



INTER MARITIME CLUB[®]

The International Maritime Mobile Amateur Radio Club, Inc.

Initiated in 1964. Founded in 1969. Seated in 1971. Incorporated in 1977 at Geneva Register of Commerce

1976 INTER MARITIME LETTER

T A B L E O F C O N T E N T S

<u>S U B J E C T</u>	<u>P A G E</u>
Table of Contents	1
Editorial	2
Inter Maritime Convention	3
Officers Group	4
Financial Report	5
Crew List	6, 7
Travel Reports	8, 9
Inter Maritime Network	10
Inter Maritime Awards	11
International Monitoring System	12
Maritime Official Scene	13
Brother Societies	14, 15, 16
Meet a Member	17
Cordial Invitation	18
Members' Advertisements	19
Commercial Page	20

Incorporated to USKA. ISWL.

Affiliated to SOWP.

Associated to MMARC. AGCW

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Officers:
HB9XJ, K6MG
DK4BP

E D I T O R I A L

INTER MARITIME CLUB is the short form of the International Maritime Mobile Amateur Radio Club, incorporated. We started communication through amateur radio in 1972, after installing our first Headquarters and Net Control Station. For this communication among Maritimers, the INTER MARITIME NETWORK was established. It employs a fixed radio channel system corresponding to that of commercial radio services.

A large number of our members, however, sail under national flags which prohibit the use of HAM radio aboard their ships. Others, travelling on vacation or doing landlubber jobs simply are not QRV. Last not least, our network range naturally is limited by radio propagation conditions, leaving behind those members who sail in distant sea areas. These members can be reached by mail only.

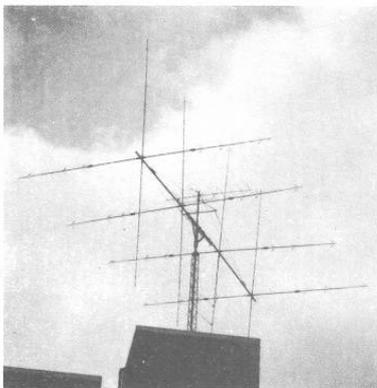
Regarding this situation, we started to supply all our members with regular newsletters using printed matter surface mail in 1974. In accordance with the provisions of our Constitution Article 10.4, they were called Maritime Mobilgrams. This name has been changed to MARIGRAM recently. They are issued at variable time intervals due to opening periods of our Headquarters. This procedure is still effective. Marigrams are mailed to all of us about once a month now. They are proceeded automatically by an addressing machine system. They offer latest news within the maritime field, world-wide.

For most of us, this procedure is still insufficient. There are still piles of maritime information left to be forwarded. To fill this gap, our 1975 INTER MARITIME CONVENTION has decided to issue an annual newsletter. This shall offer maritime information which cannot be published by MARIGRAMS due to space limitations. It has been named the INTER MARITIME LETTER. It will be issued annually after closing our convention, and will offer detailed information of maritime development of the past twelve months.

We sincerely hope that all readers will appreciate this INTER MARITIME LETTER. We always welcome comments and information from anywhere in the world.

Three Cheers, your
INTER MARITIME CLUB
1976 Secretary General

A. G. G.
DK4BP, IMMC 1001



1976 INTER MARITIME CONVENTION, Protocol

LIST OF DETAILS, concerning legal steps leading to the decisions made:
Convocation and invitations made in accordance with IMMC Article 4.1.
List of participants in person: DF1QX, DK4BP, DL2GE, DL9AZ, DL9IL.
List of participants by amateur radio: ON5GT, YO4ASG.
Headquarters Station Operator: DF1QX. Meeting Chairman: DK4BP.
Voting code: Overall majority of those present, voting by calling out.

AGENDA submitted and DECISIONS made, in accordance with IMMC Article 4.3:

1. Mr. Nippe, chartered accountant, is confirmed for enterprise consultant starting from today.
2. A German language translation of our Constitution is submitted. The translation is to be printed shortly.
3. The Geneva registration procedure shall be completed this year, in close cooperation with our Geneva Notary Public, Mr. Terrier.
4. No national registrations with the exception of Switzerland shall be made, unless required by clubs incorporating.
5. Our Constitution of 12 Articles shall be split into 30 Articles and 7 By-Laws, in accordance with the requirements of the Swiss Law.
6. The IMMC will continue to incorporate with other national radio clubs, after incorporations were accomplished with ISWL, MMARC, SOWP, AGCW etc.
7. The IMMC will proceed to affiliate with other radio clubs. A new catalogue of legal conditions will be set up immediately.
8. After our first legal proceedings were completed on 13 November, 1975, at the Hannover Administrative Court, others shall follow.
9. Though work has increased to a full-time load, the office of Secretary shall remain honorary. No paid work of any kind is admitted to Secretary.
10. Due to his frequent sea trips, DK4BP wishes to transfer his office to another club member, in accordance with IMMC Articles 2.1 and 2.2.2.
11. In accordance with the provisions of Article 7.3, the IMMC shall continue to own and operate its Headquarters Station on its own account.
12. In accordance with the provisions of Article 3.1.1, the IMMC shall continue to accept for membership only licensed radio amateurs.
13. Our 1976 Officers Group has been elected as: HB9XJ for President, K6MG for Adviser, DL1FL for Secretary who refused. DK4BP remains in office.
14. No amendments to our Constitution will be made in fiscal year of 1976. There will be a new Constitution to be voted on in 1977.
15. The 1975 financial report as given by DK4BP has been accepted. Our chartered accountant certifies it to be in good order and condition.
16. The Secretary is authorized to take international credit as deemed necessary for the benefit of the club.
17. The INTER MARITIME NETWORK shall be split into 3 ITU-regional nets. Separate Net Control Stations shall be selected and operated daily.
18. Our Headquarters Station shall continue its automatic transmissions after preliminary test series in A1 and A3J modes were successful.

