

THE COLOMBO PLAN
COUNCIL FOR TECHNICAL CO-OPERATION IN ASIA AND THE PACIFIC
Equipment for Training or Research Institutes and for Equipment accompanying Experts

APPLICATION

By the Government of.....MALAYSIA
JAPAN
from.....
(Country)

- Notes—(a) This Form has been devised for the general guidance of co-operating countries in order to facilitate the supply of relevant information and data necessary to afford an adequate appreciation of the nature of the technical co-operation required. The careful completion of this application form will avoid much reference back and lead to speedier action. Separate forms A 4 should be used for requests for equipment for each individual institute or project.
- (b) The requisite number of copies of the Form A 4, including a copy for the Colombo Plan Bureau, duly endorsed by the appropriate Foreign Aid Department of the requesting Government should be forwarded to the donor Government concerned through the appropriate channels.

1. Background Information

Please describe as concisely as possible the general outlines of the project for which the equipment is required, indicating whether the latter is (a) for use by an expert in the performance of his duties (b) for a training scheme or institution or (c) for a research institution. If either (b) or (c) please say whether the equipment is for the establishment of a new institution or the expansion or re-organisation of an existing one (e.g., by the provision of a new department, &c.). The name and exact location of the institution, its approximate cost and the authority responsible for it should be stated. Where appropriate, details should be given of the availability of any services required for the operation of the equipment. This would include operation by electricity (i.e. type of current, periodicity, voltage and any variations, phases, frequency, etc. and if D.C. is the only current available, please give full details), water reticulation or steam, gas, etc. Details of similar equipment already in use should be given.

The equipment and spares are required for improvement of the existing training facilities at the MARA Johor Bharu Vocational Training Centre, and to increase the capacity and level of training there.

This point has been discussed with the Japanese After-care Mission during a series of meeting held in Kuala Lumpur and Johor Bharu from 14 - 21 June, 1983.

2. Description of equipment required

Please give a full description of each item and general specifications where possible. The manufacturer and estimated cost of each item if known together with details of the proposed end use of item should be given. Where applicable, give details of any special packing or tropic proofing required and indicate whether handbooks or instruction data supplied in English will suffice. If appropriate, please indicate any required priorities or phasing of deliveries and advise whether adequate facilities exist for maintenance and servicing of the type of equipment requested. (If lengthy, detailed lists should be annexed, it would be convenient to have separate annexures for (a) films; (b) books and (c) other equipment.)

1. Spare parts for the 3 trades, namely:

Marine Engineering, Marine Welding and Electroplating (as per attached sheet)

2. Additional Equipment for the 3 trades, namely:

Marine Engineering, Marine Welding and Electroplating (as per attached sheet).

3. Has this equipment request already been directed to any other Agency or Colombo Plan country and, if so, to whom was it addressed and with what result?

No

4. Has the list of equipment already been discussed with representatives of the supplying country/ies? If so, please indicate what stage the discussions have reached.

Yes, discussion was held with the Japanese After-care Team from 14-21 June 1983 and it was agreed that additional equipment and spare parts (as attached) would be requested.

5. Furnish full particulars in respect of—

- (a) Consignee;
(b) Official to receive documents and enquiries; and
(c) Clearing agent at port of entry.

- a. Majlis Amanah Rakyat (MARA) Kuala Lumpur, Malaysia.
b. MARA Vocational Training Section,
6th Floor Pertama Complex, Kuala Lumpur, Malaysia.
c. Appointed by MARA.

6. Where equipment is required for use by an expert

Please indicate—

- (a) The country or agency from which the expert has been requested or obtained
(b) His duties and length of secondment (a reference to the relative Form A.1 will suffice when the expert is being provided by the country to which the equipment request is addressed)

(c) What use is proposed for the equipment when the export's period of secondment terminates?	
(d) By what date is the equipment required?	
7. Where equipment is required for Training or Research Institutions Please indicate—	(a) Vocational Training, Skill Craftman Level
(a) Nature and standard of training or research to be undertaken	
(b) Total number of students to be accommodated from within the country or from elsewhere in the Region, the qualifications for admission, the duration of courses, and the annual output of trainees	(b) (i) 56 students for each of the trade (ii) SRP/SPM (iii) 2 Years (iv) 28 students for each of the trade.
(c) Whether there is already a similar institute (s) in existence in the country. If so, please give details.	(c) MARA has altogether 8 Vocational Training Institutes
(d) Whether buildings are already available. If not, has construction started and when is it expected to be completed?	(d) Yes
(e) Whether qualified staff to handle the equipment has been recruited or is proposed to be recruited locally. If not, is it proposed — (i) to recruit foreigners under aid-programmes? (ii) to train locally recruited personnel abroad in handling equipment? (the reference numbers of any Forms A. 1 or A. 2 relating to such requests should be quoted)	(e) MARA has qualified staff to handle the equipment.
(f) Taking into account the answers to (d) and (e) above, what is the date by which the equipment is required and the date on which training or research work is to commence?	(f) As soon as possible.
(g) Whether any assistance in drawing up the Scheme has been obtained from outside experts? [Any specialist reports or Government surveys (e.g. Educational Committee Reports, etc.), bearing on the request should be provided if possible]	Through discussion with the Japanese After-care Team.
8. Correspondence Name, Postal and Telegraphic Address of official to whom correspondence regarding this application is to be forwarded	Chief Secretary to the Government, Economic Planning Unit, Prime Minister's Department, Jalan Dato' Onn, KUALA LUMPUR. Telegraphic Address: ECONOMICS, KUALA LUMPUR.


