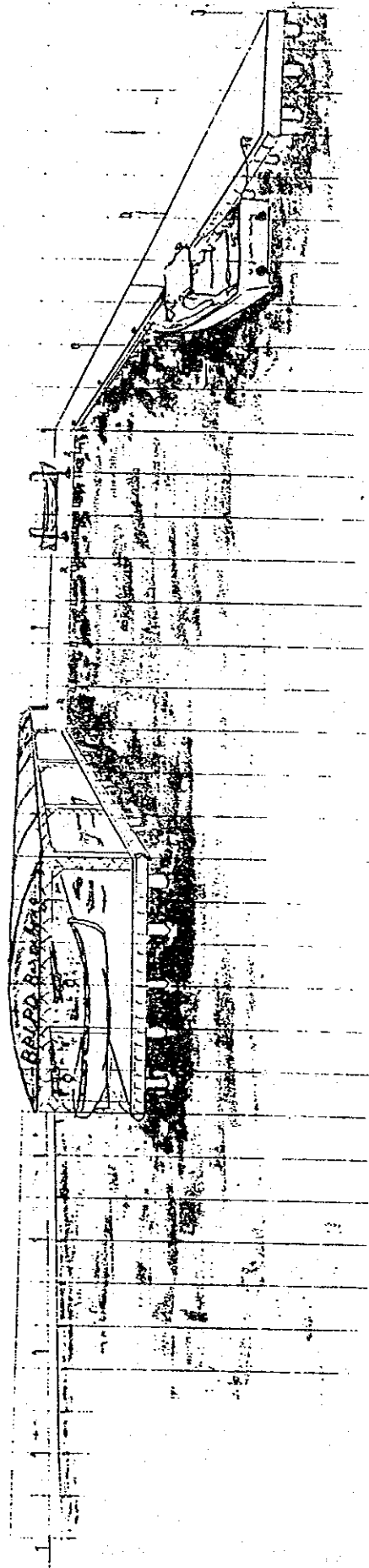


入手資料リスト

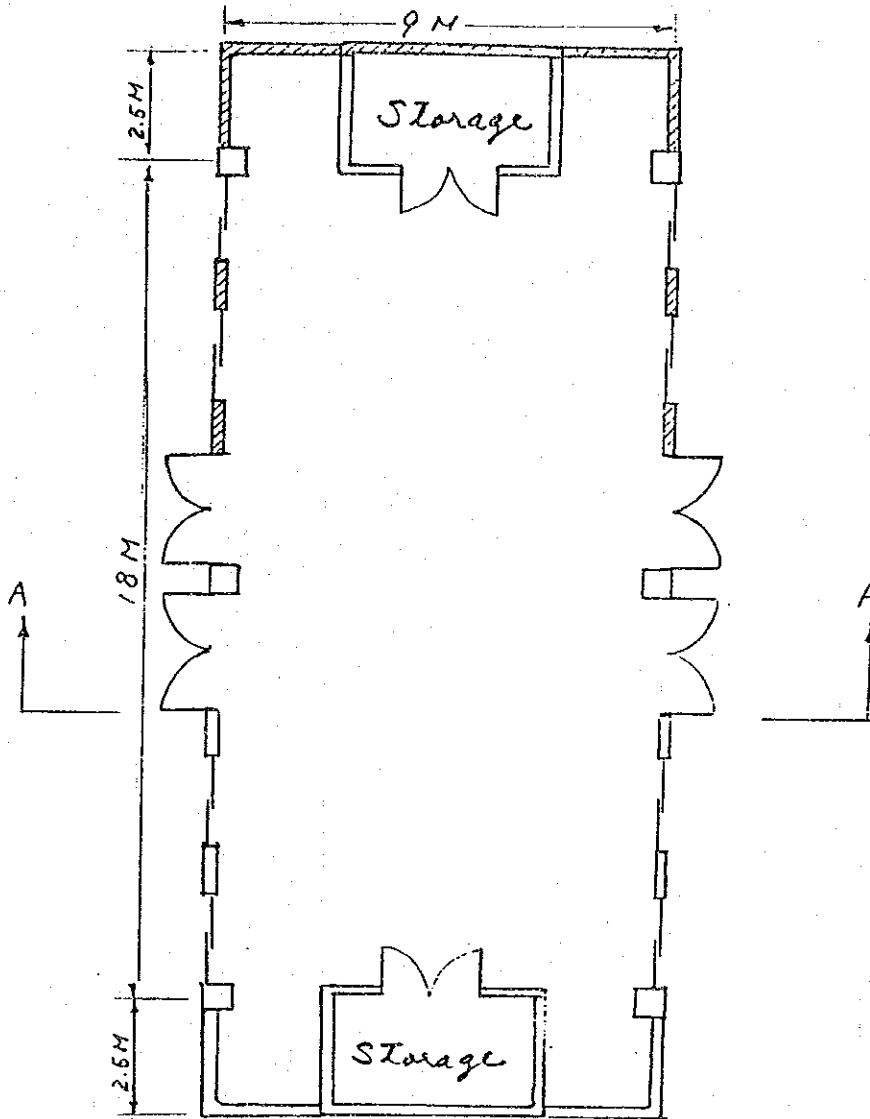
- ① クエスチョネアの回答書（バロンボン海員学校作成）
- ② 第一次無償基本設計図
- ③ 要請施設スケッチ図
- ④ 各クラス時間割
- ⑤ 建築資材コスト（1991年9月）
- ⑥ ジェネベラン川改修工事計画平面図
- ⑦ インドネシアの海員の現況
- ⑧ ジェネベラン川河口導流堤計画図
- ⑨ ジェネベラン川河口付近のボーリングテスト
- ⑩ 栈橋積算書