Agreed upon and published at Hannover Headquarters on 1 May, 1976.
Signed for Meeting Chairman: DK4BP. Signed for Witness: DL9AZ.

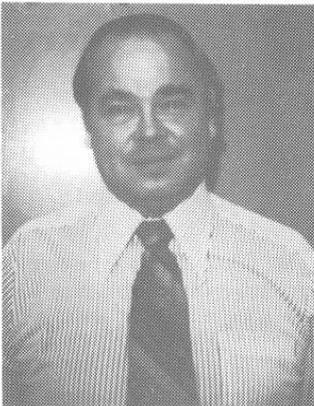
Presenting our 1976 OFFICERS GROUP

President OM Hans Buehler, HB9XJ ex ELØA/MM, 9K2DB/MM, VK9HB, P29HB, 9M8HB



Originating from Zurich, Hans obtained his first HAM licence at the age of 17. After receiving a commercial education he became a telecommunication official. At 23, he went to sea as a Radio Officer operating various ships and maritime mobile calls. Hans underwent an additional training in marine electronics and modern management and after that worked ashore in the marine field. Later, as a Delegate for the International Committee of the Red Cross, he was in charge of communications in Nigeria. For several years now, he has been the Fleet Manager of an international fishing company at Kuching, Sarawak, North Borneo.

Adviser OM Earl Baker, K6MG ex OX3BF, WØIQP, W7PQT, W7PVS, K6TSQ, etc.



Old Salt Earl is a Radio Electronics Officer. He is 49 of age, married and has 3 children and 2 grand children. He heeded the call of the sea at the age of 17 and has been going to sea regularly since, first with the U.S. Navy from which he retired in 1966. Since that time, he has been sailing aboard U.S. merchant vessels, including the S.S. "Alaska Bear/WQGK", "Transglobe/WSAX", "Gainsville Victory/WQGU" and presently on the S.S. "Transcolorado/KOEW" which he joined in 1968. Earl has been an active radio amateur since 1946 and is a member of the following professional and fraternal organizations: IMMC, SOWP, MMARC, QCWA, ARRL, ARTS, AGCW, ARA and FRA.

Secretary General OM Arno Mueller-Henze, DK4BP ex DL9XP, ELØB/MM, DK3VU etc.



Arno is a HAM by passion. After watching his class-mate's crystal receiver in 1947, he started off as a BCL at the age of 14. The following year, he won the European one-way DX record by covering 2000 km with a PbSO₂ crystal to a 12 m long wire. In 1951, he joined DARC and made his DL9XH licence 7 months later. In 1952, he obtained his 2nd class SROC at Bremen Nautical School and then enjoyed sailing the Persian Gulf in summertime aboard DDTM. In 1956, he made his 1st Class SROC. When realizing that HAM radio was forbidden under DL flag, he returned his licence. After sailing the Swiss Arosa Liners in the New York to Bremerhaven passenger run, he obtained his 1st category Chief's Licence in 1961. In 1965, Arno established coastal Panama Radio/HOE25/26 on VHF. Thereafter, he studied EDP and became an IBM 360/20 programmer. Stress, however, made him return to the deep blue sea and Arno enjoys sailing short relief trips now.

The 1975 F I N A N C I A L R E P O R T

Itemized statement of receipts and expenditures in accordance with the IMMC Business Book 1, pages 24 to 26, and IMMC Constitution Article 2.2.3.

POSITION SUBJECT COLUMN INCLUDING SUBJECTS AMOUNT IN GOLD FRANCS

(RECEIFTS)

1	Dues	H	Donations	1248.81
2	Loans	K		17882.31
3	Awards	S		0.00
4	Various	U	Sales, Refunds, Corrections	3307.57
Total Amount Receipts				22438.69

(EXPENDITURES)

5	Headquarters	L	Insurance, Rent, Printing etc.	922.66
6	Telecomm.	M	Telephone, Telegrams, Special	1012.75
7	Shipping	N	Postage, Drayage	383.16
8	Travelling	O	km-Lumpsum, Public Fares	132.33
9	Meeting	P	Supplies etc.	53.29
10	Radio Station	Q	Fees, Purchase, Power, Repairs	3278.88
11	Awards	R	Printing	131.06
12	Various	T	Tax, Interest, Refunds etc.	4637.73
Total Amount Expenditures				10551.86
1975 Balance plus				11886.83

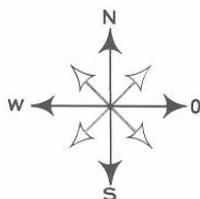
CERTIFICATION

We have carefully checked society records for fiscal year of 1975.

We find the above statement to be a true copy of fiscal records furnished.

Located at Hannover Headquarters, dated on 8 September, 1976.

Signed for Chartered Accountant: Joachim Nippe. For Secretary: Arno MH.