 For The Chief Secretary to the
 Signed :.....*Government of Malaysia*.....
 Malaysia

on behalf of the Government of.....

Date :.....
 11 JUL 1983

For use only by Donor Government

Application accepted/rejected/withdrawn
 Date :..... on behalf of the Department of.....

LIST OF SPARE PARTS REQUIRED FOR
THE MARINE MECHANICS COURSE.

<u>NO</u>	<u>ITEM & SPECIFICATION</u>	<u>QUANTITY</u>
1	"YANMAR" Diesel Engine Model TS-50 (a) Gasket for cylinder head (b) Compression ring (Top) (c) " (2nd) (d) " (3rd) (e) Needle valve & case	4 pcs 4 pcs 4 " 4 " 4 sets
2	"YANMAR" Diesel Engine Model 3TGE-C (a) Compression Ring (Top) (b) Oil Scraping Ring (c) Needle valve & case	4 pcs 1 pc 4 pcs
3	"YANMAR" Diesel Engine Model ISMGE-MC (a) Compression Ring (Top) (b) Oil Scraping Ring (c) Needle valve & case	4 pcs 1 pc 4 pcs
4	"YANMAR" Diesel Engine Model 2SMGE-MC (a) Compression Ring (Top) (b) Needle valve & case	4 pcs 4 pcs
5	"YANMAR" Diesel Engine Model 3ESDGE (a) Compression Ring (Top) (b) " (2nd) (c) " (3rd) (d) Oil Scraping Ring (e) Needle valve & case	4 pcs 4 " 4 " 2 " 4 "
6	"YANMAR" Compression Model TS50xSC ₂ For SC ₂ (a) Piston ring, upper (b) " lower (c) Low pressure valve assy (d) High pressure valve assy (e) Spring for low-pressure valve (f) Spring for high-pressure valve (g) Valve plate (h) Packing for low-pressure valve (i) Packing for high-pressure valve (j) Gasket for high-pressure valve cover For TS-50 (a) Cylinder head gasket (b) Piston ring No 1 (c) " No 2 (d) " No 3 (e) Needle valve & case	2 pcs 2 " 2 " 2 " 2 " 2 " 2 " 2 " 2 " 2 " 4 pcs 4 pcs 4 pcs 4 pcs 4 sets

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|----|---|--------|
| 7 | "WAIDA" Cylinder Boring Machine
Model NWA NO.0 | |
| | (a) Boring Bit | 10 pcs |
| | (b) Boring Bit for face cutting | 2 " |
| 8 | "FUJI" Vertical Honing Machine
Model DH-B3 | |
| | for Honing Head (Model FH-1) | |
| | (a) Stone 8x9x100 #150 | 20 pcs |
| | (b) " " #500 | 20 pcs |
| | (c) " " #1,000 | 20 " |
| | For Honing Head (Model FC-2) | |
| | (a) Stone 8x9x100 #150 | 10 pcs |
| | (b) " " #500 | 10 " |
| | (c) " " #1,000 | 10 " |
| | For Honing Head (Model F.C-3) | |
| | (a) Stone 4.5x8x75 #150 | 30 pcs |
| | (b) " " #500 | 20 " |
| | (c) " " #1,000 | 20 " |
| | (d) Stone 7.7x8x75 #150 | 35 pcs |
| | (e) " " #500 | 30 " |
| | (f) " " #1,000 | 30 " |
| 9 | "YANMAR" Diesel Engine
Model TS 50C | |
| | (a) Compression Ring (Top) | 4 pcs |
| | (b) " (2nd) | 4 " |
| | (c) " (3rd) | 4 " |
| | (d) Needle valve & case | 4 sets |
| 10 | "YANMAR" Diesel Engine
Model YSM12 | |
| | (a) Nozzle Assy | 2 pcs |
| | (b) Compression ring | 4 pcs |
| 11 | "YANMAR" Diesel Engine
Model 2TGE-C | |
| | (a) Compression Ring | 4 pcs |
| | (b) Needle valve & case | 4 sets |
| 12 | "YANMAR" Diesel Engine
Model 3ESDGE | |
| | (a) Compression Ring (Top) | 2 pcs |
| | (b) " (2nd) | 4 pcs |
| | (c) " (3rd) | 4 pcs |
| 13 | "YANMAR" Diesel Engine
Model 4KDGE | |
| | (a) Needle valve & case | 2 pcs |
| | (b) O-ring for cooling water joint | 2 pcs |
| 14 | "BANZAI" Valve refacer
Model MB-145 | |
| | (a) Valve refacer sheal | 2 sets |
| 15 | Piston Ring Compressor
"BANZAI" Model RC-30 | 10 pcs |

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INSTITUT KEMAHIRAN MARA
JOHOR BAHRU

