

134	Cartridge type filter NIHON FILTER CO., LTD Model : 078S 415V, 50 Hz, 3 phase with cartridge (P-50) 108 pcs Serial No. 84077	/	/	(20) 100 Replacement
135	Carbo pump NIHON FILTER CO., LTD 100 - 115V, 50/60 Hz Serial No. 070582	/	/	
136	Buffing collector NOMIZU KIKAI SEISAKU-SHO Model : QB-46 415V, 50 Hz, 3 phase Serial No. 4888, 4889, 4890	3	3	
136	Dust collector Nomizu kikai seisaku-sho Model : QM-22 Serial No. 2639, 2640, 2641 V belt A-58 2 pcs " A-51 4 " Sisal buff 10 " Bias cloth buff M-6 10 " Buffing compound tripoli K-1 4 Sisar No.100 4 " Green rounge 4 Metal ring 1 set	3	3	(10) 10 Replacement (10) 10 "
137	Metallurgical microscope SHIMAZU RIKAI KIKAI Model : MSL-T1 AC 240V, 50 Hz, Single phase with reserve bulb 50 pcs	/	/	

Electro-Plating List ②

'79

NO.	Article & Specification	Quantity Supplied	Quantity Existing	Remarks
<u>1. Equipment for Electroplating</u>				
1.	Alkaline Decreasing Tank with drain (SUS-304)	/	/	
2.	Electro Cleaning Tank with Bus-bar ..... 3 pcs Electrode ..... 4 pcs	/	/	
3.	Acid Dipping Tank with drain ..... 3 pcs	/	/	
4.	Copper Strike Plating Tank with Bus-bar ..... 3 pcs	/	/	
5.	Copper Plating Tank (Cyanide Bath) with Bus-bar ..... 3 pcs Air Agitating Pipe	/	/	
6.	Copper Plating Tank (CuSO <sub>4</sub> Bath) with Bus-bar ..... 3 pcs Air Agitating Pipe Cooling Pipe	/	/	
7.	Nickel Plating Tank with Bus-bar ..... 3 pcs Air Agitating Pipe	/	/	破損 1 Replacement
8.	Chromium Plating Tank with Bus-bar ..... 3 pcs Lead Alloy Electrode ... 6 pcs	/	/	破損 1 Replacement
9.	Hard Chromium Plating Tank with Bus-bar ..... 3 pcs Lead Alloy Electrode ... 6 pcs	/	/	破損 1 Replacement
10.	Zinc Plating Tank (Cyanide Bath) with Bus-bar ..... 3 pcs Air Agitating Pipe	/	/	
11.	Zinc Plating Tank (Non-Cyanide Bath) with Bus-bar ..... 3 pcs Air Agitating Pipe	/	/	
12.	Nitric Acid Dipping Tank with Drain	/	/	

13	Chromate Coating Tank with Drain	1	1	
14	Alkali Dipping Tank with drain	1	1	
15	4 Connected Water Rinsing Tank with drain	2	2	
16	2 Connected Drug Out & 4 Connected Water Rinsing Tank with Spray Shower Pipe .. 1 pce Pedal Cock Drain ..... 6 pcs	7	7	
17	3 Connected Water Rinsing Tank with drain ..... 3 pcs	3	3	
18	Hot Water Rinsing Tank with drain	1	1	
<u>2. Main Attached Equipment</u>				
1	Blower (for Liquid Agitating with 0.75KW Motor)	1	1	破壞 1 Replacement
2	Centrifugal Hydro Extractor with Heater 3KW Motor 0.4KW Timer Basket 2	1	1	
3	Filer with 0.2KW Motor 25A Hose	6	6	
4	Trichloroethylene Degreaser with drain ..... 3 pcs Liquid Gauge ..... 1 pce Water Separation ... 1 pce Thermostat Temperature Adjusting Instrument & Thermometer ... 1 pce Heater (3KW) ..... 2 pce Supersonic Wave Device (600W) ... 1 pce Aux. Transformer ... 1 pce	1	1	
5	Cooler (for Ammonium Copper Plating Liquid)			
	1) Air Cooled Type Unit (1)			
	2) Cooled Water Tank (1)	1	1	
	3) Cooled Water Circulation Pump (1)			
	4) Electromagnetic Valve Bypass (2)			
	5) Piping Materials for Cooled Water Circulation (1)			

6	Draft Chamber 1500x1000x1500mmH	/	/		
7	Barrel for Small-Sized Plating with 15W Motor	2	2		
8	Rectifier & Connecting Wires				
	1. Rectifier				
①	for Electrolytic Cleaning 10V-100A with Thermostat Temperature Adjusting Instrument & 2 Thermometry Resistance	/	/		
②	for Copper Striking 10V-100A with Thermostat Temperature Adjusting Instrument & a Thermometry Resistance	/	/		
③	for Ammonium Copper Plating 10V-100A with Thermostat Temperature Adjusting Instrument & a Thermometry Resistance	/	/		
④	for Cyanide Copper Plating 10V-100A with Thermostat Temperature Adjusting Instrument & a Thermometry Resistance	/	/		
⑤	for Nickel Plating 10V-100A with Thermostat Temperature Adjusting Instrument & a Thermometry Resistance	/	/		
⑥	for Chromium Plating 10V-500A with Polarity Changing Over Switch Thermostat Temperature Adjusting Instrument & 2 Thermometry Resistance	/	/		
⑦	for Cyanide Zinc Plating 10V-100A	/	/		
⑧	for Non-Cyanide Plating 10V-100A with Thermostat Temperature Adjusting Instrument & a Thermometry Resistance	/	/		
	2. Connecting Wires (Between Rectifier and Plating Tank)	(1)	(1)		
	1) 100A 30sg 1.5M ... 14 pcs				
	2) 500A 250sg 1.5M ... 4 pcs				
	<u>3. Attached Equipment</u>				
1	Vibrating Barrel Grinder	/	/		
2	Sand Brast (Dry Type)	/	/		
3	Dryer for Examination	/	/		
4	Rotating Barrel Grinder	/	/		
5	Endless Grinder	/	/		
6	Plating Tank for Examination	2	2		
7	Heater (Stainless Steel)	3	3		
8	Heater (Quartz)	3	3		
9	Automatic Thermostat Temperature Adjusting Instrument for Examination	5	5		

