



**THE CONSERVATIONAL MANAGEMENT AND INTERPRETATION
FOR FUTURE DEVELOPMENT OF THE ROYAL THAI ARMY MUSEUM
IN HONOR OF HIS MAJESTY THE KING**

มหาวิทยาลัยศิลปากร สงวนลิขสิทธิ์

By

Captain Tavorn Supachokeauychai

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

Program of Architectural Heritage Management and Tourism

(International Program)

SILPAKORN UNIVERSITY

2008

**THE CONSERVATIONAL MANAGEMENT AND INTERPRETATION
FOR FUTURE DEVELOPMENT OF THE ROYAL THAI ARMY MUSEUM
IN HONOR OF HIS MAJESTY THE KING**

By

Captain Tavorn Supachokeauychai

มหาวิทยาลัยศิลปากร สงวนลิขสิทธิ์

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

Program of Architectural Heritage Management and Tourism

(International Program)

SILPAKORN UNIVERSITY

2008

The Graduate School, Silpakorn University has approved and accredited the Thesis title of “The Conservational Management and Interpretation for Future Development of the Royal Thai Army Museum in Honor of His Majesty the King” submitted by Captain Tavorn Supachokeaueychai as a partial fulfillment of the requirements for the degree of Doctor of Philosophy in Architectural Heritage Management and Tourism.

.....
(Associate Professor Sirichai Chinatangkul, Ph.D.)
Dean of Graduate School
...../...../.....

The Thesis Advisor
Professor William S. Logan, Ph.D.

The Thesis Examination Committee

.....Chairman
(Professor Emeritus Trungjai Buranasomphob, Ph.D.)
...../...../.....

.....Member
(Professor William S. Logan, Ph.D.)
...../...../.....

.....Member
(Nuanlak Watsantachad, Ph.D.)
...../...../.....

48056960:MAJOR: ARCHITECTURAL HERITAGE MANAGEMENT AND TOURISM

KEYWORD: THE ROYAL THAI ARMY MUSEUM, MILITARY MUSEUM,

CONSERVATION, INTERPRETATION

TAVORN SUPACHOKEAUYYCHAI: THE CONSERVATIONAL MANAGEMENT
AND INTERPRETATION FOR FUTURE DEVELOPMENT OF THE ROYAL THAI
ARMY MUSEUM IN HONOR OF HIS MAJESTY THE KING.

THESIS ADVISOR: PROFESSOR DR. WILLIAM S. LOGAN, 378 pp.

The Royal Thai Army Museum in Honor of His Majesty the King IX, referred to this dissertation as the '*RTA Museum*', was the first military museum in Thailand, having been established since 1986 as the place to illustrate to the general public the pivotal role of the army in the national history through object displays and exhibitions. In fact, the museum building was erected in 1906 as the '*Chulachomklao Royal Military Academy*' during the reign of King Rama V and has been renovated since then to accommodate the museum function that it has today. In recent years, the RTA museum has not met its management objectives and has low visitation rates due to several internal and external factors. The museum has suffered from its location as it was built within the restricted area of the army headquarters and also its transformation from the former academic function into the military museum, leading to the difficulty of access by the public and the installation of an unsystematic set of exhibitions up to the present. The museum has lacked the financial means to improve its exhibitions and necessary facilities for visitors. As it was constructed more than a century, the museum building is in a state of deterioration and needs special conservation works to retain its functions and physical aspects in an original state.

This research emphasizes the potential for developing possibility of the RTA museum to improve its current exhibit presentations and provide necessary visitor facilities on site. The new management plan and policy are also proposed for effective administration and conservation of the museum, aiming at developing the RTA museum as a military 'edutainment center' in Thailand.

Architectural Heritage Management and Tourism, Graduate School, Silpakorn University Academic Year 2008

Student's signature.....

Thesis Advisor's signature.....

Acknowledgements

I would like to express deep gratitude to my parents and my sister for education and for the encouragement that led to achieving this PhD research. Sincere thanks also go to my sincere colleagues, namely Captain Kobboon and Captain Somsamon, for their assistance and effective consultation. Furthermore, I would like to give my gratitude to all classmates of the Silpakorn international program, especially Mrs. Apinya and Mr. Jaray for being my best friends and for their incomparable encouragement. Thank you all.

My special appreciation goes to Colonel Pilaiporn Thanasomboon, a military curator of the RTA museum in the Directorate of Operations, who provided resourceful information about the RTA museum and its existing problems. Special thank to Colonel Sasithorn Wangtaphant, a military officer at the Military History Department who provided valuable information about the army in general context. Additionally, many thanks to all military personnel at the National Memorial Museum and the Royal Thai Air-Force Museum for providing the useful information used in the analysis.

My admiration goes to Professor Dr. Trungjai Buranasomphob, the program director, who made this architectural heritage management program possible and brought to reality for all of us. Her dedication and suggestion to cope with unavoidable situation and problems throughout a long period of study are very much appreciated. Also gratefully thank to my co-advisor: Dr. Nuanlak Watsantachad for her assistance and support of my research project.

The most important person who assists me in every stage of this dissertation is Professor Dr. William S. Logan. His valuable advice, support and encouragement inspired me to finish the dissertation within three years. He always makes me to believe that I can create a good work that relates to my military field. My gratitude and appreciation goes to him and I am proud to be his student. As mentioned above, thank a lot for all of you.

Table of Contents

	Page
Abstract.....	b
Acknowledgments.....	c
List of Figures.....	m
List of Tables.....	q
 Chapter	
1 Introduction	
Statements and significance of the problem.....	1
Objectives.....	4
Expected advantages.....	5
Research questions and hypothesis.....	5
Key concepts.....	6
Scope of the study.....	6
Limitations of the research.....	7
Research Methodologies.....	8
The process of qualitative method.....	8
The process of quantitative method.....	10
Data analysis.....	11
Conceptual framework.....	11
Process of the study.....	13
2 Literature Review	14
The beginning of the museum.....	15
Definition and meaning.....	16
Role, significance and exhibition.....	18
Types of visitors, target audiences and their expectations.....	25
Perception and communication processes within the museum.....	34
Interpretation and the provision of facility within the museum.....	38
Displays and exhibitions.....	46
The care of collections.....	53
Museum management.....	55

Chapter	Page
Funding sources and relationship with other stakeholders and organizations.....	60
The birth of museum in Thailand and its development.....	61
The role of the government in managing military museum.....	63
Military museum context.....	66
Exhibitions and circulation in military museum.....	69
Developing conservation policy and new additions to heritage places.....	72
The future of museums and their collections.....	74
3 Background and historical development of the RTA Museum.....	78
Background of the Royal Thai Army.....	78
Biography of the founder, King Chulachomklao (King Rama V).....	81
History of the Chulachomklao Royal Military Academy.....	84
History of the Royal Thai Army Headquarters and the museum.....	87
The Directorate of Operations and their responsibility	91
The Military History Department.....	94
Background of the Royal Thai Army Museum (RTA Museum).....	95
Location.....	97
The architectural attribute of the RTA Museum.....	99
Architecture of the Royal Thai Army Museum and associated area....	99
The change to the fabric of the RTA Museum and associated area.....	101
Evaluation of Displays and Exhibitions.....	102
The Royal Thai Army Museum building.....	102
Auditorium.....	102
Weapon room.....	102
Army History room.....	103
Flag and Military Equipment room.....	104
Uniform and Military Insignia room.....	104
Reception room.....	105
Memorial Hall.....	105

Chapter	Page
The Administrative Ordnance Building.....	106
Army Evolution Room.....	106
Research and Military Archives room.....	106
The significance and the usage of the place.....	107
The analysis of cultural heritage significance of the RTA Museum.....	107
Aesthetic value.....	107
Historical Value.....	108
Scientific value.....	108
Social value.....	108
Statement of cultural heritage significance.....	109
The Assessment of cultural heritage significance.....	109
Criteria for assessing cultural heritage significance.....	109
Level of significance of the place.....	111
Site Interpretation.....	112
Analysis of existing interpretation.....	112
Staff interpretations to the site.....	112
Public interpretations to the site.....	114
Current situations and problematic issues of the museum.....	115
The accessibility difficulty to the general public.....	115
Unsatisfied numbers of visitation by the general public.....	115
Ineffective presentation for interpretation within the museum.....	115
The lack of necessary facilities to be provided for audiences.....	116
Factors that give rise to the missing link of interpretation.....	116
Internal factors.....	116
External factors.....	118
Summary: critical analysis of the current museum.....	118
The good points of the current museum.....	118
The weak points of the current museum.....	119
Interpretative management for the RTA Museum.....	119

Chapter	Page
4 Comparative Case Studies and Analysis.....	122
Royal Thai Air-Force Museum (RTAF) in Bangkok, Thailand.....	123
National Memorial Military Museum in Bangkok, Thailand.....	133
Imperial War Museum North (IWMN) in Manchester, UK.....	141
The Army Museum of Singapore (ARMS) in Singapore.....	156
The development requirements for the Royal Thai Army Museum.....	171
5 Field Study and Research Methodologies.....	174
Physical investigation of the museum building and its problems.....	174
The design of interview questions and questionnaire surveys.....	177
Key questions for data collection.....	177
Interview with museum's staffs as qualitative research.....	178
Objectives of the interview.....	178
Interviewing questionnaire design.....	178
Questionnaire survey to museum visitors as quantitative research.....	183
Objectives of the questionnaire survey.....	183
The assessment of target respondents.....	183
Questionnaire survey design.....	184
Data collection.....	188
6 State of Conservation: Physical Condition of the Museum Building.....	189
Evident problems from building investigation.....	189
Roof, roof tiles and related causes of problems.....	190
Structure and walls of the third floor and the second Floor.....	191
Structure and walls of the first floor.....	194
Staircase and flooring materials.....	196
Doors, slatted windows and related decorative ornaments.....	198
Interior spaces.....	199
Conservation requirements for the RTA Museum.....	201

Chapter	Page
7 Analysis of Interview Results from Museum Staff.....	203
Museum Management and Operations.....	203
Museum Visitors.....	206
Display Objects and Current Exhibitions.....	208
Facility Provision within the Museum.....	209
Conservation Management and Maintenance.....	210
Staff Opinions of the Museum.....	212
Dominant Points of the Museum.....	213
Weak Points of the Museum.....	213
8 Data Analysis of Questionnaire Surveys from Museum Visitors.....	215
Analysis of Questionnaire Survey from 300 Respondents.....	216
Visitor's Profile.....	216
About the Visit and Current Exhibitions at the Museum.....	218
About the Improvement and Development of the Museum.....	226
Analysis of Questionnaire Survey from the Focus Group.....	238
Visitors' Profile.....	238
About the Visit and Current Exhibitions at the Museum.....	238
About the Improvement and Development of the Museum.....	244
The Comparison Table of the Survey.....	256
The Examination of hypothesis to the Survey Results.....	258
9 Management Plan and Policy for the RTA Museum.....	260
Organization and Administration Strategy.....	262
The Development of Goal and Mission Statement	266
The Development of Museum Staff.....	267
Code of Conduct for Museum Staff.....	269
Target Audience Identification.....	269
The Setting of Museum's Policies.....	270
Policy for the Improvement of Interpretation.....	271
Displays and Exhibitions Techniques Policy.....	271
Building Renovation and Conservation Policy.....	272

Chapter	Page
Staff Training Policy.....	272
Training in the Role of Museum Professional.....	273
Training in Collection Management.....	274
Training in Inventories and Documentations.....	274
Training in Caring and Preserving of Collections.....	275
Training in Displays and Exhibitions.....	275
Training in Caring of Visitors.....	275
Training in Museum Education in the Context of Functions..	276
Training in Management.....	276
Training in Personnel Management.....	277
Training in Marketing.....	277
Training in Museum Security and Disaster Preparedness....	277
Training in Illicit Traffic Issues.....	278
Public Relations and Promotion Policy.....	278
Fundraising and Financial Support Policy.....	279
Facility Management Policy.....	280
Museum Building Facility Management.....	280
Visitor Service Facility Management.....	282
Maintenance and Supervision Policy.....	284
Visitor Management Policy.....	285
Conservational Management	286
The Requirement of Information for Policy Development.....	286
Developing the Conservation Policy.....	287
Statement of the Conservation Policies.....	288
Maintenance and Supervision of the Conservation Policies.....	289
The Objectives of the Conservation for Future Development.....	289
Forward Plan for the New Museum Development	291
Interpretative Management.....	292
Theme and Concept.....	292
Displays and Exhibitions Development.....	293

Chapter	Page
Interpretative Tools Development.....	294
Interpretative Signs.....	294
Printed Material.....	294
Professional Guides.....	295
Audio-Visual Aids.....	295
Internet Websites.....	296
Facility Provision within the Museum.....	296
Public Relation Programs.....	298
The Development of Museum Staff and Educational Programs.....	298
The Development of the Publication System.....	299
The Development of the Outreach to the Target Group Visitors.....	299
The Development of Business Partnership and Alliances....	300
Option Consideration for the New Museum Development.....	300
Project Proposal of the Underground Facility Development.....	300
The Purpose of the Project.....	301
Scope of the Project.....	302
The Construction and the Provision of Underground Facilities.....	303
The Analysis of New Development Project.....	311
Strengths.....	311
Weaknesses.....	312
Opportunities.....	313
Threats.....	314
Statement of Heritage Impacts.....	314
The Assessment to Minimize Adverse Impacts.....	315
Expected Outcomes and Advantages from the Development.....	316
Opportunities for Future Development of the RTA Museum.....	319
10 Conclusion and Recommendation.....	323
Bibliography.....	329
Appendixes.....	337

Chapter	Page
Appendix I: Interview Questions for Military Museum	
Organizations (English).....	337
Appendix II: Interview Questions for Military Museum	
Organizations (Thai).....	351
Appendix III: Questionnaire Questions for Questionnaire Survey (English)...	363
Appendix IV: Questionnaire Questions for Questionnaire Survey (Thai).....	367
Appendix V: Questionnaire Survey (English and Thai Versions).....	373
Autobiography.....	377

มหาวิทยาลัยศิลปากร สงวนลิขสิทธิ์

List of Figures

Figures	Page
1 Map of the RTA Museum in the Rattanakosin Island.....	4
2 Model of Exhibit Process and Interpretation Loop.....	13
3 Process of the Study.....	14
4 Outreach and Perception of Museums.....	35
5 The Communication Model by Knez and Wright (1970).....	35
6 The Communication Model applied to Exhibition Development.....	36
7 A Holistic Approach to Museum Communication.....	37
8 Interpretation Loop.....	40
9 Model of the Overall Process of Heritage, Museum and Gallery Work....	42
10 Exhibition Project Model.....	50
11 Diagram for the Making of an Exhibit.....	51
12 Agents of Deterioration.....	53
13 The Ministry of Defense with Military Parade.....	81
14 Portrait of King Rama V.....	82
15 The Chulachomklao Royal Military Academy in the Past.....	84
16 Cadet Troops Parade to the New Military Academy in Nakhon-Nayok Province.....	86
17 The Chulachomklao Royal Military Academy.....	87
18 The Royal Thai Army Headquarters.....	89
19 The Directorate of Operations Diagram.....	93
20 Military History Department's Organization Chart.....	94
21 The Royal Thai Army Museum building.....	95
22 Map of the RTA Headquarters.....	98
23 Master Plan of the RTA Museum Building.....	99
24 Auditorium Room.....	102
25 Weapon Room.....	102
26 Army History Room.....	104
27 Flag and Military Equipment Room.....	104
28 Uniform and Military Insignia Room.....	105
29 Reception Room.....	105

Figures	Page
30 Statue of King Rama V.....	105
31 Memorial Hall.....	105
32 Army Evolution Room.....	106
33 Research and Military Archives Room.....	106
34 The Royal Thai Air Force Museum Directory.....	125
35 Entrance of the RTAF Museum.....	127
36 RTAF Aircraft Building I.....	127
37 Aircraft Displays.....	127
38 Aircraft Displays at Building I.....	127
39 RTAF Aircraft Building II.....	127
40 RTAF Aircraft Building III.....	127
41 Uniforms and Insignias Building.....	129
42 Aviation Exhibition within the Gallery.....	129
43 Showcases of Military Insignias.....	129
44 Showcases of Air Force Uniforms.....	129
45 RTAF Building V for Helicopters.....	130
46 Outdoor Aircraft Displays.....	130
47 The Three Main Buildings within the National Memorial Museum.....	134
48 The Ceremonial Building.....	136
49 The Panoramic Display Building.....	136
50 The Military History and Museum Building.....	137
51 Mural Painting on Circular Wall Panels.....	137
52 Black Marble Sign Panels with the Inscription of Soldier's Names.....	137
53 Model Display at the Panoramic Room.....	137
54 Miniature Models with Diorama display.....	138
55 Imperial War Museum North in Trafford.....	142
56 Architectural Aspect of the IWM North.....	145
57 IMW North from the Bird-Eye View.....	145
58 IMW North Floor Map.....	147
59 The Big Picture Show at the main exhibition space.....	148
60 Large Objects Exhibitions at the Main Exhibition Space.....	150

Figures	Page
61 Temporary Exhibitions (Silos).....	150
62 Time Stack object handling at action Station.....	152
63 T34-Tank Teamwork at Action Station.....	152
64 The Trench at Action Station.....	152
65 Army Museum of Singapore (ARMS).....	159
66 Main entrance of the army museum.....	159
67 Exhibitions within Army Museum of Singapore.....	161
68 Architectural Design of the museum.....	162
69 Main Entrance of Gallery 1.....	162
70 ‘Our Early Year’ Presentation.....	162
71 The Birth of the Army Gallery.....	162
72 Military Bunk at the Gallery 3.....	164
73 Object Theater at the ‘Our Army Now’.....	164
74 Individual Marksmanship Trainer (IMT).....	164
75 Army Operations for Today.....	164
76 Creating Our Future Gallery.....	165
77 Multimedia Presentations at Gallery 6.....	165
78 Women in the SAF Exhibition.....	166
79 Students played at the Adventure Park.....	166
80 SAFTI-CANA Cafeteria.....	167
81 Dining Area next to the Cafeteria.....	167
82 Map of the Army Museum of Singapore.....	167
83 Architectural Attribute and Landscape of the ARMS Museum.....	168
84 The Chulachomklao Academic Building since 1906 AD.....	175
85 The RTA Museum Building of the present.....	175
86 The First Floor Plan of the Museum.....	176
87 The Second Floor Plan of the Museum.....	176
88 The Third Floor Plan of the Museum.....	177
89 Illustration of Evidence Problems.....	189
90 Leakage downspouts cause roofing deterioration.....	191
91 Deterioration by moisture at the exterior ceilings.....	191

Figures	Page
92 Peeling of paints at the wall.....	193
93 Degradation of masonry wall from water penetration.....	193
94 Peeling by incompatible layers of paint emulsion.....	193
95 The evidence o paint blistering.....	193
96 Hair-line cracking of exterior walls.....	195
97 Paint blistering by moisture penetration.....	195
98 Splash of rain as source of decay.....	196
99 Rising damp from downspout.....	196
100 The scratch and peeling of wooden floor.....	197
101 Underground humidity impacted to hardwood flooring.....	197
102 Carpet flooring as source of fungi and black spots.....	197
103 The decay of sill and jamb from rain water.....	199
104 Crazing of paint from weathering and humidity penetration.....	199
105 The crack at the ornamental molding plasters.....	199
106 The splash of rain causes paint blistering.....	199
107 Peeling of wallpaper from moisture penetration.....	200
108 Fungi spot at the interior gypsum ceiling.....	200
109 Wooden walls are drilled for insecticide injection.....	201
110 Damp carpet by underground humidity.....	201
111 New Administration Organization of the Museum.....	263
112 Master plan of the underground development project.....	304
113 Underground development project.....	305
114 Front section of the project underneath the museum.....	306
115 Side section of the project underneath the museum.....	306
116 Illustration of information center and souvenir shop.....	307
117 Illustration of temporary exhibition.....	308
118 Illustration of the army theater.....	309
119 Illustration of underground cafeteria.....	309
120 Illustration of New Courtyard at the Museum Entrance.....	311
121 Illustration of New Courtyard at the Museum Exit.....	311

List of Tables

Table	Page
1 Interview Questionnaire Design Table.....	179
2 Questionnaire Survey Design Table.....	185
3 Visitor's Occupation.....	216
4 Age of Museum Visitors.....	217
5 Gender of Visitors.....	218
6 Level of Education.....	218
7 Gender and Level of Education Cross-Tabulation.....	218
8 Type of Visitation.....	219
9 Type of Visit and Number of Visit Cross-Tabulation.....	219
10 Sources of Museum Information.....	220
11 Purpose of Visit.....	221
12 Reputation of the Museum as Factor of Visit.....	222
13 To see Exhibition as Factor of Visit.....	222
14 To understand the Army's Role as Factor of Visit.....	222
15 Museum Design as Factor of Visit.....	223
16 Visitor's Opinions about the RTA Museum Exhibitions.....	223
17 The Most Satisfying Exhibition.....	224
18 The Most Unsatisfying Exhibition.....	225
19 Improvement for the RTA Museum.....	226
20 Visit Other Museums.....	227
21 The Comparison between the RTA Museum and Other Museums.....	228
22 Difficulty Factors to the RTA Museum.....	229
23 Opinion about the Entrance Charge.....	230
24 Sources of Improvement by Charging Entrance Fees.....	231
25 Project Proposal for New Development.....	232
26 New Museum Location.....	233
27 Level of Education and Project Proposal Cross-Tabulation.....	234
28 New Facility Development within the RTA Museum.....	235
29 Opinion for the Revisit to the RTA Museum.....	236

Table	Page
30 Recommend the RTA Museum to Others.....	236
31 Suggestions for the New Improvement.....	237
32 Type of Visit and Number of Visit Cross-Tabulation.....	238
33 Sources of Museum Information.....	239
34 Purpose of Visit.....	240
35 Reputation of the Museum as Factor of Visit.....	240
36 To see Exhibition as Factor of Visit.....	241
37 To understand the Army's Role as Factor of Visit.....	241
38 Museum Design as Factor of Visit.....	241
39 Visitor's Opinions about the RTA Museum Exhibitions.....	242
40 The Most Satisfying Exhibition.....	243
41 The Most Unsatisfying Exhibition.....	244
42 Improvement for the RTA Museum.....	245
43 Visit Other Museums.....	246
44 The Comparison between the RTA Museum and Other Museums.....	246
45 Difficulty Factors to the RTA Museum.....	248
46 Opinion about the Entrance Charge.....	248
47 Sources of Improvement by Charging Entrance Fees.....	249
48 Project Proposal for New Development.....	250
49 New Museum Location.....	251
50 New Facility Development within the RTA Museum.....	252
51 Opinion for the Revisit to the RTA Museum.....	253
52 Gender and Revisit to the RTA Museum.....	253
53 Recommend the RTA Museum to Others.....	254
54 Gender and Project Proposal Cross-Tabulation.....	254
55 Suggestions for New Improvement.....	255
56 The Comparison Table of the Military Officers Survey and the Focus Group Survey.....	256

Chapter 1

Introduction

Statement and Significance of the Problem

After the severe impact from the outbreak of economic crisis throughout the world since 1997 AD, many Asia-Pacific countries recognized the significance of the tourism industry and paid more attention to it as the way to relieve the economic downturn and to be an effective income generator for economic and social viability in one particular region. Due to the boom of tourism worldwide and the diversity of heritage and historic destinations available in Thailand, tourism operation in the country has been highly successful in gaining visitors. On the other hand, many museums in Thailand, especially military museums have never been promoted to be included for the tourism package as one of the tourism attractions. This is because they have been considered as unattractive destinations for the visit. As a result, military museums have never been accomplished in gaining large number of visitors due to the fact that they lack of public relations, promotions, and investments from effected stakeholders.

Meanwhile, owing to military museums are usually located within military boundary as the restricted area, the accessibility seemed to be inconvenient by the general public. In addition, without any support from related organizations and effected stakeholders, these military museums are to be self-operated in which financial support will be gained only from the government sector. Because of these negative factors, the military museums are seemed to be left unattended and the deterioration of the museum buildings is undeniably occurred up to the present.

This research study discusses the importance of military museums not only in the role of historic and weapon collection but also the function as a life-long educational venue for the general public. In general, the chief aim of military museums worldwide are to foster general audiences in understanding the historic development and evolution of one particular country in terms of history, civil war, and sovereignty as the way for future development.

Bangkok, the capital city of Thailand; has long been widely accepted in its historic significance, where politics, bureaucrats, military, as well as social and economic reforms effected to the city development. Although military in the past portrayed a crucial role in city's development planning and policy, meanwhile, it has also being used as the government representative for political reforms in any circumstance by mean of curfew or coup d'etat. This leads to the resentment and suspects of the military roles by local Thai people for a long period of time. In order to bridge the gap between the army department and the general public, the Royal Thai Army Museum in Honor of His Majesty the King (RTA museum) has been established in 1986 AD as the place to illustrate the mutual understanding among the general public in the pivotal role of the Royal Thai Army and their imperative action for political intervention in the protection, as well as the defense of Thai territory and sovereignty among Thai people.

To capture public's interests and increase number of visitation for economic opportunity, the Royal Thai Army highly attempted to promote the military museum as a tourism attraction for both domestic and international visitors. Basically, museums are related to tourism and are significant as tourist destinations that can provide for consumption of cultural heritage or cultural experience without risk or damage to the fragile resource; indeed, they are primary conservers of historic remembrance from the past to present and into future generations (Benediktsson 2004, p.10). Despite the RTA museum can be developed as a historic attraction and research center for the general public with economic gain from the visit, military rules and regulations obscured of such development as the statutory constraints in terms of accessibility, public's participation, and facility development for those public visitors.

In addition, many military museums in Thailand are recognized as unattractive places for a long period of time and incompatible to general public's interests, especially among Thais and other Asian people due to personal perceptions concerned the past experience in unimaginative or poor exhibitions, including other intrinsic and extrinsic factors in each particular site. As a result, the RTA museum is unsuccessful in attracting general public's interests and financial supports from any stakeholder, leading to poor management and conservation. The RTA museum building was built in 1906 and is in a state of disrepair and deterioration. The current conservational management is inefficient because restoration efforts are operated by military officers who are not trained in the restoration fields. Therefore, the museum continues to be in a state of disrepair up to the present.

The deterioration of museum building both exterior and interior appearances from ineffective conservation and maintenance is effected to further development of the building and its exhibitions. Furthermore, as built for a century, the invasion from pest and termite is unavoidably occurred overtime. This also includes the improper use by any museum participant that leads to an irreversible damage to the physical characteristics of the building.

As stated above, military museums of the present should be revolutionized in their obsolete exhibitions and overall characteristics by the provision of new managerial processes and effective conservation in conjunction with economic, social and political changes. As the society and people's expectation has changed, they are no longer to be forced in learning, rather; they want interactive response from what they have learnt. Hence the RTA museum, the first military museum in Bangkok; requires new development for the exhibition from outmoded exhibition as the warehouse for military weapons and equipment to be more modernized by the introduction of new technological and interactive media for its current exhibit presentation to motivate public's interests and visitor's participations. However, effective conservation and maintenance of this old-historic building are initiatively required for long-term sustainability of the museum building per se.



Objectives:

1. To study the development process of the Royal Thai Army building from the beginning of its establishment into the military museum of the present with the view to understand the overall characteristics of the building and its location;
2. To have more understanding about the current constraints and limitations that affect to the development opportunity of the RTA museum;
3. To verify the public's opinions, perceptions, personal behaviors and attitudes in the military museum context in order for understanding their interpretations of the museum and creating efficient museum management that suit their requirements and preferences
4. To demonstrate the total economic, social, physical and psychological affects of the development for military museum both direct and indirect consequences;
5. To conserve the significance of the RTA museum with a view to provide effective conservation programs and development strategies for long-term sustainability, including the encouragement of the museum to be as a life-long educational center for the general public.

Expected Advantages:

- Conservation of the significance and historic values of the military museum with the provision of effective conservation and development;
- Understanding of visitor's opinions and attitudes, as well as several negative factors that impacted to the museum development, aiming at bolstering the potentiality of the museum in general contexts;

- Encouragement of the greater development on museum displays and exhibit presentations to be appeal as one-stop historic destination for the audience;
- Advocacy of public and private interests in financial support, mutual cooperation among all stakeholders with strategic conservation and development from the present through the future.

Research Questions:

1. What are the important factors affecting to the development and survival of the Royal Thai Army Museum?
2. How can the Royal Thai Army museum be developed to be more accessible to the general public and what are the most effective approaches to improve their access without making any change to the fabric of the building and its setting?
3. Which is the most useful potential methodology to sustain and conserve the significance of the museum in long-term and to reinforce the life-long support from effected interest groups both public and private organizations?

Hypothesis:

- *‘There is a positive relationship between strategic development on museum presentation, interpretation policies and accessibility to the successful level of visit by the general public’.*
- This hypothesis will be tested and verified in association with the outcomes from qualitative and quantitative researches by which these data will be analyzed for a better development and planning for the RTA museum in particular and other military-related museums worldwide in general.

Key Concept (Definition)

- *Museum*: An indoor place for historic collection with exhibition herein.
- *Military museum*: The museum that was organized by the military organization.
- *The RTA museum*: The Royal Thai Army Museum in Honor of His Majesty the King that was ran by RTA Headquarters.
- *Conservation management*: The managerial process and techniques for reserving military museum's building and its collections.
- *Interpretation*: The perceptions, attitudes, and appreciations from the general visitors to the museum they have visited.
- *SPSS Analysis*: The '*Statistical Package for the Social Sciences*' is the computer-based software for the statistical analysis of survey data from the questionnaire surveys that it will be used for translating numerical data into comprehensive graphical presentations such as bar-graph and pie-chart.

Scope of the Study:

- *Study boundary*: the RTA Museum building and the Administrative Ordinance building within the area of 15 rai (5.9 acres) in the RTA Headquarters area.
- *Sub-study boundary*: the main entrance and upfront landscaping area with the large courtyard adjacently located to The RTA Museum are to be included in study boundary for the assessment in the context of accessibility and overall land-use management for the museum.
- *Focus of the research*: analyzing historic significance, heritage management, and changes of the museum building within the Royal Thai Army Headquarters area with the consideration on tactics and strategic management to conserve the invaluable museum building in long run.
- *Target group for the research study* will be classified into 'Public sector' (government-related organizations and institutions), 'Private sector' (non-

government organizations and special groups of investors), including ‘General audience’ (local people and foreigners) who are effected museum stakeholders.

Limitations of the Research

On the Literature Review and the Analysis of Existing Interpretation:

The literature review related to military museum context and existing interpretation of the army museum are limited to available resources. Some related literature can be found only in local libraries and university libraries. The research on military context and military museum interpretation is quite rudimentary and new for many researchers.

On the Visitor Survey and the Data Collection:

The respondents from questionnaire survey can be obtained only from those local Thai people due to the fact that most visitors at the site are local visitors who came by groups of schools or organizations. Because these visitors have a very short period of time for their visits at the museum, they have a very limited time to spend for completing the questionnaire questions as one will contribute his or her time no more than 10 minutes.

The data collection will only be collected on local perspectives from their perceptions and opinions about the military museum in Thailand, thus the foreign visitor’s perspectives on their museum experiences are absent.

Research Methodology:

This research will equally concentrate on both qualitative and quantitative methods. These approaches are imperative and useful for understanding overall context of the Royal Thai Army museum in its operation, planning, including strategic conservation and management.

The Process of Qualitative Method:

- For the ‘Documentation research’, the secondary data will be collected from related resources of information concerning the RTA museum from the beginning of its establishment up to the present in order for better understanding the museum background and context. There are the museum’s history, management planning and exhibition, museum conservation and so forth.
- Information related to the museum context will be searched from the university libraries, Tourism Authority of Thailand Library (TAT), National Library and National Archives, government and military publications, as well as an online information from internet websites.
- In-depth interview to specific targets of participants in the museum will be carried out with succinct and clear questions to facilitate the interviewing process. The prospective targets for interviewing can be classified as the following:

1. The museum staff: Museum managers, curators, guides and guide apprentices will be individually interviewed for the current operation of the museum. As these staff have a daily contact with all types of visitors, their information concerning visitor’s behaviors will be useful in understanding visitors through the eye of them. Besides, the information from the interview to those staffs on how to develop museum to meet public interests will be helpful for a better understanding of the current museum operation and management.

2. The Military History Department within the Royal Thai Army Headquarters: This department is responsible for independently managing, conserving, and funding for the museum without any permission by the Ministry of Defense. However, as the budget for operating the museum in each fiscal year is quite limited, they have to prepare the management plans in advance and report them for budget acquisition. As they work closely with the museum in operation, conservation, and all managerial processes, data and information from the department are resourceful and valuable for the improvement and advancement of the museum in long term.
 3. The Directorate of Operations within the Royal Thai Army Headquarters: This department is responsible for planning and operating all kinds of war as well as creating strategic management and principle for military forces. New development or new additions within an area of the Royal Thai Army Headquarters require permission and mutual agreement among participants of the department. Interviewing this institution will be useful in understanding army rules and regulations effecting to new development to the place.
 4. Museum visitors from school groups, government and non-government institutions, as well as tour groups of visitors will be interviewed on their perceptions, satisfactions and interpretations of the place in terms of museum's exhibitions, museum's environment, facility provision, and so forth.
- Participant observation will be conducted to those who have entered into the RTA museum. The observation will be carried out both before the audiences enter into the museum and after they have finished the visit. Target audiences to be observed by groups, comprising of local schools and officers from both government and non-government institutions, and the general public as group of local visitors. The interaction among these participants will be recorded

while personal interviewing will be proceeded to several groups of visitors in order to understand their viewpoints and opinions about their museum experiences.

The Process of Quantitative Method:

- The Questionnaire-based Surveys will be carried out in order to understand characteristics, perceptions, attitudes and opinions among all visitors who have entered into the museum. Specific groups to be surveyed are groups of schools, organization groups, and visitor groups. These audiences will be asked to complete the questionnaires by providing their personal information and opinions on what the museum have offered and what they want the museum to provide for them. This step of information collection will be conducted to understand the audiences' responses and interpretations on their museum experiences.
- There will be 300 museum visitors to be participated in the questionnaire surveys while another group of 100 people will be used as a focus group for in-depth survey. The outcomes from the survey research from these groups of visitors will be collected and evaluated through computer-based statistic program: '*The Statistical Package for the Social Science Program*' (SPSS). The survey results will be represented in tables and graphical presentations like bar-graph or pie-chart to support the analysis explanation.

Data Analysis:

- The outcomes from qualitative research are to be analyzed in the context of museum management and conservation for future development with the cooperation among effected stakeholders.

- The outcomes from quantitative research are to be analyzed with the SPSS program by means of presenting numerical data and graphical presentation as the approach for data analysis in the context of visitor's interpretations, perceptions and attitudes, aiming for strategic development and facility provision of the museum to be appealed to public's interest.
- The purposes of data analysis and evaluation are to seek the framework of proper management and conservation for long-term sustainability for the Royal Thai Army museum as a whole.

Conceptual Framework:

The construction of the conceptual framework in this dissertation is aimed at explaining and verifying the museum's life-cycle in association with museum exhibition, management and interpretation at the heritage site. This new conceptual framework model is adopted from: the 'Interpretation Loop Model' by Edson, G. & Dean, D. (1994, p.172), the 'Model of the Overall Process of Heritage, Museum and Gallery Work' by Corsane, G. (2005, p.3), as well as the 'Diagram for the Making of an Exhibit' by Musicakama, N., Chanhosri, K., Tuamcharoen, M. (1978, p.198).

The '*Model of Exhibit Process and Interpretation Loop*' in **Figure 2** illustrates simple communication between senders and receivers in the museum reign. Here, museum's curators and staff are as senders who wish to convey important messages (museum's objects and information through displays and presentations) directly to all visitors at the site (receivers). In order for effective communication and interpretation, the managers and curators at the site need to identify objectives and goals of the museum exhibitions and then determine contents and manuscript with curatorial consultation. In addition, material and information for the museum exhibition are needed to be considered, including the production of effective interpretation methods through various exhibition outputs. The managers and curators at the heritage site also need to consider the management and conservation with the search for marketing and stakeholders to support the museum for long-term sustainability.

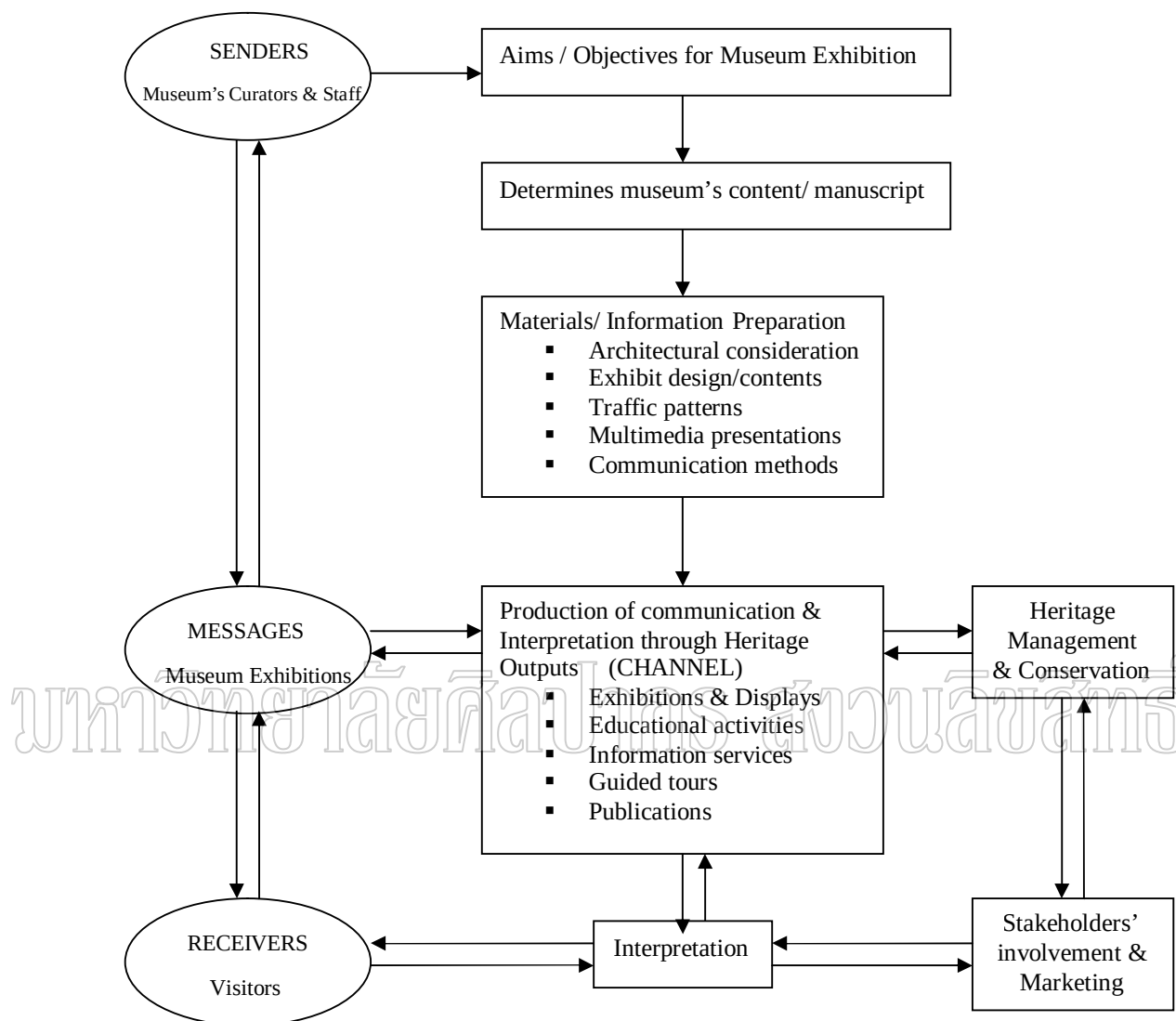


Fig.2 Model of Exhibit Process and Interpretation Loop

Illustrated by Supachokeauychai, T.

Process of the Study

This section illustrates the sequence of data collection, investigation, analysis and the development of strategic plan and policy for future development of the RTA museum.

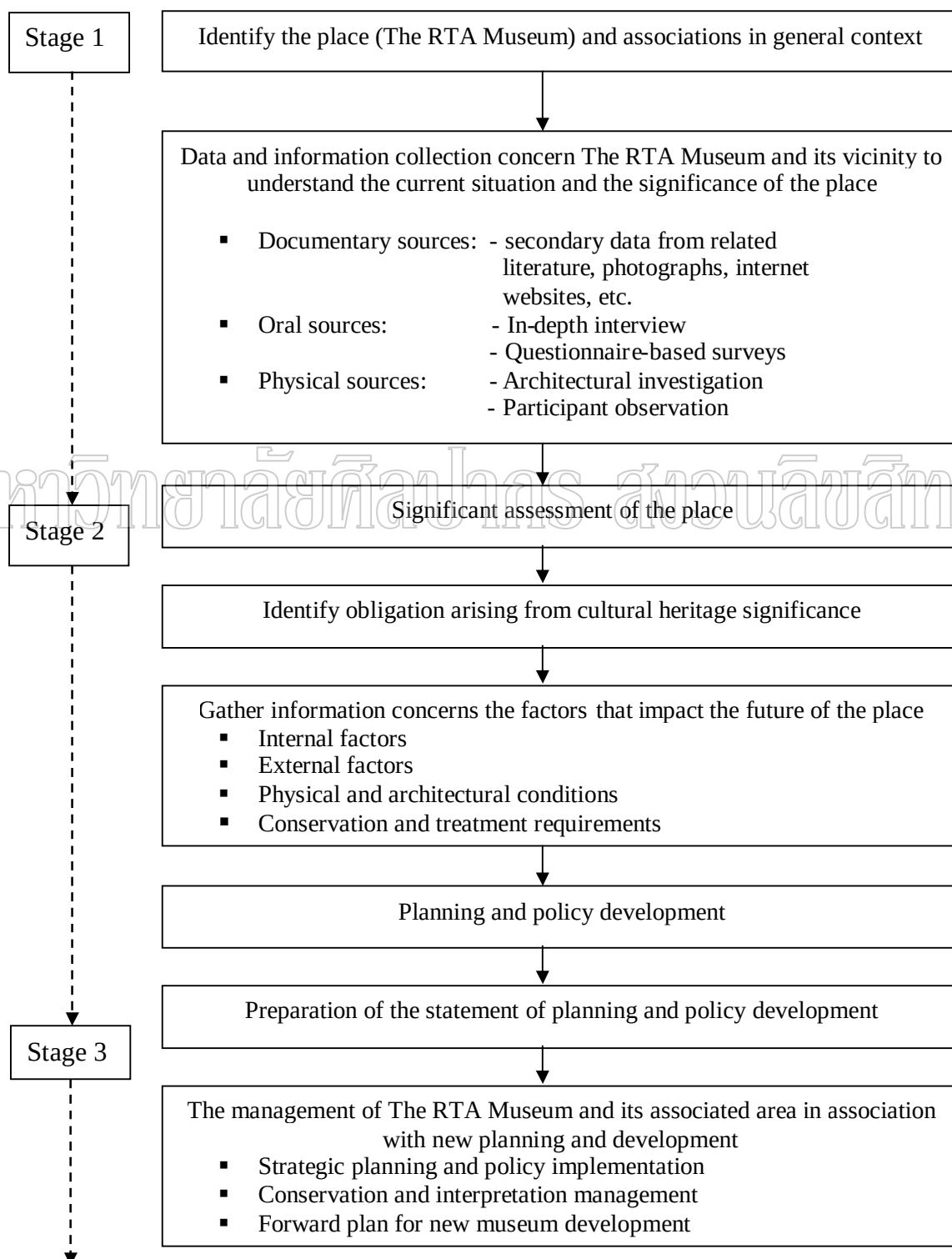


Fig.3 Process of the Study

Chapter 2

Literature Review

This dissertation focuses on an army museum, namely ‘The Royal Thai Army Museum in Honor of His Majesty the King’, as the way to consider how to develop the army museums in Thailand to meet the public’s interests while maintaining their successful operation and the effective conservation of their collections. The research covers all stakeholders from both public and private sectors. For the ‘Public Sector’, they are military division as the government agency and all related organizations and institutions, while ‘Private Sector’ means interest groups such as local schools, museum organizations, and non-government organizations (NGOs) and so forth. The research will concentrate these participants on their interactions, perceptions and managerial practices in the museum for social and economic viability of the military museum. This requires the review of related literatures not only in the context of the museum generally but also the army context specifically. There is much relevant literature concerning the origin and definition of the museums worldwide and their scopes, including interpretation, visitor study, the exhibition, the care of collection, effective management and museum building conservation.

For a better understanding of the museum context, this research will focus on the general principles of museum management in conjunction with studies of related heritage, tourism and interpretation issues. However, academic literature related to military museums is quite scarce and limited. Successful museums like the Imperial War Museum in the United Kingdom and the Army Museum of Singapore will be used to set benchmarks for the operation of military museums. Due to the fact that the current level of understanding of military museum operation in Thailand is quite rudimentary and as a result of staffing policies, including recruitment of untrained staff and lack of in-service training opportunities, Thai army museums have not been well-

managed over a long period of time. Profound understanding and knowledge of the operational and interpretation skills and processes available to museum managers and curatorial staff are essential for all sorts of museums and galleries. These should be taken into consideration in the development of every management plan and activity.

1. The Beginning of the Museum

For more than a century, museums were regarded as major vehicles for the fulfillment of the state's new educative and inspirational role in relation to the population as a whole (Bennett 2000, p.109). This is because museums are mirrors of memorial power, mediating the past, present, and future. Unlike personal memory which is animated by individual experience, museums give material form to authorized versions of the past, which in time become institutionalized as public or as official memories. In fact, museums have often been described as places of selective and collective memories at the same time. As Corsane (2005, p.186) mentioned, the memory of the past and the present can be bridged and empowered by both tangible element (touchable object) and intangible element (emotion and feeling) within the museum collections and exhibitions.

Dierking (1992, pp.30-34) proposed that a key aspect of memory is the way it acts as a process connecting past experiences to recent ones. Memories are then consolidated or lost, over a long period of time. The notion of individual differences in the learning process is one of the key factors affecting the learning and this links to physical and social contexts for the learning experiences.

Because museums aim to illustrate the past, history museums are established where versions of the past are produced through words, pictures, and artifacts, and where the messages they contain are consumed by visitors (Gable 2006, p.110). In fact, history museums are the ideal places to display national identity by helping to create 'official history' for all people.

During the nineteenth century, education was the prime function of the museum. The ideal museum was recognized as an advanced school of self-instruction. While school provides primary formal education, museum usually offers informal education. However, the opportunities to learn are based on the learners' interests, educational levels, and construction of meanings (Hein 1998, p.5).

Ambrose and Paine (1993, p.6) noted that museums in the modern sense developed in Europe around the seventeenth century. The first use of the term 'Museum' in English was in 1682 AD when it was used to describe the storage place for a collection of strange, rare and exotic things developed by Professor Elias Ashmole at the University of Oxford. From the private collections of courtiers and gentlemen, museums became the public educational institutions ever since. As Bennett (2000, p.66) observed, museums, galleries, and exhibitions played a pivotal role in the formation of the modern state. It is fundamental to the conception of museums and their nexus with the state and state funding support that they represent a set of educative and civilizing agencies, aiming for the interest and participation of the general public. It was assumed that museums acted as the treasure houses of the human race because they stored the memories of the world's people, their cultures, dreams and hopes.

2. Definition and Meaning

In the museum context, however, it is more appropriate to reach an understanding of the meaning and purposes of the museum in broad and general terms. The International Council on Museums has developed a definition with a wide vision for the scope and parameters of museums.

'The museum is a not for profit-making, permanent institution, in the service of society and of its development, and open to the public, which acquires, conserves, researches, communicates, and exhibits for purposes of study, education and enjoyment, material evidence of men and his environment' (ICOM 1987 quoted in Ambrose and Paine 1993).

Furthermore, *The Museum Association 1984* quoted in *Ambrose and Paine (1993, p.9)* also proposed that *‘a museum is an institution which collects, documents, preserves and interprets material evidence and associated information for the public benefit’*. In the broader sense, the American Association of Museum (AAM) defined a museum as

‘An organized and permanent non-profit institution, essentially education or esthetic in purpose with professional staff within, exhibiting tangible objects to the public’s interest for the purposes of conserving, studying, interpreting, and exhibiting its instruction and enjoyment of objects and specimens, aiming for the provision of educational and cultural values through artistic, scientific, historical and technological materials’ (*Genoways and Ireland 2003, p.4*).

Despite the variation in terminology, the common element in each definition is that museums are for everyone in the society to learn, experience, and share ideas of displays and exhibitions during their visits. However, perhaps the most disappointing aspect of the museum consists in the degree to which it conceives and represents the social and cultural history of the city as something distinct from, and having no organic connections with its political history (*Bennett 2000, p.125*). Moreover, some museums are too formal and too exclusive in their exhibitions, leading to the notion in many people’s minds that they are inaccessible and irrelevant. Thus, it has been argued by *Bennett (2000, p.131)* that the development of museums should be concerned primarily with artifacts relating to the daily lives and customs of ordinary people, rather than continuing to position the cultures and values of the non-elite class as subordinate to middle class culture and values. In short, *Bennett (2000, p.132)* argues that the assessment of relations and connections of the past to contemporary social, cultural and political preoccupations are enormously significant for museum exhibitions today.

Museums collect and care for objects of scientific, artistic, and historical importance and make them available for public viewing through permanent or temporary exhibitions. To be attractive, most museums attempt to offer programs and activities for a wide range of audiences, including adults, children, and families. The modern trend in museology is to broaden the range of subject matter and introduce many interactive exhibits which give to the public an opportunity to engage in activities.

It is important to note that museums are major apparatuses in the creation of national identities. Visual representations are one of the key elements in symbolizing and sustaining national communal bonds. At the national level, museums were signs of the secular religion of nationalism, leading to a general maturity of taste and level of civilization (Hooper-Greenhill 2000, p.25).

3. Role, Significance, and Exhibition

Presently, museums are part of the heritage industry as they give meaning to our present lives by interpreting the past and providing the symbols through which the nation and a culture understands itself (Hewison 1987, p.84). As mentioned by Bennett (2004, p.107), the museum's role is as a storage device capable of accumulating a succession of pasts, synthesizing their direction, mapping out a future, and being applied to the tasks of civic education, serving as a means of acting development to the social as a whole. What the museum needs to tell people and help them to understand is that today is history for tomorrow and history is continuing from one generation to next generation (Discovery Museum 2005, p.88).

Most museum theorists agreed that today the museum has borrowed from the cinema and the theme park to become a spectacle that engages all the senses, whether to evoke an aesthetic experience, a historical context, or an interactive learning environment (Marstine 2006, p.13). Museums of the present pay more attention to the relationship between their institution and their audiences. Some museums are now searching for more understanding on their visitor's expectation and preference in order

to develop museums to meet public interests. When well designed, new media in exhibition can stimulate visitors to ask questions, challenge their preconceptions and engage them to be participated in exhibit activities (Marstine 2006, p.30). Moreover, museum websites, in particular, can provide new ways to interact with prospective audiences through virtual tour and interactive activities provided within the webpage.

Museums also perform as educational centers because they aim to give knowledge and offer continuing education to all visitors, regardless of age, gender and race (Tantivess 2002 quoted in Hudsadin 2002, p. 64). Thus, activities should also be set up in order to encourage participation and exchange of views among visitors. For the display and exhibition, the object should be kept in view in the selection and arrangement, making the museum into a teaching institution where the general public, students, and school children obtain information (Bennett 2004, p.167).

Furthermore, museums have become a cultural and political mechanism used in public relations by government and non-government organizations. In academic terms, museums have become the mediator between users and the past, amplifying and decoding, stimulating, and assisting (Sola quoted in Knell 1999, p.188). Ambrose and Paine (1993, p.3) proposed in the book '*Museum Basics*' that museums have a key task to play in providing an understanding of the identity and a sense of its belonging to a place. Their collections represent a unique resource reflecting a country's, region's or community's achievements and progress overtime. Therefore, museums play a significant role in commemoration as their displays confer legitimacy on specific interpretations of history and significance of particular event (Noakes 1997 quoted in Whitmarsh 2000, p.1).

Because museums have the potential to enlighten, provoke awe, stimulate, educate and entertain at the same time, they can also act as a tool in helping the public to become self-fulfilled by creating a self-esteem that helps public to overcome the anxieties of the present (Hewison 1987, p. 46).

Museums ensure the preservation and conservation of the community's cultural and natural heritage. They serve as a cultural focus and a center of expertise, providing opportunities for community involvement in their work through friend's groups, volunteers, project work and in other ways. Museums give support to educational organizations, and offer a facility for cultural events and activities (Ambrose and Paine 1993, p.9).

In the social context, therefore, museums serve a significant purpose as an expression of community and civic pride by preserving and nourishing the continuance of local memories and knowledge, as well as enjoyment within. In a similar way, museums have political as well as cultural significance as they provide economic benefits and their presence impacts upon leisure and tourism as well as education and enlightenment (Cossons 1991, p.186). Keene (2002, p.3) also proposed that in the economic and social contexts, museums were significant economically and socially. Their economic importance derived principally from their roles as an attraction for tourism, which across the world was a driver of economic growth.

In many countries nowadays, the role of museums is changing by becoming more 'people-oriented', rather than 'collection-oriented'. Certainly, museums are now paying much more attention to finding out what their audiences want, and evaluating whether what they provide is satisfactory. Osborn (1927a) quoted in Bennett (2004, p.123) offered that the new museum idea is the same as the educational idea, in which the natural history museum is to be animated by what may be called its ethical sense, its sense of public duty: the realization that the general intelligence and welfare of the people are the prime reasons for its existence.

Consequently, as Keene (2002, p.42) says, museums for the twenty-first century were meant to have strong educational roles, encouraging their audiences to be active and participative rather than passively receptive, and engaging with their community to work toward social inclusion. Museums should be an important resource and champion for learning and education, promote access and inclusion, contribute to

economic regeneration in the regions, use collections to encourage inspiration and creativity, and ensure excellence and quality in the delivery of core services.

According to the International Council on Monuments and Sites (ICOMOS 1999, p.2), they noted that ‘tourism should bring benefits to host communities and provide an important means and motivation for them to care for and maintain their heritage and cultural practices’. The involvement and cooperation of local community representatives, conservationists, tourism operators, property owners, policy makers, and national development planners are necessary to achieve a sustainable tourism industry and then enhance the protection of heritage resources for future generations.

While the museum’s role is to preserve and promote cultural heritage assets, tourism applies to the process of consuming experience, including the consumption the museum experience and of cultural heritage. These two fields (museums and tourism) should be able to meet on mutual ground due to the fact that both have the common goal to use and sustain the heritage resource (Benediktsson 2004, pp.1-9). What museums can add to the field of sustainable cultural tourism development is the conservation dimension. The museum role is to protect the cultural heritage represented by artifact collections, including the authenticity of their significant heritage values no matter whether these are tangible or intangible.

In the past, while ‘*Heritage*’ has focused on the preservation and conservation of immovable tangible heritage notably monuments and sites or, more generally, places, ‘*Museums*’ paid attention to movable tangible heritage. However, museums and galleries have been encouraged to expand their notion of what heritage means. Nowadays, the principles and practices of museum and heritage place management are interrelated to each other. Due to the consideration on the importance of the intangible cultural heritage as a mainspring of cultural diversity and of sustainable development, the convention for the safeguarding of the intangible cultural heritage was established by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2003 AD. The convention aimed to safeguard the intangible cultural heritage by raising awareness at the local, national, and international levels to ensure mutual

appreciation and cooperation among them (Convention for the Safeguarding of the Intangible Cultural Heritage 2003, pp.1-12).

For the intangible cultural heritage aspect, this means the practices, representations, expressions, knowledge, skills, artifacts, objects, and cultural spaces associated with communities or cultural groups as part of their cultural heritage. Intangible cultural heritage can be transmitted from generation to generation in response to their environment, their interaction with nature and history, aiming to provide a sense of identity and continuity so as to respect their cultural diversity therein (Corsane 2005, p.6).

The function of heritage is important: it is a version of the past that we select in the present to serve contemporary purposes, and it therefore encompasses economic, cultural, political, and social elements. Corsane (2005, p.228) also noted that 'Heritage' was a communication medium that encodes and decodes the messages of and about official, actual and imagined communities. Consideration of the physical process can influence the study of social impact and of memory within the museums. In fact, heritage, museums and galleries are vital cultural, social and economic resources within society since they are immensely useful in lifelong learning and capable of empowering people. These institutions are important as sites for the construction and exchange of ideas, memories and identities, and for public engagement with historical, cultural, and social issues.

Where tourism is part of the local economy, museums and other visitor attractions act as magnets for attracting tourist visitors. This brings the creation of employment for local people. In fact, as Marstine (2006, p.11) noted, heritage and tourism are collaborative industries because heritage converted locations into destinations while tourism gave them economic viability. Besides, museums attract financial support from both government and all stakeholders in the form of successive investments (Ambrose and Paine 1993, p.10). Indeed, museums are an important and obvious tourist attraction that can provide a consumption of cultural heritage or cultural experience without damaging the fragile resource (Benediktsson 2004, p.10).

Moreover, museums can help to foster a sense of local pride and belonging, and maintain traditional cultural values, serving as the demonstration of one particular community's roots. Museums can play a pivotal role in public relations and publicity for their administering organizations where they are part of a range of service provided for local people and also tourist visitors (Ambrose and Paine 1993, p.11).

Around the beginning of the twentieth century changes began to take place. As museums became more dependent upon public funding, attitudes shifted from acceptance of the former elitism, both social and academic, toward an expectation that public institutions should provide public service. Exhibitions are important for public relations and for justifying the museum to its supporting community. Thus exhibitions are a vital part of any museum's activities. Hooper-Greenhill (2002, p. 2) also noted that museums were perceived as educational institutions with important and far-reaching social roles. In the past, pedagogic approaches in museums were based on a formal didacticism and on the view that objects were sufficient to ensure learning. Today, this approach is no longer appropriate because the audience requires new forms of relationships of the museums and their participations with effective communication.

As exhibitions within the museum became more gender, racial, ethnic, and ideologically inclusive, so museums reacted to their constituency and at the same time came to realize that they had a viable pedagogic product (education) to share with their audience. Therefore, museums have a basic role as educational institutions and a good museum will attract, entertain, and arouse curiosity, leading to the promotion of learning (Edson and Dean 1994, pp.5-9). To be more effective, museums should offer opportunities for self-education and self-improvement at a time wherever possible.

In addition, museums are a reflection of a high level of social development. They require personnel with advanced and specialized educational and managerial backgrounds and it is the balance of these diverse efforts that result in a properly functioning museum. Verhaar and Meeter quoted in Edson and Dean (1994, p. 151) stated that an exhibition is an interpretative medium of communication, aimed at large groups of the public with the purpose of conveying information, ideas and emotions

relating to the material evidence of human activities and habitats with the aid of chiefly visual and dimensional methods.

Nowadays, as noted by Corsane (2005, p.42), museums clearly see themselves as part of the tourist industry and the heritage experience. Public relations and marketing have become an integral part of all major museums. Museum visitors are surveyed for information on their educational and economic background, and attendance figures are also recorded in order to prove the social worth of the museum.

Most visitors appreciate museums and galleries as places to extend their experience and to enjoy a social occasion. The learning experience from these visitors is likely informal and can be described as '*leisure-learning*' (Hooper-Greenhill 1999, p.21). It is also likely to involve social interaction, especially with family or peers. This does not focus upon what exactly has been learned from a particular experience, nor in the ways that those things contribute to or interact with what the learner already knows (Corsane 2005, p.230). Within museums, informal learning occurs primarily through the glance and the experience of the exhibits. It is the responsibility of the education department to make the museum exhibitions accessible physically, emotionally and intellectually to those potential visitors (Genoways and Ireland, 2003, p.274).

As stated by Hooper-Greenhill (1999, p.21), learning is influenced by motivation, attitudes, prior experience, culture and background. Museum learning is frequently focused on objects as they can stimulate in relation to learning processes when handled and studied closely. Objects can act to enable the recall of knowledge and experiences and can arouse curiosity.

The built environment, like museums, provides the potential atmosphere to facilitate people to feel connected with their cultures, thereby contributing to active citizenship in the society. As an interpretative instrument for a society, the museum is an important source of understanding and self-knowledge for the society, and therefore allows greater exploration of social diversity (Corsane 2005, p.61).

The reason people trust museums is because they connect people to original objects. Museums invite visitors to form and test their own conclusions based on their own experience, which are often formed with family members and friends under terms shaped by the visitors per se. The distinctive characteristic of cultural history museums is that they relate to human experience and perceived as social memories. They have the power and responsibility to influence what should be remembered and have the role of narrator to communicate national identity. This requires museums to create new knowledge that enables users to identify with their museums, their history and their own time (Knell 1999, p.151).

4. Types of Visitors, Target Audiences and Their Expectations

Hooper-Greenhill (1999, p.36) stated that more than thirty years ago, many museum theorists assumed that the audiences were passive recipients with no act of personal interpretation and perspective for their visit. Nowadays, museum experts accept that visitors are not passive; rather, they are to be seen as individuals, preferred learning styles concerning social and cultural aspects that meet their own particular needs. The main characteristic of these individual museum visitors is that they make sense of things in their own manner. Therefore, the notion of passive 'general public' has become the new 'active audience'.

There are numerous reasons for visiting art museums and galleries. The visit may be a vehicle for escapism, relaxing, learning, and personal pleasure. Wherever possible, local people should be employed to work within the museum business as curators or guides for sustainable economic viability while the development of the necessary infrastructure should be under local guidance and meet their needs or inspirations. Unfortunately, tourism brings along its own set of problems as too many tourists can cause the physical erosion of a site and even the deterioration of museum exhibits if environmental control systems are overloaded (Corsane 2005, p.132).

For many visitors, seeing sights or becoming aware of a destination area's heritage is a sufficient motivation for their visits to a heritage attraction. Nonetheless, to be more effective, it is the task of the museum managers and tourism developers to set the interesting context of the destination in order to supply the right products and knowledge to benefit their audiences. Hooper-Greenhill (2000, p.7) noted that museums were struggling to find ways to incorporate audience research into their processes of exhibition development. However, it is critical to recognize that people within different social and cultural communities respond to museums and their collections according to their own perspectives.

Constructivism in museums refers to the idea that learners construct their own perception, knowledge, and meaning based on each individual perspective. As mentioned by Hein (1991, pp.30-34), there were various key principles for such constructivist thinking and learning in museums. Learning is an active process in which the learner uses sensory input and constructs meaning out of it. The successive learning involves physical and mental actions, including the engagement of learners in their participation within exhibits or programs. Besides, learning involves language and social activity as the visitors come in families or groups to share and discuss what they have learned. Learning is contextual and needs cumulative or previous knowledge to build new learning experiences. In fact, learning takes time to pay attention and requires motivation as a key component for learning reinforcement.

To understand the motivation of adult visitors to the museum is complex owing to their various and divergent interests. Thus, no museum can expect to meet all the interests of all their visitors because adult visitors want to set their own learning pace and use their own style and structure of the learning process (Matthew 1987, pp.70-72).

Similarly, to capture children's interests within the museum, Regnier (1987) argued that the creation of activities within the museum is important to let them pay attention along their visits such as interactive exhibitions with light and sounds, role-play or costume dressing activities, objects to assemble and disassemble, and so forth.

Exhibits that require the participation of several members of the group are necessary. Children will also adapt situations to conform to their current enthusiasms and interests. For example, as noted by [Regnier \(1987\)](#), the Television Studio at the Inventorium in La Villette, Paris, was an exhibit which appealed to a wide age range and offered a considerable variety in the types of activities offered. At a simple level, children can appear in front of the camera and present news and other programs of their invention. However, there is no certainty that all activities provided for children would be successful. As stated by [Thomas \(1994, pp.120-130\)](#), the criteria for the selection of activities and exhibitions were not whether the content was essential scientific knowledge, but whether the information was interesting to children and whether appropriate activities could be developed.

If museums are aimed at increasing attendance, then families are the most potential and productive target for promotion and publicity. At the Natural History Museum in London, for example, almost half of visitors were found to be in family groups, while another half of them were in groups of some sorts ([Alt, 1980 quoted in Wood 1990, p.20](#)). Although, families today are less dependent on each other and spend less time together, their expectations are higher for the quality of experience than before. Family learning in museums was informal, as their principal reason for visitation was to share and exchange ideas and experiences outside their homes ([Wood 1990, pp.20-23](#)).

It is also important to acknowledge the needs of disabled people in the society who could be one of the prospective museum's visitors. In 1990 AD, the Americans with Disabilities Act required that all public, commercial and government buildings and services should be made 'readily accessible' to people whatever their disability. In the Great Britain museums are now forging links with local societies of disabled people. The idea of disability culture begins with the recognition that all of us are valuable people in ourselves. Museums must make it clear what they have to offer and assist those disabled people ([McGinnis 1994, pp.27-29](#)).

Today, as museums and galleries are searching for ways to deepen the experiences of current visitors and to develop new audiences, the insight that learning theories offer is beginning to be deployed fruitfully in exhibition planning. Increasingly, producers and managers of exhibitions are developing interpretation strategies that encourage active participation among all audiences.

Undoubtedly, museums worldwide relate to the general public with the aim of satisfying their memorials and expectations. Kavanagh (2000, p.3) suggested that in terms of recording and collecting, memories enter the museum as '*product*'; that is, as a source of information, something which can be stored, interpreted, returned to and employed. The curatorial role here is concerned with keeping and interpreting their objects and exhibits within some systematic manner so as to communicate them to visitors through an understandable explanation.

Balancing the role of the collection with the role of the public is the key to the current purpose of museums. This can be achieved through an understanding of the public in relation to the collection. It is clear that the public expectations have undergone a considerable degree of change in recent decades. Today people are used to highly sophisticated productions through television, films, theme parks and various multi-media. The current trend is that visitors want an experience, not just a visit to a museum and this means changing the nature of what museums used to offer and the way the collections are presented (Keene, p.13).

Edson and Dean (1994, pp. 192-215) argued that the museum should take every opportunity to develop its role as an educational resource used by all sections of the population or targeted groups that the museum is intended to serve. Basically, museum education programs are often developed for specific age or interest groups. In this way, the information is presented in the vocabulary, comprehension level, and social manner of the group. Each museum worker has a responsibility to preserve and distribute information about the cultural properties of the countries and the characteristics of its people.

In fact, visitors are increasingly expecting a greater degree of involvement and participation in the museums as they are becoming more interested in displays, exhibitions, collections, and data-bases herein. Thus it is not enough for museums to present collections and information in a passive way, rather; they have to engage interest through active involvement with their users. As [Ambrose and Paine \(1993, p.18\)](#) proposed, the rising public demand for involvement and participation in the museum's activities meant that museums have to understand the social and economic context within the public sphere.

'Eureka', the children's museum in Halifax, England, for example, provides the bridge between adult expectations of learning and children expectations of fun and excitement with the purpose to attract the target audience. With the aims to be an informal learning center that engages all the learning senses, the gallery has successfully worked due to the context of learning is comprehensive and clear. The conceptual boundaries are well defined so that both children and adults are to be prepared for the subject they are interested ([Mulberg and Hinton 1994, pp.238-243](#)).

Museums have an important role in providing education services to users whether these are adults, children, or disabled people. For children's participation, it is important for the museum to establish strong links with local schools. The museum manager should be responsible for maintaining contact with teachers at local schools. While the museum may be able to offer events and activities or leisure learning programs to all of its visitors, it is better to target specific groups as the main users for the museums per se ([Ambrose and Paine 1993, p.52](#)).

In identifying the target audience, museums should always be opened to identifying and attracting new visitors who could become part of the regular audience. This can be achieved by examining the community as a whole from existing population studies and then seeking the new audience through interviews and questionnaires of the community. It is also crucial to note that every visitor who enters a museum carries their personal set of preconceived data and expectations. Understanding human motivations and learning requirements is fundamental to

developing exhibitions to serve audience needs. The process of determining these groups is known as ‘target audiences’ or ‘focus groups’ (Edson and Dean 1994, pp. 173-185).

As noted by Hooper-Greenhill (1999, p. 260), museums are inevitably concerned with the consideration of target markets and the provision of museum services available to their visitors. These notions lead to the development of marketing research and visitor surveys to improve the exhibit and gallery. In fact, exhibitions that allow audience to make personal link, participate in the exhibit displays or objects, and offer ways for accessing information will broaden the numbers and types of visitors within the museums.

Significantly, rather than passive receivers of fixed messages, visitors should be seen as active participants in interpretation, meaning-making and learning (Hooper and Greenhill 1994). In these processes, as noted by Corsane (2005, p.10), visitors and users bring their own experiences and prior understanding into play as they engage with public programs. However, in many museums, knowledge about their visitors and attention to their learning processes were quite rudimentary (Hooper-Greenhill 2000, p.2).

As noted by Davis and Gardner (1996), visitors can feel like outsiders in museums if they sense an unwelcome feeling from staff and the exhibitions are inaccessible. To attract them to visit museums, the museums themselves should open windows to welcome all types of visitors. Davis and Gardner (1996, pp.99-104) proposed five different windows on learning that have a natural appeal for learners (visitors), whose are determined by their different configurations of intelligences in the museum experiences:

- First, the ‘Narrative Window’ is the story approach for learning. This is where the museum curators can arrange the story or the history of the objects and the displays to captivate audiences.

- Second, the ‘Quantitative Window’ is suitable for the learner who has interested in the relative monetary values of the various objects in the museums such as the number of painting the artist created, the exact year of the object was created, or even the values of the precious objects in the gallery and museum.
- Third, the ‘Foundational Approach’ provides the windows for the learner who is truly interested in understanding the importance of the objects or art works, and how the objects were created.
- Fourth, the ‘Aesthetic Approach’ is suitable for the learner who is prone to criticize the art objects and explains his or her own feelings and opinions.
- Fifth, the ‘Experiential Approach’ is appropriate for the learner who is prone to participating in the artworks by one way or another, such as drawing and designing the shape of the objects they observed, or even touching the objects to fulfill his or her artistic feelings.

These five windows invite a range of presentations of meaning and call on the learner to construct his or her own understanding of artworks and objects within the museums. Moreover, they encourage the visitors to search out the relevant information needed to inform their individual perspectives and preferences. In short, museum programs must relate to the life-experiences of the audiences they seek to motivate and engage.

Traditionally, museum audiences have been considered demographically by age, ethnic, occupation and so forth. This relates to the ‘Developmental Theory’, referring to the view that all people in each age range changes their perspective and experience overtime (Jensen 1999, pp.110-117). For the school-children, because they have trouble dealing with the past as their understanding of time-periods is still incomplete, they usually have vague ideas on how the objects placed in the museum and why the museum was established. To solve this, museum programs should focus

on a few objects of interest and present them in ways that are understandable and relevant to children, which may lead museums toward catering for entertainment in order to get them to participate.

In order to cater for teenagers who are on the road to becoming young adults and have various emotional needs, including the need to develop a sense of themselves as individuals; museums may need to learn from the way that schools have fostered social as well as academic goals. In other words, museums may need to reinvent themselves as places to socialize with friends. Despite a general appearance of curiosity, teenagers have the capacity to be imaginative and thoughtful and to extend themselves into the lives of others. They need opportunities and spaces for self-expression and creative learning. To help them achieve this, the museum developers need to create interactive programs and activities to motivate their learning experiences and participations. Adults, on the other hand, because they have richer experience than children and teenagers, are independent learners and search for educational programs that fulfill their own requirements. To be effective, the exhibit programs for adults should concentrate on social and cultural contexts, concerning the topics of history, birth and death that are mentally concerned to them.