LIST OF SPARE PARTS REQUIRED FOR THE
MARINE WELDING COURSE

<u>NO.</u>	<u>ITEM & SPECIFICATION</u>	<u>QUANTITI</u>
1.	SINGLE GAUGE REGULATOR FOR MANIFOLD PIPE LINE	
	(a) ACETYLENE REGULATOR	20 PCS
	(b) OXYGEN REGULATOR	20 PCS.
2.	MASTER REGULATOR FOR CYLINDER MANIFOLD	
	(a) ACETYLENE	2 PCS.
	(b) OXYGEN	2 PCS
3.	OXY ACETYLENE WELDING TORCH	20 PCS
	NOZZLE NO. 1	20 PCS
	NOZZLE NO. 2	20 PCS
	NOZZLE NO. 3	20 PCS
	NOZZLE NO. 4	20 PCS
	NOZZLE NO. 5	20 PCS.
4.	OXY ACETYLENE CUTTING TORCH	20 PCS
	CUTTING NOZZLE NO. 1	20 PCS
	NO. 2	20 PCS
	NO. 3	20 PCS
5.	ELECTRODE HOLDER FOR 300 AMPS	20
6.	ELECTRODE HOLDER FOR 400 AMPS	20
7.	ARGON GAS REGULATOR	4 SETS
8.	CO ₂ GAS REGULATOR	4 SETS
9.	ARGON WELDING TORCH COMPLETE WITH HOSE AND WATERHOSE (ONE SET)	4 PCS
10.	CO ₂ WELDING TORCH COMPLETE IN SET	4 PCS
11.	ARC WELDING HEAD SHIELD WITH LENGTH	20 PCS.



LIST OF SPARE PARTS REQUIRED FOR THE
ELECTROPLATING COURSE

<u>NO</u>	<u>ITEM & SPECIFICATION</u>	<u>QUANTITY</u>
1	Electric soldering iron 240V, 50Hz	19 pcs
2	(a) Heater Model P-10	8 pcs
	(b) " " M-10	6 pcs
	(c) " " SUS-10	3 pcs
3	Thermometer of Electroplating solution 0-100°C	10 pcs
4	Cartridge type filter NIHON FILTER CO LTD. MODEL O-8S	
	(a) Cartridge P-100	100 pcs
	(b) " P- 10	100 pcs
	(c) " P- 25	100 pcs
	(d) " P- 50	100 pcs
5	Dust Collector NOMIZU KIKAI SEISAKU SHO-MODEL (QM - 22)	
	(a) Sisal Buff	10 pcs
	(b) Bias Cloth Buff M-6	10 pcs
6	(a) Heater (stainless Steel)	3 pcs
	(b) " (quartz)	3 pcs
7	Automatic Thermostat Temperature Adjusting instrument for examination	5 pcs
8	PH Electrode	1 pc
9	ORP Electrode	1 pc
10	Coagulant Feed Pump	1 pc
11	Stainless Steel Wire	
	(a) SUS304 1 Ø	2 kgs
	(b) " 0.7 Ø	2 kgs
	(c) " 0.5 Ø	2 kgs
12	Copper Plate	
	(a) 10x3x1000 mm	2 kgs
	(b) 15x3x1000 mm	2 kgs
13	Brass Plate 0.3t 400x50mm	100 pcs
14	Stainless Steel Plate 0.5t 400x300mm	15 pcs
15	Flonsol	20 kgs
16	Flontex	20 kgs

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17	Hard Steel Wire	
	(a) 1 ϕ 1,000 mm	10 kgs
	(b) 2 ϕ 1,000 mm	10 kgs
	(c) 3 ϕ 1,000 mm	10 kgs
	(d) 4 ϕ 1,000 mm	10 kgs
18	Anode Bag	8 pcs
19	Rubber Apron	10 pcs
20	Copper Anode 400 x 150 mm	12 pcs
21	Phosphorous Copper Anode 400x150mm	4 pcs
22	Nickel Anode 400x150mm	12 pcs
23	Lead Anode SN-90 450x90x11mm	8 pcs
24	Stainless Steel Anode 300x400x0.5mm	2 pcs
25	- do - 150x300x0.5mm	4 pcs
26	Gold Potassion Cyanide	500 kgs
27	RH Plating Solution	500 mls
28	Silver Salt	10 kgs

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List of Additional Equipment Required
for Marine Mechanics Trade

1. High Pressure Fuel Pipe
for 4KD, 3 ES, 2 SME, TS 59
2. Pumping Element for Fuel Injection Pump
for Model 4 KD, 3 ES, 2 SM and 1 SM
3. Injector Nozzle Tester
4. Fuel Injection Pump. In line for
4 KD, complete set.
MAKER - YANMAR
5. Electro Hydraulic Steering Gear (1977)
6. Others.

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INSTITUT KEMAHIRAN MARA
JOHOR BAHRU

COURSE : MARINE WELDING

List of additional equipment for Marine Welding trade

<u>NO.</u>	<u>ITEM & SPECIFICATION</u>	<u>QUANTITY</u>
1.	NATIONAL AC/DC ARGON GAS ARC WELDER	3
2.	"TANAKA" AUTOMATIC GAS CUTTING MACHINE	5
3	PORTABLE ELECTRIC DISC GRINDER DISC SIZE: 10 MM (4")	10 SET
4	PORTABLE ELECTRIC DISC GRINDER DISC SIZE: 150mm (6")	4 SET
5	HAND DRILL (ELECTRIC) MODEL: SD-10C WITH DRILL CHUCK	2 SET
6	NATIONAL AC/DC CO ARC WELDER MACHINE WITH WIRE FEEDER MACHINE AND COMPLETE WITH ACCESSORIES	3 SETS
7	OTHERS	

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List of additional equipment required
for electroplating trade.