C R E W L I S T

<u>NUMBER</u>	<u>CALL SIGN</u>	<u>NAME IN FULL</u>	<u>MEMBERSHIP STATUS</u>	<u>REMARKS</u>
Status Symbols: A active, F passive, L lifetime, E expelled, S silent.				
1001	DK4BP	Arno Mueller-Henze	A	ex ELØB/MM
1002	DJ2KS	Hans Widdel	P	ex DI2DR
1003	OH2BDP	Hans Boeltzig	P	ex Adviser
1004	DL2DQ	Ehrhard Goertz	P	
1005	DL1FL	Alfred Mueller	P	DARC Officer
1006	DL1XA	Richard Dargatz	S	ex DL1XA/MM
1007	DJ6TK	Wilfried Graeper	P	ex DBZO
1008	G3RSP	Alan Pampling	P	ex President
1009	ON5GT	Georges Tillemans	P	
1010	DL9AZ	Hagen Zernin	L	NCS relief OP
1011	DK1PO	Alfred Horn	S	
1012	ON4DJ	Marnix de Jaegher	F	Channel Ferry
1013	ON4QY	Karel Wærzeggers	P	ex ON6RN
1014	DK6SX	Willi Groetzinger	P	ex DABT
1015	DK1RB	Ingo Weber	P	ex OEØZWW/MM
1016	OK4PEN	Dalibor Berka	P	ex OLGL
1017	YU3FU	Danilo Glazar	P	ex ELØR/MM
1018	DJ4SO	Klaus Behrndt	P	ex DDTQ, 9VIL
1019	DL1KS	Klaus Sauer	L	ex DKØTV
1020	HM5AP	Byong-joo Cho	F	ex ELØP/MM
1021	W5FGO	Harry Maclaren	P	ex WHIX, MMARC
1022	ON4QX	Bob Bergé	P	Meet a Member
1023	ON5FU	Aime Moens	P	ex OPUA
1024	VK8HA	Henry Andersson	P	
1025	DL2CM	Kurt Egersdorff	P	ex ELØL/MM
1026	G4CBC	William Shepherd	P	ex VK2BSX
1027	ZF1BH	Alvin Hanlan	P	ex VP5BH
1028	YU2QK	Milenko Milinovic	P	ex YTBE
1029	YU2RGY	Bozidar Milinovic	P	ex YTQP
1030	VK3APO	Philip Orchard	P	ex Pass Trader
1031	YO4ASG	Emil Cornel	L	ex YQBB
1032	YJ8FS	Bobby Schenk	P	DK8CL now
1033	OK4NH	Jaroslav Fresl	F	ex OLGB
1034	9V1RS	John Plenderleith	P	ex ELØA/MM
1035	JA8PMF	Akira Shimonaga	P	ex JEVN

C R E W L I S T , continued

<u>NUMBER</u>	<u>CALL SIGN</u>	<u>NAME IN FULL</u>	<u>MEMBERSHIP STATUS</u>	<u>REMARKS</u>
1036	ON6GC	Guy Cappeliez	P	ex OSFS
1037	YO4WO	Olympiu Dimitriu	P	ex YQSI
1038	K6MG	Earl Baker	A	KOEW, Adviser
1039	ON6WR	Roger Vandebussche	P	ex ORAH
1040	DK3NG	Joachim Groeger	A	ex MP4TDT, GM5BKZ
1041	YU2RAM	Vojislav Bucan	P	
1042	DL1SV	Albrecht Heinrichs	P	ex DEAT, DLDB
1043	YU2GE	Stefan Bugar	P	
1044	DL2WI	Juergen Wicht	P	
1045	JA4DBQ	Hori Nobuaki	P	ex JBGm
1046	DF1QX	Gerrit von Majewski	L	ex DB2QX
1047	HB9XJ	Hans Buehler	A	President
1048	DL1UG	Kurt Ebert	P	ex Navy
1049	LA2KD	Annar Kjernsvik	P	
1050	DJ9ZT	Axel Czuday	P	ex "Sue" Solaris"
1051	DL3NH	Nikolaus Schlippe	P	ex "Cobra"
1052	DL9IL	Hermann Kroening	A	ex DBFB
1053	G3ZXH	Leslie Anderson	P	ex GHLB
1054	DL7RY	Wolfgang Drasdo	L	OESWDK
1055	LA9UH	Reidar Johansen	L	ex LMJE
1056	YO4PZ	Ionel Magardician	P	
1057	DC1AF	Christian Rauch	L	Naval School
1058	ZS1JC	Johannis Elschot	P	salvage tugs
1059	G3LFF	Clifford Emeny	P	ex Navy
1060	DJ3DH	Helmut Strauss	P	
1061	ZS60S	Daniel Mahony	P	
1062	DL3MQ	Kurt Heinrich	P	AGCW, ex Navy
1063	DC6FF	Michael Staff	P	special tasks
1064	LX1DE	Joseph Faber	P	FØCI, ex LXAA
1065	DL2GE	Juergen Hockerup	A	report service
1066	DL7PV	Achim Hauer	P	relief trips
1067	VK6RQ	Raymond Gray	A	drilling base
1068	DL1SQ	Fritz Rutzki	A	
1069	DU1GQ	Generoso Quinton	P	ex 5LDN, A8RC
1070	VK3AID	Roman Gregorio	P	6ZFX

Closing date was 1 May, 1976. Number of nations represented: 19.

