Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
V	II	Balikpapan	PKN		448, 500	A_1 A_2	0.5	0000 - 0100 0400 - 0500	116°48'31.5"E	1°16'16.5"S	Mobile
					4238 6326.5	A_1	0.25	Hx			
					8437	A_1	0.25	0000 - 0100 0400 - 0500			
					2182 2690	A_3A A_3J A_3H	0.25	0000 - 0100 0400 - 0500			
					4357.4	A_3A A_3J	0.25	0100 - 0130			
					6215.5	A_3A A_3H A_3J	0.25	Hx			
					8746.5	A_3A A_3J	0.25	0400 - 0500			
			Balikpapan Radio		VHF Ch16 Ch20 Ch26	F_3	0.05	0000 - 0500			
				8AR	11060	A_1	0.7	0230 - 0400			Fixed
					6926	A_3J	0.1	0200 - 0230 0330 - 0400 0530 - 0600			
					5316	A_3J	0.1	0100 - 0130 0430 - 0500			
V	III	Banjarmasin	PKC		456. 500	A_1 A_2	0.25	0100 - 0130 0500 - 0530 1000 - 1100	114°35'57"E	3°20'30"S	Mobile
					4238	A_1	0.25	0230 - 0300			
					6337	A_1	0.25	0600 - 0630			
					8457	A_1	0.25	0130 - 0200			

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
V	III	Banjarmasin	PKG		2182	A_3A A_3J A_3H	0.25	0030 - 0100 0400 - 0430	114°35'37"E	3°20'30"S	Mobile
					3180	"	0.25	0030 - 0100 0400 - 0430			
					4388	A_3A A_3J	0.25	0630 - 0700			
					6215.8	"	0.25	0200 - 0230			
					8765.4	"	0.25	0530 - 0600			
			Banjarmasin Radio		VHF Ch16 Ch20 Ch22 Ch26	F_3	0.05	0000 - 0600			
				8AN	8110/11060	A_1	0.1				Fixed
					5216	A_3J	0.1	2330 - 0600			
					6926	A_3J	0.1	0800 - 0900			
					9116	A_1	0.1				
V	III	Tarakan	PKO		487.5, 500	A_1 A_2	0.25	0130 - 0200 0430 - 0500 0630 - 0730	117°35'40"E	3°17'40"N	Mobile
					6337	A_1	0.25	Hx			
					8445	A_1	0.25	0100 - 0130 0330 - 0400 0730 - 0800			
					2182 3180	A_3A A_3H A_3J	0.25	0200 - 0230 0500 - 0530 0800 - 0830			

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
V	III	Tarakan	PKO		4422.5	A_3A A_3J	0.25	Hx	117°35'40"E	3°17'40"N	Mobile
					6215.5	A_3A A_3J A_3H	0.25	Hx			
					6221.6	A_3A A_3J	0.25	Hx			
					6518.8	"	0.25	Hx			
			Tarakan Radio		VHF Ch10 Ch16 Ch20 Ch22 Ch26	F_3	0.05	0000 - 0800			
				8AG	5316	A_3J	0.1				Fixed
					6926	A_3J	0.1	2330 - 0630			
					9110	A_3	0.1				
V	IV/A	Sampit	PKC_2		VHF Ch10 Ch15 Ch16 Ch20 Ch22	F_3	0.05	Hx	112°57'24"E	2°33'26"S	Mobile
				$8AN_7$	5316	A_3J	0.1				Fixed
					6926	A_3J	0.1	2330 - 0600			
					9110	A_3	0.1				
V	IV/A	Samarinda	PKN_6		8445	A_3	0.02	0130 - 0200 0500 - 0600	117°09'12"E	0°30'30"S	Mobile
			Samarinda Radio		VHF Ch10 Ch15 Ch16 Ch20 Ch22	F_3	0.05	0200 - 0300 0400 - 0500			

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
V	IV/A	Samarinda		8AR$_2$	5316	A$_3$J	0.1	2330 - 0600	117°09'12"E	0°30'30"S	Fixed
					6926	A$_3$J	0.1	2330 - 0600			
					9110	A$_3$J	0.1	2330 - 0600			
V	IV/B	Pulaupisami		8AN$_5$	5316 6926	A$_3$J	0.1	2330 - 0030 0400 - 0430 0500 - 0600			Fixed
V	IV/B	Nunukan		8AN$_2$	4055	A$_3$J	0.1				Fixed
V	IV/B	Muara Pegah		8AN$_x$	5316 6926	A$_3$J	0.1	2300 - 2330 0400 - 0430			Fixed
V	IV/B	Tg. Santan									

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
VI	I	Ujung Pandang (Makassar Radio)	PKF		465. 500	A_1 A_2	1	H_{24}	119°26'20"E	5°06'30"S	Mobile
					4295	A_1	1	0100 - 0200 0900 - 1000			
					8686	A_1	1	0200 - 0300 0800 - 0900 1100 - 1200			
					12682.5	A_1	1	0400 - 0500 1200 - 1300			
					2182 2690	A_3A A_3H A_3J	0.7	H_{24}			
					4397.7	A_3A A_3J	0.7	0300 - 0330 0730 - 0800			
					6215.5	A_3A A_3H A_3J	0.7	0330 - 0400 1000 - 1030			
					8802.6	A_3A A_3J	0.7	0600 - 0630 1030 - 1100			
					13100.8	"	0.7	0700 - 0730 1330 - 1400			
			Makasser Radio		VHF Ch16 Ch20 Ch26	F_3	0.05	0000 - 1200			
				8AP	8110	A_1	1	0000 - 1000			Fixed
					11060	A_1	1	0300 - 0330			
					9925	A_1	1	0530 - 0600			
					14639	A_1	0.7	0030 - 0100			
					5165	A_3J	0.7	0400 - 0430			

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
VI	IV/B	Kendari	PKF_3		VHF Ch10 Ch15 Ch16 Ch20 Ch22	F_3	0.05	Hx	122°35'00"E	3°55'00"S	Mobile
				$8AF_2$	5165	A_3J	0.125	0030 - 0100 0400 - 0430			Fixed
					9925	A_1	0.125	0030 - 0100 0400 - 0430			
					6926	A_3J	0.125	0100 - Hx			

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
VII	I	Bitung	PKM		438, 300	A_1 A_2	1	H_{24}	125°10'51.8"E	1°26'46.8"N	Mobile
					6428.5	A_1	1	0600 - 0700 1100 - 1200			
					8691	A_1	1	0100 - 0200 0500 - 0600 0900 - 1000 1300 - 1400			
					12704.5	A_1	1	0200 - 0230 1000 - 1030 1400 - 1500			
					2182 2690	A_3A A_3H A_3J	0.7	0000 - 0100 0400 - 0500 0800 - 0900 1000 - 1200			
					4410.1	A_3A A_3J	0.7	Hx			
					6215.5	A_3A A_3H A_3J	0.7	0100 - 0200 0500 - 0600 0900 - 1000 2000 - 2400			
					8808.8	A_3A A_3J	0.7	0200 - 0300 0700 - 0800 1200 - 1300			
					13125.6	A_3A A_3J	0.7	Hx			
			Bitung Radio		VHF Ch16 Ch20 Ch26	F_3	0.05	Hx			
				$8AS_2$	11060	A_1	1				Fixed
					14630	A_1	1				
					9110	A_1	0.7	0000 - 0930			
					6926	A_3J	0.1				
					5381.5	A_3J	0.1				

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
VII	III	Donggala	PKM_9		448, 500	A_1 A_2	0.05	0030 - 0100 0400 - 0430	119°44'30"E	0°39'36"S	Mobile
					8686	A_1	0.05	0130 - 0200 0530 - 0600			
					2182 2690	A_3A A_3H A_3J	0.15	0000 - 0030 0430 - 0500 0930 - 1030			
					6215.5	A_3A A_3J	0.15	0100 - 0130 0900 - 0930			
			Donggala Radio		VHF Ch10 Ch15 Ch16 Ch20 Ch22	F_3	0.05	0200 - 0230 0500 - 0530			
				$8AS_7$	9110	A_1	0.1	0000 - 0600			Fixed
					5165	A_3J	0.1				
					5381.5	"	0.1				
					6926	"	0.1				
VII	IV/B	Menado		8AS	5381.5	A_3J	0.1	0000 - 0600			Fixed
					6926	A_3J A_1	0.1	0000 - 0600			
					9110	A_1	0.1	0000 - 0600			
VII	IV/B	Corontalo	PKM_8		2182 2690	A_3A A_3H A_3J	0.1	0030 - 0100 0400 - 0430 0900 - 0930	123°03'47"E	0°29'59"N	Mobile
					6215.5	"	0.1	0130 - 0200			
			Corontalo Radio		VHF Ch10 Ch15 Ch16 Ch20 Ch22	F_3	0.03	0000 - 0030 0530 - 0600			

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
VII	IV/B	Gorontalo		$8AS_3$	9110	A_1			123°03'47"E	0°29'59"N	Fixed
					5381.5	A_3J	0.10	0000 - 0600			
					6926	A_3J					
VII	IV/B	Poso	PKM_6		VHF Ch10 Ch15 Ch16 Ch20 Ch22	F_3	0.05	0000 - 0030 0230 - 0300 0530 - 0600 0900 - 0930	120°45'01"E	1°22'15"N	Mobile
				$8AS_4$	9110	A_1					
					5381.5	A_3J	0.1	0000 - 0600			Fixed
					6926	A_3J					
VII	IV/B	Luwuk	PKM_5		2182	A_3A A_3H A_3J	0.1	2330 - 2400 0100 - 0130 0400 - 0430 0930 - 1000	112°47'24"E	0°56'58"N	Mobile
					2690	"	0.1				
					6215.5	"	0.1				
			Luwuk Radio		VHF Ch10 Ch15 Ch16 Ch20 Ch22	F_3	0.03	0000 - 0030 0530 - 0600			
				$8AS_5$	9110	A_1					
					5165	A_3J	0.1	0000 -0600			Fixed
					6926	"					
					5381.5	"					

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
VII	IV/B	Toli-Toli	PKM_7		VHF	F_3	0.05	0130 - 0200	120°48'25"E	1°03'35"N	Mobile
					Ch10 Ch15 Ch16			0530 - 0600			
					Ch20 Ch22						
				$8AS_6$	5381.5	A_3J	0.1				Fixed
					9110	A_2	0.1	0000 - 0600			
					6926	A_1	0.1				
VII	IV/B	Parigi	PKM_4		VHF	F_3	0.05	0100 - 0130	120°09'46"E	0°48'40"N	Mobile
					Ch10 Ch15 Ch16			0400 - 0430			
					Ch20 Ch22						
				$8AS_8$	5381	A_3J	0.1	0130 - 0400			Fixed
					9110	A_1	0.1	0000 - 0600			
VII	IV/B	Ampana		$8AS_9$	9110	A_1	0.1	0000 - 0600			Fixed
					6926	A_3J	0.1	0000 - 0600			
					5381.5	A_3J	0.1	0000 - 0600			
VII	IV/B	Tahuna		$8AS_{20}$	5381.5	A_3J	0.1	2330 - 0500			Fixed
VII	IV/B	Kolonedalo		$8AS_{21}$	5381.5	A_3J	0.1	0000 - 1000			Fixed
					6926	A_3J	0.1	0000 - 1000			
VII	IV/B	Siau		$8AS_{22}$	5381.5	A_3J	0.1	0000 - 1000			Fixed
					6926	A_3J	0.1	0000 - 1000			

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
VIII	I	Ambon (Amboina Radio)	PKE		470, 500	A_1 A_2	1	H_{24}	128°11'44"E	3°41'33"S	Mobile
					4295	A_1	1	Hx			
					8473	A_1	1	0200 - 0330 0900 - 1030			
					12682.5	A_1	1	0000 - 0100 0500 - 0600			
					17184.8	A_1	1	0600 - 0700 1200 - 1230			
					2182 2690	A_3A A_3J A_3H	0.8	0100 - 1200			
					4379.1	A_3A A_3J	0.8	Hx			
					6215.5	A_3A A_3H A_3J	0.8	0700 - 0800 2200 - 2300			
					8796.4	A_3A A_3J	0.8	0330 - 0430 2300 - 2400			
					13128.7	A_3A A_3J	0.8	Hx			
			Amboina Radio		VHF Ch16 Ch20 Ch22 Ch26 Ch28	F_3	0.05	0000 - 0500			
				8AQ	17623	A_3B	1	0100 - 0900			Fixed
					13661	A_1	1	0100 - 0900			
					11060	A_1	1	0100 - 0900			
					5316	A_3J	0.1	2315 - 2400 0300 - 0330 0030 - 0100			
					6926	A_3J	0.1	0430 - 0500			

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
VIII	IV/A	Ternate	PKE_5		470, 500	A_1 A_2	0.08	0000 - 0030 0400 - 0430	127°22'52"E	0°47'00"N	Mobile
					6428.5	A_1	0.08	0100 - 0230			
			Ternate Radio		VHF Ch12 Ch13 Ch14 Ch16	F_3	0.03	0000 - 0500			
				$8AQ_2$	5316	A_3J	0.1	0330 - 2400 0020 - 0100			Fixed
					9925	A_1	0.1	0430 - 0500 0230 - 0300			
VIII	IV/B	Tual	RKE_{24}		VHF Ch12 Ch13 Ch14 Ch16	F_3	0.03	0100 - 0130	132°40'27"E	5°20'10"S	Mobile
				$8AQ_3$	9925	A_1	0.1	2315 - 2400 0400 - 0445 0345 - 0400			Fixed
					5316 6926	A_3J	0.1	2245 - 2400 0230 - 0300 0430 - 0500			
VIII	IV/B	Banda Neira		$8AQ_4$	5316 6926	A_3J	0.1	2315 - 2400			Fixed

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
IX	I	Jayapura	PNK		465. 500	A_1 A_2	1	2300 - 1000	140°43'18"E	2°30'48"S	Mobile
					8694	A_1	1	0000 - 0100 0300 - 0500			
					12682.5	A_1	1	0100 - 0200 0500 - 1000			
					17074.5	A_1	1	0200 - 0300 0700 - 0900			
					2182 3180	A_3A A_3H A_3J	1	2300 - 1000			
					4357.4	A_3A A_3J	1	Rx			
					6215.5	A_3A A_3H A_3J	1	0700 - 1000 2200 - 2300			
					6221.6	A_3A A_3J	1	0000 - 0200 0300 - 0500 0800 - 0900 2300 - 2400			
					8802.6	A_3A A_3J	1	0200 - 0300 0500 - 0600 0800 - 0900 2300 - 2400			
					13134.9	A_3A A_3J	1	0000 - 0200 0300 - 0500 0600 - 0800 0900 - 1000			
			Jayapura Radio		VHF Ch16 Ch20 Ch26	F_3	0.05	2300 - 1000			
				8AT	17615	A_3B A_1	1	0100 - 0900 0000 - 0030			Fixed
					6926	A_3J	0.1	2230 - 0030 0730 - 0800 0600 - 0930			

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
IX	I	Jayapura		8AT	9925 10225	A_1 A_1	0.7	2330 - 2400 0130 - 0200 0900 - 0930	140°43'18"E	2°30'48"S	Fixed
					14639	A_3	1	0000 - 0030			
IX	III	Sorong	PKY4		458, 500	A_1 A_2	0.25	2300 - 0400 0500 - 1000	131°14'20"E	0°52'42"S	Mobile
					6337	A_1	0.25	0130 - 0200			
					8461	A_1	0.25	0200 - 0300 0930 - 1000			
					2182 3180	A_3A A_3H A_3J	0.25	0000 - 0030 0300 - 0330			
					4422.5	A_3A A_3J	0.25	0400 - 0430			
					6215.5	A_3A A_3H A_3J	0.25	0800 - 0900 2230 - 2330			
					6221.6 6506.4	A_3A A_3J	0.25	0100 - 0130			
					8802.6	A_3A A_3J	0.25	0030 - 0100 0900 - 0930			
			Sorong Radio		VHF Ch10 Ch16 Ch20 Ch22 Ch26	F_3	0.05	2300 - 0400 0800 - 1000			
				8AT4	10225, 9110(R)	A_3B	0.1	0000 - 0900 2230 - 2330 0100 - 0200 0915 - 0930			Fixed
					9925	A_1	0.1	0000 - 0900			

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
IX	III	Sorong		8AT$_4$	6926	A$_3$J	0.1	2230 - 2340 0245 - 0300 0830 - 0845 0300 - 0330	131°14'20"E	0°52'42"S	Fixed
					5316	A$_3$J	0.1	2230 - 2340 0245 - 0300 0830 - 0845 0300 - 0330			
IX	III	Merauke	PKY$_5$		458. 500	A$_1$ A$_2$	0.25	2300 - 0500 0800 - 1000	140°43'24"E	8°29'00"S	Mobile
					6326.5	A$_1$	0.25	0130 - 0200			
					8457	A$_1$	0.25	2315 - 2330 0100 - 0130 0830 - 0900			
					2182 3180	A$_3$A A$_3$H A$_3$J	0.25	2330 - 2400 0030 - 0100			
					4410.1	A$_3$A A$_3$J	0.25	Hx			
					6215.5	A$_3$A A$_3$H A$_3$J	0.25	2300 - 2315			
					6221.6	A$_3$A A$_3$J	0.25	0900 - 1000			
					6509.5	A$_3$A A$_3$J	0.25	0000 - 0030 0800 - 0830			
			Merauke Radio		VHF Ch10 Ch16 Ch20 Ch22 Ch26	F$_3$	0.05	Hx			
				8AT$_5$	6926	A$_3$J	0.1	2230 - 2330 0000 - 1000			Fixed
					9925	A$_1$	0.1	0200 - 0445			

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
IX	IV/A	Manokwari	PKY_3		2182 3180	A_3A A_3J A_3H	0.1	0800 - 0900	134°00'32"E	0°48'50"S	Mobile
					6221.6	A_3A A_3J	0.1	0800 - 0900 2300 - 2400			
			Manokwari Radio		VHF Ch10 Ch15 Ch16 Ch20 Ch22	F_3	0.03	Hx			
				$8AT_3$	6926	A_1 A_3J	0.1	0015 - 0900			Fixed
					10225	A_1	0.1	2330 - 2400			
					6213.5	A_3J	0.1	0030 - 0045			
IX	IV/A	Biak	PKY_2		8437	A_1	0.1	0000 - 0100	136°05'00"E	1°11'12"S	Mobile
					6221.6	A_3A A_3J	0.1	0000 - 0100			
				$8AT_2$	0025	A_1	0.1	2330 - 2400 0130 - 0200			Fixed
					10225	A_1	0.1	0215 - 0230 0900 - 0930			
					6926	A_3J	0.1	2310 - 2320 0030 - 0900			
					6213.5	A_3J	0.1	2300 - 0845			
IX	IV/B	Amamapara		$8AT_5$	6926	A_3J	0.1	2230 - 1000			Fixed
IX	IV/B	Kaimana		$8AT_7$	6926	A_3J	0.1	2230 - 0700			Fixed
IX	IV/B	Fak-Fak		$8AT_8$	6926	A_3J	0.1	2200 - 1000			Fixed
IX	IV/B	Serui		$8AT_9$	6926 6213.5	A_3J A_3J	0.1 0.1	2250 - 0900 2300 - 2310 0000 - 1000			Fixed

Area	Class	Station Name	Call Sign		Emission			Service Hours of Service (GMT)	Longitude	Latitude	Remarks
			Mobile	Fixed	Frequency KHz or MHz	Class	Power KW				
IX	IV/B	Nabire		8AT$_{20}$	6926	A$_3$J	0.1	2200 - 1000			Fixed
IX	IV/B	Sarmi		8AT$_{21}$	6926	A$_3$J	0.1	2315 - 0700			Fixed
IX	IV/B	Bintuni		8AT$_{22}$	6926	A$_3$J	0.1	2230 - 0930			Fixed
					5316	A$_3$J	0.1	0300 - 0330 0800 - 0900			

APPENDIX-2

Present Status of Radio Equipment in Coast Stations

Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
BELAWAN	Tx	PHILIPS	8RZ-159 59352	CC-1700/S1	1969	1,000	500/475	G
		"	"	CC-1700/S2	"	"	"	
		"	8RZ-153 53305	CC-1700/S1	"	"	2182/2690	"
		"	"	CC-1700/S2	"	"	"	"
		"	8RZ-151 51502	CC-1700/S1	"	"	12970.5 4295/8686	"
		"	8RZ-153 51502	CC-1700/S2	"	"	1799.2/8686 12970.5	"
		"	" 80220	CC-1700/S2	"	"	8110/13661/ 17615	"
		"	8RZ-813 13205	CC-1700/1	"	300	5165/8110	"
		"	8RZ-153 53505	CC-1700/1	"	1,000	6518.6/87384 13175.6	"
		MARCONI	OCEAN SPAN II	C525	1964	100	500/474	"
		"	"	A1280/8	"	"	500/474/11060	"
		PHILIPS	8Mz-220/ 901	CM-7065/S2	1969	50	CH16	"
		"	"	CM-7865/S1	"	"	CH26	"
	Rx	EDDYSTONE	830/7	EU-2115	1969	--	300K-30M	"
		"	"	EU-2116	"	--	"	"
		"	"	EU-2117	"	--	"	"
		"	"	EU-2118	"	--	"	"
		"	"	EU-2119	"	--	"	"
		"	"	EU-2121	"	--	"	"
		"	"	EU-2122	"	--	"	"
		"	EC958	BU-0036	"	--	10K-30M	"

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Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
BELAWAN	Rx	EDDSTONE	EC958	BU-0037	1969	--	10K-30M	G
		"	"	BU-0038	"	--	"	
		MARCONI	AT-2207	0241	"	--	15K-28M	"
		"	"	1021	"	--	"	"
		PHILIPS	ISB-RO-955	CC-1701/S1	"	--	6926/11060/13661	"
		"	SSB-RO-933	CC-1701/S1	"		5165/8110	"
		"	8MO-200/962	CM-7865/S1	"	--	VHFC16.Ch26	"
		"	RO-150	--	1977		0-29M	"
	TRX	PYE	SSB-125T	6528	1969	125	5165/5295/6926/8110	"
ULEE-LHEUE	TRX	PYE	SSB-12ST	6533	1970	125	5165/5295/5316	G
		"	SSB-130	2827	1976	130	"	"
		"	"	2817	1976	130	"	"
GN. SITOLI	TRx	TWC	10S	--	--	100	2182	"
		"	"	--	--	"	5165	"
		"	"	--	--	"	5295.5	"
SABANG	Tx	JRC	NSC-144A	S-30343	1964	1,000	500/438	"
		"	"	S-30344	"	"	500/465	DER
		"	NSC-1085	F7163	"	85	500/470 F/418/17M	"
		"	NSD-7AA	BS-60202	1972	250	500/438/2182 4388.4/6251.51 8796.5	G

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Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
SABANG	Tx	JRC	NSD-248	S-30341	1964	1,000	11060/17623/ 8686	G
		"	"	S-30340	"	"	17184.5	"
		"	"	S-30342	"	"	5316	"
	Rx	"	NRD-142A	R-30366	"	--	90K-28M	"
		"	"	R-30367	"	--	"	"
		"	"	R-30363	"	--	"	"
		"	NRD-143	R-60886	"	--	0.5M-30.5M	"
		"	"	R-60887	"	--	"	"
		"	"	R-60885	"	--	"	"
		"	NRD-130P	R-30377	"	--	"	"
		"	NRD-15J	BR-12546	1972		"	"
	TRx	"	JMV207PE	CB-56533	1973	--	CH16/C20/C22/ C26/28	"
		PYE	SSB-125B	6533	1969	--	5165-5295	NG
DUMAI	Tx	PHILIPS	MC2428/S01	--	1971	1,000	448/500	G
		"	"	--	"	"	2182/3180	"
		"	"		"	"	6337	"
		"	"	--	"	"	8457/12682	"
		"	"	--	"	"	171848	"
		"	MC2428/302	--	"	"	6215/8765	"
		"	MC2428/301	--	"	"	4390/8765	"
		"	MC2428/S03	--	"	"	10300/14410	"
		"	MC2428/S01		"	300	4055/5316	"
		"	"		"	1,000	11060//8110	"

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Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
DUMAI	Tx	PHILIPS	MOBILOPON		"	100	5316/6926	G
		RCA	409T		1957	1,000	--	NU
		"	170T		"	1,200	HF	"
		"	NSD-1123		"	"	MF	"
		JRC	JSB		1967	100	5316/6926	NG
	Rx	EDST	830	--	1971	--	30K-30M	G
		"	"	--	"	--	"	NG
		"	"		"	--	"	"
		"	EC958		"	--	"	G
		JRC	MNR130		1957	--	90K-23M	NU
		MAC'R	500A		"		80K-23M	NG
		"	"		"		"	NG
	TRx	JRC	JSB-35		"	100	5316/6926	"
		"	"		"	"	"	G
		"	"		"	"	"	"
		"	"		"	"	"	NG
		"	"		"	"	"	G
		PYE	SSB130F	2566	1971	"	"	"
		"	"	2567	"	"	"	"
		"	"	2568	"	"	"	NG
		"	"	2569	"	"	"	G
		"	"	2570	"	"	"	"
TELK	Tx	PHILIPS	2908/S03	5322	1972	1,000	500/430/6335	"
BAYUR		"	2908/S02	5323	"	300	2182/3180	"
		PYE	130	4231	"	100	4055/5316 6210.4/9110	" "

Note:
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Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
TELK BAYUR	Rx	PHILIPS	R7100A	215	1972	--	All Band	G
		"	"	233	1970	--	"	"
		JRC	NRD130C	C20 950	1963	--	"	"
		FURUNO	NS11	5152503	1979	--	--	"
	TRx	PYE	130F	4131	1972	100	4055/5316 6210/9110	"
		"	"	4132	"	"	"	"
		RADIO COMMUNI-CATIONS	FM150/1-at/806	1214	1978	70	C10,12,14, 16	"
		"	FM150/1-Bt/ 806	1200	1978	70	C20,22,26 28	G
		FURUNO	NS-11	5152503	1979	150	2182/3180 5 other Freq.	G
TG UBAN	Tx	PRESS-WIRELES	PWT OCN	105			8076	NG
		"	"	103			"	"
		TCS	13A/S/12	104			5316	NG
		"	CIR/53345	101			11060	"
		"	13A/T/12	108				"
		"	13A/T/12	9080				"
		"	COL/T/ 52245	4311				"
		"	13A/T/12	119			0.5-29 MHz	"
	Rx	YAESU	EGR-7	7H 111283			0.5-30 MHz	G
		EDISTONE	--	FF 4015			"	"
		"	--	"			0.2-20 MHz	"
		RCA	91A	C711			"	"
		"	"	C293			"	"

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Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
TG UBAN	Rx	TCS	CKP-46159A	-2304			1.5-12 MHz	G
		"	12A/T/12	119			"	"
		"	"	122			"	"
		"	13A/T/12	113				"
		"	"	106				"
		"	"	111				"
	TRx	PHILIPS	CNFFAD				C12, C13 C14, C16	"
		PYE	130				4055, 5315 6926, 9110	"
		JRC	NTD-117Z	0.25-30			5316, 4055 2182, 6926, 9110	"
BENG-KALIS	TRx	PYE	SSB-130	2568		100	5316	"
PALEM-BANG	Tx	JRC/SSB	JRC-1C	BS-30057	1969	1,000	--	NU
		JRC/MF-1	NSC-144A	BS-60021	"	"	448/500	G
		JRC/MF-2	"	BS60022	"	"	"	"
		JRC/SSB-1	NSD-1B	BS-30072	"	"	2182, 2690 8437, other 2	"
		JRC/SSB-2	"	BS-30073	"	"	"	"
		JRC/SSB-3	"	BS-30074	"	"	4446/8118/9925	"
		RFC	6004	--	1980	5	400 MHz	"
	Rx	JRC/ISB-1	JRR11-2B	AR-10447	1969			NU
		JRC/ISB-2	"	AR-10448	"	--	0.2-30 MHz	G
		JRC/MF1	NRD-1EL	AR-10537	"	--	All Band	"
		JRC/MF-2	"	AR-10538	"	--	"	"

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Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
PALEM-BANG	Rx	JRC/SSB-1	NRD-11E	AR-10395	1969	--	"	"
		JRC/SSB-2	"	AR-10396	"	--	"	"
		JRC/SSB-3	"	AR-10397	"	--	0-30 MHz	"
		JRC/SSB-4	"	AR-10398	"	--	"	G
		JRC/SSB-5	"	AR-10399	"	--	"	"
		JRC/RFC	6004	--	1980	--	400 MHz	"
	TRx	JRC/UHF	JUA-2C	DA-10205	1969	5	"	"
		"	"	DA-10204	"	"	"	"
		JRC/VHF	JHF-25	CA-54546	"	25	C16	"
		"	"	P-50917	"	"	C20	"
		"	"	CA-54544	"	"	C26	"
		JRC	JSB-50/ TR125	006-03	1979	125	4446.5, 9950 5381.5, 6926	"
PON-TIANAK	Tx	JRC	NSD-7AA	--	1972	250	500/465	"
		"	"		"	"	2182/4410 6218/6215	"
		"	NSD-1125		1967	100	6355/8423 9950/11060	"
	Rx	"	NRD-15J	--	1972	--	All Band	"
		"	"		"		"	"
	TRx	"	NTD177	--	"	--	4446/5304.5 6926/9950	"
		"	"		"	--	"	"
		"	JHV-207PS	--	1973	--	CH10/CH16	"
		"	JHV-207R	--	"	--	CH20,22,26	"

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Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
CIRE-BON	Tx	JRC	NSD-1085	5635	1968	85	500/474,64915 8119,2182,3195	G
	Rx	ATLANTA	2207	930	1965	--	200 KHz-23 MHz	"
		JRC	NMR-1030R	2195	1968	--	90 KHz-23 MHz	"
	TRx	JRC	NTD-177	BS12228	1972	125	4446.5,9950 5381.5,6926	"
		"	"	BS12229	"	"	"	"
		"	JHF207PR	CB56503	1973	20	C10,C15,C16	"
		"	"	CB58503	"	"	C20	"
		FURUNO	NS-11A	5320037	1977	150	2182/2690/ 6215.5	"
PAN-JANG	Tx	JRC	NSD-1085	5641	1968	85-100	430/500/6355/ 6523/8110	G
		"	NSD-1125	5279	"	125	"	"
	Rx	ATALANTA	2207	909	1967	--	15KHz-28MHz	"
		JRC	NMR1030K	21091	"	--	90KHz-25MHz	"
	TRx	"	NTD-177	BS12227	1972	100	44465, Other 4 Bands	"
		"	JHV207PS	CB56407	1973	20	C10,C15,C16	"
		"	JHV207R	CB56515	"	"	20-22	"
		FURUNO	NS-11A	53220044	1978	150	2182/2690 Other 3 Bands	"
		INTI	NTD-177Z	027-30	1979	100	4446.5 Other 4 Band	"
JAMBI	Tx	JRC	NSD-1125	5276	1967	125/75	500/448/2182 6491.5/8110	"
		BC	375E	6873	1942	--	8110	"
		TCS	131A/S/12	117	1954	--	4055	SPR
		"	"	114	"		"	G

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Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
JAMBI	Rx	JRC	NRD1EC	R-62007	1967	--	90 KHz-30 MHz	SPR
		"	NMR1030X	21099	"	--	90 KHz -23 MHz	G
		PHILIPS	BX925A	0199	--	--	210 KHz-20.7 MHz	SPR
		TCS	13/A//R/12	106	1954	--	1.5 MHz-12 MHz	G
		"	"	114	"	--	"	"
	TRx	JRC	NTD177	BS12232	1972	125	--	NG
		"	"	BS12233	"	"	4 Bands	G
		"	JHV207PS	CB56510	"	20	CH10,15,16	"
		"	JHV207R	CB56510	"	20	CH20,22	"
		FURUNO	FS100A	785014	1978	100	2 Bands	NG
		YAESU	FT300C	2062	1979	100	6 Bands	G
KUNTOK		JRC	NTD-168	BS10392	1970	100	4446.5,5381.5 6926,9950	NG
		INTI	NTD-177	005-30	1979	125	"	G
MUARA-SABAK		JRC	NTD168	BS10389	1970	50	5381.5	"
		YAESU	FT-3000	120064	1979	90	"	"
BENG-		JRC	NTD-168	BS10390	1970	100	5381.5,9950	"
		"	NTD-177	007-30m	1979	100	"	"
PANGKAL-BALAM		"	NTD-177	BS12230 BS12231	1973	100	4446.5,5381.5 6926,9950	"
		"	JHF207	CB56506 CB56517	"	50	C10,15,16 C20,22	"
		FURUNO	FS-100A	785020	"	100	2182,2690,2090 Other 6 Bands	"

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Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
SURABAYA	TX	PHILIPS	9551321 593 52	CC/382/S4	1968	1,000	430/500	G
		"	"	CC/382/S3	"	"	"	"
		"	9551 321 593 05	CC/382/S1	"	800	2182/2690	"
		"	"	CC/382/S2	"	"	"	"
		"	"	CC/382/S1	"	"	4379.1/62153 8796.4	"
		"	9551 321 593 02	CC1382/S1	"	1,000	171992/8461/ 127045	"
		"	"	CC/382/S2	"	"	9950/8461/ 127045	"
		"	"	CC/382/S3	"	"	9061/10226	"
		"	9551 321 132 04	CC/382/S3	"	800	5316/10226	"
		"	8 MHz 220 961	CM 5599/S1	1961	50	156.8 (C16)	"
		"	"	CM559/S13	"	"	161.6 (C20)	"
		"	"	CM5599/S17	"	"	161.7 (C22)	"
		"	"	CM5599/S2	"	"	161.9 (C26)	"
		"	"	CM5599/S7	"	"	162.0 (C28)	"
		MARCONI	Ocean-Span VII	1135 BN 0.665	1958	72	500/430	"
		JRC	NSD199H	S-20138	1964	250	8110/5316	"
		RFC	150/1-AT806	1217	1978	50	156.8 (C16)	"
		"	150/1-BT806	1220	"	"	161.6 (C20)	"

Note:
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Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
SURABAYA	Tx	RFC	"	1219	1978	"	161.7 (C22)	G
		"	"	1218	"	"	161.9/162.0 (C26/C28)	"
	Rx	PHILIPS	8RO501/01	CC/382/S2	1968	--	200 KHz-31.2 MHz	"
		"	"	CC/382/S6	"	--	"	"
		"	"	CC/382/S7	"	--	"	"
		"	"	CC382/S9	"	--	"	"
		"	"	CC382/S10	"	--	"	"
		"	"	CC/382/S14	"	--	"	"
		"	"	CC/382/S15	"	--	"	"
		"	3522 144 973 00	CC/382/S1	"	--	5316/91101	"
		"	"	CC/382/S1	"	--	5316/10226	"
		"	8RO 150	MC3504/S03	1976	--	0.1 MHz-20MH	"
		"	8MO 200/ 901	CM599/S4	1961	--	C16	"
		"	"	CM5599/S2	"	--	C20,22	"
		"	"	CM5599/S7	"	--	C26,28	"
		JRC	NRD130G	C20957	1963	--	90 KHz-20 MHz	"
		"	NRD1-EL	R62012	1967	--	90 KHz-30 MHz	"
		RFC	1541-AT/ 806	1217B	1978	--	166.8 (Ch16)	"
		"	"	1219B	"	--	161.6 (Ch20)	"
		"	"	1220	"	--	161.9 (Ch22)	"
		"	"	1218	"	--	161.9/1620 (Ch28,26)	"