Hood (1981) quoted in Gunther (1999, p.123) identifies three types of museum visitors: frequent participants, occasional participants, and non-participants. The 'frequent participants' are the minority of the audience in museums but represent the largest proportion of those re-visiting regularly. These visitors do not mind visiting museums alone as they want to explore their own pace and believe that visiting museum is a worthwhile activity. The 'occasional participants' are young adults and parents of young children who are interested in social interaction and entertainment activities but are usually less interested in learning opportunities because they often feel uncomfortable in a museum visit. Providing social or group interactions with familiar environment for this audience is critical to let them participate in museum. Lastly, the 'non-participants' are high school-educated person who have had a negative experiences with formal education and have no socialization to prepare them to read the museum code, leading to the decision not to visit museums.

According to the research by Gunther (1999, pp.126-129) on the recommendations for museum to meet the learning expectations of adult visitors, the managers, developers, and curators should understand that every member of the museum staff is an educator whose role is to teach and navigate visitors to understand the museum environment by helping them to decode the museum environment and also combining learning activities and new multimedia technology to satisfy them. Besides, the provision of amenities such as relaxing places, lavatories, food services, gift shops, and comfortable lecture rooms are something of concern to all museums.

Visitor studies are carried out so as to understand on what visitors think and feel about their experience in the museum. There are various ways for observation methods such as tracking and timing by means of recording the movement of visitors in the museums, or developing questionnaire-based surveys or in-depth interviews of those audiences (Hein 1998, pp.100-134). Studies of visitor behavior have found, for instance, that children tend to orient themselves and carry out their investigations with objects. Children seldom record information unless this is required by teachers for their assignments, but they can recall what they have done and explain it to others even after strikingly long intervals.

On the other hand, adults bring with them their rich experiences, where museums can facilitate them in learning experiences. The individual's learning experience is enhanced by input from other family members as part of sharing knowledge and experience with each other. The two themes are constantly interacting, while visitors respond to the objects and the intended messages of the museum, visitors sometimes develop their own understanding, based on their background, prior knowledge, culture, and their society (Hein 1998, pp.142-147).

Visitor comfort is also an important prerequisite for visitor learning in museums. Comfort covers a wide range of factors, covering the provision of convenient facilities or resting places (Hein 1998, p.137). Generally, it is insufficient to develop exhibitions that will appeal primarily to only adult or only children; rather considering the various stages of intellectual development for all audiences is vital for

exhibitions. Nevertheless, a museum's success in engaging visitors will largely depend both on the quality of the presentation and the provision of facilities to assist learning in the museum. Generally, visitors' expectations have been recognized as valuable resources for museum educators and curators. These can be obtained through feedback from the guestbook or completed questionnaires available in the museums.

5. Perception and Communication Processes within the Museum

When considering the idea of public service, museums have come to acknowledge the fact that the visiting audience has a variety of cultural or leisure-time activities. While visitors are selecting other recreational activities such as theaters or amusement parks rather than visiting museums, the real challenge to museum workers is to have abroad view of global issues and to determine what can be done to make a difference. The provision of greater services information to attract new audiences must consider on how people learn and obtain the effective means of communication in a museum setting. Museum staff requires training, leadership, and planning to develop and implement a meaningful outreach program for all museum participants. In fact, community perception is often a key element in attracting a particular audience to an exhibition or program. Special attention must be given to nurturing both the impression and reality of public involvement in museum programs, events and exhibitions.

As mentioned by **Edson and Dean (1994)**, the perception of an individual museum is the composite of many ideas. Visitors, supporters, the community, and even the staff present and foster an image of what a museum is and can be. As outreach and perception are opposite ends of the same action, positive outreach normally generates a positive perception of a museum. Besides, staffs that are well trained and informed give a positive image of the institution. As part of the outreach process, the museum can inform the public of the activities associated with collection care, research, and exhibition preparation. The model is given below:



Fig. 4 Outreach and Perception of Museums

Source: Edson, G. & Dean, D., 1994. *The Handbook for Museums*, 10

Communication is one of the primary functions of museums and galleries. There are two broad approaches for conceptualizing communication: the transmission model and the cultural model. The transmission model defines communication as a process of imparting information and sending messages, transmitting ideas across space from a knowledgeable information source to a passive receiver. As such, it relates closely to other main functions of the museum: the collection, conservation and management of artifacts and specimens, and the management of the whole institution. The simple communication model was introduced to the museum world. **Knez and Wright (1970)** proposed that putting across ideas (intellectual cognition) was the primary function of museum communication.

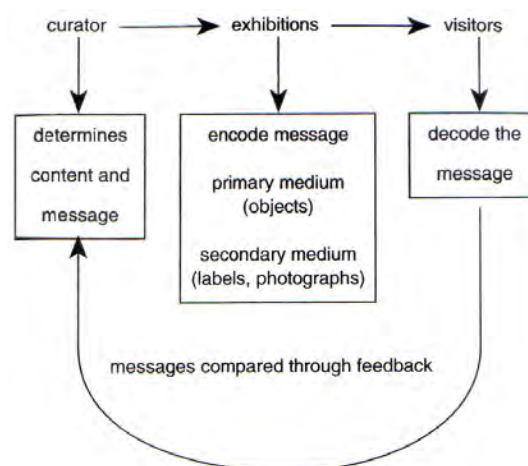


Fig. 5 The Communication Model by Knez and Wright (1970)

Source: Hooper-Greenhill, E., 1999. *The Educational Role of the Museum*, 37

The above model demonstrated that while objects were the most important factor for the communication through exhibitions, the audience was passive and merely reactive. There was no acknowledgement of the fact that audiences actively interpret their experiences of museums in the light of many individual and social factors, including their background, cultural assumptions, levels of knowledge and personal agenda for the museum visit.

On the other hand, the cultural model defined communication as a process of sharing, participation and association. Communication is perceived as a series of processes and symbols whereby reality is produced, maintained, repaired and transformed. This view of communication is not concerned with transmitting messages across space for the purpose of power and control, communication is perceived as a cultural process that binds people together within particular space-frames, and as part of specific ritual procedures. In fact, it is concerned with the negotiated production, rather than the imposition of meaning within the museum.

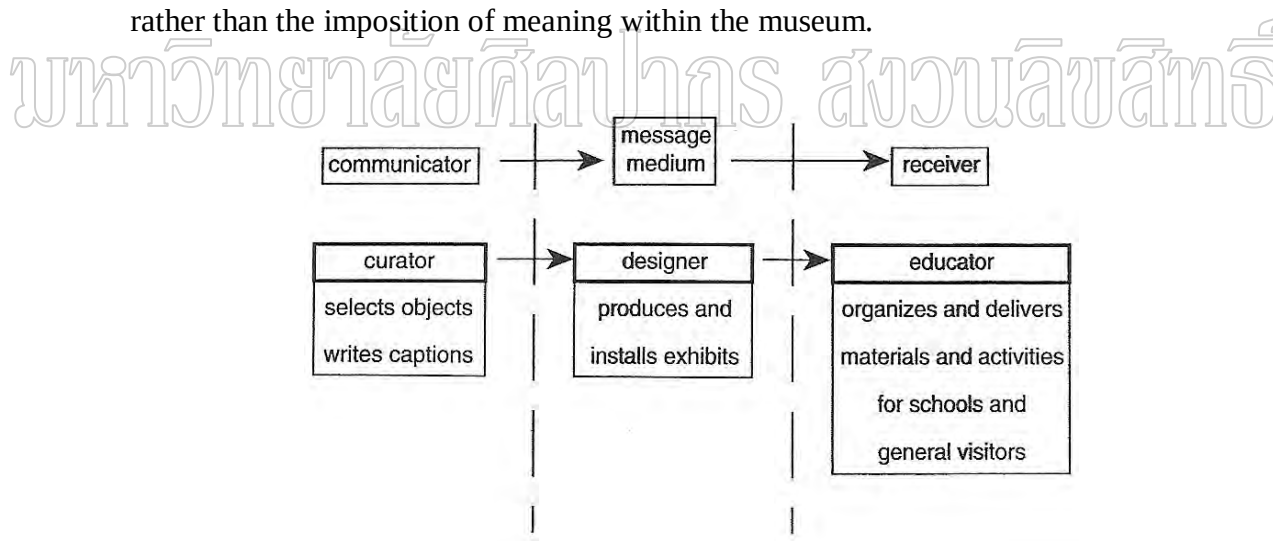


Fig. 6 The Communication Model applied to Exhibition Development
Source: Hooper-Greenhill, E., 1999, the Educational Role of the Museum, 70

According to Hooper-Greenhill's holistic approach to museum communication, every element within the museum is important to fulfill visitor's experiences. In considering a holistic approach to museum communication, wide elements are to be aware either on the museum's image or on general experience of the visit. These include the museum buildings, attitudes and activities of museum staff, atmosphere

and managerial style of the museum institution, as well as the preparation of guidance and orientation for museum visitors. Indeed, museums communicate on-site through a range of methods which includes exhibitions of many different types, functions, sizes and approaches to interpretation. As different audiences need different provisions, different types of exhibition or display can be used to attract different sections of the public. A Holistic Approach to museum communication is as follows:



Fig.7 A Holistic Approach to Museum Communication

Source: Hooper-Greenhill, E., 1999, *The Educational Role of the Museum*, 40

In addition to the Holistic Approach model, activities, events and educational programs are generally designed to match the need of particular audiences by means of creating opportunities for public involvement with the museum exhibitions and collections. Generally, museums use a variety of means to communicate with people outside the building. These include the establishment of connections with local and national media, the building-up of secure supporting networks among local, business, educational and cultural communities, including the use of various marketing techniques for museum advertisement (Hooper-Greenhill 1999, pp.40-42).

6. Interpretation and the Provision of Facility within the Museum

People perceive heritage and museum collections in various ways in accordance with individual perceptions and their sharing ‘conceptual maps’ of the world. Their interpretations will largely depend on their cultural experiences, specialist knowledge, socio-economic factors, personal identities, and their visiting practices. As Hooper-Greenhill (1999, p.11) states, visitors construct meaning within museums using a wide range of interpretative strategies. The meaning is related to mental construct and to the pattern of ideas on which the individual bases his or her interpretations of their experiences of the world. The process of meaning-making is the process of making sense of experience, explaining and interpreting the world to ourselves and others. In museums, meaning is constructed from objects and from the sites themselves. This involves an encounter between the past and the present, and the interpretation of the material matter.

Although visitors make sense of objects in their own ways according to their interests, skills, prior knowledge and interpretative strategies, the museum has the responsibility for producing an exhibition which is identified and researched its intended audiences, and that is designed with the results of this research in mind. The concepts of interpretative communities, and shared conceptual maps, are useful in allowing museum managers to differentiate among various responses (Corsane 2005, p.207).

The above statements are supported by Aplin (2002) who proposed that different people perceive and define heritage very differently, depending on their educational background, previous experiences, beliefs, and philosophy of life. Interpretation is any form of presentation of factual material and interpreted meaning about a site or other heritage item. Brochures, multimedia, websites, and all sorts of advertising are interpretative tools for interpretation. However, differences in age, gender, and geographical context can affect perceptions and interpretation of heritage (Aplin 2002, p.30). Effective interpretation requires potential apparatus for presentation. These include on-site signs, professional guides, eye-catching brochures

and print materials, the provision of audio-visual aids and multimedia, websites, as well as visitor center as the medium between museum and visitors. Most importantly, managers and interpreters need to have a clear idea on their goals in using interpretation and the messages wished to convey.

The meaningfulness of information presented to audiences is important to achieve the purposes of presentations and an agency of communication is 'Interpretation'. In fact, the interpretation must be entertaining and interesting for audiences to pay attention while understandable and relatively easy to perceive (Ham 1999, p.162).

For the definition of interpretation, Tilden (1997, p.8) has provided that

'Interpretation is an educational activity which aims to reveal meaning and relationships through the use of original objects, by first-hand experience, and by illustrative media, rather than simply to communicate factual information' In brief, interpretation is a means of communicating ideas and feelings which helps people enrich their understanding and appreciation of their world, and their role within it' (Interpretation Australia Association 1995).

Museums and interpretative exhibitions have a crucial role to play in communicating to their visitors a sense of place and identity. Uzzell (1996, p.219) stated that military and regimental museums, for example, both provide a public record of the history and achievements of the regiment or command, and act as a social agent to inculcate the traditions, value systems and conventions of behavior into new recruits.

Recently, educational theorists have recognized the fact that learners need to interact in meaningful ways with new information before it can become part of their repertoire of knowledge, and also that the negotiation of what counts as meaningful to learners is critical in the provision of helpful learning environments. Similarly, constructivist learning theory insists that people make their own active interpretations

of experience as individuals search for meaning, look for patterns, and try to invest their experiences with significance (Hooper-Greenhill 2000, p.118).

Museums will use a variety of techniques to present their collection to the visitors. The ‘media’ is used as permanent displays, special exhibitions, guides, lectures, videos, catalogues, and other printed materials. A balance among information, education, and entertainment is needed so as to maximize the benefit the visitors deserve within the museum (Corsane 2005, p.65).

The process of interpretation requires an understanding of the ways ideas and information are communicated. A model of the interpretative pathway is illustrated in Fig.8: Interpretation Loop.

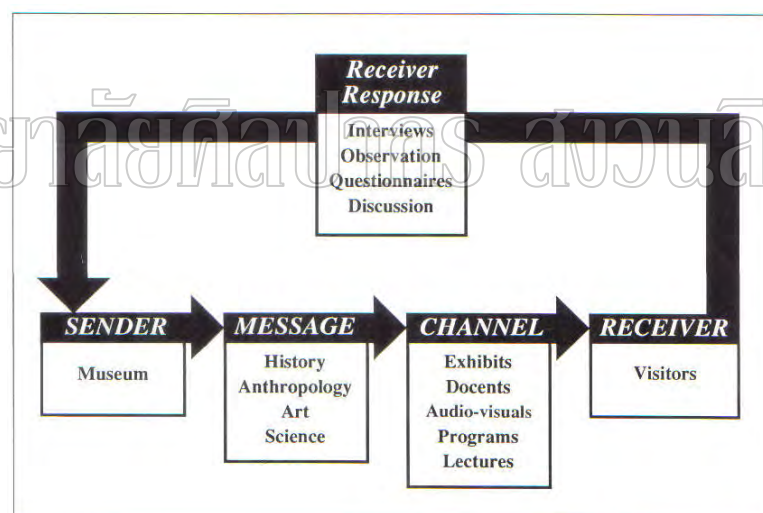


Fig. 8 Interpretation Loop

Source: Edson, G. & Dean, D., 1994, *The Handbook for Museums*, 172

As illustrated, the flow of interpretation is from sender to receiver and then back to the sender. An important aspect of the process is the way the path turns back on itself. Without this particular aspect, the sender has no way of knowing whether the message has been received. The model has demonstrated what kinds of the messages are to be conveyed and which channels are likely to be most appropriate for those prospective audiences (receivers). This model can be used for enhancing the chance for future improvement of the exhibitions.

The interpretation of visual culture in museums may be considered from two viewpoints. Curators display objects in groups along with associated images and texts, and thereby produce interpretations for visitors. Meanwhile, visitors themselves deploy their own interpretative strategies and repertoires to make sense of the objects, the displays and the experience of the museum as a whole.

As Hooper and Greenhill (1994, p.14) noted, back in the 1950's, there was already a shift in media and communication theory away from understanding audiences as passive receivers of information, and towards seeing them as active participants in the meaning-making process. This shift recognized that audiences are much more diverse, selective and therefore active in their responses to all sorts of media. As Corsane (2005, p.178) proposed, the notion of the curator as the sole interpreter, handing down wisdom to a passive public should be ignored. Instead, one should now aim for interpretation to be a transaction between the public and the curator as a mutual task.

มหาวิทยาลัยศิลปากร สงวนลิขสิทธิ์

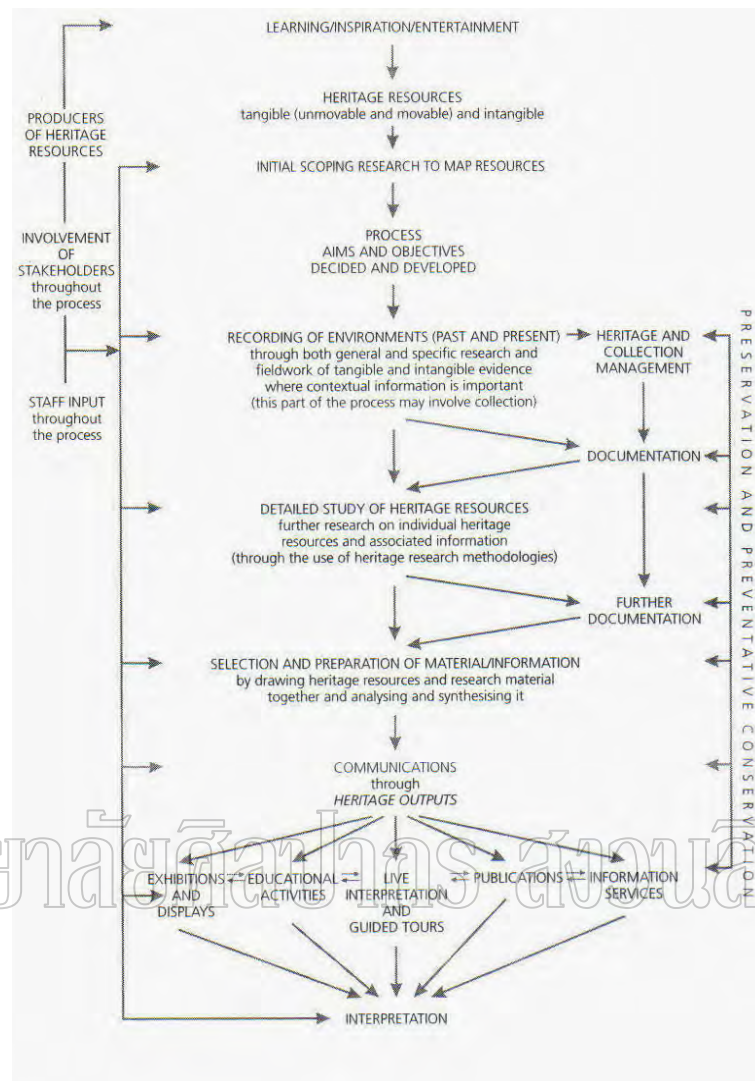


Fig. 9 Model of the Overall Process of Heritage, Museum and Gallery Work
Source: Corsane, G., 2005, *Heritage, Museums and Galleries*, 3

Developed by Corsane, G. (2005), the Proposed Model in Figure 9 emphasizes the importance of public participation in all stage and activities of the overall process either heritage, museum or gallery works, from involvement in the activities themselves to the decision-making processes that both lie behind these activities and connect them. The model recognizes the notion that museum is performed to provide vehicles for learning, inspiration and entertainment. Throughout the process, practitioners work with representatives from different stakeholder groups and communities in consultation and negotiation, aiming to develop available heritage

resources and museum exhibitions to be more effective, attractive and understandable among audiences with effective interpretative tools.

Heritage management is based in a dynamic world of changing values, issues, stakeholders and visitors. To stay one step ahead of change, interpretation needs feedback from stakeholders and evaluation programs concerning the exhibitions and activities within the museum. The product, the operating environment, and the resource were three essential components for interpretative planning (McArthur and Hall 1996, pp.87-104). Despite huge advances in the methods and technologies of displays, museums still reach a tiny proportion of the population because they have been regarded as places for specialists or elite groups within society. To be successful, the museums need to be re-interpreted as the reservoir for tourists, who are thirsting for a living image of the past, a source of culture, a crossroads for ethnic cultures, and a symbol of national unity (Corsane 2005, p.220).

One of the main reasons that people do not visit museums is that they think they have no comfortable feeling and connection there. Many earlier museums were built and designed like exotic places, where they are easily associated in people's minds as the reservoirs for elites. Besides, many of the most famous museums attracted a large number of foreign visitors rather than local people, leading to the notion of 'not for us' (Ambrose and Paine 1993, p.217). In many Asian countries, going to museums was never a habit among local people. As Meechul (2005, p.57) stated, if people did visit museums, it is because they were forced to do so. Most students was accompanied by teachers on a museum trip and found the experience boring.

The main barriers for the museum visit seemed to be lack of information, lack of time, and the negative perception that museum might be boring, inaccessible and have expensive catering (Hooper-Greenhill 1999, p.10). Recommendations for improving the experience for younger visitors include more accessible and interactive exhibits, better orientation, creative workshops, thematic displays and zoning, as well

as the availability of necessary facilities such as clean toilets, a cafeteria, or spatial parking lot to be provided on site.

Most museums presently recognized that communication can only be accomplished within a more interpretative framework than solely exhibit as they used to. The educational mission of museum exhibitions has become the primary focus. The information behind the objects needs to be related to the audience through planned and structured interpretation. Some messages can be reasonably well identified through exhibition efforts such as the presentation of genuine objects for stimulating interest and curiosity, the coordination among schools and other organization partnerships, and the creation of providing entertainment and enjoyment within the exhibition, aiming to promote a willingness to learn and to continue learning in the future (Edson and Dean 1994, pp. 155-156).

To be effective in presentation and interpretation, the exhibited specimens must be prepared in the most careful and artistic manner, arranged attractively in well-designed cases. More appropriately, each object must attach a label of its name and history for all audiences to get actual understanding (Goode 1991, p.308 quoted in Bennett 2004, p.170). For the physical orientation provided to all visitors, it is a good idea to give them a leaflet containing a plan of the museum and pictures of principal exhibitions, including events and activity programs (Ambrose and Paine 1993, p.224). Heritage objects exhibited in the museum are varied in their inherent values and in the associations that give them their special significance. One thing stands out, as noted by Thompson (2005, p.40), several elements were reinforcing each other to give mutual meaning. However, as Corsane (2005, p.205) argued, the meanings of objects, images, and sites will depend on what visitors bring to them and that this will change according to the personal knowledge and individual experiences of the visitors.

Effective marketing and public relations are vital elements in the museum's success. There are many public relation tools for effective communication, including the annual report, newsletters, brochures, museum website, public service announcements, print advertising, documentary and public education programming, billboards, corporate sponsored advertisings, personal contacts, and so forth. By using these means, museums continue to grow as important participants in the lives of their communities, and these relationships carry positive public relations benefits (Genoways and Ireland 2003, p.268).

As stated by Serrell and Raphling (1992, p. 181), when working within the visitor relationship, the development of teams can come up with creative, thoughtful solutions that should achieve the goals set for both the exhibit and the audience. For the future development of heritage attractions, an understanding of the comparative effectiveness of different interpretative media is also important. Techniques for investigating the effectiveness of the presentation media include studies of non-verbal communication as a means of feedback from visitor to guides providing verbal information (Risk, 1989).

The provision of available facilities within a museum is important for that museum's viability. To create additional income, as Marstine (2006, p.12) suggests, museums should provide facilities such as reception and orientation areas, restrooms, educational centers, theaters, and special area for school groups if they want to win visitor's mind.

The museum manager and staff should also ensure that the success of a visit is not damaged by poor support facilities or services. Good management of souvenir shops, restaurants, coffee points, and other facilities represent good opportunities for providing information about the museum, its collections, services, events, and activity programs to visitors as well (Ambrose and Paine 1993, p.63).

7. Displays and Exhibitions

Ambrose and Paine (1993, p.67) have emphasized that it is worth spending a little time thinking about the different ways museums interpret the objects in their collections, and considering which are the best techniques for interpreting different things to different people. Managers, curators, or staff should be responsible for coordinating the content of the display or exhibition to be accessible to all audiences. Museum and heritage can facilitate learning by making available resources and information through exhibitions, educational materials and activities, along with other useful public programs. If visitors have been empowered through well designed learning orientation, then they can become active interpreters (Corsane 2005, p.10).

In order to mount significant exhibitions, museums are expected to collect things and thus the collection role suddenly appears as a symbol of the continuation of life. Vujic 1999, quoted in Knell (1999, p.88) noted that at the beginning of the war in Croatia, when it was still part of Yugoslavia, the Croatian History Museum and its collections were damaged and lost. At that time, people ceased to be object oriented and due to their tragic circumstances, they became more oriented towards ideas and memories. As time goes by, mere memories could not satisfy them and thus they started to collect and create their material contexts. Therefore, collections and exhibitions of tangible heritage in the museums were regarded as pivotal components to fulfill the past memories among all people.

Significantly, effective museum exhibitions need to understand visitor behaviors, orientations and their circulation within the museum. Bitgood (1992, pp.15-16) provided some principles of understanding visitors at the museums and galleries by giving that visitors tended to have a more satisfying experience and acquire more knowledge when they were given information and orientation along their visit. Besides, visitors tended to approach landmarks, large objects, and interactive exhibitions as the ways to attract and entertain them.

Nonetheless, there is no guarantee that the intended meaning will be achieved despite exhibitions being produced to communicate meaningful visual and textual statements. This is because visitors to museum exhibitions respond in diverse ways and may or may not have perceived the key messages, or paid attention to the exhibitions at all (Hooper-Greenhill 2000, p.4). In persuading visitors to pay more attention, exhibitions require effective objects exhibited within. There are many objects that could be better understood if the audience has a chance to participate in a process or experiment within a museum. Durbin (1996) noted that it was safe and wise to assume that every exhibition will have novice learners in its audience. Thus creating effective and educative exhibitions to be accessible to all audiences, including new visitors, are pivotal for museums worldwide to maintain their potentiality and viability.

Hooper-Greenhill (2000, p.107) discusses the meaning and definition of material culture and visual culture of the exhibitions. 'Material Culture' largely restricts its focus to three-dimensional objects, to materials and their significance, their relationships to each other, and to the history and geography and social context of the object. For 'Visual Culture', it is a new field of study that largely restricts its attention to two dimensional objects in order to address the meaning of the image in film, photography, television, advertising, or painting, and is far less concerned with the physical or material character of the image.

However, from the modern period till the present, objects were viewed as sources of knowledge in themselves through their effective arrangement. As Hooper-Greenhill (2000, p.109) asserted, objects were used to construct identities on both a personal and a national level. Personal experiences can be encoded in artifacts, so that the object represents the memory, the significance and the emotional power of those experiences. Objects can therefore be used to express a sense of self and a feeling of cultural affiliation. Objects are also the inscribed signs of cultural memory and are used to represent or symbolize ideas and memories. It is the mutual responsibility among managers, operators, and curators in registration, documentation, and classification of those curatorial procedures within the museum collections.

Because museums can not survive financially on permanent exhibition alone, temporary or special exhibitions play an important role in maximizing the use of space as they provide a chance for changing and sustaining visitors' interests as well as attracting new visitors at the same time (Genoways and Ireland 2003, p.281). This is because the contexts of temporary exhibitions can offer what visitors interest and want, thus they invite the revisit from visitors and the financial support by effected stakeholders who jointed the exhibitions.

Currently, the museum's relationship to its collections is changing. On the modern interpretative side, museums will rely less on collections to carry the story, and more on other forms of expression such as stories, songs, speech, dramatic, and psychological powers for their presentations, in which emotional and evocative messages within the museums would be lessen as well. However, these changes will help museums to become more effective storehouses of cultural information (Corsane 2005, p.71). Information Technology is shifting the museum's emphasis, making possible transparency in their working process, opening up collections to users, and creating interdisciplinary networks and greater participation. Indeed, technology is enabling professional and social communities to take possession of their heritage (Sola quoted in Knell 1999, p.192).

On the exhibition team, there are three important experts: the curator who provides knowledge of the museum, the designer for visual appearance and exhibition, and finally the educator who establishes the link between the content of the exhibition and the audiences. As advocated for museum audiences, educators must represent the interests of the variety of visitors an exhibit will potentially serve. As Roberts (1994, pp.10-12) suggested, families, youths, seniors, disabled people, schoolchildren and so forth have different needs and interests in which it was the responsibility of the educator to know and represent museum to suit each group of audiences. It is also critical to note that learning in museums includes emotional, social, contemplative, and attitude aspects. An understanding of these aspects is essential for exhibition development.

As museum workers, developers such as managers and curators can change the experience that visitors have by developing and designing exhibitions that acknowledge the learning preferences of those different audiences. Indeed, exhibitions are the basis of the museum experiences for mass visitors. Accessible exhibitions can lead to greater enjoyment and more effective learning.

To be more effective in exhibition, the exhibition policy needs to address the following areas: target audience, resources, types of provision, roles and functions of temporary exhibitions and permanent displays within the museum, and in the community, research and evaluation (Hooper-Greenhill 1994, pp.176-179). In brief, as mentioned by Hilke (1994), all exhibitions should be accessible to the widest possible audience, informative and effective in communication, supportive in a variety of learning styles from individual and group experiences, and also encouraging audience participation within the museum activities and exhibitions.

There are numerous tasks to be performed in producing a museum exhibition. A useful way of creating exhibitions is to approach them as a type of project or enterprise with a definite product as the end result (the exhibition). Throughout the project, as proposed by Edson and Dean (1999), there are three types of activities: Product-oriented activities are the efforts in association with objects and interpretation. Management-oriented activities are all the tasks that focused on the provision of resources and personnel. Finally, Coordination activities are concerned keeping every job moving forward the prospective goal. All projects begin with an idea, progress through a planning and implementing period. The project can be drawn as a series of events along its timeframe as the following:

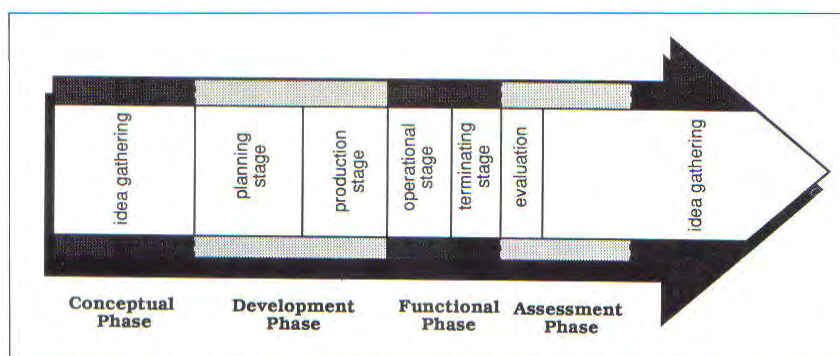


Fig. 10 Exhibition Project Model

Source: Edson, G. & Dean, D., 1994, *The Handbook for Museums*, 162

The Exhibition Project Model represents four main stages of system life-cycle for exhibition development. The phases and stages starting from conceptual phase through assessment phase make them easier to identify tasks and to make a plan in action. This outline also makes types of activities and specific tasks to be more recognizable and helpful in identifying times when decisions are needed.

The Smithsonian Institution of the United States, the world's largest museum and research complex, has developed a diagram for exhibit programs to be applied as a standard for museum exhibitions. The diagram clarifies each stage of exhibit process in order to stimulate coordination among all practitioners and staff within the museum.

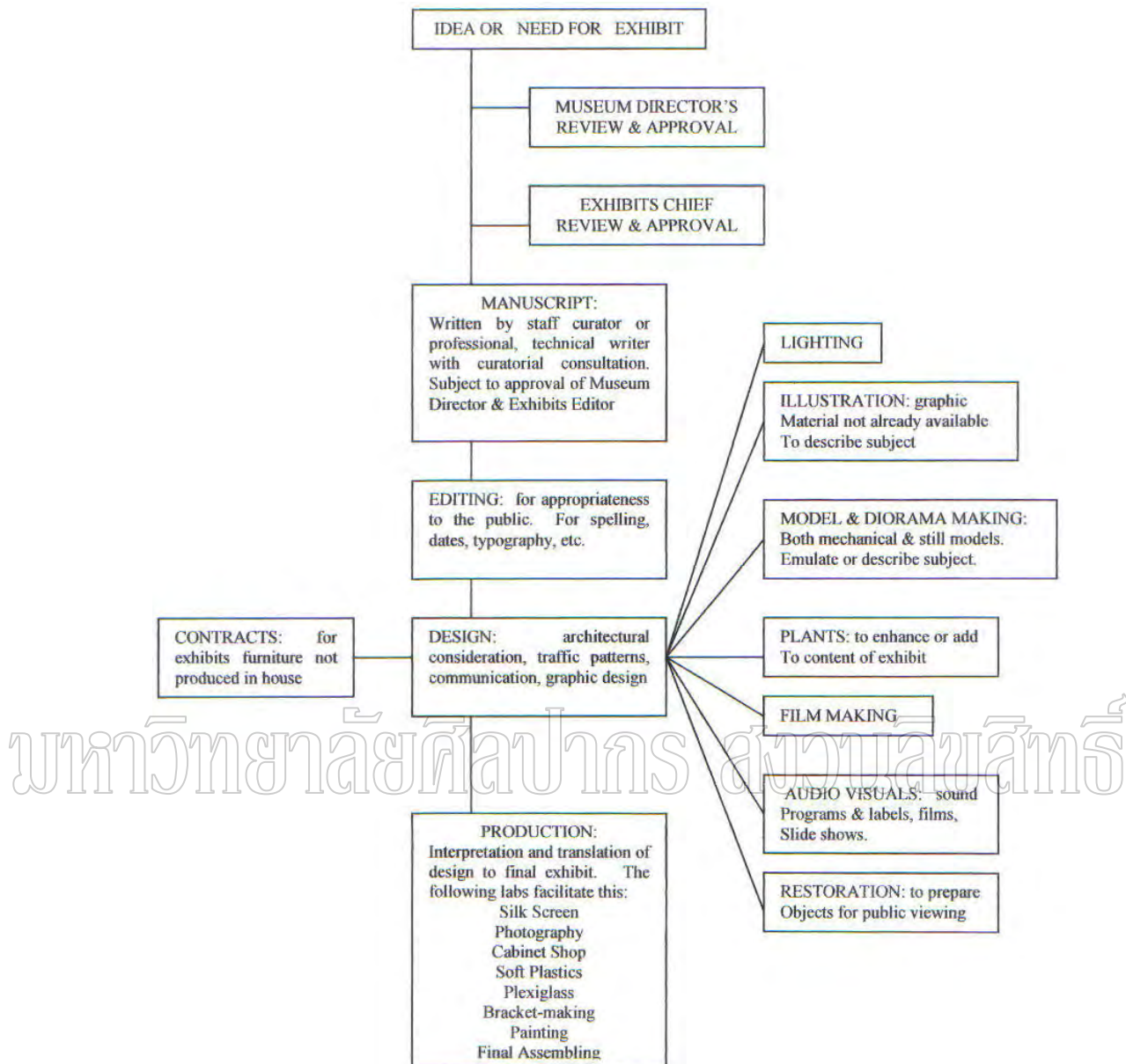


Fig. 11 Diagram for the Making of an Exhibit

Source: Musicakama, N., Chanthosri, K., Tuamcharoen, M., 1978, Museology, 198

The diagram illustrates the process for making an effective exhibition by dividing into four main stages as follows:

- **Stage 1 (Objective Approval by Museum's Director):** This is the responsibility of the curatorial staff or developer to propose objectives for an exhibition by assessing exhibit title, objective, scope of exhibition and hypothesis.

- **Stage 2 (Manuscript and Editing):** After the director approved the exhibit objective, the curator need to identify documentation and exhibition by studying size and number of objects, exhibit narratives, exhibition title and subtitle, as well as exhibit labels.
- **Stage 3 (Graphic and Design):** This is where interior designer of an exhibition and curatorial staff are coordinated to each other in considering exhibit script, physical and psychological requirements among audiences, graphic and composition, including various exhibit factors such as lighting, illustrations, models and dioramas, audio visual, and object restorations.
- **Stage 4 (Production and Installation):** When the design contents and exhibition planning are mutually agreed by the designer and curator, the production and installation of exhibit showcases and collections are to be proceeded.

In monitoring and evaluating of the museum exhibitions, there are various possible techniques for surveys, each of which has strengths and weaknesses. These include Questionnaire Surveys, In-depth Interviews, Structured Interviews, Behavioral Mapping as well as Observation (Binks and Uzzell 1990, pp.16-17).

There are three types of evaluation in museums that are useful for measuring the success of exhibitions and displays. The Front-end Evaluation is the process of testing ideas and proposal for exhibitions to avoid mistakes of display design. The Formative Evaluation is the process of testing and trying out whether the ideas of the exhibition have worked or not by building a mock-up of the exhibition and modifying it in advance of constructing the final exhibition. Finally, the Summative Evaluation is the process that is carried out on the completed exhibition once it has been built. The aim is to discover whether the exhibition works or achieves its intended design (Ambrose and Paine 1993, p.108).

8. The Care of Collections

A museum should manage their collections as effectively as possible while preserving the collections for long-term use and in accordance to its mission. All museums need a well articulated collection management policy that is understandable by the board of government, staff, and volunteers. Each museum should tailor its collection management plans to fit its own collections and situations (Genoways and Ireland, 2003, p.175).

The care of the collection as related to preventive conservation, this includes environmental monitoring, climate control, design of storage equipment, building construction, use of storage materials, facilities management, security systems, fire protection, emergency preparations, pest control and management, as well as health and safety issues (Genoways and Ireland 2003, p.188).

Conservation can be defined as *'the act of preserving, guarding, or protecting; preservation from loss, decay, injury, or violation'* (Edson and Dean 1994, p. 93).

Conservation is an attempt to prolong the life of objects of historical and artistic value. The primary job of saving them can be done by their curators or owners through providing proper safeguards for the objects against environmental extremes, such as humidity and temperature fluctuations, insects, micro-organisms, and vandalism.

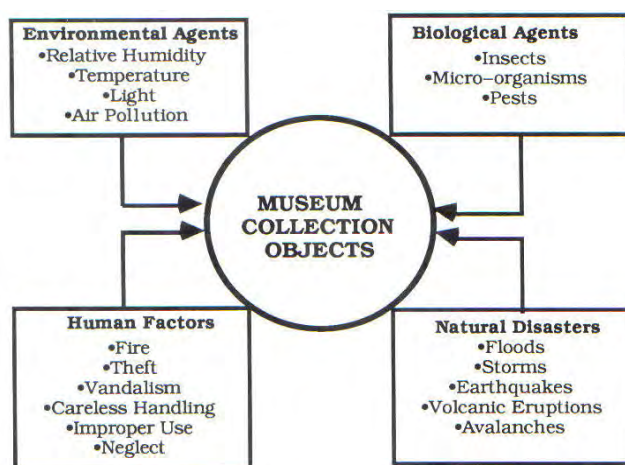


Fig. 12 Agents of Deterioration

Source: Edson, G. & Dean, D., 1994, the Handbook for Museums, 94

Edson and Dean (1994) have also identified the sources and agents of deterioration to the museum collections. These deteriorate agents should be prevented by effective conservation treatment and routine monitoring in order to prolong valuable collections in long run.

Ambrose and Paine (1993, pp.162-163) proposed that conservation for object displays as well as museum buildings was needed for long-term sustainability. There are two types of conservation. While 'Preventive Conservation' is about ensuring that the museum's collections are properly stored, displayed, handled and maintained in ways which do not lead to deterioration, 'Remedial Conservation' is the process by which the deterioration of an object is halted and its survival in a stable condition is assured. Nonetheless, investment in preventive conservation is now seen as a key priority for museums of all types as the ways to protect museum's assets in advance. However, different types of collections need different forms of caring, thus museum managers should therefore be trained in understanding the special needs of different types of collections as well.

In many American museums, according to Proschan (2004, p.25), the curators are not simply the custodian of a collection or administrator of a museum or department, rather; they act as specialists or scientists who are responsible for a particular part of a museum and its collection. Ideally, the curators know their collection from top to bottom, conducting a research both to expand the collection and to deepen understanding of objects already in the collection. Besides, they develop ideas for exhibitions and try to bring educational programs and activities to be included for the exhibition packages.

The most difficult part of maintaining a museum is the proper care and use of the collections that are called '*material evidence of people and their environment*'. The care of collections is the primary responsibility of all museums and should be done by setting forth in a written statement concerning the collection management policy, including the purpose of the museum and its goals, the uses of collections and scope, acquisition strategies, loan policies from both incoming and outgoing loans, record-

keeping requirements, methods of disposing of items from the collection, and finally the explanation of how the goals are interpreted in its collection activities (Edson and Dean 1994, p.67).

As stated by Edson and Dean (1994, p. 95), there were four different levels for the conservation of collections. The first level concerns the treatment of collections as a whole to maintain the unchangeable state by providing controlled environments and appropriate housing for the objects. The second level is object preservation as the retardation of further deterioration or damage to the object. The third level is actual conservation restoration by which the action has been taken to return a damaged artifact as nearly as is feasible to its original form and function. Finally, the fourth level is related to in-depth scientific research and technical examination of the object. The success of an active conservation program depends on data management such as the gathering, recording, and evaluating information related to collection care.

Similarly, planning ahead for disaster control plan is an urgent requirement for the museum. Museum staff should be trained in dealing with disasters by creating disaster control equipment and supplies as well as planned procedures (Ambrose and Paine 1993, p.189). For the management of environment factors within the museum, the staff needs to have an in-depth knowledge of the type and capabilities of the temperature and humidity system of heating, ventilation, and air-conditioning system (HVAC), the control of dust and pollutants, the control of natural and artificial lights, as well as pest and micro-organism control management (Edson and Dean 1994, pp. 114-128).

9. Museum Management

For the success of administration in museums, the museums themselves should have a management plan that describes their purposes, objectives, programs of action by explaining how the resources will be used to implement the programs and defining the steps which will be used to monitor progress and evaluate the impact of the museum's works. The management plan must derive from policy agreed by the

museum's governing body (Ambrose and Paine 1993, p.232). Museum managers have the role of monitoring how well their museum is doing in terms of the museum's mission and objectives set out in their forward planning.

Furthermore, the success of the museum depends upon the success of staff in meeting planning objectives and in carrying out their routine works. Ambrose and Paine (1993, pp.264-265) also suggested that an annual job appraisal or performance review should be carried out so that a member of staff gains improved job satisfaction through knowing that their works in terms of quantity and quality has been recognized, acknowledged, and valued.

Edson and Dean (1994, pp.54-61) proposed that the security in museum should be taken into consideration for museum operations. 'Museum Security' was the philosophy and activity of providing an environment in which people and objects may be as free from threat of harm or damage as possible within the museum. Security objectives can be met by use of staff, barriers, signage, collection management practices, housekeeping activities, environmental monitoring, alarms and surveillance, and a security plan. These components are interrelated with each other and with all other factors of museum management.

As indicated in the previous discussion, museums are experiencing radical changes in their social environment. These changes involve the change in economic conditions, pattern of support, visitor profiles, competition from other institutions and organizations, public expectation, communication modes, and also political roles. Thus, it would be reasonable for museums to look for a management framework to guide them in improving their relationships to their social surroundings. To strengthen staff members' performance in groups as well as their interaction with the public, some museums have offered staff interpersonal skills training (Corsane 2005, p.55).

To be successful in museum operation, like the Singapore Discovery Museum, for example; the most important factor is developing teamwork among the curators, designers, photographers, scriptwriters (Discovery Museum 2005, p.94). In addition,

administration of the organization requires skill in conflict management, interpersonal relations, budget management and monitoring, and staff supervision and evaluation. Managers must also set legal and ethical standards and maintain involvement in the museum profession.

For conflict management in museums as noted by Genoways and Ireland (2003, pp.68-70), there were four levels of conflict in the workplace: intrapersonal, interpersonal, intra-group, and inter-group. The challenge for administrators comes in helping staff to understand the sources of perceived conflicts and in keeping the focus on the greater good for the museum. There are three factors as contributing to museum conflicts: the level of authority (hierarchy), conflict of interest, and working-overlap from one department to one department, leading to internal conflict therein. The best way to manage conflict is to create positive interaction by respecting differences and encouraging open communications.

The relationship between the museum administration and its staff has a direct impact on a museum's ability to fulfill its mission. It is vital that efforts be made to create a working environment that is productive, progressive, and respectful of the needs of the individuals as well as the institution. Genoways and Ireland (2003, pp.21-24) proposed that the mission statement consisting of the institution's goals, purposes, and scope of collections, should serve as a touchstone for the institution's staff and the board. A museum must create a well written statement that conveys the primary purpose of the institution not only to the staff and board but also to the public. A successful mission statement depends on creating texts covering all activities in which a museum may wish to engage and this must be made visible through public programs.

The mission statement and strategic plan for a museum should be committed in writing. The museum director should be certain that the shaping of the mission and construction of the strategic plan are an inclusive process, including board, staff, and audience members (Genoways and Ireland 2003, p.338).

As introduced by Bryson and Alston (1996) for development planning in the museums, there were nine steps of strategic planning processes as the following:

1. Initiate and agree on managerial process;
2. Identify organizational mandates;
3. Identify and understand stakeholders and develop mission;
4. Internal and external assessments;
5. Identify strategic issue;
6. Review and adopt strategic issues;
7. Formulate strategies (action or work plan) to manage strategic issues;
8. Establish a vision for the future of museum;
9. Evaluation and reassessment of the operation.

Indeed, the purposes of a development plan are to identify opportunities for fund-raising, and train staff or volunteers in implementing the plan. Significantly, a development plan should be consistent with the goals of a museum's strategic plan (Genoways and Ireland 2003, p.122).

According to Element for Museums (2004, pp.6-14), there are four main issues for effective administrative systems of the museum: the Museum Planning, the Budget Planning, the Personnel Planning, and the Marketing Planning. For the Museum Planning, it needs to identify museum's policy, personnel development, forward planning both short-term and long-term, fund-raising, social service and welfare, including routine museum evaluation. For the Budget Planning, an administrative department needs to identify the cost of museum operations, personnel trainings and salary, cost of maintenance, cost of new acquisition and renovation, cost of displays and exhibitions, cost of public relations and personnel welfares, and so forth. As these costs should not be exceeded the budget from each fiscal year, most museums attempt to raise funds from other sources of funding either government and non government organizations or any group of interests to support the museum administration.

For the Personnel Planning, museum personnel or staffs are the most valuable resources that need to put them on the right job and the right place by considering their level of education, experience, personal skill and ability, human relations and their personal interests. Personnel in the museum comprises of administrative department, academic department, public relations department, development department, operation department, human resource department, building maintenance department, account department, as well as general affairs department. Finally, the Marketing Planning covers all publicity, promotion of the museum services, advertising, public and media relations, including marketing research and visitor surveys.

In the conservation context, the Burra Charter is a statement of principles and processes for the conservation of heritage places, leading to the clear concept of cultural significance in aesthetic, historic, scientific, and social values. Today, it has been widely recognized and accepted as the Australian industry standard and this statement can be included in the mission statement (Knell 1999, p.141).

The form and function of museum establishment are conditioned by their social, economic, political context, available locations, financial resources, organization's objectives, and also funding partners. A museum building should function cost-effectively and efficiently by using appropriate materials with firm architectural statement of the museum (Ambrose and Paine 1993, p.204). In the current trend of museums, Ambrose and Paine (1993) also proposed that keeping up-to-date with new ideas and changing practice as well as learning from other museums about success and failures, was a considerable challenge for museum staff and operational procedures. This can be done especially in small museums, where time for practicing and training is often restricted.

10. Funding Sources and Relationship with Other Stakeholders and Organizations

Although operating on a non-profit basis, museums nonetheless require sufficient income to ensure their survival. Because they face the world of increasing competition for public and private funds, and funding is scarce, museums must attract public attention and revenue by demonstrating that resources are used effectively and efficiently. The board or managers can help secure the museum's future survival by budgetary planning and sound financial projection such as a five years monitoring plan. Budget management requires sufficient planning and development, staff involvement, and continual monitoring aides by tools of monthly reports and annual audits to ensure that the service and facility are available to the community (Genoways and Ireland 2003, pp.101-113).

Museums have, therefore, been encouraged to consider money making schemes, such as introducing cafés, shops and ventures, for example, as an alternative money generator. Keene (2002, p.15) stated that museums in almost all countries were expected to generate income from their visitors to supplement any public funding they receive. This can be done through commercial activities such as shops, hire of their galleries and charging for services.

Fund-raising is the process whereby an organization generates funds from individuals, businesses, foundations, or government. There are various methods for fund-raising obtained by donors or participants of the museum such as grants from government as well as public and private organizations. Genoways and Ireland (2003, pp.123-126) provided three effective campaigns as the sources for funding. 'The annual campaign' is a museum's effort to raise funds for daily operating and programming needs. The challenge for annual campaigns is to encourage donors to contribute their funds for museums. 'The capital campaign' is an intensive fund-raising effort to generate a substantial sum of money to meet the capital needs of a museum such as constructing new building or installing new and up-to-date technology within the museum. 'The endowment campaign' is the supplementary for museum's

operation on a specific purpose, where by the income may be donated by cash, real estates, or personal properties.

Other source of funds may be obtained through membership, personal and phone solicitations, direct mailings, special events, admission fees, dining and entertainment facilities in the museum, souvenir shops, and special exhibition or educational programs offer to all audiences.

Developing relationships with other organizations can also beneficial to the museum's operations and managements. This may include the development of other museum organizations, tourism organizations and educational faculties (Ambrose and Paine 1993, p.121).

11. The Birth of the Museum in Thailand and its Development

The introduction of museums in Thailand began in 1856 AD in the reign of King Rama IV for his own collections since he had an active interested in the archaeological field and had visited various ancient remains in the region. In accordance with his personal interest, and with the support of the royal family members and senior bureaucrats, the first museum was built within the area of Racha-Rudee Throne for his personal collections. As King Chulachomklao (King Rama V) was also interested in antique collections, he had been to many museums in Asian and European countries and brought back ideas of successful museum management to Thailand. Therefore, in 1874 AD, 'The Concordia Auditorium Museum' was built for the purpose of antiquity exhibition, including the king's collections, and also for use in a military conference (www.thailandmuseum.com/officemuseum/history.htm).

Before 1911 AD, Thai cultural heritage in the fields of archaeology, history, artistic works, literature, archives, and museums were under the care of various government agencies, with the consequence that the wide range of responsibilities tended to be scattered and poorly discharged. As King Mongkutklao (King Rama VI) recognized the importance of arts and cultures as belonging to citizens in the Kingdom

and as the basis of Thai national identity, the Fine Arts Department was founded by royal command on March 27, 1911 AD and entrusted with managing the cultural affairs of the Thai nation. Being a government agency, the Fine Arts Department is responsible for preserving, conserving, and promoting the wisdom and culture of the nation in the areas of museums, archaeological precincts and monuments, including various artistic national treasures such as custom and tradition, performing arts, fine arts and historic literature. It also supports systematic and practical studies as well as research on local wisdom and culture as the way to preserve cultural heritage through museum exhibitions and several artistic activities (www.finearts.go.th/en/mission.php).

Subsequently, in 1926 AD, with the aim of establishing an official National Museum in the region, King Praja-Dhipok (King Rama VII) with the assistance by George Coedes, the Southeast Asian archaeologist and the director of the National Library of Thailand, ordered the construction of the first ‘National Museum’. The museum was charged with collecting and conserving invaluable ancient relics and national treasures and exhibiting them through permanent and temporary exhibitions to the general public (www.thailandmuseum.com/officemuseum/history.htm). In addition, it is also responsible for registering the relics and treasures in order to ensure their security.

The common aim of museums worldwide as stated by Munkarn (1979) is to collect and conserve valuable collections overtime in order to facilitate the mutual understanding of the inherited culture and traditions in a particular nation. To be successful in museum administration, however; it is critical to recognize what is the purpose of the exhibition, what is to be exhibited within the gallery, how the message is to be conveyed to all audiences, and who the real visitors are. Nowadays, many museums and galleries are changing their exhibition approach from purely static exhibits to be more exciting multimedia exhibits with the aim at being more accessible to a wider public. In the military museum context for today, the situation is the same: the exhibitions are changing from static presentations to be more exciting by means of multimedia displays, light and sound techniques, and more advanced arts of displays and interpretations.

12. The Role of the Government in Managing Military Museums

As the government representative, the Royal Thai Army (RTA) is responsible for protecting national sovereignty and stability for the mutual national benefit of all Thai citizens with the chief aim to ensure the general public in the role and the potentiality of the Royal Thai Army in securing the landlord for future development (The Royal Thai Army Public Relation Plan 2006). As a result, the Royal Thai Army attempted to promote the role of the army through various public-relations media such as broadcast radio, television, print material, multimedia (especially internet), and all sort of social activities. More importantly, the potential medium for gaining mutual understanding from the public in the role of the army is to develop military museum with effective displays and exhibit presentations for them to be participated with no admission fees.

Unlike other public and private museums that are owned by one particular organization, the military museums worldwide were executed and funded by the state organization with its aim to present the world histories of military context while preserving the national collections in its care. The Royal Thai Army Museum in Honor of His Majesty the King IX in Bangkok, for instance; has been operated by the Military History Department under the commission of the Royal Thai Army Headquarters. The Royal Thai Army Headquarters have their own right to independently manage, conserve, and fund to the museum without any commission from the Ministry of Defense (RTA Museum 1997). As the museum is housed in a renovated academic building that was built for training cadets in 1986 AD in the reign of King Rama V, it is one of the oldest military museums in the region (The Century of Chulachomklao Royal Military Academy 1987, pp.257-262).

According to the official museum policy by the Royal Thai Army Headquarters, this museum building was built to be served as an educational center for infinite educational experience in the context of historic events and wars in Thai territory by means of military equipment exhibitions (www.rta.mi.th/history.htm). In addition, it was also being used as the connection venue between the army organization and the

general public to get mutual understanding in the crucial roles of the Royal Thai Army in defense of Thai's territory and sovereignty in which all Thai citizen can be proud of and tried to conserve the significance of the place in the long run. More importantly, as following the official military policy, this museum was initially intended to be accessible for all visitors not only for those military personnel members but also general public access. Thus the museum is opened daily and welcomes all visitors with no admission fees.

Nowadays, the Royal Thai Army Museum is funded by the Royal Thai Army Headquarters as the major source of fund raising in each fiscal year. The Military History Department is responsible for producing management and conservational planning for the museum covering at least two fiscal years ahead and proposes the total budget directly to the Office of the Army Comptroller within the Royal Thai Army Headquarters for financial consideration. By the way, some sources of funding can be sought by donations from the general public and private organizations (RTA Museum 1997). Unfortunately, due to the fact that the RTA museum was built within the highly restricted area of the RTA Headquarters, access to which is only available to army personnel. This means that providing open access to the museum has been impractical for those general audiences and external visitors (The Century of Chulachomkiao Royal Military Academy, 1987).

As the Royal Thai Army Headquarters recognized the limitations and constraints of the military museum, they have proposed several options for improving public access to the museum, as follows: First, to promote the museum with the aim to increase public access, the RTA Headquarters made a connection with some public and private organizations, including local schools that were interested in museum visitation. In order to control the number of visitors into the museum building, however; those interested groups have to make a reservation in advance through telephones, faxes, or internet online for visiting schedule and timing availability (Royal Thai Army Vision 2000).

Second, as the RTA Headquarters had two entrances within the area, the entrance on the Rachadamnoen-Nok Road will be used as the main transit for all visitors who come to the RTA museum. On the other hand, the entrance on the Democrat Road will be used as the main transit for all military personnel of the RTA Headquarters (Royal Thai Army Vision 2000). This option can be considered as the effective approach to separate the military museum from the RTA Headquarters' boundary. If effectively operated, the museum can gain more public access from both local and foreign visitors while maintaining the whole fabric of the place in long term. Nevertheless, this proposal option needs the agreement of all military departments and chief commanders within the vicinity.

Third, if the above proposed options are impractical due to the difficulty of achieving conformity with military rules and regulations, including the limitation in the number of visit into the museum building, the RTA Headquarters would decide to relocate the military museum to a new site (Royal Thai Army Vision 2000). This option means that the RTA museum will be reserved only for those military personnel and will continue without any public access. Critically, however; due to the fact that the new military museum for the general public requires large sum of budget for the construction, this kind of proposal will be impractical or indefinitely postponed.

Unlike other museums that can be more readily accessed and organized, as stated above, military museums are more difficult to operate and manage to meet organization's satisfaction and required strategic plans. The national government, as the owner of the military museum, should be responsible for management planning. It would be a useful starting point for the government authorities to undertake a critical assessment of the strengths, weaknesses, opportunities, and threats (SWOT analysis) of military museums and their management.

13. Military Museums Context

Finn (2005, p.78) describes the material culture of war museum as embodying battlefield landscapes, cemeteries, monuments of wars and memorials, as well as historic or reconstructed buildings associated to the living and the dead of war time, all representing a complex interplay of past and present as memorials. It is a common fact, however; that many military museums worldwide are regarded as unattractive venues for visitation and incompatible with the interests of the general public and they therefore suffer from poor financial support from stakeholders and poor management of the museum per se.

As defined by Virunrak (2005, pp.26-31), the ‘military museum’ is the place where all sorts of military equipment are collected in a single place and exhibited to reveal the historical significance of each object and issue. Nonetheless, the common problems occurring in military museums worldwide are largely related to the following:

1. The constraint of sponsorship in funding, especially from the government;
2. The displays and exhibitions within the museum are designed by military officers without museological training and who therefore have limited expertise in mounting effective exhibitions, leading to poor presentations and visitor satisfaction;
3. Because of budget constraint, many old buildings used as military museums are to be renovated instead of building a new one, with the incompatible functions of the old building contributing to poor displays and presentations.

Nowadays, the involvement of stakeholders from different sorts of disciplines and activities, such as military specialists, professional curators, teachers, travel agencies, marketing specialists and so forth, are needed to collaborate in the development of more effective military museum.

Whitmarsh (2000, p.2) argued that memory of war often forms part of a nation's self-image and identity and the commemoration of war serves two purposes: 'affirmation and propagation of political ideas about the wars and the nations which fight them' and 'the need to express and resolve emotional traumas caused by war'. Significantly, memory and commemoration were constructed according to the social, cultural, and political nature as well as the needs and experiences of the society (Winter 1999b). Memorials have often been constructed in an attempt to bring together the varied meanings that death in war has for those left alive (King 1998).

The period since the Second World War has seen the construction of Holocaust memorials and museums throughout the world, especially in the 1960s and the 1980s (Heathcote 1999). In the United Kingdom, one of the best examples is the Holocaust exhibition at the Imperial War Museum. Fundamentally, the aim of the Imperial War Museum was to create a sense of inclusion and membership of the nation by using pictures to reinforce images of national unity and a sense of shared experiences among members of the nation.

Too often, however, in dealing with the memory of war, military museums focus on the technological advancement of the military equipment rather than on other aspects such as the more general context of how the objects were applied or of the course of the war itself. In this way military museums are no different from other forms of traditional commemoration which are also selective in the way they portray war. Focusing on technological performance has inevitably neglected meanings and divorced objects from their original usage and from the people associated with them. Many military objects connected to human tragedy possess a potentially powerful emotional aura, but, as Liddle (1997) noted, most of them are rarely explored by museums in their exhibitions. An exception is the Flanders Fields Museum at Ypres, Belgium, which has attempted to avoid emphasis on technology or on glamorizing or glorifying war. The main exhibition presents weapons in a rusty condition, preventing them from being considered in purely aesthetic terms.

As Jabri (1996) notes, war is a constitutive element of collective identity; it reproduces in collective memory through national narrative of past glories in the face of threats against national sovereignty and survival. Meanwhile, understanding military history has a number of purposes. One main purpose concerns the study of past accomplishments and mistakes so as to become more aware in the future about operational needs and results of war. Another purpose is to create sense of tradition which is used to create cohesive military forces. To collect oral history for more understanding of war time, Kavanagh (2000, p.67) noted that, in 1972, the Imperial War Museum set up its 'Sound Records Department' to record memories of war through oral history covering the memories of veterans of the First World War by means of formal and informal interviews. However, regardless of the purpose of the interviews, oral history should be conducted in the spirit of critical enquiry and social responsibility.

The lack of success of many military museums worldwide is related to the various problems of exhibitions and interpretations. External representations of memory such as memorials and commemorative exhibits may reflect fading memories or a desire to forget, but may also decrease one's perceived obligation to remember (Young 1993 and Hamilton 1994b). Another aspect of the commemorative tradition is that the reality of death or emotional interpretation is not directly mentioned in the galleries. More often, museums portray war in relatively unemotional terms and in line with the commemorative traditions as static exhibitions. Thus it might be more appropriate for military museums to seek to make an emotional impact on audiences through the use of interactive displays and exhibitions.

While most museums seemed to be forwarded with modern displays design and improved visitor facilities to their operations; military museums, on the contrary, were usually short of money, understaffed and deficient in covering exhibition area but just basic visitor amenities. In fact, military museums must be developed by the introduction of entrance charges, shops and catering operations, including fundraising and cooperating with commercial sponsorship to provide the financial resources they needed to form new galleries or to improve displays, exhibitions, and facilities therein.

This development can make museums more efficient and more attractive to the general audience (Forty 1987, p.73 quoted in Thwaites, P. 1996, p.55).

Sujit (1972) has proposed several practices that have the potential values for the management of military museums:

1. Military museums worldwide should have mutual aim in '*educating audiences*' by using military weapon and equipment exhibitions to understand the roles of the state in protecting the nation.
2. Those who sacrificed themselves in war should be honored in the galleries like '*commemoration displays*'. This can be done by assembling replicas or model of the monuments and diorama displays within the galleries.
3. As the military context is concerned with tragedy and sensitive elements to all audiences, the military context within the galleries should be moderately exhibited and acceptable while '*entertaining audiences*' to gain more public access herein.
4. Military museums should be responsible for effectively '*managing and conserving those invaluable assets*' through time for life long learning to all visitors.

14. Exhibitions and Circulation in Military Museums

Thwaites (1996, p.38) mentioned that the objects within the military museums have a crucial role to keep alive the traditions of the army by providing a storehouse of knowledge for the military historian, by collecting together those relics of the past which make the history of the regiment lived for the recruit and also by bringing the army and its past history to the notice of the general public.

However, military museum displays of the present seem to give narrowed view of battle exhibitions without any explanation or analysis to be provided for such strategies and tactics applied in the fighting. As referred by Thwaites (1996, p.73), this is might a result of inadequate exhibition areas for dioramic displays and available

spaces for presentations, including the change in the way that individual achievement in battle history will be no longer explained into the current exhibitions. Wood (1987) stated that old-fashioned, object-based, esoteric displays of traditional military museums are needed to be improved by the new design of displays and exhibitions to make their subjects more accessible and relevant to people's lives.

As stated by Sujit (1972), the exhibitions in military museums should be divided into '*Permanent Exhibitions*' with separate rooms dedicated to War Memorial Galleries, Military Weapons and Equipment, Military Uniforms, as well as Military Insignia. On the other hand, '*Temporary Exhibitions*' should be provided in order to present a particular theme that has been selected to appeal to the interest of the general public. This kind of exhibition should be readily accessible to all audiences and close to the entrance hall. There are many sources of military weapons and equipment to be obtained for exhibitions such as the contribution from local national museum, military divisions and departments, cadet schools and military organizations, as well as the donation from public and private collectors (Munkarn 1979).

The development of a spatial concept for the museum must begin with the awareness of the constraints and opportunities posed by each particular space available within the building, including circulation patterns, aesthetic factors and architectural design characteristics (Hooper-Greenhill 1999, pp. 178-190). For the exhibition space and storyline, it is necessary to allow the visitor to move easily among the galleries and make logical decisions as to which way to go. In addition, as suggested by Olds (1999), if a good balance among movement, comfort, competence and control of the space is achieved, these will lead to psychological and physiological harmony and a setting that is more interesting and accessible to all visitors.

Sujit (1972) argued that, in order to be successful in designing a new military museum, appropriate lay-out planning of the building, traffic circulation, materials for construction, heating ventilation and air conditioning system (HVAC), lighting design, transportation circulation, parking spaces, as well as nearby landscape should be taken into consideration for new museum development. Displays are the interface between

the visitor and the machinery of the museum. It is here that the expertise and capability of museum staff must fulfill the expectation of the general visitor, the curator, and the artist. For the installation of objects to be exhibited, it is the responsibility of the conservators to give advice on appropriate handling, placement, and other operational parameters. Besides, they also make recommendations concerning installation, light levels, security levels, and other display factors to maintain the physical well-being of the objects

To protect the objects within the exhibition, glass cases or acrylic in frames are recommended to be the effective barriers against interference by visitors. Nonetheless, the need to protect works and objects can interfere with artistic intention, particularly contemporary works which rely on visitor's participation. To offer more options satisfactory to all parties, curators and conservators should develop and test new approaches for the displays (Barker and Smithen 2006, p.99).

The level of lighting in an exhibit area should be taken into consideration due to the fact that organic objects are subject to deterioration upon high exposure or prolonged periods of light. Object deterioration can manifest itself in the form of fading, discoloration, and decomposition. The appropriate use of light is therefore critical to maintain the objects in perfect condition (Barker and Smithen 2006, p.100).

A routine cycle of maintenance for the display exhibition is essential to maintain the well-being of the museum in long term. This can be done by monitoring the overall environment, dusting and polishing works on display, and ensuring that exhibit equipments are well-operated.

Significantly, to captivate public interests and their accessibility into the museums would be largely depended upon several factors; for example: the aesthetic and exciting activities provided in the exhibitions, audience's knowledge and background, promotional media, as well as budget for new development. Although military museums had the same functions as the general public and private museums such as lobby, ticket booth, lavatory, exhibition hall, auditorium, library, military

office, storage room, and so forth, however; they required more security guards and special attendants as they are usually built within the military boundary. Thus, the accessibility by general public tends to be limited in accordance to army rules and regulations (The Royal Thai Army Public Relation Plan 2006).

15. Developing Conservation Policy and New Additions to Heritage Places

In general, as proposed by ICOMOS (1999), the major reason for undertaking the protection, conservation and management of heritage places, was to facilitate an understanding and appreciation of the heritage significance of the place- that is, both its tangible and intangible values- by the host community and the visitors in an equitable and affordable manner. In a similar way, the interpretation and presentation of programs within museums or galleries should encourage a high level of public awareness while supporting the need for long term survival of the natural and cultural heritage of the place as a whole. Unfortunately, consideration of the protection of heritage places in many asian countries is relatively rudimentary and is not the first priority for governments faced with the pressures of globalization and demands by their citizens for increased work opportunities and standards of living. According to Logan (2002), the biggest problem in heritage protection was the lack of government commitment to cultural heritage protection, leading to poor heritage management and conservation in many asian cities.

The Burra Charter process of heritage protection adopted by Australia ICOMOS can be utilized as cultural heritage conservation guidelines in many asian countries. The Burra Charter (1999) provided that ‘*Cultural Heritage Significance*’ means ‘*aesthetic, historic, scientific, or social values for past, present, and future generations*’. Investigating the significance of a place like the Royal Thai Army Museum in Thailand, for example; the basis of information needs to be collected from physical investigation, oral history and documentary information, including historical summary and physical survey into the fabric of the place and the change to the fabric as a whole. To be more effective, the conservation policy should be based on the ‘Statement of Significance for the Place’ and should incorporate recommendations for

preservation, restoration, reconstruction, adaptation and interpretation as appropriate (Heritage Victoria, 2003).

In developing conservation policy, Kerr (2000, p.22) asserted in his Guide to the Preparation of Conservation Plans' that information such as the requirements for retention of significance, client's requirements and resources, an understanding in physical condition of the place, and the external requirements in each particular circumstance is also needed. Significantly, conservation policy should aim to reveal the significance of the place and meet all statutory requirements, while anticipating opportunities and threats therein.

Some historic museums require new additions or extensions to their heritage precincts for social and economic viability. With improper use of heritage place and the lack of facilities provided to visitors at museums like the Royal Thai Army Museum in Bangkok, Thailand, for example; new additions and facilities constructions are needed to fulfill visitor's expectations and conservation requirements for sustainability. A successful addition is one that on completion complements the heritage place, but without any significant damage to material and value on nearby historic buildings or adjacent area as a whole.

According to 'A Guideline Basis for New Additions and Extension to Heritage Place' (2005) proposed for the appropriation of new works into the heritage site, it is necessary to ensure that new additions do not detract from the significance of the heritage places and their setting. In principle, new additions should not dominate a heritage place but should be compatible to the original heritage building in terms of material, size, proportion, height, setback, texture, color, plan figuration, while sustaining rhythm and orientation of the heritage place in general. Furthermore, the new addition into the heritage place should follow rules and regulations of one particular place with highly permission by the owner of the area.

16. The Future of Museums and Their Collections

Carbonell (2004, p.87) provided four main causes of changes for the future of museums:

1. The rise in people's social expectations and consequently in what they expect the governments to provide for them;
2. The increasing in the amount of disposable income, leading to more demand for sophisticated and expensive leisure activities of traveling among visitors worldwide;
3. Owing to the advancement of professionalism among those who work in museums, it is time to develop better museums to suit audience's satisfaction while maintaining high quality exhibition programs;
4. Because of the increasing number in both public and private museums, the competition among them has unavoidably occurred to captivate audience's visitation.

Because reminiscence stimulates a person's memory, the use of this in positive and constructive ways can assist people to build self-esteem and bolster a sense of identity, as well as enable them to fulfill their personal experiences through memorial exhibitions. Thus museums would probably have the opportunity to develop levels of service for older adults on a par with current levels of service for schools. This can be done by providing lifelong learning through reminiscence (Kavanagh 2000, p.119). Furthermore, museums are one of many places which enhance opportunities for children and adolescents to talk about the past and often to do so on their own terms within the family unit. Visitation has opened up the possibilities for cross-generational exchanges as things from remembrance among the child's or the family's members can be shared and talked about.

Besides, in order to act as memorials to the local servicemen and seize the imagination of posterity, war museums should contain rolls of honor, records of the local regiments, photographs and archives. These would be supported by the

presentation of weapons, uniforms, medals, souvenirs of the local service men during the war, as well as war trophies captured from the enemy (Thwaites, P. 1996, p.33).

Museums of the future will focus and pay attention to the role played by such museum information, including value, meaning, power, control, interaction with visitors, interpretation, understanding, authenticity as well as authority. These concerns are largely cognitive and centered on the processing of knowledge for creating, interpreting, receiving, and understanding of such information (Corsane 2005, p.58). Greater attention would be paid to the relationship of the museum and its audience, basing educational discipline through effective exhibitions and communication. 'Customer Care' includes all aspects of education, interpretation and exhibition, marketing and the development of marketing research, and the care and safety of visitors (Hooper-Greenhill 1994, p.230). The post-museum would be equally interested in both tangible and intangible heritages and memories would be represented through innovative multimedia to call back commemorations of the past (Hooper-Greenhill 2000, p.142).

Considerably, the new museum should categorize their exhibitions into three zones or learning space: the '*Discovery Zone*' is the space for learning by searching and discovering at the same time while the '*Collection Zone*' is an exhibition of historic, cultural and art objects. The '*Resource Center*' is a place where audience can search for more knowledge in abstract or tangible forms. These three learning activity zones are presented together in combination (Discovery Museum 2005, p.9).

Today, many museums attempt to expand audiences and to become more appealing to visitors through the use of advanced digital technology and interactive media. The chief aim of today's museums is to attain attraction status and to become destination for mass audience. In this new trend of museums for the future as Bruce (2006, p.130) proposes, experience has become currency while entertainment has become culture. This means that the provision of entertainment media within the museum is imperative and become a major component to fulfill visitor's experiences and satisfactions.

McTavis (2006, pp.226-243) also proposes that the introduction of ‘*Virtual Reality*’ within the museum website is important in attracting a new audience that is interested in getting its museum experience online. In terms of public service, web designers aim to engage worldwide audiences in interactive website made available through internet connection. Major goals of digital exhibitions are to promote museums as part of the educational infrastructure and to provide online resources for instructors as well as students who are interested in the museum realm.

For effective marketing management, it is time for the army museum to search for other groups of visitors. Thwaites (1996, pp.130-153) referred that regardless of the general public access, military museum curators have always provided guided tours of their museum only for official visitors, army personnel, as well as public and private school parties. However, these types of visitors are no longer enough for the viability of the museums, thus they need to offer a wide range of learning experiences to all general public that associate to a number of their disciplines such as the fine and decorative arts, technology, ethnography and social history, for example.