REPLACEMENT

10.	Timer for Plating	10	10
11.	Shearing	1	1
12.	Glass Electrode PH Meter	3	3
13.	Jyootoo Type Simple Analyzer	2	2
14.	Waste Water Treatment Equipment (for Training)	1	1
15.	Precision Amperemeter	5	5
16.	Ampere-Hour Meter	1	1
17.	Vacua Pump	1	1
18.	Spray Gun for Coating with Paint	1	1
19.	Stand Microscope	1	1
20.	Draft Chamber for Examination	1	1
<u>4. Exhaust Equipment</u>			
1. Chromium & the Others (Except Cyanide)			
	1) Exhaust Fan with 5.5KW Motor	1	1
	2) Exhaust Hood	8	8
	3) Gas Washing Tower	1	1
	4) Liquid Circulating Pump with 3.7KW Motor	1	1
	5) Circulating Liquid Tank	1	1
	6) Ducts & Fittings	1	1
2. Cyanide			
	1) Exhaust Fan with 1.5KW Motor	1	1
	2) Exhaust Hood	3	3
	3) Gas Washing Tower	1	1
	4) Liquid Circulating Pump with 0.75KW Motor	1	1
	5) Circulating Liquid Tank	1	1
	6) Ducts & Fittings	1	1
<u>5. Waste Water Treatment Equipment</u>			
		1	1
Accessories			
	Reaction Tank	...	1
	Spare Parts	...	1
	Sand Filter	...	1
	Dehydrator	...	1
	Parts for Construction	...	1

	Control Panel	...	1			
	Meter for Control Panel	...	9			
	Chemical Tank	...	1			
	Filter Media	...	5			
	Optional Accessories					
	PH Electrode	...	1	(0)	1	Replacement
	ORP Electrode	...	1	(0)	1	"
	Coagulant Feed Pump	...	1	(0)	1	"
	<u>6. Tools</u>					
1	Soldering Iron			10	0	14 Replacement
2	Magnifying Glass (X 10)			6	6	
3	Plier 210m/m			5	5	
4	Cutting Nipper 180m/m			5	5	
5	Bolt Clipper 450m/m			5	5	
6	Cutter 450m/m			5	5	
7	Cutting Knife			5	5	
8	Scissors for Cloth			2	2	
9	Solder			5g	0	消耗品
10	Paste 150g			2	0	"
11	Solder Flux			5g	0	"
12	Blade for Hacksaw			1	0	"
13	Double Edged Saw			2	0	"
14	Auger			5	5	
15	Straight Shank Drill					
①	1φ			2	2	
②	2φ			2	2	
③	3φ			2	2	
④	5φ			2	2	
⑤	10φ			2	2	

16	Electric Drill with Chuck .... 2 pcs Chuck Handle ... 1 pce Carbon Brush ... 1 set	1	1	
17	Wire Stripper	5	5	
18	Radio Plier	5	5	
19	Chisel 150x13φ	2	2	
20	Oil Stone (Rough)	1	1	
21	Oil Stone (Smooth)	1	1	
22	Screw Driver (+) 75, 100, 125, 150 each 3 pcs (-) 50, 100, 150, 200 each 3 pcs	12	12	
23	Box Driver 1.7, 2.0, 2.3, 2.6, 3.0, 3.5, 4.0, 5.0 6.0, 7.0, 8.0, 10.0φm/m each 2 pcs	24	24	
24	Pipe Wrench 300m/m	2	2	
25	Nail (19. 32. 50. 75m/m long)	4kg	0	消耗品
26	Bolt 3φ x 20 ..... 200 pcs 5φ x 20 ..... 200 " 8φ x 30 ..... 100 " 10φ x 40 ..... 100 "	1	0	"
27	Nut 3φ ..... 200 pcs 5φ ..... 200 " 8φ ..... 100 " 10φ ..... 100 "	1	0	"
28	Stainless Steel Wire ① SUS304 1φ ② SUS304 0.7φ ③ SUS304 0.5φ	1kg 1kg 1kg	0 0 0	2kg Replacement " " "
29	Copper Plate ① 10x3x1000m/m ② 15x3x1000m/m	2kg 2kg	0 0	2kg 2kg "