Note:
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Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
SURABAYA	TRx	PYE	SSB 130F	4133	1972	100	5165	G
		"	"	4140	"	"	5165/5316	"
		PHILIPS	8MR221/ 511	CM5519/S2	1961	50	Ch12	G
		"	"	CM5519/57	"	"	Ch14	"
	RADIO-LINK	JRC	8SR960	--	1978	10	407.3	"
		"	6004	--	1980	10	"	"
KUPANG	Tx	PHILIPS	RZ-195	RZ2908/ S02	1972	1,000	430/8445/ 9950	G(70%)
		"	RZ813	MC-2908/S02	"	300	3180/2182/6M	"
		JRC	NSD-1125	5237	1967	100	500/430//8730	NG
	Rx	R.HOLLAND	R.7100A	232	1972	--	--	G(70%)
		"	"	219	"	--	--	"
		JRC	NMR1030	1085	1967	--	--	"
	TRx	PYE	SSB-130	4146	1972	100	6Ch	"
		"	"	4149	"	"	"	"
		JRC	SSB-7727	1587	1980	100	"	"
CILACAP	Tx	PHILIPS	MC2908/ S01	72571	1972	1,000	474/500/ 8445	G
		"	"	72581	"	300-1,000	2182/3180/ 6506.4	"
		JRC	NSD1125	5272	1967	--	474/500/ 8445	NG
	Rx	RADIO-HOLLAND	R7100A	216	1972	--	80 KHz-30 MHz	G
		"	R7100A	209	"	--	"	"

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Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
CILACAP	Rx	JRC	1030	21084	1967	--	90 KHz-23 MHz	G
	TRx	PYE	SSB-130F	4141	1972	100	--	NG
		RFC	150/1-AT/806	1345	1980	50	12-14-16-20-26	G
		"	"	1345H	"	"	"	"
PANA-RUKAN	Rx	JRC	NRD-130G	C-20960	--	--	90 KHz-28 MHz	"
	TRx	PYE	SSB-130	5866	--	100	5316/6926 9950/10226	"
		"	"	5911		100	"	"
		PHILIPS	CM FAD	45268	--	20	C12,13,14,16	"
BENOA	Tx	NAVY DEP BUREAU OF SHIP	TCS-12	9193	1942	50	649.5	NG
		MARCONI	1200C	1268	1960	100	500/487.5	"
	Rx	NAVY DEP BUREAU OF SHIP	TCS-12	9114	1942	--	2.5-12 MHz	"
		MARCONI ATLANTA	2207C	914	1960	--	10 Band	G
		JRC	NDRN2A	R-300369	"	--	8 Band	"
	TRx	PYE	SSB-130M	5906	1976	100	5316/6929/9950	NG
		PYE	SSB-130M	5909	"	"	"	G
		MOBIL-PHONE	VHF CMT	9551 151	"	20	C12,13,14,16	"
		FURUNO	NS-11A	5320034	1978	150	2182 Other 4 Band	"

Note:
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Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
TEGAL	Tx	TCS	15	150	1945	25	1.5-9 MHz	NG
	Rx	JRC	NRD	142A-n	1964	--	All Band	G
		EDDY-STONE		8680FP	1945	--	"	NG
	TRx	PYE	SSB-130P	3699	1972	100	Ch1-Ch4	G
		"	SSB-130M	5061	1974	100	"	"
		SPIL-BURY & TINDAL	VHP		"	10	C6,8,12,14,16	"
		PHILIPS	"	9551	"	25	C12,13,14,16	"
MENENG	TRx	PYE	130M	5868	1974	100	S/D4	"
		"	130M	5913	"	"	1S/D4	"
		PHILIPS	PAD4AB	955/15/ 20906	"	10	VHF	"
		FURUNO	NS-11A	5320039	1978	350	1S/D5	NG
	Rx	JRC	12A	R-30250	1964	--	All Band	"
CELUKAN-BANWANG	TRx	INTI	NTb-177	2026-30	1979	125	4055, Other 5 Band	G
		PHILIPS	VHF CMT	955 115/ 1295.3	1974	20	C16,12,14	"
PROBO-LINGGO		PHILIPS SSB	130.M	5858	1974	100	5316,6926 9950,10226	"
BIMA		--	125T	5614	--	90	5316	NG
BALIK-PAPAN	Tx	JRC	NSC 158AA	BS-30164	1971	500	500	G
		"	"	BS-30165	"	"	448	"
		"	NSD-68A	BS-30136	"	1,000	2182,4357.4 Other 3 Band	"

Note:
G = Good, NG = No Good, DER = Out of Order, NU = No Used, SPR = Spare

Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
BALIK-PAPAN	Tx	JRC	NSC 158AA	BS-30137	1971	1,000	"	G
		"	JRC-05C	BS-60072	"	"	11060	"
	Rx	"	NRD-1EL	BR-10665	"	--	All Band	"
		"		BR-10666	"		"	"
		"	MRD-11E	BR-11398 BR-11339 BR-11460	"	"	"	"
	TRx	"	JSB-35	BS-10393	1970	100	4487.1,6924.6 53146,9108.6	"
		"	JHV-2078	CB50499	1971	20	C12,14,16	"
		"	"	CB50500	"	"	"	"
		"	JHV-207R	CB-53905	1972	"	C20,22,24,26,28	"
TARAKAN	Tx	"	NSD-7AA		"	250	500/478.5 2182/8445	"
	Rx	"	NRD-15j			--	All Band	"
	TRx	"	JHV-207R		1972	20	Ch20,22,26	"
		"	JHV-207PS		"	"	Ch10,16	"
		"	NTD-177		"	250	4053.6/5316 6926/9110	"
BANJAR-MASIN	Tx	"	NSD-7AA	BS 30 293	1971	250	500-456 2182 3180 Other 4 Band	NG
		"	"	BS30294	"	"	"	"
		"	NSD-1962	S-11573	1964	300	--	DER
		"	NSD-193H	S-20140	"	"	8457,8726 8110,11060	G

Note:
G = Good, NG = No Good, DER = Out of Order, NU = No Used, SPR = Spare

Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
BANJAR-MASIN	Rx	"	NRD-11E	ER-11395	1971	--	All Band	G
		"	"	ER-11396	"	--	"	"
		"	NRD-130F	R-30331	1964	--	"	"
		"	"	R-30332	"	--	"	"
	TRx (Tran-ceiver)	JRC-JSB-35	NTD-168	BS-10974	1971	100	5316,6926, 9110	"
		"	"	BS-10394	"	"	"	"
		"	"	BS-10394	1970	"	"	"
SAMPIT	TRx	JRC	NTD-177	BS-12236	1972	"	40053/5316	"
		"	"	BS-12237	"	"	6926/9110	"
		"	JHV-207R	CB-56520	1973	20	Ch20,22	"
		"	JHV-207 PS	CB-56512	"	"	Ch10,15,16	"
PULANG-PISAU		FURUNO	NS-6A	5120 358	"	100	9110,5316	"
MAKA-SSAR	Tx	JRC	JRC-1C	BS 30056	1969	1,000	5165 Other 5 Band	"
		JRC/MP-1	NSC-144AA	BS 60019	"	"	465/500	"
		JRC/MP-2	"	BS 60020	"	"	"	"
		JRC/SSB-1	NSD-6B	BS 30069	"	"	2182 Other 7 Band	"
		JRC/SSB-2	"	BS 30070	"	"	"	"
		JRC/SSB-3	"	BS 30071	"	"	5165 Other 5 Band	"
		JRC	NSD-1125	5721	1967	100	465/500 Other 4 Band	"

Note:
G = Good, NG = No Good, DER = Out of Order, NU = No Used, SPR = Spare

Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
MAKA-SSAR	Rx	JRC/SB-1	JRC-11/28	1R-10445	1969	--	0.2KHz-30MHz	G
		JRC/SB-2	"	AR-10446	"	--	"	"
		JRC/MF-1	NRD-1EL	AR-10596	"	--	90KHz-30MHz	"
		JRC/MF-2	"	AR-10597	"	--	"	"
		JRC/SSB-1	NRD-11E	AR-10390	"	--	"	"
		JRC/SSB-2	"	AR-10391	"	--	"	"
		JRC/SSB-3	"	AR-10392	"	--	"	"
		JRC/SSB-4	"	AR-10393	"	--	"	"
		JRC/SSB-5	"	AR-10394	"	--	"	"
		JRC	NRD-1030K	21086	1969	--	"	"
		PHILIPS	RO-150	MC-3504/S02	1967	--	--	"
	TRx	JRC/VHF	JHV-25	F-52539	1969	25	C.16	"
		"	"	F-52555	"	"	"	"
		"	"	F-52554	"	"	C.26	"
		"	"	F-52537	"	"	C.20	"
		JRC	JSB-36	S-15117	1967	100	6204,9110 10226,10410	"
KEN-DARI		"	NTD-177	BS 14324	1974	125	5165/5295.5 6926/9925	"
		"	"	BS 14323	"	"	"	"
		"	JHV-217	CE 51949	"	20	C15,15,10	"
		"	"	CE51950	"	"	"	"
DON-GGALA	Tx	"	NSD-1125		1968	100	8606	"
		"	NSD-1085		1967	"	500	"

Note:
G = Good, NG = No Good, DER = Out of Order, NU = No Used, SPR = Spare

Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
DON-GGALA	Rx	"	NMR-1030		1968	--	90KHz-23MHz	"
	TRx	"	NTD-177		1973	100	5165/5381.5 6926/9110	"
		FURUNO	NS-11A		"	"	2182 Other 7 Band	"
		JRC	JHV-207PS		"	20	156.80/156.5/ 156.75	"
		"	JHV-217R		"	"	161.6/161.7	"
POSO	Tx	BC-375-E	--	74275	1942	75	--	DER
		JRC	NSD-1085	5634	1968	85	9110	G
	Rx	RC-348-Q	--	16082	1942	--	8110	DER
		JRC	NMR-1030	2110	1968	--	9110	G
		BS-348-Q	--	4514	1955	--		DER
	TRx	JRCSSB	NSD-177	BE 14327	1974	100	5615,5381 6926,9110	G
		JRCSSB	NSD-177	BE 14328	"	"	"	"
		JRC/VHF	JHV-217	CE 51953	"	20	C10,15,16	"
		"	"	CE 51958	"	"	C20,22	"
KOLO-NODALE		YRC	YSB-35	ES 10525	--	--	51636/5380.1 6924.6/5108.6	"
		JRC	HTD/68	--	1970	--	"	"
GORON-TALO	Tx	"	NSD-1085	5039	1968	85	9110	NG(25%)
	Rx	"	NMR-1030K	21098	1967	--	90KHz-23MHz	"
	TRx	"	SSB	BS-14333	1974	100	9110/6926	G(80%)
		"	"	BS-14334	"	100	5381/5165	"

Note:
G = Good, NG = No Good, DER = Out of Order, NU = No Used, SPR = Spare

Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
GORON-TALO	TRx	JRC	VHF/FM	CE-51959	"	20	C10,15,16,20,22	G
		"	"	CE-51951	"	"	"	"
		"	SBX-100	47927	1980	100	2182 Other 7 Band	"
SIAU		"	JSB-35	BS 10528	1970	"	5163.6/5380.1 6924.6/8180.6	"
TAHUNA	TRx (Tranceiver)	"	JSB-35	BS 10524	1970	"	5163.6/5180.1 5924.6/8108.6	"
PARIGI	Tx	RADIO-HOLLAND	BC348X	197	1942	75	--	DER
	Rx	"	BC374	154	"	--	--	"
	TRx	JRC	NTD177	BS14330	1974	100	5165/5381 6926/9110	G
		"	VHF JHV-217	CA5955	"	20	C10,15,16	"
AMBON	Tx	"	NSD 199H	S-20137	1963	250	470/500	NG
		PHILIPS	8RZ153/00	XC1276/S1	1968	1,000	470/500	"
		"	"	XC1276/S6	"	"	"	"
		"	8RZ150/01	XC1276/S20	"	"	2182/2690	"
		"	"	XC1276/S13	"	"	"	"
		"	"	WC-1128/S13	"	"	4295.5/8742/ 12682.5	"
		"	"	XC-1276/S9	"		1718.45/8473/ 11060	"
		"	"	XC1276/S17	"	"	4396.6/6215.5/ 8796.4	"
		"	"	BC887/S7	"	"	8080/133661/ 17623	"

Note:
G = Good, NG = No Good, DER = Out of Order, NU = No Used, SPR = Spare

Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
AMBON	Tx	"	8MZ220/901	CM599/524	"	50	156.8 (C16)	NG
		"	"	CM5599/S14	"	"	161.60 (C20)	"
				CM5599/S19	"	"	161.70 (C22)	"
				CM5599/S4	"	"	161.90 (C26)	"
				CM5599/S9	"	"	162.00 (C28)	"
	Rx	"	8R0501/01	CC1382/S8	1968	--	0.2-31.2 MHz	NG(40%)
		"	"	CC1382/S12	"	--	"	G
		"	8R050/00	CC1382/S1	"	--	"	G(50%)
		"	"	CC1382/S5	"	--	"	NG(10%)
		"	"	CC1382/S16	"	--	"	"
		"	8R0501/01	CC1382/S4	1968	--	0.2-31.2MHz	G
		"	"	CC1382/S11	"	--	"	NG
		"	"	CC1382/S13	"	--	"	"
		"	8RB900/01	CC1382/S2	"	--	8110,17615 13661	G
		"	8MB/902	CM5599/S9	"	--	Ch26/28 VHP	NG
		"	"	CM5599/S4	"	--	Ch26/22	"
		"	"	CM5599/S5	"	--	Ch16	"
		EDDYS/ONE	S880/2	HS0590	"	--	0.5-30.5MHz	NG(40%)
		"	"	HS0597	"	--	"	"
		JRC	NRD-11E	BR11123	1970	--	90KHz-30MHz	G
		"	NRD-130G	C-20959	1963	--	"	NG
	TRx	PYE	125T	5517	1969	100	5316/7556	"
		"	"	56119	"	"	"	"

Note:
G = Good, NG = No Good, DER = Out of Order, NU = No Used, SPR = Spare

Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
AMBON	TRx	PYE	"	" 5618	"	"	"	NG
		PHILIPS	8MR730	S9932	1968	10	Ch20/22/26	"
		"	"	S9933	"	"	"	"
		"	"	S9934	"	"	"	"
		"	UHP3TK3010	MBS471	"	--	415-428 MHz	G
		RADIO-FRREQ.-COMMUNI-CATION	FM/400 60/600HST	--	1977	--	407.5-421 MHz	"
TERNATE	Tx	JRC	NSD-1085	5640	1968	85	500/470 6428.5	"
	Rx	"	NMR-1030K	21095	1967	--	90KHz-23MHz	"
	TRx	PYE	SSB-130	TP453	1971	100	4488.5/5316 6926/9925	"
		PHILIPS	CHT	45270	--	20	VHF C12,13,14,16	"
JAYAPURA	Tx	JRC	JRC-1C	--	1969	1,000	5316/6916/ 9925/10225/ 13661/17615	"
		"	NSD-6B		"	"	"	"
		"	"		"	"	2182/3128 6215.5/6221.6 8694/8802.5 12682.5/1704.4	"
		"	"		"	"	"	"
		"	NSC-144AA		"	"	465/500	"
		"	"		"	"	"	"

Note:
G = Good, NG = No Good, DER = Out of Order, NU = No Used, SPR = Spare

Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
JAYAPURA	Rx	JRC	JRC-11/2B		1969	--	90KHz-30MHz	G
		"	"		"	--	"	"
		"	NRD-11F		"	--	"	"
		"	"		"	--	"	"
		"	"		"	--	"	"
		"	"		"	--	"	"
		"	"		"	--	"	"
		"	NRD-1FL		"	--	"	"
			"		"	--	"	"
	TRx	"	JHV-25		1969	50	C16	"
		"	"		"	"	"	"
		"	"		"	"	C20	"
		"	"		"	"	C26	"
JAYAPURA		"	JUA-2C1046		"	--	407.5MHz	"
		"	JUB-2C118B		"	--	Multiplex Terminal	"
		"	JUB-2Q104G		"	--	420 MHz	"
		"	JUB-2C118B		"	--	Multiplex Terminal	"
		DANADRAM MARCONI	CH-25		1970	1,000	2186	"
MERAUKE	Tx	JRC	NSb-7AA	BS-60200	1972	250	500/458/8457 Other 10 Band	"
		"	"	BS-60201	"	"	"	"

Note:
G = Good, NG = No Good, DER = Out of Order, NU = No Used, SPR = Spare

Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
MERAUKE	Rx	"	NSb-15J	BR-12545	1972	--	All Band	G
		"	"	BR-12544	"	--	"	"
	TRx	"	NTD-177	BS-12242	"	50	10225,9925 6926,5316	"
		"	"	BS-12243	"	"	"	DER
		JRC/VHF	JHV-2079S	CB-56504	1973	20	C16,10	G
		"	"	CB-5600	"	"	C20,22,26	"
		CHC MARCONI	SSBCH-25	6987	--	100	2182/2148	NG
SORONG	Tx	JRC	NSP-7AA	BS-60198	1972	250	458/500/2182 Other 8 Band	G
		"	NSD-7AA	BS-60199	"	"	"	"
	Rx	"	NRD-15J	BR-12542	"	--	0.1-50 MHz	"
		"	"	BR-12543	"	--	"	"
		PHILIPS	BRC-501	RED-764	1965	--	0.2-32 MHz	G(65%)
	TRx	JRC	NTD-177	BS-12248	1972	125	5311/16926 Other 2 Band	G
		"	"	BS-12249	"	"	"	"
		CAN. MARCONI	CH-25	6953	1970	100	2182/4319	"
		BACKER	HB152RT	001 1965	1965	100	7830/8755	NG
		JRC	JHV-207PS	CR-56499	1973	20	156.7/156.8	DER
		"	JMV-207B	DB5603	"	"	161/1617	"

Note:
G = Good, NG = No Good, DER = Out of Order, NU = No Used, SPR = Spare

Station	Item	Maker	Type	Mfg. No.	Mfg. Year	Output (Watt)	Freq-ency	Condi-tion
FAK.FAK	Tx	CMC	SSBCH25	7012			6926/8281 6213	G
		"	"	7013			2182	"
	Rx	"	"	7012			6926/6213 8281	"
		"	"	7013			2182	NG
	TRx	JRC	J/V207PS	CB56499			C16,10	G
		BACER	50MG	5006			--	DER
BIAK	Tx	ZEIST HOLLAND	HB-159T	--	1963	100	2706	NG
	Rx	INTI	NRD-1061S	--	1980	--	200 KHz-29 MHz	G
		PHILIPS	8RD501/50	--	1960	--	200 KHz-31 MHz	NG
	TRx	YAESU	P-T-300C	--	1979	--	2182/6221.6/ 8437	G
		"	"		"		2182/6221.6/ 8372.8	"
		MARCONI	CH-25		1970		6926/6213	NG
MANOK-WARI		PHILIPS	BX925A	1041	--	--	--	"
		JRC	NTD-177	BS14336	1974	125	5316/6926 9925/10225	G
		"	"	BS14335	"	"	"	"
		MARCONI	CH-25	6949	"	100	2182.5/6221.6 2148.5/6213.5 4143.6/8281.5	"
KAI-MANA		"	"	7020	1962	"	2182/6213.5 2148/8281 4139.5/6926	"

Note:
G = Good, NG = No Good, DER = Out of Order, NU = No Used, SPR = Spare

FREQUENCIES FOR SAR OPERATING COAST STATIONS

Item	Type of Emission	Frequency (Band)	A-class	B-class	Remarks
Mobile	A1A, A2A	500 kHz MF freq. for communications 512 kHz	o	o	
	J3E, R3E A1A, J3E	2182 kHz 1800 — 3900 kHz 3023 kHz	o	o	one freq each of A1A, J3E commonly used freq for SAR
		4 — 4.65 MHz	o	o	one freq each of A1A, J3E
		6,215.5 MHz 5.2 — 6,525 MHz	o	o	support freq for J3E 2182 A1A, J3E
		8,195 — 8,815 MHz	o		A1A, J3E
		12,230 — 13,200 MHz	o		"
		16,360 — 17,410 MHz	o		"
		22,000 — 22,855 MHz	o		"
	F3E	154 — 174 MHz Ch 16	o	o	
(For Direction-Finding Stations) P-P	A1A	4,438 — 5,480 MHz	o	o	
		7,300 — 8,195 MHz	o	o	
SAR	A1A, A2A A3E	500 kHz 2,182 kHz 6,215.5 kHz Radio Buoy	o o o o	o o o o	

List A: RADIO COMMUNICATIONS INSTALLATIONS FOR SAR OPERATING COAST STATIONS (Except those given in List B)

Station Installation	A-class	B-class	Direction-Finding Station	KPLP Detachment
	set	set	set	set
5 KW HF MH Telegraph/Telephone	2*			
1 KW HF MF Telegrapn/Telephone	1*			
" " "	3			
0.5 kW "		2	1	
Spot RX(6 x freq)	2	1		
Allw RX	2	1	1	
Operation Console	a 1	b 1	c 1	
UHF Link	2	2	1	
V F T	1	1		
VHF T/R 5Ch	2	2		1
Power Supply	1	1	1	
DF RX	1	1	1	
DF Monitor Console	1	1	1	
Antenna Tower/ Transmitting	a 2	b 2	b 2	
Antenna Tower/ Receiving	a 2	2		
Mast Pole for VHF				1
ARQ	1			
Teleprinter	2			
Rocke Ant & Earthing for DF	1	1	1	
Ant Expansion & Earthing	1	1	1	
DF Hut	1	1	1	
Measuring Instruments	1	1	1	
Spares	1	1	1	

Note: * shows (Jakarta)

List B: RADIO COMMUNICATIONS INSTALLATIONS FOR THE B-CLASS COAST STATIONS GIVEN IN THE REMARKS BELOW

Station Installation	B-class		Remarks
		set	
			Sibolga
1 KW HF MF Telegraph/Telephone		3	TG Uban
			Ampenan
0.5 KW "		4	Samarinda
Spot RX (6 x freq)		1	Ternate
ALLW RX		1	Biak
Operation Console	b	1	
UHF Link		2	
Power Supply		1	
DF RX		1	
DF Monitor Console		1	
V F T		1	
VHF T/R 5Ch		2	
Antenna Tower/Transmitting		1	
Antenna Tower/Receiving		1	
Conical Monopole		1	
Rocke Ant & Earthing for DF		1	
Ant Expansion & Earthing		1	
DF Hut		1	
Measuring Instruments		1	
Spares		1	

SEA AND COAST GUARD (KPLP)

The organization of KPLP is as follows:

Headquarters.....Directorate of KPLP is under the Directorate General of Sea Communications

District Headquarters.....District Directorate of KPLP is under the District Directorate General of Sea Communications

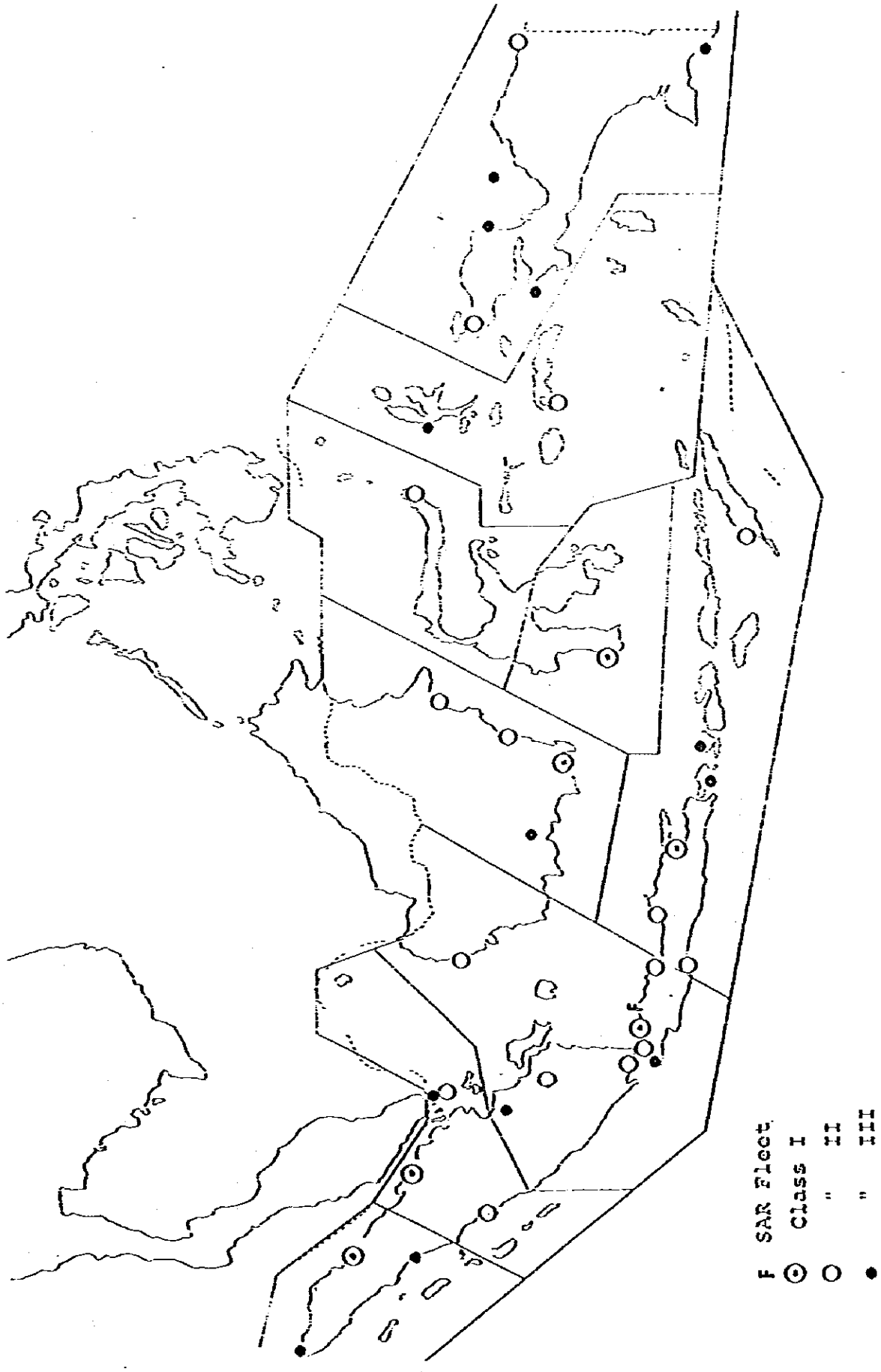
Detachment.....There are more than 30 KPLP Detachments located throughout Indonesia

KPLP is responsible for the safety in ports, harbors, waterways, at sea and on coast, and for securing the maritime order, and also is the maritime SAR task force in Indonesia.

The nine SAR ships, belonging to the Central SAR Fleet, are being delivered from the shipyards in 1981 to 1982, and will be despatched on long term basis to some District Headquarters as SAR task force.

The Detachments are based at the main ports, and consist of the three classes of I, II and III, each of which is in charge of 750 miles, 750-1,500 miles and more than 1,500 miles ranges respectively to cover the whole waters of Indonesia.

ALLOCATION OF KDLP DETACHMENTS

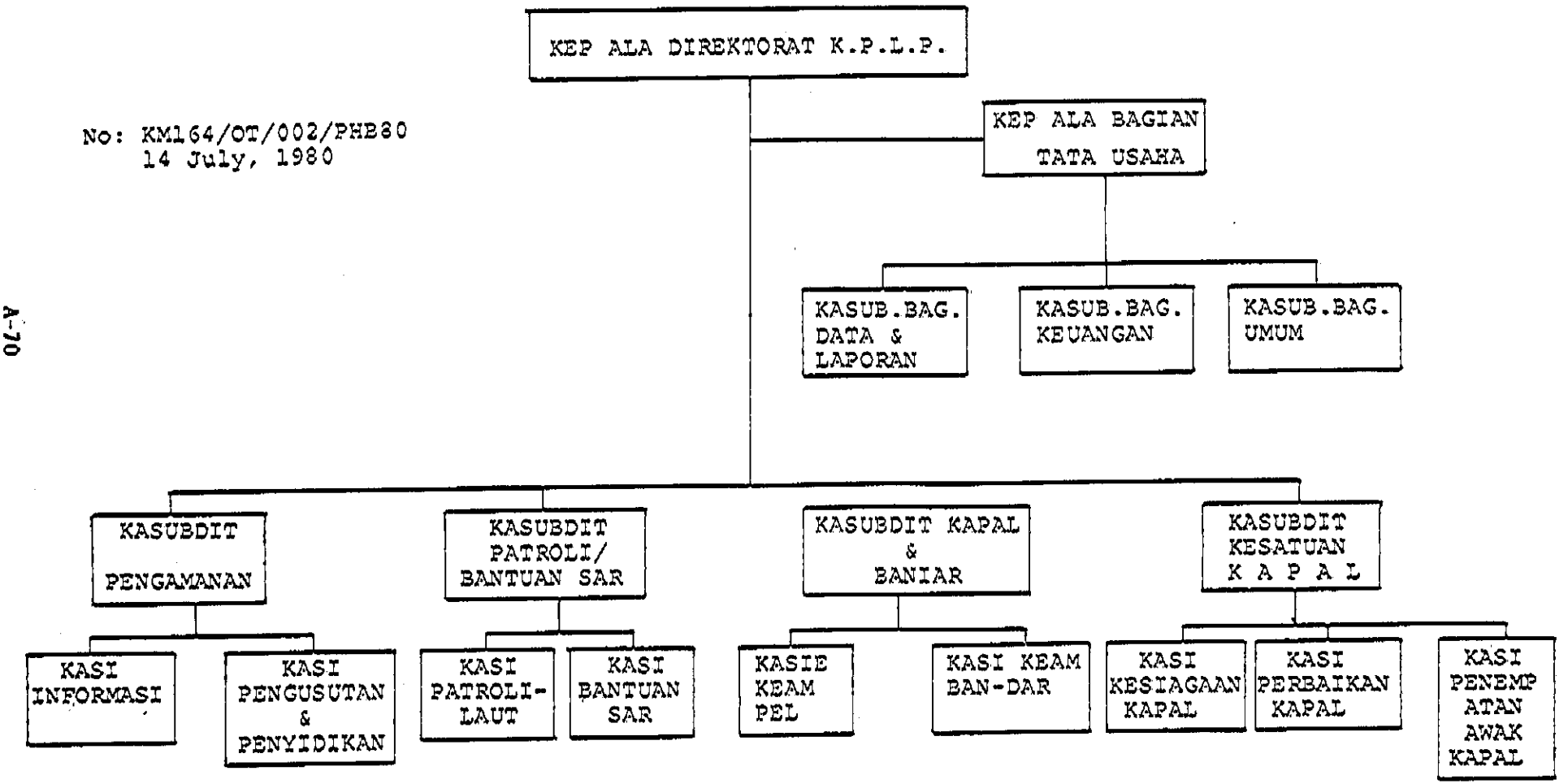


ORGANIZATION CHART OF K.P.L.P

STRUKTUR ORGANISASI DIREKTORAT KESATUAN PENJAGAAN LAUT DAN PANTAI (K.P.L.P.)