In addition, there are still more needs to be done for the armed forces to relate their topic to those civilian population. First of all, it is no longer the duty of such military officers to design displays and exhibitions for the museums; rather, it is the experience and expertise museum designers to refurbish displays to be more attractive and relevant to future generations of museum visitors. Nowadays, nevertheless, not only did the museum problem concerned about how to develop displays and presentations to be more compatible to general interests, the critical problem of the military museum is also related to their existing locations. Many displays and exhibitions are still situated in unsuitable buildings that are not built for a museum purpose at the first place. In addition to this, due to the fact that the museum buildings located within army camps with insufficient visitor facilities, surrounded by security fencing, inadequate trained staffs to look after their collections, as well as the lack of financial resources to make necessary improvements, these are also major problems that obstructed the museum development up to the present. Therefore, these

problematic factors need to be considered and searched for effective solutions before any museum development.

Without any improvement or development to the military museums, they will be facing an accusation from being the most backward and old-fashioned. To be more attractive and relevant to the need of future visitors, hence, as suggested by Thwaites (1996, p.157), new displays and exhibitions should be incorporated with effective interpretative features such as animated figures, dioramic displays, special light and sound effects, interactive videos, as well as simulators to suit all audience's interests.

According to effective sources for museum presentations, printing materials such as paintings, drawings, photographs and documents are the mainstay of many museum displays today and as sources for research collections. The Cine-film is also being used to illustrate war history, daily lives and duties of those military service men and women. The film can easily attract audience's emotions to be participated into the presentation by telling story from the record of oral history and experiences of those military personnel. Libraries within the military museums are also used as the storage of published unit histories, autobiographies, biographies and reference books on subjects like uniforms, weapons, military equipments and vehicles.

For the future of military museums in Thailand, in accordance with the New Bangkok City Plan for the period 2006-2011, the Royal Thai Army Museum in Honor of His Majesty the King would be promoted and developed as the military museum hub in Thai territory as it has been built in the heart of the city of Bangkok on 'Rattanakosin Island', which is recognized as having a unique position and as the source of city's history with a variety of artistic and cultural creations (http://thailand.prd.go.th/the_focus_view.php).

Chapter 3

Background and Historical Development of the Royal Thai Army Museum

Legend has it that the whole present-day area of the Royal Thai Army Headquarters and the Royal Thai Army Museum used to be the place for the Chulachomklao Royal Military Academy which trained all Thai cadets since 1906 AD. Inspired by King Rama V, the former academic area played an important role as the first military academy in the region before being literally transformed into the Royal Thai Army Headquarters as it is today. In outlining the historical development of the Royal Thai Army Headquarters of the present, this chapter will be arranged into following sections: the Background of the Royal Thai Army, the Biography of King Rama V as the military academy founder, the History of the Chulachomklao Royal Military Academy, the History of the Royal Thai Army Headquarters, the Role of the Directorate of Operations and the Military History Department, and finally the Background of the Royal Thai Army Museum.

Background of the Royal Thai Army

National security depends on political, economical, socio-psychological, technological and military factors. Even though ideological conflicts in politics and socio-cultural development with other adjacent countries such as Burma, Cambodia and Lao are gradually decreasing in the region, economic competition, border lines problems, national interest protection, as well as conflicts between dominant and minority ethnic groups still occur. It is imperative, therefore, for the Thai nation to acquire a high capability military force in order to guarantee its defense and the preservation of its national interests.

As part of the national military power, the Royal Thai Army is required to develop sufficient combat capability with respect to the security environment and national economic status. According to the Royal Decree by King Rama V, the Royal Thai Army has the responsibility to prepare the army forces and to defend the Kingdom of Thailand with the Army Commander-in-Chief as the commanding general in time of conflict. As outlined below, in order to prepare the army forces, this institution has developed its capabilities by enhancing force structure, combat readiness, sustainability and modernization for the nation.

Force Structure: The enhancement of force structure focuses on organization development which has meant in recent year, an effective downsizing of forces. The Royal Thai Army of the present has several types of units: Heavy Units, Light Units, Fire Support Units, Special Operations Units, Para-military Units and Reserve Component Units. The Royal Thai Army is organized into seven components. These are the Command component, Combat component, Combat Support component, Logistics component, Area Command component, Education and training, as well as Development Support component.

Combat Readiness: Because manpower is a major factor for combat readiness, the Royal Thai Army has improved the quality of its personnel by instilling in them high standards of knowledge, democratic stand-point, and flexibility of mind. The institution has also been supervising the welfare and living standards of its personnel with the establishment of Army Welfare Department Store and Recreation Center. For material readiness, the Royal Thai Army has attempted, although under budget constraint, to procure the equipment and facilities necessary for operational self-sufficiency by either purchasing them from foreign countries or producing them domestically. In the training field, the organization has established tactical training centers to enhance realism of training, particularly at the regiment level.

Sustainability: The Royal Thai Army has enhanced its capability to sustain combat fighting by means of improving logistics in order to ensure rapid movement personnel, equipment, and supplies into operational areas. These enhancements are reflected by the establishment of war reserve stocks, land and air transportation and the development of trained reservists to fill up units and to replace combat casualties. Such combat sustainability is an essential factor in determining a quick success in any crisis.

Modernization: The Royal Thai Army has continuously initiated various modernization programs for future combat readiness such as force structure, military doctrine, army equipment, supplies and personnel, in association with emerging threats and technological developments. There are four main types of operations: Border Defense, Internal Security Operations, Maintenance of Internal Law and Order, and Support of Country Development.

As stated in Thai Constitution, the Royal Thai Army plays an important role in supporting the nation's development by means of utilizing its resources, personnel, equipment and budget to raise the people standard of living and to fight the war against poverty in remote areas. Besides the national defense roles, the Royal Thai Army has also been participating in many operations other than war, such as the United Nations Peacekeeping Operations, Humanitarian and Disaster Relief Operations in neighboring countries, Narcotic Suppression Operations and other special tasks (*The Evolution of Royal Thai Army 2000, pp.46-53*).

Nowadays, the Royal Thai Army attempts to perform the assigned duties and missions with its utmost ability. The organization has enhanced various capabilities in order to efficiently cope with both internal security problems and external threats, aiming at sustaining the country's sovereignty and the region's independence.

King Chulachomklao (King Rama V) showed far-sightedness in realizing the significance of the armed forces and the need for radical changes to the armed forces, and he embarked upon an extensive program of internal reform and modernization. But in order to achieve good and strong military force, soldiers need a good welfare.

Therefore, the King decided to establish a place for the soldiers in the old Royal Barn behind the City Hall. Marshall Chao-Phraya Surasak Montri was ordered to undertake the construction of this place, which was to be known as the ‘Front Barrack’, and the work was completed in 1880 AD.

The Front Barrack of the Soldier Department comprises the Armed Department, Crewman Department and Royal Guard Department. The Front Barrack building has three storeys, which the Sword Training Hall located on the first floor and Military Officer Conference Room on the second floor. The third floor has been reserved for the Military Museum with a variety of weapons and equipments (*The History of Ministry of Defense 2003*). In 1894 AD, the Front Barrack has changed its name into ‘The Ministry of Defense’, the name still used today.

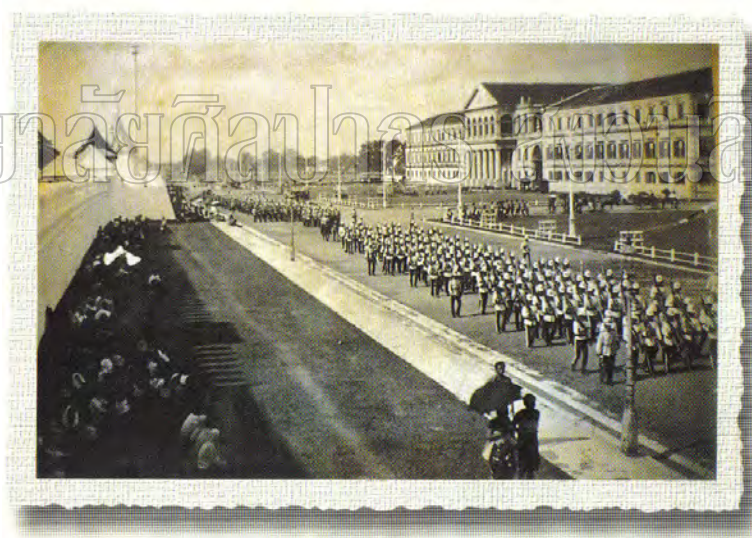


Fig.13 The Ministry of Defense with Military Parade

Source: The Royal Thai Army Museum in Honor of His Majesty the King, 1997

Biography of the Founder, King Chulachomklao (King Rama V)

The Siamese monarch, King Chulalongkorn, also known as King Chulachomklao or King Rama V, was born in 1853 AD as the ninth child of King Mongkutklao (King Rama IV) but was the first son to be born by the royal queen. He was the fifth king of the Chakri Dynasty and ruled the country from 1868 until his demise in 1910. King Rama V succeeded his father, King Rama IV, who had begun to

modernize Siam in an attempt to prevent European colonial aggression. The king's diplomatic policies averted colonial domination and his domestic reforms brought about the modernization of the Kingdom. Like his father, King Rama V was educated by European advisors, notably the teacher Anna Leonowens, but he was also the first Siamese king to study abroad.



Fig.14 Portrait of King Rama V

Source: The Royal Thai Armed Forces Memorial, 39

His state visits were a great success in a promotion of the relationship between Thailand and European countries. The king was given a warm and cordial reception from kings and rulers of the countries he visited in Europe, and he was acquainted with European heads of state. This led to an invaluable understanding between Thailand and the great powers, enabling the survival of Thailand's independence, a feat achieved by no other country in South-East Asia (<http://www.braun-deutschland.de/chula/chula-en.htm>).

At the beginning of his reign in 1868 AD, the king suffered not only from political problems resulting from the threat of the western world powers but also from the internal threats of rebellion. However, because of his royal wisdom in political management and diplomacy, including his attempt to revolutionize the military operations to be comparable to other nations, he was able to security of the throne by

the end of his reign. The king set new military standards and the foundation for effective operations in order to sustain the independence and sovereignty for the nation.

King Rama V successfully abolished slavery in 1874 AD and, in 1885 AD, he began reforming the government, establishing ministries structured along functional lines. The king stripped power from the old nobility, provincial elites, and hereditary court officials and established a professional military armed with modern weaponry. King Rama V also reformed the tax system and then established the country's first modern bank, namely 'Siam Commercial Bank'.

Because of his preference for and support to Western education, science and technology, he chose to send all of his sons abroad to study. Within his own capital city, Bangkok, King Rama V implemented a Western-style educational system and founded the country's first university (later named Chulalongkorn University) in order to train a modern governmental bureaucracy.

During his reign, all of the King's sons finished military education abroad and turned back to their home-town. These royal descendants brought back knowledge of military tactics and strategies, managerial processes and operations to be adopted in Thailand. Recognizing the importance of military operations in the protection of the nation's independence, he launched an idea for the establishment of the first royal military academy in the region, aiming at recruiting and educating new generations of cadets as a base for future military operations. As a result, the first Royal Thai Army academy was built in the hub of Bangkok on Rachadamnoen-Nok Road and officially given the named 'The Chulachomklao Royal Military Academy' or 'Jor-Por-Ror Cadet Academy' which it still holds (The Royal Thai Army Museum in Honor of His Majesty the King 1997, p.45).

History of the Chulachomklao Royal Military Academy



Fig. 15 The Chulachomklao Royal Military Academy in the past

Source: *The Century of Chulachomklao Royal Military Academy*, 1987

Part of the Royal Thai Army Headquarters and the current RTA museum used to be the place for the Chulachomklao Royal Military Academy, inspired by King Rama V for the military operations in the region. Dating back to 1887 AD, Saran-Rom Military School, located near Saran-Rom Palace, was the first cadet school in Thailand with foreign military curriculum introduced from the United States and taught by hired military trainers and practitioners from overseas. Later on, Saran-Rom Military School for cadets of the primary class has changed its name to ‘Royal Thai Army Military School’.

It was not until 1902 AD, King Rama V perceived that Royal Thai Army Military School was constrained in space and was insufficient for the recruitment of new cadets. Consequently, in addition to the new curriculum for cadets of the secondary-class, he ordered the construction of the new secondary class for cadet school on the area close to Rachadamnoen-Nok Road. The official opening ceremony of the new cadet school took place in 1909 AD, where around one thousand cadets participated in the ceremony. Thus, at that time, there were two military schools: the school for cadets of the primary-class near Saran-Rom Palace as well as the school for cadets of the secondary-class on Rachadamnoen-Nok Road.

The structure of the new school compound comprises a large three-storey building, which was a general headquarters for the military school at that time and had an academic subject classroom, teacher's main office and lounge to be located within the building. In addition, there were around 11 classrooms and dormitories within the academic compound. Later on, necessary facilities were added in order to complete fully the military academy.

In 1925 AD, the Ministry of Defense was ordered to combine cadets of the primary-class and cadets of the secondary-class into one place by using two academic buildings on Rachadamnoen-Nok Road to be an academic institution. Later on, these buildings were renovated to become the RTA Museum and the Ordnance Building of the present.

During World War II, many armed forces participated in fighting, leading to the need to produce larger numbers of soldiers by the 'Royal Thai Army Technical School' and military leaders from the military academy. Soon after the war ceased, the Royal Thai Army Technical School was combined with the Royal Thai Army Military Academy. In 1987 AD, King Rama IX ordered the RTA Military Academy to be renamed as 'Chulachomklao Royal Military Academy' in order to commemorate and enhance King Rama V's prestige as the creator of the military academy in Thai Kingdom (The Century of Chulachomklao Royal Military Academy 1987, p.170).

The Chulachomklao Royal Military Academy adopted West Point's curriculum from the United States in which the five-years curriculum is suitable for students who already passed the two-years curriculum of the Pre-Military School. The chief aim of the curriculum is to create ideal military behavior in all cadets so as to ensure success in their military careers. Owing to the fame of the academy, royal family members and military officers had sent their children to study at the academy. The excessive number of students and the limited academic spaces due to its location in the hub of the city led to congested environments for all students within the academy. Moreover, as new classroom buildings and dormitories had been added inside the campus, there are no longer spaces left for physical training, sport and recreational activities.

In order to relieve this congestion, the Royal Thai Army planned to remove the Royal Thai Army Military Academy to a better location, where it would be able to accommodate larger number of military cadets in the future with adequate areas of training and recreational activities. Soon after 1980 AD, King Rama IX (that is, the present King Bhumiphol) ordered the previous military academy to be relocated to a new location within Khao-Cha-Ngok area, Nakhon-Nayok Province, where the allocated land encompassed around 21,000 rai (8,400 acres) with critical surroundings for military operations. General Prem Tinsulanonda, the Commander-in-Chief at that time, was charged with undertaking the royal project. As soon as the new military academy was completed, the Royal Thai Army planned to remove cadets to the new territory. Colonel Princess Maha Chakree Sirindhorn, daughter of King Rama IX, organized the propitious ceremony before the equestrian statue of King Rama V at the Royal Plaza to pay homage to the relocated military academy.

In 1986 AD, Major-General Nikom Sunsarakom, Commander in Chief of the Chulachomklao Royal Military Academy, led all the military officers and the cadet troops from the previous location into the new location of military academy, which is officially called 'Chulachomklao Royal Military Academy', in Nakhon-Nayok Province.



Fig.16 Cadet troops parade to the new military academy in Nakhon-Nayok Province

Source: *The Century of Chulachomklao Royal Military Academy*. 1987



Fig.17 The *Chulachomklao* Royal Military Academy in Nakhon-Nayok Province

Source: *The Century of Chulachomklao Royal Military Academy 1987*

During the search for a permanent location for the Royal Thai Army Headquarters, several top Army commanders agreed to conserve a couple of axial type buildings that used to be a general headquarters for the military school and to renovate them as the army museum. In 1996 AD, the museum building and the ordnance building were officially called ‘*The Royal Thai Army Museum in Honor of His Majesty the King*’ to commemorate the Golden Jubilee of the fiftieth anniversary of His Majesty the King Rama IX’s Accession to the throne.

History of the Royal Thai Army Headquarters and the Museum

*‘Liberty, stability and prosperity of the nation depend on
military operations as a major component for all periods of time’*

King Bhumiphol-Adulyadej’s Speech

The Royal Thai Army has evolved in parallel with the kingdom and has performed its role as one of the nation’s foundations ever since. The military reform was inspired by the military operation from the Western countries in the reign of King Mongkutklao (King Rama IV). King Chulachomklao (King Rama V) ordered the adoption of the Western military curriculum for Thai military and then established the first cadet schools in his reign. From 1910 AD, the General Headquarters for the Army

has been operated within the area of the Ministry of Defense, where military operations have been modernized along European military lines.

Although the Royal Thai Army is a major institution in protecting the stability and sovereignty of the nation, the institution has no Headquarters for its own right and thus used small space within the Ministry of Defense for military operations for a long period of time. In 1984 AD, General Arthit Kamlang-Eak, the Commander-in-Chief at that time, has considered the permanent location for the RTA Headquarters. The Infantry Department Precinct 11th in Bang-Khen District, Bangkok, has been considered as a new territory for the Headquarters. Nonetheless, the project has been postponed and discontinued due to the budget constraint at that time.

In 1986 AD, when the Chulachomklao Royal Military Academy on Rachadamnoen Road wanted to expand its academic spaces and functions to serve a large number of existing cadets as well as new cadet recruitment, it was decided to move the academic institution to the new location at Nakhon-Nayok Province. Coincidentally, owing to the outstanding location in the hub of the city and prestigious history of the previous academic institution in associate with the production of efficient military officers for the region, the Royal Thai Army Department decided to use part of the academic compound as its permanent Headquarters. With the mutual agreement and approval of the cabinet of the Royal Thai Government and the Royal Thai Army Department, a committee was charged with constructing the new building for the Royal Thai Army as the permanent army operational center for Chief Army Commanders and military officers. The building has retained this function since then.



Fig.18 The Royal Thai Army Headquarters

Photo: Supachokeaueychai, T.

However, a couple of previous academic buildings within the Royal Thai Army compound had renovated their former academic spaces and functions renovated for the museum's use while retaining overall characteristics of the buildings and without any alteration to the exterior design. The new Royal Thai Army Headquarters was officially opened to the public on 20 October, 1988 by General Chavalit Yongjaiyuth, the Commander-in-Chief, as a major conductor of the ceremony in that time (http://www.rta.mi.th/history/rta_history.htm).

The RTA Headquarters is an army organization responsible for planning, managing, and developing all army-related operations and activities. The chief aim of the organization is to achieve the ultimate protection for and stability of Thailand's territory. At present, the RTA Headquarters acts as the principal military information center in Thailand. In the RTA Headquarters compound, there are five major interlinking buildings.

Building I

- The Chief-Army Commander Office
- Directorate of Operations
- Directorate of Intelligence
- Directorate of Personnel
- Directorate of Logistics
- Directorate of Civil Affairs
- Army Operations Center

Building II and Building III

- Army Information Center
- Diagnosis Department
- Post-Exchange Shop (PX)
- Army Technological Center
- Adjutant General Department
- Convention Halls
- Commissioned and Non-Commissioned Cafeterias
- Army in Chief Conference Rooms
- Army-Consultant Department
- Main Library

Building IV

- Office of the Army Secretary
- Finance Department
- Thai Military Bank (Royal Thai Army Branch)

Building V

- RTA Parking Building

In addition, Kitti-Kajorn Auditorium Building and a pair of historic museum buildings (the RTA museum), are also located within this campus.

The Directorate of Operations and Their Responsibility to the Museum

The Directorate of Operations has been founded in accordance with the army revolution in 1887 AD in the reign of King Chulachomklao (King Rama V), who has established the Ministry of Directorate of Operations at that time. This ministry has the responsibility parallel to the Ministry of Defense by managing and controlling both the Royal Thai Army and Navy Departments. In 1892 AD, the Ministry of Directorate of Operations has been downsized their operational positions to manage only for the Royal Thai Army Department and as a sub-division of the Ministry of Defense (**The Commemoration of 78th of Directorate of Operations 2005, pp.10-12**).

His Royal Highness Prince Nakhon-Chaisri Suradej, the Chief of the Army General Staff, has revolutionized military operations by establishing the Chief of the Army General Staff Department to support the Ministry of Directorate of Operations in terms of military operations, troop training and transportation ever since.

The Directorate of Operations is responsible for:

- Planning and operating all kinds of war;
- Creating strategic management and principle for military forces;
- Monitoring an army forces training;
- Preparing strategies and tactics to win the war in military operations.

Since 1962 AD till the present, the Directorate of Operations has classified their operations into 11 departments as listed by the following:

1. Military Administrative Works Department
2. Armed-Forces Preparation Department
3. Military Training and Education Department
4. Policy and Planning Department
5. Research and Battle Development Department
6. Military Planning and Operation Department

7. Military Planning and Operation for Air-force Department
8. Special Forces Department
9. Military History Department
10. Project and Budgetary Department
11. Information Operations Department

It was not until 1993 AD, the Directorate of Operations had moved their operational location within the Ministry of Defense into the new location of the Royal Thai Army Headquarters ever since (The Commemoration of 78th of Directorate of Operations 2005, pp.22-23).

Mission Statements of the Directorate of Operations:

- Planning for strategic military operations and forces management within the military precinct;
- Planning and setting policies for military forces in terms of training, education, mobilization and demobilization of the troops, as well as the administration in war time;
- Managing military history and all kinds of military museums especially the RTA museum;
- Directing and coordinating in accordance to army plans and policies;
- Managing all related treaty of the Royal Thai Army;
- Administrating, planning, and coordinating all kind of military researches;
- Managing and inspecting the education system in all levels of the army.

Scope of responsibility and routine tasks:

- Assist army commanders in Armed forces administration for protecting the land and facilitating local military authority in sustaining tranquility;
- Set policies for mobilization and demobilization, including the preparation of secondary forces;
- Administrate and arrange the number of armed forces for forces preparation;

- Assign military armed forces units in order to accomplish the missions;
- Administrate an army training in case of emergency;
- Manage and progress for special forces of the Royal Thai Army;
- Prepare military authority for special areas occupied by armed forces;
- Arrange military history in historic orders and manage military museums;
- Organize military tasks in the Chief of the Army General Staff Department by:
 - giving advice and suggestion to the army commanders;
 - designing an army instruction, common practice and regulation;
 - directing and monitoring all kinds of military tasks in association to mission statements in order to improve army operations.

The Directorate of Operations Diagram

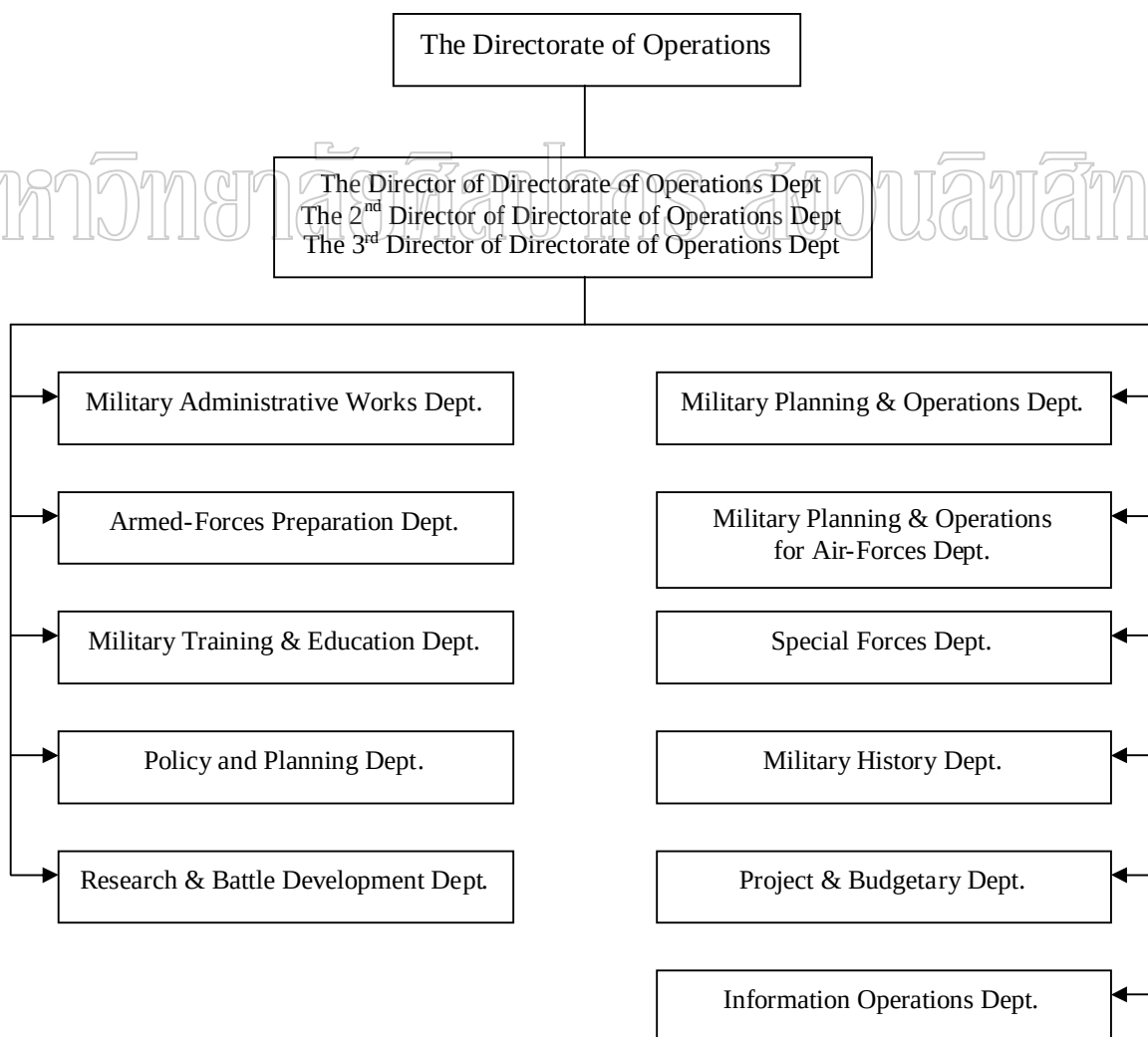


Fig.19 The Directorate of Operations Diagram

Source: The Commemoration of 78th of the Directorate of Operations, 2005.

Military History Department

The Military Historical Department is a sub-department of the Directorate of Operations and has an absolute authority to manage all tasks in association with historical issues and the RTA museum. This department is responsible for planning, managing and coordinating military history, archaeology, and museum collections in relation to military affairs. The analysis of military history and the communicating information about the military museum to the public are also major tasks of the department (Military History Department 2005, p.48).

Military History Department's Organization Chart

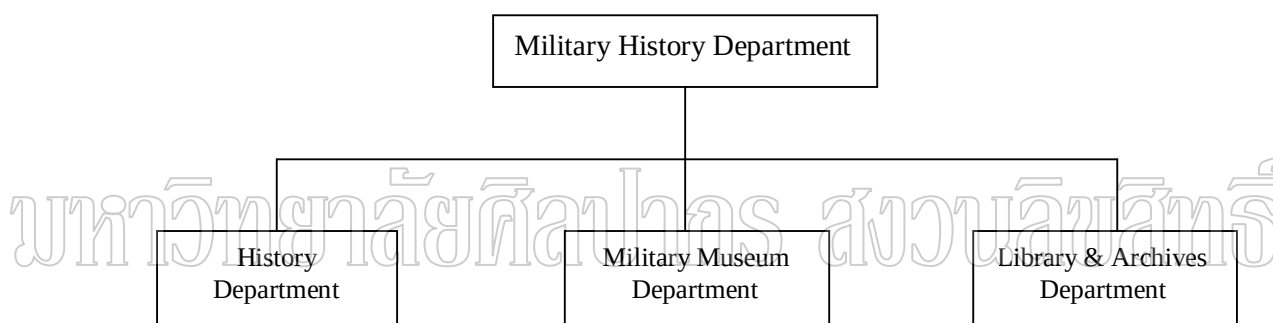


Fig.20 Military History Department's Organization Chart

Source: The Commemoration of 78th of the Directorate of Operations, 2005.

The History Department is responsible for:

- collecting all military related historical documents, including historic literature and military documentary service;
- arranging and compiling military historical documents, as well as promoting them to the public; and
- giving comment and suggestion on the military history management.

The Military Museum Department is responsible for:

- organizing military museum by using strategic management and sustainability approaches;
- setting instruction and regulation as standard of performance to be conformed by all staff in the military museum;
- documenting and monitoring ancient remains and relics that are associate with the army's history.

The Library and Archives Department is responsible for:

- collecting and selecting literatures, books, magazines and necessary documents for the library;
- organizing all related library tasks in order to accomplish objectives and meet standard of management; and
- developing the library department as an ultimate source of military archives and academic documents relating to military history not only for military officers but also members of general public who are interested in army history.

Background of the Royal Thai Army Museum



Fig.21 The Royal Thai Army Museum Building
Source: The Royal Thai Armed Forces Memorial, 88

For the purpose of conserving and collecting historic documentations and military weapons for each period of war, the first military museum was built in 1882 AD according to the wishes of King Rama V on the third floor of the Ministry of Defense's building. When the Chulachomklao Royal Military Academy (Jor-Por-Ror Cadet Academy) located on Ratchadamnoen Road became the new location for the Royal Thai Army Headquarters (The RTA Headquarters), several top army commanders agreed to relocate the military museum, then at the Ministry of Defense, to the new site where it would be housed in two academic buildings dating from 1906 AD during the reign of King Rama V. The academic buildings were renovated for the military museum in 1986 (*The Century of Chulachomklao Royal Military Academy, pp.257-262*). At present, the museum is officially called '*The Royal Thai Army Museum in Honor of His Majesty the King*' or '*The RTA Museum*'.

The Royal Thai Army Headquarters has its own right to independently manage, conserve, and fund the RTA museum without any commission from the Ministry of Defense (*The Royal Thai Army Museum in Honor of His Majesty the King 1997*). However, the Military History Department is responsible for organizing the RTA museum under the commission of the Royal Thai Army Headquarters. The RTA Headquarters encompassed the whole area of 39 *rai* (15.6 acres), where the RTA Museum building and nearby Administrative Ordnance building encompassed the total area of 15 *rai* (5.9 acres).

The architectural style of these axial type buildings are influenced by Thai-European style of decorations. The RTA Museum building has three storeys, where every weapon and piece of military equipment has been classified to suit each exhibition room. For exhibition purposes, the Weapon Room, the Auditorium, and the Army History Room are situated on the first floor. Meanwhile, the Flag and Military Equipment Room, the Uniform and Military Insignia Room, as well as the Reception Room are located on the second floor. On the third floor, the Memorial Hall is situated at the core of the building where the whole area is reserved as a hall of fame for displaying the Statue of King Rama V and the portraits of all Commander-in-Chiefs.

Next to the museum building, the Administrative Ordnance building has the Army Evolution Room for exhibition purposes on the first floor while the Administrative Research and Military Archives Room is located on the second floor for military-related information. The main objective of military exhibitions is to be an infinite educational place for long-term study and research center of army history not only for those military officers but also general public who are interested in military context (<http://www.rta.mi.th/armytourism/rta.museum>).

Although the RTA museum building has been built for hundred years, the renovation of this previous academic building into the museum was only officially opened on June 9, 1996 to commemorate the fiftieth anniversary of His Majesty Rama IX's accession to the throne. Because the place has historic and artistic significance at the national level, the Thailand Department of Fine Arts had the RTA museum building registered on the National Heritage List in 1992 AD (*The Royal Thai Army Museum in Honor of His Majesty the King 1997*).

Nowadays, the RTA museum serves as an edutainment center for countless educational experiences in the context of historic events and wars on Thai territory for the general audience. In addition, it is being used as the connection venue between the Army organization and the general public helping the latter to understand the crucial role of the Royal Thai Army in defense for Thai territory and sovereignty. The RTA museum is open to the general public, without admission fee, from 9.30 am to 16.00 pm from Monday through Friday.

Location

The RTA museum is located within the RTA Headquarters which is bordered by:

- Krung-Kasem Road on the north
- Visuthi-Kasath Road on the south
- Rachadamnoen-Nok Road on the east
- Democracy Road on the west

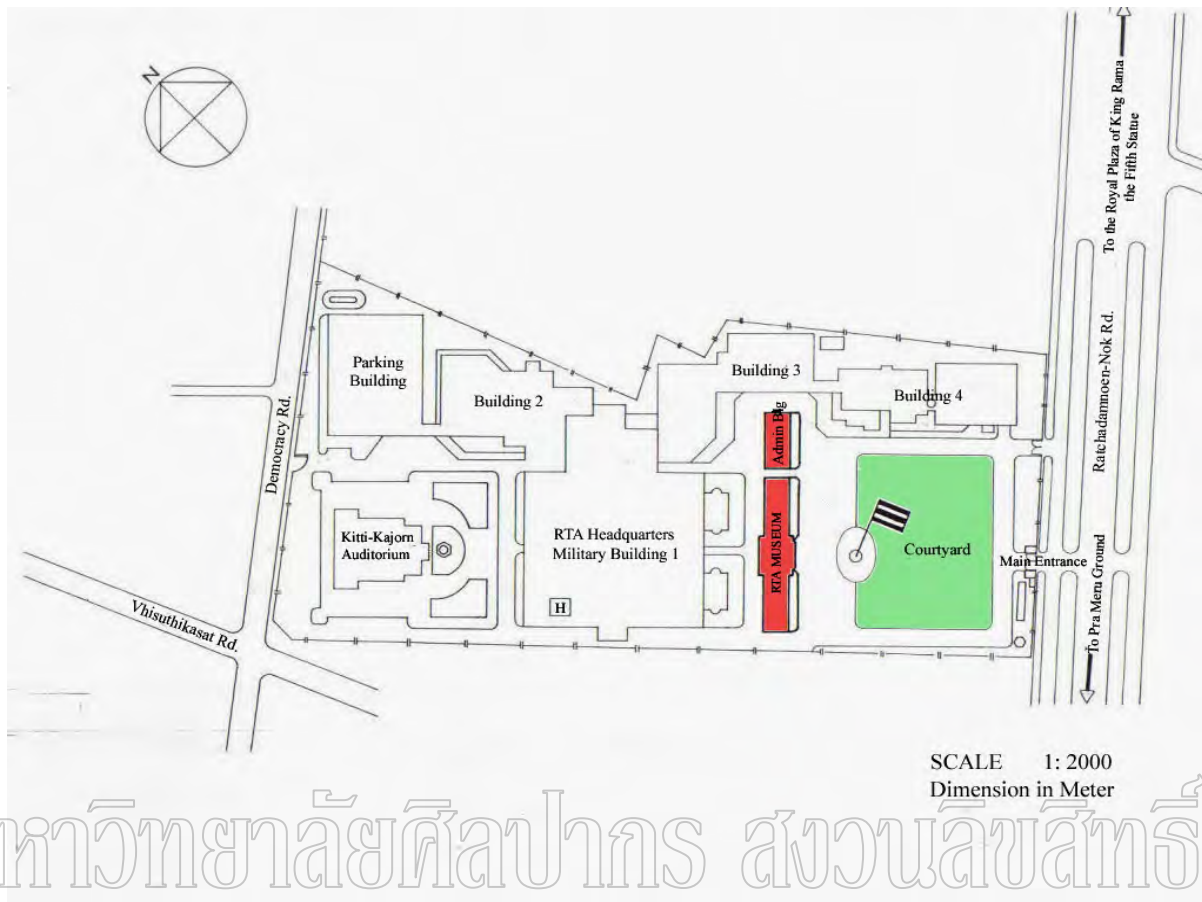


Fig.22 Map of the Royal Thai Army Headquarters

Source: The Royal Thai Army Museum in Honor of His Majesty the King, 1997

The Royal Thai Army Museum is located at the main entrance of the Royal Thai Army Headquarters which are located on the Rachadamnoen road closed to the United Nations (UN.) and opposite the Rachadamnoen Boxing Stadium. The RTA Headquarters are the main army organization in Thailand responsible for planning, management, and development for army-related activities and events and is the military information center in Thailand (http://www.rta.mi.th/history/rta_history.htm). The whole RTA Headquarters area encompasses 39 *rai* (15.6 acres) and comprises the RTA museum building, the Administrative Ordnance building, the group of Military Office buildings that house each army department, the Kitti-Kajorn Auditorium, Car-Park building, as well as the Army Gas Station.

2. The Architecture Attribute of the RTA Museum and Associated Area

Architecture of the RTA Museum and Associated Area

Located at the main entrance of the Royal Thai Army Headquarters, as already mentioned in the literature review section, the RTA Museum and the Administrative Ordnance building comprise a pair of axially arranged buildings that were renovated from the Chulachomklao Royal Military Academy. Therefore, the architecture of these symmetrical structures is in original condition. The museum building and nearby Administrative Ordnance building, as well as front landscape and large courtyard encompass 15 rai (5.9 acres) within an area of the RTA Headquarters. The RTA Museum building is 12.5 meters in width and 88 meters in length (1,100 sq.m) and 15 meters in height. The Administrative Ordnance building is 12.5 meters in width and 30 meters in length (375 sq.m) with 15 meters in height.

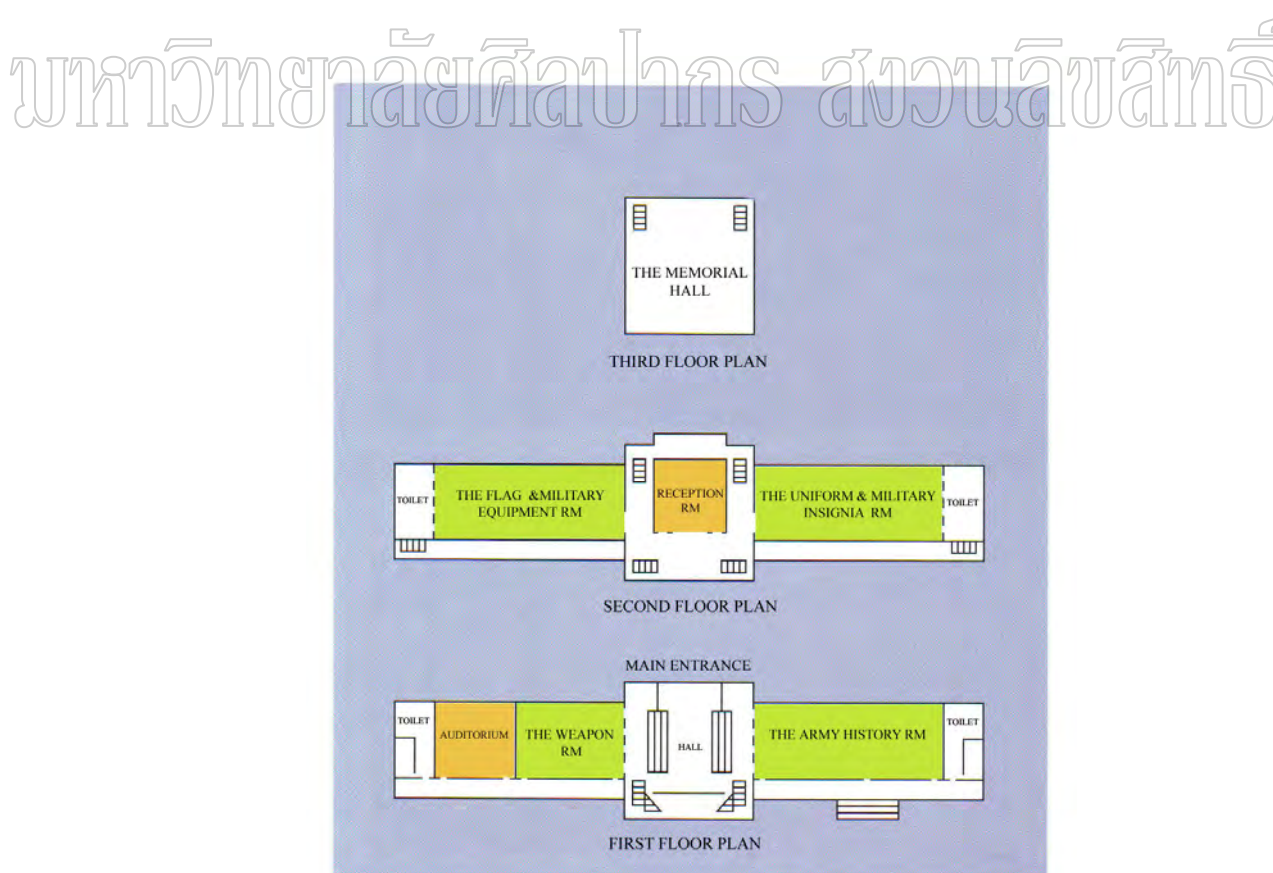


Fig.23 Master Plan of the Royal Thai Army Museum Building

Source: The Royal Thai Army Museum in Honor of His Majesty the King, 1997

The RTA Museum has three storeys and houses weapons and other military equipment classified and exhibited in a sequence of displays. On the first floor, the Auditorium for the presentation of army revolution and the Weapon Room with military equipment exhibitions are located on the left wing of the building, while the Army History Room is on the right wing. On the second floor, the Reception Hall is situated at the core of the building with the Flag and Military Equipment Room and the Uniform and Military Insignia Room on either side. On the third floor is the Memorial Hall which has been used as the hall of fame with a bronze statue of King Rama V at the center and the portraits of all Commander-in-Chiefs of Thailand.

Next to the museum building is a small-scale building, namely the Administrative Ordnance building. This two-storeys building houses the Army Revolution Room on the first floor to display Thai Army revolution, while the Administrative Research and Archives Room is located on the second floor and is the center of the wide-ranging and valuable military information repository.

In terms of exterior design, the architectural attributes of the museum building and the Administrative Ordnance building have been influenced by European architecture, with Neo-classical and Renaissance styles of decorations are to be combined into one place (Wattanamahatma 1997, pp.108-111). This is because Western architecture is widely accepted in Thailand for its aesthetic and elegance and was especially widely used for official buildings in the reign of King Rama V. However, Thai-style architecture has been applied in the building through the use of military icons illustrating Thai identity.

A site inspection revealed that the structural foundation of these buildings is made of concrete structure. The exterior walls of the buildings from the first floor through the third floor are stucco-covered masonry painted in pale yellow, a color that was widely used for official buildings in the past. The interior walls of the exhibition rooms are made of hardwood structure with plywood partitions. From the site investigation, it is apparent that the flooring material in all the exhibition rooms is made from teak, now covered with carpet while doors and windows are made from

teaks conserved in original condition. The roof is constructed in hardwood material and entirely covered with red cement tiles.

The museum's remarkable features include the verandah passageway along the building façade on the second and the third floors with delicate details of slatted double-swing windows and European-shaped cornices. At the rear view of the building, decorative corridors have been constructed along the building. Despite the details of the plaster window moldings being simplified, these exterior decorations are compatible with the overall architectural style of the building. Interestingly, the most eye-catching point of the museum building is a stucco on the pediment in the form of Royal Crown and military insignia, illustrating the adaptive use of Thai style decoration. In terms of historic and cultural significance, the museum building and Administrative Ordnance building have strong association with Thai's history in the transformation of the previous academic building into today's military museum.

In addition, the front landscapes with a pair of bronze lion statues at the entrance hall of the museum, as well as the large courtyard at the main entrance of the RTA Headquarters have illustrated the imitative setting as the Versailles Palace in France created by King Louis XIV. Hence, it is apparent that overall architectural attributes and landscape setting of the RTA Museum and associated compound represent the fusion of Eastern architecture and Western architecture to form an integrated and harmonious ensemble.

The Change to the fabric of the RTA Museum and Associated Area

The large renovation of the previous Chulachomklao Royal Military Academy building has been occurred in 1986 AD with the removal of all classroom partitions and associated materials allowing conversion into the museum function of the present day. In 2002 AD, as found in an investigation of the physical attributes of the museum and its surroundings, the construction material of construction such as wooden panels and built-in furniture were removed from the walls in order to facilitate the long-term maintenance of the building and its protection from pests and termites. Thus future

renovation will simply involve repainting masonry walls. In addition to the landscape setting, courtyard, and surroundings around the museum building, there is no evidence of physical alteration to the function and fabric of the place.

3. The Evaluation of Displays and Exhibitions

The Royal Thai Army Museum Building

The Auditorium:

In introducing visitors to the beginning of the Royal Thai Army and its revolution, this auditorium is used as a briefing room on the topic of the army history and its revolution with a multiple image slide presentation. This room can accommodate an audience of around fifty with built-in auditorium chairs.



Fig.24 Auditorium Room
Photo: Supachokeauechai, T.



Fig.25 Weapon Room
Photo: Supachokeauechai, T.

Weapon Room:

This room displays arms such as cavalry rifles and flintlock muskets to machine guns widely used in the various battlefields from late Ayudhaya period until the end of the Vietnam War. Many model weapons on display derived from England, United States, Germany, Sweden, Austria, and Japan, while some of them were seized from the enemies in the period from King Rama V to King Rama VI. These weapons are displayed in the wooden showcases with glass windows. Larger scales of artillery weapons are displayed in the wooden based podiums in the middle of the room.

Army History Room:

This room displays significant military events from the Sukhothai period till the present day. The objects on display are both life-size and miniatures with diorama showcases. There are three outstanding life-size models with displays:

- Model display of King Naresuan the Great pouring ceremonial water onto the ground as an announcement to break off diplomatic relationship with Burma;
- Model display of King Chulachomklao (King Rama V) conferring Army Victory Flag;
- Model display of Royal Thai Army and the Royal Project by King Bhumiphol Adulyadej (King Rama IX), who currently reigns Thai Kingdom.

Miniature diorama displays within the wooden showcases are as follows:

- King Ramkhamhaeng the Great fights on elephant back with King Sam-Chon of Burma
- Chiang-Gran War
- Heroic Performance at Pran-Nok
- Lad-Yha Victory
- The Participation of Thai Troop in World War I
- Ban-Prao Battle in Indo-China Dispute
- Doi-Mui Battle in World War II
- Fook-Tho Battle in Vietnam War
- Mak-Noon village military operation
- Rom-Klao village military operation
- Chong-Bok military operation
- The Conference for Battle Determination between Malaya and Thailand
- Khao-Khor military operation
- Pad-Oum Heroic performance

In addition, this room also presents the historical development of the Royal Thai Army by means of traditional weapons such as swords, knives, spears, lances and pikes to be displayed on signboards.



Fig.26 Army History Room
Photo: Supachokeaueychai, T.



Fig.27 Flag and Military Equipment Room
Photo: Supachokeaueychai, T.

Flag and Military Equipment Room:

This room displays the Royal Thai Army victory flags since the reign of King Rama V to the present, as well as military equipment categorized according to their military functions, such as Quartermaster Corps, Signal Corps, Corps of Engineer and Chemical field. Various styles of field radios, telegraphs, telephones, and walkie-talkies are exhibited in wooden cabinets, including table ware and food containers that were used by King Rama V and King Rama VI when they were in military service. Also exhibited in the showcases are the 1815 Military Strategy Manuscript and the Royal Thai Army Manuals. The most remarkable exhibition in this room is the victory flag exhibitions that were used by the Royal Thai Army during the World War I and the World War II.

Uniform and Military Insignia Room:

The exhibition in this room covers the evolution of Army uniforms through the Sukhothai Kingdom, Ayudhaya Kingdom, Thonburi Kingdom, Ratanakosin Kingdom, World War I, World War II, up to the present day. These Army uniforms are presented on life-sized mannequins in large glass showcases. Also on display are diverse royal decorations, medals and military insignia dating back to the reign of King Rama V and up to today.



Fig.28 Uniform and Military Insignia Room
Photo: Supachokeaueychai, T.



Fig.29 Reception Room
Photo: Supachokeaueychai, T.

Reception Room:

The reception room has been decorated in European style with wooden furniture and soft-furnishings. This room is reserved for welcome important guests such as the Prime Minister, senior government officials, and several army commanders on special formal occasions.



Fig.30 Statue of King Rama V
Photo: Supachokeaueychai, T.



Fig.31 Memorial Hall
Photo: Supachokeaueychai, T.

Memorial Hall:

The central position in this grand hall on the third floor of the museum is held by the bronze statue of King Rama V. The statue commemorates and honors the great monarch, who laid the foundation of the Royal Thai Army, as well as his initiative in establishing the military academy and museum. Within the gallery, the portraits of all

former Commander-in-Chiefs are displayed in built-in wooden showcases on the decorative walls.

The Administrative Ordnance Building

Army Revolution Room:

The revolution of the Royal Thai Army from the establishment of Sukhothai Kingdom to the present day is illustrated by means of life-sized model displays, using multimedia with light and sound, including an interactive touch-screen system. This is the place where visitors can access diverse military information from different periods as each exhibit section is independently operated.



Fig.32 Army Evolution Room
Photo: Supachokeauychai, T.



Fig.33 Research & Military Archives Room
Photo: Supachokeauychai, T.

Research and Military Archives Room

This room is the center of extensive information in the military context with a wide range of military documents, such as textbooks, exercises, field manuals, thesis and other military-related archives. This place is also used as the main office for curators and staff of the museum.

4. The Significance and the Usage of the Place

Keene (2002, p.3) mentioned that *‘museums are significant economically and socially, by which they served significant purposes as an expression of community and civic pride, nourishing the continuance of local memories and knowledge’*. Similarly, being the first military museum with a wide range of military weapons and equipments, it is important to conserve the RTA museum and its fabric for long-term sustainability. The museum itself is significant as a principal educational place and research center on army history and events in Thai territory not only for military and government officers but also the general public. Moreover, this museum functions as the point of liaison between the military organization and the public in the provision of a favorable understanding of the role of the Royal Thai Army.

5. The Analysis of Cultural Heritage Significance of the RTA Museum

The Burra Charter (1999, p.12) defined the cultural significance as aesthetic, historic, scientific, or social value for past, present, or future generation. The RTA museum and its components have their own intrinsic historical and cultural significances in which their values of significances are classified and analyzed to define their level of significance of the whole place. In this research study, the Burra Charter for Places of Cultural Significance are used as the guidelines for conservation policy and planning development, while the New South Wales Heritage Assessment Criteria are applied as the criteria for heritage significance assessment of the museum and the whole vicinity.

1. Aesthetic Value:

- The RTA museum building is outstanding in its architectural attributes which demonstrate Thai and European classical styles of decoration perfectly combined into one place.
- The overall characteristics of the museum building in terms of its form, scale, color, material for construction and decoration are harmonious and compatible with the setting within the area of the RTA Headquarters.

2. Historic Value:

- The RTA museum is associated with the inspiration of King Rama V to build the first military museum in Thailand with a wide range of collection of military equipment, archives and documents.
- The RTA museum functions as the representative of the past with the provision of military history and information by means of exhibiting military equipments and model displays, aiming to depict army history and commemorating the bravery of those who sacrificed their life in battle.
- The location and the museum building are associated with army history in terms of the development of the place from academic building in the past to the museum building of the present.

3. Scientific Value:

- The RTA museum functions as the storage of various rare military weapons and equipment collections, as well as invaluable and confidential documents.
- The museum was the first in Thailand to introduce the new methodology of having exhibitions for each class of military collection.
- Despite of the radical change in the functions of the building from academic purpose to the present-day museum building, the architectural attributes, the style of decorations and the whole fabric of the place have kept their original condition and have therefore retained their historic significances through time.

4. Social Value:

- The RTA museum portrays as the point of liaison between the army organization and the general public for a better understanding of the common role of the army in the protection of the land and sovereignty.
- The museum is significant at a national level as the principal edutainment venue and research center.

6. Statement of Cultural Heritage Significance

The RTA museum represents its historic value and significance as the first military museum in Thailand inspired by King Rama V for his purpose to build a place for military collection. The architectural attributes of the building illustrate aesthetic value through ideal combination between Thai and European styles of decoration into one place, while new exhibit presentations demonstrate scientific idea on how to effectively classify various types of military collections. The RTA museum is significant at a national level for its contribution as a military edutainment center and worth of being conserved for the future.

7. The Assessment of Cultural Heritage Significance

Criteria for Assessing Cultural Heritage Significance:

Assessing Heritage Significance (2001, p.4) noted that “the main aim in assessing significance is to produce a succinct statement of significance, which summarizes an item’s heritage values”. In accordance with documentation research and physical investigation of the RTA museum and its vicinity, this place is compatible with the criteria assessed by Heritage Council of New South Wales of Australia (2001) as the following:

1. **C (a):** An item is important in the course, or pattern of the local area’s cultural or natural history.

The RTA museum has been renovated from the former academic building called the Chulachomklao Royal Military Academy and is of outstanding and significance as representative of King Rama V’s planning initiatives for Bangkok a century ago.

2. **C (b):** An item has strong or special association with the life or works of a person, or group of persons, of importance in the cultural or natural of the local area.

The RTA museum is located on the Royal Thai Army Headquarters and is the first military museum in Thai history with a wide range of military weapons and equipment collection for the general public of today and for conservation for future generations.

3. **C (c):** An item is important in demonstrating aesthetic characteristics and or a high degree of creative or technical achievement the local area.

The RTA Museum was founded on the initiative of King Rama V and is an outstanding reflection in its architectural attributes of the King's efforts to combine the best of Thai and European styles of decoration into contemporary official buildings.

4. **C (e):** An item has potential to yield information that will contribute to an understanding of the local area's cultural or natural history.

The RTA museum functions as a principal educational venue and research center with a variety of military equipment and useful information provided to the general public, aiming to fulfill public requirements and achieve a better understanding of Thai military history and the important national role of the Royal Thai Army.

Level of Significance of the Place

As there is a variety of military buildings within the RTA Headquarters including the RTA museum, the assessment of the level of significance of those buildings can be classified as follows:

- **Exceptional Significance:**
 - The Royal Thai Army Museum Building
 - The Administrative Ordnance Building
 - The Statue of King Rama V
- **Considerable Significance:**
 - Military building I, II, III, IV, and V
 - Car-park building for military officers
 - The Courtyard and the Flag pole
- **Little Significance:**
 - Kitti-Kajorn Auditorium
 - Landscape setting
 - Military Gas-station

Within this assortment of levels of significance for the various components, it is critical to note that the RTA Museum Building and the Administrative Ordnance Building are of exceptional significance because these building were constructed in 1906 and have survived more than a century of rapid changes in Bangkok and Thailand. To retain the significant physical attributes and create a conservation plan to protect with them is crucial for long-term sustainability. However, every building in the RTA compound, except the landscapes setting and the gas station, should be retained for its uniqueness and heritage significances.

8. Site Interpretation

The Analysis of Existing Interpretation

This section examines the existing interpretation of the Royal Thai Army museum and is divided into five major parts. The first part discusses the interpretations and actions of the curatorial staff at the RTA museum and military personnel at the Military History Department as well as public opinions and perspectives on the museum visitor experience and interpretation. The second part concerns current situations and problematic issues related to the museum. The third part relates to the factors that have led to the missing link of interpretation. The fourth part analyzes the displays and exhibitions within the Royal Thai Army museum, identifying both the good and weak facets. The final part suggests some management solutions for more effective interpretation at the site, aiming at providing better communication and interpretation for museum visitors.

Staff Interpretations of the Site

There are five curatorial staff at the RTA museum and military personnel at the Military History Department who were interviewed as part of this research project. Both groups argued that their museum's mission and objectives are distorted from their initial purposes and incompatible with the existing military regulations. In general, the Military History Department is responsible for promoting the museum as the principal destination for members of the general public seeking to learn about Thailand's military experience. It is a historical learning center in the hub of Bangkok, Thailand's capital. Museum staff have attempted to open the museum's door as much as possible to the public, including supporting the need to maximize accessibility to the site and catering for visitors by providing parking space.

However, due to the fact that the museum has been built within the military precinct of the Royal Thai Army Headquarters, which is the main office for the Army in Chief Commanders and many high-rank personnel, museum staff need to observe to military regulations and policies and to consider the RTA museum as part of a restricted area. Because of military constraints, the accessibility by the general public to the site is therefore limited and inconvenient, and visitors, who must come in groups, must make a reservation with curators in advance of their visit. As stated above, many curatorial staff and military personnel in the Military History Department find this unsatisfactory because these limitations work as against their aims to promote the museum.

The museum building is in a state of deterioration because it has been built more than a century ago, the museum staff have successfully convinced the Royal Thai Army department to provide sufficient funding for new renovations and conservation.

However, the budget to improve displays using multimedia exhibition techniques is still in a state of scarcity.

Museum curators and other museum staff mentioned that current displays and exhibitions within each exhibition room are well-organized to suit each category of the collection, but what needs to be improved is the provision of multimedia and interactive exhibitions to attract, entertain and give knowledge to the range of museum audiences who visit the museum at any one time. According to museum staff perspectives, the RTA museum is a principal learning center on military history in Thai territory because of its various kinds of military collections and outstanding characteristics of the building that can be developed as a tourist attraction for the public. Many members of the museum staff realized that the provision of adequate facilities such as toilets, cafeteria, souvenir shops and spacious parking lot is also an essential requirement for the museum to increase public interest and accessibility.

Public Interpretations to the site

Most of the members of the general public interviewed about their opinions concerning the RTA museum thought that the museum is outstanding in its architectural design and the setting of a museum building with a large area of courtyard at the main entrance. However, the accessibility to the area by the general public seems to be difficult due to the fact that the museum is situated within the restricted military precinct of the RTA Headquarters with large number of military guards all over the site. Additionally, visitors need to make advance reservation for their visits while individual visitors are not allowed to access either the museum or the RTA Headquarters area. Thus the general public is not likely to enter to the museum area as they perceive that this museum has been reserved only for military officers and not open to them.

Owing to negative military operations in the past in terms of several *coups d'état* as well as politic and economic intervention, some sections of the general public interpret military operations in a pessimistic way, revealing the gap between the army and the public that still exists. Besides this, because the Royal Thai Army is weak in public relations and the RTA museum has never been promoted through effective sources of media channels, the general public usually omits a visit to army museums from their travel itineraries.

According to the on-site interviews of museum visitors after their visits, most found that the displays in each exhibition room were well classified but quite static and unattractive, and that insufficient information was provided within the gallery. They thought that entertainment media such as multimedia, light and sound effects, and interactive instruments could be provided within the museum exhibitions to better fulfill visitors' imaginations and communications among them.

9. Current Situations and Problematic issues of the Museum

The Accessibility Difficulty by the General Public

The Royal Thai Army Headquarters is the main office for many numbers of the chief army commanders and requires high security protection for its area. For security reason, the museum needed to conform to military policies and regulations by screening all visitors who have entered into the area. Therefore, the accessibility by individual visitors seemed to be inconvenient unless they come by groups. Moreover, the visitor groups from any organization or institution must make a reservation of the visit in advance and let all museum staff know their exact date of arrival. The permission of the visit needs to be agreed not only from the museum department but also the agreement from the authorities of the RTA Headquarters.

Unsatisfied Numbers of Visitation by the General Public

Owing to the difficulty that the general public faces in getting access to the museum area, including the security system by military guards in front of the main entrance of the Royal Thai Army Headquarters, people seemed to be too nervous and embarrassed to enter into the site. In addition, as the museum and the RTA Headquarters used the same main entrance, the transportation by most visitors is inconvenient due to the congested traffic and the unavailability of parking spaces. As a result, although the museum located within the most spectacular site of the Rattanakosin Island, most visitors usually omit the museum from their itinerary due to the perceived inconvenience.

Ineffective Presentation for Interpretation within the Museum

Even though the military objects and collections are a rich and valuable resource for learning experience among all audiences, the current signs, displays and exhibition techniques seem to be unattractive and provide inadequate information for interpretation. This is because interactive tools or multimedia are unavailable at the

site. In addition, necessary information for each exhibit objects is insufficient for visitors to understand what they are seeing while languages other than Thai translation are unavailable, making limiting the interpretation available to foreign visitors. The sources of acquisition and the significance of each museum objects are not to be described at the displays. At present, the interpretation panels only provide a very brief history and the period of weapon, leaving most local and foreign visitors confused. In order to facilitate better interpretation, therefore, the provision of historic information through exciting light and sound effects, modernized multimedia and multiple languages needs to be considered for new development of the museum exhibitions.

The lack of necessary facilities to be provided for audiences

In addition to poor communication and interpretation from existing displays and exhibitions, the lack of necessary facilities is also a major factor affecting to the small number of visitation. In general, necessary facilities are important to fulfill visitor's requirements in terms of learning and perception. However, interpretative accommodations such as a visitor center or a theater with video presentation to facilitate interpretation among visitors are currently unavailable at the site. Besides this, necessary facilities such as a cafeteria, parking lot, toilets and so forth are also needed to be provided.

10. Factors that Give Rise to the Missing link of Interpretation

Internal Factors:

The Royal Thai Army pays special attention to military operations and associated army works, and consequently funds have been largely distributed to those operations. Meanwhile, the RTA museum has limited funding support due to the fact that it was seen as the storage for military equipment and weapons and was insignificant to and unassociated from the army's key work. Because of the budget constraint, new renovation and new development of the museum were normally ineffective and incomplete. Narrow perceptions by the military authority that displays

and exhibitions within the military museum must be represented in a somber way with static presentation are also the obstacles for the development of exhibitions and the introduction of new materials into the gallery.

Due to the fact that the exhibitions within the museum have been designed by military officers who have no experience and understanding in the field of museology, the displays were often inappropriate, generally ineffective educationally and usually left unattended by the visitors; they failed to communicate the significance of the military objects and the important role of the Royal Thai army in Thailand's history. Inadequate staff at the site also affected the quality of the presentations while untrained guides can lead to a misconception of the museum's purpose. In addition to insufficient information being provided within each exhibit gallery, translations into English or other languages was also unavailable for foreign visitors, thus leading to misinterpretation.

Virunrak (2005, p.27) noted that Thai museums buildings have usually been adapted from older historic buildings that were built for specific purposes, leading to difficulty in matching museum design and purpose. Similarly, being renovated from former cadet school designed to suit its academic purpose, the current RTA museum has met the difficulty of functional utilities within the building, including the exhibition design contents as well as light and sound systems. As the museum building was located within the military boundary of the RTA headquarters, the land use limitations was also a major factor for new development of the museum's area. Nowadays, there are unavailable spaces for new constructions or new additions of the visitor center, the recreational area and theater to facilitate the better interpretation among museum visitors. Meanwhile, museum accommodations such as cafeteria, souvenir shops, toilets and so forth are insufficient to serve large numbers of visitors.

Ineffective public-relations was also another factor leading to communication failure. Many museum authorities and staff have the misperceptions that their daily contact with army-related organizations and schools is just enough to maintain viability without any regard to visit by the general public. As a result, the museum has

not been promoted through effective sources of media such as television programs, newspapers, traveling books and internet websites, for example; and the general public has no idea about what the RTA museum would like to offer.

External Factors:

Basically, as stated by Meechul (2005, p.57), to visit museums was never a habit among Asian people, and, if they went to a museum, it could be assumed that they were forced to do so for specific reasons. Thai people were not used to museums, especially military museums, and usually have negative perceptions concerning the military operations in the past such as the several *coups d'état* and political interventions. In addition, the general public perceived that military museums were built to serve only for army officers and the elite, and thus were unrelated to them. Many people also have negative interpretations that the military history and operation were boring and hard to understand. In addition, some might have the perception that the army history was generally concerned intangible emotions in terms of heroic performances and their sacrifice in time of war. However, the current museum presentations were unable to access into the history and provided nothing rather than a place of military collections. Furthermore, as the RTA museum was situated within the military area, the accessibility by general public seemed to be inconvenient and hence the number of visits has remained low up to the present day.

11. Summary: Critical Analysis of the Current Museum

The Good Points of the Current Exhibition:

- The exhibition portrays as an invaluable source of military information from the past to the present day;
- The exhibitions have the potential to provide a profound understanding of the Royal Thai Army's history and its to all audiences;
- Various kinds of military weapons and equipments are well-categorized to suit each exhibit enabling visitors to search for their personal interests;

- Despite the lack of interpretative information provided at the site, curators and guides can present the Army's story professionally and demonstrate the historical development of the Army in an effective manner to all audiences.

The Weak Points of the Current Exhibition:

- The exhibition is static with no interaction for visitors to take part at the displays. There is no multimedia with light and sound at the military weapon and model displays to attract museum visitors, leading to a feeling of boredom experienced by most audiences;
- The exhibition does not demonstrate the historical and cultural significance of the Royal Thai Army museum and associated area;
- Built-in wooden showcases are too massive, congested and incompatible with most exhibited objects, leading to a misconception on the part of the general public about what the museum wants to express and present;
- Because layout planning for each exhibit room is misplaced and ineffective, the walking patterns followed by visitors within the museum is generally random and adds to the confused interpretation;
- The level of display lighting is insufficient and needs to be improved.

12. Interpretative Management for the RTA Museum

Basically, the understanding on the context of exhibitions and what the museum would like to offer to the audience can develop museums to achieve their missions and goals in terms of the management and presentations. Effective management in interpretation can motivate the general audience to show much more interest in the military museum as the way to establish mutual understanding between the army organization and the general public about the role of the Royal Thai Army and the mission of army museum, as well as the reasons for its establishment. The Royal Thai Army Department, the owner of the RTA museum, needs to pay more attention and support museum staff to achieve goals of museum development. For

better communication and interpretation, the provision of effective interpretative tools needs to be considered, as follows:

1. The RTA Department should have a profound understanding of the role of the military museum and search for ways to promote the museum through effective media channels.
2. The RTA Department, the Military Historical Department and the curatorial staff at the site need to achieve mutual agreement in terms of the museum's mission, objectives and goals and promote these to the general public.
3. The provision of necessary facilities such as parking lot, visitor centers, cafeteria, souvenir shops, toilets and so forth needs to be considered as an integral part of museum development.
4. Public relations programs and coordination with other museum-related organizations such as Tourism Authority of Thailand (TAT), SEAMEO Project for Archaeology and Fine Arts (SEAMEO SPAFA), and relevant Non-Government Organizations (NGOs) such as the International Council on Monuments and Site (ICOMOS) need to be considered as the way to promote the RTA museum to other public interests.
5. For effective interpretation about the roles of the Royal Thai Army and the military history to general audiences, the Royal Thai Army Department, the Military Historical Department and curatorial staff at the site need to make special efforts in communication to the general public by creating efficient programs of public relations that allow the audiences participate and feel a sense of ownership of the military museum.

6. For better interpretation, static exhibitions within the museum need to be improved by introducing high quality multimedia techniques and interactive programs aimed at providing knowledge and entertainment to the visitors at the same time.
7. Fund raising by both government and non-government organizations is essential for the conservational management and development for the museum in long term.

The next part of this dissertation is concerned with comparative case studies of military museum worldwide with the aim of understanding their managements, arrangements of collection and exhibition policies. Their strengths, weaknesses, opportunities, and potential threats are identified through the use of the SWOT Analysis.

มหาวิทยาลัยศิลปากร สงวนลิขสิทธิ์

Chapter 4

Comparative Case Studies

In order to improve the RTA museum to meet standard of military museum and search for the opportunity for future development, comparative case-studies in related fields will be conducted to find the possibility for future improvement. There are four case-studies: the Royal Thai Air-Forces Museum (RTAF), the National Memorial Museum, the Imperial War Museum North (IWM) in England and finally the Army Museum of Singapore (ARMS). These museums will be analyzed through SWOT analysis in terms of their purposes of construction, sites, current displays and exhibitions, future plan and development, including their limitations and other associated problems. The main objective of this chapter is to search for appropriate ways to develop the RTA museum to meet both curatorial staff and visitor satisfaction.

1. Case Study: Royal Thai Air-Force Museum (RTAF)

The Beginning of Thai Aviation and the Royal Thai Air Force

Aviation in Thailand began during the reign of King Vajiravudh (King Rama VI) in the year 1911 AD. His Royal Highness Marshal Phitsanulok Prachanard, chief of staff of the Royal Thai Army, conceived the idea of setting up an Air Force Division in the Royal Thai Army and hence selected three promising officers namely Major Luang Sakdi Sunyavudh (Sunee Suvanpreteep), Captain Luang Arvudh Sikigorn (Long Sinsuk), and Lieutenant Thip Kedutat to study aviation in France.

Upon graduation in 1913, the three officers returned to Thailand with the purchase of 8 aircrafts to be delivered by ships. The Army Aviation Section was established and the first hanger was built at the Pathumwan Airfield which at present is the site of the Royal Bangkok Sports Club. The three newly returned officers acted not only as instructor pilots but also had to take on the duties of flight engineers as well. As the activities of the Army Aviation Section rapidly increased, Lieutenant Colonel Luang Sakdi Sunyavudh came to the decision that Don-Muang was in fact a more appropriate site for a permanent airfield, and thus the Army Aviation Section was relocated to Don-Muang in 1914 AD (http://www.rtaf.mi.th/museum/MUS_HIST-1.HTM, accessed on February 18, 2005).

The effort and expertise of the three founding fathers heralded a new era in Thai aviation history, enabling Thais to successfully construct Breguet aircraft in 1915 A.D. Thereafter, the army Aviation Section continued to expand its administration and was renamed the Royal Thai Air Force in 1937 AD.

Background of the Royal Thai Air Force Museum

The Royal Thai Air Force Museum was initially established in 1952 AD by the Royal Thai Air Force (RTAF) Department with the purpose of collecting and restoring defense articles of different periods, including equipments and aircrafts in use during the early period of Thai aviation history up to the present. The RTAF Museum was first located at a hangar west of Don-Muang airfield and was not open to the public. It was not until January 15, 1969 AD that the new Royal Thai Air Force Museum was constructed on the new location of Phrahon-Yothin Road near the RTAF Headquarters and officially opened to the public access (*The History of Royal Thai Air Force Museum 1999, pp.1-3*).

The exhibitions at the Royal Thai Air Force Museum, which are opened daily to the public, feature various types of aircrafts rarely found elsewhere in the world. Many of them served in time of war and played a pivotal role in safeguarding the Thai nation's independence. The numerous Victory Medals awarded to pilots attest to the bravery and valor of Thai heroes. The Royal Thai Air Force has attempted to develop its museum to ensure the preservation of the complete historical records of the Royal Thai Air Force. This aviation museum is opened daily from 9.00 AM through 16.00 PM.

The Displays and Exhibitions

Due to the large size of various aircrafts, the Royal Thai Air Force Museum has classified its aircraft displays into five hangars, including the outdoor displays, as shown in the following plan:



Fig.34 The Royal Thai Air Force Museum Directory
Photo by: Supachokeauychai, T.

Building 1: The RTAF Aircraft Building I

Located behind a statue of King Rama V, this is the main building for the RTAF museum and used as the lobby for all visitors. Within the museum hall, Thai aviation history has been displayed through the art gallery portraying the beginning of the aviation in Thailand with the exhibit displays of various types of aircrafts that have been used during the World War II. Besides this, aircrafts that have been designed and built by Thai are also displayed in the gallery. On the second floor of the building is the main RTAF Administration where military officers are working within. The displays of aircrafts are as follows:

- Bomber Type 2 (Baribatra) that was built and served for RTAF since 1927 to 1940 and named by King Rama VII. It was the first aircraft designed by Thais.
- Directorate of Aeronautical Engineering Model 1 (DAE-1) Pazmany PL-2 (1974 - 1989)
- Trainer Type 17 (Chandra) (1974 - 1989)
- RTAF-5 (1984 - 1985)

- Cessna O-1 Bird Dog (1967-1990, donated by the United States)
- Trainer Type 8 (AT-6 TEXAN) (1937-1964)
- Attacker Type 3 Curtis SB2C-5 Helldiver (1950 -1955)
- Trainer Type 10 De Havilland DH-82 Tiger Moth (1951-1961)
- Liaison Type 6 Grumman G-44A Widgeon (1951-1956)
- Attacker Type 4 Fairey Firefly I (1951-1954)
- Liaison Type 5 Beech Craft Bonanza 35 (1951-1954)
- Liaison Type 4 Stinson L-5 Sentinel (1947 - 1959)
- Liaison Type 3 Piper L-4 Grasshopper (1947 - 1959)
- Trainer Type 9 De Havilland DHC-1 Chipmunk (1949 - 1989)
- Utility Type 1 Helio U-10B Courier (1963 - 1986)

Building 2: The RTAF Aircraft Building II

Having three storeys, this is the tallest building within the museum. Its purpose is to exhibit rare aircrafts that have been used during the World War II and to display temporary exhibition created by authorized military officers or curators of the RTAF.