ADDITIONAL REQUIREMENT FOR EQUIPMENT

1. NICKEL TANK
8' x 3' x 3'
Complete with Bus Bar and accessories
2. HARD CHROME TANK
8' x 3' x 3'
Complete with Bus Bar and accessories
3. CHROMIUM TANK
4' x 3' x 3'
Complete with Bus Bar and accessories
4. ULTRA SONIC CLEANER
Capacity 2000 - 3000 c.c.
5. PORTABLE PH METER (DIGITAL)
PH 0 - 14, Temp. 0 - 80 c above
6. BUFFING MACHINE
2500 r.p.m. 5HP
complete with Dust Collector
7. Thickness Tester
ELEC Fine instrument Co
Model G-7.3
AC240V, 50Hz, Single Phase
Serial No. 1390
8. Blower (for liquid agitating with 0.75 kw motor)
9. Plating Tank for examination
10. Others.

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資料5. MARA ジョホールバル職業訓練校調査表

TABLE I BUDGET OF THE CENTER

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TABLE III NUMBER OF INSTRUCTOR & TRAINEE BY COURSE

YEAR: 1976

COURSE NAME	INSTRUCTORS				TOTAL	TRAINEES			
	SENIOR INSTRUCTOR	INSTRUCTOR	INSTRUCTOR SHOP ASSISTANT	LABORATORY ASSISTANT		1st semester	2nd semester	3rd semester	4th semester
1 Mechanical Draughtsmanship		4			4	14	14		
2 General Mechanics		3			3	14	14		
3 Machining & Turning		4		1	4	14	14		
4 Welding		3			3	14	14	14	
5 Agri-Heavy Machinery						NO INTAKE			
6 Air-Conditioning & Refrigeration		2			2	14	14		
7 Electrical Wiring		4			4	14	14		
8 Radio & Television Mechanics		1			1	14			
9 Motor Mechanics	1	3			3	14	14		
10 Marine Engineering						NO INTAKE			
11 Electro-plating									
12 Marine Welding									

TABLE III NUMBER OF INSTRUCTOR & TRAINEE BY COURSE

YEAR: 1980

COURSE NAME	INSTRUCTORS				TRAINEES				
	SENIOR INSTRUCTOR	INSTRUCTOR	INSTRUCTOR SHOP ASSISTANT	LABORATORY ASSISTANT	TOTAL	1st semester	2nd semester	3rd semester	4th semester
1 Mechanical Draughtsmanship	1	5			6	14	14	14	14
2 General Mechanics	1	4	1		6	14	14	14	14
3 Machining & Turning		5	1		6	14	14	14	14
4 Welding	1	4	1		6	-	14		28
5 Agri-Heavy Machinery		3			3	-	14	-	14
6 Air-Conditioning & Refrigeration		4	1		5	14	14	14	14
7 Electrical Wiring	1	5	1		7	14	14	14	14
8 Radio & Television Mechanics		5		1	6	28	14	14	14
9 Motor Mechanics	1	2	1		4	14	14	-	14
10 Marine Engineering		3			3	14	-	14	14
11 Electro-plating		2			2	14	-	14	
12 Marine Welding		3			3	14		14	14

TABLE III NUMBER OF INSTRUCTOR & TRAINEE BY COURSE

YEAR: 1983

COURSE NAME	INSTRUCTORS				TRAINEES				
	SENIOR INSTRUCTOR	INSTRUCTOR	SHOP ASSISTANT	LABORATORY ASSISTANT	TOTAL	1st semester	2nd semester	3rd semester	4th semester
1 Mechanical Draughtsmanship	1	4	-	-	5	14	14	14	14
2 General Mechanics	1	5	1	-	7	14	14	14	14
3 Machining & Turning	1	5	1	-	7	14	14	14	14
4 Welding	1	4	1	-	6	14	14	14	14
5 Agri-Heavy Machinery	1	5	1	-	7	14	14	14	14
6 Air-Conditioning & Refrigeration	1	4	1	-	6	14	14	14	14
7 Electrical Wiring	1	4		-	5	14	14	14	14
8 Radio & Television Mechanics	1	3			4	14	14	14	14
9 Motor Mechanics	1	3			4	14	14	14	14
10 Marine Engineering	1	3			4	14	14	14	14
11 Electro-plating	1	3			4	14	14	14	14
12 Marine Welding	1	5	1		7	14	14	14	14
13 Instrumentation	1	3							
14 Metal Fabrication		1							