KANTOR PUSAT DIREKTORAT JENDERAL PERHUBUNGAN LAUT

No: KM164/OT/002/PHB80
14 July, 1980



ORGANIZATION OF KPLP DETATCIMENTS

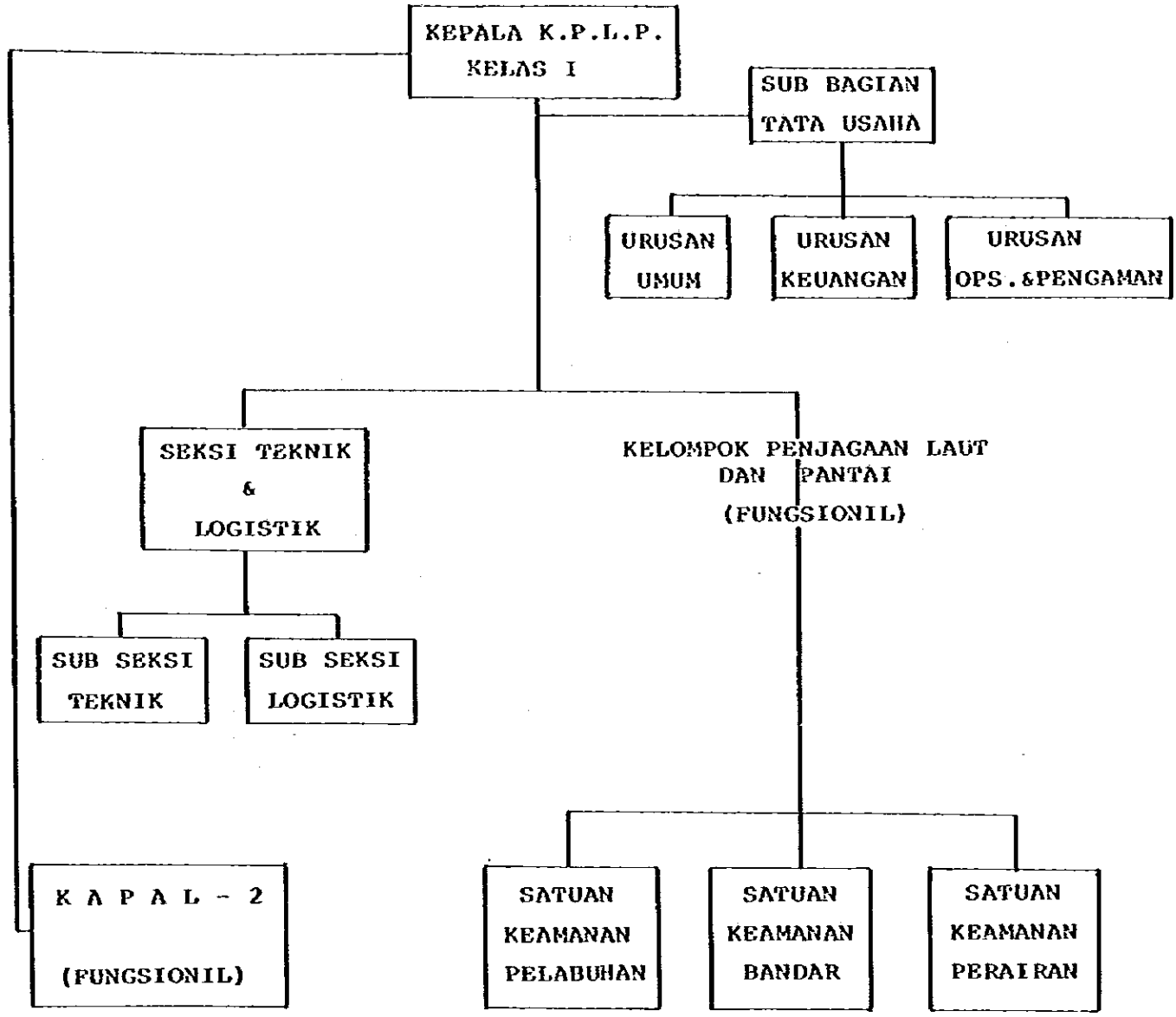
APPENDIX - 9

BAGAN ORGANISASI KESATUAN PENJAGAAN LAUT DAN PANTAI (KPLP)

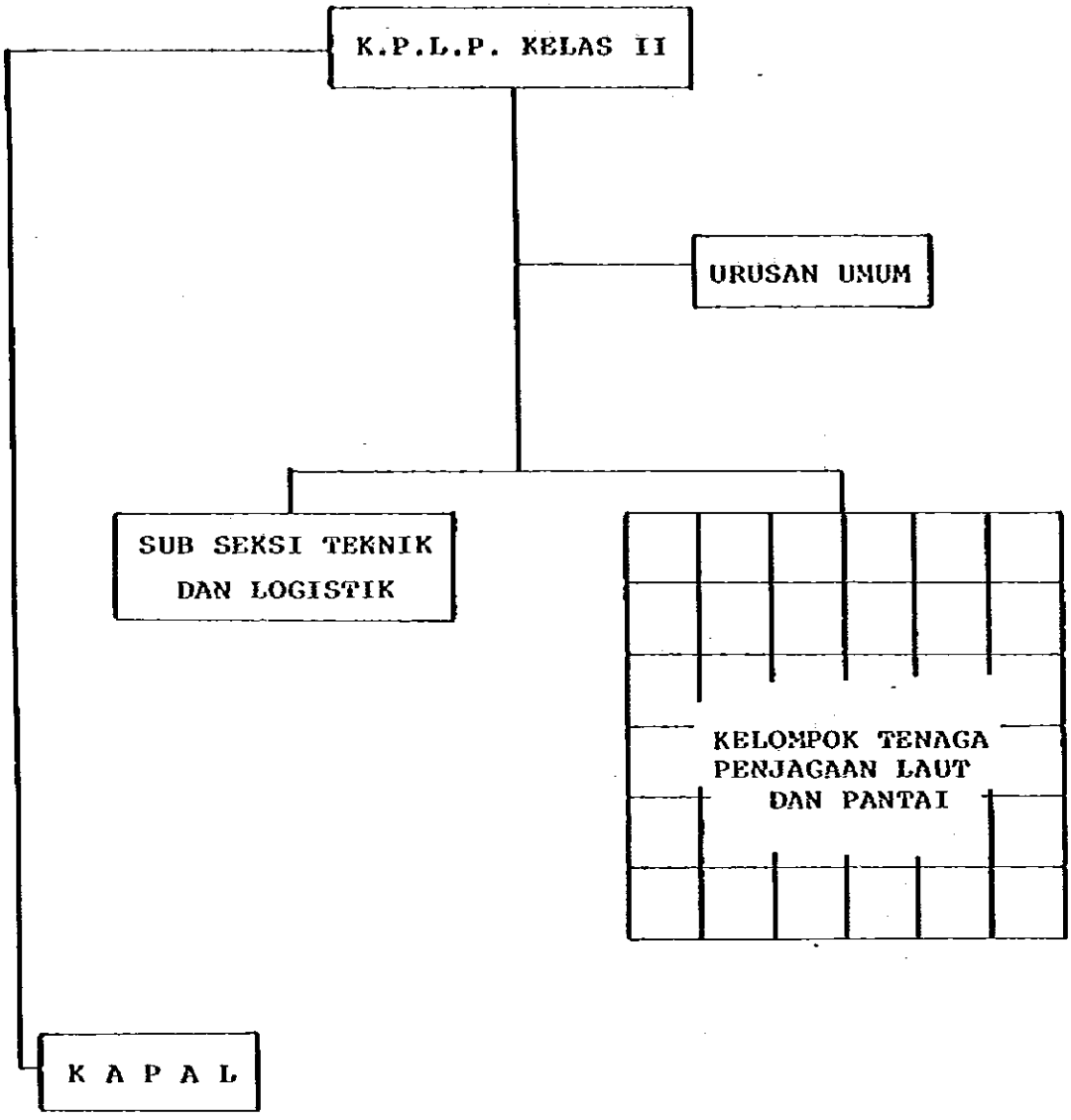
K E L A S - I

DIREKTORAT JENDERAL PERHUBUNGAN LAUT

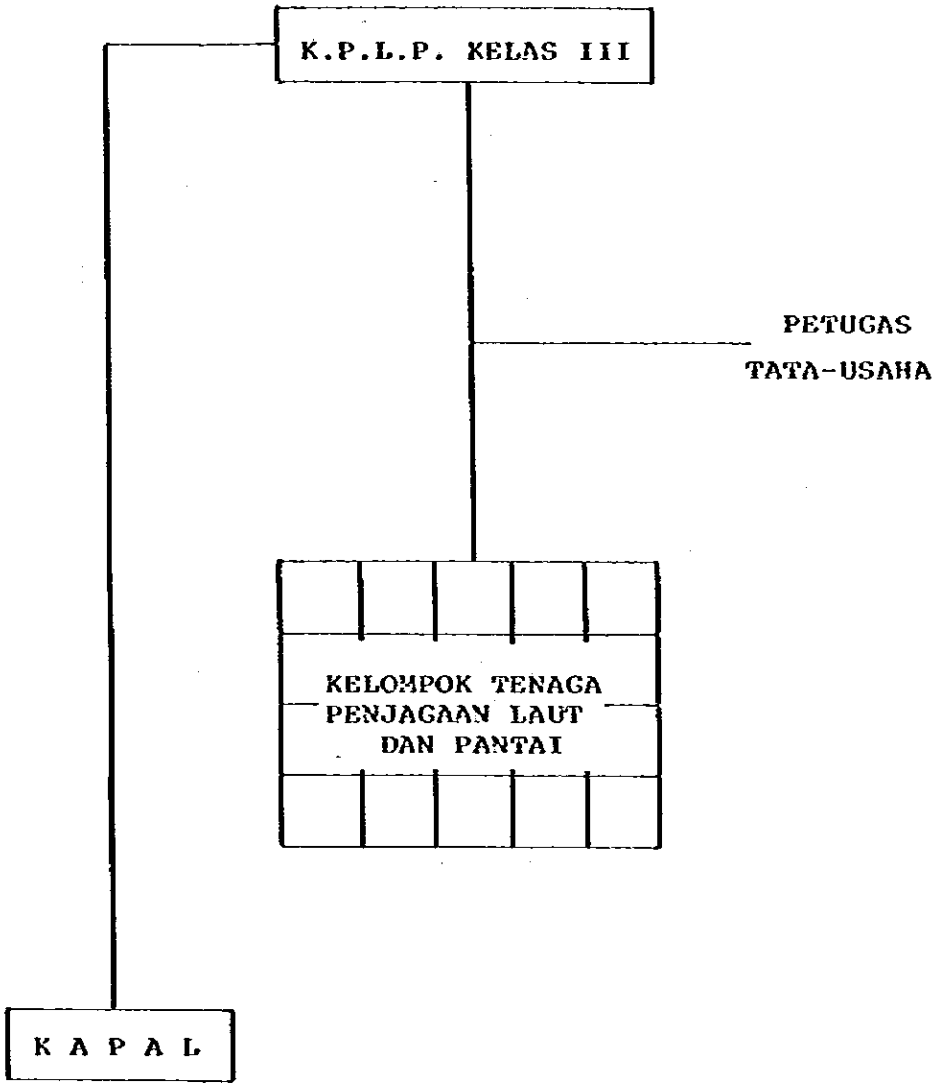
DEPARTEMEN PERHUBUNGAN



BAGAN ORGANISASI KESATUAN PENJAGAAN LAUT DAN PANTAI
(K.P.L.P.) KELAS II
DIREKTORAT JENDERAL PERHUBUNGAN LAUT
DEPARTEMEN PERHUBUNGAN



BAGAN ORGANISASI KESATUAN PENJAGAAN LAUT DAN PANTAI
(K.P.L.P.) KELAS III
DIREKTORAT JENDERAL PERHUBUNGAN LAUT

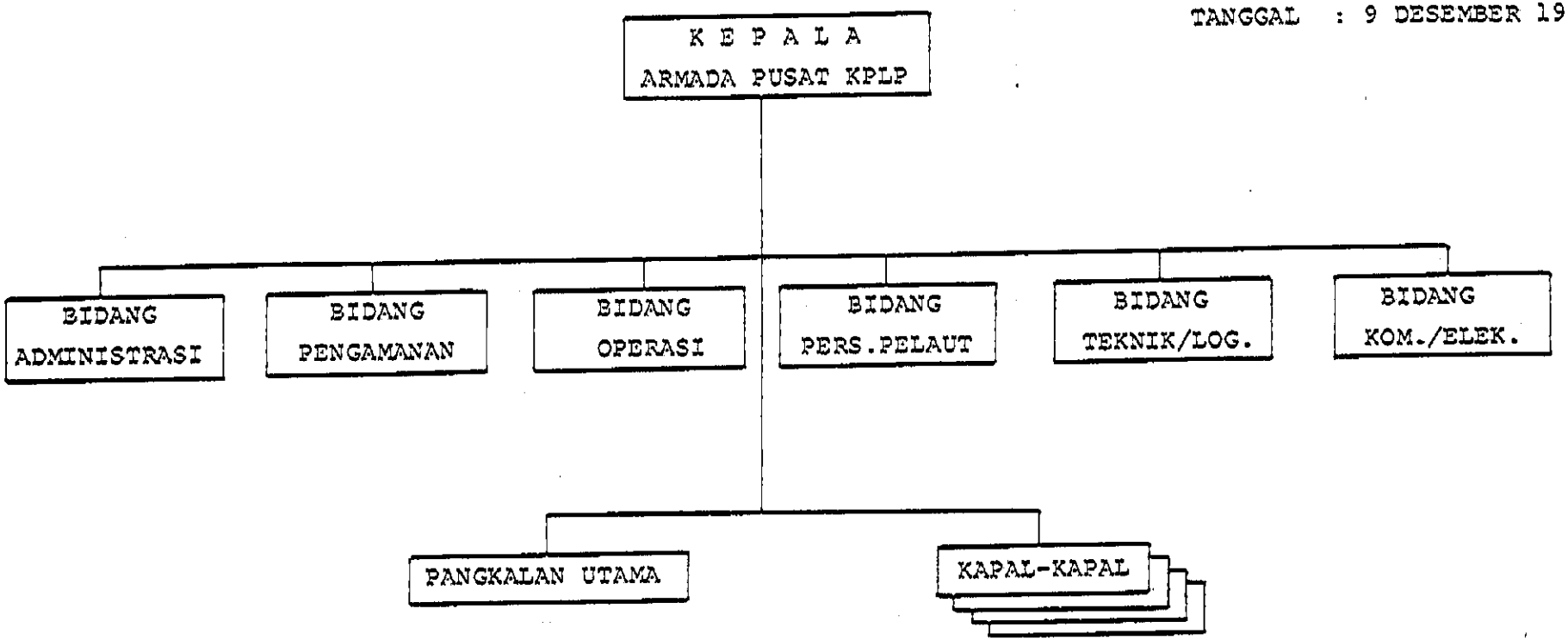


BAGAN ORGANISASI

SATUAN TUGAS RAMADA PUSAT DIREKTORAT KPLP

LAMPIRAN - II

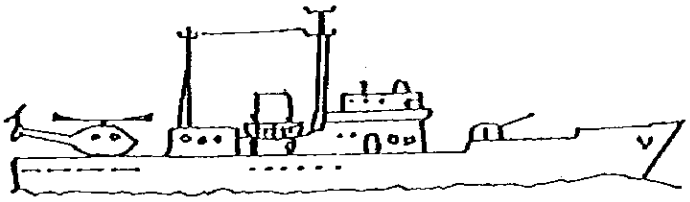
S.K. DIRJEN. PERHUBUNGAN LAUT
NOMOR : DLR. 87/2/2.
TANGGAL : 9 DESEMBER 1980.



FASILITAS KAPAL-KAPAL DAN SAR
KPLP DI SELURUH INDONESIA
-Number of KPLP SAR Ships and SAR Facilities-

NOMOR	L O K A S I	KELAS KAPAL I	II	III	IV	V	JML	PASILITAS SAR
I.	PUSAT JAKARTA	-	9	-	-	-	9	1 UNIT
II.	KANWIL I BELAWAN							
	1. ULEE LHEUE	-	-	-	1	-	1	--
	2. BELAWAN	-	1	-	1	4	6	1 UNIT
	3. SIBOLAGA	-	-	-	1	1	2	--
III.	KANWIL II DUMAI							
	1. DUMAI	-	-	3	4	1	8	1 UNIT
	2. TG. UBAN	-	1	1	-	1	3	1 UNIT
	3. TG. PINANG	-	-	1	1	1	3	--
	4. TELUKMAYUR	-	-	-	1	2	3	1 UNIT
IV.	KANWIL III TPK							
	1. TG. PRIOK	-	-	3	4	1	8	1 UNIT
	2. PONTIANAK	-	-	2	1	-	3	1 UNIT
	3. CIREBON	-	-	-	1	1	2	--
	4. SUNDAKLAPA	-	-	1	1	-	2	--
	5. PALEMBAND	-	-	-	1	1	2	1 UNIT
	6. JAMBI	-	-	-	1	1	2	--
	7. MERAK	-	-	-	1	1	2	--
	8. PANJANG	-	-	-	1	1	2	--
V.	KANWIL IV SBA							
	1. SURABAYA	-	-	2	2	2	6	1 UNIT
	2. SMERANG	-	-	-	1	1	2	--
	3. CILACAP	-	-	-	1	1	2	--
	4. BENOA	-	-	-	1	1	2	--
	5. AMPENANA	-	-	-	-	1	1	--
	6. KUPANG	-	-	-	-	1	1	--
VI.	KANWIL V BMASIN							
	1. BANJARMASIN	-	-	-	2	-	2	--
	2. SAMARINDA	-	1	1	1	1	3	1 UNIT
	3. SAMPIT	-	-	-	1	-	1	--
	4. BALIKPAPAN	-	-	-	1	-	1	--
VII.	KANWIL VI U.P.							
	1. U.PANDANG	-	-	1	2	2	5	--
VIII.	KANWIL VII MDO							
	1. MANADO/BTG	-	1	-	1	1	3	1 UNIT
IX.	KANWIL VIII AMBN							
	1. AMBON	-	-	1	1	4	6	1 UNIT
	2. TERNATE							
X.	KANWIL IX JRA							
	1. JAYAPURA	-	-	1	4	-	5	--
	2. SORONG	-	-	1	-	-	1	--
	3. BIAK	-	-	1	-	-	1	--
	4. MANOKWARI	-	-	-	1	-	1	--
	5. MERAUKE	-	-	2	-	-	-	1 UNIT
	6. FAK-FAK	-	-	-	-	-	-	--

FASILITAS KAPAL-KAPAL PATROLI & SAR KPLP
-Criteria of KPLP SAR Ships-

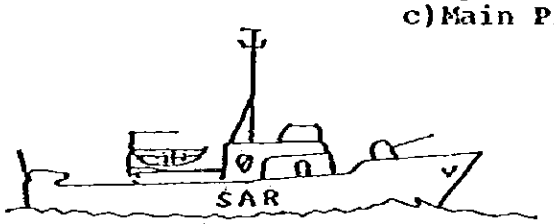


KLAS I :

a) Length: >45m
b) Operation Area: Open Sea
c) Main Proportions:
6000H

C R E W

DECK : < 21 orang
MESIN : < 12 "
RADIO : < 3 "
(Sesuai Tonnage Kapal)



KLAS II :

a) Length: 35 ~ 45m
b) Operation Area: Indonesian Waters
c) Main Proportions:
3000 ~ 6000H

C R E W

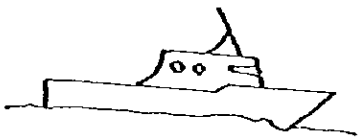
DECK : 12 orang
MESIN : 8 "
RADIO : 2 "

KLAS III :

a) Length: 20 ~ 35m
b) Operation Area: Offshore
c) Main Proportions:
800 ~ 1200H

C R E W

DECK : 10 orang
MESIN : 6 "
RADIO : 1 "



KLAS IV :

a) Length: 10 ~ 20m
b) Operation Area: Coastal
c) Main Proportions:
400 ~ 800H

C R E W

DECK : 7 orang
MESIN : 4 "
RADIO : 1 "

KLAS V :

a) Length: 5 ~ 10m
b) Operation Area: River/ Harbor Area
c) Main Proportions: < 400H

C R E W

DECK : 3 orang
MESIN : 3 "
RADIO : --

LIST OF KPLP PERSONNEL

CENTRAL:	STAFF	SEA PATROL	TOTAL
Central Fleet Task Force	74	161	235

DETACHMENTS:	STAFF	PORT SECURITY	HARBOUR PATROL	SEA PATROL	TOTAL	REMARKS
District I						(Harbour Master)
1. Belawan(I)	23	201	14	29	271	(I)Belawan
2. Sibolga(III)	6	23	8	-	37	(III)Ulee Lheue Sabang Sibolga
3. Ulee Lheue(III)	7	22	-	-	29	Kuala Tanjung
District II						
4. Dumai(I)	25	23	24	46	118	(I)Dumai
5. Tanjung Uban(II)	29	26	10	45	110	(II)Tanjung Pinang Teluk Bayur
6. Tanjung Pinang(III)	1	9	-	4	14	(III)Pekanbaru Pulau Sarbu
7. Teluk Bayur(II)	5	24	6	-	35	Tanjung Uban
District III						
8. Tanjung Priok(I)	93	547	35	72	747	(I)Palembang Tanjung Priok
9. Pontianak(II)	27	33	5	26	91	(II)Cirebon
10. Cirebon(II)	10	33	7	-	50	(III)Panjang Bengkulu
11. Sunda Kelapa(II)	20	61	10	36	127	Jambi Sunda Kelapa
12. Palembang(II)	13	32	11	-	56	Pontianak Cigading
13. Jambi(III)	5	16	6	-	27	
14. Merak(III)	3	18	10	-	31	
15. Panjang(II)	5	36	4	-	45	

	STAFF	PORT SECURITY	HARBOUR PATROL	SEA PATROL	TOTAL	REMARKS
District IV						
16. Tanjung Perak /Surabaya (I)	34	121	22	46	223	(I)Surabaya
17. Semarang(II)	27	48	8	-	83	(II)Semarang
18. Cilacap(II)	6	10	2	-	18	(III)Ampenan /Lenban
19. Benoa(III)	5	11	6	-	22	Benoa
20. Lenban/Ampenah(III)	1	10	-	-	11	Cilacap
21. Kupang(II)	8	5	4	-	17	Kupang
District V						
22. Banjarmasin(I)	30	66	15	-	111	(II)Banjarmasin
23. Samarinda(II)	10	15	-	37	62	Balikpapan
24. Sampit( )	10	7	4	-	21	Samarinda
25. Balikpapan(II)	9	18	6	-	33	(III)Pl'ngkaraya
						Tanjung Sentar
						Bontang
District VI						
26. Ujung Pandang(I)	27	68	32	-	127	(I)Ujung Pandang
						(III)Kendari
District VII						
27. Manado/Bitung(II)	23	84	11	26	144	(II)Manado/Bitung
						(III)Donggala
District VIII						
28. Ambon(II)	22	60	49	-	131	(II)Ambon
29. Ternate						
District IX						
30. Jayapura(II)	14	24	5	18	61	(II)Jayapura
31. Sorong(II)	10	13	7	10	40	(III)Biak
32. Biak(III)	5	11	-	10	26	Sorong
33. Manokwari(III)	5	4	4	-	13	
34. Merauke(III)	4	10	6	12	32	
35. Fak-fak(III)	6	5	8	-	19	

Note: ( ) shows Klass of Harbor Master

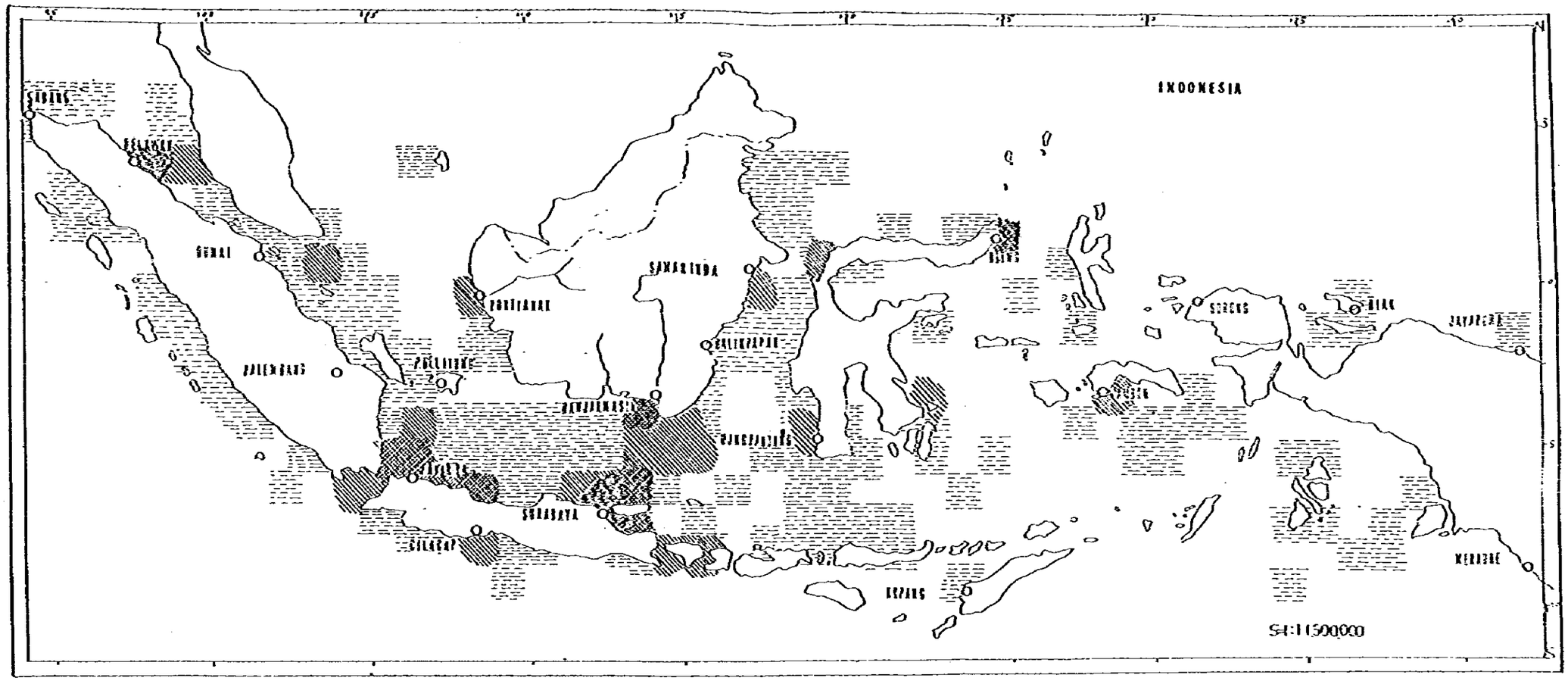
KRITERIA KLASIFIKASI KPLP

-Criteria Classification of KPLP Detachments-

No.	PERSYARATAN	% Bobot	KPLP KLAS I	KPLP KLAS II	KPLP KLAS III	KETERANG
1	2	3	4	5	6	7
1.	OPERASIONAL	50%				
	A. Pelabuhan		Pelab.Kls.I/II	Pelab.Kls. II/III	Pelab.Kls. III/IV	
	B. Bandar		Kesyahb.Kls. I/II	Kesyahb.Kls. II/III	Kesyahb.Kls. III/IV	
	C. Perairan					
	1)Luas Perairan		radius >1500 mil	radius 750 mil -1500 mil	radius < 750 mil	
	2)Mengawasi SBN		⩾ 200 bh.	<200 bh.	-	
	3)Bantuan SAR di Laut		koordinasi dengan KKR/SKR	koordinasi dengan KKR/SKR	-	
	4)Proteksi lingkungan hikup perairan		radius 1500 mil	radius 750 mil -1500 mil	radius 750 mil	
2.	FASILITAS PENUNJANG	50%				
	A. KAPAL		-	-	-	
	1)Kapal Patroli Klas I		⩾1 bh.	min 1 bh.		
	2) -"- -"- -"- II		⩾2 bh.	min 2 bh.	min 1 bh.	
	3) -"- -"- -"- III		⩾5 bh.	min 3 bh.	min 2 bh.	
	4) -"- -"- -"- IV		⩾4 bh.	min 3 bh.	min 2 bh.	
	5) -"- -"- -"- V					
	B. BANGUNAN DARAT					
	1)Kantor(Kamar Pemeriksa)		⩾400 M2	⩾300 M2	⩾200 M2	
	2)Gudang Peralatan(Alat SAR, Permakanan Perlengkapan kapal & Senjata)		> 180 M2	⩾125 M2	<125 M2	
	3)Dermaga/Pangkalan		> 150 M	⩾100 M	⩽ 50 M	
	4)Bengkel Pemeliharaan Kapal		200 M2	150 M2	100 M2	
	5)Asrama Penggahan Anak Buah Kapal (ABK)		30 Org.	20 Org.	10 Org.	
	C. PERALATAN					
	1)SAR		5 unit	3 unit - 4 unit	2 unit	
	2)Penyidikan		4 unit	2 unit - 3 unit	1 unit	
	3)Telekomunikasi		5 unit	2 unit - 3 unit	1 unit	
	4)Pemadam Kebakaran		5 unit	3 unit	1 unit	
	5)Persenjataan		⩾200 pucuk	80 pucuk-200 pucuk	<80 pucuk	
	6)Kendaraan Patroli Darat		⩾10 bh.	⩾4 bh.	⩾ 3 bh.	
	J U M L A H	100%				

THE WATERS WHERE MARINE ACCIDENTS OCCURRED

(Ref: Table of " NUMBER OF MARINE ACCIDENTS OCCURRED)



21 - 100 accidents within 60 x 60 miles during 1978 to 1980

11 - 20 " " " " " "

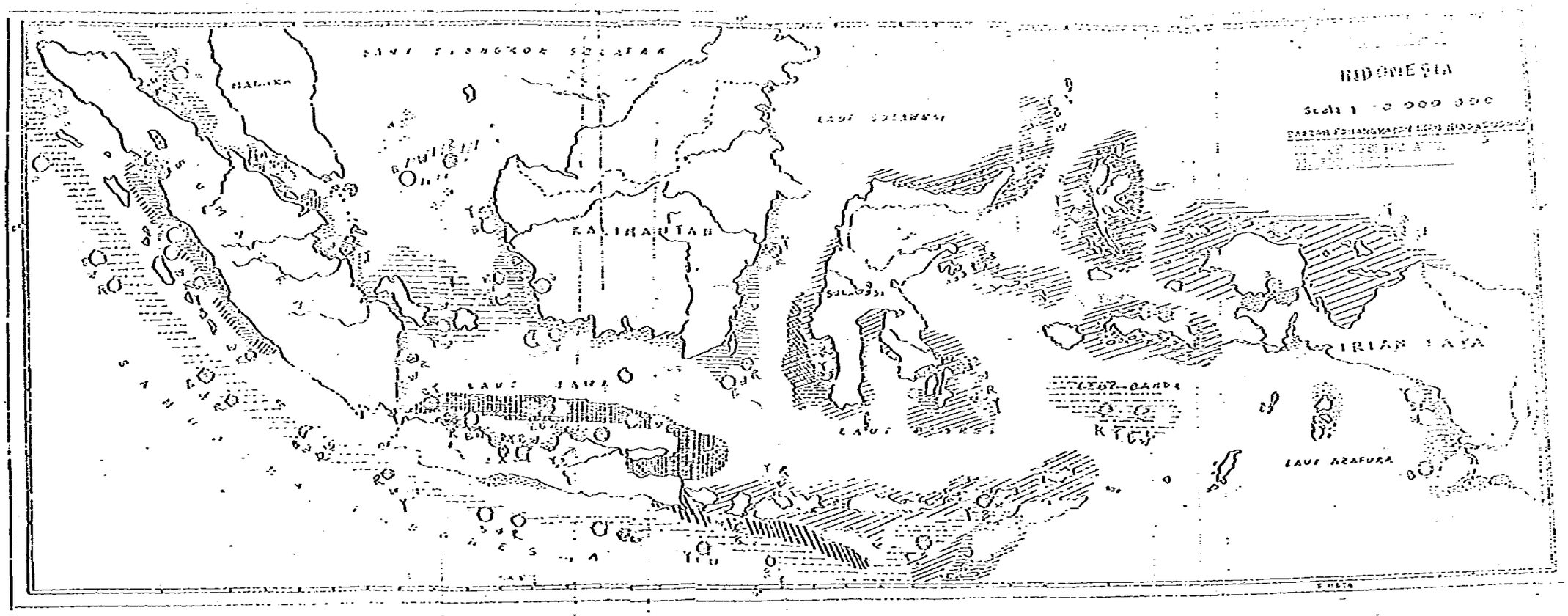
6 - 10 " " " " " "

1 - 5 " " " " " "

Table: NUMBER OF MARINE ACCIDENTS OCCURRED

	1978*		1979*		1980*		Remarks
	No. Occur'd	No. Plot'd	No. Occur'd	No. Plot'd	No. Occur'd	No. Plot'd	
Jan.	4	2	21	13	35	24	Source: Direktorat Perkapalan dan Pelayaran Sub Direktorat Kebandaran dan Awak Kapal Notes: * Number of the accidents plotted on the "waters where Marine Accidents Occurred. **Percentage of the accidents plotted in relation to those occurred.
Feb.	22	15	33	14	30	21	
Mar.	28	20	28	21	24	17	
Apr.	32	25	19	13	17	13	
May	64	42	23	18	28	17	
Jun.	18	15	31	23	32	25	
Jul.	25	21	27	22	33	26	
Aug.	47	26	21	15	35	27	
Sept.	30	22	40	19	30	18	
Oct.	38	29	45	34	35	25	
Nov.	23	16	26	19	29	19	
Dec.	53	41	29	20	18	11	
Total	384	274 (71%)**	343	231 (67%)**	346	243 (70%)**	

MAP OF FISHING AREA IN INDOENSIA



Musim ikan

Bulan 1 — 3
" 4 — 6
" 7 — 9
10 — 12

Legenda Peta Daerah Penangkapan Ikan Musim dan Udang

TUNA
CAKALANG
UDANG
KEMBUNG
LAYANG
LAYANG, MENYUNG, BARACUDA
TORANI
ANCHOVY
SELOPANG, HALALUSIS

Source: Fisheries Statistics of Indonesia,1978

Tabel 2.3 . Jumlah perahu/kapal perikanan perairan umum menurut kategori dan Propinsi, 1978
Table — Number of inland open water fishing boats by size and Province, 1978

Propinsi *Province*	Jumlah *Total*	Perahu tanpa motor – *Non powered boat*				Motor tempel *Outboard motor*	Kapal motor *Inboard motor*
		Jukung *Dug out*	Perahu papan – *Plank build boat*				
			Kecil–*Small*	Sedang–*Medium*	Besar–*Large*		
Jumlah – *Total*	121 858	68 568	43 247	6 649	305	2 898	191
SUMATERA	44 792	11 728	29 928	2 921	152	32	–
Di. Aceh	1 083	559	141	231	152	–	–
Sumatera Utara	10 468	4 515	5 885	68	–	–	–
Sumatera Barat	980	715	265	–	–	–	–
Riau	10 978	–	10 978	–	–	–	–
Jambi	1 818	363	864	561	20	19	–
Sumatera Selatan	17 235	5 013	10 719	1 486	–	17	–
Bengkulu	65	–	65	–	–	–	–
Lampung	2 165	564	1 011	575	10	5	–
JAWA	5 564	2 342	2 926	706	80	–	–
DKI. Jakarta	–	–	–	–	–	–	–
Jawa Barat	1 317	32	988	260	37	–	–
Jawa Tengah	1 535	815	343	334	43	–	–
DI. Yogyakarta	–	–	–	–	–	–	–
Jawa Timur	3 712	1 995	1 605	112	–	–	–
BALI–NUSATENGGARA	521	521	–	–	–	–	–
Bali	298	298	–	–	–	–	–
Nusatenggara Barat	202	202	–	–	–	–	–
Nusatenggara Timur	21	21	–	–	–	–	–
Timor Timur	–	–	–	–	–	–	–
KALIMANTAN	52 044	43 192	10 224	2 958	26	2 444	191
Kalimantan Barat	5 129	115	3 036	1 953	25	–	–
Kalimantan Tengah	22 306	18 071	3 679	371	–	3	191
Kalimantan Selatan	25 223	25 006	217	–	–	–	–
Kalimantan Timur	6 386	–	3 301	644	–	2 441	–
SULAWESI	9 797	9 327	85	–	–	385	–
Sulawesi Utara	3 128	3 128	–	–	–	–	–
Sulawesi Tengah	633	620	–	–	–	13	–
Sulawesi Selatan	5 493	5 036	85	–	–	372	–
Sulawesi Tenggara	543	543	–	–	–	–	–
MALUKU–IRIAN JAYA	1 140	957	74	54	18	37	–
Maluku	825	825	–	–	–	–	–
Irian Jaya	315	132	74	54	18	37	–

Source: Fisheries Statistics of Indonesia, 1978
Page 20

Tabel / *Table* 1.3 Jumlah perahu/kapal penangkap menurut kategori, daerah perairan pantai dan Propinsi, 1978[r] / *Number of fishing boats by size, coastal area and Province, 1978*[r]