The second floor is being used as the library and archives center. The aircrafts to be displayed at the first floor are as follows:

- Observation and Attacker Type 1 (Corsair V-93S) (1934-1950)
- Fighter Type 10 Curtiss Hawk III (1935 - 1949)
- Trainer Type 6 Tachikawa Ki-36 Ida (1942 - 1950)
- Bomber Type1 (Breguet 14) (1919 - 1937)
- Fighter Type 11 (Curtiss Hawk 75N) (1937 - 1949)

Building 3: The RTAF Building III

Located behind the RTAF Building I on the left side, this building displays aircraft that were used during anti-communism campaign. The aircraft displayed are as follows:

- Attacker Type 5 (Rockwell OV-10C Bronco) (1971-2004) The Royal Thai Air Force procured sixteen multi-purpose Rockwell OV-10C Bronco light attack aircraft from the United States in 1971. It was the first aircraft procurement made by the RTAF during the post-World War II.
- Attacker Type 6 (Cessna A-37B Dragonfly) (1972-1994) The Royal Thai Air Force received seventeen Cessna A-37B Dragonfly Attackers from the United States, designated Attacker Type 6.



Fig.35 Entrance of the RTAF Museum
Photo by: Supachokeauychai, T.



Fig.36 RTAF Aircraft Building I
Photo by: Supachokeauychai, T.



Fig.37 Aircraft Displays
Photo by: Supachokeauychai, T.



Fig.38 Aircraft Displays at Building I
Photo by: Supachokeauychai, T.



Fig.39 RTAF Aircraft Building II
Photo by: Supachokeauychai, T.



Fig.40 RTAF Building III
Photo by: Supachokeauychai, T.

Building 4: The Uniforms and Insignias Building

This building displays the collection of various kinds of museum items from Royal Thai Air Force insignias to armaments, Medals of Honor, military uniforms, as well as the aircraft replicas and models. Ordnance and aviation equipments that have been used in the battle are also exhibited within the gallery. These military collections are being displayed in the glass showcases for protection, where the varieties of collection are categorized.

Building 5: The RTAF Building V

This building displayed various kinds and models of helicopters that were used for the operation by the RTAF. The displays of the helicopters are listed as follows:

- Fighter Type 15 (Grumman F8F-1 Bearcat) (1951 - 1960)
- Fighter Type 14 (Supermarine Spitfire XIV) (1950 - 1954)
- Helicopter Type 6A (Bell 212) (1976 - 2000)
- Helicopter Type 1 (Westland WS-51 Dragonfly) (1950 - 195)
- Helicopter Type 1A (Sikorsky Yr-6A) (1951 - 1954)
- Helicopter Type 2A (Hiller UH-12B Raven) (1953 - 1962)
- Helicopter Type 3 (Sikorsky H-19A Chicasaw) (1954 - 1965)
- Helicopter Type 4 (Sikorsky H-34 Choctaw) (1962 - 1976)
- Helicopter Type 4A (Sikorsky S-58T) (1979 - 1999)
- Helicopter Type 5 (Kaman H-43B Huskie) (1962 - 1971)
- Helicopter Type 6 (Bell UH-1H Iroquois) (1968)
- Helicopter Type 6B (Bell 412) (1982)
- Helicopter Type 6C (Bell 412SP) (1992)
- Helicopter Type 6D (Bell 412EP) (1998)
- Helicopter Type 7 (Bell OH-13H Sioux) Bell 4 (1972 - 1973)
- Mapping Helicopter Type 1 (Bell 206B Jet Ranger) (1982 - 1987)
- Mapping Helicopter Type 2 (Kawasaki KH-4) (1982 - 1985)
- Helicopter Type 8 (Bell 206B-3 Jet Ranger III) (1996)

- Helicopter Type 9 (Eurocopter AS-332L-2 Super Puma II) (1996 - 2003)

Outdoor Display

The outdoor display encompassed the large area within the museum with various jet fighters, transport aircraft to be displayed. They are:

- Fighter Type 16 (Republic F-84G Thunderjet) (1956 - 1963)
- Fighter Type 17 (North American F-86F Sabrejet) (1961 - 1973)
- Fighter Type 17A (North American F-86L Sabre) (1963 - 1966)
- Fighter Type 18 (Northrop F-5A Freedom Fighter) (1967 - 1998)
- Fighter Type 18B (Northrop F-5E Tiger II) (1978 - Present)
- Cargo Type 1 ((Beechcraft C-45 Expediter) (1947 - 1971)
- Cargo Type 2 (Douglas C-47 Skytrain/Dakota) (1947 - 1991)
- Cargo Type 4 ((Fairchild C-123B Provider) (1964 - 1989)



Fig.41 Uniforms and Insignias Building
Photo by: Supachokeaueychai, T.



Fig.42 Aviation Exhibition within the gallery
Photo by: Supachokeaueychai, T.



Fig.43 Showcases of Military Insignias
Photo by: Supachokeaueychai, T.



Fig.44 Showcases of Air-force Uniforms
Photo by: Supachokeaueychai, T.



Fig.45 RTAF Building V for Helicopters
Photo by: Supachokeaueychai, T.



Fig.46 Outdoor Aircraft Displays
Photo by: Supachokeaueychai, T.

Analysis of the Royal Thai Air Force Museum

The RTAF museum will be analyzed its strengths, weaknesses, opportunities, and threats using SWOT analysis.

Strengths:

The historic significance of the museum in terms of its establishment and the aircrafts has given strong characteristics to the success of museum operations. As the aircraft displays are classified into five hangars as well as outdoor display, visitors are able to pay attention specifically to what they want to learn or are linked to their personal interests. In addition to the impressive aircraft exhibitions, most visitors also appreciated the attentive service and catering by the curators, guides and site staff who give them explanatory assistance about the information related to the aircrafts and displays. With various activities available at the aircraft museum, visitors can participate in those activities that are attracted to them.

Without needing to gain prior permission to visit the gallery, general visitors can access the museum easily at any time they prefer. The location of the museum is also an important point and many visitors make use of the spacious parking lot that is available for various kinds of transportation such as school buses, vans and private cars.

Weaknesses:

Although the aircraft exhibitions may captivate many visitors, they seemed generally to be static and unattractive because of the lack of entertainment elements and multimedia tools. For the museum buildings themselves, the absence of interior decoration for walls and ceilings leads to unattractive and static exhibits in the eyes of most audiences. Because the planning and zoning of five exhibit buildings are disorientated and disconnected, visitors are always confused their walking orientations. Owing to budgetary constraints, standard facilities such as visitor centers, restaurants and recreational zones are still unavailable for visitors. These need to be improved for the success of museum operations and managements.

Opportunities:

Due to the historic significance of the place and the various attractive aircraft displays, this museum can be developed as the national aviation learning center for the general public. To be successful in museum management, the managers and staffs of the museum should create activities to attract both children and adults while looking for effective sponsors to support the recreational programs in long term.

Threats:

Currently, the degree of competition among museum businesses is increasing all the time and thus investment for new improvements within the gallery is needed if it is to survive. As the trend of visitors' behavior keeps changing, they are increasingly more expecting to see the first class exhibitions that can educate and entertain them at the same time. The budgetary limitations faced by the Royal Thai Air Force Department will affect to the opportunity for the improvement and the better management in long run.

Evaluation of SWOT Analysis

The Royal Thai Air Force Museum is in a strong position to be an attraction for all visitors because of its aviation exhibitions and accessible location. The most successful management at the site is the attentive service provided to all audiences with good public relations plans and processes to captivate visitors' minds. However, the exhibitions in each building need to be better planned and recognized in order to flow smoothly and logically along the museum pathway. Investment to improve facilities is also required to meet the public's requirements if the museum wants to continue to win visitors' minds. The rapid change of the visitor market and the competition among museums should be taken into consideration as well.

มหาวิทยาลัยศิลปากร สงวนลิขสิทธิ์

2. Case Study: The Thai National Memorial Museum

Background

Thailand's independence and the institutions of nation, religion and monarchy have long been served as the pride among Thai people and this can be contributed to those brave heroic deeds in every period of war, who sacrificed their lives for the protection of the country. As Thailand involved several military events such as the Korean War, the Vietnam War, the suppression of terrorists and internal security operations led to the loss of lives among the armed forces, polices and civilians. Their remains were kept as memorials of war but until the 1980s, there was no permanent place of honor to preserve them.

Therefore, General Saiyud Kerdphol, Supreme Commander of the Royal Thai Armed Forces at that time, proposed a monument project for national heroes to a cabinet meeting. Having won the agreement of General Prem Tinnasulanonda, the Prime Minister, the cabinet gave its in principle on February 16, 1982 AD to the construction of the first National Memorial Museum in Bangkok. Thereafter, the Bangkok Bicentennial Celebration Committee also accepted this project as part of the city's celebration (<http://www1.mod.go.th/heritage/nation/memorial/memorial10.htm>, accessed in July 18, 2005).

In 1982 AD, the Ministry of Defense formed a committee for the construction of the National Memorial. As the result of a search for an appropriate location, the cabinet approved the use of an area around 38 rai (15.2 acres) of the Royal Thai Airforce's land in the triangular area where Vibhavadi Rangsit Road meets Phahon-Yothin Road.

The Thai National Memorial Museum, under the responsibility of the Armed Forces Education Department, was founded in 1983 by the Supreme Command, Ministry of Defense, as a testimonial to the great kings, heroes and heroines who sacrificed their lives in defending the land and the institutions of nation, including the

state religion and monarchy which still exist today and are recognized and held in esteem by the world community. The National Memorial Museum, or so called 'Anusorn-Satharn Haeng Chat' in Thai, is located at Don-Muang Triangle district in Pathum-Thani province.

The chief aim for the museum is to be a permanent place of honor to keep the ashes and other remains of national heroes in each major battle and for the names to be inscribed and displayed within the museum. The military exhibitions and diorama displays are used as a reminder of the past threats and as a lesson for the benefit of present and future generations (Chaysuwan 1996, pp.105-106). The museum is also intended to serve as a learning and recreational venue for the general public.

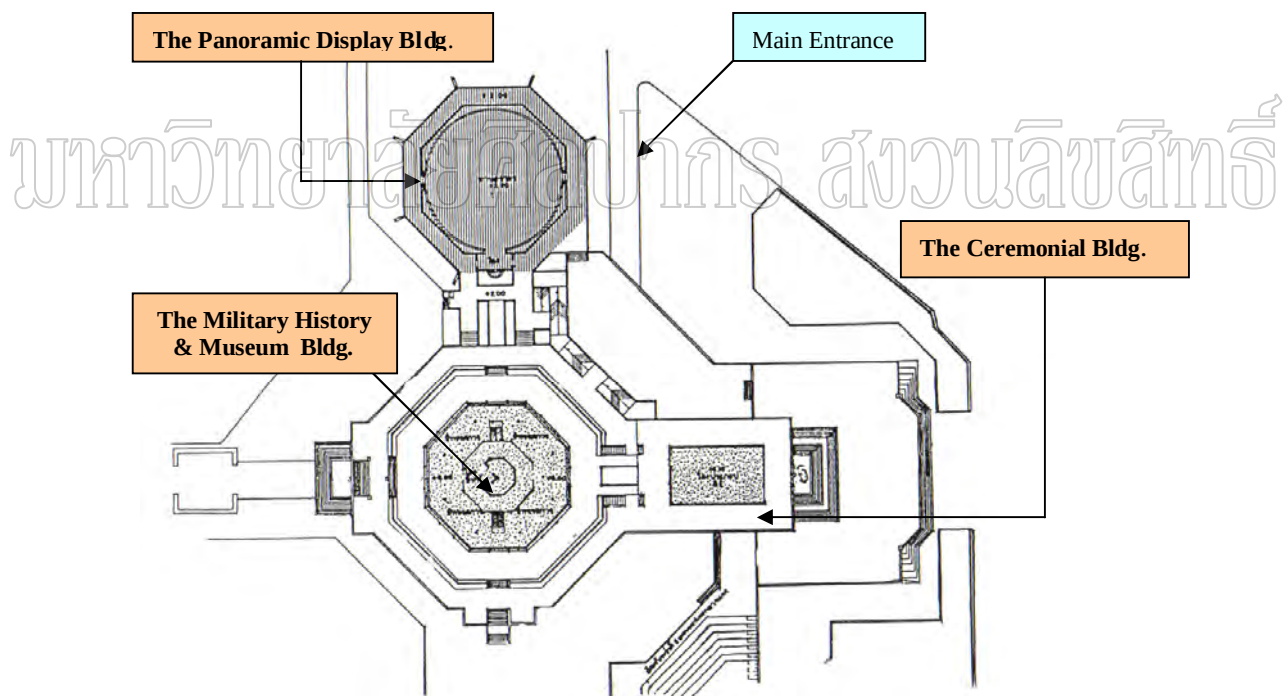


Fig.47 The Three main buildings within the National Memorial Museum
Source: Prathumnant, S. The National Memorial Museum, Arch and Idea Magazine.

Layout Plan of the National Memorial Museum and its Exhibitions

Inspired by the design of an old Thai fortress, the National Memorial Museum was designed by the Faculty of Architecture, Silpakorn University (Prathumnant 1994). The museum compound consists of three main buildings as follows:

1. The Ceremonial Building

A one storey building with a Thai-style rooftop, this building is used for national ceremonies and related religious functions. Within the building, there is a large ceremonial hall, where the statues of Thailand's Nine Great Kings are installed. The ceremonial ground is used for wreath-laying on special occasions and commemoration of historic heroes who sacrificed their life in the war.

2. The Panoramic Display Building

This is an octagonal-shaped building with mural paintings on its interior circular walls, illustrating major historical events from the past to the present in order to reflect the Thai Great Kings' ingenuity and efficiency. In addition, the painting depicts the bravery and sacrifice of Thai ancestors in defending and safeguarding the national independence.

3. The Military History and Museum Building

This building is the most distinguished and well-known building in the National Memorial Museum compound. Inspired by an old Thai fortress, the museum building was designed in an octagon-shape with the statue of King Rama V situated at the main entrance. This tallest museum building has four storeys, and contains exhibits classified into designated categories. On the first floor, models with diorama displays are exhibited for the five battles in which Thai military took part: They are the World War I, French Indochina Campaign, Great East Asia War, Korean War, and Vietnam War. These diorama displays

are presented into each panorama room, where visitors can observe the displays through glass windows.

On the second floor, model displays of military activities in defending and developing the country are exhibited, as well as special exhibitions on important occasions are exhibited. This floor has an outdoor balcony that connects with the exterior wall of the building. The names of soldiers and those who sacrificed their lives in the historic battles are permanently inscribed in golden lettering on the black marble around the exterior wall of the building.

On the third floor, fourteen heroic events such as King Ram Kamhaeng the Great, Queen Somdej Phra Suriyothai, King Naresuan the Great, for example, are model-displayed with diorama in the wooden showcases for depicting the historic events in each period of time. On the fourth floor, uniforms, insignias and accessories of military of the past are displayed according to their respective periods, namely from Pre-Sukhothai, Sukhothai, Ayutthaya, Thonburi, Early Ratanakosin, up to the present time.



Fig.48 The Ceremonial Building
Photo by: Supachokeauychai, T.



Fig.49 The Panoramic Display Building
Photo by: Supachokeauychai, T.



Fig.50 The Military History and Museum Building
Photo by: Supachokeauychai, T.



Fig.51 Mural painting on circular wall panels
Photo by: Supachokeauychai, T.



Fig.52 Black marble sign panels with the inscription of soldier's names
Photo by: Supachokeauychai, T.



Fig.53 Model Display at the Panoramic Room
Photo by: Supachokeauychai, T.



Fig.54 Miniature models with diorama display
Photo by: Supachokeauychai, T.

The Analysis of the National Memorial Museum

The museum will be analyzed its strengths, weaknesses, opportunities, and threats using SWOT analysis.

Strengths:

The historic and aesthetic significances of the place, especially its architecture reflecting an ancient Thai fortress, have given striking characteristics to the museum building. The military models with diorama displays provide strong links to Thai history by depicting the past battles and wars in panoramic rooms. The fourteen diorama showcases are also well-designed with the introduction of light and sound to capture audiences of all ages. As all three museum buildings are independently separated in their operations, visitors can select an itinerary of visitation that suits to their individual interests. The National Memorial Museum has a spacious parking lot, providing for large groups of visitors either arriving by buses or private vehicles. Although the museum has been organized by the Armed Forces Education Department, visitors can be able to enter freely into the museum without needing any permission from the military authority.

Weaknesses:

Although the museum building is easily observed from the outside because of its extraordinary scale and shape, many visitors have no ideas of what is inside the building and what is the purpose of its establishment. Because of this ignorance, visitors decide not to visit the museum. The lack of public relations with the general public is a major obstacle for the museum's promotion. Besides this, the lack of amenities and facilities to be provided for visitors at the site, such as a visitor center, restaurant, and toilets will lead to dissatisfaction among museum visitors.

Opportunities:

The unique architectural aspect of the building and the historical displays for the whole area of the museum can be utilized to create an effective campaign to communicate the history of wars and past events to all audiences at the site. In the future, the museum and its compound can be developed as a learning and recreational center for the general public.

For the financial support opportunity and to ensure self-sustainability, the museum should cooperate with other stakeholders or any interest group to develop the available space within the museum in order for attracting people to visit the museum. This can be done by the provision of entertaining programs such as performing arts and martial arts, including the merchandizing of local foods and products known as 'One Tambon One Product' (OTOP) and other recreational programs to gain more public access into the site.

Threats:

Because of a huge investment in tourism and the hospitality sector, the degree of competition is increasing and the museum faces extreme rivalry for gaining and retaining visitors. In the future, the museum needs to develop its exhibitions and displays to be compatible to the new trend of meeting a full range of visitor interests, including the visitor's search for combining learning experiences and entertainments at the same time. The lack of financial support by the military organization must also be considered as it will effect to the opportunity for the new improvement of the museum and its facilities.

Evaluation of SWOT Analysis

The National Memorial Museum is in a strong position to be a visitors' attraction because of its architectural aspects and well-designed exhibitions. The museum can develop itself as a learning center in military context for all audiences. The location of the museum and spacious parking lot can accommodate visitors and give them easy access to the site. However, facilities such as visitor centers, souvenir shops, restaurants, cleaned toilets, as well as recreational space within the museum are indispensably required for a better management at the site. To be more effective, the competition among museum business should be taken into consideration in order to better cater and fulfill visitors' requirements on their museum visits, leading to their repeat visitations.

3. Case Study: The Imperial War Museum North

The Background of the Imperial War Museum North

The Imperial War Museum in the United Kingdom was established by an Act of Parliament in 1920. Its purpose is to collect, preserve and display material and information connected with military operations in which Britain or the Commonwealth have been involved since August 1914. The collections illustrate and record all aspects of the history of modern conflicts with displays that reflect the personal experience of war and wartime life, both military and civilian, and commemorate service and suffering in war.

Initially, the first branch of the Imperial War Museum has been located in London or so called the 'Imperial War Museum London', and then spanned into four further branches: the Churchill Museum and Cabinet War Rooms in Whitehall, the Historic Ship HMS Belfast, the Imperial War Museum Duxford near Cambridge, and finally the Imperial War Museum North in Trafford, away from Manchester city around two miles.

With four branches in the South East, the board of the Imperial War Museum desired to offer the population in the North to be able to access to its exceptionally rich collections of films, photographs, arts, documents, war-related objects, sound recordings, books, maps, and various museum services. Through a unique partnership with developers Peel Holdings, Trafford M.B.C and a range of other agencies, the Imperial War Museum North has been opened to the public on July 5th 2002 (<http://north.iwm.org.uk>, accessed in February 18, 2007).

The 'Imperial War Museum North' is a war museum that is unique in its coverage of conflicts from the First World War to the present day. It seeks to provide and to encourage the study and understanding of the history of modern war and 'war-time experience' and has been regarded as one of the essential museum destinations of the region. This museum concentrates about people and their stories, about how lives have been and still are shaped by war and conflict. Besides, the museum building has

been designed by world-renowned architect 'Daniel Libeskind' and won the 2003 British Construction Industry Building Award. In addition to this, the museum has also won many awards such as 'Visitor Attraction' of the Year 2004', 'A Special Commendation in the European Museum of the Year Award 2004', as well as the winner of 'A Large Visitor Attraction of the Year 2006' in the Manchester Tourism Awards. This museum is a symbol of the world torn apart by conflict and is situated on the banks of the Manchester Ship Canal in Trafford (<http://north.iwm.org.uk/>, accessed in February 18, 2007).

The Imperial War Museum North was constructed by SDL and Sir Robert McAlpine company at a cost of 28 million British Pounds (http://www.daniel-libeskind/project/show_all/imperial_war_museum_north, accessed in February 18, 2007). The building has a highly complex geometry with sloping floors and ceilings and few perpendicular surfaces, designed to induce disorientation reminiscent of that caused by war. The large tower is known as the 'Air Shard' and has a viewing observation platform at the top, accessed by a lift, with a good view of the Lowry and Salford Quays. The museum is open daily from 10.00 am till 5.00 pm. with free admission (<http://www.manchester2002-uk.com/museums/museum2a.html>, accessed on February 18, 2007).



Fig.55 Imperial War Museum North in Trafford

Source: Theokas, A. (<http://www.manchester2002-uk.com/museums/museums2a.html>)

The Museum Building Concept

The Imperial War Museum North deals with the conflicts that have shaped the Twentieth century and those which will continue to shape the future. The building brings together culture and regeneration, craft and design, in order to give the public a striking emblem on both tradition and future revolution.

Libeskind's concept for the museum was a globe, shattered by conflict and then reassembled on the site. The three elements of the building, the air shard, the earth shard and the water shard represent the arenas where conflicts are fought. These fragments, shards or traces of history, are in turn assembled on this site and projected beyond it. An entirely new landscape will offer an environment in which the participatory experience of the public would begin long before the visitors enter through the actual doors. The building exists in the horizon of the imagination and is visible across the strategic points of the Manchester city and its surroundings.

As the building is an attraction in itself, it is expected to be visited by around 400,000 visitors a year. The style, as typical of Libeskind's work, has become known as 'Defragmentation', and it departs dramatically from conventional vertical and right angle-built architecture in its free-flowing forms and asymmetric geometry. The original plan had called for concrete; the final stainless steel sheet cladding came as a result of financial constraints (Libeskind, D. 2002). The building has joined an ever-growing list of celebrated twentieth-first century structures appearing around Manchester, and is expected to attract continuing international interest for designers and students of architecture. It is a further contributor to the rebirth of Manchester as a world-class architectural environment and as such is instrumental in shaking off more than a century of drabness and grime which has long been associated with the area.

The Shards Concept

As stated above, the design concept is based on the globe, broken into three fragments to depict the shattering effect of war on the history of the world. These three fragments, or 'shards', are structurally interlocked to represent world conflict on land,

water and in the air. The Earth Shard forms the generous and flexible museum space. It signifies the open, earthly realm of conflict and war. The Air Shard with its projected images, observatory and education spaces, serves as a dramatic entry into the Museum. The Water Shard forms the platform for viewing the Canal with its restaurant, cafe, deck and performance space. These three shards together: Earth, Air and Water concretize Twentieth century conflicts which has never taken place on an abstract piece of paper, but has been fought on dramatic terrain by the infantry, in the skies by the air force and battled with ships in the sea (Libeskind, D. 2002).

According to the concept, the Earth Shard provides the main museum space while the Water Shard (the section that closest to the water) contains the restaurant and a café. The third section, the Air Shard, is open to the elements and has a dominant towering observatory, offering panoramic views across the Ship Canal and the Manchester city center skyline (<http://www.manchester2002-uk.com/museums/museums2a.html>, accessed in February 18, 2007).

The Museum's Layout Plan and its Exhibitions

The Museum tells the story of how war has affected the lives of British and Commonwealth citizens since 1914. As mentioned earlier, this museum is the fifth branch of the Imperial War Museum and the first outside of the South East of England. This museum is situated at The Quays on Trafford Wharf Road, Trafford Park, Manchester close to Harbour City Metrolink and Junction 9 of the M60 as illustrated (<http://north.iwm.org.uk/server/show/ConWebDoc.991>, accessed in February 18, 2007).



Fig.56 Architectural Aspect of the IWM North

Source: <http://north.iwm.org.uk/>



Fig.57 IMW North from the Bird-Eye View

Source: Aerial Photograph Image Courtesy of www.webaviation.co.uk 2005

Museum Exhibitions and Displays

For the architectural aspects of the building, the Imperial War Museum North has two tiers: the ground level and the level one. The ground level has the main entrance on the Air Shard building for individual visitors while group visitors have a special entrance close to the shop area on the same level. This Air Shard has lift and stairs to the viewing platform. Visitor information center, shops, and necessary accommodations are also to be available for all visitors at the ground level. On the

level one, there are the main exhibition space with picture gallery namely 'Big Picture Show' and also six temporary exhibition spaces called 'Silos'. The Special Exhibitions Gallery and the Learning Studio are located next to the main exhibition space, while Water Shard Café is at the front of the building.

The Museum utilizes many new and innovative modern exhibition design techniques and used the very latest interactive technologies to enhance the visitor experience, However, there are still some reassuringly conventional glass cases with memorabilia and exhibits to satisfy to those conservative visitors, as well as there being occasional free standing artifacts of war such as a field gun, Russian tank, Harrier Jet and so forth.

The Museum's interactive multimedia facilities elevate it from being merely dry or static exhibition space to produce a truly twentieth-first century center aimed at bringing the stark realities of war to visitors of all ages. Libeskind, the museum architect, was involved in not only the overall building design but advised on the disposition of the internal spaces and exhibits. The museum also has an extensive art collection with paintings and drawings commissioned during the two World Wars, as well as collections of photographs, film and other period documentation.



Fig.58 IWM North Floor Map
Source: <http://north.iwm.org.uk/>

Main Exhibition Space and Big Picture Show

An audio-visual presentation with the enhancement of museum's extensive sound and image archives is to be used within the gallery, drawn attention by most audiences. This audio-visual is automatically running in the main exhibition areas for fifteen minutes every hour. Set on an immense scale, other displays are blacked out during the presentation, which uses sixty projectors on twenty screens of around five meters height. The museum features an exhibit called '*The Big Picture*'. This award-winning, the Big Picture, is a 360 Degree audio-visual experience and a unique way for visitors to access the museum's world-renowned collections of photography, art and sound (<http://www.iwm.org.uk>, accessed in February 18, 2007).

Once an hour, the lights in the main exhibition hall are lowered, photographs and quotations from scenes of war are projected onto all of the walls, and recordings of events echo around the hall. The images are continuously changing onto the gallery walls, floor and visitors themselves, creating a total immersive environment. The images are also accompanied by music, sounds and reminiscences from the oral history archives to unforgettable and impressive shows. Although the Big Picture is well worth waiting to see, it contains flashing lights and loud sounds which may be problematic for some visitors or very small children. The warning has been announced to allow audiences with opportunities to whom wish to leave the area.



Fig.59 The Big Picture Show at the main exhibition space

Source: <http://north.iwm.org.uk/>

The Time Line

The Time Line forms the main layout of the exhibition, following a broad historical development and charting the changing balance of world power through various zones including:

- 1900-1914: A New Century
- 1914-1918: First World War
- 1919-1938: Between the Wars
- 1939-1945: Second World War
- 1946-1990: Cold War
- 1990-Present: Into a New Century

This Time Line illustrates the twentieth and twentieth-first century of conflict along the gallery walls, featuring key landmark events involving British and Commonwealth citizens since 1900 AD till the present day.

Large Objects Exhibition

Among a hundred of objects in the main exhibition area, there are major exhibits of artillery pieces which tell an important story of wars. These large scale objects and equipments are the Harrier Jump-jet, the Artillery Piece, the Fire-fighting Trailer, the Trabant Estate Car, the Leopard Patrol Vehicle, the T34 Russian Tank, and the Model Barrage Balloon. Although these military objects are permanently displayed, some can be removed if the museum requires some more spaces for any special exhibition.

Silos: Exhibition areas or so-called ‘Silos’ are provided within the main exhibition space in order to afford opportunities for temporary or changing exhibitions. These six partially enclosed tall exhibition spaces (Silos), present a range of themes that are central to the history of war and conflict, as the following:

- Silo 1: represent 'Experience of War'
- Silo 2: represent 'Women at War'
- Silo 3: represent 'Impressions of War'
- Silo 4: represent 'Empire, Commonwealth & War'
- Silo 5: represent 'Science, Technology & War'
- Silo 6: represent 'Legacy of War'

The Silo exhibition spaces can be utilized for visiting or temporary exhibitions in the future, and a series of regular ongoing 'events' is planned.

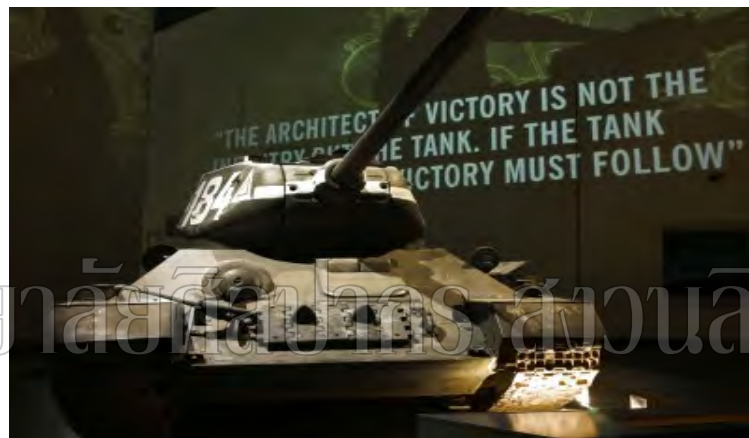


Fig.60 Large Objects Exhibition at the main exhibition space

Source: <http://north.iwm.org.uk/>



Fig.61 Temporary Exhibitions (Silo 4)

Source: <http://north.iwm.org.uk/>

Time Stacks: Located near Silo 1 and Silo 4, Time Stacks offer a chance to explore objects from the Museum's stores. Built into the walls of the silos, Time-Stacks contain themed trays of objects and invite visitors of all ages to touch and explore the objects revealing the stories and people behind them. Trays look at subjects such as 'Escape and Evasion', 'War Art', 'Land and Air Warfare', and 'Cold War', including two new Time-Stack trays on the themes of 'Last Letter': the feelings and expressions in the letters between servicemen and women and their loved ones at home during the First and Second World Wars. Another theme is 'Prisoners of War, Keeping-up Morale': the POWs and their activities in relation to entertainments such as handmade musical instruments, song writing and theatrical productions while they are in the camps.

Action Stations: The Action Stations allow hands-on exploration of the themes of the exhibition which are suitable for children of all ages. These activities are as the following:

- **The Trench:** Explore the terrible conditions for soldiers in First World War trenches through 'feely boxes' and smells.
- **Symbols:** Design symbols on a huge wall and see how they are powerful tools.
- **Divided City:** Play a Berlin-based board game and try to get access to the other side of the Berlin Wall.
- **Hide and Seek:** Try different camouflages and see how they confuse the eye.
- **Codes 'Makers' and 'Breakers':** Try making and breaking codes to see how important secret languages are in wartime.
- **T34 Tank Teamwork:** A quick-fire game of coordination demonstrating the importance of teamwork.
- **In The Balance:** Visitors get to cast a vote to see how it might tip the scale.

- **Spin Machine:** Have a go at spinning the Spin Machine to reveal the power of the poster during wartime and see how propaganda can be used to influence and change opinions and behavior.



Fig.62 Time Stack object handling at Action Station

Source: <http://north.iwm.org.uk/>



Fig.63 T34-Tank Teamwork at Action Station

Source: <http://north.iwm.org.uk/>



Fig.64 The Trench at Action Station

Source: <http://north.iwm.org.uk/>

The Provision of Facilities

Souvenirs and memorabilia shop are opened daily within the public hours with extensive books on war-related topics are to be on sale. The restaurant in the Water Shard opens all day, while ground floor café sells light refreshments and sandwiches.

Necessary facilities such as visitor center and toilets are to be available and accessible not only for general visitors but also disabled and wheelchair users. Lifts and stairs to viewing platform are also available to accommodate all audiences, including spacious parking and disabled Parking. Group visits are welcome but require to booking their visitation in advance by contact the Education Department within the museum (<http://www.manchester2002-uk.com/museums/museums2a.html>, website accessed in February 18, 2007).

The Analysis of the Imperial War Museum North

The Imperial War Museum North can be analyzed its strengths, weaknesses, opportunities, and threats via SWOT analysis.

Strengths:

The museum has an outstanding characteristic of its architectural attributes as the icon for the Manchester city. Located on the banks of the Manchester Ship Canal in Trafford, it is easily accessible by many kinds of vehicles such as cars, buses, and boats. Another advantage of the museum location is that the museum is not located in a high security military area, thus; the general public visitors can easily access into the museum area without any constraint from the military security. The museum utilizes highly innovative multimedia for the displays with a variety of displays to suit each visitor's interest and desire for entertainment. The exhibition zoning and lay-out plan of the main exhibition and other exhibition rooms are well-designed and associated to each other. Interactive media and exhibit information are to be provided in situ for learning opportunities. Moreover, the provisions of activities for all audiences to be participated in the exhibitions are well-created, especially the Action Stations that are suitable for children of all ages.

In addition to permanent exhibitions, special exhibitions are also available in situ as a motivation to attract not only new visitors but also general visitors for their repeat visits. The museum provides tips for a successful visit online. This is a very

useful way for visitors to prepare themselves before their actual visits. Facilities such as visitor center, toilets, restaurants, shops and parking-lot are readily available in the museum to accommodate general and disable visitors.

Weaknesses:

Although highly innovative exhibitions can attract large number of visitors, the conservative audiences who prefer general glass showcases with objects may not appreciate the presentation and will leave the museum dissatisfied. In addition, as the Big Picture Show on the main exhibition space contains flashing lights and loud sound system; it may be problematic and interrupt some visitors or very small children. The large objects of military vehicles are still scattered all over the main exhibition area. These need an additional particular space for exhibition.

Opportunities:

According to its outstanding location, away from the Manchester city just two miles, the museum can be developed as a tourist destination for all visitors. Because of highly sophisticate presentation and innovative multimedia, especially the Big Picture Show, can attract large number of local and foreign visitors worldwide. The museum can be portrayed as an excellent resource for both formal and informal learning covering all curriculum areas. It can be developed as an educational center for visitors of all ages. Owing to useful information on the internet website of the Imperial War Museum North is easily accessible and up-to-date, visitors can prepare themselves in advance for their visits with effective learning opportunities. As one of the Imperial War Museum members, the Imperial War Museum North can utilize its network to promote its museum and then attract several visitors who have been to other museums to pay attention and visit this museum next time.

Threats:

Although admission to the Museum is free, a car parking fee is charged for the first three hours. In business hours, the parking is normally full owing to small parking area around the museum. Thus visitors need to park in the Lowry Designer Outlet secure car park opposite across the Ship Canal and pay parking fees on regular basis. Generally, visitors are required to approach the Museum on foot or by public transportation such as bus or taxi. This apparently frequent inconvenience affects most visitors who come to the museum, whether as families or individuals.

Evaluation of SWOT Analysis

As explored so far, what makes the Imperial War Museum North unique is the integration of architecture, exhibition design engineering and a vision of history and the future. According to Libeskind (2002), the building is of simple construction, with low-maintenance costs, efficiently use, ecological responsibility and sensitive security awareness. The museum utilizes highly effective media to attract visitors along its exhibitions, including the provision of temporary exhibitions with changing themes to enhance repeat visitation among visitors. Although the exhibition zonings are well designed, some large military objects on the main exhibition area need to be removed to expand the museum space. Overall, the Imperial War Museum North is well organized with effective exhibitions and displays. Because of outstanding architecture and design contents of the exhibitions, this museum can be developed as infinite learning center and a tourist attraction for the Manchester city.

4. Case Study: The Army Museum of Singapore (ARMS Museum)

The Beginning of Singapore Army Operations

After more than a century of British colonial rule and under the administration by the Malaysian Federation, Singapore was finally separated and declared a sovereign and independent nation on 9 August 1965 AD. It was a time of great uncertainty as the leaders were faced with enormous tasks of charting the path of national destiny. An urgent priority after independence was to build up Singapore's own defense capability. With its small population and the need to channel resources for economic development, it was decided that Singapore's defense would be based on citizen armed forces.

In August 1965, the Ministry of the Interior and Defense (MID) was established with Dr. Goh Keng Swee as the first Minister at that time. The key priority then was to build up the army into a credible force as soon as possible. However, there was no military tradition in Singapore. The bulk of the population had traditionally held military service in low esteem. As intense educational effort was required to overcome such attitudes, thus ministers, members of the parliament, senior civil servants and community leaders volunteered to serve in the People's Defense Force. In this way, they set an example and drove home a message that it was the responsibility of every citizen to defend their patriotic nation. With this chief aim, the government was able to gain and keep the general acceptance and support of Singaporeans for the 'National Service' ever since (Lim 1997).

Mission

The Mission of the Singapore Armed Forces is to enhance Singapore's peace and security through deterrence and diplomacy and, should these fail, to secure a swift and decisive victory over the aggressor. To achieve this, the Ministry of Defense (MINDEF) is committed to strengthening the military, manpower, and technological edge of the Singapore Armed Forces (SAF), while fostering close defense relations with friendly countries in the region and beyond through dialogue, confidence-building

and co-operation (http://www.mindef.gov.sg/imindef/about_us/mission.html, accessed in November 9, 2006).

Towards Singapore Armed Forces and the Idea of Museum's Establishment

The interest in preserving military heritage was quite new in Singapore and usually neglected due to the fact that the nation paid special attention to technology and economic development (Lau 1997). It was not until 1980 AD that the army department was confronted with a new set of challenges. Not only did hardware and technology have to be developed for the army but also the human factor; that is, how military officers were to be organized, trained and motivated. To enrich and preserve military heritage, collection of wars memorabilia, and commemorate military servicemen, the Singapore Armed Forces (SAF) showed its first real interest in heritage and military preservation by researching the feasibility of setting up a military museum. This has also been complemented by educating local citizen in all sorts of military history to see the significance of military operations.

The idea of a 'future military museum' was invented in 1977 AD in association with the setting up of the Ministry of Defense Records Center (MINREC). Establishing a military museum was a logical corollary to the Ministry of Defense's goal to enrich the Singapore Armed Force's heritage. By systematically collecting, housing, and displaying old artifacts, the museum would not only provide the army with a sense of history and direction but also serve national education goals to all museum audiences (http://www.mindef.gov.sg/imindef/mindef_websites/atozlistings/army/microsites/armymuseum/about/about_arms/towards, accessed in November 9, 2006).

The Army Museum of Singapore (ARMS Museum)

Owing to the significance of museum's establishment within the region and the celebration of fortieth Anniversary of National Service (NS), the project of the Army Museum of Singapore was launched by the Minister of Defense, Mr. Teo Chee Hean,

in June 2006 to be located within the SAFTI Military Institute (SMI). The museum was also connected to Singapore Discovery Center, the center for learning experiences in arts, cultures and traditions of Singapore with various activities not only for children but also all family members to be participated. The location of the museum was effective to capture the interest of all family groups who have been entered into the SAFTI military area because they could visit the army museum and the Discovery Center at the same time. According to its website, the museum was built to preserve the heritage of the Singapore army, the contributions, the experiences and honors of heroic soldiers. It was a place, the website claims, where local people can view the military heritage through exciting displays and exhibitions, and learn about the vital role and responsibility of the army in safeguarding the nation (<http://www.mindef.gov.sg/armynews/display2.asp>, accessed in November 9, 2006). Interestingly, the name 'Army Museum of Singapore' was derived from a branding competition open to all soldiers. The name 'ARMS' was a very simple and concise, yet powerful for referring to various formations within the army concepts such as Armor, Artillery, Army Engineering, etc.

The Architectural Design Concepts

The architectural design concept reinforces the connection of the army to the land and is built upon the three ideas of emergence, growth and sustainability. The concept of emergence and growth arises from the army's evolution and transformation throughout the years. Hence the most prominent feature of the building is the roof that literally grows out of the earth, rising in a sweeping arc along the lake. The rising movement of the roof is supported by three rock-like structures that firmly anchored the building to the ground. These rock-like structures convey a sense of permanence and strength, symbolizing the values that remain important for sustaining growth and change (http://www.mindef.gov.sg/imindef/mindef_websites/atozlistings/army/microsites/armymuseum/about/architecture, accessed in November 9, 2006).



Fig.65 Army Museum of Singapore
Source: <http://www.mindef.gov.sg>



Fig.66 Main entrance of the army museum
Source: <http://www.mindef.gov.sg>

The concept of sustainability extends to the integration of the building with the topography of the site. Instead of making its presence felt by intruding or building into the pond, the sweeping roof of the Army Museum gains its momentum by accentuating the arc of the lake, rising from the ground as it continues its sweep. Occupying the space between the existing lake and the road, the building design responds to the site through its internal layout and spatial flow, using the arc of the lake as its primary axis of visitor movement. Pushing the concept of sustainability further, the preservation of the existing ecosystem of the site is another important objective. Hence, gaps within the building were introduced to function as pockets of green space from which trees and plants can grow. Conceptually, these green spaces bring elements of the natural landscape into the interior, reinforcing the close connection between the building and the land.

Preserving History within the Building

The uniquely Singapore experience of National Service (NS) is chronicled in a new Army Museum of Singapore which is opened to the public in September, 2007 in conjunction with the fortieth anniversary of the NS. The Defense Science and Technology Agency (DSTA) is the principal architect designer and construction manager behind this meaningful heritage landmark. The team has designed the facility to encapsulate the essence of the Army's rich heritage. This new army museum was one of the recommendations made by the Fourth Committee to Recognize the Contributions of the Operationally Ready National Servicemen to Total Defense group chaired by Second Minister for Defense, Dr. Ng Eng Hen.

The museum has featured six galleries that showcased the army's development since its formative years. The National Servicemen (NS) has been illustrated to all visitors through exhibitions such as the mock-up of 1970s soldier's bunk and displays of army equipment complemented by the 'sounds and smells' of each battle. Putting together the structures, the army museum was uniquely designed to complement the existing buildings and environment. Its three rock-like structures symbolized the magnificent history and strength of Singaporean's army as well as the solidarity among soldiers. Every effort was considered for the formation of museum to ensure that the museum was not only functional but also aesthetically pleasing.

Mrs. Pauline Ang, a DSTA architect, highlighted that the architectural design has been incorporated with the concept of continuous growth to reflect the transformation journey of the army. The roof, which rises from the ground in a sweeping arc, has illustrated the evolution and continuous growth of the army. In a deliberate reversal of the building form, the main entry has been designed to be entered from the top level instead of the bottom level. Visitors can enter through the top level galleries and then descend through the atrium, from where they turn back into the lower level galleries.

Exhibitions within the Museum



Fig.67 Exhibitions within Army Museum of Singapore

Source: <http://www.mindef.gov.sg>

The Army Museum of Singapore is striving to convey three main key messages to its visitors: ‘Our army is ready and capable’, ‘We are an army of the people’, and ‘National Service is a uniquely Singaporean experience’. Although National Service (NS) is mandatory and as a contribution by all Singaporean men to the nation, the museum emphasizes the latter message the most to its visitors in order to convey the idea that the protection of Singapore and the participation in the army are everyone’s duty (<http://www.mindef.gov.sg/armynews/display2.asp>, accessed in November 9, 2006). To achieve this, two storeys of built-in six galleries are displayed past and current army operations, including the future evolution of the army through different themes within the museum.

Permanent Exhibitions

Gallery 1: Orientation Gallery

This gallery introduces the army's mission while providing a preview of the different galleries in the museum. The army's mission statements are mounted onto the steel wall made from decommissioned SM1 tanks while 40 television screens projected various images depicting the National Servicemen and the army operations as to commemorate the forty years of National Service. Here, the multimedia screens

featured 40 disparate enlistees from all walks of life and demonstrate how they eventually come together as a cohesive platoon.



Fig.68 Architectural Design of the museum
Photo by: Supachokeaueychai, T.



Fig.69 Main Entrance of Gallery 1
Photo by: Supachokeaueychai, T.



Fig.70 'Our Early Years' Presentation
Photo by: Supachokeaueychai, T.



Fig.71 The Birth of the Army Gallery
Photo by: Supachokeaueychai, T.

Gallery 2: Our Early Years

Visitors are able to relive the experience of army life in the early days as they walk through an overturned bus lined that created the turbulent mood with some old short-films depicting the security challenges facing a newly independent Singapore. A mock up of Dr. Goh Keng Swee's office, the Singapore's first Defense Minister, represents his vision for the army in safeguarding security and defense the territory. Meanwhile, a speech by Mr. Lee Kuan Yew, the Prime Minister of Singapore is played about the need for a citizen army. An interactive wall outlines the army's capability

development, operations and efforts to recognize the National Service over the years, while highlighting the resilience and foresight of military pioneers.

Gallery 3: Making of a Soldier

This gallery features the making of those citizen soldiers and their national service experiences with Basic Military Training (BMT), overseas training, duties and so forth. Through the rapid expansion of the army's order of battle in the 60s, visitors are experienced a basic military bunk typical of that era evoked the social memories of the common experiences. Here, visitors can immerse themselves into the everyday experiences of ordinary soldiers. These are rekindle the memories of the first generation of those National Servicemen while highlighting the contrast in conditions experienced by younger servicemen as is today. Another key highlight of this gallery is the turnstile display panels, showcasing overseas training and army duties.

The outstanding feature of this gallery is 'Our Army Now' shown at the Object Theater, showcasing the military hardware with a multi-media presentation of lights, sounds and special effects that highlights the combined arms fighting capabilities of Singapore's army. This show can engage visitors through the audio and visual effect to illustrate the armed forces. Local visitors have more understanding about the importance of the role of the army in the defense of the nation and also have an insight into the types of equipment that enable soldiers to protect the country.

Another sub-gallery is the Individual Marksmanship Trainer (IMT) where four different weapons from M16, SAR 21, Ultimax SAW, and M203 highlighted the technological advancements. Here, professional military staffs have demonstrated the use of machine guns and weapons to all visitors and then allowed them to use those weapons for learning and entertaining experiences.



Fig.72 Military Bunk at the Gallery 3

Photo by: Supachokeauechai, T.



Fig.73 Object Theater at the 'Our Army Now'

Source: <http://www.mindef.gov.sg>



Fig.74 Individual Marksmanship Trainer (IMT)

Source: <http://www.mindef.gov.sg>



Fig.75 Army Operations for Today

Source: <http://www.mindef.gov.sg>

Gallery 4: Army Operations for Today

This gallery highlights a mission and an involvement of the servicemen in operations from the past up to the present. It reviews the threat environments facing the nation and covers the army's successful military operations, its values and contributions to enhancing defense diplomacy. Static model displays are integrated with exciting multimedia to attract all audiences.

Gallery 5: Creating Our Future

The possibilities for the Army's future transformation and its evolution are presented in this gallery. Visitors transported into the future through the eyes of the children and their artworks that depict what the future could be. It provides a glimpse into the future of warfare and encourages visitors to play an active role in shaping the future of the army. Here, they can try their hand at interactive training through virtual battle simulators, featuring advanced and experimental weaponry and platforms. The most exciting exhibition is the 'Robot World'. Visitors are allowed to control their robots, leading to a sense of hope and commitment to the future.



Fig.76 Creating Our Future Gallery

Source: <http://www.mindef.gov.sg>



Fig.77 Multimedia Presentation at Gallery 6

Source: <http://www.mindef.gov.sg>

Gallery 6: Our People

This gallery presents an enduring tribute to the efforts of the people. Stories by units and individuals are archived for visitors to reminisce on the army experience and nurture an appreciation of the sacrifice, dedication and commitment of successive generations of Singaporeans who served in the army. A short film, created by local director, Mr. Roystan Tan, on how the army and the people have grown together can motivate local people to dedicate their commitments to the National Service (NS). An electronic database is also available for downloading photos and personal data of those soldiers in the past till the present. The 'Connection Booths' are built to encourage public browsing of past course photos.

Temporary Exhibition

The current exhibition is concerned ‘*Women in the Singapore Armed Forces (SAF)*’ with the illustration and showcases that women contribute to the nation’s defense. This exhibition encourages visitors to learn and appreciate the spirit of patriotism that has drawn these women to serve for the nation. The topic of the temporary exhibition will be changed the exhibit topic every three month to maximize repeat visitation.



Fig.78 Women in the SAF Exhibition



Fig.79 Students played at the Adventure Park

Source: <http://www.mindef.gov.sg>

Photo by: Supachokeauychai, T.

Recreational Area

In addition to permanent and temporary exhibitions within the museum, at the Adventure Park close to the museum, visitors are given an opportunity to be trained as soldiers at the ‘Standard Obstacle Course’ (SOC). Although they are a miniaturized version scaled down for children under 14 years of age, these obstacles enable parents to bond and participate with their children in a venue where everyone can enjoy themselves as they are navigated through the various obstacles.

Facilities

As an extension of the museum experience, the cafeteria called ‘SAFTI-Cana’ with the decoration as a soldier camp is located on the first floor to cater for all visitors

during their visits. This cafeteria creates a sense of nostalgia while younger visitors can enjoy a trendy alfresco ambience by eating outside in the landscape and near the lake. In addition, a souvenir shop with a variety of museum memorabilia is also available near the cafeteria for all visitors. A good point is that this museum has sufficient toilets to be catered for a large number of visitors.



Fig.80 SAFTi-Cana Cafeteria

Photo by: Supachokeauychai, T.



Fig.81 Dining Area next to the Cafeteria

Photo by: Supachokeauychai, T.

Locations and Directions

The Army Museum of Singapore (ARMS) is located at the SAFTI Military Institute (SMI) on Upper Jurong Road, closed by the Singapore Discovery Center. This museum can be easily accessible by public transports either buses or subway trains.



Fig.82 Map of the Army Museum of Singapore

Source: <http://www.mindef.gov.sg>



Fig.83 Architectural Attribute and Landscape of the ARMS Museum
Photo by: Supachokeaueychai, T.

The Analysis of the Army Museum of Singapore

The Army Museum of Singapore (ARMS) can be analyzed its strengths, weaknesses, opportunities, and threats through SWOT analysis.

Strengths:

The architectural design concept reinforces the connection of the army to the land with a sophisticated idea of military's growth and sustainability. As the museum occupies the space between the existing lake and the road, the building design responded to the site through its internal layout and spatial flow by using the arc of the lake as its primary axis of visitor movement. This sharp museum concept and outstanding architecture can attract visitors from the outside. The good point of the museum is that it was built adjacent to the Singapore Discovery Center, and thus the museum is able to gain many young visitors and their family members to visit the museum as well as the older types of people who are the conventional types of visitors to museums.

The museum is easily accessible by various sorts of public transportation such as buses and monorail trains. Visitors can also access to the site using personal vehicles or by walking. In addition to the permanent exhibitions that are classified into six main themes, temporary exhibition with interesting topics about the army are also available to motivate repeat visits. Interestingly, the museum has introduced highly innovative multimedia techniques in each exhibition to reinforce the learning experience and, at the same time, to entertain visitors of all ages. Moreover, the museum provides basic facilities to fulfill visitors' requirements, such as a cafeteria, souvenir shop and spacious toilets. To enhance visitors' participation, Adventure Park with Standard Obstacle Course (SOC) is also available for young visitors to reinforce a sensory perception on how soldiers were trained as they have navigated through these adventurous obstacles.

Weaknesses:

Due to the fact that the museum was built within the military area of the SAFTI Military Institute, visitors who have accessed the site using personal vehicles needed to be inspected by military guards before parking. This leads to embarrassment and is inconvenient for them. However, visitors who came by public transport, either by buses or trains, have more convenience of access than individual vehicles.

Due to the fact that the museum was just officially opened to the public at the end of the year 2007, some military objects and displays were quite small in number and scattered within the gallery, while some exhibit showcases were unassociated to the exhibit themes. These can be improved by the director of the museum and the curatorial staff. Another weak point of the museum is that it was located far away from the city, resulting in a large number of visitors only on weekend.

Opportunities:

The museum can gain a large number of local visitors because its exhibition topic deals with the duty of local Singaporean National Service (NS). This museum is also the only museum that concerns with the military matter in Singapore and associates to the citizen. Owing to its outstanding architecture with various sorts of exhibit themes and multi-media to attract visitors, this museum can act as an educational venue providing learning experiences for visitors of all ages. This includes not only local visitors but also foreign visitors who wish to see the progress and the potentiality of Singapore's military forces in safeguarding the nation. The temporary exhibition with changeable themes and concepts of exhibition provides opportunity for the museum to motivate the revisit among existing visitors, meanwhile, attracting new visitors who have special interest in each topic at the same time.

Threats:

The huge investment in military museums and the degree of competition is increasing among many Asian countries. The neighborhood countries such as Malaysia and Indonesia attempted to develop and open widely their army museums to the public. These countries have tried to promote their museums worldwide and arranged their museums to be included as tourism packages. With the constraint of available area and land use limitation, the Army Museum of Singapore would be confronted the big issue for further development in the future. To be more effective and comparable to other countries, the museum should plan in advance for future development and then search for more available space to expand or build new addition into the museum area.

Evaluation of SWOT Analysis

The construction of the Army Museum of Singapore was initiatively inspired by the Ministry of Defense to illustrate the vital role of the army in safeguarding the nation. This museum played as an honorable venue and the pride of all local people who have served for National Service (NS). Although the museum has a limited space

for construction having been built within the military zone, this was not a difficulty for the museum; rather, the museum overcame the land-use limitation by the use of an architectural design concept that is compatible with the existing area. The classification of exhibitions into six galleries with the introduction of highly innovative multi-media can motivate the learning experiences and personal interests for all types of visitors.

Because this museum understood the basic requirements of visitors, a cafeteria, souvenir shop, visitor center, recreational area and toilets were made available within the museum as an extension of the museum experiences. Although this museum can attract large number of visitors and can be developed as a tourism attraction among local and foreign visitors, the degree of competition in military museums was continuously increasing in many Southeast Asian countries and this should be taken into consideration if the Army Museum of Singapore wished to win visitors' minds and wanted to be listed as the hub of military information in the future.

มหาวิทยาลัยศิลปากร สงวนลิขสิทธิ์

The Development Requirements for the RTA Museum

As explored so far, the four case-studies provide good examples on what the museum should offer or provide at the site, including how to effectively manage and develop the military museum in the future. In addition, what have learnt from the above cases are also concerned the weak points and some threatening situations that should be avoid. From the above case-studies lesson, the RTA museum should take into consideration as follows:

1. The classification of each exhibition themes is important for planning and zoning management within the museum.
2. In addition to permanent exhibitions, temporary or special exhibitions should be available within the museum in order to attract visitors and motivate their repeat visits.

3. Innovative multimedia in terms of lights, sounds, special effects as well as interactive programs should be input within displays and exhibitions to educate and entertain visitors.
4. The provision of participative programs and activities are needed to be provided in the museum in order for creating a strong sensory perception among visitors about the historic events and crucial information that the museum would like to communicate.
5. The architectural design concept of the museum building should associate to the overall theme of the exhibition and reinforce the connection between the army and general public audiences to understand the vital role of the army in safeguarding the nation, aiming to enhance the patriotic feeling and the pride of the nation among all visitors.
6. Public relation programs through efficient sources of media are essentially required to promote the museum to the general public and as the way to inform them about the characteristic of the museum and what it would like to offer.
7. Basic accommodations such as a visitor center, a cafeteria, a souvenir shop, spacious toilets as well as a recreational area are needed to be catered as an extension of learning experience for all visitors.
8. Financial support from both internal and external sources are essentially required not only for the development but also the viability of the museum in the future.
9. Charging an entrance fee is optional for consideration but it is beneficial to the museum as a financial source to support the management of the museum.
10. Spacious parking lot is necessary to be provided at the museum in order to cater for various kinds of public transportation and private vehicles.

11. Museum guides should have an ability to educate and entertain audiences at the same time in order to attract visitors along their visits.
12. The museum should be easily accessible without asking for the permission or any intervention from the military authority. This is for the convenience among the general public.
13. The development of internet websites for museums provides the opportunity to persuade and attract visitors online. Information about the object displays and exhibitions, directory and location of the museum, accommodations available at the site, and any necessary information should be informed through the websites for the advance preparation of visitors before their actual visits.
14. New construction of military museums should avoid the military area as much as possible. However, existing museums within the military precinct should have the authority to independently manage its museum without any intervention from the army. To be more effective, any rule and regulation against the accessibility by the general public should be reduced.
15. The nature of tourism is changing and visitors now tend to have more expectation for the destination to accommodate learning and entertaining experiences at the same time. Moreover, the vast investment in military museum worldwide is high due to the competition to develop the museum as tourism destination. To develop the RTA museum to meet public interests, the provision of multimedia and participative programs should be taken into consideration for future development.

Chapter 5

Field Study and Research Methodologies

1. Physical Investigation of the Museum Building and its Problems

The architectural investigation is mainly emphasized on the RTA museum for evident problems of the building within the area 1,062.5 sq.m. According to the investigation in the degradation of materials and construction of the museum building, some problematic issues related to current architectural appearances will be identified and illustrated in systematic manner, aimed at verifying the causes of building problems and also searching for solutions to fix them. Overall investigation of this building is as a preliminary research for further inspections on the provision of appropriate conservation and strategic management of the museum for long-term sustainability.

Objectives of Physical Investigation

- To investigate overall physical characteristics of the RTA museum by which some problematic issues related to physical aspects of the building will be identified for understanding the causes of deterioration;
- Total physical inspection will be utilized as the source of architectural information of the museum building for future maintenance and conservation with a view to provide appropriate conservation practices and long-term sustainable development.

Although the RTA Museum has been renovated from the previous academic building called '*Chulachomklao Royal Military Academy*', the architectural structure of the building is still in the original form of its architecture with its symmetrical shape, retaining overall building structures as an official building in the past. The museum

building is about 12.5 meters in width and 88 meters in length (1,100 sq.m) and has the entrance hall at the core of the building with equally-spanned wings. This building is decorated in European architectural style, where Neoclassic and Renaissance styles of decoration are to be combined (Wattanamahatma 1997, p.111). Another building located near the RTA museum is the two storey building called '*The Administrative Ordnance Building*', where it is around 12.5 meters in width and 30 meters in length (375 sq.m).



Fig. 84 The Chulachomklao Academic Building since 1906 AD.

Source: The Century of Chulachomklao Royal Military Academy, 1987



Fig. 85 The RTA museum building of the present

Source: Supachokeauychai, T.

Building Conditions

Built in 1906 AD with an adaptive re-use from academic purpose to exhibition museum, the major renovation in 1996 AD has played an important role in reassigning the former academic function into the current exhibition by changing and removing some concrete walls and interior partitions to be more compatible for displays and exhibition purposes. Still, this three storey museum can be able to retain its physical attributes in an original form. Similarly, the Administrative Ordnance building located near the museum, where it was used as a military academic office, being remained in its original condition despite having been changed into the Army Evolution Room on the first floor and the Research and Military Archives Room on the second floor. However, many parts of this building were confronted with large number of architectural problems as construction materials have deteriorated from time to time by moisture, weathering from direct-sunlight and raining season, as well as an intrusion by underground pests and termites. Thus, it requires special maintenance for the overall building structure to be kept in its original conditions.

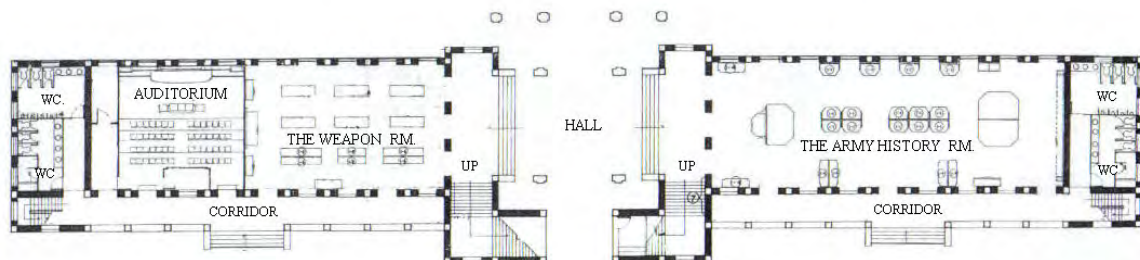


Fig. 86 The First Floor Plan of the Museum

Source: Supachokeaueychai, T.

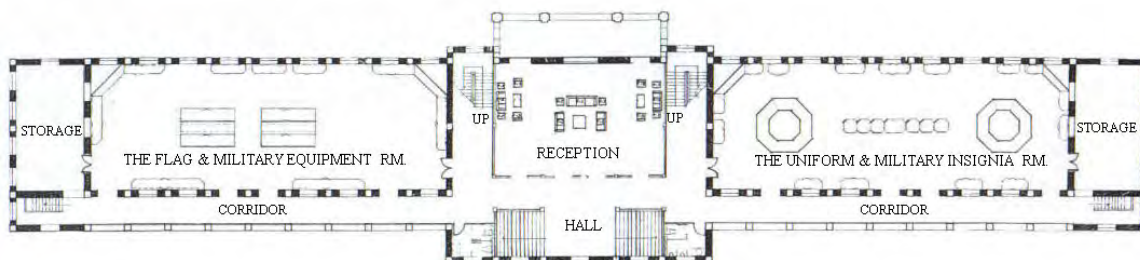


Fig.87 The Second Floor Plan of the Museum

Source: Supachokeaueychai, T.

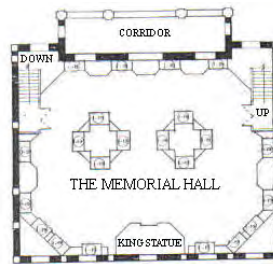


Fig.88 The Third Floor Plan of the Museum

Source: Supachokeauychai, T.

Built a century ago, the RTA museum and the Administrative Ordnance building are in a state of deterioration from their original construction. The causes of degradation can be classified into three main factors: the degradation from environment, the degradation from underground pests and termites, and the degradation from human. The analysis of architectural problems of the RTA museum and the Administrative Ordnance building will be identified and analyzed in the next chapter.

มหาวิทยาลัยศิลปากร สงวนลิขสิทธิ์

2. The Design of Interview Questions and Questionnaire Surveys

Key Questions for Data Collection

The research literature apparatus provides the foundation of museum study and effective management apparatus. It delivers ideas behind the research project and provides key questions for the Royal Thai Army museum as listed below:

1. How to make sensible meanings to the military museums and what are the most effective channels to promote the museum?
2. How to develop displays and exhibitions to meet public interests and what interpretation programs are attractive and beneficial to the museum?
3. How to manage and conserve the military museum for self- sustainability and where is the source of funding?
4. What is the critical solution to develop the museum in long term against existing constraints and limitations at the site?

Interview with Museum's Staff as Qualitative Research

Objectives of the Interview

The purpose of the interview with any military museum's staff was to explore their interpretations and perspectives on how to manage, develop, promote, and conserve their museum through time. These are aimed at understanding their overall actions and ability to cope with particular constraints and limitations within each museum site. The objectives were:

- to understand the chief aims of military museum establishment and current management practice in Thailand, as well as various factors affecting to overall museum operations;
- to improve military museums to meet the highest standards of management and develop as attractions that would appeal to larger numbers of visitors;
- to encourage greater development of museum presentations and exhibitions in order to appeal to general visitors as one-stop historic destinations;
- to conserve the significance of military museums with a view to provide effective conservation programs and development strategies for long-term sustainability.

Interviewing Questionnaire Design

There are 44 questions for the interviewing questionnaire in which they have been classified into five sections (See Appendix I and II). The first part has 9 questions concerning museum management and operations. The second part has 16 questions related to general opinions from the staff in terms of their observations to those museum visitors. The third part has 7 questions concerning exhibit objects and current exhibitions within each military museum in order to explore ideas of museum improvement. The fourth part asked about the availability of the facilities within the museum and about what need to be improved or catered at the site with 3 sub-

questions. The fifth part has 4 questions concerning the current conservational management and maintenance of each military museum. Finally, the sixth part has 5 questions related to individual opinions and interpretation of the museum in association to the good and the weak points of current exhibitions, including general perspective on what needs to be improved for effective exhibition and management in the future. For design purposes, each section and question carried particular objectives as listed in the table below:

Objectives	Questions
1. To understand current museum managements and operations in terms of target audiences, sources of funding, public relations, and stakeholders	1.1 What is the main objective and goal for the museum establishment? 1.2 How does the museum manage and operate within its organization? 1.3 How many departments does the museum have and what is each department responsible for? 1.4 What are the main groups of visitors to the museum and why does the museum emphasize this kind of visitors? 1.5 What are the tactics or strategies for effective museum management and operation? 1.6 Where are the major sources of museum budget come from and is it sufficient to cover all the requirements of the museum's managements and conservation? 1.7 Which forms of media the museum have been used to promote public relations and marketing of the museum? 1.8 What are the most effective sources and ineffective forms of media for public relations in your opinion? 1.9 Does the museum charge an entrance fee? 1.10 Are there any government and non-government organizations that support and fund the museum? 1.11 Does the museum coordinate with other museum-related organization?
2. To evaluate the visitor profiles, their motivations to visit the museum, their appreciations as well as their interpretation to the site	2.1 Where have visitors mainly come from and do they visit the museum as individuals or a group? 2.2 Does the museum have any foreign visitors and where do they come from? 2.3 In your opinion, what are the factors leading people to visit the museum?

3. To identify the availability of materials and information provided for visitors, museum's capacity and operation times, including any provision of interpretative programs	2.4 How long does a group of visitors spends on average for their whole museum visit and in which kind of exhibit room do visitors spend the most time and the least time? 2.5 According to your observation, do visitors appreciate the whole exhibit content or not? 2.6 What kind of exhibit room the visitors is most appreciated and least appreciated? Why? 2.7 Do most visitors have a good knowledge of army history? If not, does this affect their understanding and interpretation at the site? 2.8 Do most visitors plan to visit the museum again? 3.1 What kind of information does the museum prepare to give to all visitors prior to their visit and by what form of media? 3.2 Has the museum provided an English version of military information to be available at the exhibit showcases and exhibitions for foreign visitors? 3.3 What time does the museum operate on business days? 3.4 Does the museum operate in weekend and during which time of the day most visitors are likely to visit the museum and why? 3.5 How many visitors and groups of visitors can the museum accept per day? 3.6 How many trained guided and guide volunteers does the museum have at the present? 3.7 Is the number of guides appropriate for the number of visitors? 3.8 Does the museum have any communication problems between guides and visitors? 3.9 Do visitors need to book or reserve their visit to the museum in advance? For general visitors without their booking, can they enter to the museum? 3.10 What kind of transportation do most visitors use to come to the museum? 3.11 Is the parking lot available at the site sufficient for the number of visit's vehicles? 3.12 Has the museum ever surveyed the level of appreciation among visitors about the current presentations and exhibitions?

Objectives	Questions
4. To identify current displays and exhibitions within the museum, including solutions for exhibit improvement	3.13 Does the museum have any recreational activities and programs for visitors to participate in during their visits to the exhibits? If so, what kind? 4.1 As the museum prepared documents and brochures to visitors before their visits, were those media effective in providing information and interpretation? 4.2 Are zoning and circulation well organized throughout the whole area of the museum? What needs to be removed or readjusted within the museum and the site, and why? 4.3 At the present time, are the exhibit objects and exhibitions well classified and appropriate to an area or not? 4.4 What are the factors affecting the exhibitions that need to be urgently improved? 4.5 Where are the sources of object acquisition and where have they been registered? Has the museum acquired objects from donations and other museums, and what kind? 4.6 Has the museum had any problems concerning the museum objects, displays and showcases, and the application of multimedia? 4.7 How can the museum resolve the exhibit problems? 4.8 Where are the major sources of budget for any renovation and improvement? 4.9 Are the current displays and exhibitions effective or not, in your opinion? 4.10 Has the museum applied multimedia techniques (such as light and sound) within the exhibitions to attract visitors?
5. To find out existing facilities within the museum site for visitors and identify any requirement of facilities at the site	5.1 Does the museum have the following facilities for visitors (such as visitor center, cafeteria, souvenir shop, and so forth) and have they sufficient for the number of visitors and what needs to be provided further? 5.2 Does the museum have any available space for the expansion of visitor facilities at the site? If not, do you have any idea or suggestion how the provision of visitor facilities can be improved at the existing site?

Objectives	Questions
6. To identify any deterioration at the museum and conservational management 7. To perceive museum staff's pinions concerning current exhibitions and any limitation impacted to the museum management	5.3 Do the facility provisions within the museum conflict with military policies and regulations? If so, in what aspects? 6.1 Has the museum found any deterioration in its exhibition objects and the showcases? If so, what are the major causes of deterioration and what have been done to eliminate these causes? 6.2 Has the museum found any deterioration concerning the exterior and interior of the museum building? If so, what are the major causes of deterioration and what have been done to eliminate these causes? 6.3 What are the security and maintenance policies for the museum's objects and the showcases? 6.4 What is the conservation policy for the museum building and associated area? 7.1 What are the good points and the weak points for the location of the museum? 7.2 Is there any impact on the museum's operations and management resulting from the fact that the museum is located in a restricted military precinct? 7.3 In such cases, is it possible and practical to separate the whole museum area from the military operational offices? If it possible, what are the methods? If not, because of what factors and why? 7.4 In your opinions, what are the good points of the museum that need to be retained and the weak points of the museum that need to be improved? 7.5 What needs to be urgently improved in order to make the overall museum administration more effective and to meet the highest standard of museum operation for both its sponsors and visitors?

Table.1 Interview Questionnaire Design Table

Questionnaire Survey to Museum Visitors as Quantitative Research

Objectives of the Questionnaire Survey

In general, people perceived and interpreted heritage places differently according to their prior knowledge and experience of each individual; thus, it can not be assumed that the general public had similar opinions and perceptions on the visit. The RTA museum has various types of visitors with different perceptions and interpretations. In order to understand their attitudes, the questionnaire was created to be used as an assistance tool for data collection.

The main purpose of the questionnaire survey for museum visitors was to identify target audiences of the museum and to explore their perceptions and interpretations to overall museum management through displays and exhibitions, including the requirement of accommodations or new additions to be provided at the site for future development. The objectives of the questionnaire survey were:

- to gather attitudes and perceptions of visitors at the RTA museum,
- to explore visitors' profile and target audiences of the museum,
- to identify interpretive media of the current exhibitions and search for further development of displays and exhibitions with the provision of necessary facilities for general public access

The Assessment of Target Respondents

In order to ensure the accuracy of the questionnaire analysis, there were two major types of questionnaire surveys as listed below:

1. The Questionnaire Survey of 300 visitors:

There were 300 visitors to be participated in the questionnaire surveys and they were local visitors who had visited the RTA museum as groups. These visitors were largely military service men and women who visited the museum by excursion tours organized by various army-related departments and organizations as a traveling package of the National Service (NS). In addition to this type of visitor, actual military officers, government and non-government officers, as well as other types of museum visitors were also included in the survey.

2. The Focus Group Survey:

In addition to the questionnaire survey of 300 visitors who were mostly military service men and women, a focus group of general public visitors was also included in the survey analysis. However, owing to the difficulty of accessibility to the site, the general public was hardly visited the RTA museum. To do this, general visitors (the total number of 100 people) were set and selected as a focus group of visitors for the survey. After the visit was done, these visitors were asked to complete the questionnaire survey questions in order to understand their personal point of view and attitudes about the museum.