資料 6 要請施設概念図

Marina Type Trams & Maintenance Facility  
Lay out



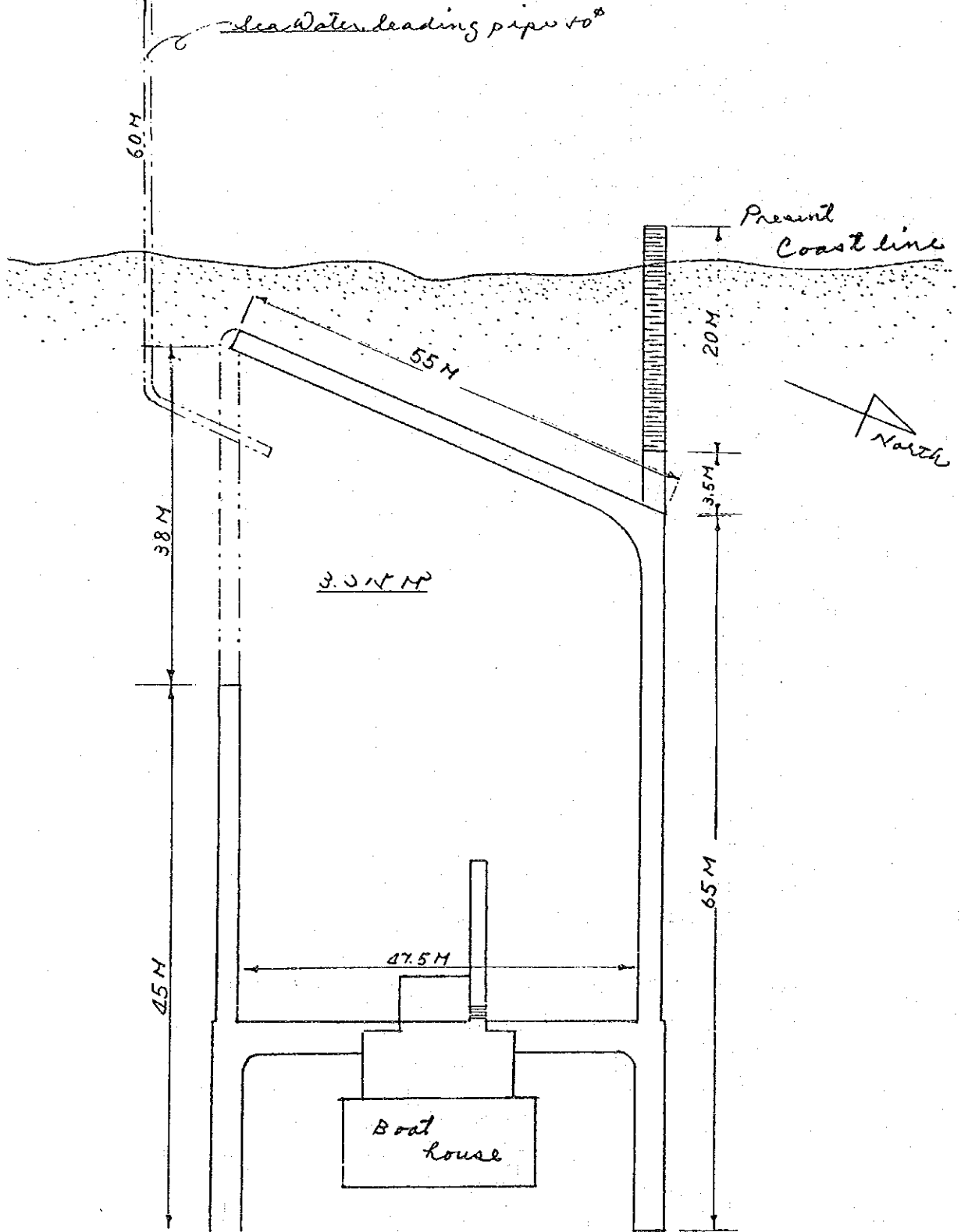
# 1. Lecture Room for Survival Training



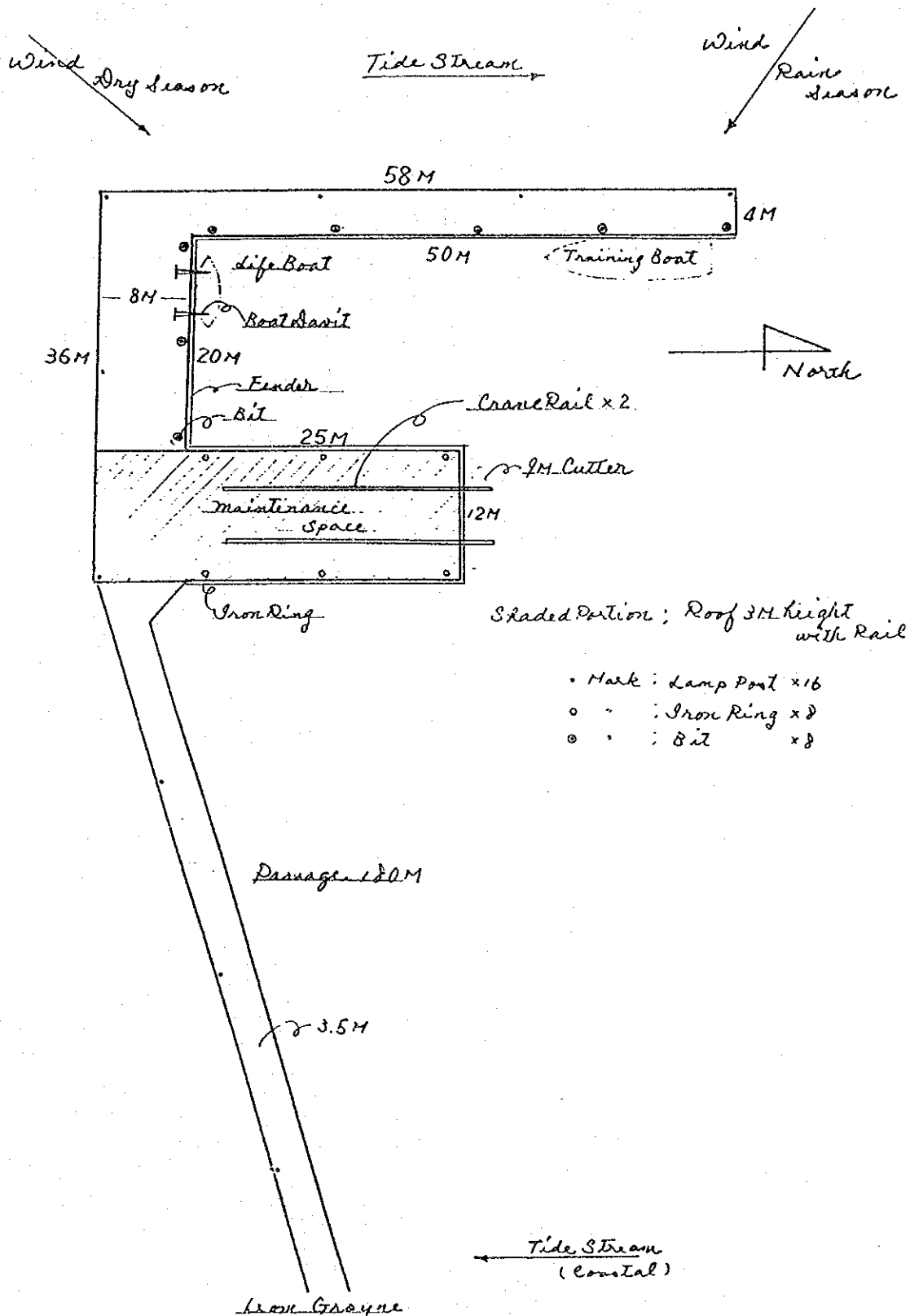
A-A Direction Shaded Portion . Renovation Part

- Iron Door x 1
- Window x 1
- Window for Ventilation x 1
- White Board x 1
- Folding Chair with handy desk x 30
- Ceiling light
- OHP x 1