Perairan pantai / *Coastal area*	Propinsi / *Province*	Jumlah / *Total*	Perahu tanpa motor – *Non powered boat*					Motor tempel / *Out board motor*	Kapal motor – *Inboard motor*								
			Sub Total	Jukung / *Dug out boat*	Perahu papan – *Plank build boat*				Sub Total	< 5 GT	5–10 GT	10–20 GT	20–30 GT	30–50 GT	50–100 GT	100–200 GT	> 200 GT
					Kecil / *Small*	Sedang / *Medium*	Besar / *Large*										
Jumlah – Total		248 113	222 121	95 392	67 406	47 786	11 234	13 226	12 766	7 305	2 387	1 806	780	232	128	78	50
BARAT SUMATERA	Sub Total	14 832	13 432	5 629	5 117	1 551	1 135	824	526	150	220	148	8	–	–	–	–
	D.I. Aceh	2 534	2 051	23	1 279	348	401	336	147	60	26	57	4	–	–	–	–
	Sumatera Utara	7 426	7 204	4 453	2 349	379	23	141	81	18	41	22	–	–	–	–	–
	Sumatera Barat	3 962	3 346	978	1 098	584	686	362	254	55	127	68	4	–	–	–	–
	Bengkulu	843	787	131	391	240	25	13	43	16	26	1	–	–	–	–	–
	Lampung	67	44	44	–	–	–	22	1	1	–	–	–	–	–	–	–
SELATAN JAWA	Sub Total	6 037	4 875	3 142	906	792	35	929	233	68	40	58	67	–	–	–	–
	Jawa Barat	2 488	1 771	779	524	468	–	573	144	68	40	36	–	–	–	–	–
	Jawa Tengah	1 419	1 118	1 029	–	57	32	212	89	–	–	22	67	–	–	–	–
	D.I. Yogyakarta	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	Jawa Timur	2 130	1 986	1 334	382	267	3	144	–	–	–	–	–	–	–	–	–
SELAT MALAKA	Sub total	29 556	22 566	–	15 938	5 695	1 933	560	5 430	3 644	786	682	202	42	52	–	–
	D.I. Aceh	3 293	2 301	–	1 162	623	516	388	604	277	237	60	30	–	–	–	–
	Sumatera Utara	11 115	9 324	–	7 016	2 273	35	60	1 731	1 051	227	293	157	3	–	–	–
	Riau	15 148	11 941	–	7 760	2 799	1 382	112	3 095	2 316	322	329	15	44	69	–	–
TIMUR SUMATERA	Sub total	10 797	8 621	636	5 707	1 968	310	1 107	1 074	944	85	29	16	–	–	–	–
	Jambi	950	487	–	292	158	37	30	433	407	4	7	15	–	–	–	–
	Sumatera Selatan	7 665	6 288	239	4 630	1 294	125	888	489	417	61	11	–	–	–	–	–
	Lampung	2 182	1 846	397	785	516	148	184	152	120	20	11	1	–	–	–	–
UTARA JAWA	Sub total	52 564	48 323	7 228	13 397	22 895	4 813	2 132	2 109	216	568	751	390	153	24	7	–
	DKI Jakarta	4 777	707	19	524	83	81	74	996	180	296	454	57	3	5	5	–
	Jawa Barat	10 072	9 629	243	2 921	5 972	493	174	269	21	91	63	87	7	–	–	–
	Jawa Tengah	12 712	11 530	4 981	2 528	3 373	648	505	677	15	169	215	127	127	20	4	–
	Jawa Timur	28 003	26 457	1 985	7 424	13 457	3 591	1 379	167	–	12	19	119	16	1	–	–
BALI–NUSA TENGGARA TIMOR	Sub total	27 141	26 341	22 279	2 864	675	220	227	73	37	4	10	4	–	–	18	–
	Bali	10 445	10 062	10 062	–	–	–	355	28	–	–	10	–	–	–	18	–
	Nusatenggara Barat	6 441	6 239	6 239	–	–	–	190	12	8	–	–	4	–	–	–	–
	Nusatenggara Timur	9 916	9 737	5 978	2 864	675	220	146	33	29	4	–	–	–	–	–	–
	Timor Timur	339	303	–	–	–	–	36	–	–	–	–	–	–	–	–	–
SELATAN/ BARAT KALI-MANTAN	Sub total	8 020	5 989	712	3 000	2 154	123	504	1 527	1 077	366	29	16	–	–	–	–
	Kalimantan Barat	4 479	2 990	318	1 338	1 211	123	504	985	572	366	31	16	–	–	–	–
	Kalimantan Tengah	3 541	2 999	394	1 662	943	–	–	542	505	29	8	–	–	–	–	–
TIMUR KALI-MANTAN	Sub total	10 059	6 645	555	2 676	3 252	162	2 029	1 385	1 122	192	29	12	20	10	–	–
	Kalimantan Selatan	3 497	2 263	555	779	854	75	265	969	815	106	11	7	20	10	–	–
	Kalimantan Timur	6 562	4 382	–	1 897	2 398	87	1 764	416	307	86	18	5	–	–	–	–
SULAWESI SELATAN	Sub total	26 673	23 805	16 854	10 759	4 828	1 364	2 737	131	47	62	10	4	4	3	–	1
	Sulawesi Selatan	24 748	21 942	7 192	9 493	3 893	1 364	2 688	118	47	49	10	4	4	3	–	1
	Sulawesi Tenggara	11 925	11 863	9 662	1 266	935	–	49	13	–	13	–	–	–	–	–	–
SULAWESI UTARA	Sub total	23 507	27 778	16 750	3 360	2 555	613	662	62	–	31	20	–	–	11	–	–
	Sulawesi Utara	14 196	13 599	9 668	1 604	1 753	574	535	62	–	31	20	–	–	11	–	–
	Sulawesi Tengah	9 306	9 179	6 582	1 756	802	39	127	–	–	–	–	–	–	–	–	–
MALUKU/ IRIAN JAYA	Sub total	28 932	27 746	22 107	3 682	1 431	526	970	216	–	4	30	61	8	11	33	42
	Maluku	23 694	22 957	18 497	2 761	1 188	511	597	140	–	4	30	32	8	8	26	32
	Irian Jaya	5 238	4 789	3 610	921	243	15	373	76	–	–	–	29	–	3	27	17

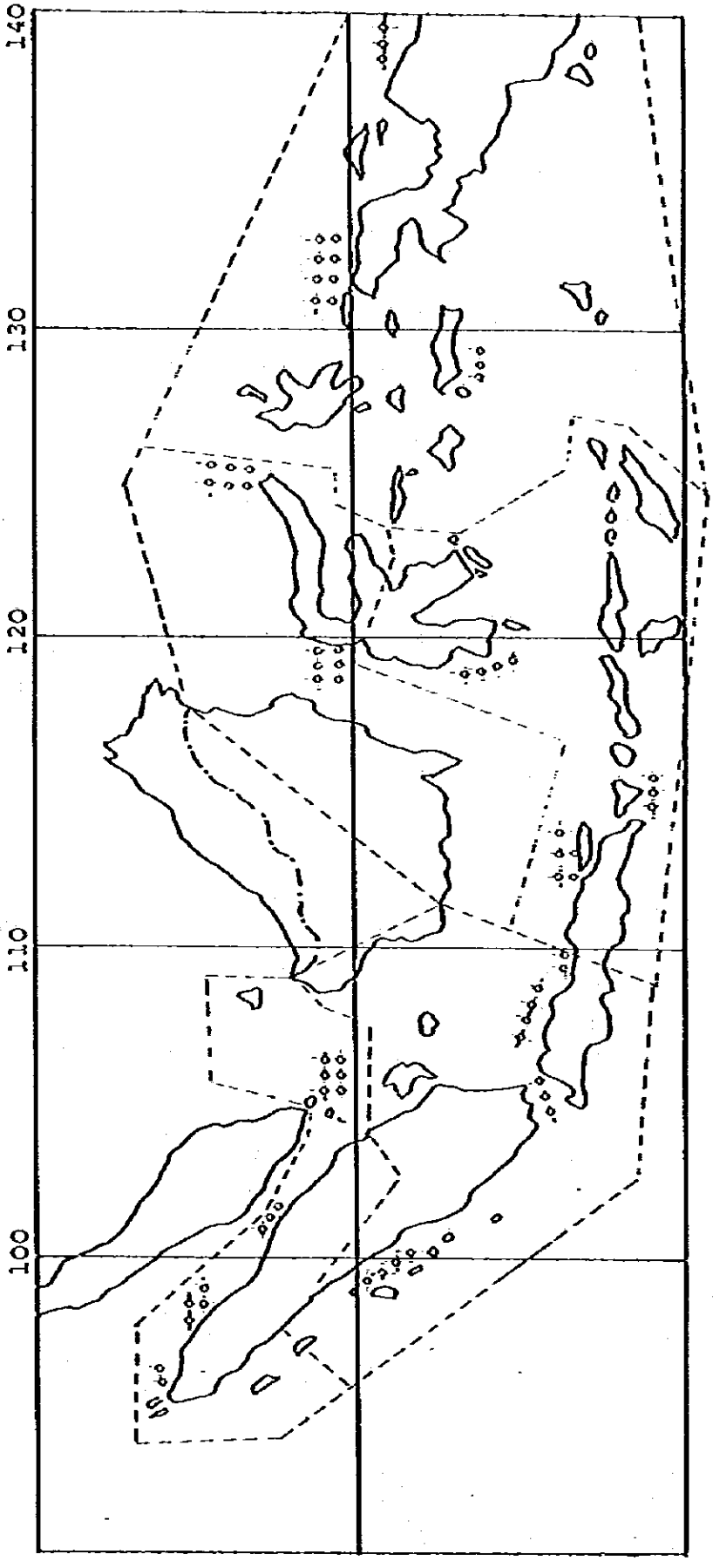
Source: Fisheries Statistics of Indonesia, 1978 Page 16

Tabel / Table 0.2 Produksi menurut sub sektor perikanan dan Propinsi, 1978[1] / *Fisheries production by sub sector of fishery and Province, 1978*[1]

Unit: Ton

Propinsi / *Province*	Jumlah / *Total*	Perikanan Laut / *Marine Fishery*	Perikanan darat – *Inland fishery*						
			Sub Total	Perairan Umum / *Open water*	Budidaya – *Culture*: Sub Total	Tambak / *Brackish water pond*	Kolam / *Fresh water pond*	Karamba / *Cage*	Sawah / *Paddy field*
Jumlah – *Total*	1 647 661	1 227 386	420 278	249 146	171 132	87 995	57 680	390	25 067
SUMATERA	516 171	423 637	92 534	69 978	22 556	13 235	6 377	63	2 881
D.I. Aceh	60 148	45 338	14 810	1 312	13 498	13 027	441	–	30
Sumatera Utara	155 317	141 299	14 018	11 111	2 907	191	853	0	1 863
Sumatera Barat	23 088	16 632	6 456	2 329	4 127	1	3 985	0	141
Riau	139 257	129 996	9 261	9 194	67	4	63	–	–
Jambi	13 640	9 291	4 349	3 998	351	–	279	56	16
Sumatera Selatan	82 987	46 219	36 768	36 191	577	–	441	–	136
Bengkulu	5 426	3 285	2 141	1 407	734	–	116	7	611
Lampung	36 308	31 577	4 731	4 436	295	12	199	–	84
JAWA	456 590	323 149	133 441	17 367	116 074	48 440	49 085	327	18 222
DKI Jakarta	27 465	26 035	1 430	–	1 430	454	861	–	115
Jawa Barat	138 655	64 242	74 413	2 470	71 943	17 455	42 965	299	11 224
Jawa Tengah	119 252	97 355	21 897	5 618	16 279	13 261	2 852	0	166
DI. Yogyakarta	1 089	292	797	478	319	–	217	–	102
Jawa Timur	170 129	135 225	34 904	8 801	26 103	17 270	2 190	28	6 615
BALI–NUSA TENGGARA	66 149	62 850	3 297	1 136	2 161	1 193	283	–	685
Bali	18 813	17 870	943	438	505	38	73	–	394
Nusatenggara Barat	28 077	25 926	2 151	550	1 601	1 131	182	–	288
Nusatenggara Timur	19 032	18 829	203	148	55	24	28	–	3
Timor Timur	225	225	–	–	–	–	–	–	–
KALIMANTAN	262 650	129 405	133 245	132 685	560	444	116	–	–
Kalimantan Barat	54 247	44 945	9 302	9 221	81	–	81	–	–
Kalimantan Tengah	75 761	18 558	57 203	57 203	–	–	–	–	–
Kalimantan Selatan	78 409	34 226	44 183	44 162	21	13	8	–	–
Kalimantan Timur	54 233	31 676	22 557	22 099	458	431	27	–	–
SULAWESI	259 500	204 044	55 456	25 879	29 577	24 678	1 620	–	3 279
Sulawesi Utara	50 905	43 130	7 775	5 247	2 528	3	920	–	1 605
Sulawesi Tengah	13 139	12 222	917	782	135	35	98	–	2
Sulawesi Selatan	171 837	126 618	45 219	18 586	26 633	24 562	411	–	1 660
Sulawesi Tenggara	23 619	22 074	1 545	1 264	281	78	191	–	12
MALUKU–IRIAN JAYA	86 606	84 301	2 305	2 101	204	5	199	–	–
Maluku	66 910	65 070	1 840	1 817	23	–	23	–	–
Irian Jaya	19 696	19 231	465	284	181	5	176	–	–

DISLOKASI DISTRIK NAVIGASI DAN SARANA BANTU NAVIGASI
-District Navigasi and Navigation Aids-



SARANA BANTU NAVIGASI

-Number of Visual Navigation Aids-

Nomor	JENIS SARANA	ED	AGA	PROP	PG	EB	EK	JUMLAH
1.	MENARA SUAR	90	24	3	1	2	14	134
2.	RAMBU SAUR	-	154	55	-	124	20	353
3.	PELAMPUNG-SUAR	-	91	58	-	156	-	305
4.	LAMPU PELA-BUHAN	-	1	-	85	3	59	148
5.	ANAK PELAM-PUNG	-	-	-	-	-	-	418
6.	RAMBU TANDA SIANG	-	-	-	-	-	-	579
	J U M L A H							1937

Itinerary of Survey

(1) Itinerary Prior to Field Survey by All Survey Team Members

Date	Remarks
1981:	
June 23	Courtesy calls on Mr. Sugiarto, Directorate of Navigation, and Mr. Manuputti, Sub-Directorate of Marine Electronics and Telecommunication.
	Consultation on survey schedules.
June 24	Exchange of views about Inception Report at Sea Communications.
June 25	Confirmation of Inception Report, and two panel discussions (one on maritime communication and the other on SAR) at Sea Communications for the purpose of activity coordination in principle between the Indonesian party and the Japanese field survey team.
June 26	Briefing about organizational outlines of KPLP, BASARNAS, KKR, SKR, etc., and SAR activities.
June 27	Visits to Tg. Priok coast station (receiving station) at Jakarta, Port Administration, KPLP and BASARNAS.

June 28	Study of collected data.
June 29	Preparations for field surveys.

(2) Group A Field Survey Itinerary

Date	Remarks
June 30	Movement from Jakarta to Banjarmasin and visit to Banjarmasin Coast Station.
July 1	Visits to Regional Sea Communications (KANWIL) V, Banjarmasin District Navigasi, KPLP, Harbor Master, Port Administration and SKR.
July 2	Movement from Banjarmasin to Balikpapan and visits to Balikpapan Coast Station, Port Administration, Harbor Master, KPLP and District Navigasi.
July 3	Movement from Balikpapan to Tarakan and visits to Tarakan Coast Station, Port Administration, Harbor Master and District Navigasi.
July 4	Movement from Tarakan to Jogyakarta.
July 5	Study of collected data.
July 6	Movement from Jogyakarta to Mataram.

July 7	Visits to Ampenan Coast Station, Lember Port Administration, Harbour Master, District Navigasi and KPLP. Movement from Mataram to Denpasar and combined study meeting of Groups A, B and C.
July 8	Three group members move from Denpasar to Jakarta. Study of collected data by two group members.

(3) Group B Field Survey Itinerary

Date	Remarks
June 30	Movement from Jakarta to Pakanbaru and visits to Pakanbaru Port Administration, Regional Sea Communications (KANWIL) II Headquarters, Dumai KPLP and Coast Station.
July 1	Visits to Dumai Coast Station, Harbor Master, Pakanbaru Airport Administration and SKR. Movement from Pakanbaru to Medan.
July 2	Movement from Medan to Banda Aceh and visit to Ulee Lheue Port Administration. (Visit to Sabang Coast Station was cancelled due to the ferry boat departure delay.)

July 3	Movement from Banda Aceh to Medan and visits to Medan SKR and Regional Sea Communications (KANWIL) I Headquarters.
July 4	Visits to Belawan Coast Station, KPLP, Harbor Master, District Navigasi and patrol boat.
July 5	Collection of data.
July 6	Movement from Jakarta to Mataram.
July 7	Movement from Mataram to Denpasar and combined study meeting of Groups A, B and C.
July 8	Four group members move from Denpasar to Jakarta. Study of collected data by two group members.

(4) Group C Field Survey Itinerary

Date	Remarks
June 30	Movement from Jakarta to Surabaya and visits to Regional sea Communications (KANWIL) IV Headquarters and Surabaya Coast Station.
July 1	Visits to Surabaya KPLP and KKR II.

July 2	Movement from Surabaya to Panarukan. Visits to Panarukan Coast Station, Harbour Master and Port Administration. Movement from Panarukan to Surabaya.
July 3	Movement from Surabaya to Ujung Pandang. Visits to Regional Sea communications (KANWIL) VI Headquarters, Makassar Coast Station and KPLP.
July 4 - 5	Study of collected data.
July 6	Movement from Ujung Pandang to Denpasar.
July 7	Visit to Benoa Coast Station. Combined study meeting of Groups A, B and C.
July 8	Three group members move from Denpasar to Jakarta. Study of collected data by two group members.

(5) Group a Field Survey Itinerary

Date	Remarks
July 9	Movement from Denpasar to Ujung Pandang. (The survey schedule was changed because the seat reservations on direct flight to Jayapura were impossible until July 21, 1981.)
July 10	Movement from Ujung Pandang to Menado. Visits to Regional Sea Communications (KANWIL) VII Headquarters, Bitung Coast Station (transmitting station) and Bitung Port Administration.
July 11	Visits to Bitung Coast Station (receiving station), Menado/Bitung Harbor Master and KPLP.
July 12	Movement from Menado to Ujung Pandang.
July 13	Movement from Ujung Pandang to Palu. Visits to Donggala Coast Station and Pantoloan New Port.
July 14	Consultation with Donggala Harbour Master. Movement from Palu to Ujung Pandang.
July 15	Movement from Ujung Pandang to Ambon. Visit to Ambon Coast Station (receiving station).

July 16	Visits to the Regional Sea Communications (KANWIL) VIII Headquarters, District Navigasi, Port Administration, KPLP, Coast Station (transmitting station) and the scheduled site of new receiving station.
July 17	Visit to Ambon SKR. Movement from Ambon to Sorong.
July 18	Visits to Sorong District Navigasi, Coast Station, KPLP, Port Administration Office and the scheduled site of new coast station.
July 19	Movement from Sorong to Biak.
July 20	Visits to Biak Coast Station, KPLP, Harbor Master, Port Administration and KKR.
July 21	Movement from Biak to Jayapura.
July 22	Visit to Jayapura Coast Station.
July 23	Visits to Regional Sea Communications (KANWIL) IX Headquarters, Harbor Master and 5th District Air Communications Headquarters.
July 24	Movement from Jayapura to Merauke.

July 25	Visits to Merauke Coast Station, District Navigasi, KPLP and SKR.
July 26	Study of collected data.
July 27	Study of collected data (because of cancellation of July 27 flight to Jayapura).
July 28	Movement from Merauke to Jayapura.
July 29	Visit to PALAPA Satellite System Earth Station (because of cancellation of July 29 flight to Sorong).
July 30	Movement from Jayapura to Sorong and overnight stay at Sorong to wait for flight to Jakarta.
July 31	Movement from Sorong to Jakarta via Ujung Pandang.
August 1	Study of collected data. Report of return from field surveys to Mr. Sugiarto, Directorate of Navigation.
August 2 - 5	Study of collected data.

(6) Group b Field Survey Itinerary

Date	Remarks
July 9 - 10	Study of collected data.
July 11	Ditto. Consultation with Indonesian Counterparts about field survey schedule.
July 12	Trip to Kupang denied at Denpasar Airport. Movement from Denpasar to Cilacap via Jogyakarta. Consultation about survey schedule.
July 13	Visits to Cilacap District Navigasi, Coast Station, Harbor Master, Port Administration, pilot station and KPLP. Movement from Cilacap to Cirebon.
July 14	Visits to Cirebon Coast Station, District Navigasi, Harbor Master and KPLP. Movement from Cirebon to Bandung.
July 15	Movement from Bandung to Jakarta.
July 16 - 20	Study of collected data.
July 21	Movement from Jakarta to Panjang. Visits to Panjang Coast Station and KPLP.

July 22	Movement from Panjang to Jakarta.
July 23	Movement from Jakarta to Pontianak. Visits to Pontianak Coast Station, District Navigasi, pilot station and KPLP.
July 24	Movement from Pontianak to Medan via Jakarta.
July 25	Movement from Medan to Sabang. Visits to Sabang Coast Station and District Navigasi.
July 26	Movement from Sabang to Medan.
July 27	Movement from Medan to Padang. Visit to Teluk Bayur Coast Station.
July 28	Visits to Teluk Bayur District Navigasi, KPLP, Port Administration and pilot station. Movement from Padang to Palembang.
July 29	Visits to Palembang District Navigasi, Coast Station, Port Administration, Harbor Master and KPLP. Movement from Palembang to Jakarta.
July 30 - August 2	Study of collected data.
August 3	Movement from Jakarta to Tg. Pandan. Visits to Harbor Master (concurrently District Navigasi manager and Port Administration Chief) and Coast Station.

August 4	Survey of direction finding station sites (Pt. Tajam, Pt. Manggar and Tanjung Modon). Visit to Manggar Harbor Master.
August 5	Visit to T. Pandan Port Administration

(7) Post Field Survey Work (by all members of Teams, a and b)

Date	Remarks
August 6	Study of collected data
August 7	Submission of Letter requesting further information. Report to Mr. Manuputty on completion of Field Survey.
August 8	Collection of data at Sea Comm. Headquarters
August 9 - 10	Preparation of Progress Report
August 11	Collection of data at Sea Comm. Headquarters . Arrivals of three members, Mr. Y. Kobayashi, N. Uehara and N. Ohtake from Japan.
August 12	Meeting by all the survey team members. Preparation of Progress Report
August 13	Visit to Cibinong Domestic Satellite (PALAPA) Master Control Station. Collection of data and preparation of Progress Report

August 14	Colletion of data
August 15	Meeting by survey team and Sea Communications.
August 16 - 17	Study of collected data.
August 18	Joint study meeting of Survey Team and Sea Communications.
August 19	Report to Japanese Embassy and JICA Office.
August 20	Departure from Jakarta and arrival at Tokyo.
August 21 - November	Drafting of Survey Report.

Performance Calculation of MF and HF Systems

1. Estimation of receiving field strength

Receiving field strengths at 4,6,8,10,12,18,22 and 27 MHz were calculated for each P-P communication system and also for S-S communication from five Class-A stations covering 100km, 300km and 500km' ranges.

P-P Jakarta - Belawan, - Dumai, Balikpapan, - Surabaya, - Ujung Pandang, - Bitung, - Ambon and - Jayapura

S-S

Jakarta - Jakarta North	100km,	300km and	500km
Belawan - Belawan North	"	"	"
Surabaya - Surabaya North	"	"	"
Ambon - Ambon South	"	"	"
Jayapura - Jayapura North	"	"	"

In computing the receiving field strength, the following assumptions were made:

Assumptions

Antenna input : 1 kw

Transmit antenna gain : 2 dB

Results of calculation

Following parameters are used.

Mode: 1E ... 1-time reflection by E layer
2F ... 2-time reflection by F layer
Angle ... Elevation of the radiated HF signal
Loss ... Transmission loss
DBU ... Receiving field strength
Month ... June, and December
SSN ... Sun Spot Number, 25 and 105
GMT ... 4, 8, 12, 16, 20 and 24

Receiving field strengths at frequencies below 3MHz for S-S communication are estimated for ground wave over sea water.

2. Estimation of atmospheric noise and required field strenth

2.1 Atmospheric noise Fam (dB above kTb)

Freq. bands: 0.5, 2, 4, 6, 8, 10, 12, 18 and 22 MHz
Fam: Effective antenna noise factor which results from a loss free antenna
En: Root-mean-square noise field strength for a 1-Hz bandwidth (dB above 1 uV/m)

The atmospheric noise level is estimated according to CCIR Report 322, 1963.

2.2 Required RF signal field strength

To obtain the required RF field strength minimum S/N for each type of emission, i.e., A1 TG 8 bauds, A2 TG 8 bauds, F1 TG 50 bauds and A3J SSB given in CCIR Rec. 339-4 was assumed as follows:

A1 TG 8 bauds:	31 dB for aural reception grade
A2 TG 8 bauds:	35 dB " " "
F1 TG 50 bauds:	51 dB for 0.001 of probability of character error
A3J SSB:	56 dB for Marginally commercial grade

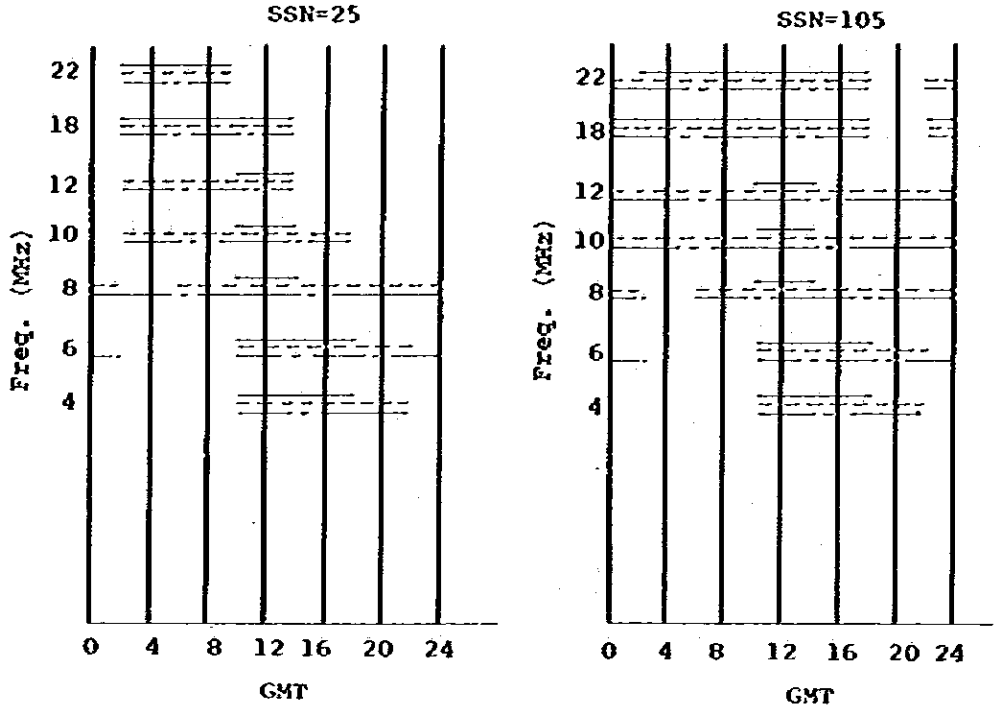
For frequencies above 3 MHz, 14-dB fading margin and for frequencies below 3 MHz, 10-dB fading margin were assumed.

3. Time during which a frequency is usable for communication

Comparing the estimated RF field strength with the required RF signal field strength the time during which a frequency is usable for communication is found in the attached papers.

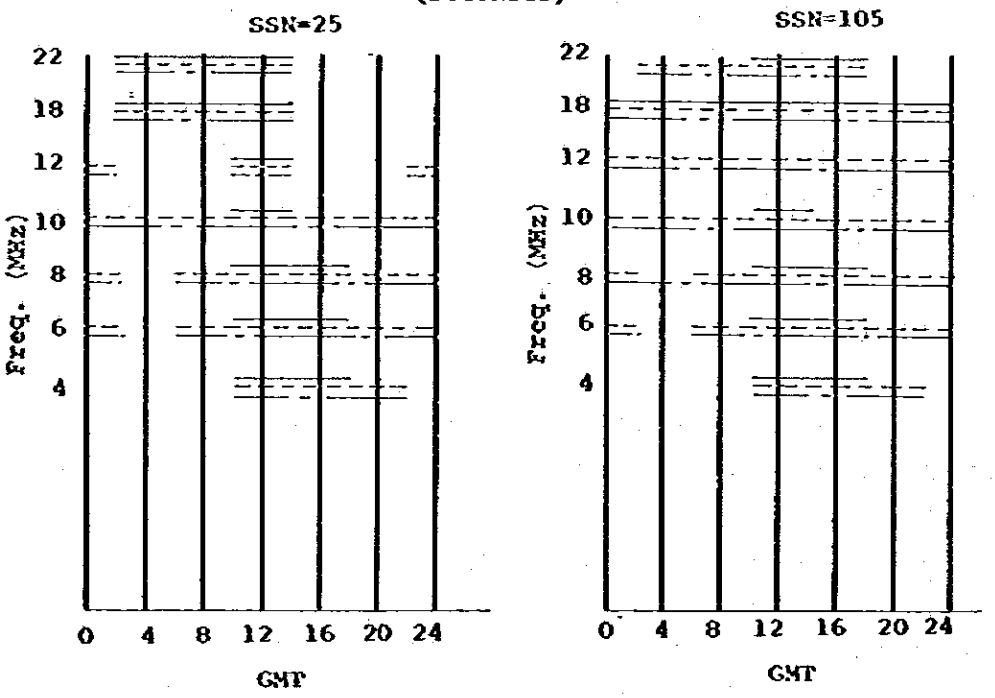
JAKARTA-BELAWAN

(June)



JAKARTA-BELAWAN

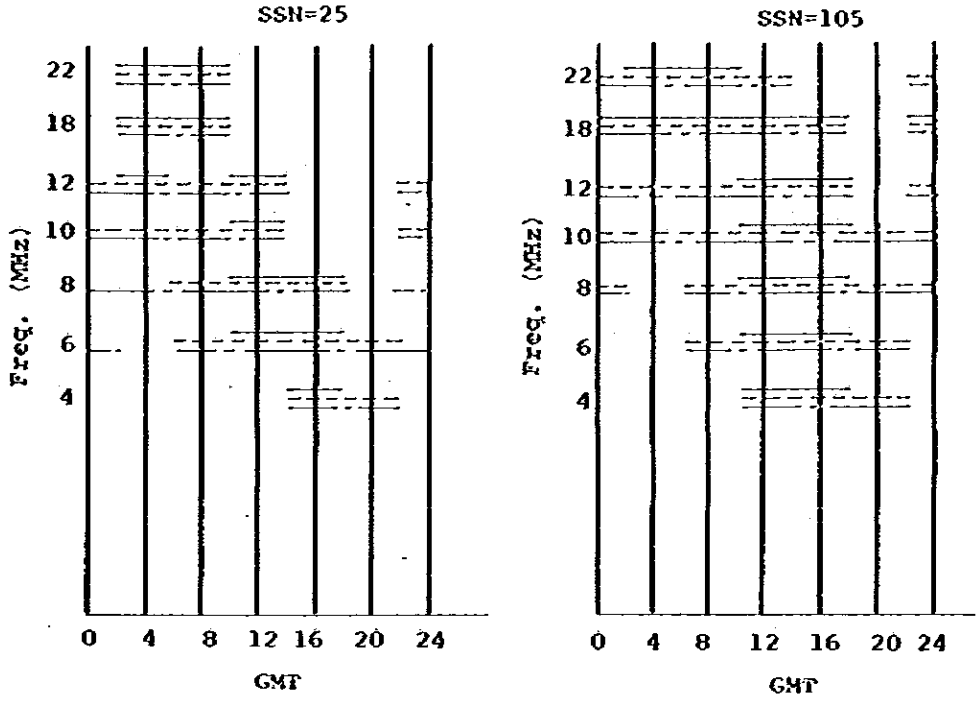
(December)



——— A3J SSB
------ A2 TG 8b
—·—·— A1 TG 8b

JAKARTA-BALIKPAPAN

(June)



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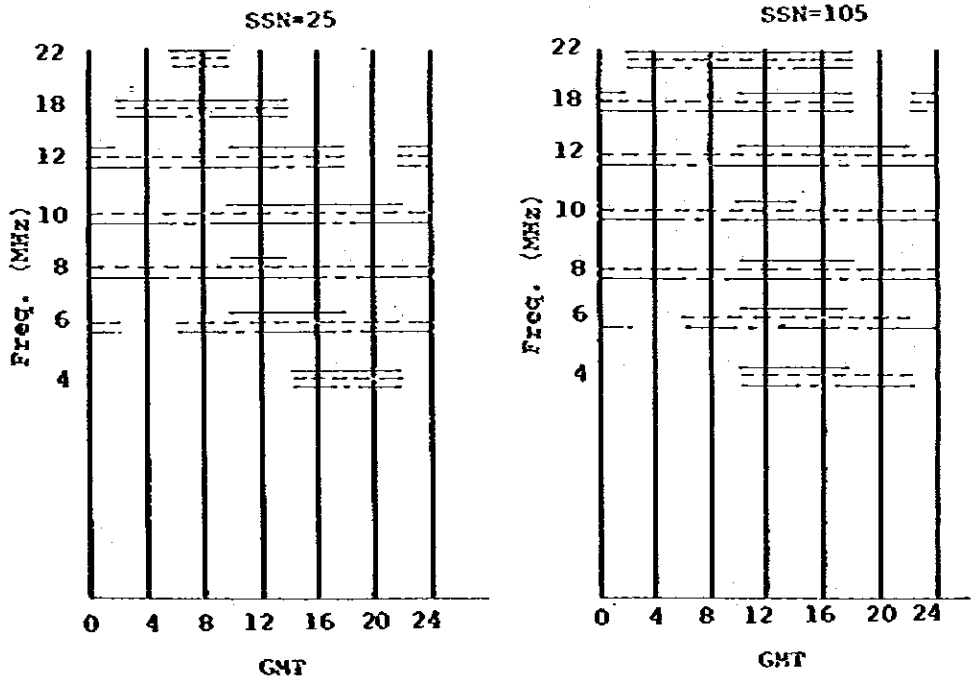
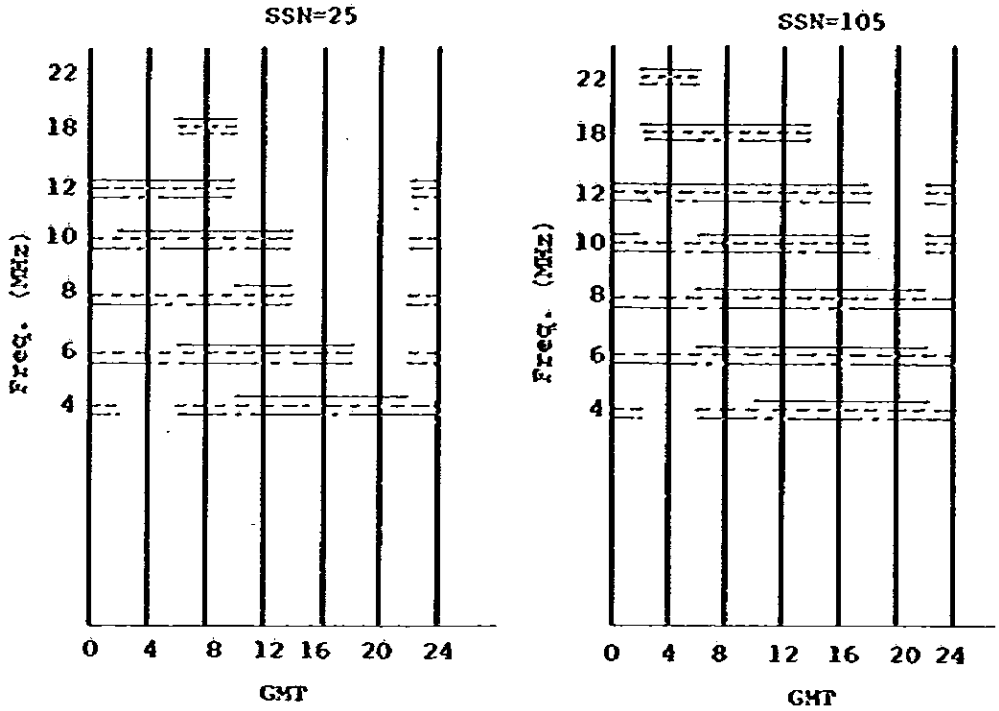