T R A V E L R E P O R T S

AMATEUR	HANDLE	SHIP'S NAME	CALL	FROM	TO	ETA	REMARKS
OZ6ZZ	Poul	Arosia	OYYK		Aarhus	6/6	vacation
JA2GKK	Mia	USA Maru	JEBW	Japan	Mena		o5n 88e
JA5JGF	Yama	USA Maru	JEBW	Mena	Genova		off 4PB
JA4HCG	Kazuma		JBXA	Nassau	Dubai		o4n 5oe
JH1BKA	Taki	Hayatomo Maru	JAAK	Port Elizabeth	Japan	17/8	16s 88e
OK4PEN	Libor	Vitkovice	OLGB	Sao Paulo	Hamburg	23/8	off PY2
W5FGO	Jock	Delta Mexico	WHIX		Dakar	7/8	
C21AF	Tony	Enna G.	C2DG	Melbourne	Nauru	21/8	off VIB
VK6RQ	Ray	WX Recorder	MJPN		Perth		vacation
JA5FHU	Koji	... Maru	J...	fishing banks		19/8	4os 1o3e
J11ILZ	Aki	Housho Maru	JGGI	Dubai	Singapore		off 4PB
JR2UHQ	Kawa	... Maru	J...	Lisboa	Capetown		fisher
DM3EA	Gun	Dresden	DAVK		Rostock	27/8	museum
W5NFZ	Marvin	Overseas A.	KLFE	Fersian Gulf		29/8	Arab Sea
EL5LHY						29/8	81n 72e
ELØR	Dan	Holstental	A8AI		Kuwait	31/8	YU3FU
K5LOM	Bruce	Del Sol	WLCI	Monrovia	New Orleans		17n 52w
LU2AAW	Jorge			Capetown	Baires	29/1	34s 11w
F6BQO	Bernard	Thisbe	FNRA	Libreville	Dakar	3o/1	o1n o5e
ELØS	Bob	Hel Taurus	6ZJV	Singapore	Constanta	1/3	off 9VG
ELØV	Just	Cedros	6ZVC	Persian Gulf	Sicily		Mozambik
JA5AFU	Ryo	Shinei Maru	JMXS	Japan			3oe 4os
HP1ZV	Franco	Louisita		Malta	Beirut	1o/2	yacht
YO4WO	Oly	Sulina	YQSI	Dakar	Izmir	5/5	
9K2DB	Hans	Byah	9KYM	Pt. Moresby	Singapore	2o,5	fisher
ELØP	Cho	Golar sanko	6ZPW	Rotterdam	Buchanan		off CUL
JA5BJG	Toyo	... Maru	J...	fishing banks		9/5	34n 11w
DJ9ZT	Axel	Sue	-	Mallorca	Gibraltar	17/5	yacht
DJ4SO	Klaus	Cremona	9VIL	Adelaide	B. Shahpour	27/5	
PI1LC	Jan	Cumulus	PDMV	4YM Ocean Weather Station			66n o3e
EL2JM	Mario	Omnium Mariner	ELYS	USA	Pto Ordaz	22/9	off NMN
VP9HX	Roy	W. A. Mader	ZCAF	New York	Curacao		off H12
ZS1CTR	Jan	Protea	ZTRX	Montevideo	Capetown		off CX2
JA5CYX	Sone	Ponape Maru	JIJV	Saipan	Yokohama	28/1o	18n 144e
JA3API	Nobuo	Caracas Maru	JPIY	Hongkong	Singapore	28/1o	15n 113e
YO4ASG	Emil	Cugir	YQAS	Casablanca	Hull	?	
JA7HX	Masa	Okinoshima M.	JCOW	Kuwait	Japan		15n 116e
LA2PH	Knut	Rona	JWOJ	Montreal	Durban		ore
JA2GDZ	Kazu	Taishan Maru	JHLI	o1n 56e	Celebes Sea		fisher
JA3SVG	Toku	Kashima Maru	JBHJ	Japan	Ft. Hedland		15s 125e
F6AXV	Henri	Magdala	FNVH	Muscat	Rotterdam	28/11	o2s 48e
JH2SIS	Taki	Fukuyoshi Maru	JLGF	Ecuador	fish banks		o2n 81w
SMØHLH	Tor	Mad. Butterfly	SJRA	Japan	?	?	Indic
WB7BVW	Mike	Navigator	?	Singapore	Dammam	23/12	tug
YO4WJ	Mihai	Rithmicu Viles	YQOS	Constanta	Nantes	12/12	36n o6w
K6MG	Earl	Transcolorado	KOEW	Japan	Fusan	13/12	off JA
G3RJS	Paul	Oriana	GVSN	Tonga	Tonga	?	
JA6RG	Tame	Ris Maru	JGAX	Japan	Suez		Arab Sea
DU1GQ	Gene	Katrina	5LDN	Japan	Singapore	3o/11	
LX1DE	Joe	XARIFA 2	LXAA	Mediterranean	Sea research		vacation
LA9UH	Ray	Bangor	LMJE	Pacific			vacation
G3ZXH	Les	Iberic	GHLB	England	Wellington		vacation
DI2HC	Herm	Gauss	DBFB	North Sea	Hamburg		DL9IL
DL3NH	Nico	Cobra	DA4648	Baltic Sea	Hamburg		yacht
JA4DBQ	Hory	Akama Maru	JBGM	Japan	Mena	9/4	
DL1SV	Al	Lichtenstein	DEAT	USA	Hamburg		prohibited