# 2. Survival Training Pool



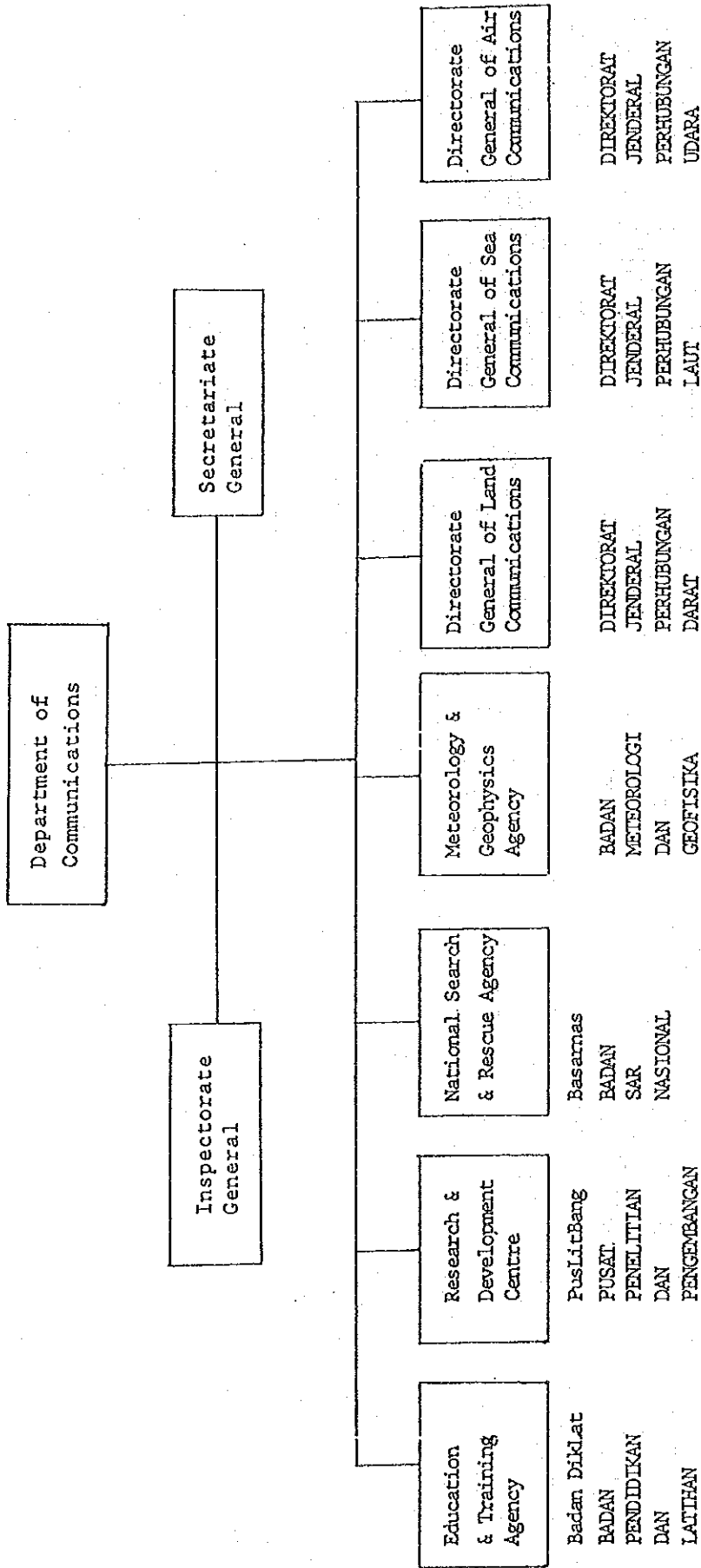
### 3. Training & Maintenance Facility



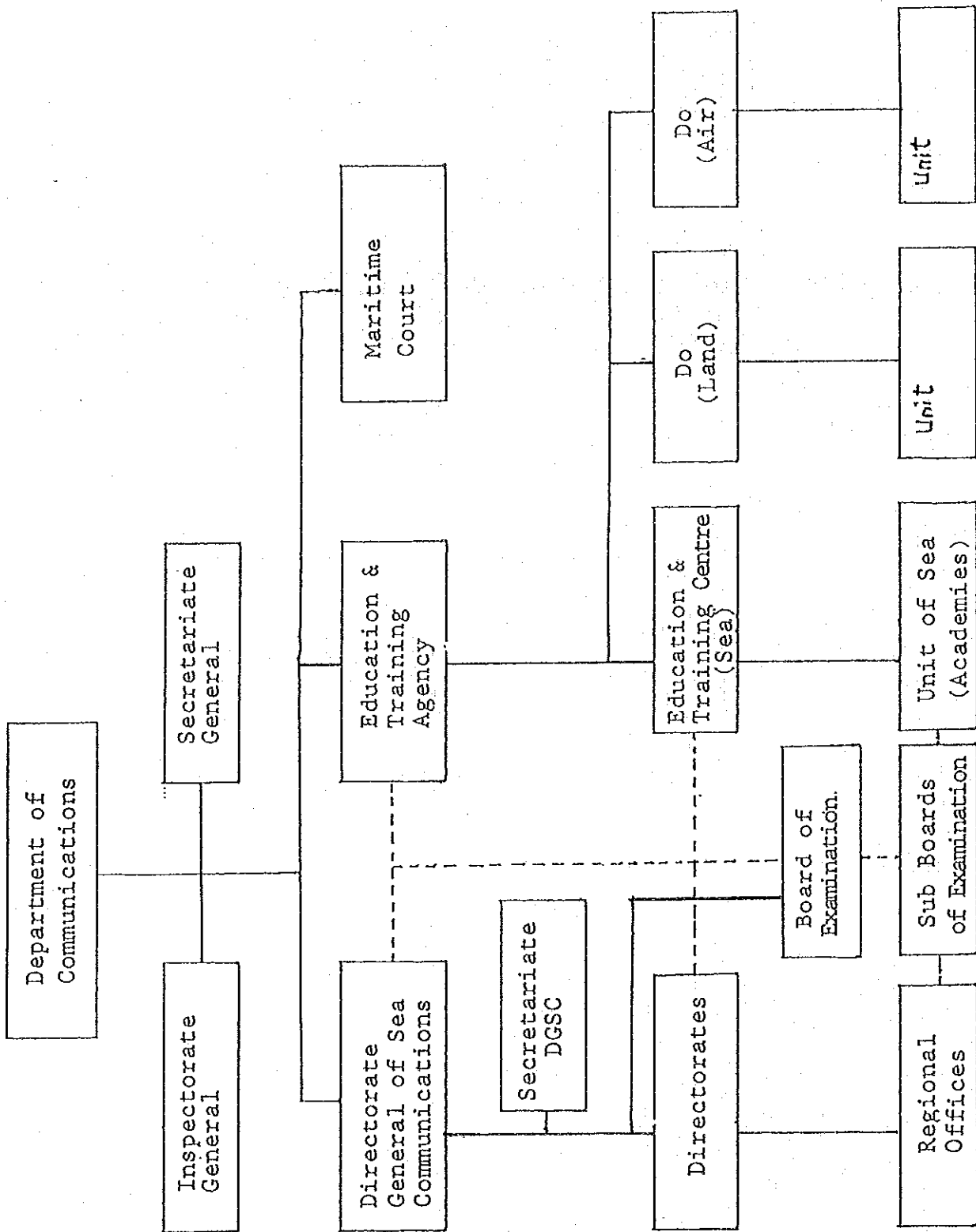


資料 7 運輸省組織図



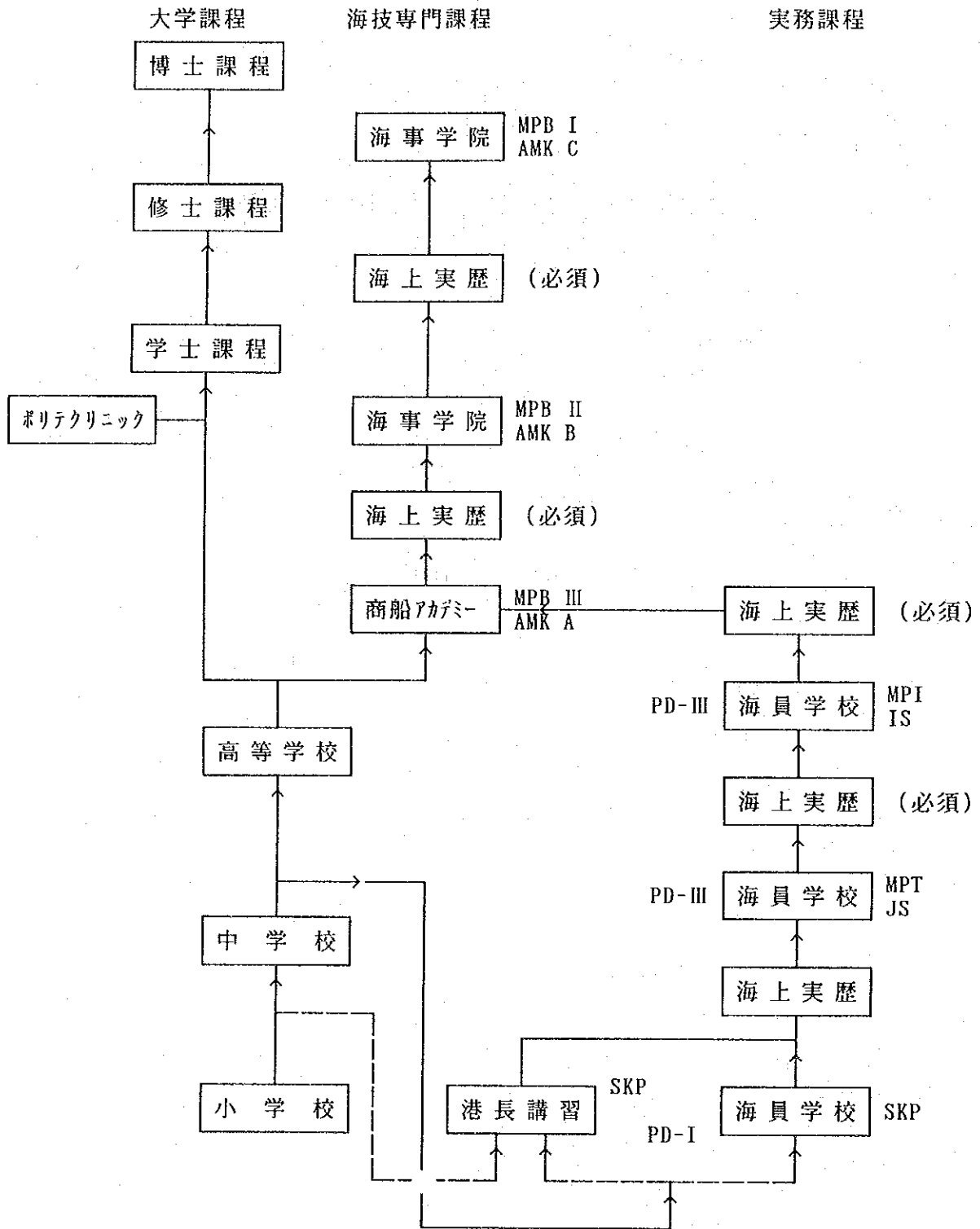


資料 8 海運総局・教育訓練庁組織図



資料 9 船員教育課程

船員教育課程



資料 10 免状の種類と職務権限

## 免状の種類と職務権限

### I. 種類

#### 1. 航海士

- 1) 大型商船航海士 I      Mualim Pelayaran Besar I (MPB I)
- 2) 大型商船航海士 II    Mualim Pelayaran Besar II (MPB II)
- 3) 大型商船航海士 III   Mualim Pelayaran Besar III (MPB III)
- 4) 近海商船航海士        Mualim Pelayaran Interinsuler (MPI)
- 5) 限定内航商船航海士   Mualim Pelayaran Terbatas (MPT)