TABLE IV NUMBER OF TRAINEE CLASSIFIED BY SCHOOL

YEAR: 1974

COURSE NAME	TOTAL	ELEMENTARY SCHOOL	MIDDLE SCHOOL	HIGH SCHOOL	ABOVE COLLEGE	HOLDER OF BASIC NITTCB	HOLDER OF INTER-MEDIATE OF NITTCB
1 Mechanical Draughtsmanship	28	-	-	28			
2 General Mechanics	23		14	14			
3 Machining & Turning	23		14	19			
4 Welding	42		14	14		12 (ARC)	
5 Agri-Heavy Machinery							
6 Air-Conditioning & Refrigeration	14		7	7			
7 Electrical Wiring	28		14	14			
8 Radio & Television Mechanics	28		-	28			
9 Motor Mechanics	28		14	14			
10 Marine Engineering							
11 Electro-plating							
12 Marine Welding							

TABLE IV NUMBER OF TRAINEE CLASSIFIED BY SCHOOL

YEAR: 1980

COURSE NAME	TOTAL	ELEMENTARY SCHOOL	MIDDLE SCHOOL	HIGH SCHOOL	ABOVE COLLEGE	HOLDER OF BASIC NITTCB	HOLDER OF INTER-MEDIATE OF NITTCB
1 Mechanical Draughtsmanship	56		-	56			
2 General Mechanics	56		17	39		15	4
3 Machining & Turning	56		17	39			7
4 Welding	42		12	30		18 (Arc) 15 (GAS)	5
5 Agri-Heavy Machinery	42		12	30			
6 Air-Conditioning & Refrigeration	56		17	39		10	
7 Electrical Wiring	56		17	39			
8 Radio & Television Mechanics	56		-	56			
9 Motor Mechanics	56		17	39			
10 Marine Engineering	28		8	20			
11 Electro-plating				14			
12 Marine Welding	42		12	30			

TABLE IV NUMBER OF TRAINEE CLASSIFIED BY SCHOOL

YEAR: 19 83

COURSE NAME	TOTAL	ELEMENTARY	MIDDLE	HIGH SCHOOL	ABOVE COLLEGE	HOLDER OF BASIC NITTCB	HOLDER OF INTER- MEDIATE OF NITTCB
1 Mechanical Draughtsmanship	56	-	-	56			
2 General Mechanics	56		16	40		12	
3 Machining & Turning	56		16	40		27	15
4 Welding	56		16	40		14 (APC) 21 (GAS)	11 (APC)
5 Agri-Heavy Machinery	56		16	40		22	
6 Air-Conditioning & Refrigeration	56		16	40		8	
7 Electrical Wiring	56		16	40			
8 Radio & Television Mechanics	56		-	56		15	
9 Motor Mechanics	56		16	40		17	-
10 Marine Engineering	56		16	40			
11 Electro-plating	42			12		-	
12 Marine Welding	56		16	40			

TABLE V PRESENT & PAST OF EX-TRANEES

	EMPLOYER'S NAME	COURSE TRAINED	NUMBER EMPLOYED	FIRST SALARY	PRESENT POSITION	PRESENT SALARY	
1	MALAYSIA SHIPYARD ENGINEERING	MARINE MECHANIC	4	\$ 250	MACHINERY FITTER	\$ 480	
2	SABAH SHIPYARD ENGINEERING	"	2	\$ 480	"	\$ 680	
3	HONG LEONG JURSSSEN SHIPYARD	"	2	\$ 250	"	\$ 395	
4	SCOTT & ENGLISH (CUMMINS ENGINE)	"	2	\$ 370	"	\$ 500	
5	EAST MALAYSIA SHIPYARD KUALA TRENGGANU	"	2	\$ 265	"	\$ 350	
6	ESSO OIL COMPANY LIMITED	"	2	\$ 415	TECHNICIAN	\$ 675	
7	NATIONAL OIL COMPANY (PETROLINAS)	"	2	\$ 475	TECHNICIAN	\$ 690	
8	PORT KLANG AUTHORITY SELANGOR	"	2	\$ 375	MACHINERY FITTER	\$ 415	
9	MALAYSIA SHIPYARD & ENGINEERING	"	4	\$ 250	MACHINERY FITTER	\$ 460	
10	MAJLIS AWANAH RAKYAT (MARA)	"	2	\$ 440	INSTRUCTOR	\$ 465	
11	GENERAL ELECTRIC COMPANY	"	2	\$ 425	MAINTENANCE TECHNICIAN	\$ 690	
12	MARINE DESTINATION SERVICES MASAI, JOHOR	"	5	\$ 375	MACHINERY FITTER	\$ 420	

TABLE V PRESENT & PAST OF EX-TRANEE

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TABLE V PRESENT & PAST OF EX-TRANE

EMPLOYER'S NAME	COURSE	NUMBER EMPLOYED	FIRST SALARY	PRESENT POSITION	PRESENT SALARY
1. MALAYSIA SHIP YARD AND ENGINEERING, PASIR GUDANG, JOHOR, MALAYSIA.	WELDERS	43	\$ 470.00	1. WELDING SUPERVISOR 2. WELDING FOREMEN 3. LEADING HAND 4. WELDERS	\$ 900.00 - \$ 1,200.00 \$ 800.00 - \$ 1,000.00 \$ 600.00 - \$ 800.00 \$ 500.00 - \$ 800.00
2. HONG LEONG SHIP YARD, BUTTERWORTH, PULAU PINANG.	WELDER	8	\$ 440.00	JUST GRADER WELDER	\$ 700.00 - \$ 900.00
3. PROMET FABRICATORS, TELUK RUMINIA, JOHOR.	6 G, WELDER	20	\$ 420.00	APPRENTICE	
4. SHIP YARD, LIMBONGAN TIMOR, TRENGGANU.	TECHNICIAN	7	\$ 420.00	TECHNICIAN	\$ 600.00 - \$ 900.00
5. SUROHAN JAYA, PELABOHAN PULAU PINANG.	TECHNICIAN	4	\$ 420.00	TECHNICIAN	\$ 600.00 - \$ 900.00
MARA VOCATIONAL TRAINING INSTITUTE, MALAYSIA.	INSTRUCTOR	6	\$ 570.00	INSTRUCTOR	\$ 700.00 \$ 1,000.00