T R A V E L R E F O R T S , continued

AMATEUR	HANDLE	SHIP'S NAME	CALL	FROM	TO	ETA	REMARKS
MP4TDT	Joe	Discoverer	WFGS		Bahrain		drilling
ON6WR	Roger	Prince Laurent	ORAH	Ostende	Dover		ferry
SV1HK	Theo	Oinoussai	SWPR	MED cruise			passenger
F6DPZ	Pat	Dogger Bank	?	Shetlands		1/1	trawler
DK4BP	Arno	Cremona	9VIL	Shahpour	Singapore	1/11	sheep
F6CMZ	Didier	Pecheur Breton	FZFM	North Sea	fishing banks		
F6BBU	Michel	Nyombe	?	Europe	Brazil	31/12	
F6CME	Bernard						vacation
F6EAX	Pierre	Hermione	FNBY	Le Havre	?	QTO 7/1	
ON5GT	Georges	Montford	ONMG	Antwerpen	Mombassa	26/3	ZDK 11/3
G3FWB	Peter	Angelique	MIRZ	Palma	London	?	yacht
LA9UH	Ray	Barwa	LMRH	Oslo	Takoradi	3/4	1055
VK3GH	John	Solent Dove		Panama	Melbourne		yacht
G3LSQ	Peter	Lucina		Mediterranean	cruise	2/4	yacht
F6ADI	Bernard	Ville de Bordeaux	FNQM		Doha	17/4	orders
G4CNU	Gerry	Silverfjord	GOZH	Japan	Jeddah	1/4	off 9VG
LA2MA	Finn	Herstein	LNWC	Singapore	Lisboa	1/12	1974
SM6CNX	Dan	Argonaut	SDJA	Hamburg	Golfito	29/6	then LA
G4EOK	Dennis	Belfast		London	London		museum
DJ4IG	Hajo	Bije		New York	Plymouth	13/8	yacht
PAØNMH	Mike	De Hoop	PHKS	Scheveningen	cruise		hospital
G3ZGC	Richard	Esso Scotia	GZJG	Niton	Rastanura	15/8	tanker
SL8DC	Torkel	Gladan	SBCG	New York	Plymouth	8/8	schooner
DJ9ZT	Axel	Solaris		Emden	Tromsøe	21/8	yacht
LA1VU	Chris	Kon-Tina		Bermuda	Plymouth	10/8	fletcher
ON5JD	Jan	Princes Paola	ONFP	Norfolk	Rastanura	9/8	
C5AJ	Elmar	Jangada	C5AG	Genova	Barcelona	13/8	yacht
OHØNE/SM	Ingolf	Sea Swift	SJTA	Fersian Gulf	Rotterdam	20/8	tanker
FAØWAY	Toine	Britsum	PJKV	Santos	Brest	18/8	then DAN
DK1PD	Klaus	Hermod	DIDH	Rotterdam	Tubarao	15/8	
VP2LN	Carlo	Fair Carol	MQUA	Antigua	St. Thomas	11/8	
ON4CH	Pierre	Filou		Monaco	Mandrier		yacht
YU2REE	Veljko	Nova Gorica	YTTX	Bahia Blanca	Constanta	30/8	
K6MG	Earl	P. Roosevelt	WLRK	Bombay	Marseille	19/8	Adviser
LA3AU	Per	Nopal Japana	JWXX	Hiroshima	Jeddah	10/9	then JA
WA2UNO	John	Export Leader	WCJV	Genova	Barcelona	15/8	
K2LG	Al	Puerto Rico	WFJK	Baltimore	Shahpour	14/8	then HZG
LA1GO	John	Tyr	LADV	Marseille	B. Abbas	15/8	then EU
VP5WS	Werner	I. Blumenthal	DJTD	Cleveland	Jeddah	25/8	
F6EMR	Robert	Yalvados	FNLB	Abidjan	Bordeaux	24/8	
VK3AID	Roman	Hop Chong	6ZFX	Bremen	Long View	25/9	ex ELHR
JA3CKJ	Yuji	Sëiren Maru	JHDU	Cebu Sea	Yokohama	13/11	
JAØVGP	Iwasaki	Okinoshima M.	JCOW	Persian Gulf	Chiba	?	tanker
W4HIX	Stony	Researcher	WTER	Miami	Miami	1/9	R/Vessel
G3ZGC	Richard	Esso Demetria	GRAX	Ras Tanura	Europe	17/8	Kenya
ON4US	Peter	Monthouet	ONMX	New York	Abu Dhabi	28/8	
ELØAA	Joe	Discoverer 511	A8LZ	Guyana	Malaga	15/11	drilling
JA4WXO	Masa	Miyata Maru	JBTK	Chiba	Rastanura	24/9	
F6EKB	Pat	Cap S. Maries	FNHJ	Boulogne	fishing banks		
LA2PH	Knut	Holm	LJKX	Milfordhaven	Fawley	15/9	tanker
LZ2EY	Danny	Alka	LZRI	Dakar	Windhoek	17/9	fisher
K6IVA	Clint	Thomas Lynch	KLHM	Djibouti	Houston	?	via SUP
I2MTA	Matteo	Rafaele	-	Tenerife	Antigua	29/9	yacht
JA4VGV	Naka	Jinyo Maru	JEDE	Japan	Jeddah	21/9	
DJ9ZT	Axel	Solaris	-	Tromsøe	N. Semlja	15/9	yacht
JA4DBQ	Hory	Takamiya Maru	JFWR	Tokuyama	Mena	9/9	tanker

I N T E R M A R I T I M E N E T W O R K

Edge frequencies were first used for maritime traffic by ELØB/MM on 21 January, 1969. Today's Channel 45 was mainly employed then for immediate changeover from A1 to A3J modes. For better frequency tuning using crystal calibrators, today's Channel 4 was first used by DL2RH on 11 April, 1969.

The IMMC Channel System was inaugurated on 7 December, 1970, by our then Adviser OH2BDP after carefully checking with other networks such as of FOC, ECARS and MMARC. This was an Officers Decision under chairmanship of our then President G3RSP. Provisinal Net Control was DLØHV operated by DK3VU from the DARC Hannover club station.

The IMMC received its own club station call sign DKØMM on 15 January, 1971. Missing an own home, this station was located at DLØHV. It never went into the air as our host did not want DKØMM to operate. When our provisional Headquarters went to sea again we returned the licence on 22 April, 1971.

Our Headquarters and Net Control Station moved into the new home of DK4BP on 1 February, 1972. We applied for return of our call sign DKØMM but the administration issued DKØOA instead. DKØMM had been given away to another club by mistake. Following our claim, the call sign DKØSS for Ship Service was issued to IMMC on 6 June, 1973.

Since then, the INTER MARITIME NETWORK has operated nearly every day. Initially, Channel 4 was used. Due to sunspot minimum conditions, however, we shifted down to Channel 3 which proved excellent. Our first relief station was established under DKØMC for Maritime Club on 6 January, 1975. Others will follow, due to regular development of our maritime network.

Below, we present a Channel Table. It is a copy from our 1973 Bluebook. Due to radio propagation conditions, applications have changed slightly.