Questionnaire Survey Design

There are 23 questions for the questionnaire survey that are classified into three sections (See Appendix III and IV). In section I, there are 4 questions concerned with personal information of each museum visitor in terms of gender, age, level of education and occupation. In section II, there are 7 questions related to visitor's motivations to visit the site and their interpretations to overall museum exhibitions. Section III, the last section, had 12 questions in association to visitor's opinions and perspectives, including their recommendations for better management and improvement for the RTA museum. For the designing purposes, each section and question carried particular objectives as follows:

Objectives	Questions
1. To explore visitor's profiles and personal information 2. To understand visitor's motivations and purposes of visit 3. To perceive visitor's attitudes and interpretations of the current displays and exhibitions 4. To explore visitor's opinions and perspectives in terms of current museum management, accessibility and the availability of facilities provided at the site	1.1 What is your gender? 1.2 Which age range do you belong to? (Lower 18, 18-25, 26-35, 36-45, 46-55, 56-65, 65-above) 1.3 What is your level of education? 1.4 What is your occupation? 2.1 Are you visiting the museum with? ▪ Family ▪ Friends ▪ Alone ▪ Military institution group ▪ Organization group 2.2 How many times have you been to the RTA museum? 2.3 How did you find the RTA museum? 2.4 What is your main purpose of visit? 2.5 In your opinion, how important are the following in influencing you to visit the RTA museum? ▪ Reputation of the museum ▪ Displays and Exhibitions ▪ Understanding the role of the RTA ▪ Beautiful exterior and interior decoration of the building 3.1 After your visit, what do you think of the exhibitions in each exhibition room? 3.2 Which exhibition did you find the most satisfying and unsatisfying? 4.1 Which of the following do you think the RTA museum should improve? ▪ Accessibility to the site ▪ Trained guides ▪ Museum building ▪ Displays and exhibitions ▪ Safety and security ▪ Hospitality and quality of services ▪ Cleanliness ▪ Accommodations (cafeteria, toilets, etc.) ▪ Transportation and parking lot ▪ Recreational area and activity zone ▪ Others.....

5. To find out visitor's perspectives and their agreements in accordance to new development proposals	4.2 Have you ever been to other military-related museums in Thailand? If so, could you please compare the RTA museum to those military museum destinations? 4.3 Which factors are as difficult for your museum experience? 4.4 What would you think if the RTA museum charged for an entrance fee? 4.5 Where would you most like to see money spent for improvement? 5.1 As the museum has limited space to provide visitor facilities because it was located in an area of the RTA Headquarters. Which proposal do you think is best? ▪ Relocate the museum to a new location, ▪ Build new facilities underneath the museum building with underground excavation ▪ Build new facility building near the museum ▪ Other opinion you may have..... 5.2 Where do you wish the new RTA museum to be located? 5.3 What kind of facilities do you want for new underground or building projects? 5.4 Do you plan to revisit the RTA museum? 5.5 Will you recommend others to visit the RTA museum? 5.6 Do you have any suggestion for the improvement of the RTA museum?

Table 2 Questionnaire Survey Design Table

According to the design content of the questionnaire, there were some critical problems and limitations that needed to be identified as the following:

1. As visitors at the RTA museum were largely military service men and women who came from various groups of National Service (NS), these temporary service officers had considered themselves as military officers for a short period of their national service duty. This affected the survey results by showing that military officers were the largest type of visitors at the museum.
2. The group of visitors had very short visits to the museum, which made it difficult to complete all 23 questions in the questionnaire. Due to the time constraint, some open-ended questions were blank. These usually occurred in question 11 and 23, concerning what kinds of exhibition rooms did visitors find most satisfying or dissatisfying, and what suggestions for improvement.
3. There were many questions that took time for decision-making with special consideration. These normally occurred in the questions that allowed visitors to fill in boxes with more than one item, and also questions that concerned the project proposals for future development of the museum. Due to the fact that some visitors had no profound knowledge or historical information about the RTA museum, they were generally confused about an answer, and so had no responses to those questions.
4. Because museum visitors were mostly local people, the questionnaire was published in Thai language with some modifications to the question to be more understandable among them. However, questionnaire's forms and question numbers were similar to an original English version.

The problems and limitations listed above were taken into consideration to modify the questionnaire to be more succinct and convenient for providing answers and suggestions. In addition, the completion of questionnaire survey and the accuracy of information were needed for data analysis.

Data Collection

After a completion of museum visit by the group of visitors, they had 20 minutes break at the Reception room on the second floor of the RTA museum. In this room, questionnaires were handed-out to all visitors to fill in all questions within the given time. Primary data was to be collected from these respondents as the fastest and most convenient way to obtain lots of information.

However, the respondents of the questionnaire survey were combined between military officers who visited to the museum by their army-related organizations and also temporary military service men and women who came to visit from the excursion program of the National Service (NS). It was critical to note that respondents' opinions and perspectives from this type of visitor might be different from the general public. Therefore, the general public focus group also needed to be given in the survey questionnaire to obtain their viewpoints and preferences. The reason that the focus group survey was created apart from the questionnaire survey of 300 visitors was to ensure the accuracy of questionnaire results and to develop the museum to meet public's interests.

The field questionnaire survey to those 300 visitors was completed at the RTA museum during the weekdays from June through September 2007. Meanwhile, the focus group survey was done at the museum site in November 2007.

Chapter 6

State of Conservation: Physical Condition of the Museum Building

Evident Problems from Building Investigation

Owing to its establishment for a century, the deterioration of material in the building has unavoidably occurred overtime. The evidence has shown the degradation of both the construction material and material for decoration of the museum as a whole. Fundamentally, the causes of deterioration to the museum building are derived from natural conditions, animal invasion, and human activities. As these factors affected to the deterioration of the building, the evident problems will be described and analyzed in this section by identifying architectural problems from the roof top through its base.

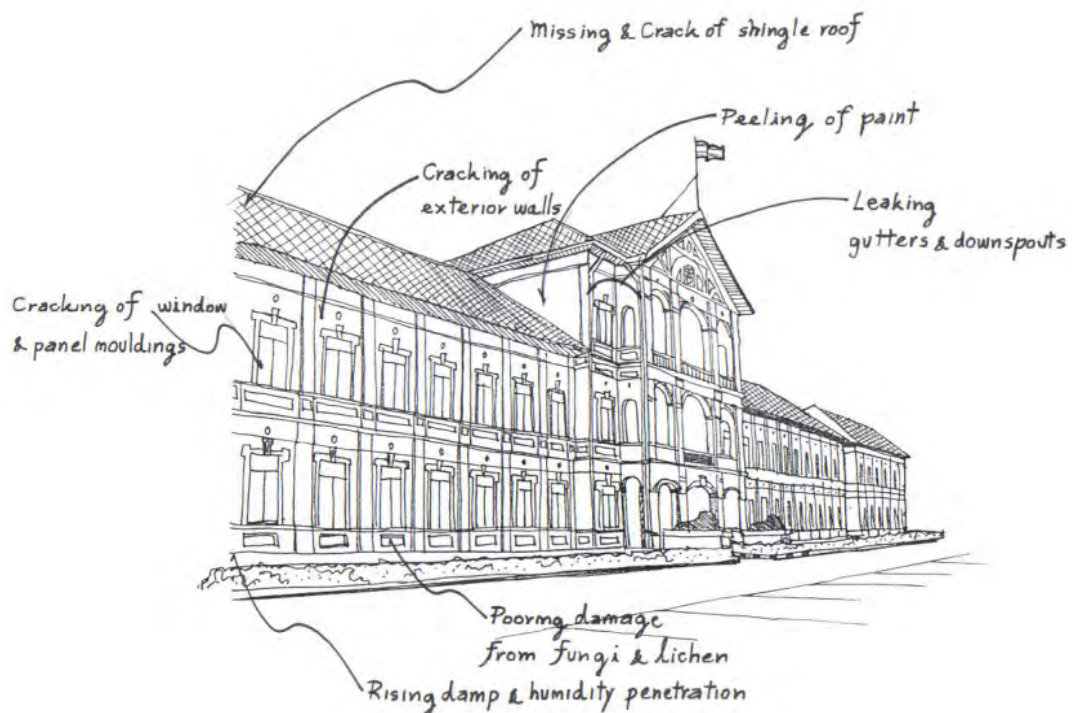


Fig.89 Illustration of Evidence Problems
Sketched by: Supachokeauychai, T.

1. Roof, Roof Tiles, and related causes of Problems

As seen in site inspections, the roofing material was red cement tiles and was still in a good condition. For the shape of the roof, the equally spanned wings of the building were constructed in hip-roof style while the core of the building was built in gable-roof style to expose the large decorative pediment. As observed, the pitch of the roof was properly sloped for the drainage system and the flashing on top was still in a perfect condition. However, there were some parts of roofing material that were deteriorated as follows:

Natural Condition Causes:

- Moisture penetration from rain is a primary factor to the deterioration of roofing structure. As humidity was trapped in the wooden structure and the eaves of the roof, all jointing areas and the corners of the eaves have deteriorated and the paint was blistering in some sections.
- Due to climatic change from the rainy season to year-round exposure from direct sunlight, some red cement tiles were cracked. Hence, water can be able to penetrate into those broken parts and causes humidity onto the ceiling.
- The substantial problems of roofing were related to the gutters and downspouts for drainage system. Exterior downspouts and zinc gutters attached to the building were cracked from weathering and material degradation. The leakage of gutters and downspouts lead to the backward flow of water onto the exterior ceilings on the third floor. Consequently, excessive moisture causes the peeling of paints from spores and lichen all over the plywood ceilings.
- As a result from the drainage system malfunction with cracked gutters and downspouts, moisture and humidity were entrapped within the interior ceiling. As observed, brown spots and stain from fungi can be obviously seen at the surface of the ceiling. In addition to this, owing to improper maintenance; the leakage of water drainage pipe for air-conditioners was also being the cause of humidity to be captured onto the ceiling as well.

- As Sweetser (1978, p.4) suggested in *'Roofing for Historic Buildings'*, the missing or cracked roofing tiles could be replaced with new compatible red cement tiles for repairing works. The gutters and downspouts need periodic cleaning and maintenance since a variety of debris fill them, causing water to back up and seep under units.

Animal Causes:

- Animal nesting such as birds and rats cause severe damage onto the ceilings. Those birds and rats drilled and removed some cement tiles for their nesting. Thus some cement tiles were cracked and missing, leading to water penetration onto the wooden structure of the ceilings to permit spores and fungus to be germinated.



Fig.90 Leakage downspouts cause roofing deterioration
Photo by: Supachokeaueychai, T.



Fig.91 Deterioration by moisture at the exterior ceilings
Photo by: Supachokeaueychai, T.

2. Structures and Walls on the Third Floor and the Second Floor

The structures of the Memorial Hall on the third floor are made of masonry with stucco while interior walls are hardwood. Similarly, the structures of the Reception and those left and right exhibition rooms on the second floor are made of masonry with stucco with hardwood interior panels. These exhibition rooms

confronted the same problems of deterioration from natural, insects and human conditions as the following:

Natural Condition Causes:

- Moisture penetration is as a major factor in the degradation of masonry walls. Because of the splash of rain, the surfaces of the masonry with stucco walls that painted with soluble material of paintings were washed-out from time to time, leading to the germination of brown spots and lichen from fungi and wet-rot that were obviously observed at the exterior walls.
- Due to the result of water penetration and thermal expansion into the building, many areas have shown evidence of paint blistering and peeling. As masonry walls were painted with oil-based color in pale yellow, hairline vertical cracking can be seen in many parts of the exterior walls due to the uneven foundation setting of the building and the overload of heavy military displays within the exhibition room. However, the crack was dormant (inactive) and can be repaired by patching cement mixed with water. For best result in sealing dormant cracks, epoxy injection is strongly recommended.

Insect Causes:

- Termites from under the ground are the most detrimental pests of deterioration because wood is their primary nutrient source. In addition to this, it is difficult to identify the source of termites as they hide themselves in the wooden walls. As a result, wooden walls are attacked by them and the strength of those walls is reduced. Although some interior walls were drilled to inject pesticide, it was not an effective way to stop the degradation of the walls.

Man-Made Causes:

- The installation of air-conditioning system is also as the cause of degradation. Owing to poor maintenance of drainage system of return air-conditioning pipes, the leakage of pipes leads to the germination of lichen and spores onto the interior gypsum ceilings. To repair this, it is critical to identify the source of problems by resealing those leakage materials.

- For the wooden interior walls, the installation of electric wires is as cause of deterioration because of those rusty and pulled-out nails impact to the wooden materials.
- Because of improper surface preparation and incompatible chemical emulsion of paint of the exterior walls of the museum, the paint has shown evidence of crazing, resulting from excessive layers of paint and no longer adhered to the material surface, as well as peeling and blistering. Additionally, some areas revealed alligatoring and chalking because of deep open cracks and the degradation of composition in the paint.



Fig.92 Peeling of paints at the wall
Photo by: Supachokeaueychai, T.



Fig.93 Degradation of masonry wall from water penetration
Photo by: Supachokeaueychai, T.



Fig.94 Peeling by incompatible layers of paint emulsion
Photo by: Supachokeaueychai, T.



Fig.95 The evidence of paint blistering
Photo by: Supachokeaueychai, T.

3. Structure and Walls on the First Floor

As found upon the site inspection, the structure of the first floor was made of masonry with stucco while all interior walls for the Auditorium and exhibition rooms both left and right wings of the building were made of wooden structure with plywood. Like the third and the second floors, there are many parts of structures and walls that were deteriorated by both natural, pests, and human conditions as causes of decay.

Natural Condition Causes:

- Moisture penetration from rain is as a cause of degradation of masonry with stucco walls of the first floor. Although gutters were properly installed for draining rain water, the splash of rain onto the exterior masonry walls was unavoidably occurred. Therefore, the surfaces of the masonry with stucco walls that painted with soluble material of paintings were washed out. Many areas have found brown spots and lichen from fungi and wet rot that can be clearly observed.
- Owing to weathering and thermal expansion into the building, many areas have shown evidence of paint blistering, peeling and flaking. Similarly, there were many areas of hair-line vertical cracking that can be seen in many parts of the exterior walls, resulting from uneven foundation setting of the building. To fix these, the crack can be repaired by patching cement mixed with water or epoxy injection; while the peeling of paint can be repaired by scraping old paints and repainting those effected areas.
- Furthermore, flooding and water that has been trapped at the first floor in the rainy season were also as deterioration factors to the masonry with stucco walls.
- Without unventilated space for humidity, damp was occurred from the underground toward the foundation and materials for construction of the museum building as a whole. As observed, black spots, lichen, and fungi can be found at the exterior walls, especially the walls that located near the water drainage. This is because the humidity at the ground is as a nutrient source for fungi and lichen to be resided in. Therefore, not only exterior walls were destroyed by fungi and lichen from humidity, but also the interior floors were infected.

Insect Causes:

- As Termites lived under the ground of the first floor, some wooden walls and plywood partitions were attacked by them, leading to the degradation of the walls and the lost of strength of their materials.

Man-Made Causes:

- Like the third and the second floors, the installation of the air-conditioning system is as the cause of degradation. Because of poor maintenance of drainage system of return air-conditioning pipes, the leakage of pipes leads to the germination of lichen and spores onto the interior gypsum ceilings.
- The installation of electric wires is as a cause of deterioration due to rusty and pulled-out nails affected to the wooden materials of interior walls.
- The paint of masonry with stucco walls has shown evidence of crazing, result from excessive layers of paint with no longer adhered to the material surface, including peeling and blistering. Besides, some areas revealed alligating and chalking, resulting from deep open cracks and the degradation of composition in the paint.



Fig.96 Hair-line cracking of exterior walls
Photo by: Supachokeauychai, T.



Fig.97 Paint blistering by moisture penetration
Photo by: Supachokeauychai, T.



Fig.98 Splash of rain as source of decay
Photo by: Supachokeauechai, T.



Fig.99 Rising damp from downspout
Photo by: Supachokeauechai, T.

4. Staircase and Flooring Materials

The material for the staircase and flooring of this museum building was made of teakwood. Constructed for more than a century, the deterioration has occurred over time as a result of natural, insect, and human factors, as follows:

Natural Condition Causes:

- Some areas of the wooden staircase attached to the ground have showed evidences of deterioration by humidity penetration from the underground. The evidence has revealed a deep cracking of wooden material and peeling of paint by which these can be obviously seen, resulting from the moisture penetration.
- Teakwood Flooring paved along the corridors of every floor was cracked, including paint flaking and peeling due to the splash of rain and humidity entrapment. Moreover, as the wooden floors were painted so many times, this might be the result of improper surface preparation and thus needs periodic maintenance.

Insect Causes:

- Termites under the ground are still the most serious problem to the staircase and flooring degradation. As observed, the wooden structures of those staircases and hardwood floorings were attacked by them, thus these structures were decayed from time to time.

Man-Made Causes:

- The surface of the staircase and wooden flooring were scratched and decayed due to regular use from the past up to the present. The painting of lacquer surface was also peeling off and faded away from those scratches.
- Although the flooring structures were made of teakwood as the primary material of the museum building in the past time, they were covered with carpet flooring for interior decorative purpose of every exhibition room since 1996 AD or around a decade ago. As the carpet absorbs moisture quite well, fungi and black spots can be observed at the carpet flooring on the third floor and the second floor. This is because the humidity has been entrapped under the ground level and penetrated onto the carpet flooring. However, the carpet flooring on the first floor has been already removed from all exhibition rooms because of those humidity problems.



Fig.100 The scratch and peeling of wooden floor
Photo by: Supachokeaueychai, T.



Fig.101 Underground humidity impacted to hardwood flooring

Photo by: Supachokeaueychai, T.



Fig.102 Carpet flooring as source of fungi and black spots
Photo by: Supachokeaueychai, T.

5. Doors, Slatted Windows and related Decorative Ornaments:

According to the observation, the materials for doors and slatted windows were made of hardwood that painted with oil-based color to prolong deterioration. The decorative ornaments for exterior doors and window cornices were made of molding plaster. However, the evidence has revealed some degradation by nature and human as causes of decay.

Natural Condition Causes:

- In the rainy season, excessive rainwater was collected along the sill and jamb, leading to the decay of door material as water was trapped for a long period of time.
- Due to the splash of rain and thermal expansion from hot weather, some areas of slatted windows have shown evidences of paint blistering and peeling that identify points of the humidity penetration.
- Ornamental molding plasters for exterior decoration of doors and windows were cracked at the corners due to a structural movement and water penetration. However, the existing cracks were not quite severe and can be fixed by a metal sheet and sealant.
- Flaharty (1990, p.9) introduced that ornamented plaster cornice can be repaired by sawing through the molding and inserting a metal sheet in the slot, and then tracing the profile directly on the template. Afterward, the saw kerf is sealed at the final stage.

Man-Made Causes:

- The surface wooden material and the flaking of doors and windows were met deterioration because of a regular use with an improper maintenance.



Fig.103 The decay of sill and jamb from rain water
Photo by: Supachokeaueychai, T.



Fig.104 Crazing of paint from weathering and humidity penetration
Photo by: Supachokeaueychai, T.



Fig.105 The crack at the ornamental molding plasters
Photo by: Supachokeaueychai, T.



Fig.106 The splash of rain causes paint blistering
Photo by: Supachokeaueychai, T.

6. Interior Spaces:

Similar to those exterior evident problems of the building, many interior spaces from the third floor through the first floor confronted with nature and insects factors as causes of decay by the following:

Natural Condition Causes:

- Moisture penetration is as a major factor to the degradation of interior walls. Although these interior spaces are not wet by direct rainwater, humidity is generated from moisture entrapment and interior condensation. As a result, the walls that made of hardwood structure with plywood partitions of the museum

were deteriorated as brown-spot and fungus can be observed at the walls. Furthermore, some areas revealed the evidence of peeling wallpapers due to the moisture penetration into the walls.

Insect Causes:

- As seen by the investigation to the interior panels, wooden structures and interior panels within the building were mostly deteriorated and decayed by termites as these wooden materials are as the nutrient source for dry wood termites. Generally, where the interior panels are covered with the wallpaper, termites can not be seen but their activities are continuously proceeding until the wood underneath the wallpaper is totally destroyed. As Feilden (2003, p.150) suggested in '*Conservation of Historic Buildings*', fumigation is a useful method of eradication, but it involves covering a whole building with a tent for its application. The use of insecticides is more effective in killing any kind of insects but the safety for human is also needed to be considered. In the present, insecticides are still being used for the protection of all historic properties at the museum.



Fig.107 Peeling of wallpaper from
Moisture penetration
Photo by: Supachokeaueychai, T.



Fig.108 Fungi spot at the interior gypsum ceiling
Photo by: Supachokeaueychai, T.



Fig.109 Wooden walls are drilled for insecticide injection
Photo by: Supachokeaueychai, T.



Fig.110 Damp carpet by underground humidity
Photo by: Supachokeaueychai, T.

Conservation Requirements for the RTA Museum

In order to conserve the museum building in long-term sustainability, the statements of conservation requirements are listed as follows:

1. For effective maintenance and supervision of each evident problem of the building, the conservation teamwork with professionals who are specialized in their fields of conservation techniques should be established. The teamwork comprises of architects, engineers, owners, conservators, and so forth.
2. Maintenance should be scheduled by routines as daily, weekly, monthly, or annual inspection in relation to the urgent need of each evident problem by identifying the causes of problem by technicians in order to diagnose the right sources of deterioration and then repair with effective implementations.
3. In the context of the nature as cause of decay, moisture and humidity penetration should be eliminated by fixing the source of leakage such as gutters and downspouts with periodic maintenance and supervision.

4. In the context of insects as cause of decay, the sources of deterioration and impractical use of material should be immediately removed to avoid the life cycle of insects, termites, fungi, and other detrimental factors that can deteriorate overall materials of the building.
5. In the context of man-made as cause of decay, appropriate and effective conservation techniques should be educated to all participants of the building to be aware of their involvements and interventions.
6. Immediately when the inspection has been made, the costs of maintenance and the conservation timing of each evident problem should be estimated, aiming for the preparation of conservation techniques and funding management.

The RTA museum has been built for a century and much more vulnerable to damage from the degradation from weathering, and biological factors, including insects or even man-made as the causes of decay. The major problem of building damage is primarily related to the penetration of rain and rising damp, result from the leakage of gutters, downspouts, unventilated space, and other sources of problem. Periodic inspection and maintenance are required so as to preserve overall physical characteristics in good conditions, aiming to conserve the museum building in long-term sustainability.

Chapter 7

Analysis of Interview Results from Museum Staff

In order to have more understanding on the operation and management of the museum, the interview survey has been created in the form of interview questions to ask museum staffs at the museum site. The information of the museum and general opinions for any improvement were largely provided by Colonel. Pilaiporn Thanasomboon, a curator of the Royal Thai Army museum and Colonel. Sasithorn Wangthaphant, a military officer of the Military History Department in the Directorate of Operations Center. The outcomes of the interview survey to those staffs can be categorized into six main topics:

1. Museum managements and operations,
2. Museum visitors,
3. Display objects and current exhibitions,
4. Facility provision within the museum,
5. Conservation management and collection maintenance, and
6. Staff's opinions of the museum.

1. Museum Management and Operations

As interviewed a curator of the RTA museum and a military officer of the Military History Department, they both stated that the main objective and goal for the museum establishment was to collect and exhibit invaluable military objects and equipments as an external source of learning experience in terms of military events and wars to both local and oversea visitors. The museum was also aimed at creating mutual understanding among the general public about the role of the Royal Thai Army in safeguarding the nation and sovereignty through time. For all military officers,

this museum was as an interpretative medium to announce military history and sacrificed heroes that not only military officers should be proud of but also all Thai people.

Presently, the Directorate of Operations Center performs as the main organization for the RTA museum where the Military History Department is one of the sub-departments within its organization. The Military History Department also has three sub-divisions: History Department, Military Museum Department, and Library and Archives Department.

The Military History Department is responsible for documenting and promoting military history of the Royal Thai Army to the public. Meanwhile, the Military Museum Department is responsible for managing all museum-related activities in association with military objects and equipments collection, registration and documentation, as well as the promotion of the RTA museum to attract general public interests.

The museum concentrated its target audiences on the educational institution group, the military officer group, including the government and non-government organization group. The group of local visitors and foreigners were also prospective visitors that the museum wished to have, still, they shown very small numbers of their visits due to the difficulty of accessibility and security regulations of the museum area.

When asked about tactics and strategies for museum management, the curatorial staff of the museum and military officers said they thought that human resources were the most valuable and important factor for the museum's success. It was the task of museum managers and curators to create a willing-hearted and responsive service among museum staff and support their working progresses by reinforcing their participations in local and international conferences of museum management, as well as facilitating them to exchange ideas and experiences of the museum with others. Those trained military officers could adopt their knowledge and experiences to improve all kinds of military museum's works for better management

and operation. Thus, this means that the development of human resource is considerable significant for the RTA museum. Curatorial staff and military officers at the museum also believed that effective public relations and promotional media could attract the general public to visit the museum.

For the museum's fund, staff mentioned that their major source of budget derived only from the Royal Thai Army and it was quite sufficient to cover all the requirements of the management and conservation of the museum.

In the interview with Colonel Pilaiporn, a museum curator, and Colonel Sasithorn, a military officer, both referred to the fact that the RTA museum had been promoted through various sorts of media such as television programs, public radio, newspapers, organization press, brochures as well as an online internet. They observed, however, that it appeared that the most effective use of the media was advertisements in television programs while the publishing through organization press was the most ineffective because it was unattractive and usually overlooked by those organization's members.

In order to conform to military regulations and accomplish museum's objectives, the RTA museum was free of charge for an entrance as it aimed at contributing a willing-hearted and responsive service to the public and as the way to remind general visitors that the museum was as everyone's property that needed to be conserved overtime. As the curator and military officer stated, there was no external sources of fund from any museum-related organization or public donation. However, the museum has been coordinated with the local Fine Arts Department, public and private museum organizations, and Museum Association of Thailand in order to exchange knowledge and ideas in relations to museum management. These organizations assisted the RTA museum in documenting and registering the acquisition of museum's objects, as well as providing useful academic literature and documents on museum exhibition, management, conservation and so forth.

2. Museum Visitors

As observed by the museum curator, visitors were largely come from military organizations with some educational institutions and they usually visited the museum as a group. According to the survey, these groups were the target audiences of the museum because many military organizations were associated to the museum field in terms of understanding the role of the Royal Thai Army and military history. Meanwhile, educational institutions had a connection with the RTA museum for excursion trips of their student groups as external learning experiences.

Considerably, however, there were very small number of local Thai visitors and foreigners due to the fact that the museum was quite weak in public relations and the difficulty of accessibility by them as the museum situated in a restricted military area. Nevertheless, there were some foreign groups from United Kingdom, United States and Denmark who used to visit the museum as special guests of the army commanders.

Referred by the museum curator and the military officer, the outstanding characteristics of both exterior and interior design of the museum building, the desire to see various kinds of military objects, and the reputation of the Royal Thai Army are three major factors leading people to visit the museum, respectively. As stated above, this means that the architectural appearance of the museum building is the most effective factor to attract the general public. The museum curator mentioned that the museum has given preliminary knowledge concerning military history and the revolution of the Royal Thai Army through slide multi-vision at the auditorium on the first floor around fifteen minutes. In addition to this, brochures are also provided to all visitors in both Thai and English languages. For oversea visitors, although military information and explanatory signs in English language were already available in all displays and exhibition rooms, light and sound effects, bilingual description and modernized multimedia were still unavailable to fulfill visitors' requirements. Thus, the provision of contemporary multimedia is needed for better communication and interpretation among all audiences.

According to operational time, the RTA museum only operated in weekday from 8.30 am. to 16.30 pm. and close at weekend. Most visitors took around two hour to complete the whole museum visit. As observed by museum staff, most visitors spent their time in the Weapon room the most because of long description by professional guides on how to use various kinds of machine guns and the revolution of army weapons since the past up to the present. On the contrary, the Uniforms and Military Insignia room was where visitors spent time the least due to static model displays without any multimedia or interactive programs to attract them.

For the carrying capacity, the museum can be able to accept around two groups of visitors per day with maximum capacity of four hundred visitors per day. Nonetheless, there are only four trained guides at the museum and they could not communicate in English language, thus leading to communication problems with foreign visitors.

As museum staff observed, visitors appreciated the whole exhibit contents, especially at the Weapon room where audiences have seen various kinds of machine guns and weapons from different periods. However, the Army History room was impressive the least because of unanimated diorama and miniature exhibitions. To be effective, therefore, the multimedia or interactive presentation should be provided for entertaining and educating visitors along their museum visits.

As interviewed, the curator and the military officer referred that regardless of the audiences have any profound knowledge about army history or not, all exhibit contents of the museum were comprehensive and accessible to all level of visitors without any distortion of their interpretations.

Significantly, as the museum situated in a restricted military area of the RTA Headquarters, all visitor groups were required to make advanced reservation of their visits in order that the museum staff could prepare and accommodate suitable time of visit for each visitor group. According to available space for parking, it was

insufficient to accommodate a large number of public vehicles, especially vans and tour buses that most visitors used for their itineraries to the museum.

As curatorial staff surveyed visitors prior to their departure from the museum, most visitors appreciated current presentations and exhibitions, as well as the recreational activities such as gun-shooting competition and answer the questions game that attracted them to pay attention and participate in the program.

3. Display Objects and Current Exhibitions

As a preliminary stage to introduce the RTA museum among audiences, there were three effective forms of media to be provided within the museum as the curator referred. They are a slide multi-vision about the revolution of the Royal Thai Army, brochures, and trained guides. Staff at the museum mentioned that zoning and circulation of each exhibition room within the museum were appropriated and well-classified. Still, as suggested by the curator and the military officer, some military objects, weapons, fiberglass and wax figures with military uniforms were in the stage of deterioration and urgently needed to be repaired or replaced with new materials.

Curatorial staff at the museum also mentioned that military objects, weapons and equipments were acquired from various sources such as the Silpakorn Fine Arts Department, the Ordnance Department, the Quartermaster General Department, the Engineer Department, the Signal Department and the Chemical Department for example. Additionally, some museum objects and equipments were donated by the general public from their personal collections, including the acquisition and exchange with other local museums.

According to the interview with the museum's curator, there were three major causes of problems affected to the museum objects and the showcases. First, lighting system in exhibit showcases was high in its ultra-violet (UV) emission that ruined museum objects, cloths and textiles. Second, some multimedia attached to exhibit showcases such as light and sound effects were deteriorated due to the difficulty of

maintenance as they were obsolete and hard to find spare parts to restore or fix them. Third, because many exhibit showcases were made from plywood, a nutrient source for pests and termites, which built adhere to the interior walls of each exhibition room; they were difficult to monitor or control these animals invasion. As a result, some exhibit showcases have shown evidences of degradation.

For the solution of lighting system, electric light bulb that high in ultra-violet emission should be replaced by a low emission lighting system to maintain museum objects in an original state. Besides, obsolete multimedia within the exhibit showcase should be removed while newly effective light and sound effects, as well as projectors with digital video disk (DVD) players are needed to be provided in situ. In order to maintain museum objects and the showcases in a long run, those exhibit showcases attached to interior walls were needed to be removed and then rearranged them in a more appropriate location of each exhibition, aiming at facilitating the detection and the control of pests and termites. For the costs of new renovation and operation, major source of fund would be derived largely from the Royal Thai Army.

According to the opinions from the museum curator and the military officer, they implied that the current displays and exhibitions were quite appreciate but need some effective multimedia to be input into each exhibition room for better entertaining and learning processes within the museum. Presently, the museum attempts to raise funds not only from the Royal Thai Army but also external museum organizations and associations for their funding supports and donations to improve overall multimedia within the RTA museum.

4. Facility Provision within the Museum

As asked museum staff for the availability of museum facility, an auditorium, a temporary exhibition area and restrooms were sufficiently available for carrying large number of visitors at the present. A souvenir shop was also available underneath the museum's staircase but needed some more spaces to improve the quality of service and a variety of products for merchandizing purpose. Considerably, however, there were

some important facilities that needed to be provided further at the site. They are a visitor center, a cafeteria, a theater and a spacious recreational area to motivate the participation among all museum audiences.

Nowadays, the museum is searching for ways to provide more accommodations to fulfill visitor requirements. However, owing to the limitation of space, there is no available area for the expansion or the development of facilities at the site.

5. Conservation Management and Collection Maintenance

As investigated by museum staff, the deterioration was found in some exhibit objects and the showcases. The causes of material degradation were derived from radical change of weather that causes humidity, underground pest and termites, as well as an improper use and maintenance by the museum staff themselves. To eliminate these, the museum has delivered some military objects and weapons to the Fine Arts Department, the specialist in relic restoration, for special inspection and maintenance of those damaged objects. For proper management and conservation, museum staff should be trained on how to exhibit military objects in a more appropriate manner and treat those invaluable objects in a long term.

In addition to the deterioration of objects and showcases, the museum building construction both exterior and interior walls were found to be deteriorated owing to the decay of cement and humidity that caused lichen and fungus all over the walls. As noted by curatorial staff and military officers, the museum building has been constructed for a century thus some old cement were decayed and crumbled while paints were peeled off. Nonetheless, these have been fixed by peeling old painting and some cement surface and then coating with new cement for more adherences. Thereafter, new acrylic painting was applied for the new restoration. For interior walls that made of plywood, insecticide was injected into those walls for the protection from pest and termite invasions.

For the conservation policy and the security management of the museum, there was no official policy for the conservation of those military objects and weapons. Nevertheless, some basic equipment were available at the site for security purposes such as smoke detectors, fire alarms, and fire extinguishers. As the curator and the military officer at the museum mentioned, there were two important policies for the removal of museum property. First, the most valuable objects that must be urgently removed as the first priority in case of fire or flooding incidents were all military-related objects in the Flags and Military Equipment room. Second, the most dangerous objects and weapons impacted to people life that need to be immediately removed were arms and weapons in the Weapon room. In addition to the security management, there was only one security guard at the museum due to the lack of fund for new recruitment. Thus, fund raising was essentially required for a better security and conservation in a long term.

According to the requirement of the conservation policy for the museum building and associated area, they are listed as the following:

1. The policy for conserving the museum building in its original form and condition as much as possible in terms of building conservation, shade and color scheme, roof tiles, doors and windows, including exterior and interior characteristics of the building.
2. The policy for monitoring the sources of building deterioration either natural cause of decay, animal cause of decay, or man-made as cause of decay and then searching for ways to conserve the overall building components in long run.
3. The policy for inspecting the humidity and the deterioration of the museum building and exhibit objects. Door and windows of each exhibition room should be routinely opened for proper ventilation, including the inspection of Heating, Ventilation, and Air-Conditioning system (HVAC).
4. The policy for security protection of the museum building of its property with the provision of security devices (smoke detectors, fire alarms, fire extinguishers, close-circuit television (CCTV), and security guards) at the museum site.

6. Staff Opinions of the Museum

As interviewed curatorial staff and military officers, the good points of the location of the museum were that the RTA museum located in the area of ‘*Rattanakosin Island*’, where was the most famous historical area in Bangkok, Thailand with a large number of local and oversea visitors. Additionally, owing to outstanding characteristics of the museum building with the combination of Thai and European styles of decoration, it was easily seen by most people who have been entered into the area. On the contrary, however, the weak points of the location were that the museum was located in the high security area of RTA Headquarters. Moreover, the main entrance to the museum and the museum building was quite remote because of army regulations to set back the museum with a large courtyard for army sports and activities at the façade of the building.

In addition to the security check-in by military guards at the main entrance, the accessibility by the general public seemed to be inconvenient as they were inspected for a security reason. As a result, the public seemed to be scared of and embarrassed for their accessibility into the museum area. Besides this, the difficulty of advance booking or reservation for official permission into the museum area for the visit was also a major factor that obstructed people to access into the museum. Nowadays, the museum is unable to increase a number of visit by the public due to the fact that these negative factors are still affected to the museum operation and management.

To increase the number of visit, the RTA museum can accommodate the accessibility of those general public by separating its museum area apart from the RTA Headquarters in order to independently operate within its boundary without any constraint from military rule and regulation to be conformed. According to the possibility to separate the whole museum area from the military operational offices, however, as interviewed those museum staff and military officers at the Military History Department, it was impractical due to the fact that the RTA museum building has already been registered as a heritage building that was owned and managed by the Royal Thai Army. Therefore, this means that the museum building must be situated

within the RTA Headquarters boundary as an army's property. Besides this, in the present, there are neither proper locations for new museum construction nor the official agreement to relocate the RTA museum to other locations.

According to staff opinions about the good and the weak points of the RTA museum, their opinions and interpretations can be described as follows:

Dominant points of the museum:

- the outstanding characteristics of the building in an axial type shape in the reign of King Rama V that was retain in its original condition up to the present;
- the beautiful exterior and interior attributes of the building;
- as the ultimate source of the military collection through exciting displays and exhibitions;
- as the source for understanding the crucial role of the Royal Thai Army to all general audiences.

Weak points of the museum:

- the limitation of accessibility by the general public from restricted military rules and regulations;
- the need of advanced booking and reservation for the visitation by the group of visitors;
- the lack of necessary facilities to be provided for visitors at the site;
- the limitation of available space for further additions or new constructions into the place.

In order to improve overall museum management to meet the highest standard, the museum curator and the military officer recommended that the RTA museum should independently operate within its own department and has full authority of determination. To be effective, the museum should classify its department into five sub-divisions that coordinate to each other for a better operation. These would be the Museum Works Division, the Museum Budget Division, the Conservation Division,

the Security Division, and the Public Relations Division. Because budget is the most valuable source for museum improvement in terms of exhibition and conservation managements, the Royal Thai Army should pay more attention and support all museum works as well as increase more funding supports for the smooth operations.

For a long-term sustainability, the museum department itself should establish its own foundation in order for having external donations and funds from other sponsors or interest groups. The cooperation with the Fine Arts Department to create and set new managerial systems and strategic operations should be taken into consideration for better management of the RTA museum in long term.

มหาวิทยาลัยศิลปากร สงวนลิขสิทธิ์

Chapter 8

Data Analysis of Questionnaire Surveys from Museum Visitors

The outcomes from the visitors' survey in terms of their personal profile, their motivation of visits, their opinions about displays and exhibitions, as well as their personal preference for the improvement of the RTA museum will be addressed and analyzed through the Statistical Package for the Social Science (SPSS) analysis program. Due to the fact that there was no foreign visitor to visit the museum, this questionnaire survey research was mainly focused on local people with different types of gender, occupations, and educational levels.

The results from the questionnaire survey of 300 respondents will be compared to the focus group of general visitors in order to discover the similarity and the difference in terms of opinions and interpretations to the site. The analysis of questionnaire survey will be useful to understand factors that affect to the number of visit either the visitors are military officers, army service men, or the general public, including the ways to develop the museum to meet their interests. The outcomes from the analysis will unearth keys to the success of museum operations that lead the museum to be more accessible and more attractive in the eye of all audiences, meanwhile, motivating the appreciation among visitors to the significance of the military museum that need to be conserved through time.

1. Analysis of Questionnaire Surveys from 300 Respondents

1.1 Visitor's Profile

Type of Visitors to the RTA Museum

Occupation	Frequency	Percentage
Military Officer	254	84.7
Teacher	1	.3
Employee	18	6.0
Gov/ Non-Gov Officer	24	8.0
Other	3	1.0
Total	300	100.0

Table 3: Visitor's Occupation

When compared the percentage of visitors to the RTA museum by occupation (see Table 3), it indicated that military officers were the largest group of visitors to the site (84.7 %), followed by government and non-government officers (8%), employee (6%), other occupations (1%), and teacher (0.3%). Although military officers were large in number, most of them were ordinary people who visited the RTA museum by the National Service (NS) program. These groups of national service men and women came to the museum as an excursion tour organized by various army-related institutions and organizations, thus they considered themselves as military officers for a short period of their army services. However, this type of military officers was also included actual military officers who came to visit the museum. For those government and non-government officers, they visited the museum as groups that were organized by their organizations for the visit. Meanwhile, visitors who were employees from public companies and other type of visitors came to the museum in a very small number of visitors.

The evident also showed that there were no school students and business owners to be as visitors to the RTA museum. This can be assumed that these types of visitors were unlikely to know that the museum was opened unconditionally to the general public and other institutions with free of entrance charge.

Age of Visitors

Age of Visitors	Frequency	Percentage
18 - 25	142	47.3
26 - 35	102	34.0
36 - 45	36	12.0
46 - 55	19	6.3
56 - 65	1	.3
Total	300	100.0

Table 4: Age of Museum Visitors

As seen in **Table 4**, all visitors at the RTA museum were older than 18 years of age. Almost half of the visitors (142 person from the total of 300 respondents or 47.3%) were around 18-25 years old and were become the largest age group of visitors to visit the museum. This was followed by the age group around 26-35 years (102 visitors or 34%), 36-45 years (36 visitors or 12%), 46-55 years (19 visitors or 6.3%), and then 56-65 years old (only 1 visitors or 0.3%). The largest age group of visitors between 18-25 years old was a sequent of group visitors from the National Service (NS) while the rest was combined with various age ranges from different occupations.

Gender and Level of Education

As indicated in **Table 5**, most museum visitors were men (69%) while women showed a small number of their visits (31%). For the level of education, more than half of visitors were graduate (51.3%), followed by high-school (35.3%) and post-graduate (13.3%), accordingly (see **Table 6**). When compared gender of visitors to the level of education as illustrated in **Table 7**, the evidence has implied that within a same level of education among graduate and post-graduate, men were slightly higher than women in number of visit. However, the finding indicated above is still uncertain in terms of which gender is likely to visit the museum. This is because visitors from national service and other government and non-government organizations were mostly male rather than female to be coerced to visit the museum. In addition, general public visitors were not included in the survey.

Gender	Frequency	Percentage
Male	207	69.0
Female	93	31.0
Total	300	100.0

Table 5: Gender of Visitors

Level of Education	Frequency	Percentage
High School	106	35.3
Graduate	154	51.3
Post graduate	40	13.3
Total	300	100.0

Table 6: Level of Education

Gender	Level of Education			Total
	High School	Graduate	Post graduate	
Male	103	83	21	207
Female	3	71	19	93
Total	106	154	40	300

Table 7: Gender and Level of Education Cross-tabulation

1.2 About the Visit and Current Exhibitions at the Museum

Type and Number of Visits

According to the finding from [Table 8](#), it was surprising that visitors from military educational institutions showed the same number of percentage (43.3%) to those who visited the museum by government and non-government organizations and these two types of visitors dominated the largest number of museum visitors. These were also followed by visitors who came to the museum with friends (13%) and with family (0.3%). While visitors from military educational institutions were those military service men and women of the local national service, military and non-military officers indicated themselves as visitors from government and government organization groups.

Type of Visitation	Frequency	Percentage
Family	1	.3
Friends	39	13.0
Military Educational institution	130	43.3
Gov/ Non-Gov organization	130	43.3
Total	300	100.0

Table 8: Type of Visitation

Type of Visitation	Number of visit			Total
	First time	2-3 times	3 times or above	
Family	1	0	0	1
Friends	38	1	0	39
Military Educational institution	115	12	3	130
Gov/ Non-Gov organization	118	10	2	130
Total	272	23	5	300
Cumulative Percent	90.7%	7.7%	1.7%	100

Table 9: Type of Visit and Number of Visit Cross-tabulation

As showed in Table 9, when compared type of visit to the number of visit, the result indicated that most visitors from any type of visit had been to the RTA museum for the first time (90.7%), while the rest had been to the museum for 2-3 times (7.7%) and 3 times and above (1.7%), accordingly.

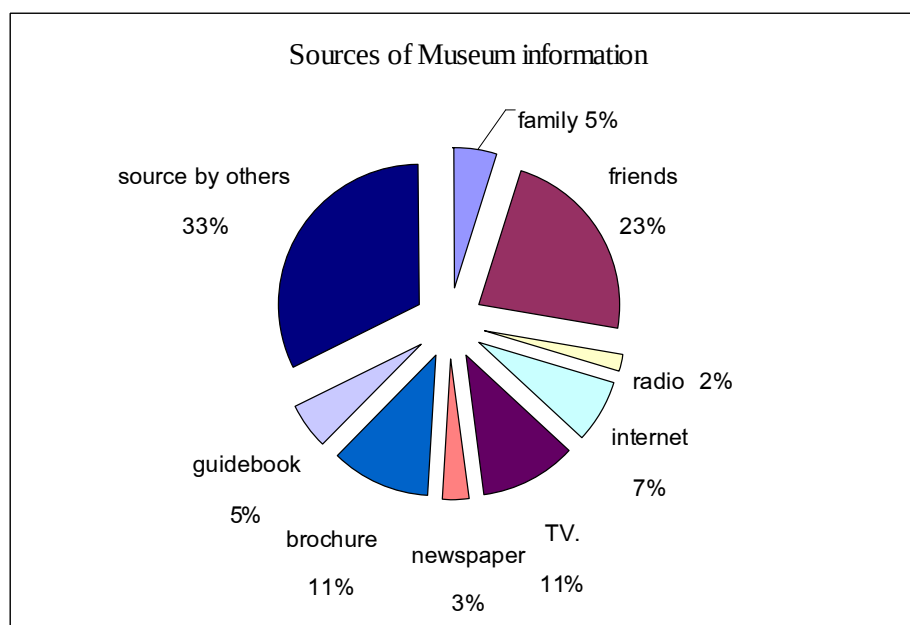
Sources of Museum Information

According to the sources of museum's information, the finding implied that more than one-third of visitors found the RTA museum through the notification from their institutions and organizations which they indicated in 'source from others' (32.6%). These military institutions and other government and non-government organizations encouraged their officers to visit the museum and arranged excursion trip for their external learning experience (see Table 10). The second source of information was from friends or colleague (23%), followed by the source from brochure (11.4%), television programs (10.9%), internet websites (7.2%), travel

magazines and guidebooks (5.2%), family (4.9%), newspaper (3.1%), as well as radio (1.8%), respectively.

Sources of Museum Information	Responses		Percent of Cases
	N	Percentage	
Source by family	19	4.9%	6.3%
Source by friends	89	23.0%	29.7%
Source by radio	7	1.8%	2.3%
Source by internet	28	7.2%	9.3%
Source by television	42	10.9%	14.0%
Source by newspapers	12	3.1%	4.0%
Source by brochures	44	11.4%	14.7%
Source by guidebooks	20	5.2%	6.7%
Source by others	126	32.6%	42.0%
Total	387	100.0%	129.0%

Table 10: Sources of Museum Information



The results can be assumed that information sources concerning the RTA museum were still insufficient and quite weak in its public relations management. Most visitors either military or non-military officers had no information about the museum unless they were told by their institutions and work colleagues. Other sources of information such as brochures, television programs, travel magazines and guidebooks, for example, were still ineffective to provide valuable information about the museum to those visitors and these needed to be improved if the museum wished to win public's interests.

Purpose of Visit

When visitors were asked about their main purpose of visit, most of them replied that they came to the museum for research and study purpose (82.7%), while leisure and recreational purpose was just 13 percent.

Purpose of Visit	Frequency	Percentage
leisure/recreation	39	13.0
research/study	248	82.7
others	13	4.3
Total	300	100.0

Table 11: Purpose of Visit

According to the finding in **Table 11**, it can be interpreted that in the visitor's viewpoint, they visited the museum because they wanted to have more knowledge and understanding about the military history through displays and exhibitions for their related fields of study rather than leisure or entertainment purposes. For other purposes of visit, some visitors revealed that their visit was part of military curriculum as a compulsory program from their military institutions.

Important Factors that Affect to the Museum Visit

As illustrated in Table 12, 13, 14 and 15, almost half of visitors implied that the most important factor that influenced them to visit the RTA museum was to see various sorts of military equipments and exhibitions (45%), while the second important factor was to understand the role of the museum through exhibitions (31%). The third important factor was the reputation of the museum as the first military museum in Thailand (18%) while the least important factor was the design of the museum building (6%).

Reputation	Frequency	Percentage
Most important	54	18.0
Second important	62	20.7
Third important	77	25.7
Least important	107	35.7
Total	300	100.0

Table 12: Reputation of the Museum as Factor of Visit

To See Exhibition	Frequency	Percentage
Most important	136	45.3
Second important	106	35.3
Third important	47	15.7
Least important	11	3.7
Total	300	100.0

Table 13: To see Exhibition as Factor of Visit

To Understand Army's Role	Frequency	Percentage
Most important	93	31.0
Second important	85	28.3
Third important	67	22.3
Least important	55	18.3
Total	300	100.0

Table 14: To Understand the Army's Role as Factor of Visit

Museum Design	Frequency	Percentage
Most important	19	6.3
Second important	48	16.0
Third important	107	35.7
Least important	126	42.0
Total	300	100.0

Table 15: Museum Design as Factor of Visit

The results indicated that most visitors were largely expected to see military collections through exhibit presentations within the museum while an understanding about the role of the Royal Thai Army and war history was also considered as important for them. Unlike the above factors which were higher in number of responses, the reputation and the outstanding characteristics of the museum building were unlikely to be considered as important for the visit.

Visitor's Opinions about the Current Exhibitions

After the visit was completed, visitors were asked to indicate their level of appreciation to various exhibitions within the RTA museum. In order to evaluate their appreciation, Mean was used as an appropriate form of indicator for the analysis with the values 1 through 4 as set below:

1.00 - 1.75 = Poor	2.51 - 3.25 = Good
1.75 - 2.50 = Fair	3.26 - 4.00 = Excellent

Type of Exhibitions	N	Minimum	Maximum	Mean	Standard Deviation
Auditorium	300	1.00	4.00	3.2833	.60355
Weapon Rm	300	2.00	4.00	3.4833	.56342
Army History Rm	300	1.00	4.00	3.3500	.63417
Flag & Equipment Rm	300	2.00	4.00	3.5333	.56268
Uniform & Insignia Rm	300	1.00	4.00	3.3833	.60355
Reception Rm	300	1.00	4.00	3.5267	.56895
Memorial Hall	300	1.00	4.00	3.6400	.53356
Army Evolution Rm	300	1.00	4.00	3.2433	.65744
Administrative Research & Archive Rm	300	1.00	4.00	3.0600	.68652
Summary	300	1.89	4.00	3.3893	.43158

Table 16: Visitor's Opinions about the RTA Museum Exhibitions

As showed in **Mean Table 16**, the survey results indicated that the Auditorium, the Weapon Room, the Army History Room, the Flag and Military Equipment Room, the Uniform and Military Insignia Room, the Reception, and the Memorial Hall were considered as excellent in their exhibitions with the mean range between 3.28-3.64. Meanwhile, the Army Evolution Room and Administrative Research and Archive Room were considered as good with the mean range from 3.06-3.24.

According to the open-ended questions concerning the most satisfying and unsatisfying exhibitions, **Table 17** revealed that the Weapon Room was the most satisfying exhibition (38%), followed by the Memorial Hall (21%), and then the Flag and Military Equipment Room (11.3%).

The Most Satisfying	Frequency	Percentage
Auditorium	3	1.0
Weapon Rm.	92	30.7
Army History Rm.	26	8.7
Flag & Equipment Rm.	34	11.3
Uniform & Insignia Rm.	9	3.0
Reception Rm.	26	8.7
Memorial Hall	51	17.0
Army Evolution Rm.	1	.3
Total	242	80.7
Missing value	58	19.3
Total	300	100.0

Table 17: The Most Satisfying Exhibition

When asked the reason of satisfaction, visitors replied that they satisfied the Weapon Room the most because they could see various types of military weapons that hard to be seen today and had more understanding on the evolution of those weapons and equipments. Besides, they were allowed to touch and participate in the demonstration by professional guides on how to use machine guns. In addition, the Memorial Hall was chosen as the second most satisfying exhibition because of its outstanding interior design of the wooden showcases with the portraits of chief-army commanders and also the bronze statue of King Rama V at the center of exhibition hall. For the Flag and Military Equipment Room, visitors revealed that they satisfied a

variety of victory flags and national flags in different reign, including the history of an army in Thai kingdom.

For the most unsatisfying exhibition, as illustrated in Table 18, there were only 50 respondents who were given the answers while the rests were absent. Regardless of a missing number of responses, the outcomes from the survey revealed that the Uniform and Military Insignia Room was unsatisfied the most (38%), while the Auditorium was chosen as the second most dissatisfaction (26 %). As observed visitors at the site, they claimed that the Uniform and Military Insignia Room was unattractive and quite static in its displays, besides, mannequins with military uniforms were deteriorate and rusty without any restoration. Similarly, the auditorium was also considered as unattractive due to the fact that it provided only brief introduction of the army history without any video-presentation or slide multi-vision to attract and entertain the audiences.

The Most Unsatisfying	Frequency	Percentage	Valid Percentage
Auditorium	13	4.3	26.0
Weapon rm	4	1.3	8.0
Army History rm	6	2.0	12.0
Uniform & Insignia rm	19	6.3	38.0
Reception	1	.3	2.0
Memorial Hall	2	.7	4.0
Army Evolution rm	2	.7	4.0
Research & Archives	3	1.0	6.0
Total	50	16.7	100.0
Missing value	250	83.3	
Total	300	100.0	

Table 18: The Most Unsatisfying Exhibition

1.3 About the Improvement and Development of the RTA Museum

Improvement for the RTA Museum

In order to develop the RTA museum to meet public's interests, visitors were asked to identify their opinions on what need to be improved for the current museum. As showed in Table 19, the majority of visitors replied that what needed to be improved the most in the museum was the provision of necessary accommodations (20.2%), while the improvement of parking-lot (17.4%) and the accessibility to the museum (15.1%) were also significant for the new improvement. These were followed by the provision of recreational area (8.6%), the improvement of displays and exhibitions (7.7%), the recruitment of more trained guides (6.7%), the safety and security in the museum (5.7%), the quality of service (5.5%), the improvement of museum building (5%), the Cleanliness (4.5%), and then other improvements (3.5%).

Improvement for the RTA Museum	Responses		Percent of Cases
	N	Percentage	
Accessibility	112	15.1%	37.3%
Trained guides	50	6.7%	16.7%
Museum building	37	5.0%	12.3%
Display & Exhibition	57	7.7%	19.0%
Safety & Security	42	5.7%	14.0%
Quality of Service	41	5.5%	13.7%
Cleanliness	33	4.5%	11.0%
Accommodations	150	20.2%	50.0%
Parking lot	129	17.4%	43.0%
Recreation area	64	8.6%	21.3%
Others	26	3.5%	8.7%
Total	741	100.0%	247.0%

Table 19: Improvement for the RTA Museum

According to the finding, accommodations to facilitate visitors in terms of an information center, a cafeteria, and toilets were the most wanted facilities to be provided at the site, while the provision of a parking-lot and the improvement of accessibility were also needed to be considered. Although most respondents of the survey were military officers and national service men, it was critical to note that they

both agreed for the improvement of public's accessibility and this can assist the museum to increase the number of visitors. Despite less in number of responses, it can not be assumed that the improvement and the provision of recreational area, exhibitions, guides, services, and other facilities are unnecessary, in fact, these amenities are needed to be catered at the site in order to fulfill visitor's requirements and accommodate their learning experiences at the same time.

The Comparison between the RTA Museum and Other Museums

When asked whether respondents have ever been to other military museums, it was surprising that more than half of them had never been to other museums (58.3%) while only 41.7 percent declared that they did (see Table 20). From the finding, museums where visitors had ever been visited were mostly domestic military museums. In Bangkok area, for example, there were the Royal Thai Air-Forces Museum, the Royal Thai Navy Museum, the National Memorial, and the National Museum. Meanwhile, The Nine-Army Battle Historical Park in Kanchanaburi province was one of the most well-known museums in the provincial area.

Visit Other Museums	Frequency	Percentage
Yes	125	41.7
No	175	58.3
Total	300	100.0

Table 20: Visit Other Museums

For those who had been to other museums (41.7% or 125 respondents), they were asked to compare the RTA museum with others and specify their brief reasons within. From the survey results in Table 21, more than half of visitors (53.6%) declared that the RTA museum was better than others while 40.8 percent mentioned that this museum was as same as others. However, there was a very small number of responses (5.6%) for those whose thought the RTA museum was not as good as others.

Comparison	Frequency	Percent	Valid Percentage	Cumulative Percentage
RTA museum is better than others	67	22.3	53.6	53.6
RTA museum is same to others	51	17.0	40.8	94.4
RTA museum is inferior to others	7	2.3	5.6	100.0
Total (without missing value)	125	41.7	100.0	
Missing value	175	58.3		
Total	300	100.0		

Table 21: The Comparison between the RTA Museum and Other Museums

When asked visitors to identify the prominent aspects of the RTA museum that were better than other museums, most visitors indicated the good characteristics of the museum as follows:

- The classification of each exhibition room;
- Location of the museum in the hub of the city of Bangkok;
- Safety and security of the museum as located in military precinct;
- Outstanding architecture of the building and interior decorations;
- A variety of exhibit objects and exhibitions with its authenticity.

For those who thought the RTA museum was not as good as other museums, the weak points of the current museum were identified as follows:

- Insufficient accommodations to be provided at the site;
- Obsolete technology and multi-media of current displays and presentations;
- Insufficient parking space for public vehicles;
- Limited space with the museum building and associated area.

Thus, as these inferior factors are as obstacles for the visit, they need to be taken into consideration for the new improvement and development of the RTA museum.

Factors that Affect to the Difficulty of Visit

As visitors were asked to specify the inconvenient factors of their museum visits, the finding results were quite similar to what visitors required for the museum improvement. Although the survey results were scattered with different responses among visitors, the top-three difficulty factors to the RTA museum were the unavailability of accommodations (20.2%), the parking-lot (17.4%), and the difficulty of accessibility (15.1%). These were followed by the lack of recreational area (8.6%), the current displays and exhibitions (7.7%), the insufficient number of trained guides (6.7%), the safety and security (5.7%), the quality of service (5.5%), the museum building function (5%), the cleanliness (4.5%), as well as other factors (3.5%). These difficulty factors were illustrated in **Table 22**.

Onsite Difficulty Factors to the RTA Museum	Responses		Percent of Cases
	N	Percentage	
Accessibility	112	15.1%	37.3%
Trained guides	50	6.7%	16.7%
Museum building	37	5.0%	12.3%
Display & Exhibition	57	7.7%	19.0%
Safety & Security	42	5.7%	14.0%
Quality of service	41	5.5%	13.7%
Cleanliness	33	4.5%	11.0%
Accommodations	150	20.2%	50.0%
Parking-lot	129	17.4%	43.0%
Recreation Area	64	8.6%	21.3%
Other Difficulties	26	3.5%	8.7%
Total	741	100.0%	247.0%

Table 22: Difficulty Factors to the RTA Museum

The reason that accommodations were chosen as the most difficulty factor for a the visit were because necessary facilities such as a visitor center, a souvenir shop, a cafeteria, and clean toilets, for example, were unavailable at the site. In general, most visitors arrived to the museum as a group tour in the morning and completed the visit within one and a half hour. Thereafter, they are likely to search for more information and purchase some memorabilia to remind their visits. However, these facilities are currently unavailable at the site. Similarly, as visitors wanted to have lunch from the

cafeteria and used toilets, these amenities were insufficient to cater for a large number of visitors or to satisfy their requirements. In addition, the unavailability of the parking-lot was also a major difficulty for all museum visitors as well.

According to the accessibility to the museum, as observed during the survey, most visitors complained that to access into the museum was inconvenient due to a security guard check-in at the entrance of the museum and a reservation that needed to be done in advance at least 3 days before an actual date of visit. Visitors suggested that these difficulty factors should be eliminated and then searched for ways to make the museum to be more accessible and convenient than before in order to increase the number of visitation by the public. For the recreational area, visitors needed more spaces for temporary exhibition in order to attract or entertain audiences, including the motivation on repeat visitation among them. For displays and exhibitions, some visitors complained that they needed more information to assist their historical understanding and interpretation. The current object displays and dioramic showcases were quite static and unattractive to capture their interests. For other factors such as the number of guides, the security protection of the museum, the quality of service, the condition of the museum building, the cleanliness, and other sorts of factors were quite acceptable but required some more modifications for new development.

Entrance Charge and Sources for Improvements

When asked visitors about their opinions on a charge of an entrance fee for the RTA museum as showed in Table 23, the majority of visitors declared that they agreed for the charge (65.3%) while others disagreed on the proposal (34.7%).

Entrance Charge	Frequency	Percent	Cumulative Percentage
Agree	196	65.3	65.3
Disagree	104	34.7	100.0
Total	300	100.0	

Table 23: Opinion about the Entrance Charge

Improvement by Charging Entrance Fees		Responses		Percent of Cases
		N	Percentage	
Improvement by Charging Entrance Fees	Objects & displays	149	22.9%	49.7%
	Facilities	153	23.5%	51.0%
	Quality of service & guides	70	10.7%	23.3%
	Multimedia exhibition	201	30.8%	67.0%
	Parking space	79	12.1%	26.3%
Total		652	100.0%	217.3%

Table 24: Sources of Improvement by Charging Entrance Fees

Regardless visitors agreed or disagreed for the charge, all of them were asked to make a decision on where would they want the money from the charge spent for the museum improvement. As indicated in the finding in Table 24, the improvement on multimedia for effective presentation was the most required option among visitors (30.8%), followed by the facility improvement in terms of a visitor center, a souvenir shops, a cafeteria and toilets (23.5%), the improvement on museum objects and exhibit showcases (22.9%), the provision of parking-lot (12.1), as well as the improvement on quality of service and guide recruitment (10.7%).

The results can be implied that the development of displays and exhibitions by the provision of multimedia presentation is the most important source for the museum improvement. Meanwhile, the provision of necessary facilities and the maintenance of exhibit objects and displays are also needed to be taken into consideration. As showed in the table, it is interesting that the requirements on the improvement of parking space, the quality of service and guides recruitment are quite less in number of responses. These can be interpreted that the current parking facility and the quality of services and guides are quite satisfied by most visitors.

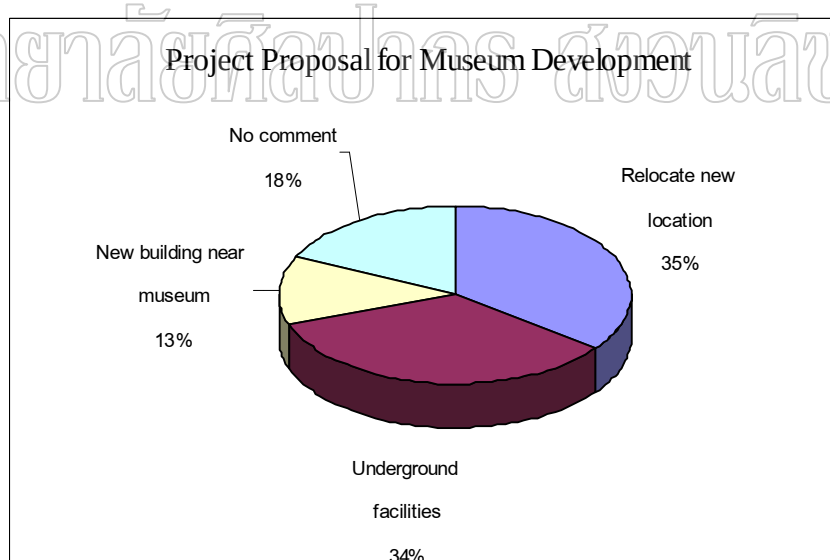
Project Proposal for Museum Development

Due to limited space within the museum to provide additional facilities for visitors, three proposals for future development were created to ask visitors at the museum. In Table 25 about the project proposal for new development, the finding

revealed that the proposal to relocate the RTA museum to a new location had a highest number of responses (35.3%), followed by the proposal to build new facilities underneath the museum building by underground excavation (34%) and the proposal to build new facility building near the museum (12.7%). There were only 18 percent of visitors who had disagreed or had no comments for those given proposals.

Project Proposal	Frequency	Percentage
Relocate new location	106	35.3
Underground facilities	102	34.0
New building near museum	38	12.7
No comment	54	18.0
Total	300	100.0

Table 25: Project Proposals for New Development



Due to various limitations on army rules and regulations within the RTA Headquarters boundary, as well as the unavailable space for new additions or facility developments, thus relocating the museum to a new location was chosen to be the most appropriate option to avoid those constraints. This proposal can facilitate the museum to independently operate and manage its museum without any intervention from the army. Meanwhile, it is interesting that although the underground facility development

within the museum area was considered as the secondary option for the development, the number of responses was quite close to the relocation proposal as noted above. These survey results can be assumed that at least one-third of visitors preferred the current location of the museum, thus underground excavation project was seen as an appropriate solution for museum development as well. It was apparent that there were a very small number of responses for the new facility building development near the museum. This may because most visitors observed the limitation of the available space within the museum and any new addition into the area was considered as inappropriate among them.

From the above findings, visitors around 35 percent, who selected the relocation of the museum, were also asked to consider the most appropriate location for the new museum. The outcomes from Table 26 revealed that as much as two-third of visitors wanted the museum to be located in the downtown of Bangkok (67%) while others preferred other provincial areas (33%). For the provincial areas, as specified in the survey, Lopburi province was chosen as the most appropriate location, followed by Pathum-Thani province, Nakhon-Prathom province, as well as Ayuthaya province, respectively.

New Museum Location	Frequency	Percentage
Bangkok city	71	23.7
Provincial area	35	11.7
Total	106	35.3
Missing value	194	64.7
Total	300	100.0

Table 26: New Museum Location

As illustrated in Table 27 when compared the proposals to the level of education among visitors, the results revealed that while underground facility development was chosen as the most wanted option among high-school visitors, graduate visitors were likely to select the relocation of the museum as the most appropriate option for new development. The findings can be assumed that visitors

with higher education desired the RTA museum to be removed to a new location as an absolute option to avoid military limitations and constraints, aiming at developing the museum to be more accessible and more comfortable among the public.

Level of education	Project Proposal				Total
	Relocate new location	Underground facilities	New building near museum	No comment	
High School	36	41	12	17	106
Graduate	53	45	23	33	154
Post graduate	17	16	3	4	40
Total	106	102	38	54	300

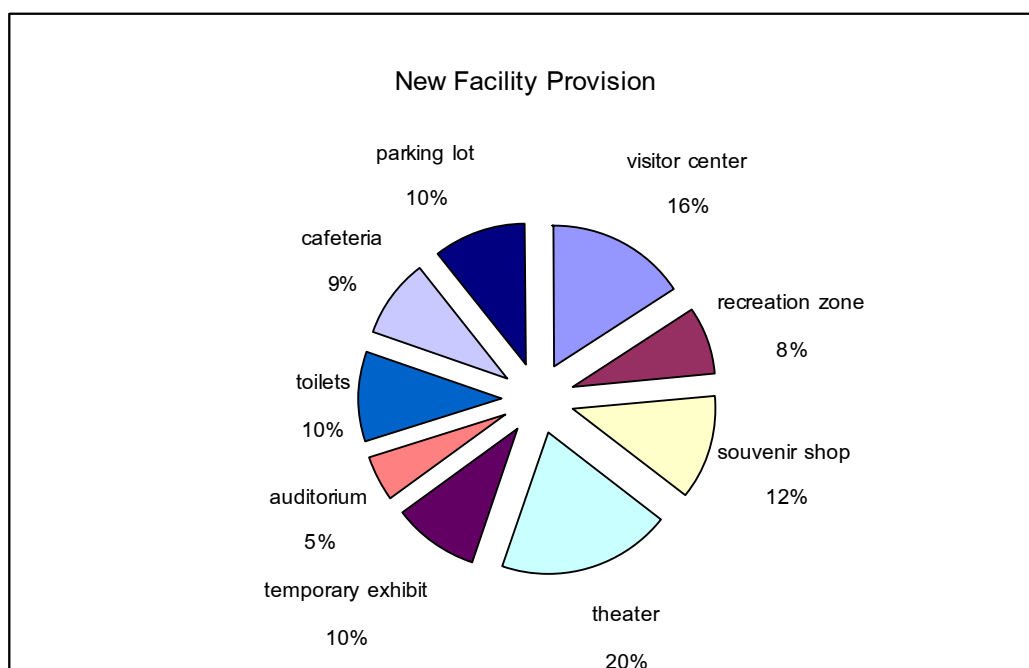
Table 27: Level of Education and Project Proposal Cross-Tabulation

New Facility Development for the RTA Museum

When asked visitors to specify new facilities that they wished to be provided at the museum site in association to the given development proposals, as showed in **Table 28**, a theater was chosen as the most desired facility(19.4%), followed by a visitor center (15.7%), a souvenir shop (11%), a parking-lot (10.5%), a temporary exhibition (9.9%), a cafeteria (9.3%), a recreational zone (8%), and finally, an auditorium (5.2%).

New Facility Provision	Responses		Percent of Cases
	N	Percentage	
Visitor center	132	15.7%	44.0%
Recreation zone	67	8.0%	22.3%
Souvenir shop	100	11.9%	33.3%
Theater	163	19.4%	54.3%
Temporary exhibit	83	9.9%	27.7%
Auditorium	44	5.2%	14.7%
Toilets	86	10.2%	28.7%
Cafeteria	78	9.3%	26.0%
Parking lot	88	10.5%	29.3%
Total	841	100.0%	280.3%

Table 28: New Facility Development within the RTA Museum



The findings can be interpreted that visitors want to have more understanding about the army history and its revolution during their visits through slide multi-vision or multimedia presentation; hence the theater can satisfy their requirements not only for the learning facet but also entertainment experiences. Similarly, the visitor center was also radically needed to be provided in the museum as an information center among those museum visitors. Although less in number of responses, the souvenir shop, the parking-lot, the toilets, and other accommodations are needed to be taken into consideration for the new museum development.

Revisit and Recommendation to Others

The survey results in [Table 29](#) revealed that most visitors would like to revisit the RTA museum next time if necessary accommodations were developed at the site (93.3%), meanwhile, some visitors were still unsure for their next visits (6.3%). These unsure visitors replied that to visit the RTA museum for a second time was unnecessary for them and a chance to revisit was quite difficult. However, a large number of visitors insisted that they would be at the museum again to see various sorts

of military weapons and equipment through both permanent exhibitions and temporary exhibitions available at the site.

Revisit	Frequency	Percentage
Yes	280	93.3
No	1	.3
Not sure	19	6.3
Total	300	100.0

Table 29: Opinion for the Revisit to the RTA Museum

Recommend Others	Frequency	Percentage
Yes	292	97.3
No	8	2.7
Total	300	100.0

Table 30: Recommend the RTA Museum to Others

When asked visitors whether they would recommend the RTA museum to others, **Table 30** revealed that most visitors would recommend (97.3%), while the rest would not (2.7%). Nevertheless, those who not recommend to others did not specify their reasons.

Suggestions for the Museum Improvement

This open-ended question's section allowed visitors to freely identify their comments for the museum improvement. However, more than two-third of visitors had no comments (68.7%), while the rest did (**see Table 31**).

Suggestions	Frequency	Percentage
No comment	206	68.7
Improve public relations	20	6.7
Increase staff & guides	6	2.0
Increase types of exhibitions	26	8.7
Improve exhibits with Multimedia	17	5.7
Provide more accommodations	7	2.3
More maintenance & conservation	12	4.0
Move to new location	6	2.0
Total	300	100.0

Table 31: Suggestions for the New Improvement

For those who provided comments (31.3%) revealed that they wanted the museum to increase types of exhibitions (8.7%), followed by the improvement of public relations through various effective sorts of media (6.7%), the provision of multimedia into current exhibitions (5.7%), more maintenance and conservation (4%), the provision of more accommodations (2.3%), as well as the consideration for new museum location and the provision of more museum staff and guides recruitment which were similar in number of responses(6%). The findings can be identified that what most visitors wanted the museum to take into consideration was largely emphasized on the improvement in a variety of military collections, interpretative tools to facilitate interpretation, and the provision of multi-media within the galleries for learning and entertaining experiences.