TABLE V. PRESENT & PAST OF EX-TRNTEE

EMPLOYER'S NAME	COURSE	NUMBER EMPLOYED	FIRST SALARY	PRESENT POSITION	PRESENT SALARY
1. MATSUSHITA SHAH ALAM, SELANGOR.	ELECTRO PLATING	3 +	375.00	SUPERVISOR	705.00
2. DORF PLATING, SENAWANG, SEREMBAN, NEGERI SEMBILAN.	"	1 +	350.00	PLATER	480.00
3. OE JEWELLERY, KAWASAN PERDAGANGAN BEBAS, P. PINANG.	"	1 +	350.00	"	485.00
PULAU PINANG.					
4. INTERBUNK METALS SDN. BHD., NO. 15, LORONG SELAWAT, KUALA LUMPUR.	"	3 +	375.00	"	450.00
5. PERISTINA SDN. BHD., NO. 255, JALAN G, PASIR GUDANG, JOHOR BAHRU, JOHOR.	"	10 +	375.00	LAB ASST / FOREMAN TRAINEE	500.00
6. DIE CASTING PRODUCT SEN. BHD., SUITE 1402, 14th FLOOR, KUALA LUMPUR.	"		375.00	TECHNICIAN	435.00
7. SGS-ATES MALAYSIA SDN. BHD., MUAR, JOHOR.	"	1 +	550.00	SUPERVISOR	755.00
8. MALAYSIAN AIRLINE SYSTEM (MAS), SUBANG, SELANGOR.	"	1 +	375.00	P TECHNICIAN	550.00

TABLE VI TRAINING HOUR BY COURSE

COURSE NAME	TOTAL HOUR	THEORY	PRACTICE	OTHERS
1 Mechanical Draughtsmanship	3190	957	2233	
2 General Mechanics	3190	957	2233	
3 Machining & Turning	3190	957	2233	
4 Welding	3190	957	2233	
5 Agri-Heavy Machinery	3190	957	2233	
6 Air-Conditioning & Refrigeration	3190	957	2233	
7 Electrical Wiring	3190	957	2233	
8 Radio & Television Mechanics	3190	957	2233	
9 Motor Mechanics	3190	957	2233	
10 Marine Engineering	3190	957	1733	See Table VI
11 Electro-plating	3190	957	2233	
12 Marine Welding	3190	957	2233	

TABLE VII TRAINING DATA BY COURSE

NAME OF COURSE	MARINE ENGINEERING			3190	3190	3190
NAME OF TRAINING	PERIOD OF TRAINING	24	MONTH	PERSON	3190	3190
FIXED NUMBER OF TRAINING	56	PERSON	3190	3190	3190	3190
SUBJECT OF TRAINING	HOUR	INSTRUCTOR	TEXT OR WORKSHEET			
MARINE THEORY	573.75	SHARIL LATIFF	MARINE ENGINEER MANUAL, JICA PUBLICATION			
GENERAL FITTING THEORY	64	MOHD. JAKASTH				
AUXILIARY MACHINERY	120	AHMAD SAID				
REFRI GENERATION	100	ARIFFIN MD DAM	MARINE REFRIGERATION.			
SUB TOTAL	957					
INTERNAL COMBUSTION ENGINE	1153.25	MOHD JARKASTH				
ALIGNMENT/SHAFTING	100.00	AHMAD SAID				
MARINE FITTING	300.00	AZMI IBRAHIM				
ELECTRICAL	120.00	SHARIL LATIFF	AUTO ELECTRICAL & MARINE ELECTRICAL HAND BOOK.			
WELDING	60.00	MANSOR SHARIF				
SUB TOTAL	1733					
HYDRAULIC	80.00	SALEH ABDULLAH	HYDRAULIC HANDBOOK			
PNEUMATIC	80.00	SALEH ABDULLAH				
TRADE SCIENCE & CAL	140.00	SALEH ABDULLAH	BRITISH INSTITUTE OF ENGINEERING TECHNOLOGY.			
TECHNICAL DRAWING	80.00	MANSOR SHARIF	BASIC TECHNICAL DRAWING HANDBOOK			
ENGLISH/BUSINESS STUDY	120.00	SHEIK OSMAN				
SU TOTAL	500.00					
GRAND TOTAL	3190					

TABLE VII TRAINING DATA BY COURSE

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TABLE VII TRAINING DATA BY COURSE