Channel	Application	Carrier Frequency	Mode	Sideband	Edge Frequency
1	Ports, Docks	3600	A1, A3J	upper	yes
2	Rivers, Canals	7100	A1, A3J	lower	
3	Coastal Waters	14100	A1, A3J	upper	yes
4	High Seas	21100	A1	-	
45	High Seas	21150	A1, A3J	upper	yes
5	High Seas	28100	A1	-	

The following Maritimers checked in to our network, filed in the order of their check-in times:

In 1974: pi1lc, paØgkw, dl9il, dl9az, dl7pv, g3rsp, ok4nh, dl2bo, yo4asg, yj8fs, oh2bdp, g3bqr, fØec, w5fgo, on6gc, yo4wo, i2k1p, f6axv, dj1kj, dl8cs, ja4dbq, dl2cm, elØr, dj5ut, ja8pmf, dl8ol, g4clo, paØrvr, uq2db, ok4pen, py1dg, ja5ceq, wa2fle, dj4so, dk4bd, yu2rfk, dj6tk, paØway, sv1rx, dj3dh, elØs, elØu, la2kd, ea8cs, g4bus, sm6cmu, oh2ka, dk6sx, sm5ffp, gm3hun, f6dat, df1qx, oz1aar.

In 1975: dk4bp, yo4asg, dj4so, elØs, f6adi, dj3dh, ep2rg, dl9il, gm5bkz, dj2vo, dj6tn, yo4wo, cn8cf, elØp, paØrvr, yo4pz, sv1sak, df1qx, dl1sq, ox3wx, dl7pv, ok4pen, 4s7wp, dl1sv, oe5ca, dj9zt, k6mg, w3mrr, dl7ry, g2wq, 9k2db, dl1ow, dk5hg, f6bqo, ja3oxk, tkØtt, yz2rfk, pi1lc, elØr, sv4ift, la9uh, ea4bv, fl8ww, el2jm, vk6rq, vp9hx, dl3mq, dj1wd.

In 1976: yo4asg, dk4bp, vk6rq, dl1sq, 9v1rd, 9m8hb, lz1cy, dj2vo, dulgq, dk5li, on5gt, yo4wo, ja4dbq, yo4arr, k6mg, hb9c, oh3ny and many more.

I N T E R M A R I T I M E A W A R D S

As far as our awards are concerned, our 1973 Constitution, Article 11.o, was amended on 1 May, 1975, as follows:

11.1, INTER MARITIME AWARD.

The award shows the deep sea in Navy Blue. It shall draw attention of easy-life landlubbers to heavy-duty conditions aboard seagoing vessels, such as: Authorities, operating agencies, shipping companies and ship-masters opposing HAM radio, crew shouting "BCI!", minimum antenna space, heavy rolling, tropical heat, arctic cold, engine noise, propeller vibration, stinking cargo, shifting watches, night overtimes, extra paperwork, missing mail - away from family on long-term contract.

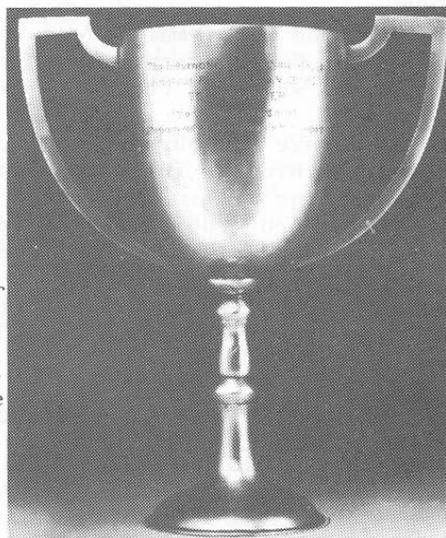
Condition: Confirm one hundred maritime contacts anywhere, any time.

(This award was developed from our former "IMMC 100" award. Due to ever increasing numbers of maritime stations reported, IMMC now allows non-member stations to participate.)

11.2, INTER MARITIME CUP.

The Cup was hand-made of Sterling silver by Yung-an at Shanghai around 1915 and is worth about three hundred Gold Francs. It shall draw attention to the INTER MARITIME NETWORK serving seafaring HAMs world-wide. Condition: Confirm your total number of maritime contacts within each calendar year.

(The trophy was won by DL9IL in 1975 who proved maximum number of maritime contacts. In 1974, the winner was DL9AZ. In 1973, the INTER MARITIME CUP had not been issued.)



11.3, SEVEN SEAS AWARD.

The award shows planet Earth from a space position above the south pole. It shall activate DX hunters to trace long distance maritimers within remote sea areas.

Condition: Confirm seven maritime contacts, one within each of the Seven Seas. Boundaries are indicated by WAZ zones and geographical coordinates.

(This award has never been issued so far. Working maritimers within the polar oceans proves extremely difficult. This, however, is the challenge! We will stand-by for the first winner. He will be honoured in due form, and publication will follow through our organs.)

Minimum reports are 33 or 338 respectively. Send your GCR list or QSLs, together with 1o IRC to IMMC Headquarters as indicated on the cover. Detailed information is available on request at any time. The winning conditions will be published continuously in various magazines and news bulletins in various languages and intervals. In addition to that, we will publish winning conditions on our QSL cards. Good luck!



I N T E R N A T I O N A L M O N I T O R I N G S Y S T E M

In accordance with Article 10.0 of our Constitution (1973 Bluebook page 14) the IMMC participates in the International Monitoring System (IMS) of the International Amateur Radio Union (IARU).

**THE INTERNATIONAL AMATEUR RADIO UNION
MONITORING SYSTEM**



IARUMS (Region 1)
36 Chelwood Crescent
LEEDS LS8-2AQ
England

REGION 1 DIVISION

Regional Co-ordinator : Colin J. Thomas, G3PSM/GB21W

Tel: (0532) 666317

IMMC members at sea and ashore currently send reports to our Headquarters by Marigram or airmail. Here they are compiled and forwarded once a week to G3PSM. Colin edits a monthly bulletin called "Summary of Intruders", a copy of which is regularly sent to our Headquarters.