30	Copper Wire				
①	0.5φ	1kg	0		消耗品
②	0.7φ	1kg	0		"
③	1.0φ	1kg	0		"
④	2.0φ	1kg	0		"
⑤	3.0φ	2kg	0		"
31	ABS Resin Plate 500x400mm	20	10		
32	Brass Wire				
①	0.5φ	1kg	0		消耗品
②	0.7φ	1kg	0		"
③	1.0φ	1kg	0		"
④	2.0φ	1kg	0		"
⑤	3.0φ	2kg	0		"
33	Zinc-Coated Steel Wire				
①	1φ	1kg	0		"
②	2φ	1kg	0		"
34	Transformer				
①	100V, 5A	1	1		
②	220V, 5A	1	1		
35	Cork-Borer (12 pcs/set)	1	1		
36	Aluminum Plate 1t, 400x50mm	100	0		消耗品
37	Brass Plate 0.3t, 400x50mm	100	0		100 Replacement.
38	Zinc-Coated Steel Plate 0.3t, 400x50mm	100	0		消耗品
39	Stainless Steel Plate 0.5t, 400x300mm	15	0		15 Replacement.
40	Vinyl Chloride Plate				
①	2t, 1000x1000mm	4	4		
②	3t, 1000x1000mm	4	4		
41	Titanium Basket	8	8		
42	Funnel 210mm φ	5	5		
43	Glass Bottle				
①	a. 50, 185mm φ	1	1		
②	b. 20, 235mm φ	1	1		



44	Vinyl-Coated Electric Wire				
①	1φ	100 <sub>m</sub>	0	消耗品	
②	2φ	100 <sub>m</sub>	0	"	
③	3φ	100 <sub>m</sub>	0	"	
45	Steel Shaft for Buffer	2	2		
46	Fionsol	10 <sub>kg</sub>	0	20 Replacement	
47	Flontex	10	0	20 "	
48	Grinding Stone	5	0	消耗品	
49	Brush for Painting				
①	a. 30cm/m width	5	0	"	
②	b. 60cm/m "	5	0	"	
50	Hard Steel Wire				
①	1φ 1,000m/m	10	0	10 Replacement	
②	2φ 1,000m/m	10	0	10 "	
③	3φ 1,000m/m	10	0	10 "	
④	4φ 1,000m/m	10	0	10 "	
51	Titanium Anode Hook 6φx200m/m	100	0	消耗品	
52	Polyethylene Bottle 10φ	10	0	"	
53	Plastic Basket 250φ	3	0	"	
54	Stainless Steel Basket				
①	150φ	2	2		
②	250φ	2	2		
55	Box for Emery Powder 100x500x100	6	6		
56	Tinner Scissors				
①	Straight 210m/m	2	2		
②	Carve 210m/m	2	2		
57	Glue	2	0	消耗品	
58	Emery Powder				
①	No. 80	5 <sub>kg</sub>	0	"	
②	120	"	0	"	
③	150	"	0	"	
④	200	"	0	"	
⑤	240	"	0	"	
⑥	320	"	0	"	

19	Emery Cloth Belt 915x100cm/m	10	0	消耗品
①	#220			
②	#320	10	0	"
③	#400	10	0	"
60	Brush	10	0	"
61	Emery Paper #60, #120, #150, #240, #320, #400 each 5 sheets	30	0	"
62	Brush	10	0	"
63	Steel Brush			
①	Brass Brush 4 - line	5	0	"
②	Steel Brush 3 - line	5	0	"
64	Anode Bag	8	0	8 Replacement
65	Cotton Glove	3	0	消耗品
66	Rubber Gloves	20	0	"
67	Rubber Apron	10	0	10 Replacement
68	Rubber Boots (Size: 26cm)	10	0	消耗品
69	Rubber Apron for Buffing	6	0	"
70	Vinyl Tape (Gray)	20	0	"
71	Polishing Media for Barrel Polishing			
①	20cm/m, 2m/m	500	0	"
②	5m/m φ	4	0	"
③	3m/m φ	4	0	"
72	Buff			
①	Ball Buff 300φ	2	0	"
②	Combination Disc Buff 300φ	2	0	"
③	Cotton Buff (20el.) 300φ	2	0	"
④	Emery Paper Buff 300φ	6	0	"
⑤	Felt Buff 300φ	2	0	"
⑥	Cotton Buff (7el.) 300φ	2	0	"
⑦	Vinyl Bond Buff #400, 25t, 300φ	1	0	"
⑧	Wire Buff 25t, 250φ	1	0	"
⑨	Paper Wheel 30t, 250φ	1	0	"
73	Bench Drilling Machine with Chuck .... 2 pcs Chuck Handle ... 2 pcs Vise .... 1 pce	1	1	

74	Copper Anode 400x150m/m	12	0	12	Replacement
75	Phosphorous Copper Anode 400x150m/m	4	0	4	
76	Nickel Anode 400x150m/m	12	0	12	
77	Lead Anode SE-90, 450x90x11m/m	8	0	8	
78	Stainless Steel Anode 300x400x0.5m/m	2	0	2	
79	Stainless Steel Anode 150x300x0.5m/m	4	0	4	
80	Platinized Titanium Anode 50x300m/m	4			
81	Silver Anode 50x300x10m/m	4			
82	Tin Anode 150x400x10m/m	4			
83	Zinc Anode 120x400x20m/m	8			
84	GOLD POTASSIUM CYANIDE				500g Replacement
85	RA PLATING SOLUTION				500ml
86	SILVER SALT				101g