NAME OF COURSE		ELECTRO PLATING			
NAME OF TRAINING		INTENSIVE COURSE			
PERIOD OF TRAINING		2 YEARS	MONTH	HOUR	
FIXED NUMBER OF TRAINING		56	PERSON		
SUBJECT OF TRAINING		HOUR	INSTRUCTOR	TEXT OR WORKSHEET	
1.	MECHANICAL AND CHEMICAL SURFACE PREPARATION	192	RIDWAN BIN SHUHADA	INFORMATION SHEET	
2.	DECORATIVE/MOBILE PLATING	287	IDRUS BIN AHMAD	JOB SHEET	
3.	INDUSTRIAL PLATING	192	BAHADOR BIN RAHM	ASSIGNMENT SHEET	
4.	CONTROL ANALYSIS & TESTING	143	HANIMI BIN OMAR		
5.	SPECIAL SURFACE TREATMENT	143	"		
SUB TOTAL		957			
1.	MECHANICAL AND CHEMICAL SURFACE PREPARATION	446	RIDWAN BIN SHUHADA		
2.	DECORATIVE/MOBILE PLATING	673	IDRUS BIN AHMAD		
3.	INDUSTRIAL PLATING	446	BAHADOR BIN RAHM		
4.	CONTROL ANALYSIS & TESTING	334	HANIMI BIN OMAR		
5.	SPECIAL SURFACE TREATMENT	334	"		
SUB TOTAL		2233			
SU TOTAL					
GRAND TOTAL		3190			

TABLE VIII PRESENT STAGE OF COUNTERPARTS' ACTIVITY

COURSE	NAME OF COUNTERPART	PRESENT STATUS
Principal	Mr. ABDUL AZIZ BIN HS ABDUL	
MARINE ENGINEERING	1. MR. SALEH BIN ABDULLAH	HEAD OF MARINE DEPARTMENT
	2. MR. MOHD JARKASEH PAHORAJI	INSTRUCTOR
	3. MR. MOKHTAR BIN ABU BAKAR	HEAD OF AGROHEAVY DEPARTMENT
ELECTRO PLATING	1. MR. RIDWAN BIN HJ. SHUHADA (OISCA)	HEAD OF ELECTROPLATING
	2. MR. IDRUS BIN AHMAD (OISCA)	INSTRUCTOR
	2.	
	3. MR. BAHADOR BIN RAHM (OISCA)	"
MARINE WELDING	1. MR. OMAR BAKI BIN SAID	HEAD OF MARINE WELDING DEPARTMENT
	2. MR. ABU BAKAR BIN ABDULLAH	- MALAYSIAN SHIPYARD AND ENGINEERING
		- BUSINESS
	3. MR. MOHAMAD BIN MOHD. DOM	INSTRUCTOR

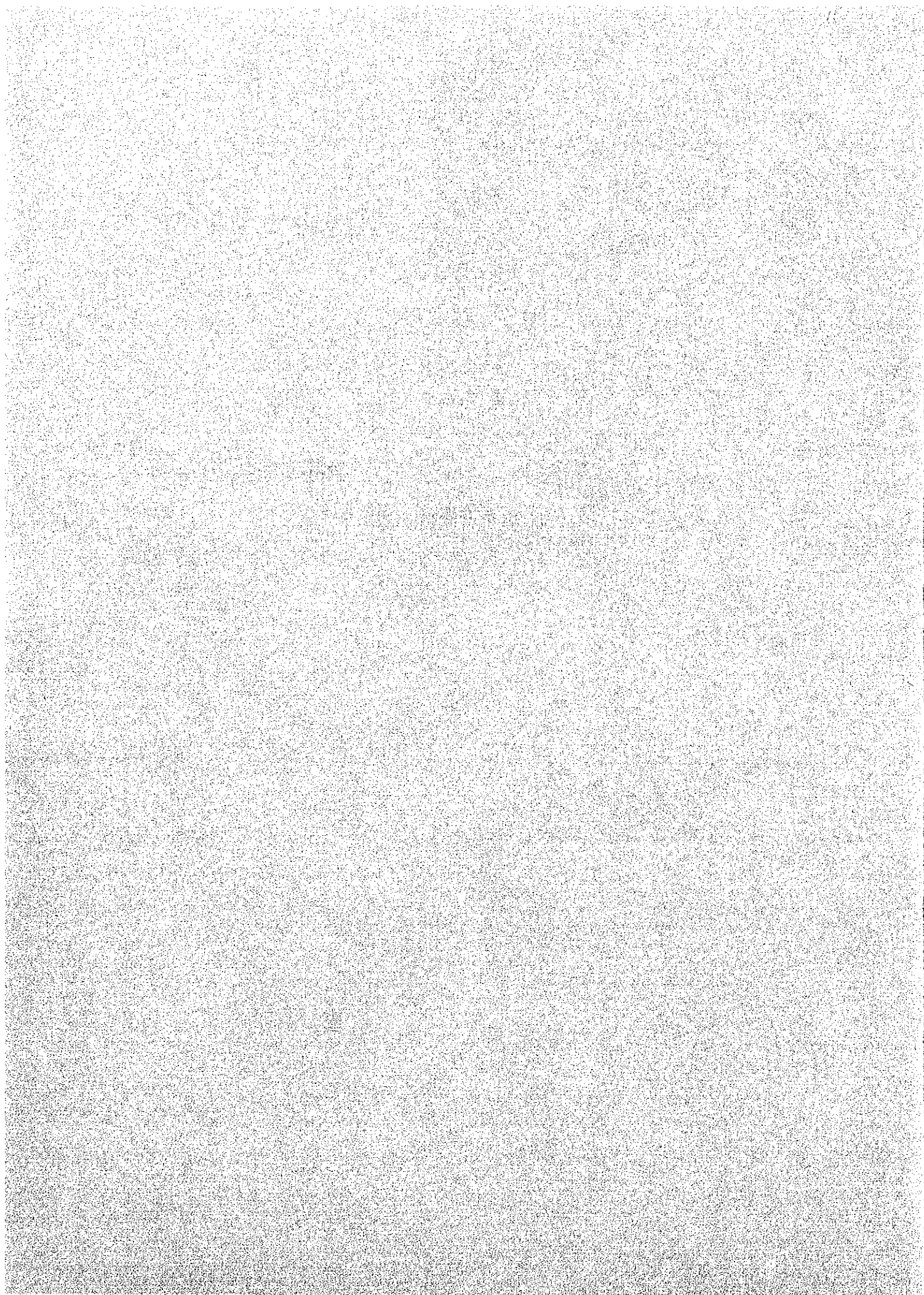
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Ⅵ 資 料 編