——— A3J SSB
- - - - - - A2 TG 8b
—·—·— A1 TG 8b

JAKARTA-SURABAYA

(June)



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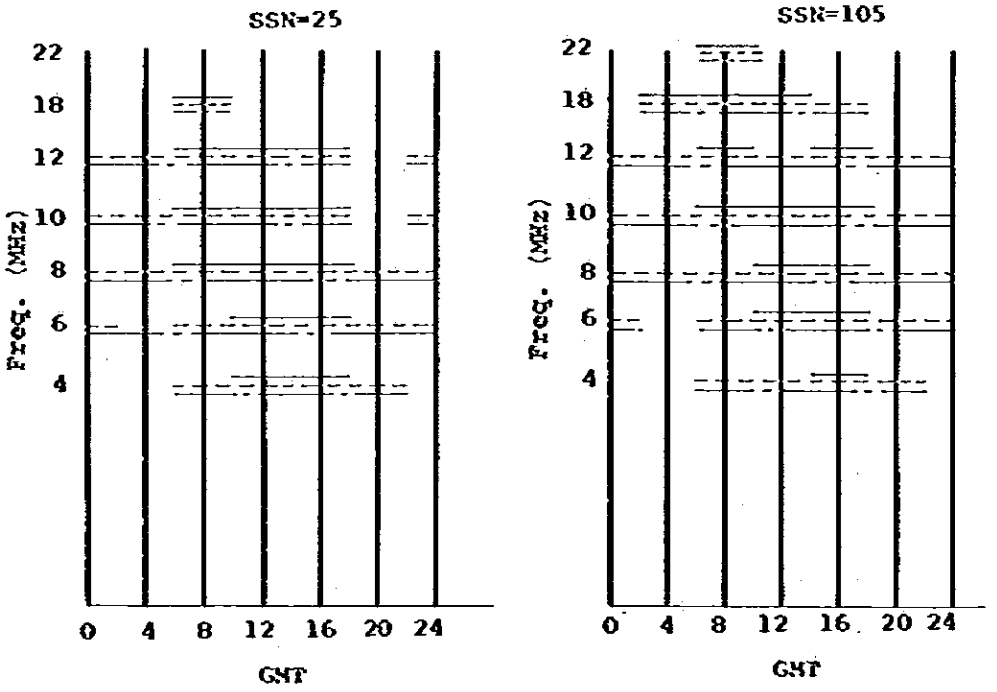
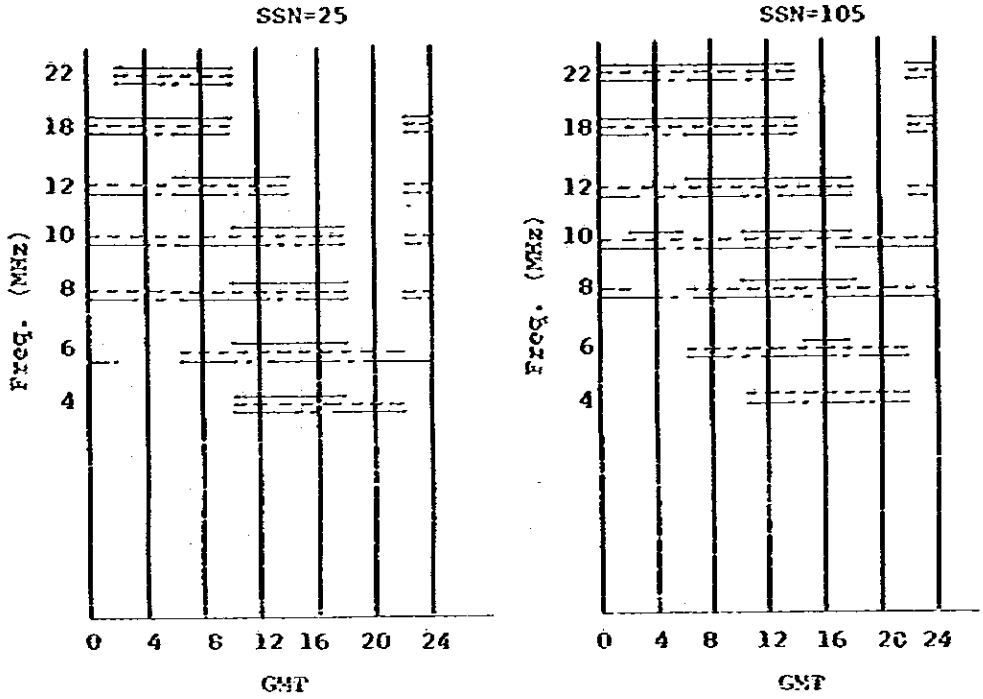


——— A3J SSB
- - - - - - A2 TG 8b
—·— A1 TG 8b

JAKARTA-U. PANDANG

(June)



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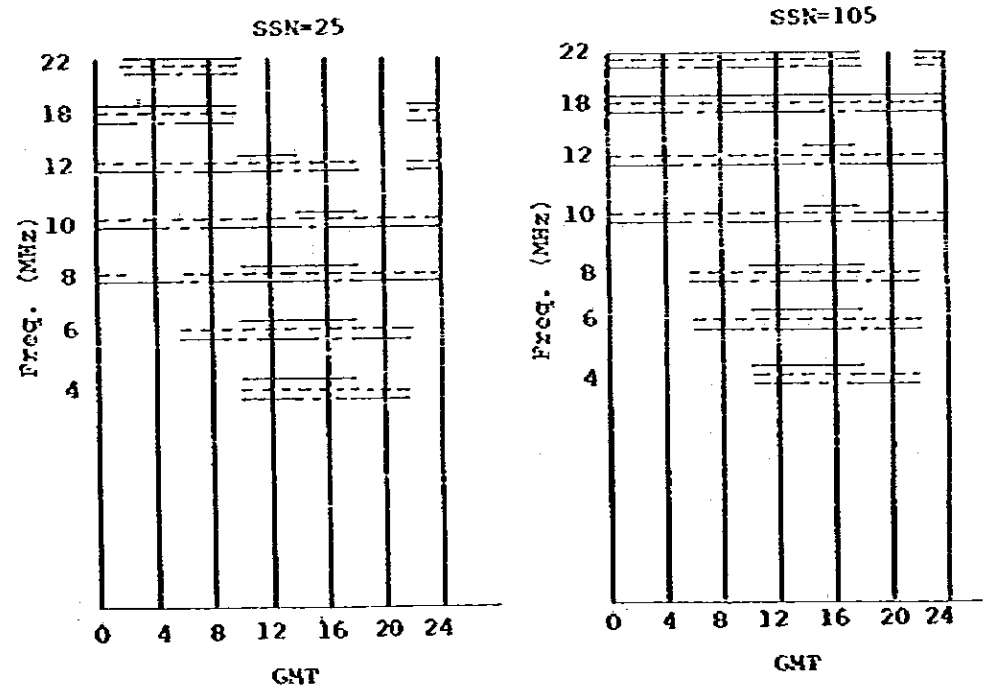
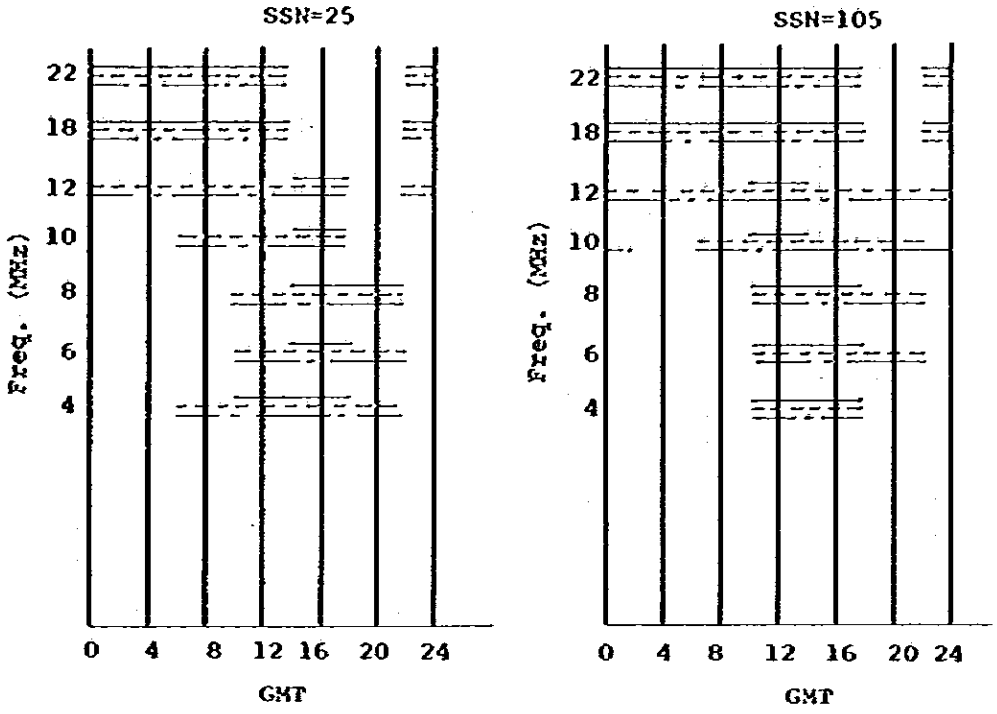


——— A3J SSB
- - - - - - A2 TG 8b
—·—·— A1 TG 8b

JAKARTA-BITUNG

(June)



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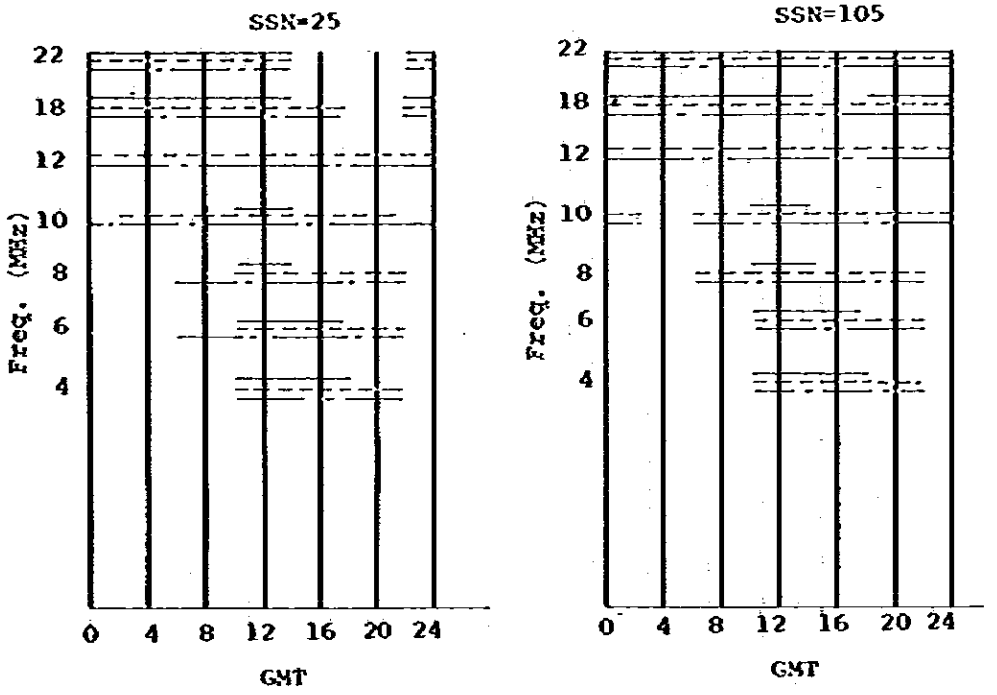

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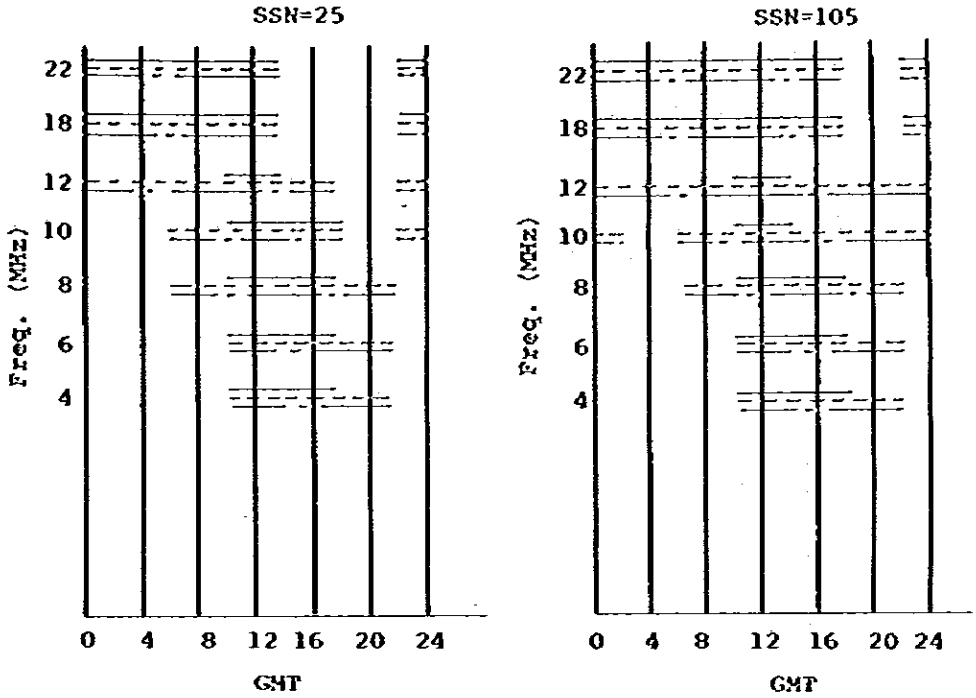
- - - - - - A2 TG 8b
—·— A1 TG 8b

JAKARTA-AMBON

(June)



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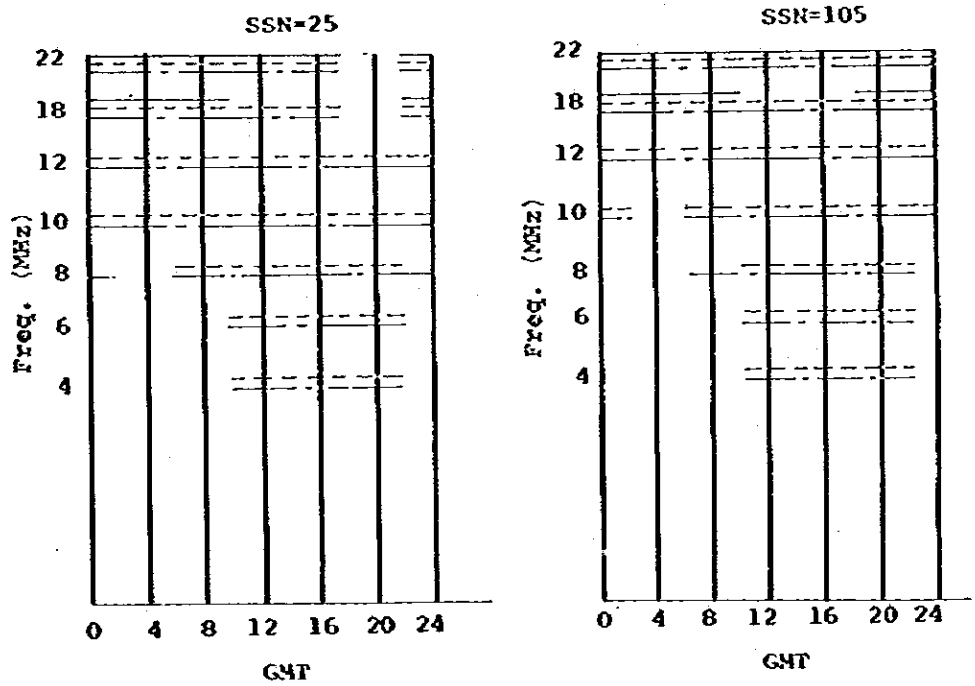

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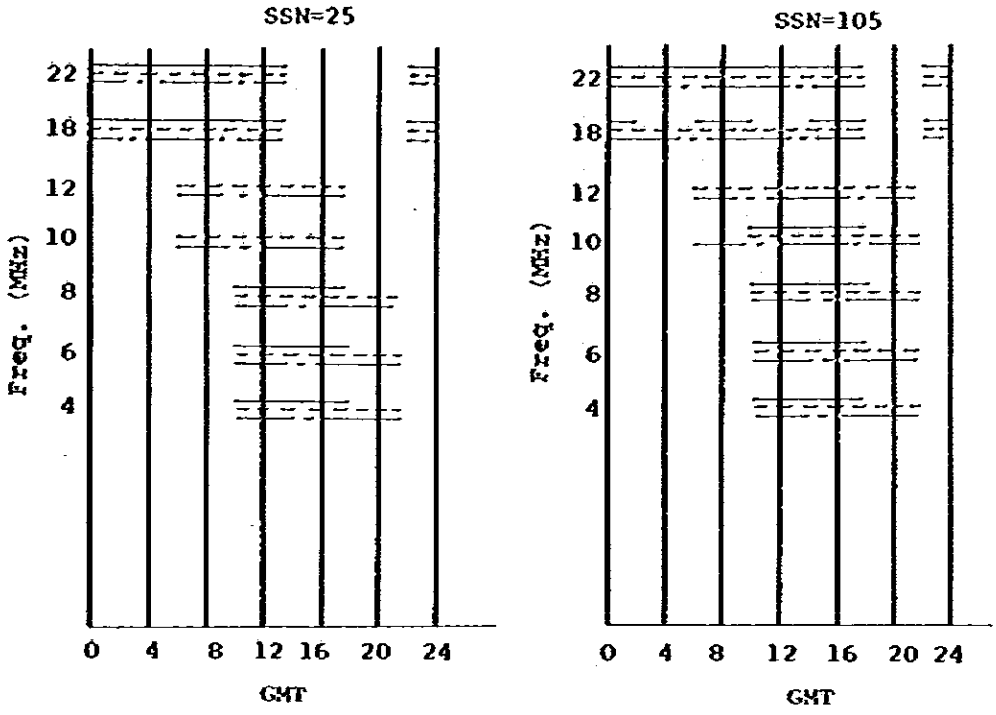
- - - - - - A2 TG 8b
—·—·— A1 TG 8b

JAKARTA-JAYAPURA

(June)



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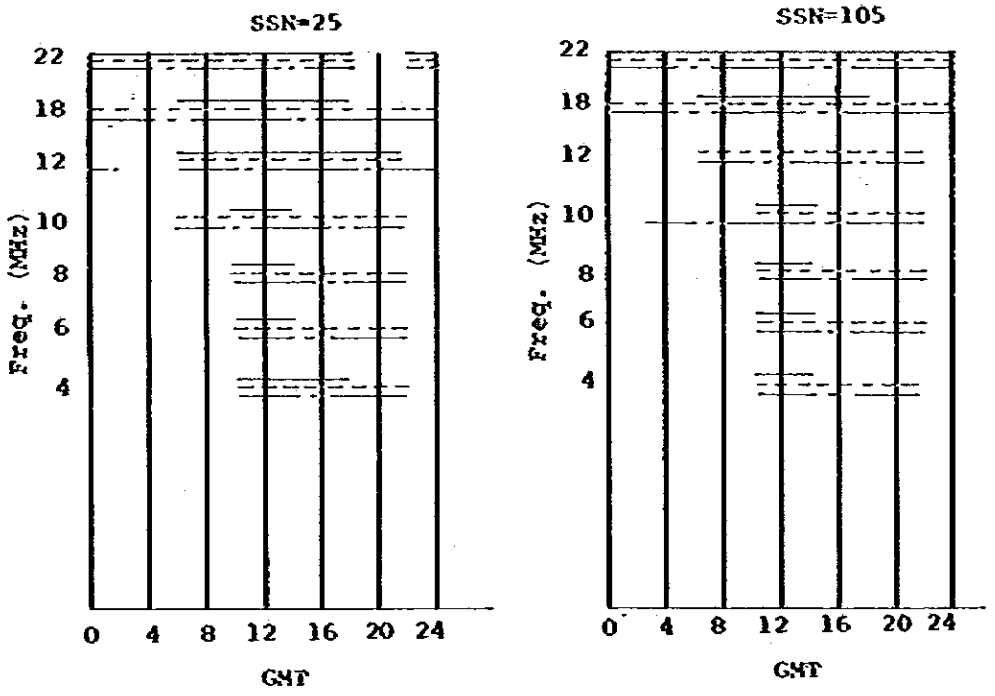

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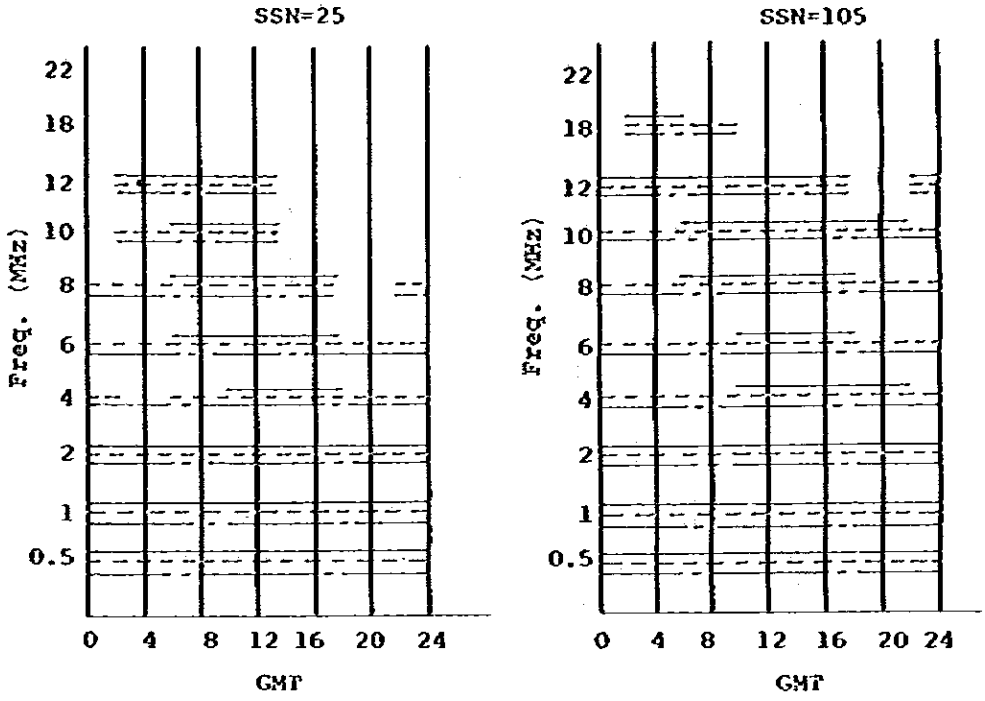
- - - - - - A2 TG 8b
—·— A1 TG 8b

(June)



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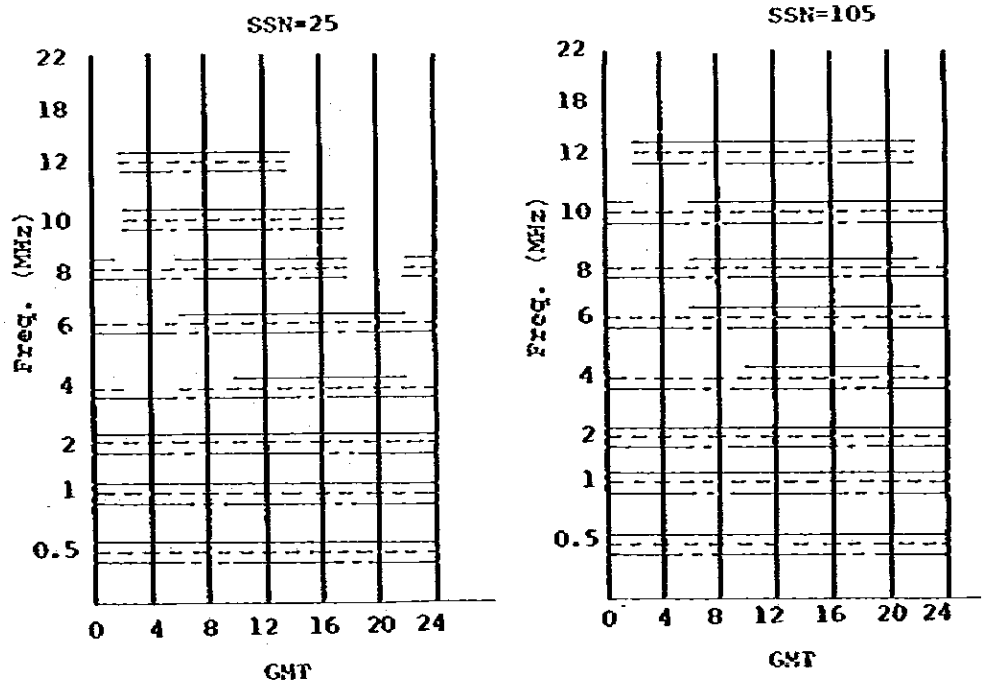

——— A3J SSB
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—·—·— A1 TG 8b

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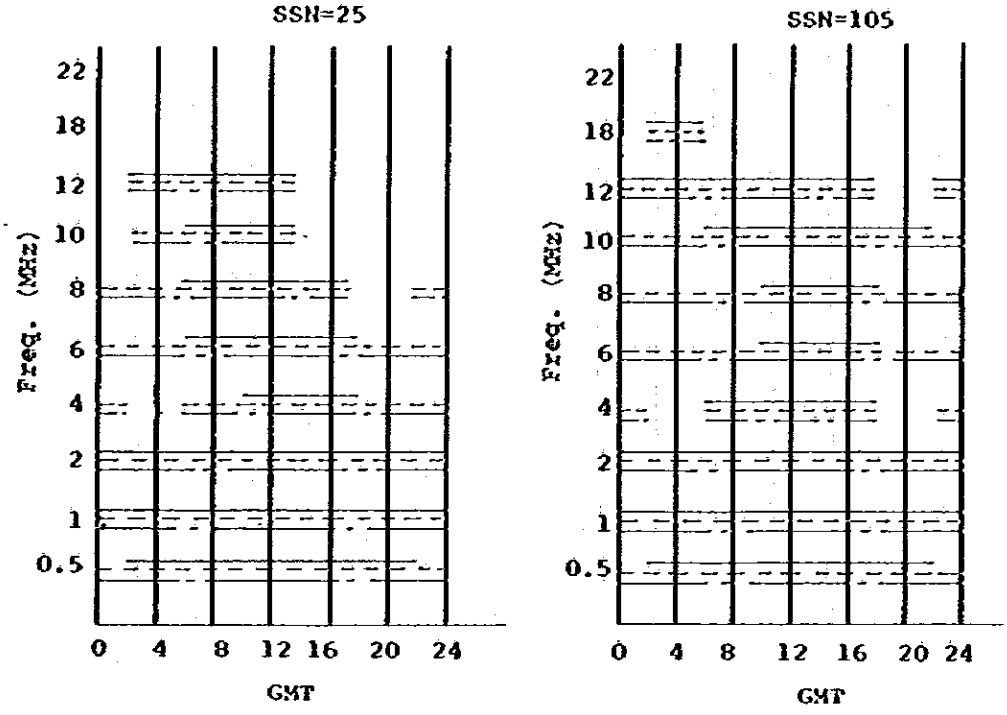

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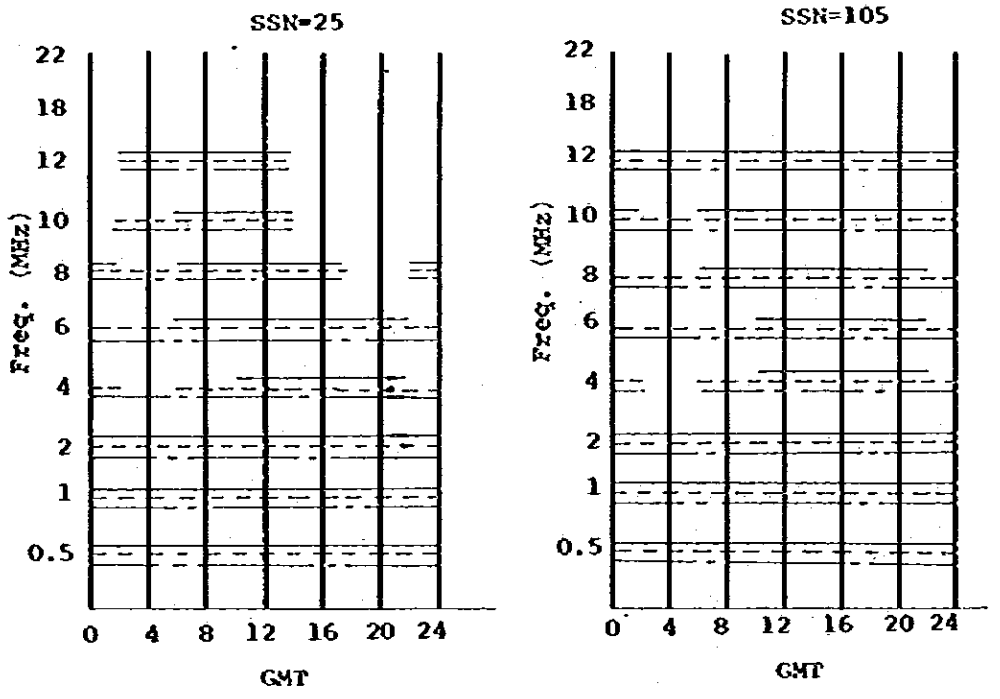

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------ A2 TG 8b
—·—·— A1 TG 8b

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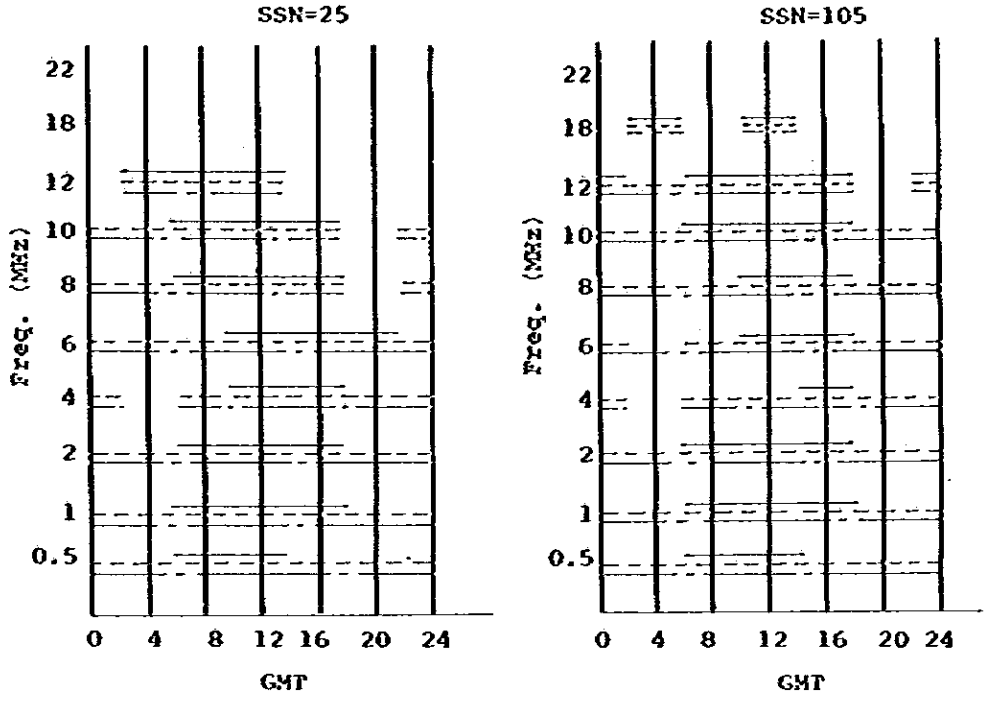
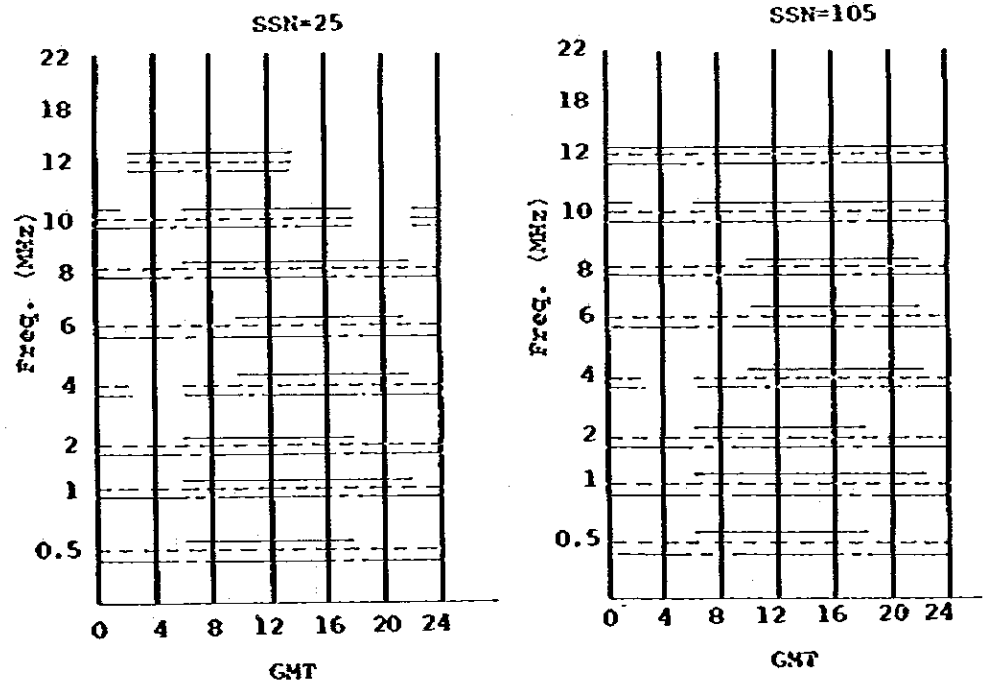
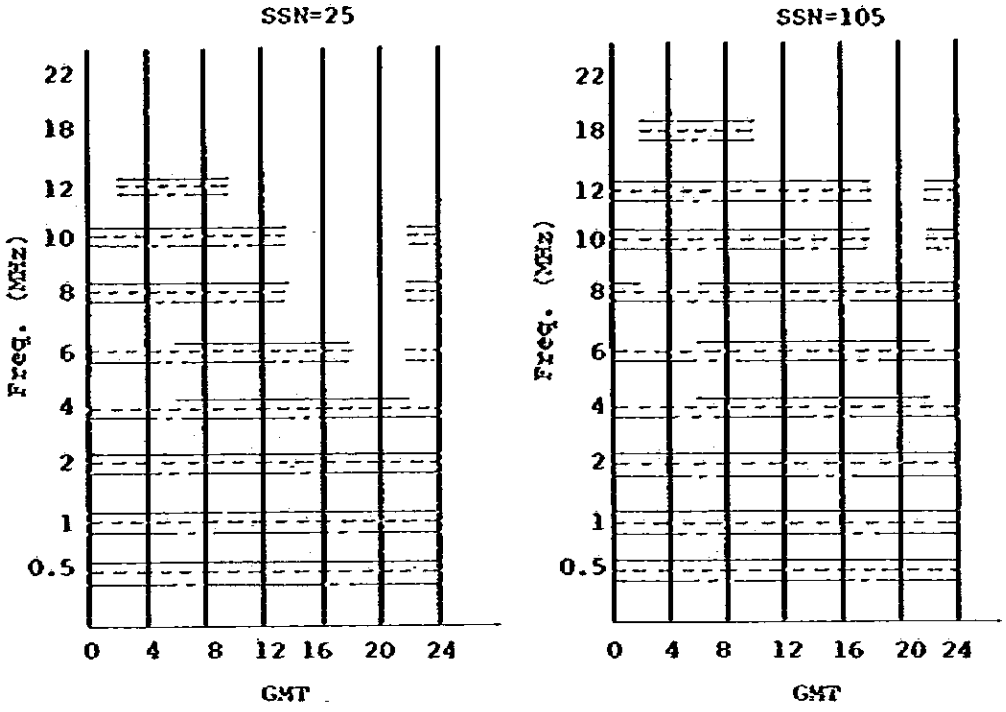