As explored so far, it is critical to note that visitors are likely to have more appreciation if the RTA museum can accommodate necessary facilities into the site while developing efficient programs of interactive media to attract them along their visit. However, the survey results indicated above are based only on military visitor's opinions. To perceive the general public's point of view, the focus group survey is to be included to have more understanding on what they preferred for the new museum development.

2. The Analysis of Questionnaire Surveys from the Focus Group

In addition to the analysis of questionnaire results from those 300 respondents who were largely military, government and non-government officers, the focus group of the public visitors has also been conducted to clearly understand on what they have expected to the RTA museum. There were 100 respondents for this focus group where fifty people of men and another fifty person of women were equally combined for the survey.

2.1 Visitor's Profile

Type of Visitors to the RTA Museum

The focus group of visitors has been chosen from the local educational institution with the total number of 100 people for the survey. These visitors were graduate students, combining both men and women around 50 person for each with the age around 18-25 years. In Table 32, the finding also indicated that they have been to the RTA museum for the first time.

Type of Visitation	Number of visit	Total
	First time	
Educational institution	100	100
Total	100	100

Table 32: Type of Visit and Number of Visit Cross-Tabulation

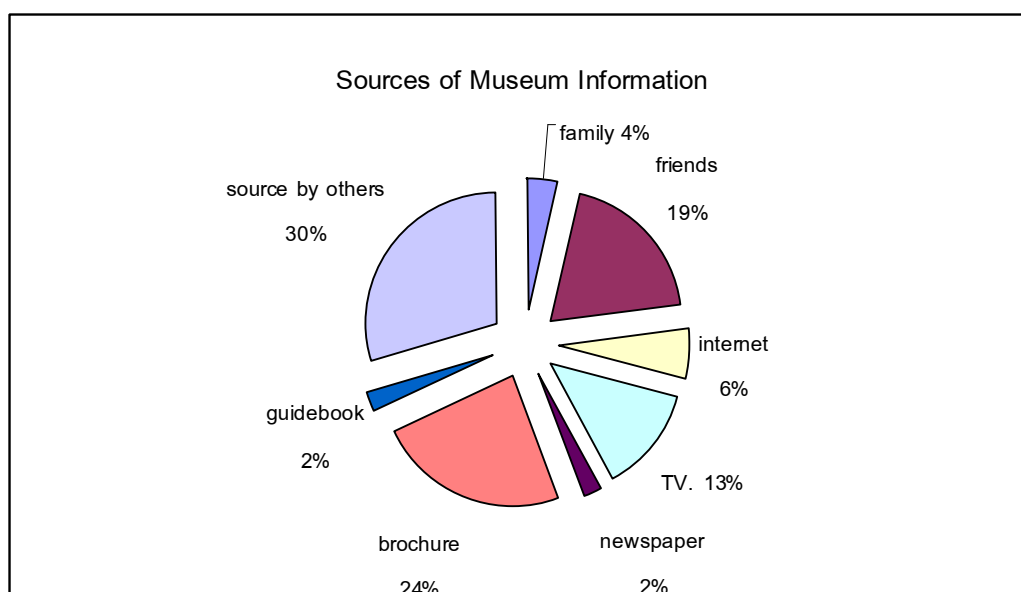
2.2 About the Visit and Current Exhibitions at the Museum

When visitors were asked about the sources of museum's information, the finding revealed that they knew the museum through the notification by their institution and the teacher guide as indicated as 'source by others' (29.8%). This was followed by the source from brochure (23.6%) and friends (19.3%), accordingly (see Table 33). However, the sources from public relations such as television and internet

websites, including the publication through travel magazines and guide books showed a very small number of responses. Due to the fact that the museum was lack of public relation programs to promote the museum through various sorts of media, thus this is why the finding results from those military officers and the focus group of the general public were quite similar.

Sources of Museum Information	Responses		Percent of Cases
	N	Percentage	
Source by family	6	3.7%	6.0%
Source by friends	31	19.3%	31.0%
Source by internet	10	6.2%	10.0%
Source by television	21	13.0%	21.0%
Source by newspaper	3	1.9%	3.0%
Source by brochure	38	23.6%	38.0%
Source by guidebook	4	2.5%	4.0%
Source by others	48	29.8%	48.0%
Total	161	100.0%	161.0%

Table 33: Sources of Museum Information



Purpose of Visit

In Table 34, most visitors implied that they have visited the museum for research and study purposes as much as 88 percent while leisure or recreational purposes were only 12 percent. This is because many visitors expected to have more understanding about the army through the exhibitions as their learning experiences rather than to satisfy their recreational needs.

Purpose of Visit	Frequency	Percentage
leisure/recreation	12	12.0
research/study	88	88.0
Total	100	100.0

Table 34: Purpose of Visit

Important Factors that Affect to the Museum Visit

When visitors were asked to indicate the factors that influencing them to visit the RTA Museum, as illustrated in Table 35, 36, 37 and 38, almost half of visitors (49%) implied that to see exhibitions within the museum was as the most important factors. Meanwhile, the second and the third important factors were the reputation of the museum (22%) and the understanding of the army role (21%), respectively.

Reputation	Frequency	Percentage
Most important	22	22.0
Second important	17	17.0
Third important	29	29.0
Least important	32	32.0
Total	100	100.0

Table 35: Reputation of the Museum as Factor of Visit

To See Exhibition	Frequency	Percentage
Most important	49	49.0
Second important	32	32.0
Third important	13	13.0
Least important	6	6.0
Total	100	100.0

Table 36: To See Exhibition as Factor of Visit

To Understand Army's Role	Frequency	Percentage
Most important	21	21.0
Second important	41	41.0
Third important	23	23.0
Least important	15	15.0
Total	100	100.0

Table 37: To Understand the Army's Role as Factor of Visit

Museum Design	Frequency	Percentage
Most important	8	8.0
Second important	10	10.0
Third important	35	35.0
Least important	47	47.0
Total	100	100.0

Table 38: Museum Design as Factor of Visit

Although the museum has an outstanding architecture with beautiful exterior design and interior decoration within each exhibition room, these were disregarded as significant to most visitors (8 %). From the above outcomes, it can be assumed that the museum exhibitions played a vital role to attract visitors while the reputation, the understanding of the army's role, and the museum design were quite ineffective to be taken into consideration for the visit. Notably, the findings from the focus group of the general public were indifferent to the findings from the military officers.

Visitors' Opinions about the Current Exhibitions

As same as those military officers, government, and non-government officers, the focus group of the general public was asked to specify their level of appreciation among various exhibitions within the RTA museum. Mean was set as indicator to evaluate level of satisfaction from 1 through 4 as listed below:

1.00 - 1.75 = Poor	2.51 - 3.25 = Good
1.75 - 2.50 = Fair	3.26 - 4.00 = Excellent

In **Table 39**, the survey results indicated that all exhibition rooms: the Weapon Room, the Army History Room, the Flag and Military Equipment Room, the Uniform and Military Insignia Room, the Reception, the Memorial Hall, the Army Evolution Room, as well as the Administrative Research and Archive Room were met visitor's satisfaction as being identified as 'excellent' with the mean range between 3.26-3.59. Unlike other exhibitions, the Auditorium was considered as 'good' with the mean range at 3.19.

Type of Exhibitions	N	Minimum	Maximum	Mean	Standard Deviation
Auditorium	100	1.00	4.00	3.1900	.59789
Weapon Rm	100	2.00	4.00	3.4700	.54039
Army History Rm	100	1.00	4.00	3.4900	.59450
Flag & Equipment Rm	100	1.00	4.00	3.4900	.61126
Uniform & Insignia Rm	100	2.00	4.00	3.4100	.60461
Reception Rm	100	2.00	4.00	3.4400	.57419
Memorial Hall	100	2.00	4.00	3.5900	.53362
Army Evolution Rm	100	2.00	4.00	3.3400	.60670
Administrative Research & Archive Rm	100	2.00	4.00	3.2600	.61332
Summary	100	2.11	4.00	3.4089	.42136

Table 39: Visitor's Opinions about the RTA Museum Exhibitions

When asked visitors to identify the open-ended questions concerning their most satisfying and unsatisfying exhibitions, the findings revealed that almost one third of visitors considered the Weapon Room as the most satisfying exhibition (32.1%),

followed by the Army History Room (30.8%), and then the Flag and Military Equipment Room (12.8%), accordingly (see Table 40). For the reason of satisfaction, like the findings from military officers, visitors replied that they satisfied the Weapon Room the most because they have seen various sorts of military weapons and equipments with more understanding about their evolution. As visitors were allowed to touch and participate in the demonstration by professional guides on how to use machine guns, this impressive moment was as an effective factor to attract them in the gallery and meet their satisfaction.

The Most Satisfying	Frequency	Percentage	Valid Percentage
Auditorium	2	2.0	2.6
Weapon Rm.	25	25.0	32.1
Army history Rm.	24	24.0	30.8
Flag & Equipment Rm.	10	10.0	12.8
Uniform & Insignia Rm.	4	4.0	5.1
Reception Rm.	7	7.0	9.0
Memorial Hall	6	6.0	7.7
Total	78	78.0	100.0
Missing value	22	22.0	
Total	100	100.0	

Table 40: The Most Satisfying Exhibition

While Memorial Hall was considered as the second most satisfying exhibition by most military officers, Army History Room was regarded as the second most satisfying exhibition by the general public due to the use of multimedia to be input within the gallery. Most visitors revealed that the dioramic showcases with three dimensional model displays and built-in sound speakers can educate and entertain them at the same time in terms of history of war in different period. The Flag and Military Equipment Room was considered as the third most satisfying exhibition but it has a small number of responses for only 12.8 percent. In this room, visitors quite satisfied the display of the ‘Flag of the Colors for a Unit’ which was hard to be seen today and other military equipment within.

For the most unsatisfying exhibition as shown in Table 41, there were only 22 percent who were given the answers while the rest (78 person) was absent. For those

who have given responses, almost half of them revealed that the Uniform and Military Insignia Room was the most unsatisfying exhibition (45.5%) while the Auditorium was the second most unsatisfying (31.8%).

The Most Unsatisfying	Frequency	Percentage	Valid Percentage
Auditorium	7	7.0	31.8
Weapon Rm.	2	2.0	9.1
Army History Rm.	2	2.0	9.1
Uniform & Insignia Rm.	10	10.0	45.5
Memorial Hall	1	1.0	4.5
Total	22	22.0	100.0
Missing value	78	78.0	
Total	100	100.0	

Table 41: The Most Unsatisfying Exhibition

Visitors unearthed that the Uniform and Military Insignia Room has a very static exhibition without any interactive media to entertain them. Besides, there were no sign boards or information to be provided at the mannequins with uniforms, thus the failure of communication has occurred. Meanwhile, The Auditorium has no video presentation or slide multi-vision to attract the audiences accept brief introduction of the army history through basic power-point presentation. Owing to the above problems, the findings from the focus group survey was as same as the survey of 300 respondents of those military officers.

2.3 About the Improvement and Development of the RTA Museum

Improvement for the RTA Museum

Visitors were asked to identify their opinions on what need to be improved for the RTA museum. As illustrated in Table 42, the findings revealed that the provision of accommodation was needed to be improved the most (23.5%), while the provision of parking-lot (16%), the accessibility to the museum (15.3%) and the development of recreational area (13.8%) were also considered as significant for the improvement. These were followed by the improvement of trained guides (8.6%), the exhibit

presentations (7.5%), the safety and security (4.9%), the quality of service (3.7%), the museum building (3.4%) and the cleanliness of the site (2.6%).

Improvement for the RTA Museum	Responses		Percent of Cases
	N	Percentage	
Accessibility	41	15.3%	41.0%
Trained guides	23	8.6%	23.0%
Museum building	9	3.4%	9.0%
Display & Exhibition	20	7.5%	20.0%
Safety & Security	13	4.9%	13.0%
Quality of service	10	3.7%	10.0%
Cleanliness	7	2.6%	7.0%
Accommodations	63	23.5%	63.0%
Parking lot	43	16.0%	43.0%
Recreation area	37	13.8%	37.0%
Others	2	.7%	2.0%
Total	268	100.0%	268.0%

Table 42: Improvement for the RTA Museum

For the public, necessary accommodation such as a visitors center, a cafeteria, toilets, a souvenir shop, for example, were much needed to be available in situ as a complementary for learning experience among visitors. Additionally, convenient accessibility to the site and the provision of parking-lot should also be taken into consideration for the new improvement. If possible, many visitors required one or more available space within the museum building to be used either the recreational area for exchanging ideas and participating in the army topic or the temporary exhibition to attract and motivate their repeat visits.

The Comparison between the RTA Museum and Other Museums

According to the survey results in Table 43, more than half of visitors (58%) had ever been to other military museums while the rest (42%) did not. According to the survey, the Royal Thai Air-Forces Museum and the Royal Thai Navy Museum in Bangkok had been visited the most by this type of visitors and they were asked further to compare the RTA Museum to others and then specify their ideas or reasons within.

In **Table 44**, almost half of visitors (48.3% or 28 person), from the total number of 58 person, stated that the RTA museum was better than others while 44.8 percent or 26 person revealed that this museum was as same as others. There were only 6.9 percent or only at 4 person who had though that the museum was not as good as others.

Visit Other Museums	Frequency	Percentage
Yes	58	58.0
No	42	42.0
Total	100	100.0

Table 43: Visit Other Museums

Comparison	Frequency	Percentage	Valid Percentage
RTA museum is better than others	28	28.0	48.3
RTA museum is same to others	26	26.0	44.8
RTA museum is inferior to others	4	4.0	6.9
Total (without missing value)	58	58.0	100.0
Missing value	42	42.0	
Total	100	100.0	

Table 44: The Comparison between the RTA Museum and Other Museums

Like visitors from military officers, this focus group was asked to identify brief opinions concerning the good and the weak aspects of the RTA museum. The prominent aspects of the museum were listed as the following:

- The classification of each exhibition room;
- Location of the museum in the hub of the city of Bangkok;
- A variety of exhibit objects and exhibitions with its authenticity;
- The cleanliness of the museum and its surrounding;
- The provision of army history and information;
- The professional skills of museum guides and curators in story-telling.

For those who thought the RTA museum was not as good as other military museums, the weak points of the museum were listed as the following:

- The difficulty of accessibility to the museum site by the public;
- Inadequate accommodations and parking spaces to be available at the site;
- Static displays and presentations with obsolete multimedia of the presentation.

According to the above inferior factors provided by the focus group, these were quite similar to the survey results from the military officers. Hence these negative factors should be eliminated as much as possible for new museum development.

Factors that affect to the Difficulty of Visit

When asked visitors to identify the difficulty factors to the RTA museum, surprisingly, the survey results of the focus group questionnaire were similar to the survey results of the military officers. Besides this, onsite difficulty factors to the RTA museum were as same as what visitors wanted for the museum improvement. As illustrated in **Table 45**, the top-four difficulty factors to the museum were the unavailability of accommodations (23.5%), the parking-lot (16%), the difficulty of accessibility (15.3%), and the lack of recreational area (13.8%), respectively. These were also followed by insufficient trained guides (8.6%), the design of displays and exhibitions (7.5%), the current safety and security (4.9%), the quality of service (3.7%), the museum building function (3.4%), as well as the cleanliness (2.6%).

Onsite Difficulty Factors to The RTA Museum	Responses		Percent of Cases
	N	Percentage	
accessibility	41	15.3%	41.0%
trained guides	23	8.6%	23.0%
museum building	9	3.4%	9.0%
display & exhibition	20	7.5%	20.0%
safety & security	13	4.9%	13.0%
quality of service	10	3.7%	10.0%
cleanliness	7	2.6%	7.0%
accommodations	63	23.5%	63.0%
parking lot	43	16.0%	43.0%
recreation area	37	13.8%	37.0%
others	2	.7%	2.0%
Total	268	100.0%	268.0%

Table 45: Difficulty Factors to the RTA Museum

The unavailability of necessary accommodations to be provided at the site was acted as a major problematic factor to the visit in many visitors' viewpoints. This also included the lack of parking space for public vehicles and the inconvenient of accessibility to the museum as it was located in the military area. For other difficulty factors, general public's opinions were quite similar to the opinions of those military officers, government and non-government officers from the former survey.

Entrance Charge and Sources for Improvements

The focus group of visitors was asked their opinions on a charge of an entrance fee for the RTA museum. As shown in Table 46, more than half of visitors indicated that they agreed for the charge (62%) while the rest (38%) disagreed on the proposal.

Entrance Charge	Frequency	Percentage
Agree	62	62.0
Disagree	38	38.0
Total	100	100.0

Table 46: Opinion about the Entrance Charge

Improvement by Charging Entrance Fees		Responses		Percent of Cases
		N	Percentage	
Improvement By Charging Entrance Fees	Objects & displays	48	20.3%	48.0%
	Facilities	62	26.3%	62.0%
	Quality of service & guides	21	8.9%	21.0%
	Multimedia exhibition	66	28.0%	66.0%
	Parking space	39	16.5%	39.0%
Total		236	100.0%	236.0%

Table 47: Sources of Improvement by Charging Entrance Fees

Again, all visitors were in the stage of decision-making on where would the money from the entrance charge to be spent for the museum improvement. According to the finding in Table 47, the improvement of exhibitions with the provision of multimedia was the most required option among visitors (28%), followed by the facility development (26.3%), the improvement on museum objects and exhibit showcases (20.3%), including the provision of parking facility (16.5%). Interestingly, the finding implied that there were a very small number of responses for the improvement on the quality of service and guides (8.9%). Thus this can be assumed that the current service and guides are quite met visitor's satisfaction.

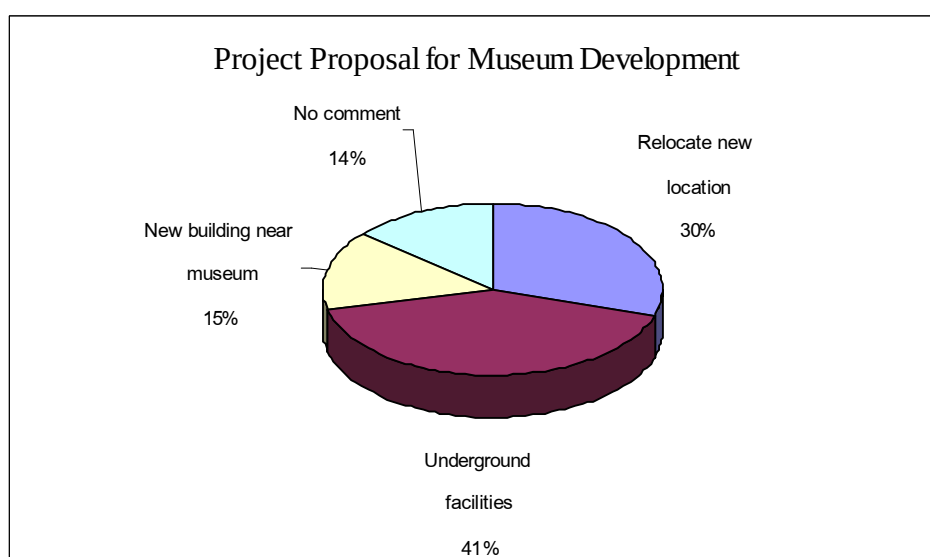
From the analysis, it can be interpreted that what urgently needed for the improvement of the museum in the visitor's point of view is largely concerned the development of exhibitions with the provision of multimedia or interactive programs to be input within the gallery. In addition, the provision of necessary facilities and parking-lot, including the maintenance and supervision of museum objects and exhibit showcases are also needed to be taken into the consideration.

Project Proposal for Museum Development

Three project proposals had been created to ask the focus group of visitors in order to perceive their opinions for future development of the RTA museum. Unlike the former survey of those 300 respondents, interestingly, the proposal to build new facilities underneath the museum building by the underground excavation project had been chosen as the most desirable option by most visitors (41%) while the proposal to relocate the RTA museum to a new location was considered as the secondary option with the total number of responses at 30 percent (see Table 48). There were only 15 percent of visitors who had chosen to build new facility building near the museum. However, there were around 14 person who had neither agreed nor giving idea on the given proposals.

Project Proposal	Frequency	Percentage
Relocate new location	30	30.0
Underground facilities	41	41.0
New building near museum	15	15.0
No comment	14	14.0
Total	100	100.0

Table 48: Project Proposals for New Development



The survey results can be interpreted that, in most general public's opinions, the location of the current museum was seemingly appropriate and the underground facility project tended to be the most suitable options for new museum development without any deterioration to the museum building and its surroundings. On the other hand, there were around one third of visitors who had chosen to relocate the museum to other areas and this may be because they wanted the museum to independently operate without the intervention from the army's regulations and limitations, aiming at the increasing demand of visit by the public.

Visitors around 30 people who selected the relocation of the museum were also asked to consider the most appropriate location for new construction. The findings from Table 49, revealed that most visitors preferred the museum to be situated in the city of Bangkok (73.3%) while others wanted some provincial areas such as Pathum-Thani, Ayuthaya, and Lopburi, for example.

New Museum Location	Frequency	Percentage	Valid Percentage
Bangkok city	22	22.0	73.3
Provincial area	8	8.0	26.7
Total	30	30.0	100.0
Missing value	70	70.0	
Total	100	100.0	

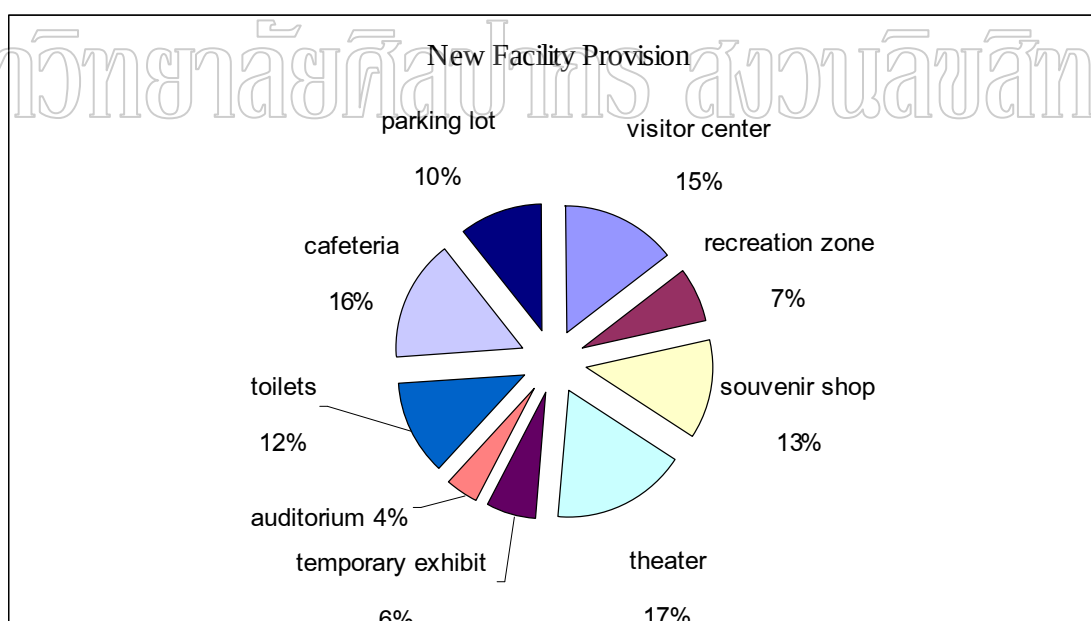
Table 49: New Museum Location

New Facility Development for the RTA Museum

In addition to the above project proposals, visitors specified new facilities that they required for the new museum development, As illustrated in Table 50, a theater was selected as the most desired facility (16.8%), followed by a cafeteria (15.6%), a visitor center (14.6%), a souvenir shop (12.7%), a restroom (12.4%), a parking-lot (10.5%), a recreational zone (7%), a temporary exhibition (6.3%), and then an auditorium (4.1%), respectively.

New Facility Provision	Responses		Percent of Cases
	N	Percentage	
Visitor center	46	14.6%	46.0%
Recreation zone	22	7.0%	22.0%
Souvenir shop	40	12.7%	40.0%
Theater	53	16.8%	53.0%
Temporary exhibit	20	6.3%	20.0%
Auditorium	13	4.1%	13.0%
Toilets	39	12.4%	39.0%
Cafeteria	49	15.6%	49.0%
Parking lot	33	10.5%	33.0%
Total	315	100.0%	315.0%

Table 50: New Facility Development within the RTA Museum



The finding results were apparent that the theater was the most desired facility to be provided at the museum in order to link the past of the army history through the present. To attract and entertain audiences, this can be done by the installation of slide multi-vision or video presentation within the theater. Considerably, the cafeteria was chosen as needed facility with a high number of responses from the focus group survey

while the former survey of 300 respondents was not. Nevertheless, the requirement of other facilities from the focus group was quite similar to those military officers.

Revisit and Recommendation to Others

The survey results in Table 51, unearthed that most visitors would like to revisit the museum next time (88%) while the rest (12%) was still unsure. Some unsure visitors replied that they have already seen all exhibitions hence it was unnecessary for the repeat visit, besides; the accessibility to the site as general public visitors seemed to be difficult among them. When compared men and women about their repeat visit, Table 52 indicated that female visitors seemed to revisit the museum next time rather than male visitors.

Revisit	Frequency	Percentage
Yes	88	88.0
Not sure	12	12.0
Total	100	100.0

Table 51: Opinion for the Revisit to the RTA Museum

Gender		Revisit		Total
		yes	not sure	
Gender	Male	41	9	50
	Female	47	3	50
Total		88	12	100

Table 52: Gender and Revisit Cross-Tabulation

When asked visitors whether they would recommend the RTA museum to others, most visitors would recommend (98%) while the rest only 2 percent would not (see Table 53). When compared gender of the focus group to a particular project proposal as illustrated in Table 54, it was interesting that while male visitors were likely to select the proposal of museum relocation, the underground facility proposal was chosen by most female visitors. The findings can be assumed that women preferred the current location of the museum rather than men.

Recommend Others	Frequency	Percentage
Yes	98	98.0
No	2	2.0
Total	100	100.0

Table 53: Recommend the RTA Museum to Others

Gender	Project Proposal				Total
	Relocate new location	Underground facilities	New building near museum	No comment	
Male	17	13	10	10	50
Female	13	28	5	4	50
Total	30	41	15	14	100

Table 54: Gender and Project Proposal Cross-Tabulation

Suggestions for the Museum Improvement

Visitors were allowed to identify their comments and suggestions through this open-ended question's section. Nevertheless, as same as the previous survey of military officers, there were only 31 percent of visitors who had given comments while the rest as much as 69 percent did not. For those who provided comments, as showed **Table 55**, revealed that what they wanted the most for future development of the museum was concerned the improvement of exhibitions with the provision of multimedia (12%), the provision of more accommodations (8%), and the increase of exhibition types (5%). These were followed by some small responses on the improvement of public relations (3%), the increasing number of staff and guides (2%), including the maintenance and conservation (1%), accordingly.

Suggestions	Frequency	Percentage
No comment	69	69.0
Improve public relations	3	3.0
Increase staffs & guides	2	2.0
Increase types of exhibitions	5	5.0
Improve exhibits with Multimedia	12	12.0
Provide more accommodations	8	8.0
More maintenance & conservation	1	1.0
Total	100	100.0

Table 55: Suggestions for New Improvement

Unlike the findings from the previous case of those military officers which the increase exhibition types was highest in number of responses, instead; the improvement of exhibitions through the installation of multimedia was the most desired for new improvement among the focus group of visitors.

As explored so far, the survey results between military officers and general public visitors are largely similar to each other in terms of their general opinions about the current displays and exhibitions. Still, there are some slightly different on ideas and opinions for new museum improvement and what they wanted the museum to offer for future development. To compare the survey results between these two groups, the comparative table about the questionnaire survey is illustrated in Table 56.

3. The Comparison Table of the Military Officers Survey and the Focus Group Survey

Questionnaire Contents	The Survey of 300 People (Military and Gov/ Non-Gov Officers)	The Survey of the Focus Group (General Public)
1. Number of Case in the Survey	300 respondents	100 respondents
2. Gender of Visitors	Male 207 person / Female 93 person	Male 50 person / Female 50 person
3. Age of Visitors	Average 18 - 35 years	Average 18-25 years
4. Level of Education	High-School (35.3%)	All visitors were graduated (100%)
	Graduate (51.3%)	
	Post Graduate (13.3%)	
5. Occupation	Military officers	All visitors were graduated students
	Government and non-government officers	
6. Type of Visit	Military Educational Institution (43%)	Educational Institution (100%)
	Gov and Non-Gov Organization (43%)	
	Friends (13%)	
7. Number of Visit	First time (90.7%)	First time (100%)
	2-3 times (7.7%)	
	3 times or above (1.7%)	
8. Sources of Museum Information	By other sources of Information (32.6%)	By other sources of Information (29.8%)
	(The notification by institution/ organization)	(The notification by institution/ organization)
	By friends (23%)	By brochure (23.6%)
	By brochure (11.4%)	By friends (19.3%)
	By Television (10.9%)	By Television (13%)
9. Purpose of Visit	Research and Study (82.7%)	Research and Study (88%)
	Leisure and Recreation (13%)	Leisure and Recreation (12%)
	Others (4.3%)	
10. Important Factors for the Visit	To see exhibition (45.3%)	To see exhibition (49%)
	To understand the army's role (31%)	To understand the army's role (22%)
	The reputation of the Museum (18%)	The reputation of the Museum (21%)
	The Design of the Museum building (6.3%)	The Design of the Museum building (8%)

11. Opinions about	All exhibition rooms were 'excellent'	All exhibition rooms were 'excellent'
Current Exhibitions	(Mean range between 3.26-4.00)	(Mean range between 3.26-4.00)
	Army Evolution room and Administrative	Auditorium was considered as 'good'
	Research and Archive room were 'good'	(Mean range at 3.19)
	(Mean range between 3.06-3.24)	
12. Most Satisfying	Weapon Room (38%)	Weapon Room (32.1%)
Exhibition	Memorial Hall (21.1%)	Army History Room (30.8%)
	Flag & Military Insignia Room (14%)	Flag & Military Insignia Room (12.8%)
13. Most Unsatisfying	Uniform & Military Insignia Room (38%)	Uniform & Military Insignia Room (45.5%)
Exhibition	Auditorium (26%)	Auditorium (31.8%)
14. Improvement for	Accommodations (20.2%)	Accommodations (23.5%)
the RTA museum	Parking-lot (17.4%)	Parking-lot (16%)
	Accessibility (15.1%)	Accessibility (15.3%)
	Recreational area (8.6%)	Recreational area (13.8%)
	Displays & Exhibitions (7.7%)	Trained guides (8.6%)
15. Visit Other	Yes (41.7%)	Yes (58%)
Museums	No (58.3%)	No (42%)
16. Comparison the	Better than others (53.6%)	Better than others (48.3%)
RTA Museum	As good as others (40.8%)	As good as others (44.8%)
to Others	As not good as others (5.6%)	As not good as others (6.9%)
17. Difficulty Factors	Accommodations (20.2%)	Accommodations (23.5%)
of the Visit	Parking-lot (17.4%)	Parking-lot (16%)
	Accessibility (15.1%)	Accessibility (15.3%)
	Recreational area (8.6%)	Recreational area (13.8%)
18. Entrance Charge	Agree (65.3%)	Agree (62%)
	Disagree (34.7%)	Disagree (38%)
19. Improvement from	Multimedia Exhibition (30.8%)	Multimedia Exhibition (28%)
Charging Entrance Fees	Facilities (23.5%)	Facilities (26.3%)
	Museum objects and displays (22.9%)	Museum objects and displays (20.3%)
	Parking-lot (12.1%)	Parking-lot (16.5%)
	Quality of service and guides (10.7%)	Quality of service and guides (8.9%)

20. Project Proposals	Relocate museum to a new location (35.3%)	Underground facility development (41%)
	Underground facility development (34%)	Relocate museum to a new location (30%)
	New building near the museum (12.7%)	New building near the museum (15%)
21. New Museum	Bangkok (67%)	Bangkok (73.3%)
Location	Provincial Area (33%)	Provincial Area (26.7%)
22. New Facility	Theater (19.4%)	Theater (16.8%)
Development	Visitor Center (15.7%)	Food-Court (15.6%)
	Souvenir Shop (11.9%)	Visitor Center (14.6%)
	Parking-lot (10.5%)	Souvenir Shop (12.7%)
	Toilets (10.2%)	Toilets (12.4%)
	Temporary Exhibition (9.9%)	Parking-lot (10.5%)
23. Revisit the RTA	Yes (93.3%)	Yes (88%)
Museum	No (0.3%)	Not Sure (12%)
	Not Sure (6.3%)	
24. Recommend to	Yes (97.3%)	Yes (98%)
Others	No (2.7%)	No (2%)
25. Suggestions for	Increase types of exhibitions (8.7%)	Improve exhibitions with multimedia (12%)
New Improvement	Improve public relations (6.7%)	Provide more accommodations (8%)
	Improve exhibitions with multimedia (5.7%)	Increase types of exhibitions (5%)
	More maintenance and conservation (4%)	Improve public relations (3%)
	Other (4.32%)	Other (3%)
	No comment (68.7%)	No comment (69%)

Table 56: The Comparison Table of the Military Officers Survey and the Focus Group Survey

4. The Examination of Hypothesis to the Survey Results

According to the proposed hypothesis concerning the connection between the museum development to the degree of visit by the general public as already mentioned in the introductory chapter, the findings from the questionnaire survey indicate that there is a positive relationship between strategic development on museum presentation, interpretation policies, and accessibility by the public to the increasing number of

visitors. This is because the findings discover that more than 90 percent of military officers and 80 percent of the general public as museum visitors would like to revisit the museum next time and would recommend the RTA museum to others if necessary facilities are being provided and developed at the site with convenient public accessibility.

Furthermore, the development of innovative presentation techniques into current displays and exhibit galleries can assist general public audiences to have more understanding about the army and interpret displays and collections in a more sensible way. The outcomes from the survey also imply that the degree of public's accessibility to the museum depends largely on the lower level of military constraints, including efficient sources of public relation programs that are used to promote and attract the general public to visit the museum.

มหาวิทยาลัยศิลปากร สงวนลิขสิทธิ์

Chapter 9

Management Plan and Policy for the RTA Museum

The high historical significance and aesthetic value of the RTA museum mean that special consideration must be given as to how to manage and conserve the physical aspects of the museum and its surroundings to meet public interests, while at the same time, maintain the museum building and surrounding landscape intact and as close to the original condition as possible. The current management and operation of the museum are still not meeting visitor satisfaction due especially to the limitation on access for the general public because the museum is located in a high security military compound. Military rules and regulations require visitors to conform within this zone. However, these constraints must be eliminated if the number of visits is to be increased and if the museum is to be professionally managed without any undue intervention from the army authorities.

The presentation of museum's displays is another factor that affects the interpretation by most visitors and the number of visits. The presentation of exhibits must be urgently improved so that adequate information can be provided for the audiences and interpretative signs and other tools for explanation and communication can be introduced. At the same time, owing to the lack of financial support and public relations, the displays are static and unattractive to educate and entertain visitors. The provision of innovative multimedia techniques and interactive programs into the gallery should be taken into consideration if the museum wishes to gain visitor satisfaction in the future. In addition, better public relations through various efficient sources of media outlets are also needed to promote the museum for all.

According to the survey results about visitor opinions and requirements for new development of the RTA museum, it can be assumed from the findings that the improvement of current exhibit presentations and the provision of necessary accommodations are the two most needed requirements among museum visitors.

The museum should create a new management plan and policies for future development. The management plan concerns the retention of historic significance of the museum building and its surrounding landscape in original condition, the provision of accommodations to meet general public interests, as well as the overall museum development for self-sustainability. The management plan also involves new improvement of the museum organization and its stakeholders, the setting of goals and mission statement, the development of museum staff and target audience identification. To be more effective, museum policies are needed to be set as codes of conduct for future management.

The objectives of the new museum are as follows:

- The museum can independently manage its organization without the intervention from the army authority or the government sector, where military rules and constraints are no longer the obstacles for the museum operation.
- The museum can be able to gain public interests and laterally develop as one of the tourism destinations in Thailand not only for local but also foreign visitors.
- The museum can promote its historical significance to reinforce public awareness on the conservation and development of the place for long-term sustainability.
- The museum can attract a larger number of visitors through new innovative forms of multimedia presentation techniques and the promotion from various public relation programs.
- The museum can enhance its potentiality through the cooperation with other public and private sectors in tourism business to promote the museum to the general public.

1. Organization and Administration Strategy

The Royal Thai Army paid special attention with vast investment on the purchase of military weapons and the training programs for military men for a very long period of time. The museum was recognized as only the storage of military weapons and equipment without any significance to the stability of the nation. Thus, this leads to the lack of financial support by the army sector and poor management.

The current museum management, the Military History Department, which is responsible for the management of military history and the RTA museum, is quite unsystematic and ineffective in its operation. In fact, the authority of decision-making depended largely on chief-army officers who have no experience in museum management and are irrelevant to the museum field. Moreover, because of an inadequate number of trained-curators and staff to accommodate a large number of visitors at the site, this leads to poor hospitality and dissatisfaction among most museum visitors.

To be more systematic and effective and to decentralize the authority of decision-making, the new administrative organization should be reset in order to create new operational departments and the cooperation with other museum-related organizations both public and private sectors. There are six operational departments to be included in the new organization: the Interpretative Department, the Human Resource Department, the Financial Department, the Marketing and Research Department, the Maintenance Department, and the Security Department. These departments are established to manage their fields of responsibility with the authority of decision-making. The new administrative organization of the new managerial body is illustrated in a diagram below.

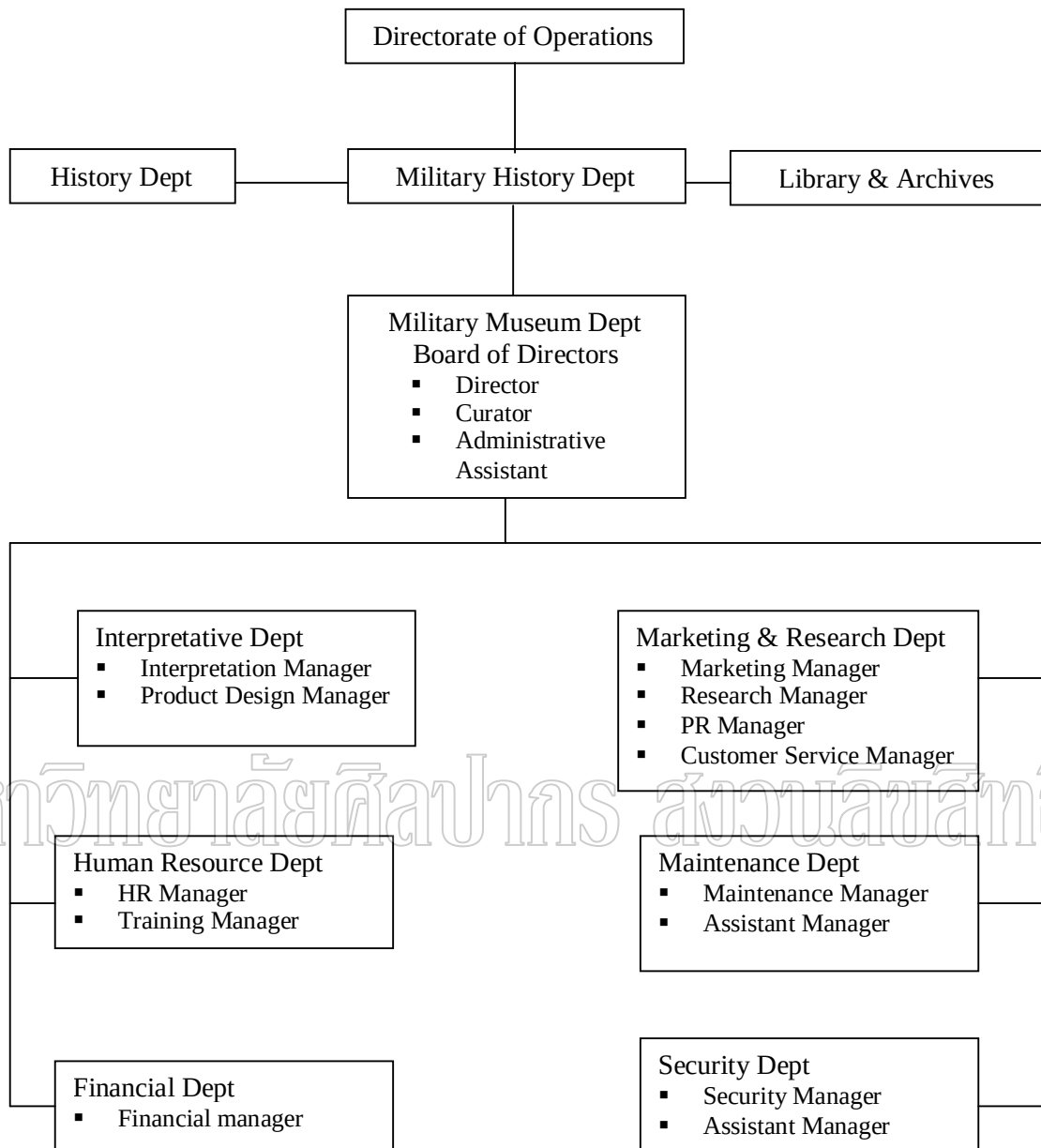


Fig.111 New Administrative Organization of the Museum

The Identification of Responsibility

- **Directorate of Operations:** is the head department of the Military History Department that is responsible for monitoring and inspecting the museum management of the Military History Department as well as recommending strategic plan for future development of the museum.

- **Military History Department:** is the sub-department of the Directorate of Operations and responsible for planning, managing, documenting and promoting military history of the Royal Thai Army to the general public.
- **Military Museum Department:** is the main office of the RTA museum which sets the objective, policy and strategy, and manages all museum-related activities in relation to the army objects and equipment collection, registration, documentation and the promotion through efficient sources of media. This department is responsible for monitoring and evaluating the progressive works of all six operational departments. Its task is also setting instruction and regulation for the military museum.
- **Director:** is the person who develops policy standards of policy for staff and resource of the museum and its collections, in order to win support for those policies in the army office and to ensure their efficient implementation. The director can provide on-site curatorial support to the museum and collections for exhibition, collection management and documentation projects.
- **Museum Curator:** is the person who can control overall management and operation of the RTA museum with full authority of decision-making and planning management for the museum. The curator needs to have appropriate professional museum training and the capability to work closely with the staff in the field.
- **Administrative Assistant:** is the person who assists both the director and the curator in all kinds of tasks and evaluates any improvement or development project.

- **Interpretation Department:** is responsible for the creation and preparation of interpretation media for communication. Interpretation manager will create an interpretation messages to the visitors. Product design manager will design effective media for communication through interpretation signs and exhibited presentations.
- **Human Resource Department:** is responsible for the recruitment and training all staff of the museum with routine evaluation for the progression of trained staff.
- **Financial Department:** is responsible for searching financial supports from both public and private sectors, as well as evaluate the financial status to ensure long-term sustainability.
- **Marketing and Research Department:** is responsible for setting marketing plans and public relation programs in order to create the cooperation among public and private organizations and then search for ways to attract all audiences into the site.
- **Maintenance Department:** is responsible the conservation of the museum in original condition. Any new addition and development to the museum building and its landscape setting should pass the permission and agreement of this department.
- **Security department:** is responsible for safeguarding the museum building, its objects and properties, as well as overall surroundings with high security protection.

The new administrative organization can decentralize the authority from the top-level to the lower-level and reinforce each department to independently manage its own task to achieve expected objectives and goals. These six departments that specialize in their own field of responsibility will support and coordinate to each other,

depending on the activity they wish to reach the objectives and goals of each assigned project. The Military Museum Department will have full authority for decision-making and act as one of the powerful representatives of the Military History Department to propose ideas of new improvement and development of the museum to the Directorate of Operations.

2. The Development of Goals and Mission Statement

Goal and mission statements should be established for new museum development and they can be used as a direction for strategic planning and management of the museum in the future.

The Museum Goal

The RTA museum aims at informing the general public about the history of the army, including the role and the significance of the army in safeguarding the nation. The RTA museum can be developed as an edutainment venue for general visitors with the focus on educating, entertaining and providing attractive showcases and exhibitions in the world of the army, meanwhile, preserving the historical significance of the place in long-term with self-sustainability.

Mission Statements

- The museum can be recognized as a tourism attraction in the field of the army with a variety of collections and exhibitions to attract a large number of local and foreign visitors;
- The number of museum collections and exhibited displays within the gallery produce strong regional network to inform local community in the significance of the Royal Thai Army in the protection and the contribution to the protection of the land;

- The development of displays and exhibitions through the introduction of innovative multimedia and interactive programs should be taken into consideration for future development;
- The provision of necessary accommodations into the museum site is required to provide assistance to all museum visitors and meet their satisfactions;
- The museum can be self-administration and independent management within its organization without any intervention from the army authority;
- The museum is everyone's property and can be developed as a learning and entertaining venue among the general public. The heritage significance of the museum can enhance the recognition on the protection and preservation of the place through time;
- By the year 2010, the army will have a well managed high profit network of efficient and cost effective museums which strongly contribute to its core goals of management.

New Museum Concept and Message

“The RTA museum, the principal source of military learning experience for all”

The new development of the RTA museum requires special consideration on the limitation of land use, as well as rules and regulations of the army that should be eliminated as much as possible. The current displays and exhibit presentations should be renovated through the installation of multi-media and interactive programs to educate and entertain visitors at the same time. The provision of necessary facilities is needed as the complement to fulfill visitor's satisfactions and learning experiences.

3. The Development of Museum Staff

The museum staff is the most valuable resource and they need to be trained for a better understanding in their scope of responsibility. The director would be responsible for the development of training programs and for the provision of professional advice and direction for the museum staff. Human resource department

acts a vital role for the recruitment and launches the training programs for staff in order to build a strong team by putting the right man on the right job. Trained staff with suitable ability in their own field and assigned mission can reinforce a chance to accomplish an objective. The staff should pass a psychological test from the board of Mentality Standard. Team spirit should also be promoted to all staff for building strong teams that support and assist each other. Trained staff should have the ability from the following:

1. Staff should have a thorough understanding about the museum building plan and the location of each exhibition theme in their minds. They know the place where each object and equipment is located and the application of interactive displays and multimedia presentation. It is the task of architects and interior designers to develop these exhibitions.
2. Staff should have a sensitivity to people and understand how they interact and respond to various physical circumstances within the museum. They can be able to communicate military ideas and exhibitions to all audiences and can anticipate the emotional reaction and behavior of visitors to military weapons, artifacts, photographs and various sorts of displays and exhibitions.
3. Staff should have a skill of problem solving and open their mind enough to identify the cause of problems while searching for an effective solution to resolve them. They should be patient to the problem they are facing in each situation and consistent in idea of problem solving.
4. Staff should have a sense of explanation and story-telling which is a valuable attribute for the success of communication and interpretation, aiming at attracting visitors to comply with the story or given information.
5. Staff should have a sense of communication to translate museum information to general audiences. Within each department, staff should communicate to each other to understand roles and scopes of responsibility of each department in order to support and give advice for further improvement.

Code of Conduct for Museum Staff

- All staff members are encouraged to share their professional knowledge and experts to both professional colleagues and the general public;
- Staff should ensure that any information given to visitors is accurate and relevant to the military context;
- Staff should not arrange or procure the acquisition of objects in contravention to the museum's acquisition policy;
- Staff should not undertake other paid or unpaid employment from external sources of the museum;
- Staff should not participate in selling, buying and acquiring objects similar or relate to the object collected by the museum;
- Staff should protect confidential information of the museum as well as information concerning the security arrangements and the source of museum collections. They should ask for a permission and agreement from the museum director if they wish to use any intellectual property of the museum either for the museum's interest or their own purpose.

Museum staff shall at all time be familiar, understand and act in accordance to the above ethical policy and code of conduct. It is the responsibility of the museum director and the head of each department to monitor all staff in order for ensuring that these policies are communicated and implemented by all members within the museum.

4. Target Audience Identification

Target audiences are clearly identified for the RTA museum to serve the right museum product to the right target group of visitors. There are four main target audiences as listed below:

- **Military officers, Government and Non-government officers:**

Because these officers can easily access into the museum, they are a largest group of visitors that the museum should retain them and cater special exhibitions, programs, events and activities to attract as well as motivate their repeat visits.

- **General public visitors:**

The new museum will open its door widely to welcome a largest number of general public visitors into the museum and reinforce them to explore the history and the significance of the Royal Thai Army in safeguarding the nation through attractive and innovative multimedia presentation techniques, including interactive programs to enhance their participations.

- **Students:**

The museum will have a daily contact with local schools and universities on regular basis to reinforce them to visit the museum. Principle but simple messages of the museum will be conveyed to all students to make them familiar with the army while attracting them through organized activities within.

- **Foreigners:**

Although overseas visitors are less in number of visit, the museum could improve its current interpretative signs and displays to be more comprehensible and meaningful for an interpretation by those foreigners. This can be done by the provision of several languages, especially English language, as an opportunity to communicate and promote the museum and its collection to different types of visitors. The museum will emphasize the development of public relation programs to be used as promotional tools to promote the museum worldwide and attract foreigners to visit the museum.

5. The Setting of Museum's Policies

Policies are created to be used as a standard of performance within a museum and as a direction for all levels of museum staff. The main goal of these policy settings is to develop the museum to meet the highest standard and reach the museum's objectives. Every department within the museum should be aware of and conform to those policies in order to create the best result of museum performance.

5.1 Policy for the Improvement of Interpretation

The current limitation and difficulty of accessibility into the museum site and will be eliminated as much as possible in order to facilitate convenient accessibility to the general public and then attract them to visit the museum. The role of the army and the significance of the military museum as a source of history information and military collection will be promoted through various channels of public relations for increasing number of visit among general public visitors. The public will be reinforced to consider the museum as their national property that needs to be conserved through time.

5.2 Display and Exhibition Techniques Policy

The evolution of the national army and the significance of the Royal Thai Army in the protection of the land are the main theme of the exhibitions within the RTA museum. The museum will provide two types of exhibitions:

Permanent Exhibitions: The existing permanent exhibitions that are classified into each exhibition theme will retain their exhibit functions as they used to. However, new techniques of exhibit displays in terms of multimedia presentations or interactive programs will be applied into the gallery for better communication and interpretation among visitors about the important messages of the army that the museum wishes to convey.

Temporary Exhibitions: Special exhibitions relate to the military history and the great and beloved King Rama V and IX of Thailand, as the founder of the Royal Thai Army in different period of time, will be presented within this exhibit section. The topic of exhibition can be changeable to suit each special event or topic of interest. This exhibition is necessary to motivate a repeat visit among visitors, while attracting new visitors to visit the museum.

5.3 Building Renovation and Conservation Policy

The museum can consider the renovation and improvement of the museum building and overall landscape within the area for future development. New additions and constructions of new buildings and facilities within the heritage place should ask the permission from the museum authority or the museum director for their agreements, suggestions, and any special considerations of the project. The museum should also invite specialists in conservation to provide information about the conservation techniques to all museum staff to understand a current condition of the museum building, as well as scopes or limitations of the conservation and development to the site. **Statement of Heritage Impact (2005)** provides a useful guideline for a consideration of new improvement and conservation as follows:

- New additions to the heritage place should not detract the significance of the heritage place, in fact; they should be compatible to the existing buildings and surroundings in terms of forms, materials, sizes, proportions, heights, setback, color, texture, plan and other details of the place.
- New works or constructions should be harmonious and sympathetic to the existing conditions of the building and the site while maintaining rhythm, orientation and proportions of the original state.
- The museum is encouraged to develop local policies and specific design guidelines in order to set as a standard of consideration for the conservation and development.

5.4 Staff Training Policy

The museum should have a variety of training programs available for curators and staffs that can lead to professional development among them. Training and professional development are crucial for the museum to move forward and achieve its plans for the future. The involvement in training activities helps staff to update themselves with new ideas and techniques, as

well as to reflect on and monitor the quality of services offered to its public in terms of museum visitors and various stakeholders that cooperate with the museum. The training development can reinforce individual staff members to contribute to teamwork, to gain satisfaction from the works that they have done and become enthusiastic in being a part of an organization that shows an interest in their professional needs and ambitions.

The museum can be developed as a learning organization that offers opportunities for staff to develop and take on new responsibilities while providing them with a support. All museum staff are allowed to practice and learn from the mistake they have made. Besides, they are encouraged to share experience and expertise among colleagues and to learn from each other through monitoring and mentoring. The museum from the director downwards can recognize the importance of training through a number of ways such as setting time for cross-department training, providing opportunities for practicing and self-monitoring, as well as encouraging and rewarding successful teams that accomplish the training objectives and goals.

As proposed by **Boylan and Woodland (2006, pp.15-37)**, training programs for museum curators and staff development should be classified as the following:

Training in the Role of Museum Professional

All museum staff should have an understanding of the history, purpose and present-day role of the museum. Training and career development guideline is needed in relation to the ethical values and rules that guide the museum's operations. Every staff should have at least a basic introduction to the history and the aim of museum's establishment so that they can relate their own works to the overall objectives. Curatorial staff and personnel in the field of museum research, the acquisition of objects and the care of collections will be trained to be familiar with the code of professional conducts and ethics, as

well as relevant international and national laws and regulations. Staff who have working in the area of museum's public service will also need to understand the ethical guidance and policy relating to their own areas of work and special responsibility.

Training in Collection Management

Museum collections are the most valuable resources for the museum. Proper caring and development of these properties is the most important responsibility among all staff members. Training and staff development programs will include a collection management policy, the acquisition and de-accessioning procedures, the numbering and marking of objects in the collections, loans condition reports, the storage and handling collections, the use of the collections in displays and exhibitions, and so forth. Museum staff needs to understand the museum's system, rules and practices for the catalogue numbering of objects so that these can be correctly identified and placed in the proper storage and type of collection. Building maintenance and security personnel also need to be aware of the principles and practices of good collection storage and the proper management and supervision of the collection within the museum.

Training in Inventories and Documentation

The advancement of computer based technology can assist the work of inventories and documentation much easier than before. Staff should be trained in cataloguing and documentation so that they can have a sufficient understanding of the inventory and documentation policies and practices of the museum. All personnel with collection-related responsibilities need to be competent in processing acquisitions, cataloguing and inventory control, including object numbering and labeling control of the collection.

Training in Caring and Preserving of Collections

The introduction of the caring and preservation of collections should be included in every training program. The museum director and other senior management staff will keep up-to-date with current development in relation to this important aspect of the museum's responsibilities through regular briefing or short workshops. The further knowledge for training will also include risks of collection management and the potential causes of deterioration management that need to be introduced to all staff members in their related fields.

Training in Displays and Exhibitions

The planning, design and implementation of permanent and temporary exhibitions should be trained to all staff members to understand proper design and strategy for displays and presentations that can facilitate a learning experience among visitors. The discussion between design and exhibition specialists, including other professional groups within the museum is essentially required for successful presentation development. For a modern museum, understanding the requirements of visitors with special needs, particularly disable visitors, is considerable important. Moreover, it is desirable to promote good communication, understanding and cooperation between different specialists and staffs to reach the museum goals.

Training in Caring of Visitors

The director and senior management staff need to understand the principles and practices in providing good and effective visitors care and service as part of their works, in order to help them in setting appropriate policy and strategic planning for the museum. The training programs include defining and understanding the visitor, types of visitors and their requirements, planning management in visitor services, as well as evaluation program for

visitor services. Public accessibility into the new museum will be more convenient and accessible to reduce levels of frustration and embarrassment. The new museum will reinforce visitors to have an informative, pleasant and enjoyable feeling of their visits with the opportunity to use facilities and services, and attend displays and exhibitions more closely than ever.

Training in Museum Education in the Context of Museum Functions

Every aspect of the museum and its activities should be considered as an educational opportunity where all museum staffs are involved in creating those opportunities for the visitors to learn and enjoy the museum collections. Museum staff should be trained to have at least basic information and the characteristic of the museum and its collections in order to communicate their knowledge and experience to all visitors.

Curatorial staff and educational staff should collaborate in planning the interpretation in the exhibitions for different target audience groups and consider how can the museum creates a positive learning environment for the visitors. The aim is that the museum's knowledge and collections are informed to the public and obtain their participation. It is important that all staff members should be trained to understand the museum's public services and educational responsibilities by means of short-session trainings and workshops as effective approaches for the training programs.

Training in Management

Museum training and staff development programs should include management program at all levels so that museum staff could understand at least basic managerial information and management solutions for each circumstance. The management programs include the setting of mission statement, planning procedures and policies, including strengths, weaknesses, opportunities and threats (SPSS) analysis program.

Training in Personnel Management

All staffs need to have a basic briefing and introduction when they are appointed on the museum general personnel policies and practices and on their own working arrangements. Staff handbook is a useful tool for all personnel to conform to the museum policies and regulations for better results of performance. Training programs should cover the museum information and training requirements of all museum staffs, both when first recruited and when there are some significant changes in the arrangements of new policies and procedures.

Training in Marketing

The potentiality to search for financial supports, either the government, the army department or external supports from other organizations and sponsors, is considerably significant for the viability and sustainability of the museum. Therefore, staff should be trained to have skills of marketing management in terms of marketing theory and practice, marketing mixes, strategic marketing planning, target audience identification, promotions and public relations management, and so forth.

Training in Museum Security and Disaster Preparedness

Security and safety are seen as the responsibility of everyone connected with the museum. Therefore, training and information sessions relating to security and safety need to be provided to all museum staff. The security and safety program for staff's training covers the strategic plan for museum protection to ensure security in display and exhibition rooms. This program educates staff about the application and installation of the Intruder Detection System (IDS), the Closed Circuit Television (CCTV), the Automatic Fire Detection and Alarm System (FAS), Access Control System (ACS) as well as the fire safety procedure (Boylan & Woollard 2006, p.35).

All museum staff members need to have a clear understanding of all important security systems and how to use them safely and efficiently in case of emergency. To be more effective, all trained staff should be encouraged to share and discuss their own experiences and the security protection of the museum, including the safety of personnel and visitors within the museum.

Training in Illicit Traffic Issues

Museum staff needs to have a sound knowledge of both the national and international legal and ethical obligations in relation to the museum's collections. Thus training staff in the field of legislations, museum ethics, acquisition of objects and de-accessioning procedures, is pivotal for the museum staff to perceive their scopes of responsibility within the museum.

5.5 Public Relations and Promotion Policy

The nature of the military museum is that people are unfamiliar with and they feel embarrassed to visit due to either the location of the museum within the military area or rules and regulations affected to the accessibility. Many people perceived that the military museums were built exclusively for military officers where they were irrelevant. This negative perception is generally occurred owing to the lack of public relations and promotional tools to communicate the actual information about the museum to the public.

In fact, this negative interpretation can be alleviate by means of effective communication through various sorts of public relations such as television programs, radio-broadcasting, brochures, newspapers, tourism books and magazines for example, aiming at conveying factual information of the museum to the public, meanwhile, attracting them to visit the museum.

The museum should consider the cooperation with other tourism and museum organizations as sources for public relations. The cooperation with Tourism Authority of Thailand (TAT), the Fine Arts Department, The Southeast Asian Minister of Educational Organization (SEAMEO-SPAFA), and other non-government organizations (NGOs) such as International Council on Monuments and Sites (ICOMOS Thailand), is essentially required to gain their support, promotion and advisory among these effective alliances.

5.6 Fund Raising and Financial Support Policy

Currently, the arrangements in place to support the RTA museum and its collections are informal and unsatisfactory. The army museum is opened to criticism for its lack of proper resourcing and for allowing the continuation of inappropriate management and support mechanisms. Generally speaking, the museum can not viable without the financial support from the government, the army department, including other external organizations and institutions.

In fact, financial support is the key to achieve successful museum management program and can assess the direction of the museum for future development. Several ideas of improvement in terms of interpretation, facility development, marketing management, as well as maintenance and conservation must be based on financial support. Both internal and external supports are identified as follows:

Internal Support: The museum should clarify its roles and significance and then ask for more financial support from the Directorate of Operations, the government sector and the Fine Arts Department for the viability or any improvement of the museum.

External Support: The museum should develop itself as one of the tourism attractions in Bangkok and coordinate with other powerful organizations such as Tourism Authority of Thailand (TAT), the Southeast Asian Minister of

Educational Organization (SEAMEO-SPAFA), and International Council on Monuments and Sites (ICOMOS) based in Thailand as potential sponsors so as to obtain their support and promotion for the museum. For self-sustainability of the RTA museum, considerably; the museum can gain financial support from the general public visitors through a charge of an entrance fee, an income from a cafeteria and a souvenir shop in order for the museum's viability.

5.7 Facility Management Policy

A proper facilities management plan takes into account the needs of the people who work within the museum, the improvement and preservation of museum's objects and exhibitions, as well as the needs of the people who visit the museum (Genoways and Ireland 2003, p.197). The new administrative plans and policies for the RTA museum will cover the management of museum building and its collections, including the management of visitor service facilities as indicated below:

Museum Building Facility Management:

The administration and facility staffs of the museum should have a detailed knowledge of the infrastructure of the building and its exhibition rooms and also an assessment of the maintenance record of the building. Displays and exhibit presentations within the museum should maintain the significant context and optimum environmental conditions necessary to ensure the value and preservation of the collections. The new design of displays and exhibitions will provide physical accessibility into the collections more closely with innovative multimedia presentation in terms of light, sounds, special effects, and interactive programs to facilitate the learning environment among all audiences.

To maintain the museum building and its collections in an original condition with friendly environment, the Heating, Ventilation, and Air-Conditioning systems (HVAC) should be installed for controlling air ventilation, temperature and humidity that can cause the deterioration to the museum's properties.

Cleaning performance specifications for contract staff must be stated as cleaning action policies to educate proper housekeeping and prevent any chemical use that can be harmful to exhibition objects and displays. For the protection from any damage to the museum building and the collections either human, nature or animal as causes of deterioration, the installation of a high-quality fire protection system will be introduced to protect museum staff, visitors and the museum building itself from any harmful incident. The sprinkler heads that release water when detecting heat and the smoke detector with heat sensors should be installed within each exhibition room for a security reason of the museum.

For animal as cause of decay to the museum building and the collection, Integrated Pest Management (IPM) program will be trained to all museum staff to understand basic prevention of the museum's property and can be able to identify the source of deterioration. All staff members will be trained in monitoring pests both direct observation and sampling method. Direct observation is by means of looking through the collection for sign and source of insect infestation. Sampling method can be done by setting and carefully monitoring insect traps throughout the museum. Any pest found in and around the traps should be identified and documented so that the museum can identify any occurrence of potential problem.

Security staff should have special responsibility in the safety of overall museum property and they will be trained on how to secure and safeguard the museum with effective security systems and procedures. Museum security can be developed through following a checklist that includes the assessment of

possible and potential risks by monitoring roofs, walls, windows, doors and floors for their strength and durability, including security issues in terms of fire, theft and accident preventions. To assist security staff, alarm systems that monitor indications of theft, fire and flood with infrared detectors will be installed into all museum exhibition rooms. To enhance security protection, the closed-circuit television (CCTV) should also be installed within the museum to aid the museum's security staff in safeguarding the museum properties.

Visitor Service Facility Management

The development and the provision of visitor service facilities are currently in a state of necessity for the new museum to ensure that the content of museum's information is understandable while the quality of service has met visitor's appreciations. Effective facility provision can reinforce public accessibility into the site and assist their interpretations. Basically, good visitor service facilities can motivate visitors to have more understanding about the army and the significance of the military museum in a broad context, aiming at creating appropriate learning experience among them.

The RTA museum should create pre-visit information to attract potential visitors. These can be done by means of the publication through the use of promotional posters, brochures, leaflets, newspapers and the advertisement in tourism books and magazines. Television, radio and internet website are also potential as a preliminary information base about the museum to the general public. According to the survey results from the military officers and the general public as the museum visitors, what they required the most for new development of the RTA museum is concerned the provision of basic amenities to be available on site. They are parking facility, theater, visitor center, dining area, souvenir shop, restrooms and recreational area that all of which are needed to be catered as additional accommodations, aiming at adding value to the visitor's learning experience. The necessity of facility is indicated as follows:

Parking Facility: Although there is a spacious parking-lot in front of the museum building, it was reserved exclusively for military officers who worked for the RTA Headquarters. As a result, there is no available space to accommodate public vehicles of those museum visitors. Therefore, the museum should make every effort to negotiate the army department for the availability of parking space or propose the excavation project to build underground parking-lot and facilities to the museum director and senior staff for an agreement.

Theater: The RTA museum should consider a theater as an important facility within the museum because it can motivate a sensory perception among audiences in terms of the history of wars and the significant role of the army in safeguarding the nation through video-recording, films or cinematic presentations. In this room, audiences will have more understanding about the role and responsibility of the Royal Thai Army in a broader perspective, meanwhile, enhancing them to interpret the army and the museum in a more appropriate perception.

Visitor Center: The museum should provide a space for visitor to obtain the museum information. This information center should be easily accessible and provide basic information and directory of the museum to all visitors in the form of brochures, leaflets and service personnel to answer the question.

Dining Facility: The museum should consider the provision of a dining area or a cafeteria to be available as additional accommodation for visitor service. If the museum is not specializing in food service, it should consider cooperative agreements with one or more local food service business. The museum can provide available space to these businesses and they, in turn, can display brochures, posters, and any museum replica to attract visitors. Such an arrangement can build good relations with the local business community while providing more exposure for the museum itself. In fact, dining facility is profitable and as a source of income for the museum.

Souvenir Shop: The remembrance of the visit can be kept through various sorts of souvenir such as postcards, pens, pencils, badges, memo-pads, mouse-pads and so forth. The availability of souvenir shop can attract large number of visitors and remind them their museum experiences. The souvenir shop is an in-house source of potential financial support for the viability and sustainability of the museum.

Restrooms: The current availability of toilets within the museum building and associated area is insufficient, thus new addition of a larger number of toilet is essentially required to accommodate an increasing number of visitors at the site. Regular cleaning service and maintenance are also needed for maintaining healthy and hygienic conditions.

Recreational Areas: The nature of people is that they want a space to express and exchange opinions and ideas with others. The RTA museum should provide a recreational space for all types of visitors to let them participate and share ideas to each other. The advantage of the recreational area is that visitors can freely express their point of views and give advices or comments for future improvement of the museum.

5.8 Maintenance and Supervision Policy

The museum should ensure that building and associated area are secured with effective security systems and procedures. Regular inspection and maintenance are essentially required for the protection of overall museum property. The museum building must be supervised in its strength and durability through regular inspection of roofs, ceilings, exterior walls, interior walls, built-in panels, floors, doors and windows, as well as materials that are in a stage of deterioration. An Integrated Pest Management (IPM) program for pest control management should be launched and trained to all staff to be able to identify the source of deterioration and recognize how to prevent the damage from animals as cause of decay.

To maintain environment and atmosphere of the museum in appropriate condition that not harm to the museum objects and displays, air ventilation, temperature and humidity should be regularly inspected and controlled through systems known as Heating, Ventilating, and Air-Conditioning systems (HVAC).

Museum directors and managers should have a detailed knowledge of the museum building in terms of building construction, floor plan and internal layout, electrical systems, heating and air-conditioning systems, plumbing systems and any necessary building information. Furthermore, they should also be able to assess the museum's maintenance procedures and schedule of maintenance work. Generally, inspection and maintenance schedules are useful to prevent potential problems and avoid expensive repairs or renovation works through serious deterioration.

5.9 Visitor Management Policy

The RTA museum and individual staff member throughout the museum will recognize the importance of museum visitors and place them at the center of the museum. The museum directors and curators should set policies and strategic plans for providing effective visitors care and service. All levels of museum staff should have an understanding in terms of types of visitors, their physical and psychological needs, visitor service management, as well as the evaluation of visitor service to meet the museum's objectives. Effective visitor services can maintain level of appreciation among visitors, meanwhile, motivating positive perceptions and interpretations into the museum.

The new RTA museum will independently manage and operate within its own rights without any intervention and regulation from the army to conform with. The access by general public visitors will be more convenient in order to enable them to have pleasant and comfortable visit as well as enjoy the exhibitions within. The new museum will provide visitors the opportunity to learn, research and study the collections through edutainment displays and

exhibitions. Moreover, they will be supported to use various available facilities and service, including communicating and sharing their ideas with the museum staff.

For effective carrying capacity of the museum building, the museum should set a timing schedule to have a proper number of visitors each day. The advance reservation of the visit is considerably required to set appropriate timing schedule for each group of visitors, aiming at catering the best quality of service that meet the need of visitors and their satisfactions.

6. Conservational Management

The Requirement of Information for Policy Development

Before assessing conservation policies to retain the historic significance of the museum and its surroundings, it is critical to understand the whole fabric of the place as well as information related to the place to create potential conservation policies and plans that are compatible to all requirements. Information needed to be taken into consideration for policy developments are listed as follows:

1. Requirement for Retention of Significance

- Physical attributes of the RTA museum building should retain its authenticity and fabric without adding any intrusion to the museum and adjacent area;
- The museum has its own historic development with the unique style of decoration between Thai and European architectures that need to be conserved through time;
- The museum has been performed as an edutainment venue and research center in military history and army information from the present through the future;
- The location, the setting of the museum and all components should be conserved their historic significance in long-term sustainability.

2. Client's Requirements and Resources

- Many visitors require their participations into the museum building for a better understanding of the army history and as the way to fulfill their museum experiences;
- According to visitor's requirements, they need more facilities and amenities to feel such participation and facilitate their accessibility to the site. The provision of more facilities such as a visitor center, a cafeteria, a souvenir shop, and other necessary amenities should be taken into a consideration for a new plan of any museum development.

3. Physical Condition of the Museum and its Vicinity

- Physical constraints of the RTA Headquarters area induce the difficulty for construction of new building or new addition into the site due to the fact that new construction into the area is impractical as against military laws and regulations;
- Adding more floors to the museum building is impermissible because this building has been registered as the National Heritage List in Thailand by the Department of Fine Arts in 1992 for historic building conservation.

4. External Requirements

- The current financial supports and funds from the military organization is inadequate for the maintenance and conservation of the museum building. Thus external funding sources from other organizations and stakeholders are essentially required for museum's management and its viability.

Developing the Conservation Policy

As observed the requirements for maintaining the significance of the place, owners and visitor's requirements, physical condition of the place, as well as available resources of the RTA boundaries, the development of strategic conservation policy is needed to retain and reveal the significance of the place in long-term sustainability and meet all requirements from those participants of the museum. The provision of

sufficient facilities such as a parking lot, a visitor center, a cafeteria and a souvenir shop should be considered at the stage of assessing conservation policy and development. The creation of more accommodations is aimed at increasing number of visit and transforming the museum to be an educational venue and research center on the military context for the general public.

However, because of spacing constraints and all buildings within the RTA Headquarters compound are equally significant and can not be removed, building new facility building into the place is seemingly impossible and impractical. To protect cultural heritage significance of the place, any new project proposal for museum and amenity development should consider the retention of the whole fabric of the place in original condition as much as possible without compromising any intrusion of new addition to devalue or devastate the significant fabric and components of the museum site.

Statement of the Conservation Policies

1. The Policy for retention, declaration, and reinforcement of heritage significance of the RTA museum and all components with appropriate use of available resources.
2. The policy for site identification and requirements for extensions of facilities provided to general visitors as new compatible development to fulfill the continuation of the significance of the place.
3. The policy to advocate accessibility, participation, communication services for all audiences and participants with the provision of facilities and accommodations to satisfy those requirements and as the addition to their museum experiences.