#### 2. 機関士

- 1) 船舶機関士 C.        Ahli Mesin Kapal-C (AMK-C)
- 2) 船舶機関士 B.        Ahli Mesin Kapal-B (AMK-B)
- 3) 船舶機関士 A.        Ahli Mesin Kapal-A (AMK-A)
- 4) 船舶機関士 I.S        Ijazah Sementard (AMK-IS)
- 5) 発動機専門家/機械専門家    Juru Motor/Juru Mesin (JM/JS)

### II. 職務権限

#### 1. 航海士

##### 1) MPB. I

船行区域に制限のない。1600GRT 以上の船の船長  
(Unrestricted Voyages /U.V)

##### 2) MPB. II

船行区域に制限のない。1600GRT 以上の船の一等航海士 (U.V)

##### 3) MPB. III

船行区域に制限のない。200GRT以上の船の当直士官  
[ Watch Dfficer : W.O ] (U.V)

##### 4) MPI

インドネシア島嶼海域を航行する200GRT以上の船の当直士官  
(Near Coastal Voyage/NCV)

5) M P T

インドネシア島嶼海域を航行する200GRT未満の船の当直士官 (NCV)

2. 機関士

1) A M K - C

船行区域に制限のない最大出力3000KW以上の船の機関長 (U.V)

2) A M K - B

船行区域に制限のない最大出力3000KW以上の船の二等機関士 (U.V)

3) A M K - A

船行区域に制限のない最大出力 750KW未満の船の当直士官 (U.V)

[ Watch Dfficer : W.O ] (U.V)

4) A M K - I S

インドネシア島嶼海域を航行する最大出力3000KW未満の船の当直機関士 (NCV)

5) J M / J S

インドネシア島嶼海域を航行する最大出力 750KW未満の船の当直機関士 (NCV)





資料 1 1 バロンボン海員学校の  
カリキュラム

---

P D - I (航海科)

CURRICULUM FOR DECK RATING

Pelayaran Dasar I, Nautika

COURSE DURATION : 6 Months

LECTURING HOURS : 800.

PARTS OF SUBJECT	SUBJECT AREA	LEC. HOURS
General Basic Subjects	1. National Ideology and Law	20
	2. Indonesian History	20
	3. Indonesian Language	20
	4. Religion	20
	5. Military Drill	20
	6. Physical Fitness	20
	7. Etiquette	40
	Sub Total	160
Professional Basic Subject	1. Mathematic	40
	2. Physics	10
	3. English Language	60
	4. Maritime Law	20
	5. Automation	20
	6. First Aid	40
	7. Pers. Sea Survival Tehnique	50
	8. Basic Fire Fighting	50
	9. Health hazard & Personal Safety	30
	Sub Total	300
Professional Subject	1. Collision Regulation 1972	40
	a. Colreg 1972	
	b. Look out by Radar	
	2. Seamanship I	120
	a. Ropes & Wire	
	b. Ships Maintenance	
	c. Ships Equipment & Facilities	
	3. Seamanship II	100
	a. Cargo Works	
	b. Ships Building & Construction	
	c. Maneuvering & Steering	
	4. Navigation	70
	a. Terrestrial Navigation	
b. Chart Work		
c. Navigation Instruments		
5. Communication	10	
	Sub Total	340
T O T A L		800

PD - I (機関科)

CURRICULUM FOR ENGINE RATING

Pelayaran Dasar I, Tehnika

COURSE DURATION : 6 Months

LECTURING HOURS : 800.

PARTS OF SUBJECT	SUBJECT AREA	LEC. HOURS
General Basic Subjects	1. National Ideology and Law	20
	2. Indonesian History	20
	3. Indonesian Language	20
	4. Religion	20
	5. Military Drill	20
	6. Physical Fitness	20
	7. Etiquette	40
	Sub Total	160
Professional Basic Subject	1. Mathematic	20
	2. Physics	10
	3. English Language	60
	4. Maritime Law & Shipboard Organization	20
	5. Ships Building & Cunstruction	20
	6. First Aid	40
	7. Pers. Sea Survival Tehnique	50
	8. Basic Fire Fighting	50
	9. Health hazard & Personal Safety	30
	Sub Total	300
Professional Subject	1. Main Propulsion Power	50
	2. Boiler Plant	50
	3. Auxilliary Engines	50
	4. Electricity	40
	5. Automation	40
	6. Workshop technology & Practise	60
	7. Engine Room Handling & Maintenance	50
	Sub Total	340
T O T A L		800

P D - II (航海科)

CURRICULUM FOR NEAR COASTAL DECK OFFICER  
Pelayaran Dasar - II, Nautika.

COURSE DURATION : 6 Months.

LECTURING HOURS : 800.