(December)

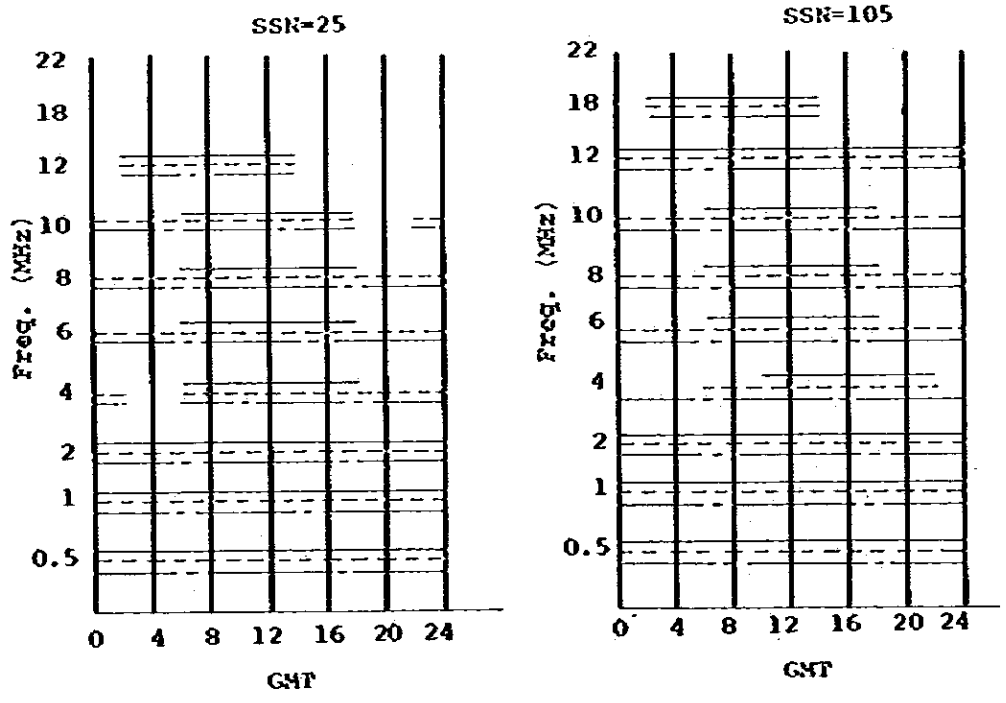


——— A3J SSB
- - - - - - A2 TG 8b
—·— A1 TG 8b

(June)



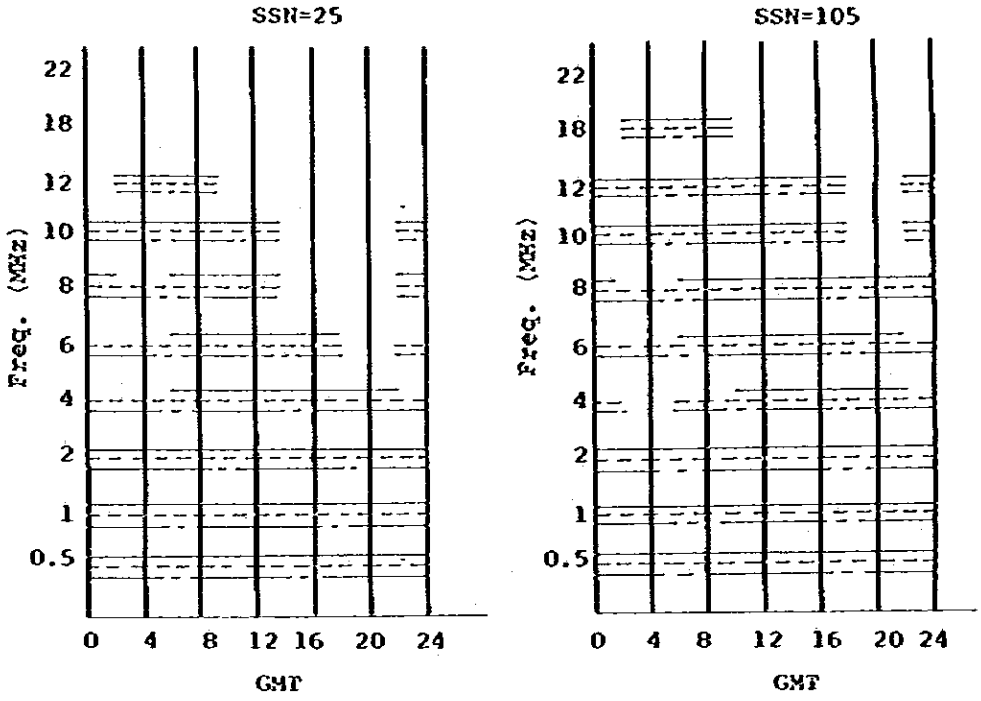
(December)



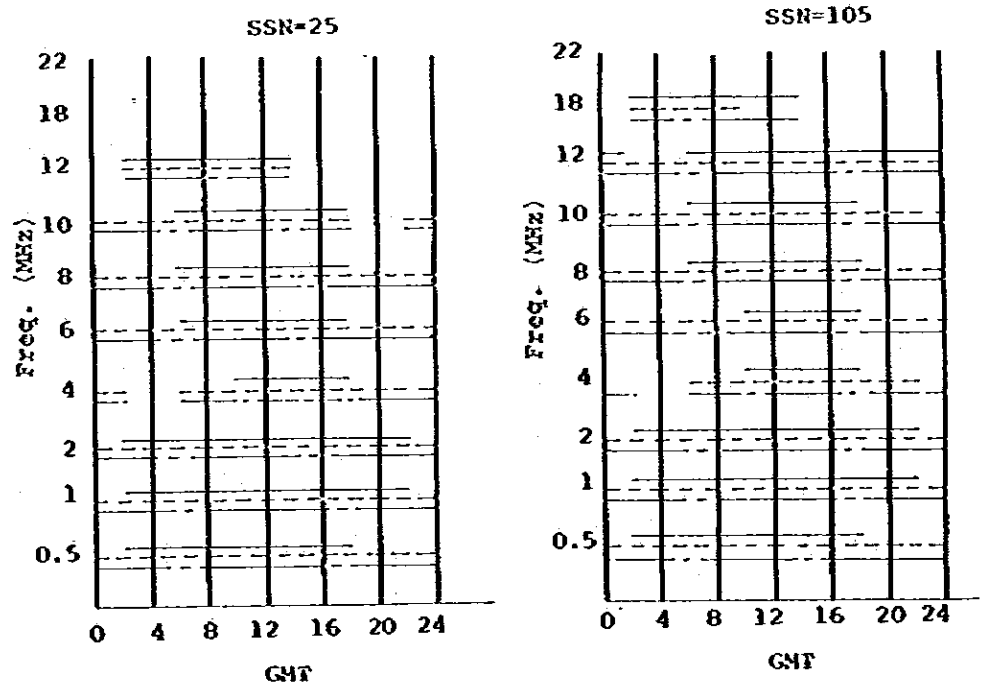
——— A3J SSB
------ A2 TG 8b
—·—·— A1 TG 8b

JAKARTA-JAKARTA N 300

(June)

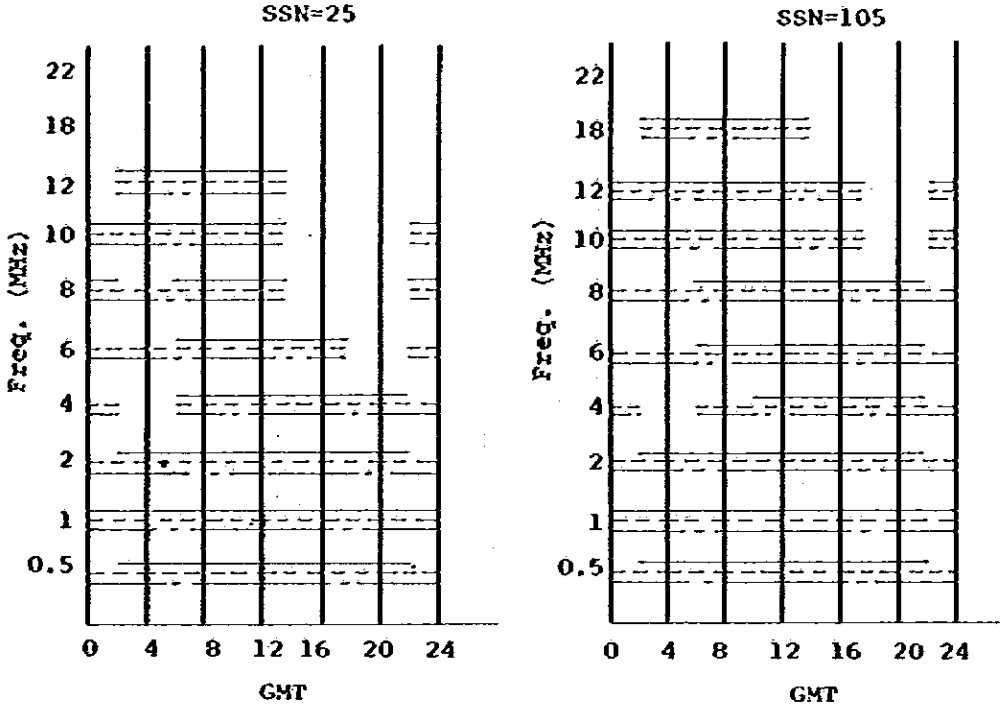


(December)

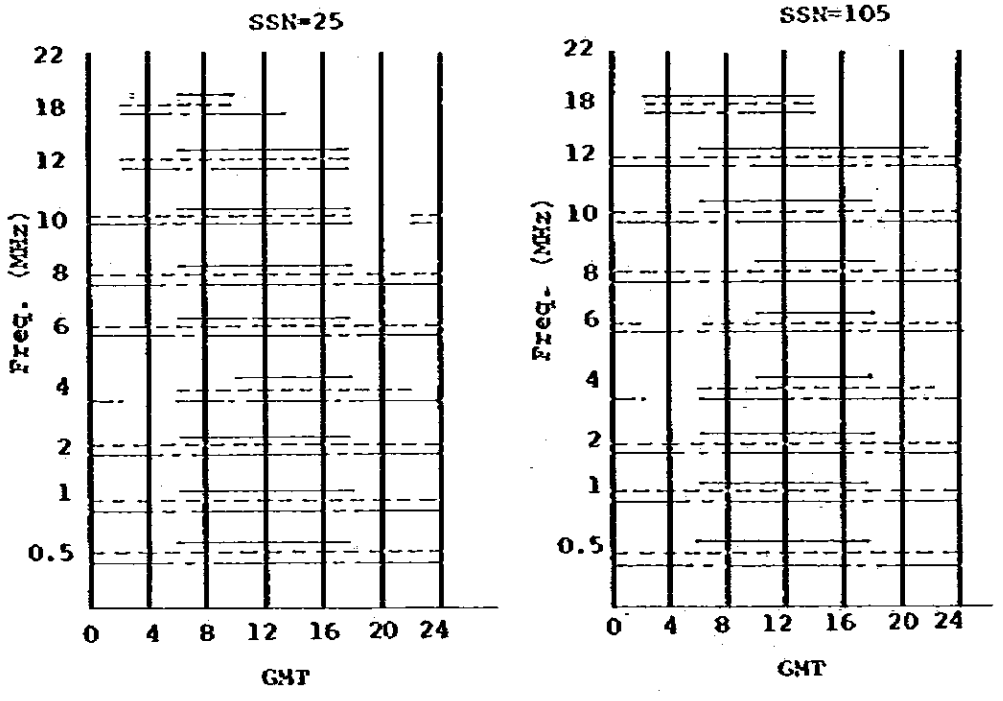


——— A3J SSB
- - - - - - A2 TG 8b
—·—·— A1 TG 8b

(June)



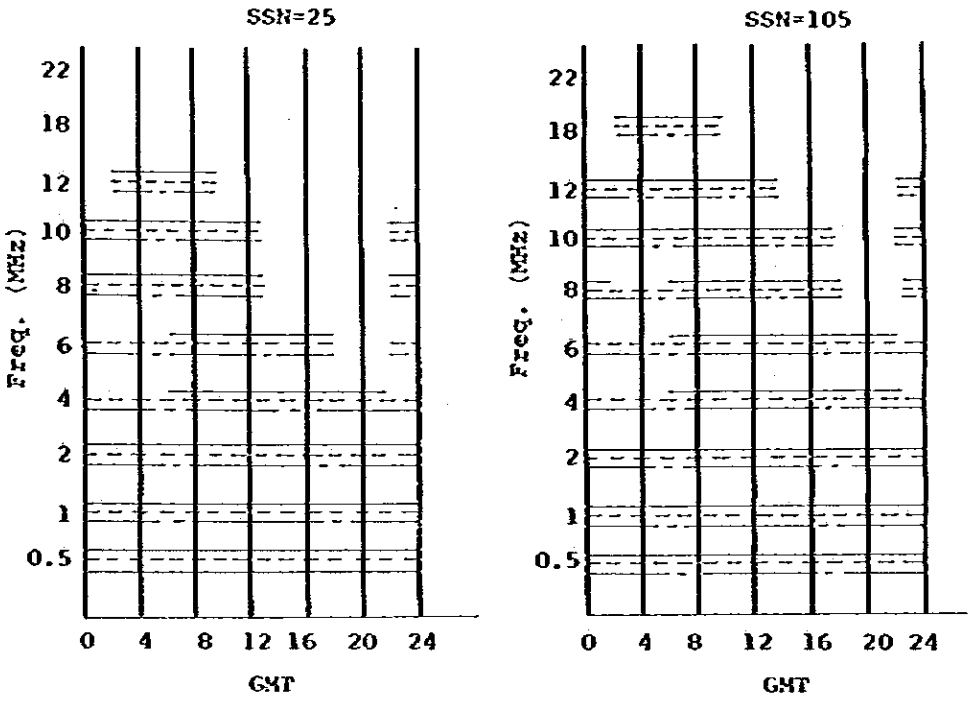
(December)



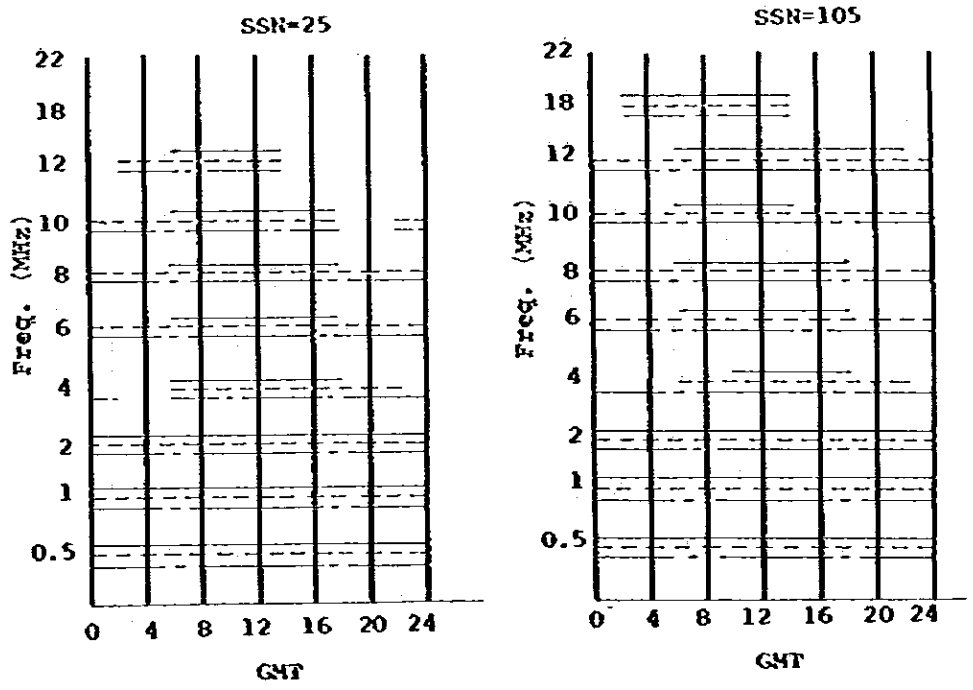
——— A3J SSB
------ A2 TG 8b
—·—·— A1 TG 8b

SURABAYA-SURABAYA N 100

(June)

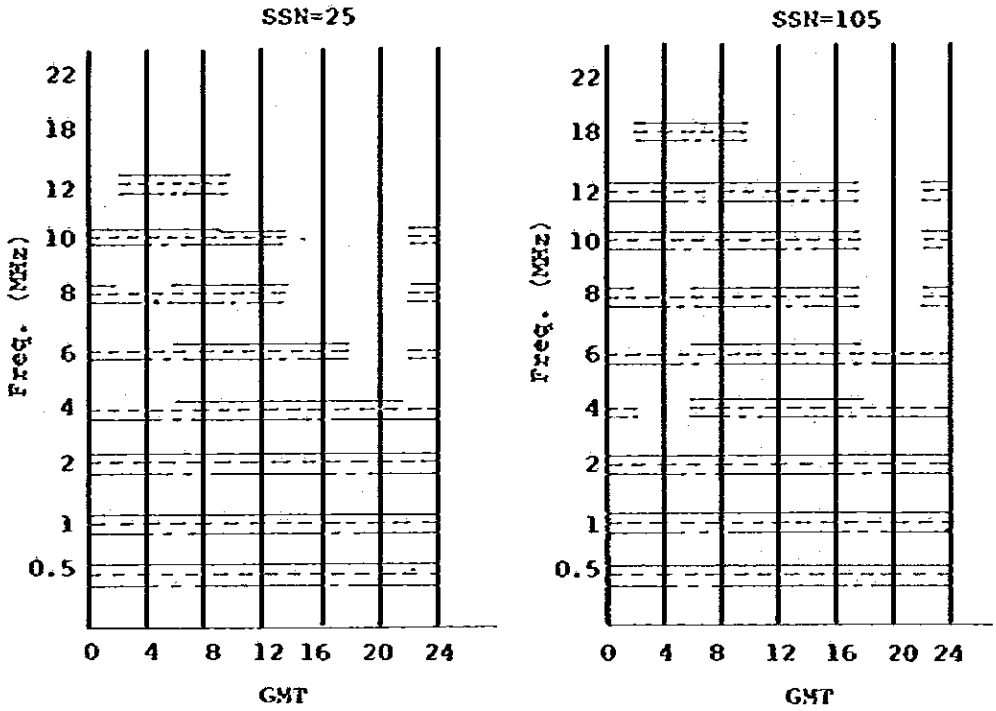


(December)

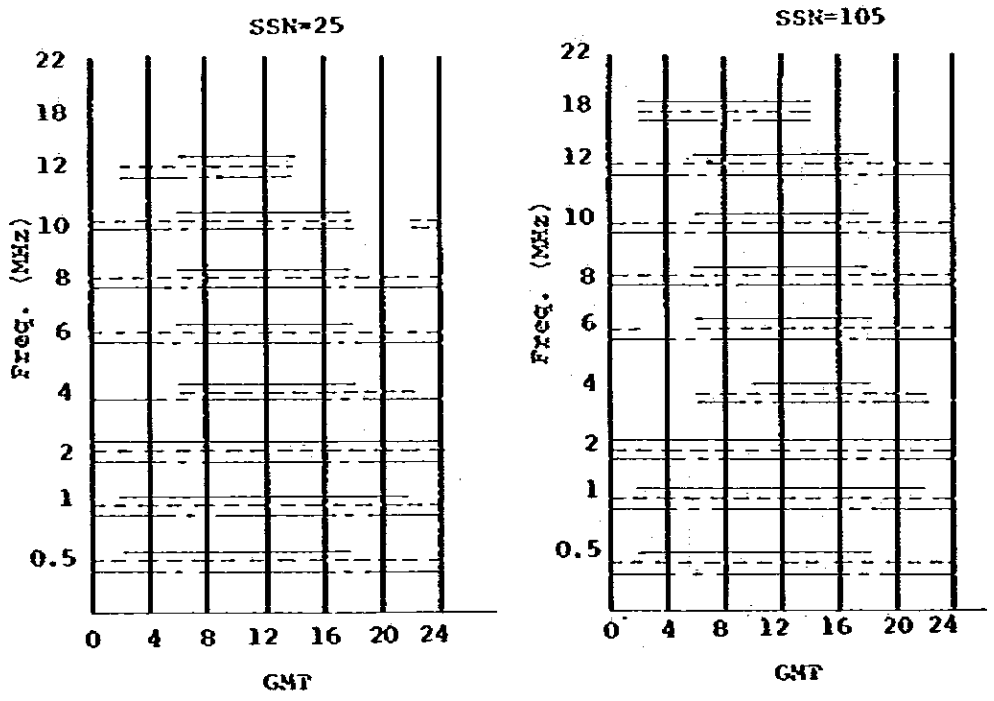


——— A3J SSB
- - - - - - A2 TG 8b
—·— A1 TG 8b

(June)



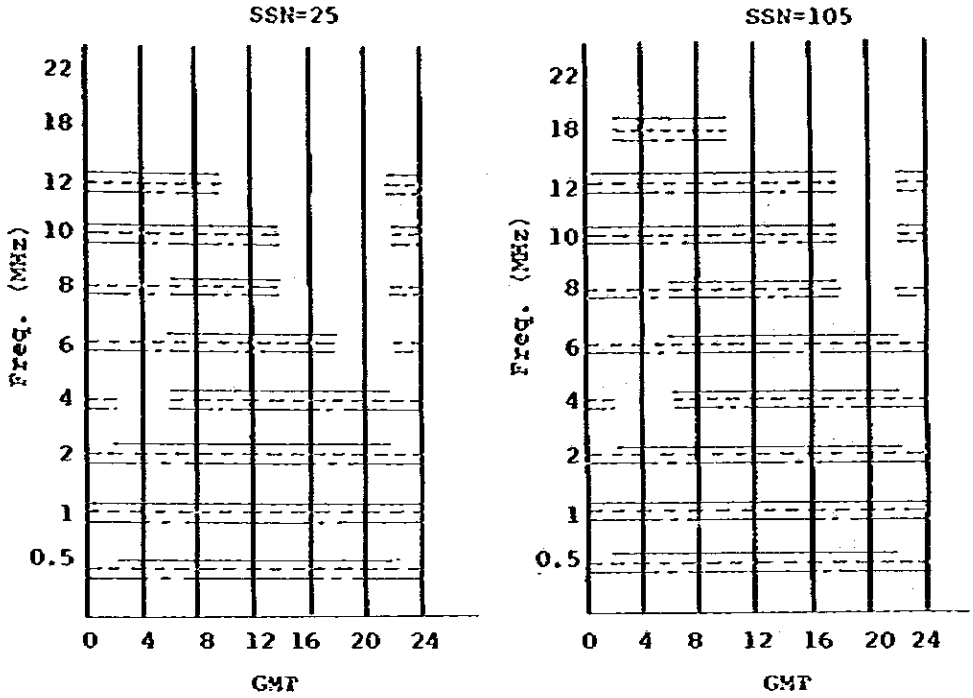
(December)



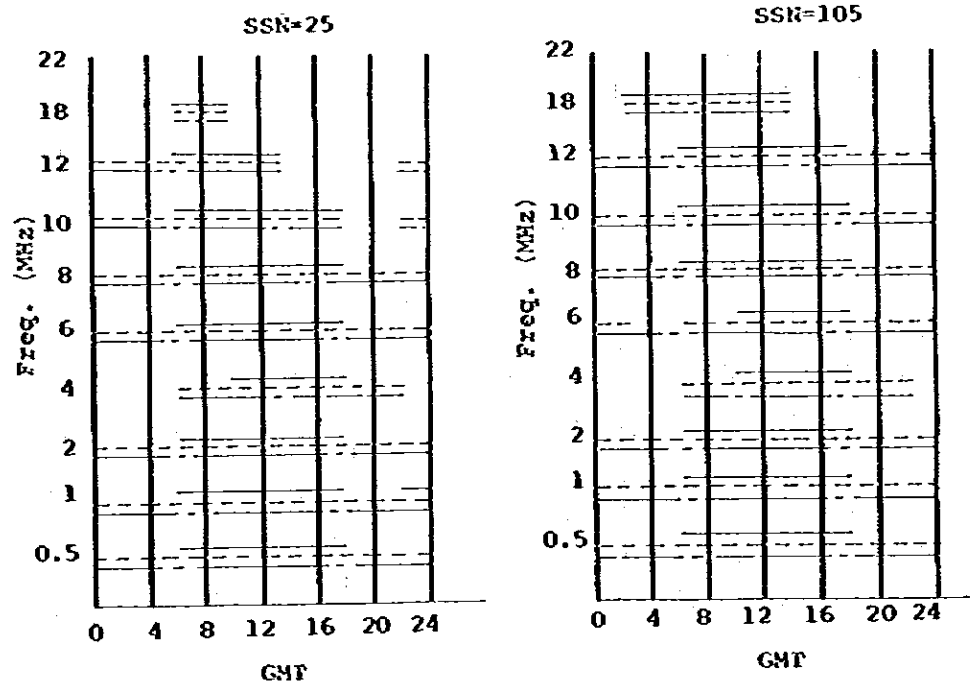
——— A3J SSB
- - - - - - A2 TG 8b
—·— A1 TG 8b

SURABAYA-SURABAYA N 500

(June)



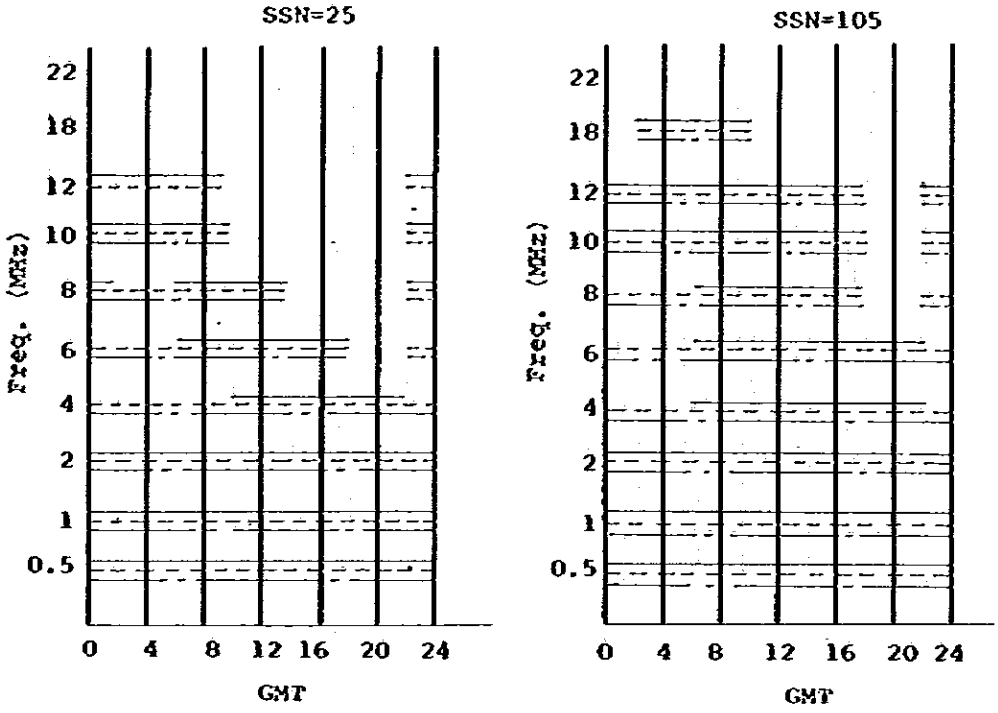
(December)



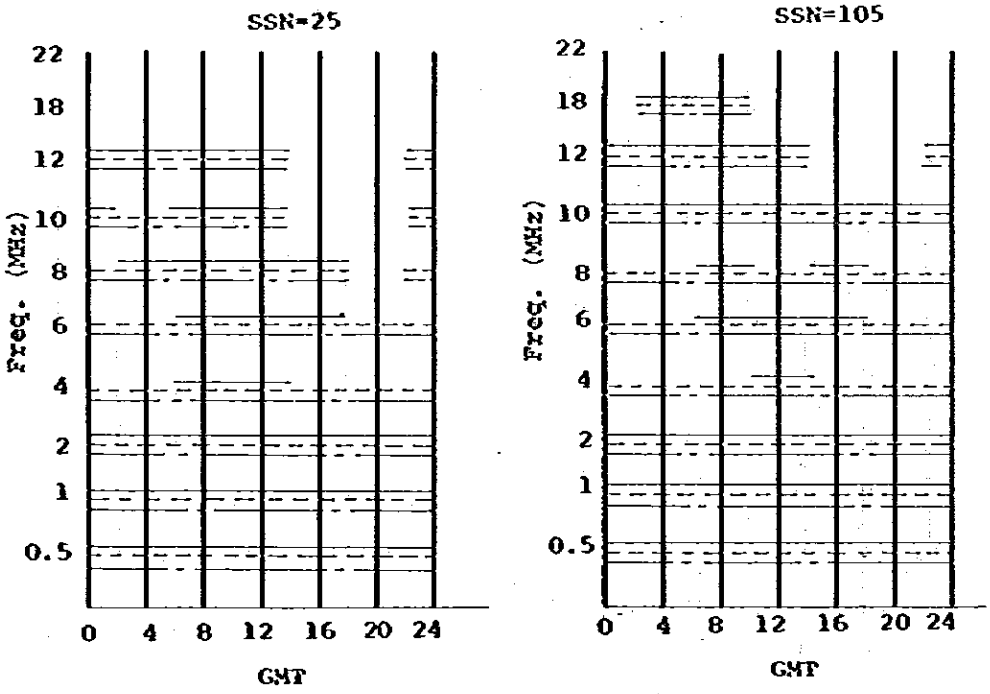
——— A3J SSB
- - - - - - A2 TG 8b
—·— A1 TG 8b

AMBON-AMBON S 100

(June)



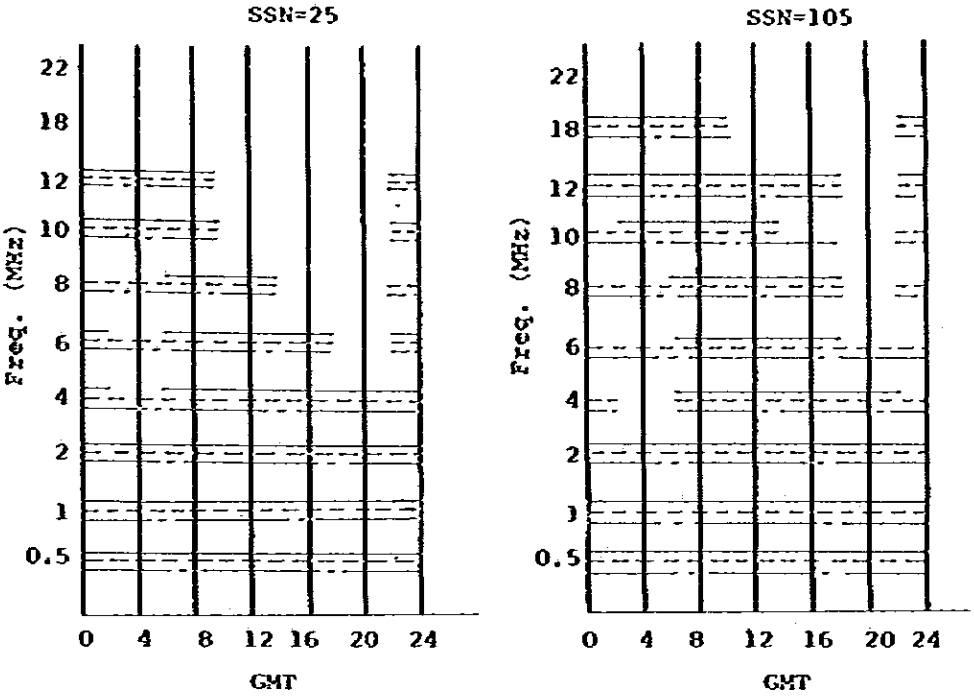
(December)



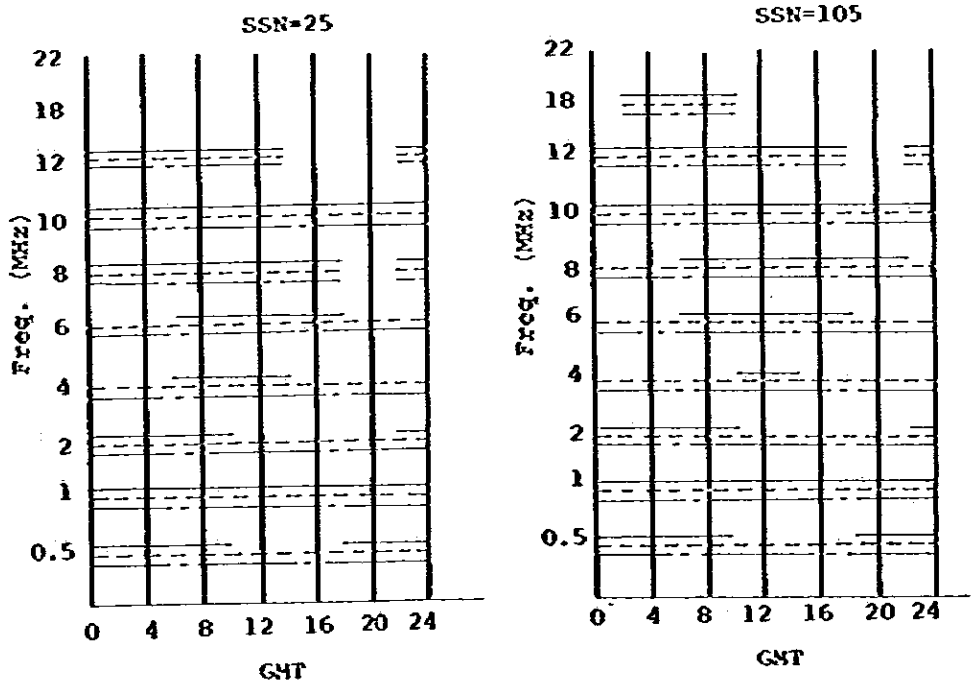
——— A3J SSB
- - - - - - A2 TG 8b
—·— A1 TG 8b