4. The policy for building conservation of the museum by removing all damage works while introducing new techniques of renovation into the place but retaining the whole elements and fabric of the building in an original condition.
5. The policy for reinforcing significant attributes of the setting and planning of all components in the RTA Headquarters compound, emphasizing the relationship of the whole components in the area.
6. The policy for reinforcing long-term conservation and management with the cooperation by all related organizations for their funding support to maintain and develop the stability and the well-being of the RTA museum.

Maintenance and Supervision of the Conservation Policies

As stated above, these proposed conservation policies should be applied as the guidance in planning and management for the museum and its components in the RTA Headquarters area, aiming for the retention of all fabric of the place and the conservation in long-term. Nonetheless, it is critical to monitor the record of actions in accordance with those proposed conservation policies. Besides, periodic reviews of those policies are recommended and essential for the place itself for assuring that all proposed conservation policies are effective and practical in any circumstance.

The Objectives of the Conservation Policies for Future Development

1. To Meet the Satisfaction among Owners and Visitors Requirements

The Royal Thai Army, the owners of the museum and overall buildings within the RTA Headquarters compound, gain lots of benefit in conserving and maintaining their valuable buildings for long-term sustainability. This is because appropriate conservation can be able to preserve the authenticity of all elements of the entire heritage site and also retain their historic information through the future. Similarly, the provision of necessary accommodations to fulfill visitor's requirements is value-

added and beneficial to the place itself as the way to reinforce positive interpretation among museum visitors.

2. To Decrease the Community Constraints

As the main problem of the RTA museum is concerned the difficulty in public accessibility to the site affecting to the unsatisfied number of visit by the general public, the new conservation policies advocate the more participation among those visitors with the provision of activities and amenities for them to take part and pay their attention to the site. If effectively operate, their prior tensions in accessibility to the place will be reduced, while positive interpretation could be increasing in accordance with the new setting of accommodations.

3. To Cooperate with those Statutory Constraints on Military Regulations

As the area of the RTA Headquarters followed the military regulations and the guideline book namely '*Procedure of Army Contract in Building Construction*', the new conservation policies will follow those regulations by avoiding any intrusion that can be affected to the fabric of the museum and its components. Indeed, the strategic conservation policies will induce the fulfillment for the RTA area as a whole for conserving and retaining their cultural heritage significance in long-term.

4. To Search for Sources of Funding Supports

The new conservation policies are not only called for the cooperation by the RTA staff members but also the participation among other participants such as the museum association, the Fine Arts Department, school and university institutions, as well as other non-government organizations in order to obtain their funding supports in the development and conservation of the RTA museum in long-term sustainability.

5. To Reinforce Positive Interpretation among All Museum Visitors

In order to reduce former misperceptions to the RTA museum by the general public, the new conservation policies and plans will transform those negative perceptions into the optimistic interpretations by promoting the RTA museum as an educational venue and research center on military-related information to the general public. In addition to this, the provision of attractive and enjoyable activities for participations is needed to fulfill visitor's requirements with adequate accommodations to be catered onsite.

7. Forward Plan for the New Museum Development

In general, military museums have to grow and develop in order to meet the highest standard of operations and to meet the interests both museum staff and general public visitors. The museum should bearing in mind that the paucity of financial supports and military constraints has no impacts to their thriving opportunity. The museum should rather consider that the improvements in terms of catering operations, displays and presentations, facility development, numbers of museum staff, fundraising through entrance charges and shops, as well as commercial sponsorship to provide financial resources, are all considerable issues to make the museum more efficient and more attractive to the public (Forty 1987, p.73 quoted in Thwaites 1996).

To be more effective in museum operations, the RTA museum requires a forward plan to be set as a framework and to ensure its effectiveness in museum operations and managements. As stated by Ambrose and Runyard (1991), the forward plan is a creative process which will help the museum to develop a future strategy of management and interpretation, as well as to improve the quality of caring for its collections and the quality of service to its visitors.

The forward plan for the new RTA museum will cover the re-development of interpretative management and tools for communication to be more effective, comprehensive and accessible to all types of audiences. Moreover, the master plan of

underground facility development project is also being proposed for the RTA museum to use as the forward plan and strategy for future development.

Interpretative Management

Generally, the management of interpretation for the military museum is much more difficult than any other museum and requires a conscious effort of the professional interpreter to create effective tools of interpretation to be more accessible and meaningful to others. As mentioned by [Aplin \(2002, pp.35-37\)](#), interpretation is a key tool in adding value to visitor's experiences in both educational and entertainment terms. In general, it is useful to promote the use of heritage in a sensible way and to bolster the understanding of heritage significance of the place with a sense of identity. The new RTA museum will set new theme and concept of the museum to be more comprehensible and accessible while improving presentations, exhibitions and other necessary facilities to educate, entertain, and fulfill visitor's requirements at the same time.

Theme and Concept

The RTA museum is the repository of military collections that reflects the crucial role and the significance of the Royal Thai Army in safeguarding the nation from the past up to the present. The architectural attribute of the museum building in Thai and European styles of decoration provides a couple considerable messages: first, a personal preference of King Rama V in European architecture with his initiative idea for the construction of the building for educational purpose. Secondly, an adaptive reuse of the building from former academic function for the cadets into the military museum function of the present that can be able to retain the architectural characteristic and the significance of the place in an original condition. The classification of exhibition room is to illustrate the historical evolution of the army through various sorts of military weapons and equipment such as flags, uniforms, insignia and many associated appliances, aiming at motivating the public awareness in the significance of the army and heroic deeds in national protections in time of wars.

The museum provides the public a convenient accessibility and participation through various kinds of interactive programs and activities in order to reinforce the perception that the museum is everyone's property and as a primary source of military learning experience for all.

Displays and Exhibitions Development

Generally speaking, museums and interactive exhibitions have a crucial role in communicating to their visitors a sense of the identity of the place they are visiting. **Uzzell (1996, p.220)** noted that military museums provide a public record of the history and achievements of the regiment and act as a socializing agent to inculcate the value and tradition of the army to all audiences. The new displays and exhibitions within the RTA museum will emphasize effective presentations in which they can entertain as well as inform visitors at the same time. Entertainment can capture the visitor's interests and set a scene for information acquisition in order for the possibility that interpretation can convey important messages about the site to visitors primarily interested in entertainment and enjoyment.

The current old-fashioned and object-based displays of traditional military museum within the RTA museum will be renovated by the installation of innovative multimedia presentation tools and techniques in terms of light, sounds, special effects and interactive programs into the exhibit showcases and displays. New displays will be incorporated with other additional interpretative features such as animated-figures with diorama presentations, interactive videos and simulators. New presentation techniques are, in fact, important for the museum to reinforce visitor's interpretations and provide extended opportunity for visitors in their learning experiences. The new development of edutainment media can make the museum's presentations more meaningful, comprehensible and accessible to all types of audiences.

Interpretative Tools Development

There are a variety of effective channels of interpretation both on-site and off-site to communicate the principal ideas on the significance, the value and what the museum has offered to its audiences. The RTA museum is in the state of necessity to develop its interpretative tools to communicate museum's information and other associated issues to inform visitors to have actual understanding about the place. Interpretative tools that must be available for the museum are identified as the following:

- **Interpretative Signs:** On-site signs are the important tools for the museum in providing information and details of the site to the visitor. Carefully conceived and well-designed signs are a key management tool for keeping visitors on designated routes and stepping apart from sensitive areas (Aplin 2002). Effective signs can reinforce visitor's understanding about the place and its purposes while promoting heritage-friendly behavior and appreciation among them. The RTA museum will create map or directory to show a location of the museum and its classified exhibitions at the entrance hall for all visitors. Information-given signs will be posted in all important areas where these signs are easily accessible by most visitors. Exhibit showcases and presentations will be improved by the installation of information signs in order to provide heritage of object features in details for learning opportunity. On-site signs will be placed in appropriate location with eye-catching and attention-grabbing design that can accommodate presentation and interpretation for all users. The provision of other languages rather than Thai, especially English language, will be available at all interpretative signs for foreign visitors as well.
- **Printed Material:** Various sorts of printed material to convey both on-site and off-site information of the museum will be available for all visitors to be used as a medium of interpretation to the RTA museum. The new form of brochures will be re-designed and re-published to make the information about the museum and its collections more understandable and accessible to visitors of

all ages. Brochures will be designed as booklets that visitors can retain them as souvenirs of the visit. Leaflets or single sheets will be available both on-site and off-site to provide brief introduction of the museum to the public. These printed materials are brief, succinct and eye-catching layout to attract people to visit the site. The RTA museum will coordinate with other tourism and heritage organizations such as Tourism Authority of Thailand (TAT) and International Council on Monuments and Sites (ICOMOS) based in Thailand, for example, to promote the museum through their organizational publications. As guide books and travel magazines are considered as valuable sources of public relations, these printed materials will be published in several languages to provide the museum's information to all foreign visitors as the way to promote the museum.

- **Professional Guides:** Guides or voluntary guides will be increased and they will be recruited from out-sources to accommodate a large number of museum visitors. These guides will be trained to be professional in their fields with an ability to provide learning and entertainment experiences to all visitors. Professional guides should be able to adapt the content of their presentations to each group they lead in association to age and sex composition, geographical origin and their interests. Effective guides should be thoroughly understandable and knowledgeable about the site and can attract visitors to pay attention to the contents they are interested in. Moreover, they can be able to communicate and inform the important messages of the museum and its collections in both Thai and English languages to facilitate local and foreign visitors.
- **Audio-Visual Aids:** Audio guide is an additional appliance that helps museum guides in providing information about the site and its collections. Audio-cassette recorders will be available for all museum visitors to rent or hire while walking around the museum and stopping at designated points to listen to the tape and view a point of interest. The audio tapes will be provided in several languages to accommodate different types of visitors.

- **Internet Websites:** As [Aplin \(2002, p.46\)](#) stated, websites are an exceptional and powerful off-site medium for interpretative information and advertisement. The benefit of using websites as a channel of interpretation is that they allow visitors to access much more detailed information than any other informative signs or printed material. The RTA museum will develop its own website to be more accessible and up-to-date to the current displays and exhibit presentations, as well as special exhibitions that the museum would like to offer or attract potential visitors online. The virtual tours of the museum galleries and interactive programs to motivate visitor's participations will be available online to enhance an opportunity of visit among them.

Facility Provision within the Museum

Visitors should be made to feel welcome and comfortable throughout their visits so as to motivate their repeat visits and recommend the museum to others.

Therefore, necessary facilities should be available at the museum site for all visitors to meet their requirements and satisfactions. Effective facility provision can reinforce public awareness and interpretation about the site they have been, including adding values to their learning experiences at the same time. According to the survey results from both military officers and the general public as museum visitors of the RTA museum, a theater was chosen as the most required facility to be catered within the museum, followed by a visitor center, a souvenir shop, a parking-lot, toilets, a temporary exhibition area, a cafeteria and a recreational area. The RTA museum recognizes the need and the significance of the facility provision and will plan to provide necessary facilities as listed below:

- **Theater:** The museum will provide a space for a theater that can accommodate visitors around 100 audiences. Highly innovative presentation of cinema and video screening will be fully installed with light and sound systems to illustrate the history and the significance of the army.

- **Visitor-Center:** The visitor-center will be located at the core of the museum building on the first floor where visitors can obtain information about the museum, collections and available services. Staff will be trained to communicate in several languages for various kinds of visitors. A museum directory, brochures and promotional leaflets will be available here at the information desk.
- **Souvenir Shop:** Museum shop will be available next to the exit of the museum to provide opportunities for visitors to take home a souvenir of their visits. This facility can help the museum to provide more information about the museum and its collections, meanwhile, serving as a point of personal contact with staff and providing a sufficient income to the museum.
- **Parking-Lot:** The RTA museum will provide more parking facility to accommodate various kinds of public vehicles. Owing to the limitation of available space, the parking facility is planned to be built underneath the museum building.
- **Toilets:** In order to accommodate a large number of visitors, toilets will be available in a more sufficient number with clean and easy to access. Special toilets for disabled visitors will also be catered at the site. These toilets will be cleaned and checked on a regular basis.
- **Temporary Exhibition Area:** The museum will search for one or more spaces for temporary exhibitions with changeable themes and concepts that relate to the military contexts. The value of this exhibition type is that it provides an opportunity to attract visitors to revisit the museum next time while attracting new visitors to the museum who have special interests in the topic of the exhibition.

- **Cafeteria:** The museum will cater food and drink facility to accommodate the group of visitors before or after the visits. The cafeteria will be well-designed in friendly atmosphere and convenient to access. Visitors are encouraged to use catering facilities for their refreshments with good quality of service. As same as a souvenir shop, this food and drink facilities can create additional income for the museum.
- **Recreational Area:** Visitors may need a space to communicate and share ideas of the visit, including giving comments and suggestions about the museum and its collections. To understand what the public have perceived and interpreted the museum, a recreational area with lively programs of events and activities are to be created to enhance a sharing opportunity and participation among these museum visitors.

Public Relation Programs

To make the RTA museum to stand in the eyes of the public depends on the development of a strong relationship between the museum and its audiences. It is critical to create a positive image of the museum in terms of its significance, achievement, and a variety of collections and exhibitions that the museum wishes to promote and convey to visitors. Public relations has a strong link to the interpretation tools and it can be done in a number of ways. The managements of public relations for the RTA museum are identifies as the following:

- **The Development of Museum Staff and Educational Programs**

It is the responsibility of the human resource department and the educational department within the museum to make the museum's collections accessible and meaningful physically, emotionally and intellectually (Genoways and Ireland 2003). The museum will create various types of programs to serve and motivate public participations through exhibitions, gallery guides, hands-on displays, demonstrations, guided tours, films,

lectures, workshops, volunteer training, and many sorts of activities for educational programs. All museum staff members are required to get involve in building special events and activities for visitors. The museum director and curators have a key role in ensuring that their personnel are well-trained to develop a good relationship between the museum and general public visitors.

- **The Development of the Publication System**

The RTA museum will set the public relations team and marketing team to manage the publicity and marketing of publication. Considerably, the news media, the broadcasting media and the publication have an important part in assisting the museum develops its reputation (Ambrose and Paine 1993, p.113). Brochures, promotional leaflets, organization press-releases, appearance on newspapers, tourism magazines and guidebooks are all effective channels of publication distribution where the museum can emphasize positive success and achievement. The production of communication strategies through these publication media will update and check on a regular basis to inform new additions or latest information of the site and also to ensure the accuracy of information given to the public.

- **The Development of the Outreach to the Target Group of Visitors**

As the RTA museum has seen the opportunity to promote through various sorts of distribution channels for public relations, therefore; the target group destinations such as domestic and international airports, hotels, universities, schools, Tourism Authority of Thailand (TAT) and other tourism organizations and information centers will be used as distribution channels to communicate prospective visitors outsource. Internet website is also considered as an effective channel of distribution, thus the RTA museum will develop its webpage to be more attractive and accessible for online visitors.

- **The Development of Business Partnership and Alliances**

The RTA museum can not work in isolation and the cooperation with other organizations on projects or programs is considerable significant to provide the opportunity for success in museum management. To achieve positive aspects of the museum's works and interpretation, as well as build up support, the RTA museum will cooperate with other museum organizations, tourism organizations, educational institutions, special interest societies, including non-government organizations to be input as museum's memberships and alliances. To do this, the museum will build a strong relationship with the government sector, Tourism Authority of Thailand (TAT), the Fine Arts Department, the Southeast Asian Minister of Educational Organization (SEAMEO-SPAFA), International Council on Monuments and Sites (ICOMOS) based in Thailand, tourism operators and travel agencies, local public and private schools and universities, as well as local residents to ensure supports and promotions from these potential organizations and institutions in long-run.

8. Option Consideration for the New Museum Development

Because of its historic significance, the RTA museum needs to adopt a strategic conservation plan in order to retain the overall characteristics of the place as original state as possible. Meanwhile, in order to maintain the museum's economic viability, it also needs to search for ways to improve amenities within the site to meet general public's interests. In the context of understanding the place for creating conservation plan, Kerr (2000, p.24) stated that a proper understanding of the nature and degree of significance of the various components of the place may help identify areas where adaptation, new construction, and even demolition are appropriate, moreover; a conservation plan is a guide to future action, it is therefore a beginning, not an end. Considering the opportunity for future development of the RTA museum and proceeding in accordance with new conservation plan and policy, there are several options to improve the RTA museum without any alteration to the place, such as

constructing a new facility building near the museum, relocating the museum to a new location and so forth. In this research, the construction of new facilities under the ground within the RTA museum area is proposed as one of the options for improving museum's displays and exhibitions, and then catering necessary amenities into the site. This recommendation is aimed at retaining the originality of the overall fabric of the museum building and its associated area.

9. Project Proposal of Underground Facility Development

According to this research, the underground facility development has been chosen from general public visitors as one of the most appropriate and considerable project proposals for new addition and development of the heritage place of the RTA museum. This chapter provides detailed information about the purpose of the project, scope of the project, the provision of facilities, including the illustration in the forms of lay-out plans, elevations and perspectives of the project. The analysis of new development through SWOT analysis and expected advantages from the development will be analyzed to ensure the effectiveness and potentiality of the museum after new renovation has completed. The statements of heritage impact are identified to evaluate the impacts of the new development that can be occurred to the heritage significance of the place. The opportunity for future development of the museum is also given to discover the possibility to develop the RTA museum to meet both staff and public interests and as one of the most attractive tourism destinations in Thailand.

1. The Purpose of the Project

Due to the fact that the RTA museum was located within the military area of the RTA Headquarters, there is no available space left for new construction or new addition into the museum to improve its effectiveness in facility services. The land use limitation is obscured the development opportunity of the museum because new building construction and new addition are not allowed as against army rules and regulations.

In order to retain physical attribute of the museum building, landscape setting and associated area, the underground facility development project is launched as a considerable option for new improvement and development of the RTA museum. This means that necessary facilities and services are to be setup and situated underground, hence the museum can retain its authenticity through time. The purposes of the underground facility project are as follows:

- To conserve the historic and heritage significance of the museum and associated area in an original conditions as much as possible without any deterioration to the fabric of the place;
- To retain physical attributes and conditions of the museum building and overall surroundings to be intact while supporting self-sustainability for the museum;
- To meet statutory requirements, as well as rules and regulations of the military organization while working within procurable resources;
- To meet general public interests in their requirements of additional accommodations and services to enhance their learning experience, aiming at attracting them to visit the museum and increasing number of visit to the place.

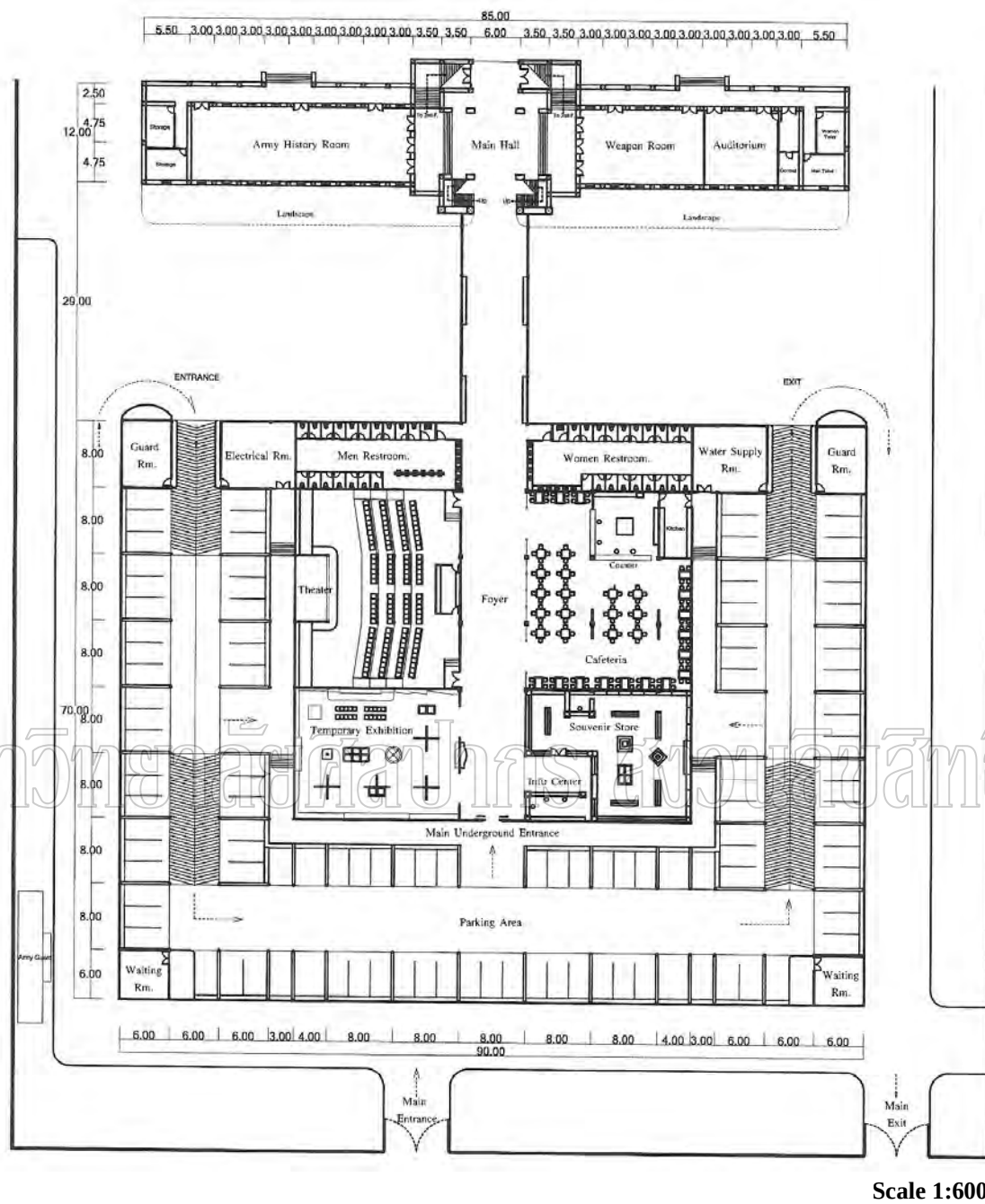
2. Scope of the Project

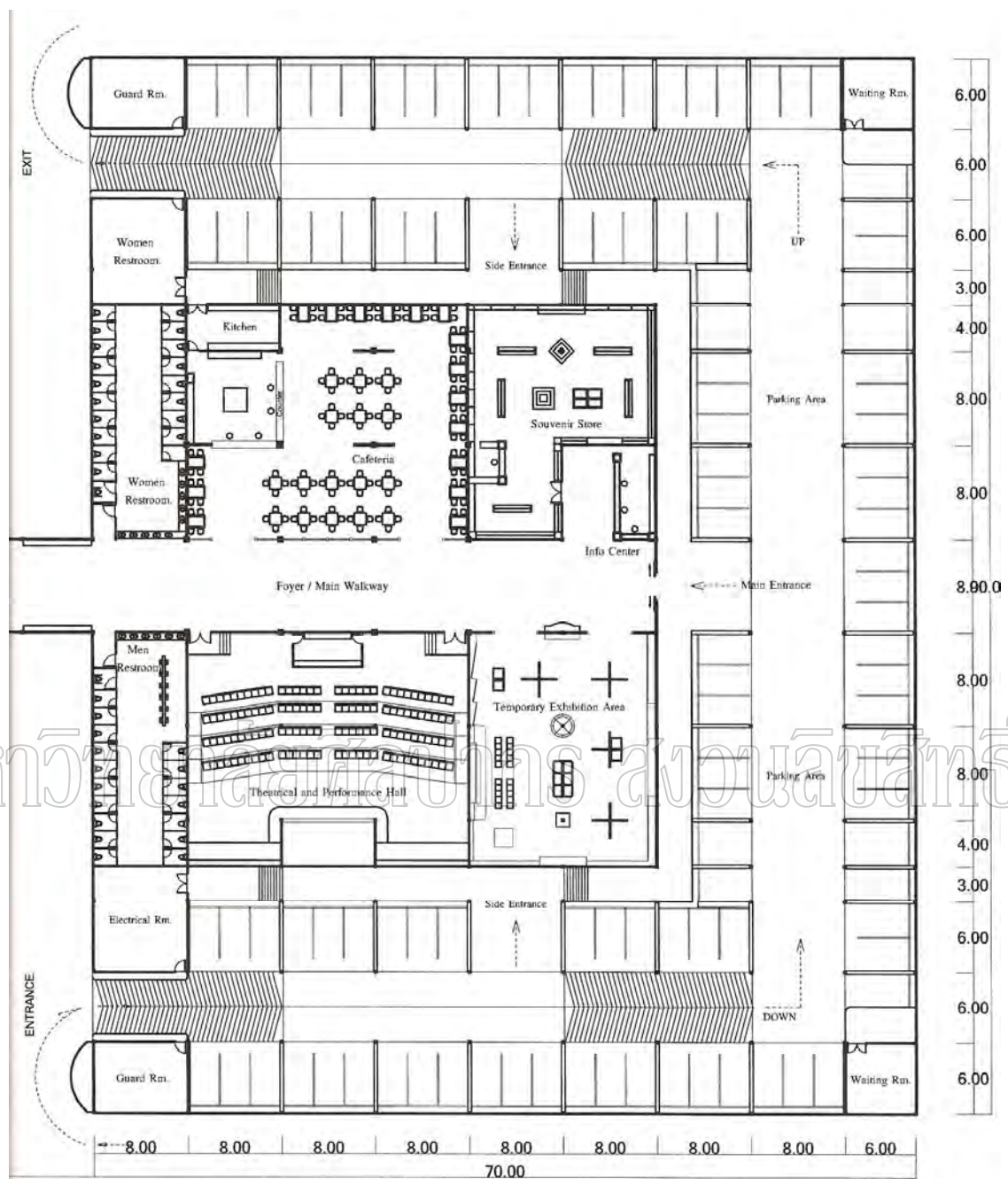
The museum building will retain its architectural attributes, its collections, the classification and function of each exhibition, including overall fabric in an original condition. However, current exhibitions are to be renovated by means of the installation of multimedia presentation techniques in terms of light, sounds, special effects and interactive programs to reinforce better interpretation and then add value to visitor's learning experiences. The underground facility project covers the area of the main road between the museum's façade and the courtyard to be excavated for facility development underneath the museum building.

The existing courtyard, in front of the museum building around 6,300 sq.m, will be burrowed for the construction of parking spaces and additional amenities therein. The project can accommodate various types of public and private vehicles, including the provision of necessary facilities to be constructed within. New additions to the museum are compatible to the current functions and conditions of the place and these will be approved by the Directorate of Operations to consider as an appropriate and practical option for the museum development.

3. The Construction and the Provision of Underground Facilities

The construction of underground facility project encompasses the area of a large courtyard around 70 meters in width and 90 meters in length with the total area of 6,300 sq.m (1.55 acres). Considering appropriate and convenient accessibility both general public users and vehicles, the underground construction requires minimum depth at 4 meters. Instead of excavating as much as that depth from the ground level, this area will be burrowed approximately 3.5 meters for the purpose of parking and facilities development underneath the courtyard. Meanwhile, the existing courtyard will be lifted-up at 50 centimeters from the ground level for underground heat and air ventilation. For better understanding about the project proposal, the illustrations are given below.





Scale 1:400

Fig.113 Underground Development Project

Illustrated by: Supachokeaueychai, T.

Information Center: Located near the underground main entrance, information counter service provides museum's directory and general information of the RTA museum through brochures and promotional leaflets that can be picked-up for free. Group or individual visitors will be notified in advance about a museum's directory, an exhibition theme, special events and programs, on-site accommodations, theater's time guide, including general museum rules and tips of the visit.

Souvenir Shop: In addition to free brochures and leaflets, some visitors may need other museum's memorabilia to be kept as a souvenir of visit. The souvenir shop, called '*RTA Memorabilia Store*' offers various sorts of stationary, key chains, caps, badges, postcards, army-related literatures, book and magazines, as well as other local handmade products. This shop is located near the main entrance where is also used as the main exit. Here, visitors can enjoy walking or browsing around the souvenir store while waiting for their groups or friends.

มหาวิทยาลัยศิลปากร สงวนลิขสิทธิ์



Fig.116 Illustration of Information Center and Souvenir Shop

Illustrated by: Supachokeauychai, T.



Fig.117 Illustration of Temporary Exhibition

Illustrated by: Supachokeauychai, T.

Temporary Exhibition: In order to attract a large number of visitors and satisfy their special interests, a temporary exhibition is developed to fulfill those requirements. The exhibition will follow trend or topic of interest of the present. For example, as King Naresuan is one of the most beloved kings in Thai Kingdom who had fought with Burmese troops and defeated the war to proclaim peace and sovereignty, King Naresuan the Great will be used as a theme for temporary exhibition to celebrate his heroic performance and accomplishment in defeating Burmese enemies. In this exhibition, visitors can obtain historical information about the king and the history of war through diorama displays, model replicas of gun cannon and weapons in the glass showcases, including interactive programs and short cinema film that can educate and entertain them within the gallery.

Theater: The underground theatrical hall or cinematheque can accommodate up to 128 audiences for each show. Here, the history of the Royal Thai Army and the establishment of the RTA museum will be introduced and illustrated through video presentation to all visitors to have profound understanding about the army and its responsibility in general

context as the way to prepare them into the army reign. Military performance from the group of well-trained personnel with impressive three dimensional stage background are also performed in this theater with light, sounds and special effects to entertain all museum audiences.



Fig.118 Illustration of the Army Theater

Illustrated by: Supachokeaueychai, T.



Fig.119 Illustration of Underground Cafeteria

Illustrated by: Supachokeaueychai, T.

Cafeteria: There is a large cafeteria available to accommodate a large group of visitors up to 128 people. Regardless the time of visit either in the morning or the afternoon, visitors can enjoy a variety of foods and refreshments available in affordable price. This dining facility will be decorated in Thai modern classic style where military history, pictures and various sorts of army equipments are to be installed on the decorative signboards and interior panels of the dining area for learning purposes. This dining facility is also being used as a meeting point for a group of visitors and as a venue to share ideas and experiences of the museum visits to each other.

Restrooms: New restrooms are constructed in a more sufficient number in order to cater a large number of museum visitors both men and women. Highly innovative toilets are spacious, clean and met standard of hygienic and health regulations. In addition, spacious toilets for disable visitors are also available within. These necessary facilities are to be located next to the theater and the cafeteria for visitor's convenient and closed to the staircase to the ground level of the museum building.

Visitor Center: On the ground floor of the museum building, some small spaces underneath staircases to the second floor on both left and right sides of the museum building will be renovated into a visitor center where visitors can obtain basic information about the museum and special exhibition programs through the provision of brochures, leaflets and a direct contact with the museum receptionists. In this area, there are convenient seats and tables with a food and drink counter service to provide a place for all museum visitors in communicating and sharing ideas of the visit. This facility can be used as a meeting point among groups of visitors on the ground floor.



Fig.120 Illustration of New Courtyard at the Museum Entrance
Illustrated by: Supachokeaueychai, T.



Fig.121 Illustration of New Courtyard at the Museum Exit
Illustrated by: Supachokeaueychai, T.

10. The Analysis of New Development Project

Although the underground facility development project is acted as an appropriate solution to retain overall fabric of the museum and its landscape settings in an original condition, this proposal also needs to be analyzed whether it worthwhile for the investment and the construction through strengths, weaknesses, opportunities and threats (SWOT) analysis.

Strengths:

- The underground facility project has been chosen by most museum visitors as the most appropriate option for museum development without any alteration to the museum building and its associated areas. The museum building can retain its functions and architectural attributes in an original condition. Meanwhile, after the project was completed, the road and the large courtyard in front of the museum can be able to retain their characteristics and functions in an original state.
- Security check-in station at the main underground entrance and sufficient parking facility located underneath the museum can increase number of visit by the general public. This is because all kinds of public and private vehicles are to be checked and inspected underground instead of security checking at the main entrance of the RTA Headquarters as it used to. Therefore, people will have more positive feeling about the visit and no longer reluctant to enter into the museum site. The advantage of underground security check-in is that the security authority to inspect all visitors who have entered into the area is replaced from the former military fort with guards in front of the RTA Headquarters entrance into a full authority by the museum. The good point is that visitors can be easily entered into the site without any nervous or embarrassment, in fact; they will have more comfortable feelings about the visit and interpret the army and the museum in a more positive perception. The provision of parking facility is beneficial to accommodate not only museum visitors but also military officers to have more available spaces for parking.

- The underground project is compatible to military rules and regulations in protecting the fabric of the military area in terms of the museum and its surroundings in an original state. In addition, this project is considerably practical to be used as a solution to the necessity and the requirement of parking and facility development onsite.
- The underground project can accommodate a large number of visitors and satisfy their requirements of the visit through the provision of a theater, a visitor-center, a souvenir shop, a cafeteria and a sufficient number of toilets. The good point of the temporary exhibition is that the theme of exhibition is changeable to suit current trend and preference by most visitors, thus this can attract not only new visitors but also returning visitors to keep their loyalty to the museum and repeat their visits.

Weaknesses:

- The facility development requires large sum of financial supports for the investment and construction especially from the government and the military department. The project would be postponed or impractical if the budget is constrained by these major support organizations. The current problem of the RTA museum is that it has been recognized by the army organization as only a storage of military collections without any significance to the army. To gain more financial supports, the museum must clarify its operations and significance to its sponsors, aiming at raising their awareness and funding supports not only from the government and the army organization, but also other public and private organizations that have an interest in cooperating with the RTA museum.
- The underground facility project may not be successful if the museum is still lack of effective public relations. Additionally, because of the scarcity of parking-lot within the RTA headquarters at the present, it could be possible that many military officers would take advantage from the underground parking facility to park their personal vehicles there. This will lead to the insufficient number of parking space for the general public vehicles.

Opportunities:

- The provision of necessary facilities such as a theater, a visitor-center and a temporary exhibition, for example, is as the way to assist visitors in learning opportunity to have more understanding about the army context and reinforce their participations. Meanwhile, a cafeteria, a souvenir shop and a sufficient number of toilets can fulfill visitor's requirements of the visit. This can lead to satisfaction and the growth in number of visit among the public visitors.
- The development of underground facilities is value-added to the museum for providing some necessary accommodations that can not be built or obtained within the museum building.
- An interior decoration of the new development is as same as the original design of the museum building both exterior and interior but simplified in details, thus it can be distinguishable as new works. The underground design combines both Thai modern classic style and contemporary style with modern materials to be applied for the decoration. The good point is that new additions are not dominated or detracted a heritage significance of the museum building. Besides, the new renovation project can be able to retain the characteristic of the museum and associated areas in an original condition without any alteration to its fabric. Hence, the RTA museum can conserve its value and significance through time.
- The installation of highly innovative multimedia in terms of light, sound, special effects and interactive programs can increase the effectiveness of exhibit presentations to be more comprehensible and accessible to all types of audiences, leading to better perceptions and interpretations to those displays and exhibit presentations. As new renovation of exhibitions can educate and entertain visitors at the same time, visitors can enjoy the presentations and can be able to interpret the army, its role and its significance in a more sensible way. The development of displays and presentations provide a great opportunity for all audiences to have accessed into the military information more convenient than before.

- As the underground development project is beneficial to the museum, this project can motivate financial supports from the Directorate of Operations, the government, and other interest groups or organizations to support the development project.

Threats:

- The negative perceptions about the military operations in politics and economic intervention are still high among local Thai people. To cope with this situation, the museum needs to cooperate with other public and private organizations to promote the museum through effective sources of media and public relations. This can reinforce the general public to have actual information and more understanding about the army, its role and responsibility. If effectively operate, visitors will reinterpret and perceive the army in a more positive way.
- As the museum is still situated within the RTA Headquarters area, where was the main office of many army commanders and the high rank military officers, individual or group of visitors must make a reservation of their visits in advance and let all museum staff know their actual date of arrival. This inconvenient situation might lead to dissatisfaction to many public visitors who wish to visit the museum.
- The competition in the museum business is increasing as various military museums worldwide attempted to develop their museums to meet public's interests. Therefore, the improvement of the RTA museum is in a state of necessity if the museum wishes to obtain a larger number of visit.

11. Statement of Heritage Impacts

The new underground facility development is a new additional work into the heritage site of the RTA museum and its surrounding landscape. In order to effectively retain the historic significance and develop the museum to meet general public interests, the statement of heritage impact is created as a guideline to ensure that new additions respect and enhance the significance and value of the place in long run. To verify the feasibility of the underground facility development and meet the objectives

of the conservation policies, as stated in the previous section, the impacts of the project are listed as the following:

- Owing to unavailable space for the construction of a new facility building within the museum area, the underground development project is considered as appropriate because new additions in terms of parking spaces, temporary exhibition area, a souvenir shop, a theater, a cafeteria and a sufficient number of toilets, are constructed under the ground. The project acts as a sympathetic solution to retain the architectural attributes and the heritage significance of the museum building and its surrounding landscape in an original state;
- Following the '*Procedure for Army Contract in Building Construction Guidelines*' issued by the Post-Engineer Department, as well as the land use permission by the Royal Thai Army authority, the large courtyard in front of the museum building is allowed for the excavation to construct new facilities within. However, the whole cartilage must be reburied and retained as original without any alteration to its existing characteristic and function;
- Although new facility development will be constructed under the ground, these new additions should be compatible and connects to the existing characteristics and functions of the museum building and its surrounding in terms of forms, materials, sizes, proportions, colors, textures and other details of the place.

12. The Assessment to Minimize Adverse Impacts

- The construction of underground facilities will be harmonious and sympathetic with the significant features of the RTA museum and its surrounding landscape;
- New materials for the development will be compatible with the existing characteristics and the setting of the place. Nonetheless, new works and materials will be distinguishable from the original version of the museum building in order to differentiate new renovation works and techniques from the original ones;

- The new development will retain the consistency of the designing concept and the style of decoration to be compatible with the original design of both exterior and interior features of the museum building;
- To conform to the Procedure for Army Contract in Building construction Guidelines, the excavation work on the large courtyard should be reburied and conserved its characteristics and functions as original.

13. Expected Outcomes and Advantages from the Development

1. To Increase General Public Interest in Museum's Presentations

New museum development can enhance the general public to pay more attention on the history of the army and its collections because new displays with presentation techniques are more accessible, comprehensive and simplified in details to suit visitors of all ages. Thus, visitors with or without a profound knowledge about the army history can enjoy their visits through attractive presentations that can educate and entertain them at the same time. Besides this, basic accommodations such as an information center, a cafeteria to have some foods and refreshments, and other additional amenities are also provided to all visitors to meet their requirements.

2. To Create Positive Perceptions and Interpretations among Museum Audiences

Negative perceptions about the army and its intervention authority in the past will be lessen because people will have more understanding about the actual role and responsibility of the army as they have an opportunity to obtain information and participate with the army through exhibited presentations. In fact, the installation of innovative presentations can enhance museum audiences to make their own interpretations and share ideas or experiences to each others.

3. To Decrease Community Constraints and Reinforce Visitor's Participations

New underground development can assist general public to be able to access into the museum area more convenient than before. As public and private vehicles are to be securely checked underground instead of being inspected at the gate of the main entrance of the RTA Headquarters, visitors are no longer reluctant or embarrassed to enter into the site. The provision of additional accommodations underneath the courtyard provides a great opportunity for the museum to attract visitors to enjoy exhibited presentations and take part in those participative programs. This aims at reinforcing museum visitors to have profound knowledge and understanding about the army and its historical significance than before.

4. To Conform to Statutory Constraints and Regulations of the Army Organization

Regarding the retention of the museum and its surrounding as original as possible, the new underground development is followed the military regulations and the procedure of army contract in building conservation guidelines. Therefore, the development project has not affected to the alteration of the place and overall landscape setting, instead; it can conserve architectural attributes and significance of the museum and associated area through time.

5. To Strengthen Self-Sustainability of the Museum

The development of underground facilities provides an opportunity for the museum to sell products and services directly to its visitors. The museum gains much of revenue from merchandizing museum memorabilia at a souvenir shop, as well as refreshments and foods at a cafeteria. These additional incomes can assist the RTA museum in financial support in addition to the major support from the army organization and the government.

6. To Motivate Financial Support and Cooperation from both Public and Private Organization

The development in exhibit presentations and additional facilities can attract a larger number of visitors to visit the museum and pay much more attention on the military context. The successful museum operation provides the great opportunity for the museum to attract other public and private organizations in their financial supports for museum development. In addition to major support from the government and the army organization, the museum can build strong alliances with the Fine-Arts Department, Tourism Authority of Thailand (TAT), the Southeast Asian Minister of Education Organization (SEAMEO-SPAFA), Non-Government Organizations (NGOs) such as International Council on Monuments and Sites (ICOMOS Thailand), local schools and universities, as well as local residents to support the museum. To be more effective, it is the necessity for the museum to build strong relationships with these powerful organizations and ensure their life-long supports to the museum.

7. To Conserve the Significance of the Museum through Time

The current problem of the museum is that there is no available parking space to accommodate a large number of public and private vehicles. Hence, the road between the museum building and the courtyard is used as temporary parking-lot up to the present. The construction of underground parking-lot underneath the existing courtyard can be used as a solution to cope with an excessive number of vehicles within the museum area. Moreover, the creation of necessary facilities underground to accommodate visitors is also acted as an appropriate idea to conserve the significance and authenticity of the place, meanwhile; it can educate, motivate and entertain visitors to have more knowledge and understanding about the army.

8. To Develop the Museum as an Army Learning Center to Visitors of All Age

The development of innovative exhibit presentations and additional facilities provides a great potentiality to the museum in conveying crucial information about the army history, role and responsibility to all types of museum audiences. Visitors are stimulated in learning and interpreting things in a more appropriate and sensible way throughout the exhibitions, still; they are entertained through enjoyable multimedia presentations and interactive programs. Considering existing location of the museum as situated in the hub of the capital city of Bangkok, this museum can be able to develop as the army learning center with various sorts of military collections in Thailand.

14. Opportunities for Future Development of the RTA Museum

- The retention of the architectural attributes of the museum building and its functions, and surrounding landscape is essentially required to maintain the intrinsic values of the place in long-term. The historic significance of the museum in terms of being the first military museum in Thailand with outstanding military collections and exhibitions is as an inner prominent point that can be used to effectively promote the museum.
- The new form of administrative organization, as indicated in **Figure 111**, provides a great opportunity for the Military Museum Department to independently manage the RTA museum without any intervention from unassociated army authority and the government sector. A new set of six sub-departments: the Interpretative Department, the Human Resource Department, the Financial Department, the Marketing and Research Department, the Maintenance Department and the Security Department, can work effectively in their own fields and these can lead to the success of museum operations.

- The setting of new museum's policies in terms of interpretation improvement, exhibition techniques, building renovation and conservation, staff training, public relations, fundraising, maintenance and security, as well as visitor management can be used as principal guidelines of museum management. If effectively operate, the museum can reduce unsatisfactory works while maintaining optimum administration for its organization in long run.
- The development of conservation policy is beneficial to the museum because appropriate conservation can preserve the authenticity and the fabric of the place in an original condition, including the retention of historic significance and crucial army information from the present to the future. The advantages of the conservation can contribute to the minimization of community constraints and accessibility difficulty into the museum area. Moreover, effective conservation can reinforce positive interpretation among the general public and call for their participations and contributions to the conservation of the place.
- According to the analysis of all four comparative-cases in terms of their strengths, weaknesses, opportunities and threats, it is a great opportunity for the RTA museum to learn from these military museums and understand on how to effectively operate the museum and communicate the crucial messages to meet general public interests, aiming at gaining a larger number of their visits. Similarly, the RTA museum has also learned several factors and problems of each particular museum site in order for avoiding any damage or potential threats that can be occurred anytime. The efficient museum management from these museums can be used as a useful guideline for the improvement of the RTA museum in the future.
- The project proposal of underground facility development performs as a sympathetic solution to maintain the physical conditions and the characteristics of the museum building and its surrounding landscape in an original state. The provision of necessary facilities such as a visitor center, a temporary exhibition area, a theater with short cinema and military performance, a cafeteria, a

souvenir shop and so forth, can fulfill basic requirements among museum visitors. These additional facilities can accommodate the learning and entertaining experience to all visitors to understand the role and the responsibility of the army and then interpret this organization in a more appropriate and sensible manner. The facility development project can, in fact, fulfill visitor's interests and attract a larger number of them to visit the museum. Nevertheless, it has to be emphasized that the new under the ground facility development is presented as just one of the possible actions to improve the museum site. Indeed, there are a variety of considerable options for further development of this museum. This research provides a space for many researchers to search for the most appropriate way to develop the military museum to meet the public interests.

- The development of parking facility underneath a large courtyard can alleviate a frustration and anxiety of the general public in accessing into the museum area. The security check-in under the ground instead of the main entrance of the RTA Headquarters can reinforce the positive perception about the visit and visitors are no longer reluctant to enter into the site. Therefore, the museum obtains lots of the public access and can be promoted as one of the attractive tourism destinations in the military field in Thailand.
- The RTA museum can be developed as a principal military edutainment and research center not only for local people but also foreign visitors as a whole. The success of museum operation and development provides a great opportunity for the museum to build a strong relationship and alliance to various potential organizations such as Tourism Authority of Thailand (TAT), International Council on Monuments and Sites (ICOMOS), Southeast Asian Minister of Education Organization (SEAMEO SPAFA), for example, in order that obtaining their financial supports and promotion to promote the RTA museum worldwide. To be more effective, the cooperation with local public and private schools, universities as well as local residents is essentially needed to be considerate to ensure a long-term coordination and the success of the RTA museum.

Chapter 10

Conclusion

There is an assumption about the museum that “if one wants to know the civilization of each particular country, just visit the museum and it will tell the story all”. This notion prevails because museums are the storehouses of national treasures, documents and archives where people can experience the countries’ history. Similarly, military museums provide a space for public remembrance without bias on how the nation has struggled through various battles and how to maintain sovereignty through the eyes of beholders or survivors in various battlefields.

The military weapons and equipment displays from each war-time should easily attract a large number of visitors to access into the museum but this is not always the case, as we have seen with the RTA museum. The main problem, in fact, concerns how to effectively manage or improve the museum to meet general public interests and, at the same time, alleviate negative perceptions of the army and its political and economical interventions that affected local populations in the past. Generally speaking, the management of military museums is more difficult than other kinds of museums because they are usually located within the army area where the management authority is under controlled by the Royal Thai Army department and the accessibility by the public may be inconvenient. The RTA museum experienced land-use limitation because it was part of the RTA Headquarters, which was the main military operation-base in Thailand, and was a high-security restricted area. Therefore, the general public access into the museum was quite limited and required the permission by the army authorities.

This is where the conflict began for the RTA museum as it attempted to increase public interests and attendance. Although there is a variety of military equipment available within the museum, the current exhibits are quite static and ineffective in communicating or representing the factual information about the collections, leading to misinterpretation among most visitors. The RTA museum was lacking in financial support to improve its displays and exhibits to be more attractive and entertaining. Additionally, there was also a paucity of necessary facilities such as a visitor center, a theater, a temporary exhibition area, a souvenir shop, a dining area and other sorts of amenities to implement the learning experience of those museum visitors.

For effective preservation and management, the museum building has been investigated in its architectural attributes in regard to construction and decorative materials. The sources of deterioration either nature, animal or human as causes of degradation had been identified from the roof top to the ground level of the museum building, aiming at understanding the causes of problems and then searching for potential solutions to fix them. This research project provides several useful ideas and options to conserve the architectural attributes of the museum building in an original condition as possible while retain the significant values of the place in the long term.

In order to effectively manage the museum, the literature review chapter provides a basic information and knowledge about the role and responsibility of the museum in general context and the military museum in particular. This chapter provides several useful ideas on the current museums that pay more attention to build a strong relationship between their institutions and their target audiences, including the survey of visitor's expectations and their preferences in order to develop museums to meet public interests. As stated by Hewison (1987, p.46), museums have the potential to stimulate, educate and entertain people at the same time. The pivotal role of museums is to help the public increase self-esteem and to overcome the anxieties of national stability from the present into the future. The new role of the museum is to persuade the audience to be active and participative rather than passively receptive as they used to be. To do so, many museum professionals provided that inactive displays and exhibitions could be installing highly innovative multimedia and interactive

programs in order for educating and entertaining all audiences. If effectively operated, museums can foster a sense of local pride and belonging, while bolstering and maintaining cultural values of one particular community over time (Ambrose and Paine 1993, p.11).

Regarding the military museum, particularly the RTA museum, the various limitations and constraints of military rules and regulations have been identified which illustrate the difficulty of operational management. However, several options to alleviate the difficulty of such management, as well as the accessibility and the participation from the general public, have also been proposed as worthwhile options for future improvement. To understand the RTA museum in general context, background and historical development of this museum are given in Chapter 3 to recognize the characteristics and functions of the museum, its collections and exhibit presentations, and more importantly, the significant values of the museum that need to be conserved through time.

In order to obtain different ideas for the successful development of the RTA museum, four military museums were examined comparatively: the Royal Thai Air Force Museum, the National Memorial Military Museum, the Imperial War Museum North (in the United Kingdom) and the Army Museum of Singapore. These museums were analyzed to identify strengths and opportunities to be applied as well as potential risks and weaknesses that need to be avoided as considerable management guidelines for the development of the RTA museum. The findings from the analysis of these museums implied that the success of the museum depended largely on the location of the museum to facilitate public's accessibility, the presentation techniques within the exhibitions to communicate and entertain visitors about the collections, and the availability of necessary facilities to accommodate visitor's learning experiences and fulfill their personal preferences at the same time.

To have more understanding about the management of the museum at the operational level, museum curators and staff were asked to identify the current management of the museum, types of visitors, displays, the availability of facilities and

the conservational management. The interview results in Chapter 7 provided that the museum was organized by the Military Museum Department, a sub-department of the Military History Department, that was responsible for managing all kinds of museum activities in accordance with military equipment and collection, registration, documentation, including the promotion through various effective public relation channels to attract people to visit the museum. According to the interview, the shortage of funding supports is cited as a major factor in regard to the improvement of the museum and it is the need to gain more financial supports not only from the government and the Royal Thai Army, but also other public and private organizations as potential stakeholders of the museum.

The development of the RTA museum requires special consideration on how to effectively develop the museum to meet general public interests and how to conserve the significance of the place in the long term. To do so, in Chapter 8, a questionnaire-based survey of approximately 300 museum visitors has been carried out to perceive personal attitudes, opinions and interpretations concerning the existing displays and exhibit presentations, the classification of each exhibition, the requirement of facilities within the museum area, and the project proposals for future development. In addition to the analysis of these 300 museum participants who were largely military and government and non-government officers, another group of 100 members of the general public visitors were also surveyed in order to find out their opinions and expectations of the museum visit. As discovered from the results of the surveys, the opinions about the museum and its exhibitions from military officers and the general public as museum visitors were quite similar, but the ideas about project proposals for new additions into the museum site were different in number of responses.

Interestingly, the findings from the interview of museum staff and the survey of museum visitors showed that the current management of the museum is still assumed to be ineffective and unsatisfactory, due to inconsistent operation of the military organization as well as limited access to the museum which is located in a high security military compound. This research proposes a new form of administrative organization for the RTA museum to independently manage its organization with full

authority of decision making. This new organization allows the Military Museum Department to extend its network into sub-operational departments that are specialized in their own fields of responsibility. These sub-departments are Interpretative Department, Human Resource Department, Financial Department, Marketing and Research Department, Maintenance Department as well as Security Department. In addition, this research also emphasizes the setting of new museum's policies to ensure the success of management. These are the interpretation policy, the displays and collection presentation policy, the conservation policy, the staff training policy, the public relations policy, the fundraising policy, the facility management policy, the maintenance and supervision policy and the visitor management policy as stated in details at the beginning of Chapter 9.

The progressive plan for new development has been created to use as management guidelines, aiming at improving the content of exhibitions to be more accessible, comprehensible, and acknowledgeable, meanwhile; entertaining all museum audiences at the same time. Although there are several possible options for new developmental plan of the museum, this research proposes underground facility development project as one of the considerable options that is compatible with existing military rules and regulations. The advantage of such development is that the museum can retain its architectural attributes and historic significance in the long run without any alteration to the fabric of the place. Meanwhile, the provision of additional facilities can lead to the success of museum management because it fulfills visitors' requirements and then reinforces the learning experiences to all. Besides, this can also lead to proper interpretation of the army and the increasing number of visit to the RTA museum.

In conclusion, this research project offers the possibility for future development of the RTA museum and overcomes any land use limitation even though the museum is located within the army area. Additionally, this research demonstrates the potential of the military museum to be developed as a principal army edutainment center with various sorts of military collections in Thailand.

Bibliography

- Ambrose, T. & Paine, C. 1993, *Museum Basics*, Routledge Press, New York.
- Ambrose, T. & Runyard, S. 1991, *Forward Planning: A Handbook of Business, Corporate and Development Planning for Museum and Galleries*, Routledge, New York.
- Anderson, G. 2004, *Reinventing the Museum: Historical and Contemporary Perspectives on the Paradigm Shift*, Altamira Press, Walnut Creek Ca.
- Aplin, G. 2002, *Interpretation and Presentation of Heritage: Attaching and Conveying Meaning*, *Heritage: Identification, Conservation, and Management*, Oxford University Press, pp.30-47.
- Assessing Heritage Significance 2001*, *New South Wales Heritage Manual*, Crown Publisher, Australia.
- Australian War Memorial* (Online), Available:
<http://www.awm.gov.au> (Accessed on August 5, 2006)
- Benediktsson, G. 2004, *Museum and Tourism*, International Museum Studies, Goteborges Universitet Press.
- Bennett, T. 1995, *the Birth of the Museum: History, Theory and Politics*, Routledge, London.
- Bennett, T. 2004, *Pasts Beyond Memory: Evolution, Museums, Colonialism*, Routledge, London.
- Bicknell, S. & Farmelo, G. 1993, *Museum Visitor Studies in the 90s*, Antony Rowe Ltd, London, UK.
- Boylan, P. & Woodland, V. 2006, *The Trainer's Manual: For Use with Running a Museum: A Practical Hand Book*, UNESCO Publication, France, pp.15-37.
- Bunbongkarn S.1987, *The Military in Thai Politics 1981-86*, Institute of Southeast Asian Studies Press, Singapore.
- Burcaw, GE 1997, *Introduction to Museum Work*, 3rd edn, Altamira Press, Walnut Creek, Ca.
- Carbonell, BM (ed.) 2004, *Museum Studies: An anthology of contexts*, Blackwell Publishing, Oxford.

- Chaysuwan, B. 1996, *The National Memorial: Remembrance for the Sacrifice*, Muang-Boran, Muang-Boran Publishing, Bkk, pp.103-106. (Thai Edition)
- Convention for the Safeguarding of the Intangible Cultural Heritage 2003*, UNESCO.
- Corsane G. (ed) 2005, *Heritage, Museums and Galleries: an introductory reader*, Routledge, London.
- Discovery Museum: A New Learning Space 2005*, National Discovery Museum Institute, Pimdee Press, Bangkok, Thailand.
- Durbin, G. 1996, *Developing Museum Exhibitions for Lifelong Learning*, the Stationary Office for the Group for Education in Museums, London ,UK.
- Edson, G. & Dean, D. 1994, *the Handbook for Museums*, Routledge; London.
- Edson, G. (ed.) 1997, *Museum Ethics*, Routledge, London & New York.
- Element for Museums*, 2004, Annual Museum Conference in Thailand, Ministry of Thai Culture Press, Bangkok.
- Feilden, B.M. 2003, *Conservation of Historic Buildings*, 3rd edition, Architectural Press, Burlington, UK.
- Finn, B. & Hacker, B 2005 *Materializing the Military*, London: Science Museum.
- Flaharty, D. 1990, *Preserving Historic Ornamental Plaster: In Preservation Briefs*, the U.S. National Park Service, USA.
- Folk, J. & Dierking, D. 1992, *Introduction: the Interactive Experience Model*, the Museum Experience, Whalesback Books Press, Washington D.C.
- Forty Years of Royal Thai Army 1995*, Royal Thai Army Press, Bangkok, Thailand.
- Fry, G. 1993 *Army Museums Review*, Canberra? : Directorate of Army Activities and Public Affairs. (Deakin library)
- Genoways, H.H & Ireland L.M. 2003, *Museum Administration: An Introduction*, Altamira Press, Walnut Creek, Ca.
- Hein, G.E. 1998, *Learning in the Museum*, Routledge, London & New York.
- History for the Royal Thai Army 1995* (Online), Available: http://www.rta.mi.th/history/rta_history.htm (Accessed on August 14, 2005)
- Hooper-Greenhill, E. 1999, *The Educational Role of the Museum*, 2nd edition, Routledge, London, UK.

- Hooper-Greenhill, E. 2000, *Museums and the Interpretation of Visual Culture*, Routledge Press, New York.
- Hudsadin, G. 2002, *Museums as an Educational Centre*, Silpakorn Journal, Vol. 45, No.6, A. P Graphic Design and Print Co., Ltd, Bangkok, pp.64-77.
- ICOMOS 1999, *Cultural Tourism Charter: Principles and Guidelines for Managing Tourism at Places of Cultural and Heritage Significance*, ICOMOS Cultural Tourism Charter.
- Imperial War Museum* (Online), Available:
<http://www.iwm.org.k> (Accessed on July 20, 2006)
- Imperial War Museum North: Manchester/ Salford UK: Daniel Libeskind 2002* (Online), available: <http://www.galinsky.com/buildings/IWMnorth/index.htm> (Accessed on February 18, 2007)
- Imperial War Museum North* (Online), Available:
<http://north.iwm.org.uk/> (Accessed on February 18, 2007)
- Kavanagh, G. 1994, *Museum Provision and Professionalism*, Routledge, London, New York.
- Kavanagh, G. 2000, *Dream Spaces: Memory and the Museum*, Leicester University Press, New York.
- Keene, S. 2002, *Managing Conservation in Museums*, 2nd edition, Butterworth-Heinemann Press, U.K.
- Kerr, J.S 2000, *Conservation Plan: A Guide to the Preparation of Conservation Plans for Places of European Cultural Significance*, 5th edition, Star Printery Pty., Ltd, New South Wales.
- King Chulalongkorn of Siam (1853 - 1910)*, (Online), available: <http://www.braun-deutschland.de/chula/chula-en.htm> (Accessed on June, 2007)
- Knell, S.J. 1999, *Museums and the Future of Collecting*, Ashgate Publishing Limited, Hampshire, UK.
- Kulick, E. & Wilson, D. 1996, *Time for Thailand: Profile of a New Success*, White Lotus Co., Ltd, Bangkok, Thailand.

Lau, A. 1997, *Toward a SAF Museum* (Online), Available:

[http://www.mindef.gov.sg/imindef_websites/atozlistings/army/microsites/army_museum/about_arms/towards an SAF museum.html](http://www.mindef.gov.sg/imindef_websites/atozlistings/army/microsites/army_museum/about_arms/towards_an_SAF_museum.html) (Accessed on November 9, 2006)

Libeskind, D. 2002, *Imperial War Museum North Earth Time: Twentieth Century Conflict and the Future*, Architectural Association, London, UK.

Lim, E. 1997, *the Birth of Singapore Armed Force* (Online), available:

http://www.mindef.gov.sg/imindef/about_us/history/birth_of_saf/v1n08_history.html (Accessed on November 9, 2006)

Logan, W.S. 2002, *The Disappearing 'Asian' City: Protecting Asia's Urban Heritage in a Globalizing World*, OUP, Hong Kong.

Manchester Museums and Exhibitions (Online), Available:

<http://www.manchester2002-uk.com/museums/museums2a.html>
(Accessed on February 18, 2007)

Marstine, J. 2006, *New Museum Theory and Practice: an Introduction*, Blackwell Publishing Ltd., UK.

McArthur, S. & Hall, M.C. 1996, *Interpretation, Principles and Practices*, pp. 88-105.

Mclean, F. 1998, *Museums and the Construction of National Identity: a Review*, pp. 244-252.

Meechul, C. 2005, *Thai Museum Appeal to Thai Youth*, Kinnaree, vol.22, no.11, pp.54-58.

Military Architecture, 1990, Amarin Printing and Publishing Co., Ltd, Bangkok.

Military History Department 2005, Directorate of Operations Document, p.48.

Mission of the Ministry of Defense of Singapore (Online), Available:

http://www.mindef.gov.sg/imindef/about_us/mission.html
(Accessed on November 9, 2006)

Munkarn, V. 1979, *The National Armed Force Museum*, Faculty of Architecture, Silpakorn University Publishing, Bangkok, Thailand.

Museum Definition and Meaning (Online), Available:

<http://en.wikipedia.org/wiki/Museums> (Accessed November 25, 2006)

Musicakama, N., Chanphosri, K., Tuamcharoen, M., 1978, *Musiology*, 2nd edition, Thai-Wattana Panich Co., Ltd, Bangkok, Thailand.

New Bangkok City Plan to Turn the Capital into a More Livable City: the Government of Public Relations Department (Online), available:

http://thailand.prd.go.th/the_focus_view.php (Accessed on November 25, 2006)

Pearce, S. 1994, *Museums and the Appropriation of Culture, New Research in Museum Studies: An International Series*, the Athlone Press, UK.

Prathumnant, S. 1994, *The National Memorial*, Arch and Idea Magazine, Vol.2, Arch and Idea Publishing, Bkk, pp.32-50. (Thai Edition)

Preserving Our Army's Heritage, Army News (Online), available:

<http://www.mindef.gov.sg/armynews/display2.asp?articleid=366> (Accessed on November 9, 2006)

Preziosi, D & Farago, C (eds) 2004, *Grasping the world: The idea of the museum*, Ashgate Publishing, Burlington VT.

Proschan, F. 2004, *Learning from the Smithsonian: Lesson (Good and Bad) from the United States National Museum*, Jirarat Printing Ltd., Bangkok, Thailand.

Sethamethikul, H. 2006, 'Royal Thai Air Force Museum in Don Muang', Kinaree Magazine, Vol.23, No.9, pp.80-84. (Thai Edition)

Shanken, A.M. 2004, *Research on Memorials and Monuments*, Instituto De Investigaciones Esteticas.

Smith, C.S. 1989, *Museums, Artifacts, and Meanings, the New Museology*, Reaktion Books Press, U.K, pp. 6-21.

Statements of Heritage Impact 2005, (Online), Available:

<http://www.heritage.nsw.gov.au> (Accessed on August 25, 2005)

Studio Daniel Libeskind: Imperial War Museum North (Online), available:

http://www.daniel_libeskind.com/projects/show_all/imperial_war_museum_north, (Accessed on February 18, 2007)

Sujit, D. 1972, *Army Museum*, Faculty of Architecture, Silpakorn University Publishing, Bangkok, Thailand.

Sweetser, S.M. 1978, *Roofing for Historic Buildings: In Preservation Briefs*, the U.S. National Park Service, USA.

The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance 1999, Australia ICOMOS Inc, Australia.

The Century of Chulachomklao Royal Military Academy 1987, J.N.T Partnership Printing, Bangkok, Thailand.

The Commemoration of 78th of Directorate of Operations 2005, Royal Thai Army Printing, Bangkok, Thailand.

The Evolution of Royal Thai Army 2000, *The Royal Thai Armed Forces Journal*, vol.39, no. 1 (October 2000 – March 2001), pp.46-53.

The Fins Arts Department (Online): Available:

<http://www.finearts.go.th/en/background.php> (Accessed on November 26, 2006)

The History of Ministry of Defense 2003, *The Royal Thai Armed Forces Journal*, vol.41, no. 2 (April – September 2003), pp.30-34.

The History of National Museum (Online), Available:

<http://www.thailandmuseum.com/OfficeMuseum/history.htm> (Accessed on November 25, 2006)

The History of Royal Thai Air Force Museum 1999, Adjutant General's Department for Air-force Press, pp.1-3. (Thai Edition)

The History of Thai Army for the Past 200 Years (1782-1982), Royal Thai Army Press, Bangkok, Thailand.

The History of the Royal Thai Army Museum 1997 (Online), available: http://www.rta.mi.th/history/rta_history.htm (Accessed on September 14, 2005)

The National Memorial 1983, *Na-Jua: Faculty of Architecture Journal*, Vol.3, pp.31-39. (Thai Edition)

The Position of Royal Thai Army as Political Institution, 3rd edition, Prakai-Pruek Press, Bangkok, Thailand.

The Royal Thai Air Force Museum: Experiencing the Aviation World (Online), Available: Members.tripod.com/peterlewisdesign/thaimuseum/ (Accessed on February 18, 2005)

The Royal Thai Air Force Museum: Welcome to RTAF Museum (Online), Available: <http://www.rtaf.mi.th/museum/> (Accessed on February 18, 2005)

The Royal Thai Armed Forces Memorial, Business Offset Printing Co., Ltd., Bangkok, Thailand.

The Royal Thai Army Museum in Honor of His Majesty the King 1997, O & S Printing House Co., Ltd, Bangkok.

The Royal Thai Army in Honor of His Majesty the King 1997 (Online), available: http://www.rta.mi.th/armytourism/rta_museum/ (Accessed on August 14, 2005)

The Royal Thai Army Museum in Honor of his Majesty the King 1997, 1st edition, O & S Printing House Co., Ltd, Bangkok, Thailand.

The Royal Thai Army Public Relations for the Fiscal Year 2006 (2006), The Royal Thai Army Civilian Department, Royal Thai Army Press, Bangkok, Thailand.

The National Memorial: Introduction for the National Memorial (Online), Available: <http://www1.mod.go.th/heritage/nation/memorial/memorial10.htm> (Accessed on July 18, 2005)

Thompson, G. 1978, *the Museum Environment*, Butterworths Press, London, UK.

Thompson, C. 1994, *the Role of the Museum in Interpretation: the Problem of Context*, International Journal of Heritage Studies, pp. 40-44.

Thompson, M. 1993. *War in Museum: the Interpretation of Twentieth Century Military History in Museums : a Case Study*, M.App.Sc.(Museum Studies), minor thesis, Deakin University, Victoria,

Thwaites, P. 1996, *Presenting Arms: Museum Representation of British Military History, 1660-1900*, Leicester University Press, London.

Tilden, F. 1977, *Principles of Interpretation*, Interpreting Our Heritage, 3rd edition, the University of North Carolina Press, Chapel Hill, pp. 3-10.

Uzzell, D. 1996, *Creating Place Identity Through Heritage Interpretation*, Intellect Limited, London.

Uzzell, D. & Ballantyne, R. 1998, *Contemporary Issues in Heritage and Environmental Interpretation: Problems and Prospects*, the Stationary Office Press, London.

Varapol, S. 1996, *Museum in the Age of Development*, Tourism Authority of Thailand Journal, vol.15, no.1, pp.43-53.

Vespada, Y. 2004, *100 Museums in Bangkok and its Vicinity: the Whole World within Reach*, Plan Readers Publisher, Bangkok.

- Vhanliphodom, S. 2001, *Local Museum: the Co-Learning Process, Thai Museums in the New Millennium*, Amarin Printing & Publishing, Bangkok, pp.1-20.
- Vhanliphodom, S. 2002, *Thai Museums in the New Millennium*, Princess Maha Chakri Sirindhorn Anthropology Centre, Amarin Printing & Publishing, Bangkok.
- Virunrak, P. 2005, *National Military History Museum*, Art & culture Magazine, Vol.26, No.4, Pim-Dee Co., Ltd., Bangkok, pp.26-31.
- Wattanamahatma, K. 1997, *The Royal Thai Army Headquarters Building*, Vimarn Magazine, vol.9, no.82, pp. 108-111.
- Weil, SE. 1990, *Rethinking the Museum and other Meditations*, Smithsonian Institution Press; Washington DC.
- Weil, SE. 1995, *A Cabinet of Curiosities : Inquiries into Museums and their Prospects*, Smithsonian Institution Press, Washington.
- Whitmarsh, A. 2000, *We Will Remember Them: Memory and Commemoration in War Museums*, Institute of Archaeology Press, London, UK.
- Wise, T. 1971, *A Guide to Military Museums*, 2nd edition, Model & Allied Publications, London.

มหาวิทยาลัยศิลปากร จุฬาลงกรณ์มหาวิทยาลัย

Appendix I

In-Depth Interview Questions for Military Museum Organizations

This in-depth interview is aimed at:

- Curatorial staff and personnel of the Royal Thai Army Museum
- Staff of the Military History Department in the Directorate of Operations Center
- Curatorial staff and personnel of the National Memorial Museum
- Curatorial staff and personnel of the Royal Thai Air-Forces Museum

Research Project: The Conservational Management and Interpretation for Future Development of the Royal Thai Army Museum in Honor of His Majesty the King

Researcher: Captain Tavorn Supachokeauychai

Objectives

- To understand the chief aims of military museum establishment and current management practice in Thailand, as well as various factors affecting to overall museum operations;
- To improve military museums to meet the highest standards of management and develop as attractions to larger numbers of visitors;
- To encourage greater development of museum presentations and exhibitions in order to appeal to general visitors as one-stop historic destinations;
- To conserve the significance of military museums with a view to providing effective conservation programs and development strategies for long-term sustainability.

Name of the museum:

There are six parts of the interview questions. Please fill in the gaps about the characteristics, the current museum managements and operations of your museum. In some questions you can tick ‘√’ in the available boxes that suit your opinions best. Gratefully thank for your cooperation.

Interviewee's information:

Name:

Position:.....being in the position for.....year(s)

Level of Education: ☐ Bachelor degree ☐ Master degree ☐ Doctoral degree

From (University/ Institution).....

Faculty of

I. Museum Managements and Operations

1. What is the main objective and goal for the museum establishment?

.....

.....

.....

.....

.....

2. How does the museum manage and operate within its organization? How many departments does the museum have and what is each department responsible for? Please specify in brief or provide an organizational chart.

.....

.....

.....

.....

.....

.....

3. What are the main groups of visitors to the museum and why does the museum emphasize this kind of visitor?

☐ Educational Institution Group

Because.....

☐ Military Officer Group

Because.....

☐ Police Officer Group

Because.....

- ☐ Government / Non-Government Organization Group

Because.....

- ☐ Local Visitor Group

Because.....

- ☐ Foreign Visitors Group

Because.....

4. What are the tactics or strategies for effective museum management and operation? Please explain in brief.

.....

5. Where have the major sources of museum budget come from and is it sufficient to cover all requirements of the museum's management and conservation?

.....

6. Which forms of media the museum have been used to promote public relations and marketing of the museum? What are the most effective source and most ineffective forms of media for public relations in your opinion?

☐ Television	☐ Leaflets/ Brochures
☐ Radio	☐ Travel Magazines/ Books
☐ Newspapers	☐ Organization Press Release
☐ Internet	☐ Other..... (Please specify)

The most effective medium is.....

Why?

The most ineffective medium is.....

Why?

7. (a) Does the museum charge an entrance fee?

☐ Charge an entrance fee

Because.....

☐ No charge an entrance fee

Because.....

(b) Is charging an entrance fee consistent with military policies and regulation?

.....

8. Are there any government and non-government organizations that support and fund the museum?

.....

.....

.....

.....

.....

9. Does the museum coordinate with other museum-related organizations?

.....

.....

.....

.....

.....

II. About the Museum Visitors

1. Where have visitors mainly come from and do they visit the museum as individuals or as a group?

From ☐ Educational institution

☐ Military organization

☐ Government and Non-Government organization

☐ Local visitors

☐ Foreign visitors

They came ☐ as individuals

☐ as a group

☐ both individuals and as a group

2. Does the museum have foreign visitors and where do they come from?

☐ No

☐ Yes, most of them come from 1.....3.....
2.....4.....

3. In your opinion, what are the factors leading people to visit the museum?

(You can tick '✓' more than one)

☐ Museum reputation

☐ Outstanding characteristics from both exterior and interior design of the museum building

☐ Desire to understanding the role of the Royal Thai Army through presentations and exhibitions

☐ Desire to see various kinds of military objects through exciting displays and exhibitions

☐ Other reasons

4. What kind of information does the museum prepare to give to visitors prior to their visit and by what form of media?

.....
.....
.....
.....
.....