資料 7. (58年度)アフターケア購送予定機材リスト

A. MARINE MECHANICS COURSE.				1.	
番号	機材名	仕	様	数量	
A-1	エンジン用スベアパーツ 型式: TS-50用	(1) GASKET CR. HEAD	104100-01330	7 x 23-	4
		(2) RING SET PISTON	704100-22500	"	4
		(3) VALVE W/CASE, F.I.	172100-53000	"	4
A-2	" 型式: JTG用	(1) RING SET PISTON	723220-22511	"	4
		(2) VALVE W/CASE, F.I.	172100-53000	"	4
A-3	" 型式: ISM用	(1) RING SET PISTON	722510-22512	"	4
		(2) OIL SCRAPING RING	"	"	1
		(3) NEEDLE VALVE AND CASE	172100-53000	"	4
A-4	" 型式: 2SMG用	(1) RING SET PISTON	722510-22512	"	4
		(2) VALVE W/CASE, F.I.	172100-53000	"	4
A-5	" 型式: JESD用	(1) RING SET PISTON	725220-22521	"	4
		(2) VALVE W/CASE, F.I.	172220-53000	"	4
B	インプレッション用スベアパーツ 型式: SC2用	(1) PISTON RING	190021-22150	"	2
		(2) PISTON RING	190021-22100	"	2
		(3) VALVE ASSY. PRESSURE	190021-11103	"	2
		(4) VALVE ASSY. PRESSURE	190021-11103	"	2
		(5) PACKING-20	23414-20000	"	2
		(6) PACKING-20	23414-20000	"	2
		(7) GASKET	190021-73621	"	2

番号	機材名	仕	単	数量
A-6	コックレックシヨノ用スベツト-パーツ 型式: TS-50 用	(1) GASKET, CYL. HEAD	104100-02200	4
		(2) RING SET, PISTON	704100-33500	4
		(3) VALVE W/CASE, F.I.	172100-53000	4
A-7	シリンダ-ボ-リング マシン 型式: MVA 102 用	(1) ボ-リング セット	MW-100	10
		(2) フォスナツチン用ボ-リング セット	MW-150	3
A-8	ボ-リングボ-リング マシン ボ-リングヘッド (EJULFN-1) 用	(1) 石炭石	8x9x100	#150
		(2) "	"	#500
		(3) "	"	#1000
	ボ-リングヘッド (EJULFC-2) 用	(1) 石炭石	8x9x100	#150
		(2) "	"	#500
		(3) "	"	#1000
	ボ-リングヘッド (EJULFC-3) 用	(1) 石炭石	6.5x8x75	#150
		(2) "	"	#500
		(3) "	"	#1000
		(4) "	7.7x8x75	#150
		(5) "	"	#500
		(6) "	"	#1000
A-9	エンジン用スベツト-パーツ 型式: TS 50 C 用	(1) RING SET, PISTON	704100-33500	4
		(2) VALVE W/CASE, F.I.	172100-53000	4

番号	機材名	仕	仕様	数量
A 10	エンジン用スベーパー	(1)	VALVE ASS. F.I. 704571-53100 マンダー	2
	型式: YSM 2 用	(2)	RING SET PISTON 704571-22500 "	4
11	"	(1)	RING SET PISTON 723220-22511 "	4
	型式: 2TQ 用	(2)	VALVE W/CASE. F.I. 172100-53000 "	4
12	"			
	型式: 2ESD 用	(1)	RING SET PISTON 725320-22521 "	4
13	"	(1)	VALVE W/CASE. F.I. 172100-53000 "	2
	型式: 4KD 用	(2)	O-RING 26-F 24311-000260 "	2
14	バルブリテーサー		型式: MR-145 6~145mm <sup>φ</sup> 奇部産業	1
15	ピストリングコンプレッサー		型式: RC-30 75~175mm <sup>φ</sup> "	10

B MARINE WELDING COURSE

4

番号	機 材 名	仕 様	数 量
B-1	マニホールドパイプライン用 シングルレギュレーター	(a) TIG用レギュレーター (b) 酸素用	専修産業(株) 20 (既設機材) 20
B-2	シリンダー マニホールド用 マスターレギュレーター	(a) TIG用 1次 BS 217° (b) 酸素	同上 2 " 2
B-3	酸素アーク溶接吹管	(A1号 溶接トーチ用)	" 20
		口径 10.1	" 20
		" 10.2	" 20
		" 10.3	" 20
		" 10.5	" 20
		" 10.7	" 20
B-4	酸素アーク溶接吹管	(大型切断用トーチ用)	" 20
		口径 10.1	" 20
		" 10.2	" 20
		" 10.3	" 20
B-5	酸素溶接ホルダー	200 A 用	" 20
B-6	"	400 A 用	" 20
B-7	アルゴンガスレギュレーター	BS 217°	" 32 4
B-8	CO <sub>2</sub> (炭酸ガス)レギュレーター	"	" 4

番号	機材名	仕様	数量
9	アルゴン溶接器	(トーチ用ホース及水用ホース付)	4 <small>1社</small>
10	灰酸ガス溶接トーチ	(ホース付)	4
11	ヘルメットマスク	(T-7 溶接用)	20



C. ELECTROPLATING COURSE

11/6

番号	機材名	仕様	数量
1	半田ゴテ	240V 50Hz	1本 （既設印機用） （515V 2KW）
2	ヒーター（特注）	(a) P-10 TILリ用 1φ 415V 2KW (b) M-10 石英ヒーター 1φ 415V 2KW (c) SUS-10 ステンレスヒーター 2φ 415V 2KW	1本 6本 3本
3	メッキ用温度計	0-100°C	10本
4	浴過剰用カートリッジ	(a) P-100 (b) P-10 (c) P-25 (d) P-50	100本 100本 100本 100本
5	バフ用	(a) サイクルバフ (b) バイアスバフ	10本 10本
6	投入ヒーター	(a) ステンレス製 1φ 240V 50Hz 0.5KW (b) 石英製 1φ 240V 50Hz 0.5KW	3本 3本
7	自動温度調節器	Pt 50Ω 0-100°C	5本
8	PH電極棒	AF-5000 ステンレス製	1本
9	ORP電極棒	AF-5000 ステンレス製	1本
10	凝集剤注入ポンプ	ME-50 4P 415V 0.1KW	1本