AMBON-AMBON S 300

(June)



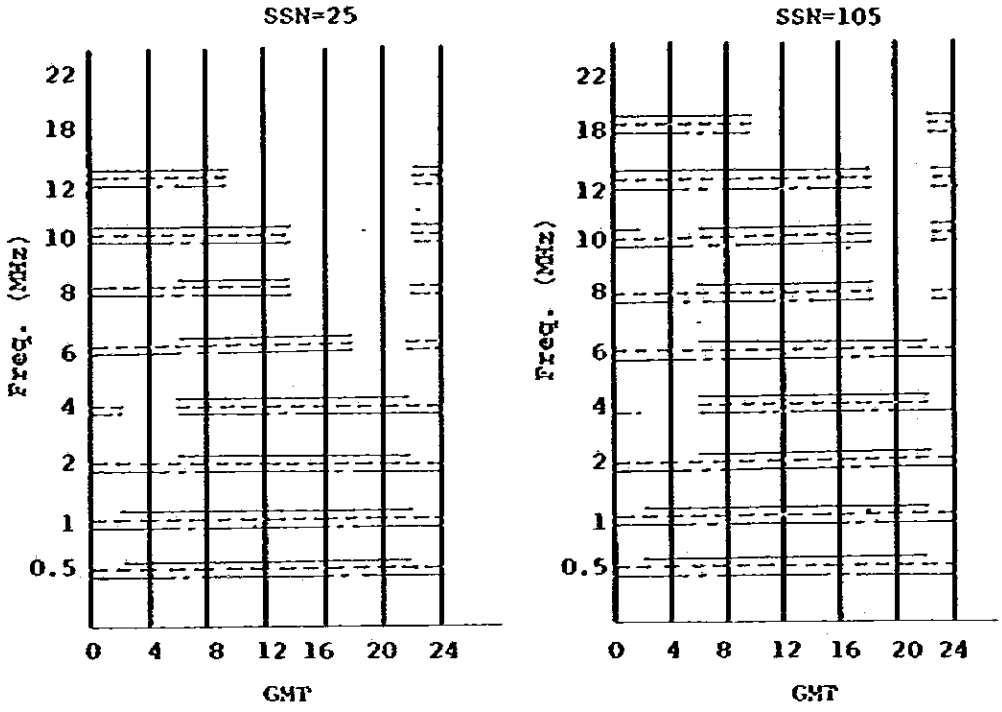
(December)



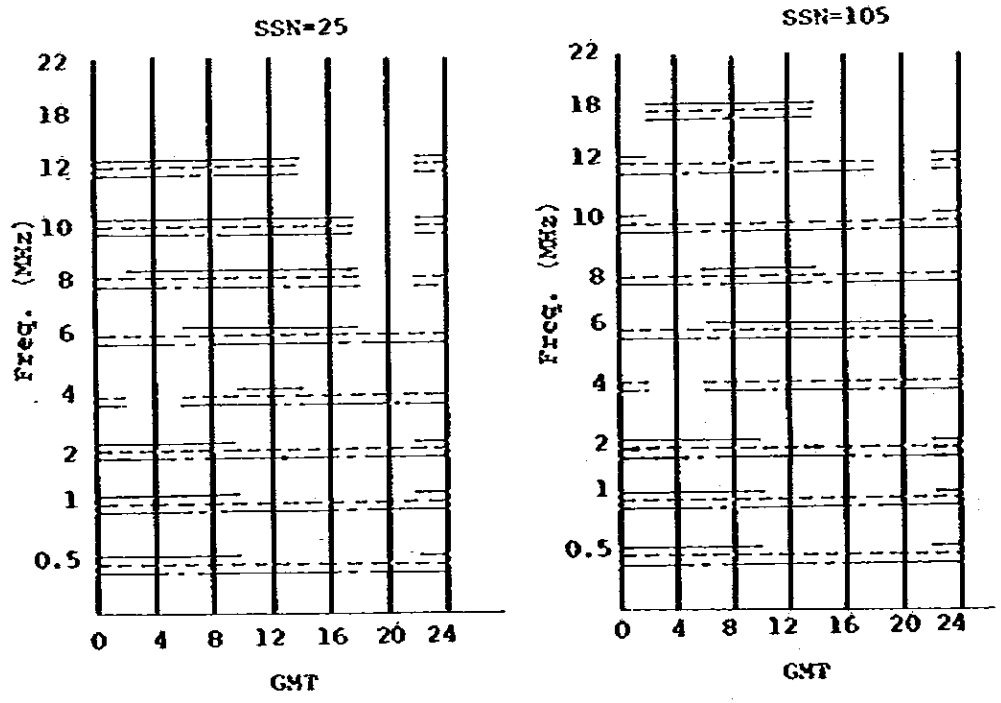
——— A3J SSB
- - - - - - A2 TG 8b
—·—·— A1 TG 8b

AMBON-AMBON S 500

(June)



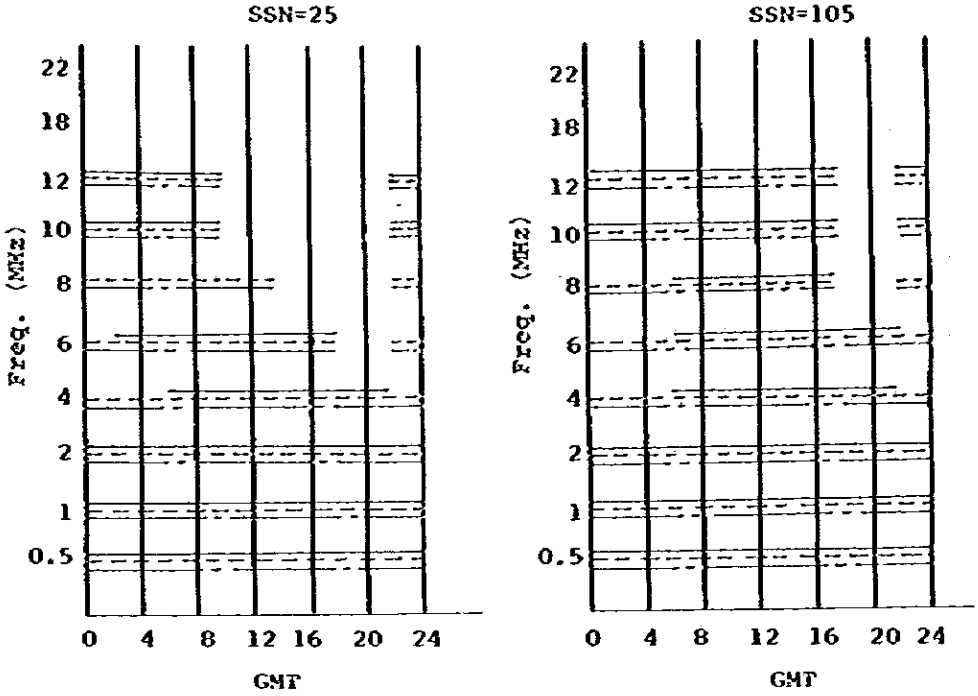
(December)



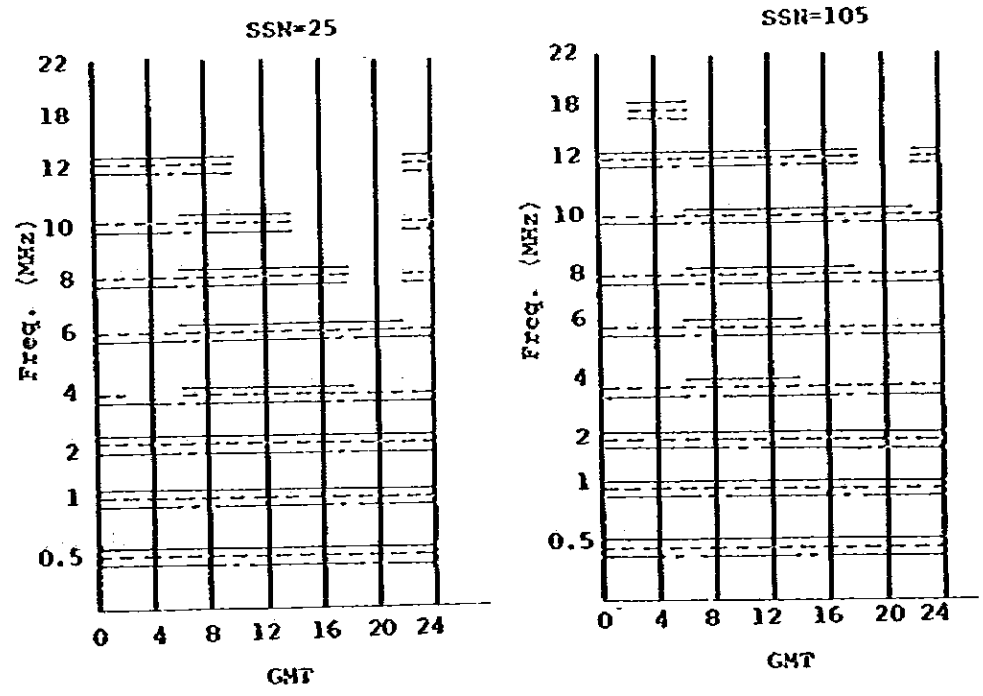
——— A3J SSB
------ A2 TG 8b
—·— A1 TG 8b

JAYAPURA-JAYAPURA N 100

(June)

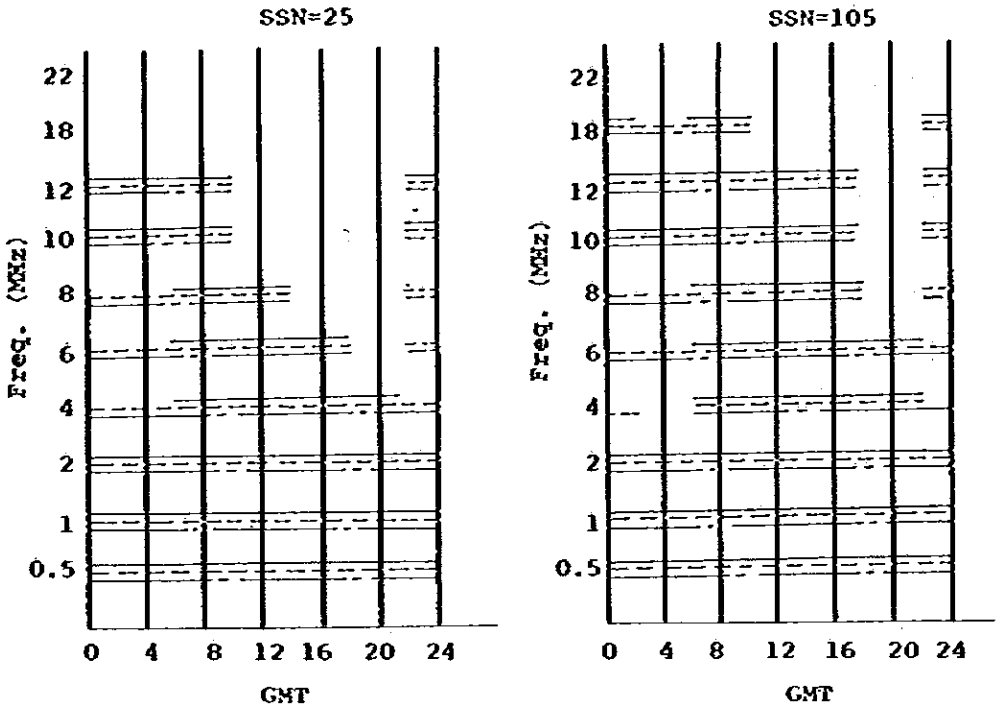


(December)

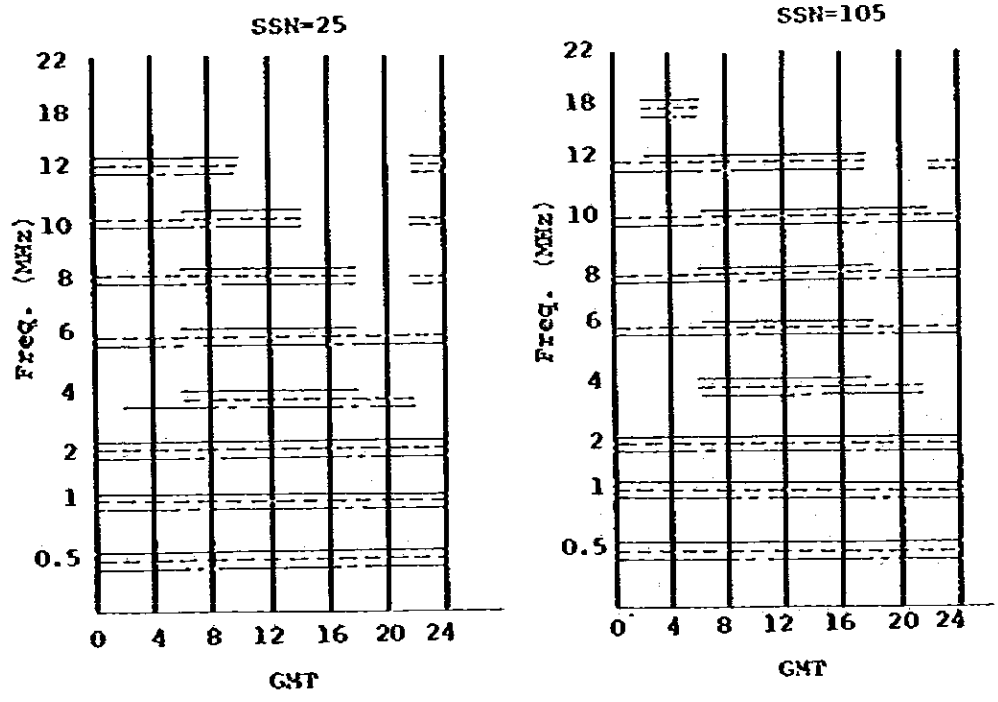


——— A3J SSB
- - - - - - A2 TG 8b
—·—·— A1 TG 8b

(June)

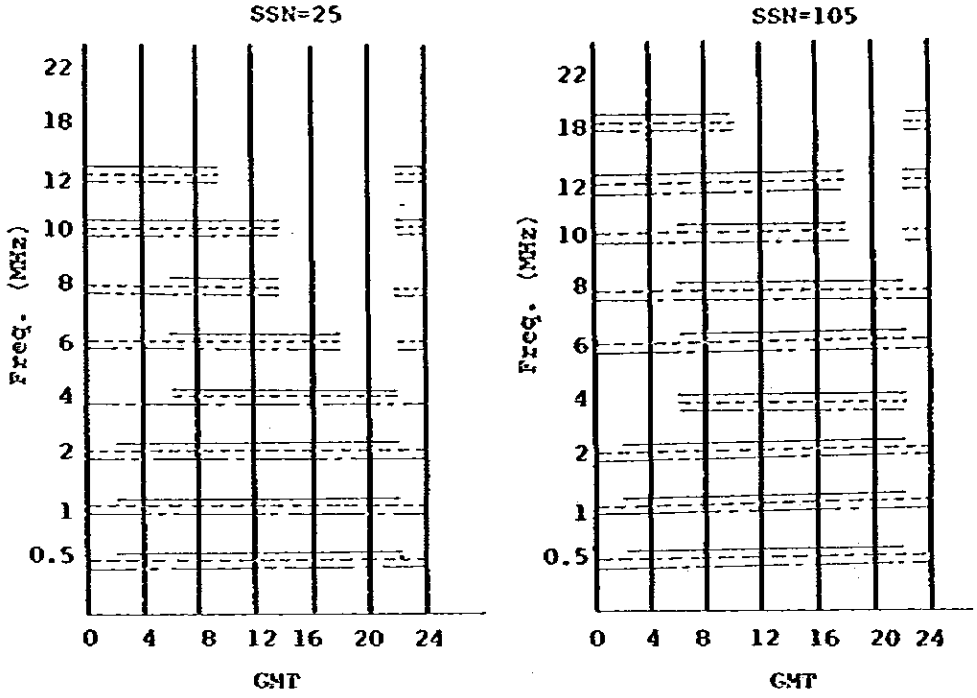


(December)

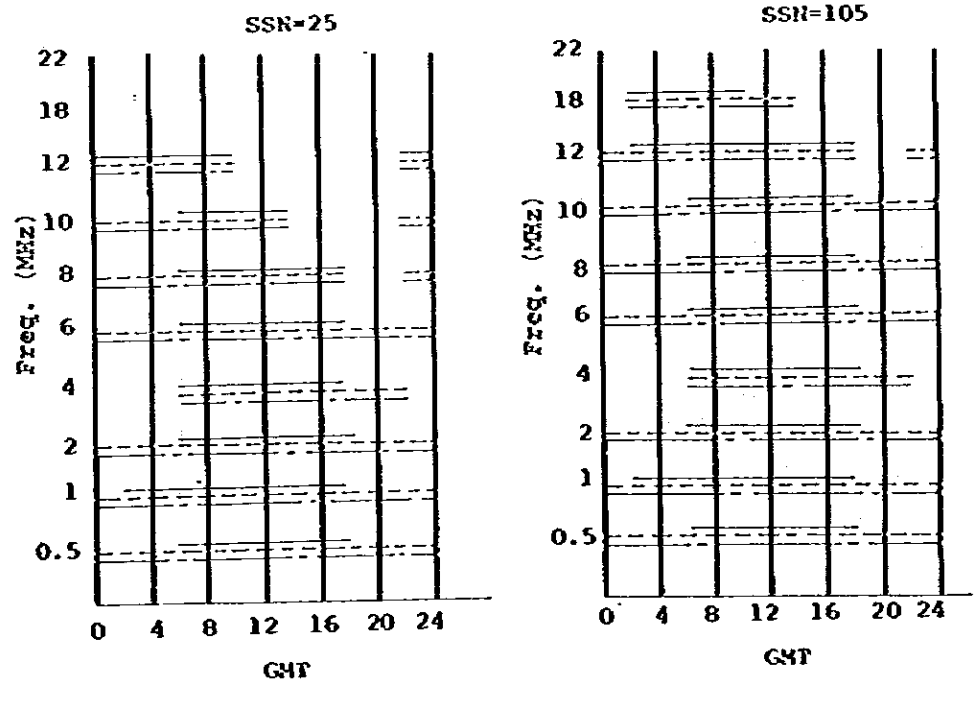


——— A3J SSB
- - - - - - A2 TG 8b
—·— A1 TG 8b

(June)



(December)



——— A3J SSB
- - - - - - A2 TG 8b
—·—·— A1 TG 8b

LIST OF EQUIPMENT TO BE PROVIDED FOR GENERAL COAST STATIONS & MAINTENANCE CENTER (URGENT DEVELOPMENT PROGRAM IN REPELITA III)

Installation \ Location	General Coast Station			Maintenance Center									
	Ambon	Balikpapan	Sorong	Medan	Dumai	Jakarta	Surabaya	Banjarmasin	Ujung Pandang	Manado	Ambon	Jayapura	Total
1 KW MF TG Transmitter		2	2			1							5
1 KW MF/HF TG.TP Transmitter		3	5			1							9
0.1 KW HF TP Transceiver			1			1							2
1 KW Matching Unit		1	1										2
0.1 KW Dummy Load						1							1
1 KW Dummy Load		1	1			2							4
Ant Matrix		1	1										2
MF/HF Receiver		3	7			2							12
Preset Unit		2	5			1							8
Scan Unit		1	2			1							4
Ant. Multicoupler		3	2										5
Ant. Exchanger		3	7										10
Operator's Position		3	5										8
Supervisory Console		1	1										2
Remote Control Unit		4	3			1							8
VODAS		3	3										6
TP Repeater		4	4										8
Morse Tape Transmitter		1	1										2
ARQ													
Teleoperation Unit													
Teleprinter													
UHF 12CH TR with Max VFT & Antenna	1	1	1			1							4
VHF T/R with Ant. & Duplexer		2	2			1							5
500 kHz Auto Alarm Receiver		1	1										2
2182 " " "		1	1										2
Antenna (Set)		1	1										2
Mast		6	6										12
Measuring Instrument & Tools (B)		1	1										2
" " (MC)				1	1	1	1	1	1	1	1	1	9
Power Plant (Set)		2	2			1							5
Power Plant for M. Center				1	1		1	1	1	1	1	1	8

LIST OF EQUIPMENT TO BE PROVIDED
FOR GENERAL COAST STATION
(SHORT TERM DEVELOPMENT PROGRAM IN REPELITA IV)

Installation \ Location	Belawan	Dumai	Jakarta	Surabaya	Banjarmasin	Ujung Pandang	Biteng	Ambon	Jayapura	Palembang	Tg. Uban	Teluk Bayur	Pontianak	Cilacap	Lembar	Kupang	Kendari	Total
1 KW MF TG Transaitter	2	2		2	2	2	2	2	2	2	2	2	2	2	2	2	2	32
1 KW MF/HF TG.TP Transaitter	6	6		6	5	3	3	6	3	5	3	5	5	3	3	4	3	69
0.1 KW HF TP Transceiver					1								1	1	1	1	1	6
1 KW Matching Unit					1						1	1	1	1	1	1	1	8
1 KW Dummy Load					1						1	1	1	1	1	1	1	8
Ant Matrix					1						1	1	1	1	1	1	1	8
MF/HF Receiver	1	1		1	7	2	3	2	3	7	5	7	7	5	5	6	5	67
Preset Unit	1	1		1	5	2	3	2	3	5	3	5	5	3	3	4	3	49
Scan Unit					2					2	2	2	2	2	2	2	2	18
Ant. Multicoupler					2	1	1	1	1	2	2	2	2	2	2	2	2	22
Ant. Exchanger	1	1		1	7	2	3	2	3	7	5	7	7	5	5	6	5	67
Operator's Position	2	2	2	2	5	2	3	2	3	5	4	5	5	3	4	4	4	57
Supervisory Console					1					1	1	1	1	1	1	1	1	9
Remote Control Unit	3	3		3	3	2	2	3	2	3	2	3	3	2	2	2	2	40
VODAS					1					2	2	3	3	2	2	2	2	19
TP Repeater	1	1	2	1	1	1	1	1	1	3	3	4	4	3	3	3	3	36
Morse Tape Transaitter					1					1	1	1	1	1	1	1	1	9
ARQ	1	1	2	1	1	1	1	1	1									10
Teleoperation Unit (NSDP)	1	1	2	1	1	1	1	1	1									10
Teleprinter	1	1	2	1	1	1	1	1	1									10
UHF 12ch TR with Max VFT & Antenna					1					1	1	1	1	1	1	1	1	9
VHF T/R withAnt. & Duplexer	2	2	4	2	4	2	2	2	1	4	3	4	2	1	3	3	3	44
500 kHz Auto Alarm Receiver					1					1	1	1	1	1	1	1	1	9
2182 " " " "					1					1	1	1	1	1	1	1	1	9
Antenna (Set)					1					1	1	1	1	1	1	1	1	9
Mast					4					5	5	5	5	5	5	5	5	44
DSC Unit	1	1	2	1	1	1	1	1	1									10
Power Plant (Set)	2	2		2	2	2	2	2	2		2	2	2	2	2	2	2	30

LIST OF EQUIPMENT TO BE PROVIDED
FOR GENERAL COAST STATION
(LONG TERM DEVELOPMENT PROGRAM IN REPELITA V)

Installation \ Location	Sabang	Panjang	Cirebon	Semarang	Samarinda	Tarakan	Dongala	Biak	Tg. Balai Karimun	Tg. Pinang	Jambi	Dili	One Class-D Station	95 Class-D Station	Total
1 KW MF TG Transmitter	2	2	2	2	2	2	2	2							16
1 KW MF/HF TG.TP Transmitter	3	3	3	1	5	5	3	3							26
0.1 KW HF TP Transceiver	1				1	1	1	1	1	1		1			8
1 KW Matching Unit	1	1	1	1	1	1	1	1							8
1 KW Dumay Load	1	1	1		1	1	1	1							7
Ant Matrix	1	1	1		1	1	1	1							7
MF/HF Receiver	5	5	5		7	7		5	3	3	3	3			46
Preset Unit	3	3	3		5	5		3	3	3	3	3			34
Scan Unit	2	2	2		2	2		2							12
Ant. Multicoupler	2	2	2		2	2		2							12
Ant. Exchanger	5	5	5		7	7		5							34
Operator's Position	4	4	4		5	6		4							27
Supervisory Console	1	1	1	1	1	1	1	1							8
Remote Control Unit	2	2	2	1	3	3	2	2							17
VODAS	2	2	2	1	3	3	2	2							17
TP Repeater	3	3	3	1	4	4	3	3	1	1	1	1	(1)	95	119
Morse Tape Transmitter	1	1	1	1	1	1	1	1							8
ARQ															
Teleoperation Unit															
Teleprinter															
UHF 12CH TR with Max VFT & Antenna	1	1	1		1	1	1	1					(3)	285	292
VHF T/R withAnt. & Duplexer	3	2	2	1	3	4	2	3	3	3	3	3			32
500 kHz Auto Alarm Receiver	1	1	1		1	1	1	1							7
2182 " " " "	1	1	1		1	1	1	1							7
Antenna (Set)	1	1	1	1	1	1	1	1							8
Mast	5	5	5		5	5	5	5	2	2	1	1	(1)	95	130
Dsc Unit															
Power Plant (Set)	2	2	2		2	2	2	2	1	1	1	1	(1)	95	113

LIST OF EQUIPMENT TO BE PROVIDED
FOR GENERAL COAST STATION
(LONG TERM DEVELOPMENT PROGRAM IN REPELITA VI)

Installation \ Location	Sibolga	Ternate	Merauke	Fak Fak	Panarukan	Benoa	Sampit	Manokwari	Single Class-D Station	108 Class-D Stations	Total
1 KW MF TG Transmitter	2	2	2	2							8
1 KW MF/HF TG.TP Transmitter	5	3	3	5							16
0.1 KW HF TP Transceiver	1	1	1	1	1		1	1			7
1 KW Matching Unit	1	1	1	1							4
1 KW Dummy Load	1	1	1	1							4
Ant Matrix	1	1	1	1							4
MF/HF Receiver	7	3	5	7	3	3	3	3			34
Preset Unit	5	2	3	5	3	3	3	3			27
Scan Unit	2	1	2	2							7
Ant. Multicoupler	2	1	2	2							7
Ant. Exchanger	7	3	5	7							22
Operator's Position	6	3	3	6							18
Supervisory Console	1	1	1	1							4
Remote Control Unit	3	2	2	3							10
VODAS	3	2	2	3							10
TP Repeater	4	3	3	4	1	1	1	1	(1)	108	126
Morse Tape Transmitter	1	1	1	1							4
ARQ											
Teleoperation Unit											
Teleprinter											
UHF 12ch TR with Max VFT & Antenna	1	1	1	1							4
VHF T/R withAnt. & Duplexer	4	3	1	4	3	3	3	3	(3)	324	348
500 kHz Auto Alarm Receiver	1	1		1							3
2182 " " " "	1	1		1							3
Antenna (Set)	1	1	1	1	1	1	1	1	(1)	108	40
Mast	5	5	5	5	2	2	2	2	(1)	108	136
DSC Unit											
Power Plant (Set)	2	2	2	2	1	1	1	1	(1)	108	120

LIST OF EQUIPMENT TO BE PROVIDED
FOR COAST STATIONS, DF STATIONS & KPLP DETACHMENT
(URGENT DEVELOPMENT PROGRAM IN REPELITA III)

Installation \ Station	Medan (Belawan)	Dumai	Tg. priok & Jakarta Central	Surabaya	Ujung Pandang	Menado (Bitung)	Ambon	Balikpapan	Sorong	Belitung	Total
5 KW MF/HF TG/TP TX			2								2
1 " " " "	3	3	1	3	3	3	3	1	1		21
0.5" " " "								2	2	1	5
Spot RX (6 x Freq.)	2	2	2	2	2	2	2	1	1		16
Allwave RX	2	2	2	2	2	2	2	1	1	1	17
Operation Console	1	1	1	1	1	1	1	1	1	1	10
UHF Link	1	1	1	1	1	1	1	2	2	1	12
VFT	1	1	1	1	1	1	1	1	1	0	9
VHF T/R 5ch	2	2	3	2	2	3	2	2	2	0	20
Power Supply	1	1	1	1	1	1	1	1	1	1	10
DF RX								1	1	1	3
DF Monitor Console								1	1	1	3
TX Antenna Tower	2	2	2	2	2	2	2	2	2	2	20
RX Antenna Tower	2	2	2	2	2	2	2	2	2		18
ARQ	1	1	1	1	1	1	1				7
Teleprinter	5	6	11	9	4	4	4	1	1		45
Rocke Ant. & Earth for DF								1	1	1	3
Ant. Expansion & Earthing	1	1	1	1	1	1	1	1	1	1	10
DF Hut								1	1	1	3
Measuring Instrument	1	1	1	1	1	1	1	1	1	1	10
Spares	1	1	1	1	1	1	1	1	1	1	10

LIST OF EQUIPMENT TO BE PROVIDED
FOR COAST STATIONS, DF STATIONS & KPLP DETACHMENT
(SHORT TERM DEVELOPMENT PROGRAM IN REPELITA IV)

Installation \ Station	Tg. Uban	Teluk Bayur	Pontianak	Cilacap	Lembar	Kupang	Banjarmasin	Kendari	Jayapura	Total
5 KW MF/HF TG/TP TX										
1 " " " "	3	1	1	1	3	1	1	1	1	13
0.5" " " "	4	2	2	2	4	2	3	2	3	24
Spot RX (6 x Freq.)	1	1	1	1	1	1	2	1	2	11
Allwave RX	1	1	1	1	1	1	2	1	2	11
Operation Console	1	1	1	1	1	1	1	1	1	9
UHF Link	2	2	2	2	2	2	2	2	2	18
VFT	1	1	1	1	1	1	1	1	1	9
VHF T/R 5ch	2	2	2	2	2	2	2	2	2	18
Power Supply	1	1	1	1	1	1	1	1	1	9
DF RX	1	1	1	1	1	1	1	1		8
DF Monitor Console	1	1	1	1	1	1	1	1		8
TX Antenna Tower	1	2	2	2	1	2	2	2	2	16
RX Antenna Tower	1	2	2	2	1	2	2	2	2	16
Conical Monopole	1				1					2
ARQ							1		1	2
Teleprinter	1	1	1	1	1	1	7	1	8	22
Rocke Ant. & Earth for DF	1	1	1	1	1	1	1	1		8
Ant. Expansion & Earthing	1	1	1	1	1	1	1	1	1	9
DF Hut	1	1	1	1	1	1	1	1		8
Measuring Instrument	1	1	1	1	1	1	1	1	1	9
Spares	1	1	1	1	1	1	1	1	1	9

LIST OF EQUIPMENT TO BE PROVIDED
FOR COAST STATIONS, DF STATIONS & KPLP DETACHMENT
(LONG TERM DEVELOPMENT PROGRAM IN REPELITA V)

Installation \ Station	Sabang	Palembang	Panjang	Cirebon	Semarang	Samarinda	Tarakan	Biak	Sumba	Dili	Baubau	Donggala	Gorontalo	Jamdena	Tual	Kep-Aru	Total
5 KW MF/HF TG/TP TX																	
1 " " " "	1	1	1	1	1	3	1	3									12
0.5" " " "	2	2	2	2	2	4	2	4	1	1	1	1	1	1	1	1	28
Spot RX (6 x Freq.)	1	1	1	1	1	1	1	1									8
Allwave RX	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
Operation Console	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
UHF Link	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	24
VFT	1	1	1	1	1	1	1	1									8
VHF T/R 5ch	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	16
Power Supply	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
DF RX	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	15
DF Monitor Console	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	15
TX Antenna Tower	2	2	2	2	2	1	2	1	2	2	2	2	2	2	2	2	30
RX Antenna Tower	2	2	2	2	2	1	2	1									14
Conical Monopole						1		1									2
Teleprinter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
Rocke Ant. & Earth for DF	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	15
Ant. Expansion & Earthing	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
DF Hut	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	15
Measuring Instrument	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
Spares	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16

LIST OF EQUIPMENT TO BE PROVIDED
FOR COAST STATIONS, DF STATIONS & KPLP DETACHMENT
(LONG TERM DEVELOPMENT PROGRAM IN REPELITA VI)

Installation \ Station	Sibolga	Ternate	Fak-Fak	Merauke	Bengkulu	Karimunjawa	Bolawan	Dumai	Jakarta	Surabaya	Ujung Pandang	Birung	Ambon	Jayapura	Total
5 KW MF/HF TG/TP TX															
1 " " " "	3	3	1	1											8
0.5" " " "	4	4	2	2	1	1									14
Spot RX (6 x Freq.)	1	1	1	1											4
Allwave RX	1	1	1	1	1	1									6
Operation Console	1	1	1	1	1	1									6
UHF Link	2	2	2	2	1	1	1	1	1	1	1	1	1	1	18
VFT	1	1	1	1											4
VHF T/R 5ch	2	2	2	2			1	1	1	1	1	1	1	1	16
Power Supply	1	1	1	1	1	1									6
DF RX	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
DF Monitor Console	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
TX Antenna Tower	1	1	2	2	2	2									10
RX Antenna Tower	1	1	2	2											6
Conical Monopole	1	1													2
Teleprinter	1	1	1	1											4
Rocke Ant. & Earth for DF	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
Ant. Expansion & Earthing	1	1	1	1	1	1									6
DF Hut	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
Measuring Instrument	1	1	1	1	1	1									6
Spares	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14

List of Measuring Equipment and Tools

No.	Item	Quantity (Note) M/C	A	B	C	D
1.	Signal generator for HF	1				
2.	Oscilloscope	1	1	1	1	1
3.	Signal analyser	1				
3.1	IF section	1				
3.2	RF section	1				
3.3	Cable	1				
4.	Analog voltmeter	1				
5.	Electronic counter	1	1	1	1	
6.	Multimeter	2	2	2	1	1
7.	Field strength meter	1				
8.	Artificial voice generator	1	1	1		
9.	Distortion meter	1				
10.	Bandwidth meter	1	1	1		
11.	Trolley	1	1	1		
12.	Terminating wattmeter	1	1	1	1	1
13.	FM linear detector	1				
14.	Electronic voltmeter	1				
15.	Standard signal generator	1				
16.	Terminated power meter	1	1	1		
17.	Signal generator for VHF & UHF	1				
18.	Frequency counter	1				
19.	Psophometric weighting network	1				
20.	Selective level meter & oscillator	1				
21.	Directional coupler	1				
22.	Coaxial detector	1				
23.	Maintenance tools	5	5	3	1	1

Note M/C ... Maintenance Center
A,B,C & D ... Class A, Class B, Class C & Class D Coast Stations

Building Space & Cost

Required building spaces and costs are estimated as follows.