PARTS OF SUBJECT	SUBJECT AREA	LEC. HOURS
General Basic Subjects	1. National Ideology and Law	20
	2. Religion	20
	3. Indonesian Language	20
	4. Military Drill	40
	5. Physical Fitness	40
	6. Etiquette	20
	Sub Total	160
Professional Basic Subjects	1. Mathematic	40
	2. Physics	40
	3. English Language	40
	4. Maritime Law	20
	5. Geography	20
	6. First Aid	20
	7. Engineering Knowledge	20
	Sub Total	200
Professional Subject	1. Terrestrial Navigation	60
	2. Cargo handling and Stowage	40
	3. Ships Stability	40
	4. Ships Equipment	40
	5. Ships Building & Construction	40
	6. Ships Maneuvering	40
	7. Collision Regulation 1972	60
	8. Navigation Instruments	40
	9. International Code of Signal	20
	10. Chart Work	40
	11. Meteorology	20
	Sub Total	440
T O T A L		800

P D - II (機関科)

CURRICULUM FOR NEAR COASTAL ENGINEER

Pelayaran Dasar - II, Tehnika.

COURSE DURATION : 6 Months.

LECTURING HOURS : 800.

PARTS OF SUBJECT	SUBJECT AREA	LEC. HOURS
General Basic Subjects	1. National Ideology and Law	20
	2. Religion	20
	3. Indonesian Language	20
	4. Military Drill	40
	5. Physical Fitness	40
	6. Etiquette	20
	Sub Total	160
Profesional Basic Subject	1. Mathematic	40
	2. Physics	40
	3. English Language	40
	4. Maritime Law	20
	5. Geography	20
	6. Ships Building & Construction	20
	7. Introduction of Seamanship	20
	Sub Total	220
Profesional Subject	1. Marine Diesel Engines	40
	2. Marine Steam Propulsion Plant and Gas Turbines	40
	3. Marine Electrotechnology	40
	4. Boiler Plant	60
	5. Workshop Practices	60
	6. Safe Working Practices	40
	7. Auxiliary Machinerics	40
	8. Technology of Materials	40
	9. Drawing of Naval Architectur and Tools Design	60
	Sub Total	440
	TOTAL	800

P D - III (航海科)

CURRICULUM FOR INTERISLAND DECK OFFICER

Pelayaran Dasar - III, Nautika.

COURSE DURATION : 12 Months.

LECTURING HOURS : 1.600

PARTS OF SUBJECT	SUBJECT AREA	LEC. HOURS
General Basic Subjects	1. National Ideology and Law	40
	2. Religion	40
	3. Indonesian Language	40
	4. Military Drill	40
	5. Etiquette	40
	Sub Total	200
Professional Basic Subject	1. Mathematic	80
	2. Physics	80
	3. English Language	80
	4. Maritime Law	40
	5. Engineering Knowledge	40
	6. Transportation Technology	40
	7. Basic Management	20
	8. Geography	40
	9. First Aid	40
	Sub Total	460
Professional Subject	1. Terrestrial & Celestial Navigation	80
	2. Navigation Calculation	120
	3. Cargo handling and Stowage	80
	4. Ships Stability	80
	5. Ships Equipment	80
	6. Ships Building & Construction	80
	7. Ships Maneuvering	80
	8. Collision Regulation 1972	80
	9. Navigation Instruments	80
	10. International Code of Signal	40
	11. Chart Work	100
	12. Meteorology	40
	Sub Total	940
TOTAL		1.600

P D - III (機関科)

CURRICULUM FOR INTERISLAND ENGINEER

Pelayaran Dasar - III, Tehnika.

COURSE DURATION : 12 Months.

LECTURING HOURS : 1.600

PARTS OF SUBJECT	SUBJECT AREA	LEC. HOURS
General Basic Subject	1. National Ideology and Law	40
	2. Religion	40
	3. Indonesian Language	40
	4. Military Drill	40
	5. Etiquette	40
	Sub Total	200
Professional Basic Subject	1. Mathematic	80
	2. Physics	80
	3. English Language	80
	4. Maritime Law	40
	5. Ships Building and Construction	40
	6. Transportation Technology	20
	7. Basic Management	20
	8. Geography	40
	9. First Aid	40
	10. Introduction of Nautical Science	40
	Sub Total	480
Professional Subject	1. Marine Diesel Engine	120
	2. Marine Steam Propulsion and Gas Turbine	80
	3. Marine Electro Tecnology	80
	4. Boiler Plant	120
	5. Workshop Practices	120
	6. Safe Working Practices	80
	7. Auxiliary Machinneries	80
	8. Technology of Materials	80
	9. Drawing of Naval Architectur and Tools Design	120
	10. Automation and Control System	40
	Sub Total	920
	TOTAL	1.600



MARINE SAFETY COURSES

I. BASIC FIRE FIGHTING :

(IMO Curriculum; STCW 1978 - Res. A.437(XI) Annex 1 and Res. A.602(15); Model Course 1.20).