C			7
番号	機材名	仕様	数量
C-11	ステンレスワイヤ	(a) SUS304 1φ	2φ
		(b) " 0.7φ	2φ
		(c) " 0.5φ	2φ
C-12	銅平板	(a) 10×3×1000 mm	2φ
		(b) 15×3×1000 mm	2φ
C-13	真鍮板	0.3t 400×500 mm	1枚 120
C-14	ステンレス板	0.5t 400×500 mm	1枚 15
C-15	フロンテックス	遮光剤	20φ
C-16	フロンゾル	(6kg入缶×3)	18φ
C-17	ビード線	(a) 1φ 1000 mm	10φ
		(b) 2φ 1000 mm	10φ
		(c) 3φ 1000 mm	10φ
		(d) 4φ 1000 mm	10φ
C-18	ビードバック		8枚
C-19	ゴムエプロン		10枚
C-20	銅ビード	400×150 mm	1枚

C			R
番号	機材名	仕様	数量
-21	燐青銅アノード	400x150 mm	1 枚
-22	ニッケルアノード	400x150 mm	1 枚
-23	鉛アノード	450x80x11 mm	1 枚
-24	ステンレスアノード	300x400x0.5 mm	2 枚
-25	ステンレスアノード	150x300x0.5 mm	4 枚
-26	シアン金カリウム	" "	100 g
-27	ロジウムメッキ液	" "	100 ml
-28	シアン銀カリウム	" "	1 g

D MARINE MECHANICS TRADE

17 9

番号	機材名	仕	様	数量	
D -1	エンジン用スベト-パーツ 型式: 4KD	(1) PIPE (A), F. INJECT.	125410-59812	1	
		(2) PIPE (B), F. INJECT.	125410-59822	1	
		(3) PIPE (C), F. INJECT.	125410-59832	1	
		(4) PIPE (D), F. INJECT.	125410-59842	1	
	型式: 3ES	(1) PIPE, FUEL INJECTION	125413-59802	3	
		型式: 2SMF	(1) PIPE, FUEL INJECTION	122510-59800	2
			型式: 7S5D	(1) PIPE, FUEL INJECTION	104120-59800
	E -2	エンジン用スベト-パーツ 型式: 4KD	(1) STRAINER, FUEL	125610-55700	1
			(2) STRAINER	120390-53312	1
		型式: 3ES	(1) STRAINER, FUEL	125300-55701	1
(2) STRAINER			122117-53300	1	
型式: 2SM		(1) STRAINER, FUEL	122510-55010	1	
		(2) STRAINER	122410-53310	1	
型式: 1SM		(1) STRAINER, FUEL	122310-55700	1	
		(2) STRAINER	122310-53300	1	
F -3		ノズルテスター	NOZZLE TESTER	737600-93501	1

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番号	機材名	仕様	数量
D-4	エンジン用スベアパーツ		
	型式: 4K-D	(1) PUMP W/GOVERNOR, E.I. 733455-51701 マンマ	1
D-5	油圧操縦装置	教育実習用	片岡商事 (会社名)
D-6	パーソナルコンピュータ		若木商事
		CPU PC 8801	ライオン
		CRT PC 804PK	
		CRT 19インチ	
		ディスクドライブ PC 6082	
		ソフトウェア PC 8881	
		ソフトウェア PC 8886	
		電源用トランス	
		[記述の必要附属品類] 一式合計	
		使用電源: 1φ 240V 50Hz	

E. MARINE WELDING COURSE

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番号	機材名	仕様	数量
1	AC/DC TIG ガス T-7 溶接機	YC-305 TDK-6 10 415V 50Hz	1
		手動作業(性能) (既製の用紙等) 500枚付	
2	自動ガス切断機	KT-5N	5
		同上	
3	ポータブルガスライナ	100mm (4") 1φ 240V 50Hz	10
4	"	150mm (6") " "	4
5	通気トリック	型式: SD-10C ドリルナット等	2
6	CO <sub>2</sub> T-7 溶接機	YK-305K 3φ 415V 50Hz 71Y-供給装置等付属品一式付	1

F ELECTROPLATING TRADE

番号	機材名	仕様	数量
F-1	ニッケルノッキ槽	550x450x700mm 276-18110品式付 手師産業(特種) (設備間の関連) S 276+FL	1台
"-2	硫酸フォームノッキ槽	550x450x700mm	1台
"-3	フォームノッキ槽	550x450x700mm	1台
"-4	超音波洗浄器	1.2kW 50Hz	2台
"-5	操作用PH1-9	PH.0~14 DC用 digital表示 0~80°C	4台
"-6	羽形研磨機	3.7kW 2772-173	1台
"-7	膜厚計	AC 240V, 50Hz	1台
"-8	操作用プロフ	0.75kW 3x 415V	1台
"-9	実験用ノッキ槽	250x200x500mm	2台

## **Majlis Amanah Rakyat (MARA)**

MARA was established as a statutory body on March 1, 1966, following the First Economic Congress of bumiputeras the previous year. MARA is one of the bodies assigned to implement the New Economic Policy. Some of its main objectives are to:

- develop manpower resources to provide Malays and other indigenous people with managerial and technical consultancy services;
- provide Malays and other indigenous people with credit facilities to enable them to engage in commercial and industrial enterprises; and
- establish commercial, industrial, transportation and other projects that will help expedite their participation in these fields.