1. Spaces

(1) General coast stations

REPELITA III	
Balikpapan & Sorong	405 m^2 x 2 = 810 m^2
REPELITA IV	
Surabaya, Ujung Pandang & Ambon	275 x 3 = 825
Banjarmasin	485
7 Class B stations	405 x 7 = 2,835
	Total 4,145 m^2
REPELITA V	
7 Class B stations	405 x 7 = 2,835
95 Class D stations	70 x 95 = 6,650
	Total 9,485 m^2
REPELITA VI	
Sibolga, Ternate, Merauke & Pak-Pak	405 x 4 = 1,620
108 Class D stations	70 x 108 = 7,560
	Total 9,180 m^2

(2) SAR & DF Facilities

REPELITA III	
9 ROS	120 x 9 = 1,080
2 DF facilities	30 x 2 = 60
1 DF station	150 x 1 = 150
	Total 1,290 m^2
REPELITA IV	
7 ROS	120 x 7 = 840
2 SAR consoles	10 x 2 = 20
9 DF faciliteis	30 x 9 = 270
	Total 1,130 m^2
REPELITA V	
8 SAR consoles	10 x 8 = 80
7 DF facilities	30 x 7 = 210
8 DF stations	150 x 8 = 1,200
	Total 1,490 m^2
REPELITA VI	
4 SAR consoles	10 x 4 = 40
11 DF facilities	30 x 11 = 330
2 DF stations	150 x 2 = 300
	Total 670 m^2

(3) No. of air conditioning equipment is as follows;

NOTE: u ... Unit(s)

REPELITA	Coast Station	SAR & DF Facilities	Total
III	3u x 2 st. = 6	ROS 2u x 9 = 18u DF Fac. 1u x 2 = 2 u DF St. 3u x 1 = 3 u	29u
IV	Cl-A,RX 2u x 3 = 6u Banjarmasin 3u x 1 = 3u Others 3u x 7 = 21u	ROS 2u x 7 = 14u DF Fac. 1u x 9 = 9u	53u
V	Cl-B st. 3u x 7 = 21u Cl-D st. 1u x 95 = 95u	DF Fac. 1u x 7 = 7u DF St. 3u x 8 = 24u	147u
VI	Cl-B st. 3u x 4 = 12u Cl-D st. 1u x 108 = 108u	DF Fac. 1u x 11 = 11u DF St. 3u x 2 = 6u	137u

(4) Cost estimation for buildings is given in the table below.

Unit: Milion Rupiahs

REPELITA	Building		Air Condition eqpt.		Total
	Coast St.	SAR & DF	Coast St.	SAR & DF	
III	227.4	362.2	7.2	34.8	631.6
IV	1,163.9	317.3	36.0	63.6	1,580.8
V	2,663.4	418.4	139.2	146.4	3,367.4
VI	2,577.7	188.1	144.0	164.4	3,074.2

DEPARTEMEN PERHUBUNGAN
DIREKTORAT JENDERAL PERHUBUNGAN LAUT

SUSUNAN TRAYEK PELAYARAN NUSANTARA TETAP DAN TERATUR (REGULAR LINER SERVICE) R.L.S

1979/80 – 1983/84

S.K. DIRJEN PERLA Nomor : 13/1/8
Tgl. 12 Juli 1979

L A M P I R A N
SURAT KEPUTUSAN DIREKTUR JENDERAL PERHUBUNGAN LAUT
NO. : DAL 13 / 1 / 8 TANGGAL : 12 JULI 1979
SUSUNAN TRAYEK PELAYARAN NUSANTARA RLS TAHUN 1979-1983

CODE TRAYEK	U R A I A N T R A Y E K
	WILAYAH BARAT
N - 1	BELAWAN - (Aceh Ports) - PENANG/PORT KLANG - (Ports Dickson) - (Kantang) - BELAWAN
N - 2	BELAWAN - PALEMBANG - (Kuala Tungkal) - (Tembilahan) - (Kuala Enok) - (Pakan Baru) - BELAWAN
N - 3	PADANG - (Sibolga) - MALAHAYATI DSK - (Padang) - SINGAPURA - (Belawan) - (Malahayati dsk) - (Aceh Ports) - (Sibolga) - PADANG
N - 4	TANJUNG PRIOK - PANJANG - TANJUNG PRIOK
N - 5	TANJUNG PRIOK - PADANG - BENGKULU - TANJUNG PRIOK
N - 6	TANJUNG PRIOK - PADANG - (Tanjung Pinang) - JAMBI/ PALEMBANG - TANJUNG PRIOK
N - 7	TANJUNG PRIOK - (Cirebon) - PALEMBANG/JAMBI - (Cirebon) - TANJUNG PRIOK
N - 8	TANJUNG PRIOK - (Tg.Sekong/Cigading) - JAMBI/PAKAN BARU DSK - (Dumai) - (Bengkalis) - (Bagan Siapiapi dsk) - (Selat Panjang) - (Cirebon) - TANJUNG PRIOK
N - 9	TANJUNG PRIOK - BELAWAN - (West Malaysian Ports) - (Singapura) - (Dumai) - (Jambi) - TANJUNG PRIOK

CODE TRAYEK	URAIAN TRAYEK
N - 10	TANJUNG PRIOK - PONTIANAK DSK - (Jambi) - (Pangkal Pinang) - TANJUNG PRIOK
N - 11	TANJUNG PRIOK - PONTIANAK DSK - SINGAPURA - TANJUNG PRIOK
N - 12	SEMARANG - (Kuala Gaung) - (Kuala Tungkal) - (Selat Panjang) - (Tembilahan) - (Rengat) - PAKAN BARU/BAGAN SIAPIAPI DSK - (Bengkalis) - (Selat Panjang/Tanjung Kedabu) - (Cirebon/Surabaya dsk) - SEMARANG
N - 13	SEMARANG - PEMANGKAT/TANJUNG PINANG DSK - (Selat Panjang) - (Tembilahan) - (Tanjung Priok) - (Cirebon) - SEMARANG
N - 14	SEMARANG - (Cirebon) - PONTIANAK/PEMANGKAT - (Singapura) - (Cirebon) - SEMARANG
N - 15	SURABAYA DSK - (Cattle Ports) - (Panjang) - (Bengkulu) - PADANG - PANJANG/PALEMBANG - (Cirebon) - (Semarang) - SURABAYA DSK
N - 16	SURABAYA DSK - PK. PINANG/BLINYU - (Tanjung Pandan) - (Manggar) - (Tanjung Priok) - (Cirebon) - (Semarang) - SURABAYA DSK
N - 17	SURABAYA DSK - (Cattle Ports) - (Tanjung Priok) - PALEMBANG - (Cirebon) - (Semarang) - (Bali/N.T.B.) - SURABAYA DSK
N - 18	SURABAYA DSK - (Cattle Ports) - JAMBI - (Singapura) - (Selat Panjang) - (Cirebon) - SURABAYA DSK
N - 19	SURABAYA DSK - (Kuala Tungkal) - (Jambi) - (Pk. Baru dsk/ Bengkalis) - BAGANSIAPIAPI DSK/KUALA ENOK - (Cirebon) - (Semarang) - SURABAYA DSK

CODE TRAYEK	URAIAN TRAYEK
N - 20	SURABAYA DSK - (Cirebon/Balongan) - TANJUNG PRIOK - PALEMBANG DSK - DUMAI - BELAWAN DSK - (Pulau Batam) - (Belawan) - (Dumai) - PALEMBANG DSK - TANJUNG PRIOK - (Cirebon/Balongan) - SURABAYA DSK
N - 21	SURABAYA DSK - (Singapura) - BELAWAN - (Singapura) - (Semarang) - SURABAYA DSK
N - 22	SURABAYA DSK - (West Malaysian Ports) - BELAWAN - (Malahayati dsk) - (Aceh Ports) - (West Malaysian Ports) - (Singapura) - SURABAYA DSK
N - 23	SURABAYA DSK - (Semarang) - PONTIANAK DSK - (Singapura) - CIREBON/SEMARANG - SURABAYA DSK
	WILAYAH TIMUR
N - 24	TANJUNG PRIOK - (Banjarmasin dsk) - BALIKPAPAN/SAMARINDA - BANJARMASIN DSK - (Sampit) - TANJUNG PRIOK
N - 25	TANJUNG PRIOK - UJUNG PANDANG - (Kota Baru) - TANJUNG PRIOK
N - 26	TANJUNG PRIOK - (Surabaya) - (Ujung Pandang) - (Parepare/Donggala/Pantoloan) - BITUNG - (Ternate dsk) - (Siau dsk) - (Tahuna dsk) - (Bitung) - (Manado) - (Tolitoli) - (Donggala) - (Ujung Pandang) - (Surabaya) - TANJUNG PRIOK
N - 27	TANJUNG PRIOK - (Surabaya) - UJUNG PANDANG - (Parepare) - KENDARI DSK - (Luwuk dsk) - (Posso dsk) - GORONTALO/BITUNG - (Ternate dsk) - BITUNG/GORONTALO - (Parigi dsk) - (Posso dsk) - (Luwuk dsk) - (Kendari) - (Ujung Pandang) - (Surabaya) - TANJUNG PRIOK

CODE TRAYEK	URAIAN TRAYEK
N - 28	TANJUNG PRIOK - UJUNG PANDANG - (Ambon) - (Sorong) - (Manokwari) - BIAK - JAYAPURA - (Biak) - (Manokwari) - (Sorong) - (Ambon) - (Kendari dsk) - (Ujung Pandang) - (Surabaya) - TANJUNG PRIOK
N - 29	TANJUNG PRIOK - (Surabaya) - DILLY - KUPANG - (Cattle Ports) - (Surabaya) - TANJUNG PRIOK
N - 30	SURABAYA DSK - BANJARMASIN DSK/SAMPIT - (Bali) - SURABAYA DSK
N - 31	SURABAYA DSK - (Kota Baru dsk) - (Ujung Pandang) - (Parepare) - (Donggala) - BALIKPAPAN DSK/SAMARINDA DSK - (Tarakan dsk) - (Donggala) - (Samarinda dsk) - (Balikpapan dsk) - (Kota Baru dsk) - SURABAYA DSK
N - 32	SURABAYA DSK - (Kota Baru dsk) - BALIKPAPAN/TARAKAN DSK - (Tolitoli) - (Donggala) - (Kota Baru dsk) - SURABAYA DSK
N - 33	SURABAYA DSK - (Ujung Pandang) - (Pare-Pare) - (Mamuju) - DONGGALA DSK/TARAKAN DSK - (Tolitoli dsk) - (Donggala) - (Mamuju) - (Ujung Pandang) - SURABAYA DSK
N - 34	SURABAYA DSK - UJUNG PANDANG - BALIK PAPAN/SAMARINDA/BANJARMASIN - (Bali) - (N.T.B.) - SURABAYA DSK
N - 35	SURABAYA DSK - UJUNG PANDANG - (Pare Pare) - (Majene) - (Mamuju) - (Ujung Pandang) - SURABAYA DSK
N - 36	SURABAYA DSK - (Ujung Pandang) - (Pare Pare) - (Donggala) - BITUNG - (Siau dsk) - (Tahuna dsk) - (Ternate dsk) - (Bitung) - (Manado dsk) - (Tolitoli) - (Donggala) - (Ujung Pandang) - SURABAYA DSK

CODE TRAYEK	URAIAN TRAYEK
N - 37	SURABAYA DSK - (Ujung Pandang) - KENDARI/GORONTALO - (Luwuk dsk) - (Banggai dsk) - (Posso dsk) - (Ujung Pandang) - SURABAYA DSK
N - 38	SURABAYA DSK - GORONTALO DSK/TELUK TOMINI - (Kendari) - SURABAYA DSK
N - 39	SURABAYA DSK - (Ujung Pandang) - (Kendari) - BITUNG - LUWUK/BANGGAI DSK - (Kendari) - (Ujung Pandang) - SURABAYA DSK
N - 40	SURABAYA DSK - BENOA - AMPENAN - (Sumbawa/Bima) - (Buleleng) - SURABAYA DSK
N - 41	SURABAYA DSK - BULELENG - AMPENAN - (Reo) - MAUMERE - (Larantuka) - (Bima) - (Sumbawa) - SURABAYA DSK
N - 42	SURABAYA DSK - (Benoa) - (Ampenan) - (Waingapu) - (Ende) - KUPANG DSK - (Atapupu) - (Larantuka) - (Maumere) - (Reo) - (Bima) - (Sumbawa) - SURABAYA DSK
N - 43	SURABAYA DSK - (Tual) - AMBON DSK - TERNATE DSK - (Baubau/Selayar) - (Ujung Pandang) - SURABAYA DSK
N - 44	SURABAYA - UJUNG PANDANG - (Cattle Ports) - (Ambon dsk) - SORONG - MANOKWARI - BIAK - JAYAPURA - (Biak) - (Sorong) - (Kendari dsk/Baubau) - UJUNG PANDANG - SURABAYA
N - 45	SURABAYA DSK - UJUNG PANDANG - (Ambon) - (Sorong) - (Fakfak) - MERAUKE DSK - AGATS - (Ambon) - (Ujung Pandang) - (Cattle Ports) - SURABAYA DSK

CODE TRAYEK	URAIAN TRAYEK
N - 46	UJUNG PANDANG - JAYAPURA - SORONG - UJUNG PANDANG
N - 47	UJUNG PANDANG - (Ambon) - FAKFAK - MERAUKE DSK - (Agats) - UJUNG PANDANG

CODE TRAYEK	URAIAN TRAYEK
	TRAYEK PENUMPANG DLL
P - 1	BELAWAN/M.K.S. PORTS - TANJUNG PRIOK - BELAWAN/ M.K.S. PORTS
P - 2	TANJUNG PRIOK - PADANG - TANJUNG PRIOK
P - 3	TANJUNG PRIOK - MENTOK - TANJUNG PINANG - BELAWAN - TANJUNG PINANG - MENTOK - TANJUNG PRIOK
P - 4	TANJUNG PRIOK - SURABAYA - UJUNG PANDANG - DONGGALA - (Tolitoli) - BITUNG - TERNATE DSK - (Bitung) - (Manado) - (Tolitoli) - DONGGALA - UJUNG PANDANG - SURABAYA - TANJUNG PRIOK
P - 5	TANJUNG PRIOK - SURABAYA/UJUNG PANDANG - AMBON - SORONG - BIAK - JAYAPURA - (Manokwari) - (Sorong) - (Ambon) - (Baubau) - UJUNG PANDANG - (Surabaya) - TANJUNG PRIOK
P - 6	SURABAYA - UJUNG PANDANG - (Teluk Bone dsk) - (Kendari dsk/Luwuk dsk/Banggai dsk) - (Posso dsk/Parigi dsk/Gorontalo dsk) - BITUNG - (Sangir Talaud dsk) - TERNATE DSK - BITUNG - (Balikpapan) - (Tolitoli dsk/Donggala dsk/Parepare dsk) - (Ujung Pandang) - SURABAYA
P - 7	BANABUNGI/BAUBAU - PELABUHAN SELURUH INDONESIA - BANABUNGI/BAUBAU

C A T A T A N :

P - 1 : Angkutan minyak kelapa sawit.

P - 2 : Lin ekspress penumpang.

P - 3 : Lin Ekspress penumpang.

P - 4 : Angkutan penumpang/barang.

P - 5 : Angkutan penumpang/barang.

P - 6 : Distribusi minyak bumi.

P - 7 : Angkutan asphalt.

CODE TRAYEK	URAIAN TRAYEK
	INDONESIA – SINGAPURA PP.
S - 1	BELAWAN - (Malahayati dsk) - (Aceh Ports) - (West Malaysian Ports) - SINGAPURA - (Pulau Batam) - (West Malaysian Ports) - BELAWAN
	SINGAPURA - BELAWAN - (West Malaysian Ports) - SINGAPURA
S - 2	–
	SINGAPURA - MALAHAYATI DSK - (Lho Seumawe) - (West Malaysian Ports) - SINGAPURA
S - 3	PAKANBARU DSK - (Dumai) - SINGAPURA - (Dumai) - PAKAN BARU DSK
	–
S - 4	JAMBI - SINGAPURA - (Pulau Batam) - JAMBI - SINGAPURA - JAMBI - SINGAPURA
S - 5	PALEMBANG - (Tin Ports) - SINGAPURA - (Pulau Batam) - PALEMBANG - SINGAPURA - PALEMBANG - SINGAPURA
S - 6	–
	SINGAPURA - TANJUNG PRIOK/PANJANG - (Bengkulu) - SINGAPURA
S - 7	PADANG - PANJANG - SINGAPURA - (Tg. Sekong/Cigading) - PADANG

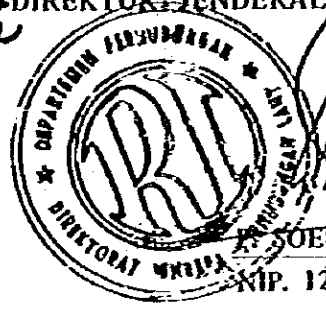
CODE TRAYEK	URAIAN TRAYEK
S - 8	TANJUNG PRIOK - (Panjang) - (Tin Ports) - SINGAPURA - (Pulau Batam) - (Tin Ports) - (Tg. Sekong/Cigading) - TANJUNG PRIOK
	SINGAPURA - PANGKAL BALAM/TANJUNG PRIOK - (West Malaysian Ports) - SINGAPURA
S - 9	TANJUNG PRIOK/CIREBON - SINGAPURA - (Pulau Batam) - TANJUNG PRIOK/CIREBON
	SINGAPURA - TANJUNG PRIOK/CIREBON - SINGAPURA
S - 10	–
	SINGAPURA - TANJUNG PRIOK - (Tegal) - (Semarang - SINGAPURA
S - 11	SURABAYA DSK - (Dilly) - (Cattle Ports) - (Surabaya dsk) - (Kumai/Sampit) - SINGAPURA - (Tanjung Priok) - (Dilly) - SURABAYA DSK
	SINGAPURA - SURABAYA - SINGAPURA
S - 12	PONTIANAK DSK - (Singkawang) - (Pemangkat) - (Sambas) - (Tanjung Pinang) - SINGAPURA - PONTIANAK DSK
	SINGAPURA - PONTIANAK/TELOK AYER - (Tanjung Pinang) - SINGAPURA
S - 13	PEMANGKAT/SINGKAWANG - (Sambas) - (Tambelan) - (Tanjung Pinang) - SINGAPURA - (Tanjung Pinang) - (Sambas) - PEMANGKAT/SINGKAWANG

CODE TRAYEK	URAIAN TRAYEK
S - 14	BANJARMASIN DSK - (Sampit) - (Kumai) - SINGAPURA - (Tegal) - (Semarang) - (Surabaya) - BANJARMASIN DSK SINGAPURA - (Tegal) - (Semarang) - (Surabaya) - BANJARMASIN - (Sampit) - SINGAPURA
S - 15	SAMARINDA DSK/BALIKPAPAN DSK - (Banjarmasin dsk) - SINGAPURA - (Pulau Batam) - BALIKPAPAN DSK/SAMARINDA DSK SINGAPURA - (Banjarmasin) - BALIKPAPAN/SAMARINDA - (Banjarmasin) - SINGAPURA
S - 16	– SINGAPURA - BALIKPAPAN/SAMARINDA - (Donggala) - UJUNG PANDANG - (Surabaya) - SINGAPURA
S - 17	UJUNG PANDANG/MALILI - SINGAPURA - UJUNG PANDANG/ MALILI SINGAPURA - UJUNG PANDANG/MALILI - SINGAPURA
S - 18	JAYAPURA - (Biak) - (Sorong) - (Fakfak) - (Ambon) - (Ternate) - (Bitung) - (Parepare) - UJUNG PANDANG - SINGAPURA - (Tanjung Priok) - (Ujung Pandang) - (Ambon) - SORONG - (Manokwari) - (Biak) - JAYAPURA
S - 19	– SINGAPURA - BALIKPAPAN/SAMARINDA - (Tarakan) - BITUNG - (Ujung Pandang) - (Surabaya) - SINGAPURA

CODE TRAYEK	URAIAN TRAYEK
S - 20	SORONG - SINGAPURA - SORONG

JAKARTA, 12 JULI 1979.

DIREKTUR JENDERAL PERHUBUNGAN LAUT



R. SOEPARDJO.
NIP. 120003631

LAMPIRAN : SURAT KEPUTUSAN DIREKTUR JENDERAL PERHUBUNGAN LAUT
NO. DAL. 13/1/5 TANGGAL 18 AGUSTUS 1980
TENTANG
PENYEMPURNAAN SUSUNAN TRAYEK PELAYARAN NUSANTARA
REGULAR LINER SERVICE (RLS) UNTUK TAHUN 1979 S/D 1983

CODE TRAYEK	URAIAN TRAYEK
N – 3	PADANG - (Sibolga) - MALAHAYATI DSK/BELAWAN - (Padang) - SINGAPURA - (Belawan) - (Malahayati dsk) - (Aceh Ports) - (Sibolga) - PADANG.
N – 26	TANJUNG PRIOK - (Surabaya) - (Ujung Pandang) - (Pare-Pare) DONGGALA/TOLI-TOLI - BITUNG/TERNATE DSK - (Siau dsk) - (Tahuna dsk) - (Bitung) - (Menado) - (Toli-Toli) - (Donggala) - (Ujung Pandang) - (Surabaya) - TANJUNG PRIOK.
N – 29	TANJUNG PRIOK - (Surabaya) - DILLY/KUPANG - (Cattle Ports) - (Surabaya) - TANJUNG PRIOK.
N – 36	SURABAYA DSK - (Ujung Pandang) - (Pare-Pare) - DONGGALA/ TOLI/TOLI - BITUNG - (Siau dsk) - (Tahuna dsk) - (Ternate dsk) - (Bitung) - (Menado dsk) - (Toli-Toli) - (Donggala) - (Ujung Pandang) - SURABAYA DSK.
N – 37	SURABAYA DSK - (Ujung Pandang) - KENDARI/GORONTALO - BITUNG - (Luwuk dsk) - (Banggai dsk) - (Poso dsk) - (Ujung Pandang) - SURABAYA DSK.
N – 42	SURABAYA DSK - (Benoa) - (Ampenan) - (Waingapu) - (Ende) - KUPANG DSK/DILLY - (Atapupu) - (Larantuka) - (Maumere) - (Reo) - (Bima) - (Sumbawa) - SURABAYA DSK.
N – 43	SURABAYA DSK - UJUNG PANDANG - (Tual) - AMBON DSK/ TERNATE DSK - (Bau-Bau/Salayar) - (Ujung Pandang) - SURABAYA DSK.
P – 8	SURABAYA - UJUNG PANDANG - BAU-BAU - AMBON - BAU-BAU - UJUNG PANDANG - SURABAYA.
S – 4	JAMBI - SINGAPURA - (Pulau Batam) - JAMBI.
	SINGAPURA - JAMBI - SINGAPURA.
S – 5	PALEMBANG - (Tin Ports) - SINGAPURA - (Pulau Batam) - PALEMBANG.
	SINGAPURA - PALEMBANG - SINGAPURA.

CODE TRAYEK	URAIAN TRAYEK
S – 8	TANJUNG PRIOK - (Tanjung Sekong/Cigading) - (Panjang) - (Tin Ports) - SINGAPURA - (Pulau Batam) - (Tin Ports) - (Tanjung Sekong/Cigading) - TANJUNG PRIOK. SINGAPURA - PANGKAL BALAM/TANJUNG PRIOK - (West Malaysian Ports) - SINGAPURA.
S – 11	SURABAYA DSK - (Dilly) - (Cattle Ports) - (Surabaya dsk) - (Kumai/ Sampit) - SINGAPURA - (Tanjung Priok) - DILLY/SURABAYA DSK. SINGAPURA - SURABAYA - SINGAPURA.

Jakarta, 18 Agustus 1980.-

DIREKTUR JENDERAL PERHUBUNGAN LAUT,

DEPARTEMEN PERHUBUNGAN

R. SOEPARDJO.-

NIP. 20003631

LIST OF PORTS IN INDONESIA

DIREKTORAT JENDERAL PERHUBUNGAN LAUT
DIREKTORAT PERKAPALAN DAN PELAYARAN

DAFTAR KESYAHBANDARAN UNTUK DISTRIBUSI BUKU - BUKU P.U./ TAHUN 1979

TABEL Kedudukan KLAS	JML	PELB. WAJIB RAMBU	I BELAWAN	II DUMAI	III TG. PRIOK	IV SURABAYA	V BANJARMASIN	VI UJUNG PANDANG	VII MANADO	VIII AMBON	IX JAYAPURA
I	6	6	1.Belawan	1.Dumai	1.Palembang 2.Tg.Priok	1.Surabaya	-	1.Ujung Pandang	-	-	-
II	10	10	-	1.Tg.Pinang 2.Tlk.Bayur	1.Cirebon	1.Semarang	1.Banjarmasin 2.Balikpapan 3.Samarinda	-	1.Manado/Bitung	1.Ambon	1.Jayapura
III	24	24	1.Ulee Lheue 2.Sabang 3.Sibolga 4.Kuala Tanjung	1.Pekanbaru 2.Pulau Sambu 3.Tg.Uban	1.Panjang 2.Bengkulu 3.Jambi 4.Sunda Kelapa 5.Pontianak 6.Cigading	1.Ampenan/Lembar 2.Benoa 3.Cilacap 4.Kupang	1.Pl'ngkaraya 2.Tg.Santan 3.Bontang	1.Kendari	1.Donggala	-	1.Biak 2.Sorong
IV	55	55	1.Lhok Seumawe 2.Pkln.Brandan 3.Pkln.Susu 4.Tg.Balai (A) 5.Gn.Sitoli 6.Krueng Raya	1.Bengkalis 2.Bagan Si-Api2 3.Dabosingkep 4.Rengat 5.Sel.Panjang 6.Tg.Balai (K) 7.Tembilahan 8.Tarempa	1.Kuala Tungkal 2.Muntok 3.Merak/Tg.Sekong 4.Pkl.Balam 5.Penangkat 6.Tg.Pandan 7.Teluk Air 8.Tel.Betung 9.Muara Sabak 10.Sambas 11.Singkawang 12.Kali Baru	1.Banyuwangi 2.Gresik 3.Kalianget 4.Pekalongan 5.Pasuruan 6.Probolinggo 7.T e g a l 8.Meneng	1.Kotabaru 2.Nunukan 3.Sampit 4.Tarakan 5.Pulang Pisau	1.Bau-Bau 2.Pare-Pare 3.Bajo-e 4.Pomalaa	1.Gorontalo 2.Luwuk 3.Posso 4.Toli-Toli 5.Tahuna	1.Ternate 2.D o b o	1.Fak-Fak 2.Manokwari 3.Merauke 4.Amamapare 5.Serui
V	182	168	1. I d i 2. Kuala Langsa 3. Lab. Bilik 4. Meulaboh 5. Sigli 6. Singkil 7. Tg. Tiram. 8. Leidong 9. Laheva 10. Pulau Tello 11. Pkln. Dode 12. Sinabang 13. S u s o h 14. Tapaktuan 15. Tg. Bringin 16. Tlk. Dalam/ P. Nias 17. Sei.Brombang 18. Hinako....x)	1. Kuala Raya 2. Kuala Gaung 3. Muara Padang 4. Panipahan 5. Parigiraja 6. Penuba 7. Sinaboy 8. Sei.Pakning 9. Sei.K.Kijang 10. S.S.Indrapura 11. Tg. Samak 12. Tg. Medang 13. Batu Panjang 14. Bandul 15. Batu Ampar 16. Kuala Enok 17. Kuala Mandah 18. H o r o 19. Pulau Halang 20. Psr.Panjang 21. Sei.Guntung. 22. Pulau Kijang 23. Sapat 24. Sikupang 25. Senayang 26. Sei. Apit 27. Penyalai/Tlk. Dalam Riau 28. Tg. Kedabu 29. Tg. Batu 30. Air Bangis 31. Buatan......x)	1. Anyer Lor 2. Bojonegoro 3. Blinyu 4. Ketapang 5. Sei. Selan. 6. Pamanukan. 7. Bintuhan 8. Eretan 9. Karangantu 10. Krui 11. Kota Agung 12. Kalianda 13. Labuhan 14. Menggala 15. Maringgai 16. Mesuji 17. Manggar 18. Nph.Panjang 19. Paloh/Sekura 20. Sei.Liat 21. Toboali 22. Tlk.Melano 23. Kendavangan 24. Way Seputih 25. Sei. Lumpur 26. Indramayu 27. Plb. Ratu 28. Muko-Muko 29. Yuntinyuat 30. Pangandaran 31. Kresek .....x) 32. Ma.Binuangen.x) 33. Ditkappel	1. Buleleng 2. Besuki 3. S i s a 4. E n d e 5. Jepara 6. Juana 7. Pasuruan 8. Rembang 9. S'pura/[illegible] 10. Sumbawa/Bes 11. Padangbai 12. Maumere 13. Kalabahi 14. Branta 15. Gilimanuk 16. Jangkar 17. Lb. Loabok 18. Pemalang 19. T u b a n 20. Waingapu 21. Kalbut 22. Larantuka x) 23. Kempo x) 24. Atapupu x) 25. Brebes x) 26. R e o x)	1. Kumai 2. Sangkulirang 3. Tanah Grogot 4. Tg: Redep 5. Kuala Kapuas 6. Ka.Pembuang 7. Pkln. Bun 8. Pegatan Mdw 9. [illegible] 10. Sukamara 11. Samuda 12. Pegatan/Kalsel 13. Tg. Selor 14. Kuala Semboja	1. Kolaka 2. Majene 3. Mamuju 4. Malili 5. Palopo 6. R a h a 7. Selayar 8. Polevali 9. Biringkasi 10. Jampea ...x) 11. Bulukumba x)	1. Amurang 2. Kuandang 3. Kolonedale 4. Banggai 5. Tagulandang 6. Ulu Siau 7. Ampana 8. Belang 9. B e o 10. Bunta 11. Kutabunan 12. Lirung 13. L e o k 14. Petta 15. Paginana 16. Parigi 17. Moutong 18. Tamako 19. Inebonto 20. Tilamuta/Bumbulan 21. Mianggas x)	1.Amahai 2.Bandanaira 3.Babuha 4.Morotai 5.P i r u 6.Sanana 7.Saparua 8.Saumlaki 9.Tobelo 10.Bula 11.E l a t 12.Leksula 13.Larat 14.Namlea 15.Soa - Siu 16.T u a l 17.Tulehu 18.Geser 19.Jailolo 20.Kairatu 21.Wahai x) 22.Kataloka x)	1.Bintuni 2.Teminabuan 3.Kaimana 4.Sarmi 5.Nabire 6.Klamono
	277	263	29	45	54	40	25	17	27	25	14

CATATAN :

1. Belum termasuk 44 lokasi Kesyahbandaran yang masih dijabat NON DJPL.
2. x) = Kesyahbandran belum wajib rambu.
3. Cigading, Krueng Raya,. Meneng, termasuk Kesyahbandaran yang masih dirangkap.
4. Daftar ini disusun berdasarkan : - SK.Menhub. No.Km.47/OT/PHB - 1978 Tanggal 8 Maret 1978.
   - SK.Dirjenla. No. DKU.60/33/12 Tanggal 23 Juni 1978.

Jakarta, 15 Juli 1980
DITKAPPEL SUB.DIT. K & AK - SEKSI P.U.

LSIT OF MAIN NEWLY PROCURED EQUIPMENT BY P-ST-12 PROJECT

EQUIPMENTS \ STATIONS	JAKARTA			UJUNG PANDANG		SURABAYA		BELAWAN			DUMAI			BITUNG			JAYAPURA		AMBON		SEMA-RANG		SORONG	MERAUKE	REMARKS
	TX	RX	MC	TX	RX	TX	RX	TX	RX	AD	TX	RX	AD	TX	RX	TX	RX	AD	TX	RX	TX	RX	TX/RX	TX/RX	
TRANSMITTER																									TG : Telegraphy with FS Keyer TP : Telephony TR : Transceiver
- 5 kW MF.TG	3																								
- 5 kW HF.TG.TP	8																								
- 1 kW MMF/HF TG.TP	3			3		1		1			1			3		3			1		3				
- 100 W HF.TP.T/R																	1								
S-S ALL-WAVE REC.		13			6		7		7			7			5		5			7		5			S-S : Ship to Shore
- PRESET UNIT		9			4		5		5			5			3		3			5		3			
- SCANNING UNIT		4			2		2		2			2			2		2			2		2			
P-P ALL-WAVE REC.		11			2		1		1			1			2		2			1					P-P : Point to Point
- PRESET UNIT		11			2		1		1			1			2		2			1					
A.R.Q. (P-P)		7			1		1		1			1			1		1			1					
VODAS (S-S)		2			1										1		1								
LINCOMPEX (P-P)		7			1		1		1			1			1		1			1					
ANTENNA SYSTEM	1	1		1	1	1	1	1	1		1	1		1	1	1	1		1	1	1	1	1	1	T : T Type M.D. : Multi Doublet D.D. : Double Doublet S.D. : Single Doublet
- T.																									
- M.D.																									
- D.D.																									
- S.D.																									
- FAN																									
- INV.L																									
- CAGE																									
- V. LOG-PERI																									
- CONICAL MONO-POLE																									
- EARTHING																									
- MATCHING TRANSF.																									
- MULTI-COUPLER																									
- ANT. SELECTOR																									
- TOWER (MAST)																									
- ANT. EXCHANGER (SWITCH)																									
- DUMMY LOAD																									
OPERATION POSITION																									Note : Including Nomote Control Equipment
- SUPERVISORY CONSOLE	1			1										1		1									
- CONTROL CONSOLE (Note)		8			4		1		1	1		1	1		3		3			1		5	1	1	
- CONTROL DESK (Note)			4															1			1				
MONITOR CONSOLE		1			1		1		1			1			1		1			1		1			
- 500 KHZ AUT.ALM.REC		1			1		1		1			1			1		1			1		1	1	1	
- 2182 KHZ AUT.ALM.REC		1			1		1		1			1			1		1			1		1	1	1	
- DIRECTION FINDER		1			1		1		1			1			1		1			1		1			
- ALL WAVE REC		1			1		1		1			1			1		1			1		1			
- SCANNING UNIT		1			1		1		1			1			1		1			1		1			
- TAPE RECORDER		1			1		1		1			1			1		1			1		1			
UHF LINK																									
- RADIO EQUIPMENT	1	2	1					1	2	1		1	1	1	1	1	2	1			1	1			
- MULTIPLEX TERMINAL	1	2	1					1	2	1		1	1	1	1	1	2	1			1	1			
- V.F.T.	2	3	1	1	1									1	1	1	2				1	1			
- ANTENNA	1	2	1					1	2	1		1	1	1	1	1	2	1			1	1			
- MAST										1			1					1							
VHF SYSTEM																									
- TRANSM/REC.		4			3		3		3			3			3		3			3		3			
- ANTENNA		4			3		3		3			3			3		3			3		3			
- CONTROL DESK		1			1		1		1			1			1		1			1		1			
MISCELLANEOUS																									ACCESSORIES : Key, microphone, headphone
- TELEPRINTER		2	7		1				1	1		1	1		1		1	1		1					
- TAPE RECORDER		2			1																	1			
- MORSE TRANSMITTER		2			1																	1			
- ACCESSORIES		1			1		1		1			1			1		1			1		1			
POWER PLANT																									
- DIESEL E.G.		1																							
- A.V.R.		1																							
- NO-BREAK POWER WITH PDB		1																			1	1			
- P.D.B.																									
MEASURING EQUIPMENT AND TOOLS		1			1		1		1			1			1		1			1		1			
SPARE PARTS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			For 3 years operation
INSTALLATION MATERIALS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Cables (coax. power. signal. control) wires fixing hardwares. etc.