MARA ジョホールバル職業訓練校

供与済機材リスト

(1976 ~ 1979)



Marine Engineering		List ①		'76	
NO.	Article & Specification	Quantity Supply -80	Quantity -80	Remarks	
1.	"YANMAR" Diesel Engine Model: TS50 Bore x stroke: 70 x 70 mm Displacement : 0.269 L with Standard Accessories <u>Standard Spare Parts</u> Gasket for cylinder head 1 Compression ring (Top) 1 Compression ring (2nd, 3rd) 1 each Oil scraping ring 1 Needle valve & case 1 set	2	2	4	Replacement " " " "
2.	"YANMAR" Diesel Engine Model: 3TGE-C Bore x stroke: 95 x 115 mm Displacement : 2.445 L with Standard Accessories <u>Standard Spare Parts</u> Compression ring (Top) 3 Oil scraping ring 1 Split pin for connecting-rod bolt 6 "O" ring for push rod cover 1 set Needle valve & case 1 set	2	2	4	Replacement " " "
3.	"YANMAR" Diesel Engine Model: 1 SMGE-MC Bore x stroke: 105 x 120 mm Displacement : 1.039 L with Standard Accessories <u>Standard Spare Parts</u> Compression ring (Top) 1 Oil scraping ring 1 Washer for connecting-rod bolt 2 "O" ring for push rod cover 1 set Needle valve & case 1 set Exhaust valve 1 Pre-combustion chamber packing 1 Anti-corrosion zinc for cylinder head 1 Anti-corrosion zinc for cylinder 1 "O" ring for cooling water joint 1 set	2	2	4	Replacement " " "

4.	"YANMAR" Diesel Engine Model: 2 SNCE-MC Bore x stroke: 105 x 120 mm Displacement : 2.078 L with Standard Accessories <u>Standard Spare Parts</u>	Z	Z	
	Compression ring(Top) 2		4	Replacement
	Oil scraping ring 1			
	"O" ring for push rod cover 1 set			
	Needle valve & case 1 set		4	"
	Washer for connecting-rod bolt 4			
	Pre-combustion chamber packing 1			
	Anti-corrosion zinc for cylinder head 2			
	Anti-corrosion zinc for cylinder 2			
	"O" ring for cooling water joint 2 set			
5.	"YANMAR" Diesel Engine Model: 3ESDGE Bore x stroke: 120 x 135 mm Displacement : 4.580 L with Standard Accessories <u>Standard Spare Parts</u>	Z	Z	
	Compression ring(Top) 1		4	Replacement
	Compression ring(2nd,3rd) 2 each		4	"
	Oil scraping ring 2		2	"
	Anti-corrosion zinc for cylinder head 1			
	Anti-corrosion zinc for cylinder 3			
	Anti-corrosion zinc for oil cooler 1			
	Anti-corrosion zinc for clutch 1			
	Washer for connecting-rod bolt 6			
	"O" ring for push rod cover			
	1) upper side 6			
	2) lower side 6			
	Needle valve & case 1 set		4	"
	Precombustion chamber packing 1			
	"O" ring for cooling water joint 6			
	Impeller for cooling water pump 1			
6.	"YANMAR" Compressor Model: TS50 x SC ₂ Cooling method: Forced circulation by gear pump Cylinder bore x stroke: 70 x 70 mm with Standard Accessories <u>Standard Spare Parts</u> <u>for SC₂</u>	Z	Z	
	Piston ring, upper 3		2	Replacement
	Piston ring, lower 3		2	"
	Low-pressure valve ass'y 1		2	"
	High-pressure valve ass'y 1		2	"
	Spring for low-pressure valve 1		2	"
	Spring for high-pressure valve 1		2	"
	Valve plate 2		2	"
	Packing for low-pressure valve 3		2	"
	Packing for high-pressure valve 1		2	"
	Gasket for high-pressure valve cover 2		2	"