### **Organisation & Finance**

MARA is financed by the Federal Government. Placed under the Public Enterprises Ministry, it is governed by a Council of 11 members appointed by the Minister. It is headed by a director-general and assisted by a deputy and has eight divisions, each under a director.

The following five operating divisions carry out the functions and responsibilities of MARA: Education and Training; Advisory Services and Enterprises Development; Credit Finance; Industry and Commerce and Transport. The other three divisions deal with Administration, Personnel and Finance. MARA has branches in every State, each headed by a State MARA officer.

### **Education & Training Division**

Its main responsibility is to increase the number of trained bumiputeras by initiating selective training programmes. These include scholarships and educational loans for further professional and academic studies, the provision of vocational training either in MARA or in other institutions or abroad and the sponsorship of on-the-job training. Junior science colleges have been set up to cater for select pupils from the rural areas to continue their secondary education in science and technology. Primary school leavers with good grades are selected to attend these boarding institutions. These colleges are in Seremban, Kota Baharu, Kulim, Kuantan and Kuala Terengganu.

Students who cannot further their studies after their secondary education are eligible to apply to one of the nine vocational training institutions in Kuala Lumpur, Melaka, Alur Setar, Sungai Petani, Lumut, Petaling Jaya, Pekan and Johor Baharu. Courses in automobile engineering, building construction, electronics, repairs and welding are available.

Where a particular type of training courses is not available at these institutions, on-the-job training schemes with private firms or government departments are arranged.

Scholarships are usually given to science students and those undergoing aircraft pilot training overseas. Loans are available to students to pursue degree courses in arts, humanities and law.

### **Advisory Services & Enterprises Development Division**

This is responsible for the promotion and guidance of bumiputeras participation in industrial and commercial activities. It conducts research and feasibility studies and formulates projects, and helps bumiputeras in implementing projects, provides consultancy services and short courses on managerial and technical know-how. Advisory services offered are in the following disciplines: management, accounting, marketing, carpentry, mechanical and industrial engineering, building construction, commercial designing and feasibility studies.

### **Credit Finance Division**

Responsible for providing loans to bumiputera entrepreneurs as well as loans to existing small bumiputera enterprises with credible growth potential and guiding the bumiputeras to make use of existing banking and financing facilities. Loans are normally backed by collaterals and payable by instalments within three to five years.

### **Transport Division**

This operates rural bus services especially into land development schemes. The services are the result of joint-venture projects between MARA and bumiputera businessmen.

A MARA express bus service also operates between Kuala Lumpur and the state capitals and major towns. Masmara Travel and Tours operates travel and tour services. The division is also involved in activities related to transportation, including workshops which serve as a training ground for bumiputeras in motor repairs. The MARA dockyard in Kuala Terengganu produces wood trawlers and motor launches. There is also a tyre-retreading factory in Kuala Lumpur and a lorry transport service.

### **Industry & Commerce Division**

This is responsible for increasing bumiputera participation in industry and commerce. It is also a holding company with investments in MARA companies and various other sectors to give optimum benefit to bumiputeras. There are several companies under this division.

### **Business Premises Development Scheme**

Under this scheme, MARA is responsible for building business premises for bumiputera business people such as bazaars, arcades, stalls and office accommodation.



#### Future Plans

- Plans to build 10 more Mara Junior Science Colleges under the Fourth Malaysia Plan and a pre-U Science College in Banting in 1983.
- Mara to spend half of its total allocation of \$1,155 mil under FMP on training and education programmes:
  - 1 \$660.5 mil for education purposes such as loans, scholarships, building colleges and setting up vocational institutes.
  - 2 \$100.9 mil for its transportation Co, Kumpulan Kendaraan Mara Bhd.
  - 3 \$38.4 mil for management of Kumpulan Mara Sdn Bhd.
  - 4 \$27.8 mil for bus company, Mara Bas.
  - 5 \$15 mil for Syarikat Jengka.
  - 6 \$4.7 mil for staff training.
- Selangor State Government to build 114 stalls under FMP to cater to the increasing needs for business premises by bumiputera businessmen.
- Mara aims to supply 10 per cent skilled-labour needs by end of FMP.

The Federal Government took over Syarikat Jengka, the timber-based joint-venture between Mara and the Pahang SEDC.

Mara allocated \$77.1 mil for loans in 1982 expecting to benefit more than 20,000 bumiputera businessmen and traders and 549.8 mil for entrepreneurs and business.