We encourage all our members to send their monitoring reports immediately after watching an intrusion. An intruder is a non-amateur radio station transmitting within IMMC Bands 2 to 5 which are exclusively allocated to the amateur radio service in all ITU Regions. The IMMC refers to 1976 Radio Regulations, Articles 15 and 16, also Appendix 7.

Below, we publish an extract from the August 1976 "Summary of Intruders". It shows the frequencies around IMMC Channel 3 and presents a typical intruder situation.

Summary of Intruders - August 1976									
Freq	Exam	Dt	Times(UT)	Ident	Cl	Adm	Loc	Traffic and comments	SOI
14097.25	F1	18	1400-XXXX	BQP71	FX	CHN	CHN	U5 & MR. 850 Hz shift	206
14099.5	F1	03	1420-XXXX	(IBBQ) DE BQP71	FX	CHN	CHN	MR.'AMP 15240 KC K'	128
		11	1527-XXXX					QTE HR 070	
14100	A1	17	0809-XXXX	GKC	-	-	-	Calls. 'QSX'	128
14100	A3J	01	1258-1300/	RA2 R1	FX	ME	-	Arabic	128
14100	A3	11	0445-XXXX	Cairo	BC	EGY	EGY	2f 7050 kHz	128
		25	0512-XXXX						
14100	JAM	17	0555-XXXX	TR TR	-	URS	URS	QTE HR 090	128
14101	A1	31	1358-XXXX	RMLT UCT	-	URS	-	Calls and procedures	128
14102.2	F1	25	0416-XXXX	-	FX	URS	-	SePr. 470 Hz. QTE LA 320	206
		26	1630-XXXX						2XX
14103.2	F1	04	1318-XXXX	-	FX	URS	URS	SePr. 970 Hz. QTE LA 315	206
		06	0530-XXXX						128
		22	1615-XXXX					QTE MI 060	
14104A	F1	08	1509-XXXX	-	FX	URS	-	SePr. 2 kHz. QTE LA 325	206
		13	1300-XXXX						
		06	2200-XXXX						
		12	0600-XXXX						
		18	0440-XXXX						206
		19	0500-XXXX						

DE G3PSM

We wish to emphasize that this world-wide organization operates effectively

"FOR THE PROTECTION OF THE EXCLUSIVE AMATEUR BANDS"

The M A R I T I M E O F F I C I A L S C E N E

On this page, the INTER MARITIME CLUB presents its annual report on the legal proceedings and other developments concerning maritime mobile (MM) amateur radio operation. Our legal adviser is Dr. Meine, attorney of law.

Radio Regulations, Article 41 of the International Telecommunication Union and their Additional Protocols do not mention any MM operation. National telecommunication administrations are in possession of all rights to set up certain restrictions for MM stations under their supervision. They also have the right to prohibit MM operation altogether.

The IMMC believes that all HAMS should be free to operate their stations aboard seagoing ships - provided that they do not interfere with the ships' safety.

According to latest information from the Ministry of Transport based on an ARRL survey, 28 telecommunication administrations prohibited MM operation in 1972. The United Nations consisted of 148 nations as per December 1974. This means that about 120 nations permit MM operation on their ships.

After thorough discussion we have come to the conclusion that we must help our members from the "underprivileged" countries. In accordance with its Officers' Decision of 1 May, 1972, the IMMC launched its first legal proceedings for MM operation, against the federal German "Bundespost" on 31 May, 1972. Both DL1TV, official of the Ministry of Transport and DL1FL, DARC Liaison Officer intervened, promising that a change of regulations was ahead. Thus IMMC stopped proceedings on 23 August, 1973. Since no regulation was changed for more than one year, the 1974 INTER MARITIME CONVENTION decided to resume the proceedings. The retrial started on 23 October, 1974, at the Administrative Court of Hannover. On 13 November, 1975, the Court pronounced the following judgment:

The Ministry of Transport has the right to prohibit MM operation. According to the Constitution of the Federal Republic, however, they are obliged to make exceptions through § 10 of their own Ship Safety Regulations. The Court judged that this § 10 must be employed at future applications for maritime mobile licences.

The IMMC is quite happy about this sentence. Since its pronouncement, two exception licences have been issued so far: to DJ4IG who used it aboard the yacht "Bije" during "Operation Sail" the Atlantic Ocean yacht race this summer, and to DL9FG who uses it aboard his yacht "Roswitha".

The IMMC will continue to stand up for its members whenever necessary.

The following 28 nations prohibited MM operation in 1972:

Algeria, Angola, Belgium, Ceylon, Cyprus, Czechoslovakia, Ghana, German Federal Republic, Greece, Hongkong, Italy, India, Korea, Luxembourg, Mexico, Malaysia, Malta, Mauritius, Mozambique, Netherlands, Nigeria, Poland, Portugal, Spain, Surinam, Syria, Western Samoa, and Zambia.

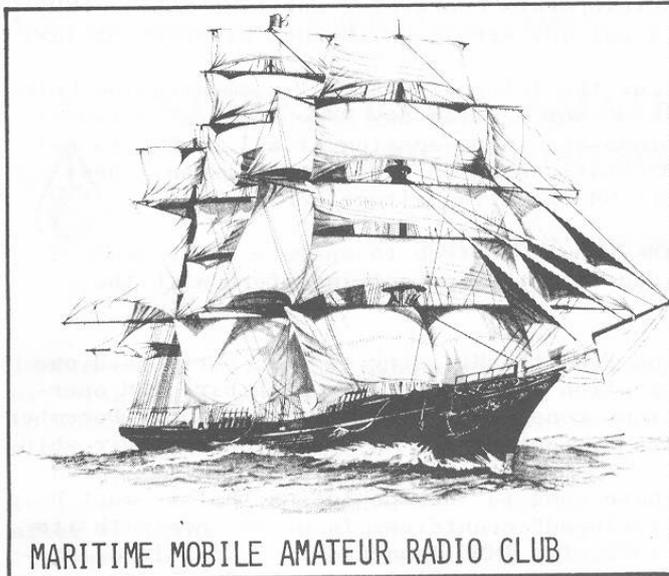
Since then, the following nations have opened up for exceptional licences:

Belgium, Czechoslovakia, and the German Federal Republic.