SUBJECT AREA	LEC. HOURS
1. Introduction, Safety & Principles	0.75
2. Theory of Fire	1.50
3. Fire Prevention	1.50
4. Fire Detection	0.75
5. Fixed Fire-extinguishing System	2.25
6. Miscellaneous Fire-fighting Equipt.	1.50
7. Ship Fire-fighting Organization	0.75
8. Fire-fighting Methods	1.50
9. Fire-fighting Drills	4.50
10. Review and Final Assessment	3.00
TOTAL	18.00

II. RADAR OBSERVER :

(IMO Curriculum; STCW 1978 - Reg. II/2, II/4 and Res 1, 18, 20)

SUBJECT AREA	LEC. HOURS
1. Introduction	0.50
2. Factors Affecting Performance and Accuracy	2.50
3. Setting Up and Maintaining Displays	10.00
4. Unwanted and Spurious Response	5.00
5. Range and Bearing	12.00
6. Identification of Critical Echos	9.00
7. Application of COLREG 1972	3.00
8. Radar Plotting	24.00
9. Parallel Index Navigation	17.00
10. Dangers of Radar Equipment, Maintenance of Radar, and Troubleshooting	7.00
TOTAL	90.00

III. PERSONAL SEA SURVIVAL TECHNIQUE :

(IMO Curriculum; STCW 1978 - Resolution 19; Model Course 1.19).

SUBJECT AREA	LEC. HOURS
1. Introduction, Safety & Survival	0.75
2. Emergency Situations	1.50
3. Evacuation	0.75
4. Survival Craft & Rescue Boats	2.25
5. Personal Live-saving Appliances	4.50
6. Survival at Sea	0.75
7. Helicopter Assistance	1.50
8. Emergency Radio Equipment	1.50
9. Review and Final Assessment	1.50
<b>TOTAL</b>	<b>15.00</b>

IV. PROFICIENCY IN SURVIVAL CRAFT :

(IMO Curriculum; STCW 1978 - Reg VI/1, Ass Res. A.611 (15), A.657 (16), 660 (16); Model Course 1.23).

SUBJECT AREA	LEC. HOURS
1. Introduction and Safety	0.75
2. Emergency Situations	1.25
3. Principles of Survival	1.00
4. Use of Survival Equipment	3.00
5. Methods of Helicopter Rescue	1.50
6. Survival Craft and Rescue Boats	0.75
7. Launching Arrangements	0.75
8. Lifeboat Engine and Accesories	1.50
9. Evacuation	0.75
10. Signalling Equipment & Pyrotechnics	0.75
11. Actions to be taken aboard SC	1.50
12. First Aid	1.50
13. Drills in Launching & Recovering Boats	3.00
14. Launching and Handling SC in Rough Weather	1.50
15. Radio Equipment	1.50
16. Drills in Launching Liferafta	3.00
17. Practical Exercises and Evaluation	6.00
<b>TOTAL</b>	<b>30.00</b>

V. FIRST AID :

(IMO Curriculum; STCW 1978 - Assembly Resolution A.438-XI).

I. Medical Emergency - Basic Training (Model Course 1.13)

SUBJECT AREA	LEC. HOURS
1. General Principles	0.5
2. Body Structure and Functions	1.0
3. Positioning of Casualty	1.0
4. The Unconscious Casualty	1.5
5. Resuscitation	2.0
6. Bleeding	1.5
7. Management of Shock	1.0
8. Burns & Scalds, Accidents caused by electricity	1.0
9. Rescue & Transport of Casualty	1.5
10. Other topics	1.0
<b>TOTAL</b>	<b>12.0</b>

II. Medical Emergency - First Aid (Model Course 1.14)

SUBJECT AREA	LEC. HOURS
1. Immediate Action	2.0
2. First Aid Kit	0.75
3. Body Structure and Functions	2.5
4. Toxicological Hazards Aboard Ship	1.5
5. Examination of Patient	1.5
6. Spinal Injuries	2.0
7. Burns, Scalds & Effects of Heat and Cold	2.75
8. Fractures, Dislocation and Muscular Injuries	2.0
9. Med Care of Rescued Persons, incl Distress, Hypothermia & Cold Exposre	1.0
10. Radio Medical Advice	1.0
11. Pharmacology	1.5
12. Sterilization	1.0
13. Cardiac Arrest, Drowning & Asphyxia	1.5
<b>TOTAL</b>	<b>21.0</b>

VI. OIL TANKER FAMILIARIZATION :

(IMO Curriculum; STCW 1978 - Reg. V/1, Model Course 1.01).

SUBJECT AREA	LEC. HOURS
1. The Oil Tanker	2.0
2. Petroleum Properties and Hazards	4.0
3. Oil Cargo Containment and Handling	6.0
4. Oil Tanker Operations	8.0
5. Marine Pollution	2.5
6. S a f e t y	6.5
7. Review and Final Assessment	3.0
T O T A L	30.0

VII. CHEMICAL TANKER FAMILIARIZATION :

(IMO Curriculum; STCW 1978 - Reg V/2 , Model Course 1.03).

SUBJECT AREA	LEC. HOURS
1. Introduction	1.5
2. Properties and Hazards of Cargoes	3.0
3. Ship Types and Arrangements	1.5
4. Cargo equipment and Instrumentation	6.0
5. General Chemical Tanker Operation	3.0
6. Safety Precautions and Measures	7.5
7. Ship/Shore Interface	1.0
8. Emergency Operations	3.5
9. Assessment/Discussion	3.0
T O T A L	30.0





JICA