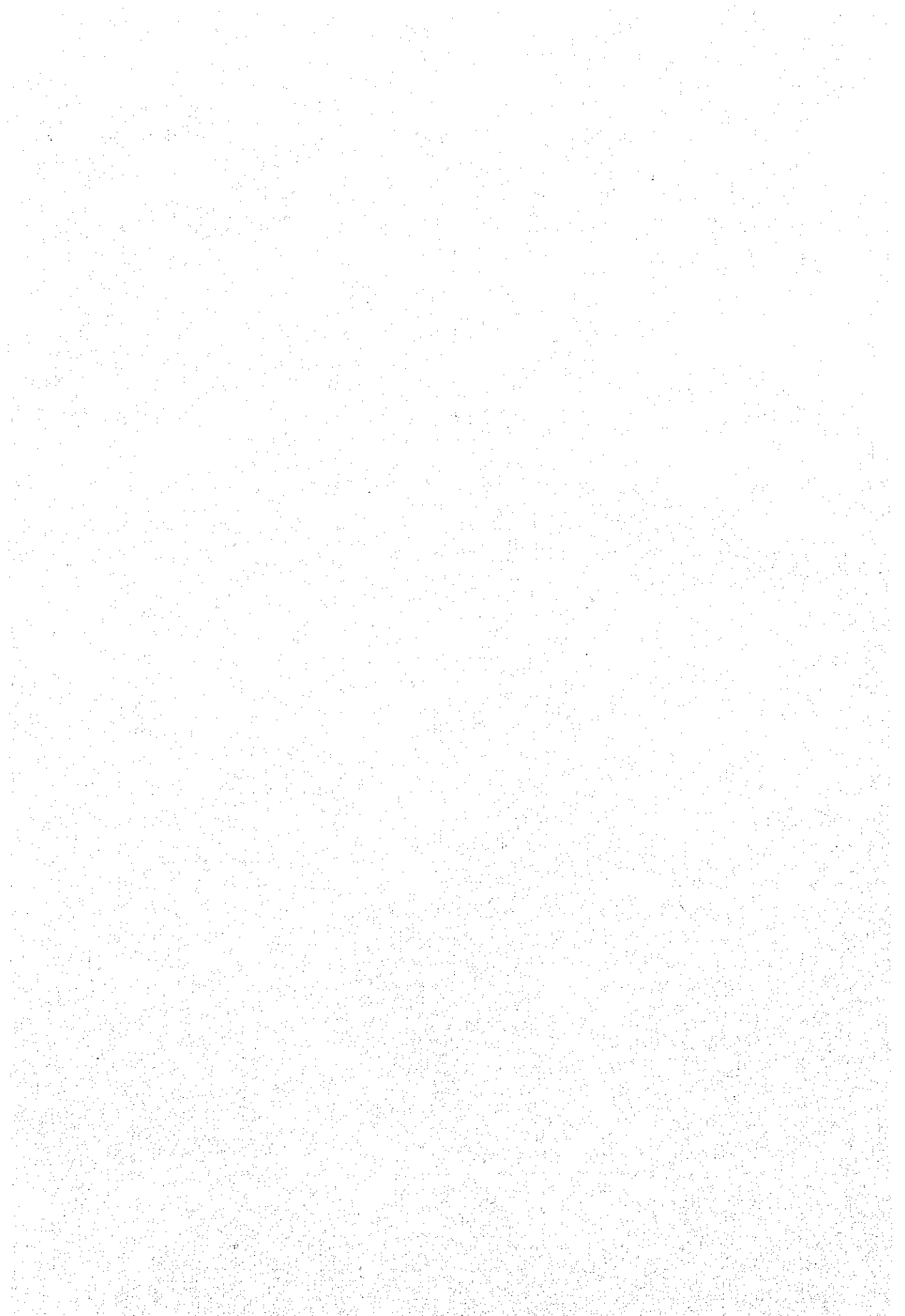
A special committee has been set up to determine the criteria for the transfer of ownership of Mara's subsidiaries and industries to bumiputera traders and businessmen. The committee will ensure that all matters pertaining to the transfer are carried out smoothly.