5. Has the museum provided an English version of military information to be available at the exhibit showcases and exhibitions for foreign visitors?

.....
.....
.....
.....
.....

6. What time does the museum operate on business days? Does the museum operate in weekend and during which time of the day most visitors are likely to visit the museum and why?

Monday through Friday from.....am. to.....pm.

Saturday ☐ Open ☐ Close from.....am. to.....pm.

Sunday ☐ Open ☐ Close from.....am. to.....pm.

The high period of visitors is during.....am. to.....pm.

7. How long does a group of visitors spends on average for their whole museum visit? In which kind of exhibit room do visitors spend the most time and the least time? Why?

Each group of visitor spends their time of visit around.....hour(s) a day.

The is the exhibit room where visitors spend time the most because.....

.....

The is the exhibit room where visitors spend time the least because.....

.....

8. How many visitors and groups of visitor can the museum accept per day?

Approximately.....visitors per day and or groups per day.

9. How many trained guides and guide volunteers does the museum have at the present? Is the number of guides appropriate to the number of visitors? Does the museum have any communication problems between guides and visitors? Please specify briefly.

.....

.....

.....

.....

.....

10. According to your observation, do visitors appreciate the whole exhibit contents or not? What kind of exhibit room is most appreciated and least appreciated by most visitors? Why?

Visitors are likely to appreciate the whole exhibit contents: ☐ Yes
☐ No

Visitors appreciate (name of exhibit room).....the most.

Because.....

.....

Visitors appreciate (name of exhibit room).....the least.

Because.....

.....

Suggestions and comments for exhibit development by visitors:

1.....

2.....

3.....

มหาวิทยาลัยศิลปากร ส่วนนิทรรศการ

11. Do most visitors have a good knowledge of army history? If not, does this affect their understanding and interpretation at the site?

.....

.....

.....

.....

.....

12. (a) Do visitors need to book or reserve their visit to the museum in advance?

.....

.....

- (b) For general visitors without their booking, can they enter to the museum?

.....

.....

13. According to your knowledge, do most visitors plan to revisit the museum again?

- ☐ They will revisit next time, because.....
- ☐ They will not revisit, because.....
- ☐ They are not sure, because.....

14. (a) What kind of transportation do most visitors use to come to the museum?

- ☐ Personal cars ☐ Tour/ organization buses
- ☐ Trains ☐ Vans
- ☐ Boats ☐ Other.....

(b) Is the parking lot available at the site sufficient for the number of visitor's vehicles?

The parking lot is ☐ sufficient ☐ insufficient to the number of vehicles at site.

15. Has the museum ever surveyed the level of appreciation among visitors about the current presentations and exhibitions?

.....

.....

.....

.....

.....

16. Does the museum have any recreational activities and programs for visitors to participate in during their visits to the exhibits? If so, what kind?

.....

.....

.....

.....

.....

III. About exhibit objects and current exhibitions

1. As the museum prepared documents and brochures to visitors before their visits, do those media effective in providing information and interpretation? Please specify in brief.

.....

.....

.....

.....

.....

2. Are zoning and circulation well organized throughout the whole area of the museum? What needs to be removed or readjusted within the museum and the site and why?

.....

.....

.....

.....

.....

3. At the present time, are the exhibit objects and exhibitions well classified and appropriate to an area or not? What are the factors affecting the exhibition that needs to be urgently improved?

☐ Appropriate

☐ Inappropriate because.....

.....

.....

.....

Need to be improved in

1.....

2.....

3.....

4.....

5.....

4. Where are the sources of object acquisition and where have they been registered? Has the museum acquired objects from donations and other museums, and what kinds?

.....

.....

.....

.....

.....

5. Has the museum had any problems concerning the museum objects, displays and showcases, as well as the application of multimedia?

.....

.....

.....

.....

6. How can the museum resolve the exhibit problems? Where are the major sources of budget for any renovation and improvement?

.....

.....

.....

.....

.....

7. Are the current displays and exhibitions effective or not, in your opinion? Has the museum applied multimedia techniques (such as light and sound) within the exhibitions to attract visitors?

.....

.....

.....

.....

.....

IV. About the facility provision within the museum

1. Does the museum have the following facilities for visitors? Are they sufficient for the number of visitors and what needs to be provided further?

	Sufficient	Insufficient	More needs
Visitor Center	☐	☐	☐
Cafeteria	☐	☐	☐
Souvenir Shops	☐	☐	☐
Theater	☐	☐	☐
Auditorium	☐	☐	☐
Recreational Space or Area	☐	☐	☐
Contemporary Exhibition Area	☐	☐	☐
Toilets	☐	☐	☐
Parking-lot	☐	☐	☐

2. Does the museum have any available space for the expansion of visitor facilities at the site? If not, do you have any idea or suggestion on how the provision of visitor facilities can be improved at the existing site?

.....

.....

.....

.....

.....

3. Do the facility provisions within the museum conflict with military policies and regulations? If so, in what aspects?

.....

.....

.....

.....

.....

V. About the conservational management and maintenance

1. Has the museum found any deterioration concerning in its exhibition objects and the showcases? If so, what are the major causes of deterioration and what have been done to eliminate these causes?

.....

.....

.....

.....

.....

2. Has the museum found any deterioration concerning the exterior and interior of the museum building? If so, what are the major causes of deterioration and what have been done to eliminate these causes?

.....

.....

มหาวิทยาลัยศิลปากร ส่วนอนุรักษ์มรดก

.....

3. What are the security and maintenance policies for the museum's objects and the showcases? Please specify briefly.

.....

.....

.....

.....

.....

4. What is the conservational policy for the museum building and associated area?

.....

.....

.....

.....

.....

VI. Your opinion of the museum

1. What are the good points and the weak points for the location of the museum?

Good points 1.....

2.....

3.....

4.....

Weak points 1.....

2.....

3.....

4.....

2. Is there any impact on the museum's operations and management resulting from the fact that the museum is located in a restricted military precinct?

.....

.....

มหาวิทยาลัยศิลปากร ส่วนพิเศษ

.....

3. In such cases, is it possible and practical to separate the whole museum area from the military operational offices? If it possible, what are the methods? If it impossible, because of what factors and policies?

☐ It is practical because.....

.....

.....

☐ It is impractical because.....

.....

.....

4. In your opinions, what are the good points of the museum that need to be retained and the weak points of the museum that need to be improved?

Good points: 1.....
 2.....
 3.....
 4.....
 5.....

Weak points: 1.....
 2.....
 3.....
 4.....
 5.....

5. In your opinions, what needs to be urgently improved in order to make the overall museum administrations more effective and to meet the highest standard of museum operation for both sponsors and visitors?

.....

“Thank you for your assistance and cooperation”

If you have any question or additional comments about this interview paper, please contact Cpt. Tavorn Supachokeaueychai, PhD Candidate, Faculty of Architecture, Silpakorn University, Bangkok, Thailand. E-mail: tavornsup@yahoo.com

Appendix II

คำถามสำหรับสัมภาษณ์บุคคลากรภายในองค์กรพิพิธภัณฑ์ทหาร

คำถามชุดนี้จัดทำขึ้นเพื่อสัมภาษณ์:

- พิพิธภัณฑ์และเจ้าหน้าที่พิพิธภัณฑ์กองทัพบกเฉลิมพระเกียรติ (Royal Thai Army Museum)
- เจ้าหน้าที่แผนกประวัติศาสตร์ทหารในส่วนของยุทธการทหาร (Military History Department)
- พิพิธภัณฑ์และเจ้าหน้าที่อนุสรณ์สถานแห่งชาติ (National Memorial Museum)
- พิพิธภัณฑ์และเจ้าหน้าที่พิพิธภัณฑ์กองทัพอากาศ (Royal Thai Air-Force Museum)

โครงการวิจัย: การจัดการด้านการอนุรักษ์อาคารและการสื่อความหมายของพิพิธภัณฑ์ทหารเพื่อการพัฒนาพิพิธภัณฑ์กองทัพบกเฉลิมพระเกียรติ ภายในพื้นที่กองบัญชาการกองทัพบก (บก.ทบ)

ผู้ดำเนินการวิจัย: ร.อ.ถาวร สุภโชคช่วยชัย

วัตถุประสงค์: เพื่อศึกษาและเข้าใจถึงวัตถุประสงค์ของการจัดตั้งพิพิธภัณฑ์ทหารในประเทศไทย รวมถึงการจัดการและการดำเนินงานของพิพิธภัณฑ์ในปัจจุบันว่ามีข้อดีและข้อเสียอย่างไร และสิ่งใดที่เป็นอุปสรรคต่อการดำเนินงานพิพิธภัณฑ์ที่สมควรได้รับการปรับปรุงแก้ไข ทั้งนี้การศึกษาค้นคว้าเชิงลึกจัดทำขึ้นเพื่อหาแนวทางในการพัฒนาพิพิธภัณฑ์ทหารในประเทศไทยให้ได้มาตรฐานสากลทัดเทียมนานาชาติ มีประสิทธิภาพและมีศักยภาพในการเป็นพิพิธภัณฑ์สำหรับบุคคลทั่วไป ซึ่งสามารถพัฒนาเป็นแหล่งท่องเที่ยวที่สำคัญให้แก่ผู้เข้าชมทั้งในและต่างประเทศต่อไปได้ในอนาคต

พิพิธภัณฑ์ที่ดำเนินการสัมภาษณ์:.....

ขอความกรุณาในการกรอกข้อมูลเกี่ยวกับพิพิธภัณฑ์ของท่านลงในช่องว่างที่กำหนดไว้ หรือ หากเครื่องหมายถูก “✓” ลงในช่องสี่เหลี่ยม (□) ที่ตรงกับความคิดเห็นของท่านมากที่สุด

ข้อมูลผู้รับการสัมภาษณ์:

ยศ, ชื่อ.....นามสกุล.....

ตำแหน่ง.....ดำรงตำแหน่งมาแล้ว.....ปี

จบการศึกษาปริญญา □ ตรี □ โท □ เอก จากสถาบัน/มหาวิทยาลัย.....

สาขา.....

I. การบริหารและการจัดการพิพิธภัณฑ์

1. วัตถุประสงค์ของการจัดตั้งพิพิธภัณฑ์ของท่านคืออะไร และมีเป้าหมายอย่างไร

.....

.....

.....

.....

2. พิพิธภัณฑของท่านมีวิธีการบริหารจัดการองค์กรภายในอย่างไร มีแผนกใดบ้างและแบ่งหน้าที่ความรับผิดชอบ ในส่วนต่าง ๆ อย่างไร (แสดง Organization Chart ถ้ามี)

.....

.....

.....

.....

.....

.....

.....

3. พิพิธภัณฑของท่านมุ่งเน้นกลุ่มเป้าหมายหลักเป็นผู้เข้าชมกลุ่มใด เหตุใดทางพิพิธภัณฑจึงเน้นที่ผู้ชมกลุ่มนี้

- ☐ กลุ่มสถาบันการศึกษา เนื่องจาก.....
- ☐ กลุ่มข้าราชการทหาร เนื่องจาก.....
- ☐ กลุ่มข้าราชการตำรวจ เนื่องจาก.....
- ☐ กลุ่มองค์กรราชการ / เอกชน เนื่องจาก.....
- ☐ กลุ่มนักท่องเที่ยวท้องถิ่น เนื่องจาก.....
- ☐ กลุ่มนักท่องเที่ยวชาวต่างชาติ เนื่องจาก.....

4. ท่านมีกลยุทธ์ในการบริหารจัดการพิพิธภัณฑอย่างไรเพื่อให้เกิดประสิทธิภาพในการบริหารสูงสุด โปรดอธิบายพอสังเขป

.....

.....

.....

.....

.....

5. งบประมาณสำหรับการบริหารจัดการดูแลพิพิธภัณฑและบุคลากรมาจากส่วนใดและมีสัดส่วนเท่าใด เพียงพอและครอบคลุมต่อการดูแลพิพิธภัณฑหรือไม่ อย่างไร

.....

.....

.....

.....

.....

6. ทางพิพิธภัณฑฯ ได้ทำการประชาสัมพันธ์ (Public Relations) และการตลาด (Marketing) ผ่านทางสื่อใดบ้าง สื่อใดมีประสิทธิภาพมากที่สุดและสื่อใดมีประสิทธิภาพน้อยที่สุด

- ☐ โทรทัศน์ ☐ ใบแจก/ แผ่นพับ (Brochure)
☐ วิทยุ ☐ นิตยสาร/ หนังสือท่องเที่ยว
☐ หนังสือพิมพ์ ☐ วารสารขององค์กร (Press Release)
☐ อินเทอร์เน็ต ☐ อื่นๆ.....

สื่อที่มีประสิทธิภาพมากที่สุดคือ.....

สื่อที่มีประสิทธิภาพน้อยที่สุดคือ.....

7. ทางพิพิธภัณฑฯ ได้เก็บค่าเข้าชมสำหรับบุคคลทั่วไปหรือไม่ ถ้าเรียกเก็บค่าเข้าชมจะจัดต่อฤดูระเบียบหรือข้อบังคับของทางทหารหรือไม่ อย่างไร

- ☐ เก็บค่าเข้าชม
☐ ไม่เก็บค่าเข้าชม

เนื่องจาก.....

.....

.....

มหาวิทยาลัยศิลปากร ส่วนบริหาร

8. ปัจจุบันมีหน่วยงานหรือองค์กรใดบ้างที่ให้การสนับสนุนด้านงบประมาณสำหรับการจัดการพิพิธภัณฑฯ

.....

.....

.....

.....

.....

9. ทางพิพิธภัณฑฯ ได้มีการประสานหน่วยงานหรือองค์กรที่เกี่ยวข้องกับกิจการพิพิธภัณฑฯ บ้างหรือไม่ อย่างไร

.....

.....

.....

.....

.....

II. ด้านผู้เข้าชมพิพิธภัณฑ์

1. ผู้เข้าชมส่วนใหญ่มาจากสถาบันหรือองค์กรใด มาเป็นหมู่คณะหรือมาคนเดียว
☐ มาคนเดียว (As Individual) ☐ มาเป็นกลุ่มหรือคณะ (As Group) ☐ ทั้ง 2 อย่าง (Individual & Group)

มาจาก ☐ สถาบันการศึกษา

- ☐ องค์กรและ หน่วยงานทหาร
☐ องค์กรและ หน่วยงานภาครัฐ/เอกชน
☐ นักท่องเที่ยวท้องถิ่น
☐ นักท่องเที่ยวชาวต่างชาติ

2. พิพิธภัณฑ์ของท่านมีนักท่องเที่ยวที่เป็นชาวต่างชาติเข้าเยี่ยมชมบ้างหรือไม่ ถ้ามี ส่วนใหญ่มาจากประเทศใด
☐ ไม่มี
☐ มี ส่วนใหญ่มาจากประเทศ 1. 3.
 2. 4.

3. ท่านคิดว่าสิ่งใดต่อไปนี้มีอิทธิพลหรือเป็นแรงจูงใจต่อผู้เข้าชมในการเดินทางมาเยี่ยมชมพิพิธภัณฑ์ของท่าน

- ☐ ชื่อเสียงของพิพิธภัณฑ์
☐ ความโดดเด่นของรูปลักษณ์อาคารพิพิธภัณฑ์ทั้งภายนอกและภายใน
☐ การได้รับทราบถึงบทบาทหน้าที่ของกองทัพบกตั้งแต่อดีตถึงปัจจุบันผ่านการนำเสนอของพิพิธภัณฑ์
☐ การได้เข้าชมยุทธโศภณภัณฑ์ทางทหารและการจัดแสดงที่น่าสนใจ
☐ อื่นๆ.....

4. ทางพิพิธภัณฑ์ได้มีการปูพื้นฐานความรู้และอธิบายเกี่ยวกับประวัติศาสตร์การทหารและการจัดแสดงในแต่ละห้องก่อนการนำเสนอให้แก่ผู้เข้าชมหรือไม่

.....

5. ในกรณีที่ผู้เข้าชมเป็นชาวต่างชาติ ทางพิพิธภัณฑ์ได้มีการจัดทำป้ายเป็นภาษาอังกฤษเพื่อใช้ในการสื่อสารบอกวัตถุประสงค์และการบรรยายหรือไม่ อย่างไร

.....

6. พิพิธภัณฑ์เปิดให้เข้าชมตั้งแต่เวลาใดถึงเวลาใดในวันปกติ ช่วงเวลาใดที่มีผู้เข้าชมมากที่สุด และทางพิพิธภัณฑ์ได้เปิดทำการในวันหยุดหรือวันนักขัตฤกษ์หรือไม่

วันจันทร์-วันศุกร์ ตั้งแต่เวลา.....น. ถึงเวลา.....น.

วันเสาร์ ☐ เปิด ☐ ปิด ตั้งแต่เวลา.....น. ถึงเวลา.....น.

วันอาทิตย์ ☐ เปิด ☐ ปิด ตั้งแต่เวลา.....น. ถึงเวลา.....น.

ช่วงที่มีผู้เข้าชมมากที่สุดอยู่ระหว่างช่วงเวลา.....น. ถึงเวลา.....น.

7. ผู้เข้าชมที่มาเป็นกลุ่มหรือหมู่คณะใช้ระยะเวลาในการเข้าชมประมาณเท่าใด และห้องจัดแสดงใดที่ผู้เข้าชมใช้เวลาามากที่สุดและน้อยที่สุด และเป็นเพราะเหตุใด

แต่ละกลุ่มผู้ชมใช้ระยะเวลาในการเข้าชมประมาณ ชม.

ห้องจัดแสดง..... ใช้เวลาในการเข้าชมมากที่สุด

เพราะ.....

ห้องจัดแสดง..... ใช้เวลาในการเข้าชมน้อยที่สุด

เพราะ.....

8. ทางพิพิธภัณฑ์สามารถรองรับผู้เข้าชมได้มากที่สุดประมาณกี่กลุ่มผู้เข้าชมและกี่คนต่อวัน

ประมาณ.....กลุ่ม/วัน สามารถรองรับจำนวนผู้เข้าชมได้สูงสุดประมาณ คน/วัน

9. ทางพิพิธภัณฑ์มีมัลติเพล็กซ์และอาสาสมัครมัลติเพล็กซ์จำนวนกี่คน จำนวนมัลติเพล็กซ์ที่มีในปัจจุบันพอเพียงกับจำนวนผู้เข้าชมพิพิธภัณฑ์หรือไม่ และมีปัญหาด้านการสื่อสารบ้างหรือไม่

.....

10. เท่าที่ท่านได้สังเกตพฤติกรรมของผู้เข้าชม ผู้ชมมีความสนใจมากน้อยเพียงใดกับเนื้อหาการจัดแสดงโดยรวม ส่วนจัดแสดงใดที่ผู้ชมประทับใจมากที่สุดและส่วนใดน้อยที่สุด และเนื่องจากสาเหตุใด

การจัดแสดงโดยรวม ☐ มีความสนใจน้อย

☐ มีความสนใจปานกลาง

☐ มีความสนใจมาก

☐ มีความสนใจมากที่สุด

ผู้ชมประทับใจในส่วนจัดแสดง.....มากที่สุด

เพราะ.....

ผู้ชมประทับใจในส่วนจัดแสดง.....น้อยที่สุด

เพราะ.....

ข้อเสนอแนะจากผู้ชมเพื่อการปรับปรุงการจัดแสดง:

1.....

2.....

3.....

11. ผู้เข้าชมส่วนใหญ่มีพื้นฐานความรู้เกี่ยวกับประวัติศาสตร์ทหารและการสงครามหรือไม่ ถ้าไม่มี จะมีผลต่อการทำความเข้าใจและการสื่อความหมายในการจัดแสดงของพิพิธภัณฑ์หรือไม่

.....

.....

.....

.....

12. ผู้เข้าชมจำเป็นต้องแจ้งล่วงหน้าแก่ทางพิพิธภัณฑ์เพื่อทำการนัดหมายเวลาเข้าชมหรือไม่ สำหรับนักท่องเที่ยวที่ไม่ได้ทำการนัดหมายล่วงหน้า จะสามารถเข้าชมพิพิธภัณฑ์ได้ด้วยตนเองหรือไม่

☐ จำเป็น เพราะ.....

☐ ไม่จำเป็น เพราะ.....

13. จากการสอบถาม ผู้เข้าชมส่วนใหญ่ที่จะกลับมาเยี่ยมชมพิพิธภัณฑ์ในครั้งต่อไปหรือไม่

☐ ไม่กลับมาเยี่ยมชม เนื่องจาก.....

☐ กลับมาเยี่ยมชมอีกในครั้งหน้า เพราะ.....

☐ ยังไม่แน่ใจ เพราะ.....

14. ผู้เข้าชมส่วนใหญ่มาพิพิธภัณฑ์ด้วยวิธีการใด ทางพิพิธภัณฑ์มีที่จอดรถเพียงพอต่อจำนวนยานพาหนะหรือไม่

☐ โดยรถยนต์ส่วนตัว

☐ โดยรถบัส/ รถทัวร์

☐ โดยรถขนส่งมวลชน

☐ โดยรถคู่

☐ อื่นๆ

พื้นที่จอดรถมี ☐ พอเพียง ☐ ไม่พอเพียง กับจำนวนยานพาหนะของผู้เข้าชมภายในพิพิธภัณฑ์

15. ทางพิพิธภัณฑ์ได้เคยมีการสำรวจระดับความพึงพอใจผู้เข้าชมกับการจัดแสดงหรือไม่

.....

.....

.....

.....

.....

16. ทางพิพิธภัณฑ์มีกิจกรรมหรือ โปรแกรมที่ให้ผู้เข้าชมได้มีส่วนร่วมในการจัดแสดงบ้างหรือไม่ อย่างไร

.....

.....

.....

.....

.....

III. ด้านการจำแนกวัตถุและการจัดแสดงภายในพิพิธภัณฑ์

1. ทางพิพิธภัณฑ์ได้มีการจัดเตรียมเอกสารหรือข้อมูลให้แก่ผู้เข้าชมล่วงหน้าเพื่อเป็นการแนะนำและทำความเข้าใจในการจัดแสดงบ้างหรือไม่ ถ้ามี สื่อนั้นคืออะไรและมีประสิทธิภาพในการสื่อสาร (Communication) และการสื่อความหมาย (Interpretation) หรือไม่ อย่างไร

.....

.....

.....

.....

.....

2. การจัดวางอาคารและพื้นที่จัดแสดง (Zoning and Circulation) ภายในพิพิธภัณฑ์ของท่านมีการจัดการวางผังที่ดีและสัมพันธ์กับการใช้พื้นที่หรือไม่ อย่างไร

.....

.....

.....

.....

.....

3. ปัจจุบัน การจำแนกและการจัดแสดงวัตถุภายในอาคารพิพิธภัณฑ์มีความเหมาะสมหรือไม่ อย่างไร และสิ่งใดที่เป็นปัญหาหรืออุปสรรคสำคัญเกี่ยวกับการจัดแสดงที่ควรได้รับการแก้ไขโดยด่วน

☐ เหมาะสม

☐ ยังไม่เหมาะสม ในส่วนของ

- 1.....
- 2.....
- 3.....
- 4.....

ควรดำเนินการแก้ไขในเรื่อง.....

.....

.....

4. วัตถุจัดแสดงภายในพิพิธภัณฑ์ของท่านมีที่มาจากแหล่งใด ได้รับการขึ้นทะเบียนจากหน่วยหรือองค์กรใด และมีวัตถุที่ได้จากการบริจาคหรือยืมจากพิพิธภัณฑ์ (Acquisition) อื่นเพื่อนำมาจัดแสดงบ้างหรือไม่ อย่างไร

มหาวิทยาลัยศิลปากร สงวนลิขสิทธิ์

.....

.....

.....

.....

5. ท่านได้พบปัญหาที่เกี่ยวข้องกับการจัดแสดงเช่น วัตถุพิพิธภัณฑ์, ผู้จัดแสดง, การให้แสงและเสียง, รวมถึงการใช้สื่อผสม (Multimedia) ในการจัดแสดงบ้างหรือไม่ อย่างไร

.....

.....

.....

.....

.....

6. หากพบปัญหาอันเกี่ยวข้องกับการจัดแสดง ท่านมีวิธีดำเนินการแก้ไขอย่างไร และการแก้ไขนั้นเป็นไปในลักษณะชั่วคราวหรือถาวร สำหรับค่าใช้จ่ายในการปรับปรุงการจัดแสดง ทางพิพิธภัณฑ์ได้รับการสนับสนุนด้านเงินทุนจากแหล่งหรือองค์กรใดบ้าง

.....

.....

.....

.....

.....

7. ในปัจจุบันการจัดแสดงภายในพิพิธภัณฑ์มีประสิทธิภาพมากน้อยเพียงใด ทางพิพิธภัณฑ์ได้มีการใช้สื่อผสม (Multi-media & Multi-vision) เพื่อใช้เป็นสื่อในการจัดแสดงบ้างหรือไม่ อย่างไร

.....

.....

.....

.....

.....

มหาวิทยาลัยศิลปากร ส่วนวนลิขสิทธิ์

IV. ด้านการจัดหาสิ่งอำนวยความสะดวกภายในพิพิธภัณฑ์

1. พิพิธภัณฑ์ของท่านมีสิ่งอำนวยความสะดวกให้แก่ผู้เข้าชม (Facility) ดังต่อไปนี้หรือไม่ และเพียงพอสำหรับการรองรับผู้เข้าชมภายในพิพิธภัณฑ์หรือไม่และสิ่งใดควรดำเนินการจัดหาเพิ่มเติม

	มีเพียงพอ	มีแต่ไม่เพียงพอ	ไม่มี / ต้องจัดหาเพิ่มเติม
☐ ศูนย์บริการข้อมูลนักท่องเที่ยว (Visitor Center)	☐	☐	☐
☐ ศูนย์อาหาร (Cafeteria)	☐	☐	☐
☐ ร้านค้าขายของที่ระลึก (Souvenir Shops)	☐	☐	☐
☐ ห้องฉายภาพยนตร์และสารคดี (Theater)	☐	☐	☐
☐ ห้องประชุมสัมมนา (Auditorium)	☐	☐	☐
☐ ลานกิจกรรมสันทนาการ (Recreational Area)	☐	☐	☐
☐ พื้นที่จัดนิทรรศการหมุนเวียน (Contemporary Exhibition)	☐	☐	☐
☐ ห้องน้ำ (Toilets)	☐	☐	☐
☐ พื้นที่ /ลานจอดรถ (Parking-lot)	☐	☐	☐

2. พิพิธภัณฑ์ของท่านมีพื้นที่สำหรับการก่อสร้างสิ่งอำนวยความสะดวก (Facility) เพิ่มเติมแก่ผู้เข้าชมหรือไม่ หากไม่สามารถหาพื้นที่ได้ ท่านมีแนวทางหรือนโยบายในการจัดหาสิ่งอำนวยความสะดวกในพื้นที่อย่างไร เพื่อเพิ่มประสิทธิภาพสูงสุดในการให้บริการของทางพิพิธภัณฑ์

.....

.....

.....

.....

.....

3. การดำเนินการก่อสร้างสิ่งอำนวยความสะดวกเพิ่มเติมในพื้นที่พิพิธภัณฑ์ของท่านขัดต่อนโยบายการใช้พื้นที่ หรือระเบียบข้อบังคับของทางทหารหรือไม่ ถ้าการพัฒนาพื้นที่ขัดต่อระเบียบ ท่านมีแนวทางหรือข้อเสนอแนะอย่างไร

.....

.....

.....

.....

มหาวิทยาลัยศิลปากร ส่วนอนุรักษ์มรดก

V. ด้านการดูแลรักษาวัตถุพิพิธภัณฑ์และการอนุรักษ์ อาคารพิพิธภัณฑ์

1. ทางพิพิธภัณฑ์ได้พบปัญหาเกี่ยวกับการเสื่อมสภาพของวัตถุจัดแสดงและจัดแสดงบ้างหรือไม่ และได้ดำเนินการปรับปรุงแก้ไขไปแล้วอย่างไร

.....

.....

.....

.....

.....

2. ทางพิพิธภัณฑ์ได้พบปัญหาเกี่ยวกับการเสื่อมสภาพของอาคารพิพิธภัณฑ์ทั้งภายในและภายนอกบ้างหรือไม่ ถ้ามี ส่วนใหญ่ปัญหาที่พบมีสาเหตุมาจากสิ่งใดและได้ดำเนินการแก้ไขแล้วอย่างไร

.....

.....

.....

.....

.....

3. พืชพันธุ์ของท่านมีนโยบายหรือวิธีการรักษาความปลอดภัยวัตถุพืชพันธุ์อย่างไร โปรดอธิบายโดยสังเขป

.....

.....

.....

.....

.....

4. พืชพันธุ์ของท่านมีนโยบายหรือวิธีการอนุรักษ์อาคารพืชพันธุ์อย่างไร โปรดอธิบายโดยสังเขป

.....

.....

.....

.....

.....

ด้านสภาพแวดล้อมทั่วไปของพืชพันธุ์

1. สิ่งใดคือจุดเด่นและจุดด้อยของทำเลที่ตั้งและสภาพแวดล้อมโดยรอบอาคารพืชพันธุ์ของท่านในปัจจุบัน

จุดดีของที่ตั้งพืชพันธุ์

- 1.....
- 2.....
- 3.....

จุดด้อยของที่ตั้งพืชพันธุ์

- 1.....
- 2.....
- 3.....

2. ในกรณีที่พืชพันธุ์ของท่านตั้งอยู่ในเขตพื้นที่ทหารที่มีการอารักขาหนาแน่นเสมือนเขตหวงห้ามสำหรับบุคคลทั่วไป สิ่งนี้มีผลต่อการบริหารจัดการพืชพันธุ์หรือไม่ อย่างไร

.....

.....

.....

.....

.....

3. ในกรณีที่พิพิธภัณฑ์ตั้งอยู่ในพื้นที่ทำงานของทหาร การแยกพื้นที่พิพิธภัณฑ์ออกจากพื้นที่ของหน่วยงานทหารสามารถดำเนินการได้หรือไม่ และขัดต่อนโยบายหรือข้อบังคับทางทหารหรือไม่ อย่างไร

☐ สามารถดำเนินการได้ เนื่องจาก.....

.....

.....

☐ ไม่สามารถดำเนินการได้ เนื่องจาก.....

.....

.....

4. ตามความเห็นของท่าน สิ่งใดคือจุดเด่นของพิพิธภัณฑ์ของท่านและจุดด้อยที่สมควรได้รับการแก้ไข

จุดเด่น 1.....

2.....

3.....

4.....

5.....

จุดด้อย 1.....

2.....

3.....

4.....

5.....

5. ตามความเห็นของท่าน ทางพิพิธภัณฑ์ควรรับดำเนินการแก้ไขหรือปรับปรุงสิ่งใดเพื่อให้การจัดการพิพิธภัณฑ์ของท่านมีประสิทธิภาพสูงสุดและสามารถรองรับความต้องการของผู้เข้าชมได้ทั้งในปัจจุบันจนถึงอนาคต

.....

.....

.....

.....

ขอขอบพระคุณอย่างสูงสำหรับความร่วมมือของท่าน

หากท่านมีข้อสงสัยหรือข้อเสนอแนะเกี่ยวกับแบบสอบถามฉบับนี้ กรุณาติดต่อ ร้อยเอก ถาวร สุขโขคาวชัย ผู้ทำการวิจัยเพื่อเสนอโครงการวิจัยเกี่ยวกับ การจัดการด้านการอนุรักษ์อาคารและการสื่อความหมายของ พิพิธภัณฑ์ทหารเพื่อการพัฒนาพิพิธภัณฑ์กองทัพบกเฉลิมพระเกียรติ ระดับปริญญาเอกของคณะสถาปัตยกรรมศาสตร์ มหาวิทยาลัยศิลปากร กรุณาติดต่อ: tavornsup@yahoo.com

Appendix III

Questionnaire Questions for Questionnaire Survey

There will be 300 people in the questionnaire survey and around 100 people for the focus group survey. The respondents will be local visitors who have entered the RTA museum as groups. For the 300 people survey, visitors will be largely come from government and non-government organizations. For the focus group survey, visitors are local people who have visited the museum.

Introduction to all visitors:

This questionnaire is aimed at gathering attitudes and perceptions of visitors at the Royal Thai Army Museum. In order to support the further development and improvement of the museum, could you please assist us. We would like to complete the questionnaire by filling in the gaps about yourselves and your opinions concerning your visit to the Royal Thai Army Museum.

We greatly appreciate your cooperation in completing this survey. Your information will be kept as confidential.

Section 1: Your Personal Information

1. What is your gender? ☐ Male ☐ Female

2. Which age range do you belong to?

☐ under 18	☐ 46-55
☐ 18-25	☐ 56-65
☐ 26-35	☐ 65 or above
☐ 36-45	

3. What is your level of education?

☐ Lower High School
☐ High School
☐ Bachelor Degree
☐ Master Degree or above

4. What is your occupation?

☐ Students	☐ Teacher/ Lecturer
☐ Military officer	☐ Police officer
☐ Government officer	☐ Business owner
☐ Non-government officer	☐ Other (please specify)

Section 2: About your visit at the RTA museum

5. Are you visiting the museum with
- ☐ Parent ☐ School / Military institution group
- ☐ Couple ☐ Organization group
- ☐ Friends..... person ☐ Alone
6. How many times have you been to the RTA museum?
- ☐ First time
- ☐ 2-3 times in years
- ☐ More than 3 times in years
7. How did you find the RTA museum?
- ☐ Family/ relative ☐ Television
- ☐ Friends ☐ Newspapers
- ☐ Radio ☐ Brochures
- ☐ Internet ☐ Travel magazines/guidebooks
- ☐ Other.....(Please specify)
8. What is your main purpose of visit?
- ☐ Recreation/leisure
- ☐ Research/ study
- ☐ Other.....(Please specify)
9. In your opinion, how important are the following factors influencing you to visit the RTA museum?
(Please rank '1' in the box for most important to '4' least important)
- ☐ Reputation as the first military museum in Thailand
- ☐ To see various sorts of military equipments and exhibitions
- ☐ To understand the role of the RTA via museum exhibitions
- ☐ Beautiful exterior and interior design of the museum building
10. After your visit, what do you think of the exhibitions?
(Please tick 'x' in the box)
- | | Excellent | Good | Fair | Poor |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| Auditorium | ☐ | ☐ | ☐ | ☐ |
| Weapon Rm. | ☐ | ☐ | ☐ | ☐ |
| Army History Rm. | ☐ | ☐ | ☐ | ☐ |
| Flag & Military Equipment Rm. | ☐ | ☐ | ☐ | ☐ |
| Uniform & Military Insignia Rm. | ☐ | ☐ | ☐ | ☐ |
| Reception Rm. | ☐ | ☐ | ☐ | ☐ |
| Memorial Hall. | ☐ | ☐ | ☐ | ☐ |
| Army Evolution Rm. | ☐ | ☐ | ☐ | ☐ |
| Administrative Research & Military Archives Rm. | ☐ | ☐ | ☐ | ☐ |

11. Which exhibition in these rooms did you find the most satisfying and unsatisfying? (Please see the name of each exhibition room in Q.10)

The most satisfying exhibition room is.....

Because.....

.....

The most unsatisfying exhibition room is.....

Because.....

.....

Section 3: Your opinions for a better improvement of the RTA museum

12. Which of the following do you think the RTA museum should improve?

(You can choose more than one)

☐ Accessibility to the site	☐ Trained guides
☐ Cleanliness	☐ Displays and exhibitions
☐ Safety & security	☐ Hospitality/ quality of services
☐ Museum building	☐ Accommodations (cafeteria, toilets, etc)
☐ Transportation/ parking lot	☐ Recreation Zone and activities
☐ Other..... (Please specify)	

13. Have you ever been to other military-related museums in Thailand?

☐ Yes, at (Please specify)

☐ No, **Please go to question 15**

14. As you have been visiting various military museums worldwide, could you please compare the RTA museum to those military museum destinations?

☐ The RTA museum is better than other military museums.

In what aspect? Please specify.....

.....

☐ The RTA museum is as same as other military museums.

☐ The RTA museum is not as good as other military museums.

In what aspect? Please specify.....

.....

15. Which factors are as difficulty for your museum experience?

(You can choose more than one)

☐ Location of the museum	☐ Number of guides
☐ Accessibility as individual	☐ Presentation by displays/ exhibitions
☐ Accessibility as group	☐ Interpretative tools (available info, signs)
☐ Reservation for the visit	☐ Insufficient accommodations
☐ Parking lot	☐ Other..... (Please specify)

16. What would you think if the RTA museum charged for an entrance fee?

☐ Agree, **Please go to Q.17**

☐ Disagree, **Please go to Q.18**

17. Where would you most like to see money spent for improvement?

(You can choose more than one)

- ☐ Exhibit showcases/multimedia presentations
- ☐ Facilities (cafeteria, toilets, shops, etc)
- ☐ Hospitality and quality of services
- ☐ Lighting and sound design
- ☐ Trained guides and volunteers
- ☐ Parking lot

18. The museum has limited space to provide visitor facilities because it was located in an area of the RTA Headquarters. Bearing this in mind, which proposal do you think is best?

- ☐ Relocate the RTA museum to a new location **(Go to Q.19)**
- ☐ Build new facilities underneath the museum building
with excavation for underground facility development **(Go to Q.20)**
- ☐ Build new facility building development near the museum **(Go to Q.20)**
- ☐ Other opinion you may have

19. Where do you wish the new RTA museum to be located?

- ☐ In the city area of Bangkok
- ☐ In the provincial area. Where?(Please specify)

20. What kind of facilities do you want for new underground / building project?
(You can choose more than one)

- ☐ Visitor center
- ☐ Auditorium
- ☐ Cafeteria
- ☐ Toilets
- ☐ Souvenir shops
- ☐ Recreational area
- ☐ Theater / Cinema
- ☐ Parking-lot
- ☐ Contemporary Exhibition area

21. Do you plan to revisit the RTA museum?

- ☐ Yes
- ☐ No, because.....
- ☐ Not sure, because.....

22. Will you recommend others to visit the RTA museum?

- ☐ Yes
- ☐ No, why not?

23. Do you have any suggestion for the improvement of the RTA museum?

.....
.....

‘Thank you for your cooperation’

If you have any question or additional comments about this questionnaire, please contact Cpt. Tavorn Supachokeauychai, PhD Candidate, Faculty of Architecture, Silpakorn University, Bangkok, Thailand. E-mail: tavornsup@yahoo.com

Appendix IV

แบบสอบถามการเข้าเยี่ยมชมพิพิธภัณฑ์กองทัพบกเฉลิมพระเกียรติ

แบบสอบถามฉบับนี้จัดทำขึ้น เพื่อรวบรวมข้อมูลในด้านความคิดเห็นและทัศนคติของท่านที่มีต่อ พิพิธภัณฑ์กองทัพบกเฉลิมพระเกียรติ เพื่อการพัฒนาและปรับปรุงพิพิธภัณฑ์แห่งนี้ให้มีประสิทธิภาพมากขึ้นทั้งในด้านการจัดแสดงวัตถุพิพิธภัณฑ์ทางทหารรวมถึงคุณภาพในการให้บริการ และการจัดหาสิ่งอำนวยความสะดวกแก่ผู้เข้าชมภายในพื้นที่พิพิธภัณฑ์ ขอความกรุณาท่านผู้เข้าชมพิพิธภัณฑ์ได้โปรดใช้เวลาในการตอบแบบสอบถามเกี่ยวกับข้อมูลส่วนตัวของท่านและความคิดเห็นทั่วไปเกี่ยวกับการเข้าชมพิพิธภัณฑ์

ทางผู้วิจัยขอขอบพระคุณท่านเป็นอย่างสูงสำหรับความร่วมมือของท่านในตอบแบบสอบถามฉบับนี้ ข้อมูลอันมีค่าของท่านจะได้รับการดูแลและปกปิดเป็นความลับอย่างดี

ส่วนที่ 1: ข้อมูลส่วนตัว

1. เพศ ☐ ชาย ☐ หญิง

2. ปัจจุบันท่านอยู่ในช่วงอายุใด

- ☐ น้อยกว่า 18 ปี ☐ 46-55 ปี
☐ 18-25 ปี ☐ 56-65 ปี
☐ 26-35 ปี ☐ 65 ปีขึ้นไป
☐ 36-45 ปี

3. ระดับการศึกษาสูงสุดของท่าน

- ☐ ต่ำกว่าระดับมัธยมศึกษา
☐ ระดับมัธยมศึกษา
☐ ระดับปริญญาตรี
☐ ระดับปริญญาตรีหรือสูงกว่า

4. อาชีพของท่าน

- ☐ นักเรียน/นักศึกษา ☐ อาจารย์
☐ ทหาร ☐ พนักงาน/เจ้าหน้าที่บริษัท
☐ ตำรวจ ☐ ข้าราชการ/ พนักงานรัฐวิสาหกิจ
☐ ธุรกิจส่วนตัว ☐ อื่นๆ.....

ส่วนที่ 2: เกี่ยวกับการเข้าชมพิพิธภัณฑ์ของท่าน

5. ท่านได้มาเข้าชมพิพิธภัณฑ์กองทัพบกพร้อมกับ

- ☐ ครอบครัว ☐ กลุ่มสถาบันการศึกษา/ วิชาทหาร
- ☐ เพื่อน จำนวน คน ☐ กลุ่มองค์กรราชการ/ เอกชน
- ☐ มาคนเดียว

6. การมาเยี่ยมชมพิพิธภัณฑ์ครั้งนี้ เป็นครั้งที่เท่าไรของท่าน

- ☐ ครั้งแรก
- ☐ เคยมา 2-3 ครั้งในช่วงระยะเวลา.....ปี
- ☐ เคยมามากกว่า 3 ครั้งในช่วงระยะเวลา.....ปี

7. คุณทราบข้อมูลเกี่ยวกับพิพิธภัณฑ์กองทัพบกจากแหล่งใด

- ☐ ครอบครัว/ญาติ ☐ โทรทัศน์
- ☐ เพื่อน ☐ หนังสือพิมพ์
- ☐ วิทยุ ☐ ใบแจก/ แผ่นพับ (Brochure)
- ☐ อินเทอร์เน็ต ☐ นิตยสาร /หนังสือท่องเที่ยว
- ☐ อื่นๆ.....

8. ข้อใดตรงกับวัตถุประสงค์ของท่านในการมาเยี่ยมชมพิพิธภัณฑ์ครั้งนี้

- ☐ เพื่อเป็นการพักผ่อน/ กิจกรรมสันทนาการ
- ☐ เพื่อเรียนรู้ประวัติศาสตร์การทหารของไทย
- ☐ เพื่อทำการศึกษาวิจัยประกอบการเรียนการสอน
- ☐ อื่นๆ.....

9. ในความคิดเห็นของท่าน สิ่งใดเป็นปัจจัยหลักที่มีอิทธิพลต่อการตัดสินใจเข้ามาเยี่ยมชมพิพิธภัณฑ์แห่งนี้ (โปรดระบุหมายเลข '1' มีอิทธิพลต่อการตัดสินใจมากที่สุดจนถึงหมายเลข '4' มีอิทธิพลน้อยที่สุด)

- ☐ ชื่อเสียงของพิพิธภัณฑ์ที่เป็นพิพิธภัณฑ์ทหารแห่งแรกของไทย
- ☐ การได้เข้าชมวัตถุการสงครามในอดีตที่หายาก และชมการจัดแสดงที่น่าตื่นตาตื่นใจ
- ☐ การได้เข้าใจถึงบทบาทหน้าที่ของกองทัพบกตั้งแต่อดีตถึงปัจจุบันผ่านการจัดแสดงในพิพิธภัณฑ์
- ☐ รูปลักษณ์สถาปัตยกรรมทั้งภายนอกและภายในของอาคารพิพิธภัณฑ์ที่มีความโดดเด่น

10. หลังจากท่านได้เข้าชมพิพิธภัณฑ์แล้ว ท่านมีความคิดเห็นเกี่ยวกับการจัดแสดงในแต่ละห้องอย่างไร (โปรดระบุเครื่องหมาย 'x' ในช่อง)

	ดีมาก	ดี	พอใช้	ควรปรับปรุง
ห้องบรรยายสรุป	☐	☐	☐	☐
ห้องจัดแสดงอาวุธ	☐	☐	☐	☐
ห้องจำลองเหตุการณ์ทางประวัติศาสตร์	☐	☐	☐	☐
ห้องธงและเครื่องมือเครื่องใช้ทางทหาร	☐	☐	☐	☐
ห้องแสดงเครื่องแบบและเครื่องหมายทางทหาร	☐	☐	☐	☐
ห้องรับรอง บก.ทบ	☐	☐	☐	☐
ห้องพระบรมมัยปกเกล้า	☐	☐	☐	☐
ห้องวิวัฒนาการกองทัพบก	☐	☐	☐	☐
ห้องค้นคว้าเอกสารทางทหาร	☐	☐	☐	☐

11. ท่านพึงพอใจและไม่พึงพอใจกับการจัดแสดงภายในห้องใดมากที่สุด (โปรดดูรายชื่อห้องจากข้อ 10)

ประทับใจมากที่สุดกับการจัดแสดงห้อง.....

เพราะ.....

ไม่พึงพอใจมากที่สุดกับการจัดแสดงห้อง.....

เพราะ.....

.....

ส่วนที่ 3: เกี่ยวกับความคิดเห็นของท่านเพื่อการปรับปรุงและพัฒนาพิพิธภัณฑ์กองทัพบก

12. ท่านคิดว่าทางพิพิธภัณฑ์ควรดำเนินการแก้ไขหรือปรับปรุงสิ่งใดเพื่อให้มีประสิทธิภาพสูงสุด (ท่านสามารถเลือกได้มากกว่าหนึ่ง)

☐ การเข้าถึงพื้นที่อาคารพิพิธภัณฑ์	☐ มัคคุเทศก์
☐ อาคารพิพิธภัณฑ์	☐ การจัดวางวัตถุและการจัดแสดง
☐ การรักษาความปลอดภัยของวัตถุพิพิธภัณฑ์ และผู้ชม	☐ การดูแลเอาใจใส่และบริการของพนักงาน
☐ ความสะอาดของสถานที่	☐ สิ่งอำนวยความสะดวก
	(ศูนย์อาหาร, ห้องน้ำ ฯลฯ)
☐ พื้นที่จอดรถ	☐ พื้นที่สัน ทนาการและพื้นที่กิจกรรม
☐ อื่นๆ..... โปรดระบุ)	

13. ท่านเคยได้มีโอกาสเข้าชมพิพิธภัณฑ์ทหารอื่น ๆ ทั้งในหรือต่างประเทศหรือไม่

☐ เคย(โปรดระบุสถานที่)

☐ ไม่เคย (ไปข้อที่15)

14. พิพิธภัณฑ์ทหารอื่นๆที่ท่านได้เคยเข้าชมเมื่อเปรียบเทียบกับพิพิธภัณฑ์กองทัพบก ท่านมีความคิดเห็นอย่างไร

☐ พิพิธภัณฑ์กองทัพบก ดีกว่าพิพิธภัณฑ์ทหารอื่นๆ (ในด้าน.....)

☐ พิพิธภัณฑ์กองทัพบก เทียบเท่าพิพิธภัณฑ์ทหารอื่นๆ

☐ พิพิธภัณฑ์กองทัพบก แย่กว่าพิพิธภัณฑ์ทหารอื่นๆ (ในด้าน.....)

15. ตามความเห็นของท่าน ปัจจัยในข้อใดต่อไปนี้เป็นอุปสรรคต่อการมาเยี่ยมชมพิพิธภัณฑ์กองทัพบกของท่าน (ท่านสามารถเลือกได้มากกว่าหนึ่ง)

☐ สถานที่ตั้งของพิพิธภัณฑ์ในพื้นที่ทหาร

☐ ระดับความยากของการเข้าถึงสถานที่

☐ การต้องนัดหมายล่วงหน้าก่อนเข้าชมจริง

☐ จำนวนของมัลติมีเดียไม่พอเพียงกับจำนวนนักท่องเที่ยว

☐ การจัดวางวัตถุและการจัดแสดงภายในพิพิธภัณฑ์

☐ เครื่องมือในการสื่อความหมาย (ข้อมูล, ป้าย, สัญลักษณ์)

☐ สถานที่จอดรถที่ไม่เพียงพอ

☐ ความไม่พร้อมของการจัดสิ่งอำนวยความสะดวก เช่น ห้องน้ำ ร้านค้า ศูนย์อาหาร

☐ อื่นๆ (โปรดระบุ)

16. เพื่อเป็นการเพิ่มรายได้ในการบริหารจัดการแก่ทางพิพิธภัณฑ์กองทัพบก ท่านมีความคิดเห็นอย่างไรถ้าทางพิพิธภัณฑ์จะดำเนินการเก็บค่าเข้าชม จากเดิมที่ไม่เสียค่าเข้าชม

☐ เห็นด้วย เพราะ..... (ไปข้อ 17)

☐ ไม่เห็นด้วย เนื่องจาก.....(ไปข้อ 18)

17. ท่านต้องการให้รายได้จากการเก็บค่าเข้าชมนำไปพัฒนาในส่วนใดดังต่อไปนี้ของพิพิธภัณฑ์ (ท่านสามารถเลือกได้มากกว่าหนึ่ง)

☐ การดูแลรักษาวัตถุพิพิธภัณฑ์และผู้จัดแสดง (Exhibit showcases)

☐ การเพิ่มสิ่งอำนวยความสะดวกที่จำเป็นแก่ผู้เข้าชมเช่น ที่จอดรถ, ศูนย์อาหาร, ห้องน้ำ, ลานกิจกรรม ฯลฯ

☐ การเพิ่มประสิทธิภาพในการให้บริการของเจ้าหน้าที่ รวมถึงการจัดหามัลติมีเดียให้พอเพียง

☐ การนำเทคนิคแอสซีเอ็ม (Multimedia) มาใช้เพื่อเพิ่มคุณค่าในการสื่อความหมายของการจัดแสดง

☐ การเพิ่มพื้นที่จอดรถสาธารณะและรถส่วนตัวสำหรับผู้มาเยี่ยมชม

18. เนื่องด้วยข้อจำกัดด้านพื้นที่ของอาคารพิพิธภัณฑ์ทั้งในด้านที่ตั้งที่อยู่ในพื้นที่เขตทหาร และการเข้าถึงที่ค่อนข้างลำบากสำหรับประชาชนทั่วไป รวมถึงพื้นที่ในการก่อสร้างสิ่งสาธารณูปโภคและอำนวยความสะดวกมีไม่เพียงพอ ข้อเสนอโครงการปรับปรุงพื้นที่ในข้อใดต่อไป นี้ ที่ตรงตามความเห็นของท่านมากที่สุด

- ☐ ดำเนินการย้ายที่ตั้งพิพิธภัณฑ์กองทัพบกไปอยู่ ณ ที่ตั้งแห่งใหม่แทนพื้นที่เดิม (ไปข้อ 19)
- ☐ ดำเนินการสร้างสิ่งอำนวยความสะดวกต่างๆ ให้อาคารพิพิธภัณฑ์ เพื่อลดการใช้พื้นที่ที่จำกัดของบริเวณโดยรอบพื้นที่อาคารพิพิธภัณฑ์ (ไปข้อ 20)
- ☐ ดำเนินการสร้างอาคารใหม่ใกล้เคียงอาคารพิพิธภัณฑ์ โดยมีสิ่งอำนวยความสะดวกอยู่ภายใน (ไปข้อ 20)
- ☐ ไม่มีความคิดเห็น (ไปข้อ 20)

19. ท่านต้องการให้พิพิธภัณฑ์แห่งใหม่ ตั้งอยู่ในพื้นที่แห่งใด

- ☐ ในตัวเมืองของกรุงเทพ
- ☐ ในต่างจังหวัด ที่จังหวัด.....

20. สิ่งอำนวยความสะดวกใดบ้างที่ท่านต้องการให้มี ตามข้อเสนอ โครงการปรับปรุงพื้นที่ภายในพิพิธภัณฑ์ (ท่านสามารถเลือกได้มากกว่าหนึ่ง)

- ☐ ศูนย์บริการนักท่องเที่ยว (Visitor center)
- ☐ หอประชุมสัมมนา (Auditorium)
- ☐ พื้นที่กิจกรรมสันทนาการ (Recreational area)
- ☐ ห้องน้ำ (Toilets)
- ☐ ร้านค้าขายของที่ระลึก (Souvenir shops)
- ☐ ศูนย์อาหาร (Cafeteria)
- ☐ ห้องฉายภาพยนตร์และสารคดี (Theater)
- ☐ ลานจอดรถบัส, รถตู้และรถยนต์
- ☐ ลานจัดนิทรรศการหมุนเวียน (Contemporary Exhibition)

21. หากโครงการปรับปรุงดังกล่าวสามารถดำเนินการได้จริง ท่านจะกลับมาเยี่ยมชมพิพิธภัณฑ์กองทัพบกในครั้งต่อไปหรือไม่

- ☐ มา
- ☐ ไม่มา เนื่องจาก.....
- ☐ ไม่แน่ใจ เพราะ.....

22. ท่านจะแนะนำหรือเผยแพร่แก่เพื่อนหรือบุคคลที่ท่านรู้จักให้มาเยี่ยมชมพิพิธภัณฑ์กองทัพบกหรือไม่

- ☐ แนะนำ
- ☐ ไม่แนะนำ เนื่องจาก.....

23. ท่านมีความคิดเห็นเพิ่มเติมในการปรับปรุงพิพิธภัณฑ์กองทัพบกทั้งในด้านการจัดแสดงและการให้บริการให้มีประสิทธิภาพมากขึ้นได้อย่างไร

.....

.....

.....

.....

.....

ขอขอบพระคุณอย่างสูงสำหรับความร่วมมือของท่าน

หากท่านมีข้อสงสัยหรือข้อเสนอแนะเกี่ยวกับแบบสอบถามฉบับนี้ กรุณาติดต่อ ร้อยเอก ถาวร ศุภโชคเวชชัย
ผู้จัดทำการวิจัยเพื่อเสนอโครงการวิจัย เกี่ยวกับการปรับปรุงสภาพแวดล้อมและการอนุรักษ์อาคารพิพิธภัณฑ์
กองทัพบกเฉลิมพระเกียรติ ระดับปริญญาเอกของคณะสถาปัตยกรรมศาสตร์ มหาวิทยาลัยศิลปากร
กรุณาติดต่อ: tavornsup@yahoo.com

มหาวิทยาลัยศิลปากร สงวนลิขสิทธิ์

Section 1: Your Personal Information

- What is your gender?
☐ Male ☐ Female
- Which age range do you belong to?
☐ under 18 ☐ 46-55
☐ 18-25 ☐ 56-65
☐ 26-35 ☐ 65 or above
☐ 36-45
- What is your level of education?
☐ Lower High School
☐ High School
☐ Graduate
☐ Post Graduate
- What is your occupation?
☐ Students
☐ Military officer
☐ Police officer
☐ Business owner
☐ Teacher/ Lecturer
☐ Employee
☐ Gov/ Non-government officer
☐ Other (please specify): _____

Section 2: About your visit at the RTA museum

- Are you visiting the museum with
☐ Family
☐ Friends number ____ person
☐ Alone
☐ School/ Military Institution Group
☐ Organization Group
- How many times have you been to the RTA museum?
☐ First time
☐ 2-3 times in ____ years
☐ More than 3 times in ____ years

- How did you find the RTA museum?
☐ Family/ relative ☐ Television
☐ Friends ☐ Newspapers
☐ Radio ☐ Brochures
☐ Internet
☐ Travel magazines/guidebooks
☐ Other _____ (Please specify)

- What is your main purpose of visit?
☐ Recreation/ leisure
☐ Research/ study
☐ Other _____ (Please specify)

- In your opinion, how important are the following factors influencing you to visit the RTA museum? (Please rank '1' in the box for most important to '4' least important)

- ☐ Reputation as the first military museum in Thailand
- ☐ To see various sorts of military equipments and exhibitions
- ☐ To understand the role of the RTA through museum exhibitions
- ☐ Beautiful exterior and interior design of the museum building

- After your visit, what do you think of the exhibitions? (Please tick '✓' in the box)

	Excellent	Good	Fair	Poor
Auditorium	☐	☐	☐	☐
Weapon Rm	☐	☐	☐	☐
Army History Rm	☐	☐	☐	☐
Flag & Military Rm	☐	☐	☐	☐
Uniform & Insignia Rm	☐	☐	☐	☐
Reception Rm	☐	☐	☐	☐
Memorial Hall	☐	☐	☐	☐
Army Evolution Rm	☐	☐	☐	☐
Administrative Research & Military Archives Rm	☐	☐	☐	☐

- Which exhibition in these rooms did you find the most satisfying and unsatisfying? (Please see the name of exhibition rooms in Q.10)

The most satisfying exhibition room is _____

Because _____

The most unsatisfying exhibition room is _____

Because _____

Section 3: Your opinions for a better improvement of the RTA museum

- Which of the following do you think the RTA museum should improve?

(You can choose more than one)

- ☐ Accessibility to the site
- ☐ Trained guides
- ☐ Museum building
- ☐ Displays and exhibitions
- ☐ Safety & security
- ☐ Hospitality/ quality of services
- ☐ Cleanliness
- ☐ Accommodations (cafeteria, toilets, etc)
- ☐ Transportation/ parking-lot
- ☐ Recreation area and activity zone
- ☐ Other _____ (Please specify)

- Have you ever been to other military-related museums in Thailand?

☐ Yes, at _____

☐ No, **Please go to question 15**

- As you have been visiting various military museums worldwide, could you please compare the RTA museum to those military museum destinations?

☐ The RTA museum is better than other military museums. In what aspect?

Please specify _____

QUESTIONNAIRE SURVEYS



THE ROYAL THAI ARMY MUSEUM

This questionnaire is aimed at gathering attitudes and perceptions of visitors at the Royal Thai Army Museum. In order to support the further development and improvement of the museum, could you please assist us. We would like to complete the questionnaire by filling in the gaps about yourselves and your opinions concerning your visit to the Royal Thai Army Museum

- ☐ The RTA museum is as same as other military museums.
- ☐ The RTA museum is not as good as other military museums. In what aspect?
Please specify _____

- ☐ Build new facility building development near the museum (**Go to Q.20**)
- ☐ Other opinion you may have _____

15. Which factors are as difficulty for your museum experience?
(You can choose more than one)

- ☐ Location of the museum
- ☐ Accessibility to the site
- ☐ Reservation for the visit
- ☐ Number of guides
- ☐ Presentation forms to displays and exhibitions
- ☐ Interpretative tools (available info, signs)
- ☐ Parking lot
- ☐ Insufficient accommodations (toilets, cafeteria, etc.)
- ☐ Other _____ (Please specify)

16. What would you think if the RTA museum charged for an entrance fee?

- ☐ Agree, **Please go to Q.17**
- ☐ Disagree, **Please go to Q.18**

17. Where would you most like to see money spent for improvement? (You can choose more than one)

- ☐ Museum objects and exhibit showcases
- ☐ Facilities (visitor center, cafeteria, toilets, shops, etc.)
- ☐ Hospitality and quality of services with more guides recruitment
- ☐ Multimedia for effective presentation
- ☐ More parking-lot for public vehicles

18. The museum has limited space to provide visitor facilities because it was located in an area of the RTA Headquarters. Bearing this in mind, which proposal do you think is best?

- ☐ Relocate the RTA museum to a new location (**Go to Q.19**)
- ☐ Build new facilities underneath the museum building with excavation for underground facility development (**Go to Q.20**)

19. Where do you wish the new RTA museum to be located?

- ☐ In the city area of Bangkok
- ☐ In the provincial area.
Where? _____ (Please specify)

20. What kind of facilities do you want for new underground / building project?

(You can tick '√' more than one)

- ☐ Visitor center
- ☐ Auditorium
- ☐ Recreational area
- ☐ Toilets
- ☐ Souvenir shops
- ☐ Cafeteria
- ☐ Theater / Cinema
- ☐ Parking-lot
- ☐ Temporary Exhibition area

21. Do you plan to revisit the RTA museum?

- ☐ Yes
- ☐ No, because _____
- ☐ Not sure, because _____

22. Will you recommend others to visit the RTA museum?

- ☐ Yes
- ☐ No, why not? _____

23. Do you have any suggestion for the improvement of the RTA museum?

'Thank You for Your Cooperation'

If you have any question or additional comments about this questionnaire, please contact Cpt. Tavorn Supachokeaueychai, PhD Candidate, Faculty of Architecture, Silpakorn University, Bangkok, Thailand. E-mail: tavornsup@yahoo.com

We greatly appreciate your cooperation in completing this survey. Your information will be kept as strictly confidential.

ส่วนที่ 1: ข้อมูลส่วนตัวของท่าน

- เพศ ☐ ชาย ☐ หญิง
- ปัจจุบันท่านอยู่ในช่วงอายุใด
 - ☐ น้อยกว่า 18 ปี ☐ 46-55 ปี
 - ☐ 18-25 ปี ☐ 56-65 ปี
 - ☐ 26-35 ปี ☐ 65 ปีขึ้นไป
 - ☐ 36-45 ปี
- ระดับการศึกษาสูงสุดของท่าน
 - ☐ ต่ำกว่าระดับมัธยมศึกษา ☐ ระดับปริญญาตรี
 - ☐ ระดับมัธยมศึกษา ☐ ระดับปริญญาตรีหรือสูงกว่า
- อาชีพของท่าน
 - ☐ นักเรียน/นักศึกษา ☐ อาจารย์
 - ☐ ทหาร ☐ พนักงาน/เจ้าหน้าที่บริษัท
 - ☐ ตำรวจ ☐ ข้าราชการ/พนักงานรัฐวิสาหกิจ
 - ☐ ธุรกิจส่วนตัว ☐ อื่นๆ.....

ส่วนที่ 2: เกี่ยวกับการเข้าชมพิพิธภัณฑ์ของท่าน

- ท่านได้มาเข้าชมพิพิธภัณฑ์กองทัพบกพร้อมกับ
 - ☐ ครอบครัว ☐ กลุ่มสถาบันการศึกษา / วิชาทหาร
 - ☐ เพื่อน จำนวน คน ☐ กลุ่มองค์กรราชการ / เอกชน
 - ☐ มาคนเดียว
- การมาเยี่ยมชมพิพิธภัณฑ์ครั้งนี้ เป็นครั้งที่ทำให้รู้ของท่าน
 - ☐ ครั้งแรก
 - ☐ เคยมา 2-3 ครั้งในช่วงระยะเวลา.....ปี
 - ☐ เคยมามากกว่า 3 ครั้งในช่วงระยะเวลา.....ปี
- ท่านทราบข้อมูลเกี่ยวกับพิพิธภัณฑ์กองทัพบกจากแหล่งใด
 - ☐ ครอบครัว/ญาติ ☐ โทรทัศน์
 - ☐ เพื่อน ☐ หนังสือพิมพ์
 - ☐ วิทยุ ☐ ใบแจก / แผ่นพับ (Brochure)
 - ☐ อินเทอร์เน็ต ☐ นิตยสาร / หนังสือท่องเที่ยว
 - ☐ อื่นๆ.....

- วัตถุประสงค์ของท่านในการมาเยี่ยมชมพิพิธภัณฑ์ครั้งนี้
 - ☐ เพื่อเป็น การพักผ่อน / กิจกรรมสันทนาการ
 - ☐ เพื่อเรียนรู้ประวัติศาสตร์ / การศึกษาวิจัย
 - ☐ อื่นๆ.....

- ในความคิดเห็นของท่าน สิ่งใดเป็นปัจจัยหลักที่มีอิทธิพลต่อการตัดสินใจเข้ามาเยี่ยมชมพิพิธภัณฑ์แห่งนี้ (โปรดระบุหมายเลข '1' มีอิทธิพลต่อการตัดสินใจมากที่สุดจนถึงหมายเลข '4' มีอิทธิพลน้อยที่สุด)
 - ☐ ชื่อเสียงที่เป็นพิพิธภัณฑ์ทหารแห่งแรกของไทย
 - ☐ การได้เข้าชมวัตถุการสงคราม ในอดีตที่หายากและชมการจัดแสดงที่น่าตื่นตาตื่นใจ
 - ☐ การได้เข้าใจถึงบทบาทหน้าที่ของกองทัพบกตั้งแต่อดีตถึงปัจจุบันผ่านการจัดแสดงในพิพิธภัณฑ์
 - ☐ รูปสัญลักษณ์ ป้ายครุฑทั้งภายในและภายนอกของอาคารพิพิธภัณฑ์ที่มีความโดดเด่น
- หลังจากท่านได้เข้าชมพิพิธภัณฑ์แล้ว ท่านมีความคิดเห็นเกี่ยวกับ

การจัดแสดงในแต่ละห้องอย่างไร (โปรดระบุ '✓' ในช่อง)

	ดีมาก	ดี	พอใช้	ควรปรับปรุง
ห้องบรรยายสรุป	☐	☐	☐	☐
ห้องจัดแสดงอาวุธ	☐	☐	☐	☐
ห้องจำลองเหตุการณ์ทางประวัติศาสตร์	☐	☐	☐	☐
ห้องธงและเครื่องมือเครื่องใช้ทางทหาร	☐	☐	☐	☐
ห้องเครื่องแบบและเครื่องหมายทหาร	☐	☐	☐	☐
ห้องรับรอง บก.ทบ	☐	☐	☐	☐
ห้องพระบรมมูปถัมภ์	☐	☐	☐	☐
ห้องวิวัฒนาการกองทัพบก	☐	☐	☐	☐
ห้องค้นคว้าเอกสารทางทหาร	☐	☐	☐	☐

- ท่านพึงพอใจหรือไม่พึงพอใจกับการจัดแสดงภายในห้องใดมากที่สุด (โปรดระบุชื่อห้องจากข้อ 10)

ประทับใจมากที่สุดกับการจัดแสดงห้อง.....

เพราะ.....

ไม่พึงพอใจมากที่สุดกับการจัดแสดงห้อง.....

เพราะ.....

ส่วนที่ 3: ความคิดเห็นของท่านเพื่อการปรับปรุงและพัฒนาพิพิธภัณฑ์กองทัพบก

- ท่านคิดว่าทางพิพิธภัณฑ์ควรดำเนินการแก้ไขหรือปรับปรุงสิ่งใดเพื่อให้มีประสิทธิภาพสูงสุด (ท่านสามารถเลือกได้มากกว่าหนึ่ง)
 - ☐ การเข้าถึงพื้นที่อาคารพิพิธภัณฑ์
 - ☐ มักุเทศก์
 - ☐ อาคารพิพิธภัณฑ์
 - ☐ การจัดวางวัตถุและการจัดแสดง
 - ☐ การรักษาความปลอดภัยของวัตถุพิพิธภัณฑ์ และผู้ชม
 - ☐ การดูแลเอาใจใส่และการบริการของพนักงาน
 - ☐ ความสะอาดของสถานที่
 - ☐ สิ่งอำนวยความสะดวก (ศูนย์อาหาร, ห้องน้ำ ฯลฯ)
 - ☐ พื้นที่จอดรถ
 - ☐ พื้นที่สันทนาการและพื้นที่กิจกรรม
 - ☐ อื่นๆ (โปรดระบุ)
- ท่านเคยได้เข้าชมพิพิธภัณฑ์ทหารอื่น ๆ ทั้งในหรือต่างประเทศหรือไม่
 - ☐ เคย ที่.....
 - ☐ ไม่เคย (ไปข้อที่ 15)
- พิพิธภัณฑ์ทหารอื่นๆที่ท่านได้เคยเข้าชมเมื่อเปรียบเทียบกับพิพิธภัณฑ์กองทัพบก ท่านมีความคิดเห็นอย่างไร
 - ☐ พิพิธภัณฑ์กองทัพบก ดีกว่าพิพิธภัณฑ์ทหารอื่นๆ ในด้าน.....
 - ☐ พิพิธภัณฑ์กองทัพบก ดีเทียบเท่าพิพิธภัณฑ์ทหารอื่นๆ
 - ☐ พิพิธภัณฑ์กองทัพบก แย่กว่าพิพิธภัณฑ์ทหารอื่นๆ ในด้าน.....
- ตามความเห็นของท่าน ปัจจัยในข้อใดต่อไปนี้ เป็นอุปสรรคต่อการมาเยี่ยมชมพิพิธภัณฑ์กองทัพบก (เลือกได้มากกว่าหนึ่ง)
 - ☐ สถานที่ตั้งของพิพิธภัณฑ์ในพื้นที่ทหาร
 - ☐ ระดับความยากของการเข้าถึงสถานที่
 - ☐ การต้องนัดหมายล่วงหน้าก่อนเข้าชมจริง

Autobiography



Name-Surname: Tavorn Supachokeauychai

Rank: Captain

Position: Interior Designer for the army at the Post-Engineer Department.

Permanent Address: 999/24 Kesiniville Soi 3, Pracha-Uthit Rd, Hauykwang District, Bangkok, Thailand 10320.

Office Address: The Post-Engineer Department, Phrahon-Yothin Road, Ladyao District, Bangkok, Thailand 10900.

Date of Birth: 26 June 1976

Place of Birth: Singburi

Nationality: Thai

Religion: Buddhism

Educational Background:

Dissertation Project: The Conservational Management and Interpretation for Future Development of the Royal Thai Army Museum in HM the King.

2005-Present: PhD Candidate for the Course: Doctor of Philosophy in Architectural Heritage Management and Tourism, Silpakorn University, Thailand.

2001-2002: Master of Arts (International Tourism and Hotel Management), Faculty of Humanity and Sociality, Southern Cross University, Australia in Partnership with Naresuan University, Pitsanulok.

1995-1999: Bachelor of Arts (Interior Design), Faculty of Fine and Applied Arts, Bangkok University, Thailand.

Work Experiences in Military Assignments:

- Interior Designer and Inspector, the Royal Thai Army Museum in HM the King, Royal Thai Army Headquarters, Rachadamnoen-nok Road, Bangkok, Thailand.

- Interior Designer & Architectural Assistant, Chiang Mai Military Precinct 33 Resort, The Military Precinct 33 (Mor-Tor-Bor 33), Mae-Rim District, Chiang Mai.
- An Army Lecturer for the Course: ‘Interior Decoration and Wooden Techniques’, at the Military of Post-Engineer Department, Bangkok, Thailand.
- Interior Designer, the Signboard for the Army History and Lists of Top Army Commanders, The Royal Thai Army Headquarters, Rachadamnoen Road, Bangkok, Thailand.
- Interior Designer & Architectural Assistant, The Reception Room for the General, The Dentistry Department, and The Pathology Department at King Rama 6th Hospital (King-Mongkutklao Hospital), Bangkok, Thailand.
- Interior Designer, the Knowledge Center and Chulalongkorn Bookstore in the Chulachomklao Royal Military Academy, Nakon-Nayok Province, Thailand.
- Interior Decorator, the National Crisis Management Center (NCCMC) in the Army Operations Center, Bangkok, Thailand.
- Interior Designer, the Official Army Conference Room and the Classroom No.1 for the Institute of Higher Army Studies at the Army Training Command (ATC), Bangkok, Thailand.
- Interior Designer and Architectural Consultant, the Grand Conference at King Rama 6th Hospital (King-Mongkutklao Hospital), Bangkok, Thailand.
- Interior Designer, The Military Registration Department at the Royal Thai Army Headquarters, Bangkok, Thailand.

International Seminar:

- A Lecturer, ‘*International Symposium on Architectural and Culture in Suvarnabhumi (ISACS)*’, organized by Faculty of Architecture, King Mongkut’s Institute of Technology Ladkrabang, August 16-17, 2007.
- A Lecturer, ‘*The 2nd ICOMOS Thailand General Assembly and International Symposium 2007*’ under the Topic: ‘*Interpretation from Monument to Living Heritage*’, organized by ICOMOS Thailand. November 1-3, 2007.