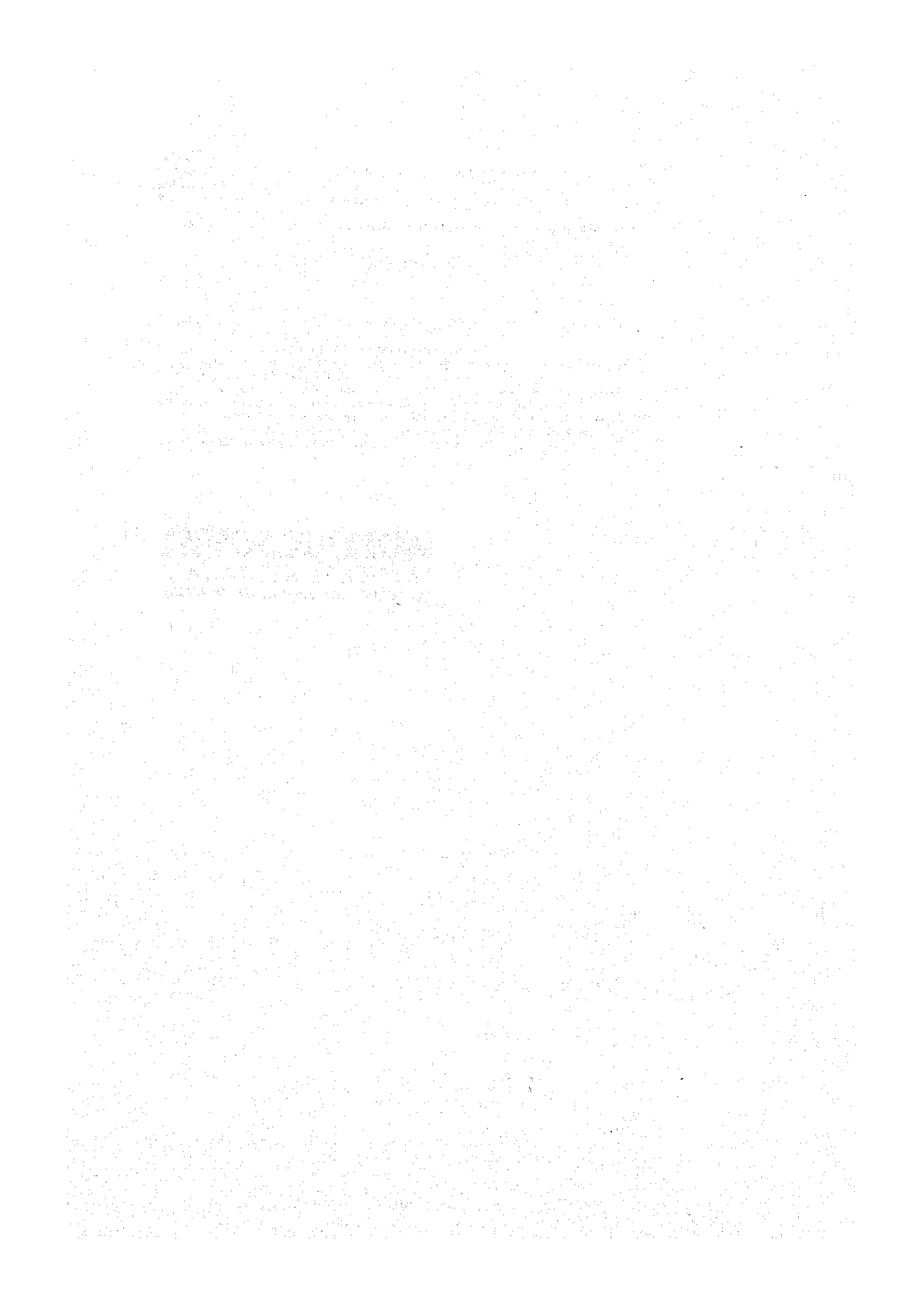
## **INFORMATION**

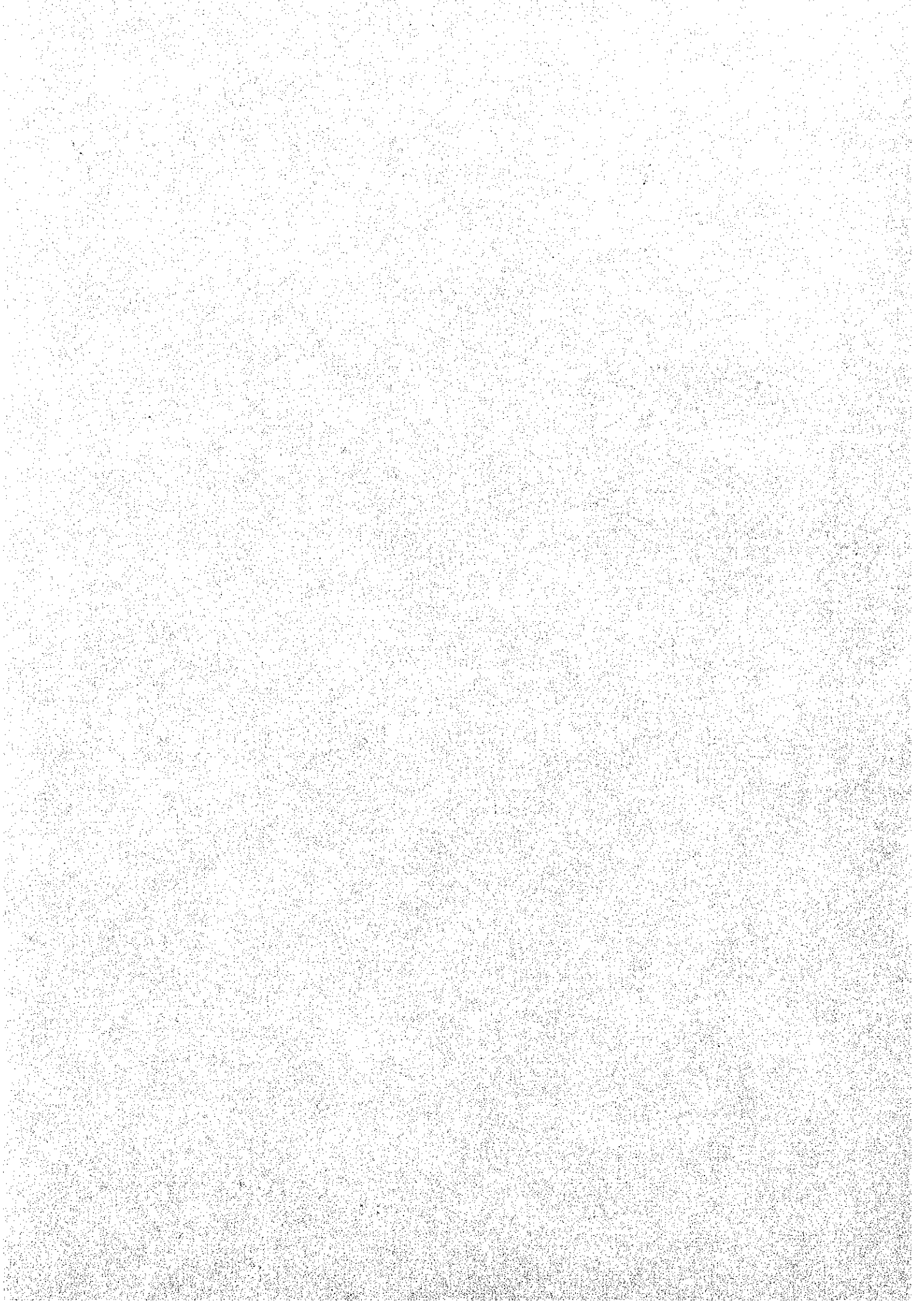
### **MALAYSIA 1982-1983**

#### **INCORPORATING MALAYSIA YEARBOOK**

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