REPORT ON BROTHER SOCIETIES

The IMMC offers regular publications of the following clubs on this page.



Headquarters Address:

MMARC

5627 Tiffany Drive

Houston, Texas 77045, USA

Commodore: WA7LZL

Vice Commodore: WB6NJX

Secretary: W5CXM

1976 MMARC Convention:

1 October at Headquarters

GREETINGS TO ALL MEMBERS OF IMMC:

"Congratulations and best wishes on this your first annual newsletter."

We are honored that we have been asked to be part of this issue as it is a "first" and pleased to have the opportunity to send our regards to all IMMC members. It is a pleasure to work with and be associated with another organization that holds as its aim the same objectives as our own; the promotion of fraternal and friendly relations between and among amateurs with a common interest in the maritime mobile service. Along with that we firmly believe that maritime mobile operators the world over create and promote high standards of amateur operation and are a credit to the amateur society.

MMARC was established in 1950 by a group of maritime mobile amateurs who banded together in order to petition for more frequencies on which to operate. At that time they were restricted to 10 meter operation only. They were successful in their attempt and now enjoy operating on 10-15-20 and 40 meters.

It is our sincere hope that IMMC will continue to grow and advance in the future as it has in the past, and that we may continue in the common cause we both share.

73

Houston, 12 April, 1976

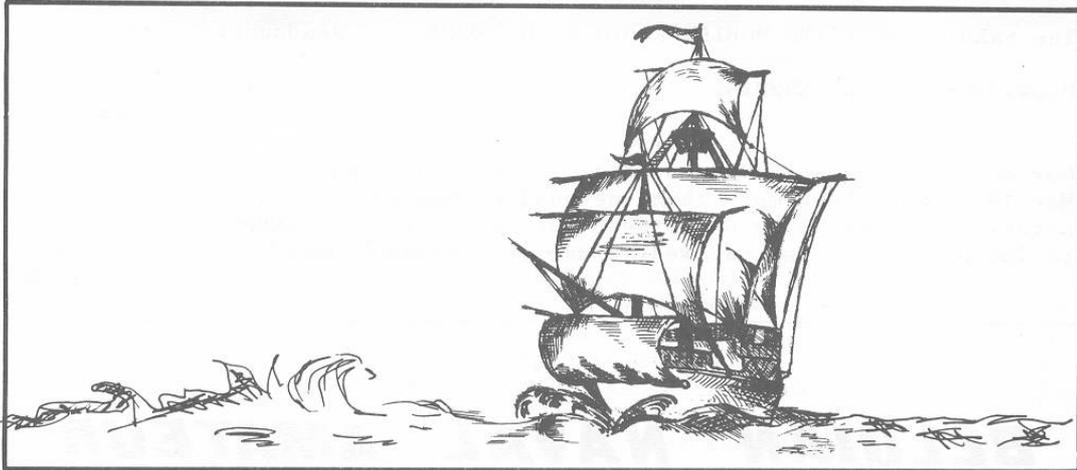
Members of the MMARC



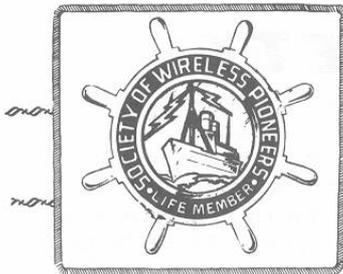
ROYAL NAVAL AMATEUR RADIO SOCIETY

1. The Royal Naval Amateur Radio Society was founded in October, 1960, with the intention of gathering all radio amateurs who had any connection with the Service, or its allied Services, at home and abroad, together. Since its formation the membership has extended to all continents of the world, with representatives in most Commonwealth Navies. It is accorded full recognition by the Ministry of Defence (Navy) and is affiliated to the Radio Society of Great Britain. The Headquarters of the Society is situated at the Royal Naval Signal School (HMS Mercury) near Petersfield in Hampshire.

IMMC initial contact to RNARS Headquarters Station G3BZU dates back to 9 December, 1970, when we were operating provisionally from DLØHV/DK3VU. Since then, the two societies have exchanged a growing communication. Some of RNARS members joined IMMC as well, and affiliation negotiations are going on. Band 3 net frequencies are 14020 and 14160 kHz, but no time schedule has been indicated so far.



Telephone (707) 542-0898



INTERNATIONAL ORGANIZATION OF PROFESSIONAL RADIO-TELEGRAPHERS

Society of Wireless Pioneers

MAIL: P. O. BOX 530 SANTA ROSA, CALIF. USA 95402

September 10 1976

SOWP Transcontinental network schedule:
Thursdays 1500 GMT on 14125 kHz A1.

The society has over 2300 members, located around the world and is the largest institution of its kind. On 14 April, 1976, SOWP and IMMC have affiliated by a special contract.

PRESIDENT
Eben K. Cady
EXECUTIVE DIRECTOR
William A. Breniman
V. P. MEMBERSHIP
John N. Elwood
TREASURER
Lorin G. DeMerritt

REPORT ON BROTHER SOCIETIES , continued



INROC
INTERNATIONAL RADIO OFFICERS' CLUB

Chaussée de Ruisbroek 54
B-1190 BRUSSELS (BELGIUM)

Chairman: Francois Depre.

Secretary General: Eddy Schouben.

The IMMC maintains friendly relations to this international society of marine radio officers since March 1975. They have more than one thousand members now - membership is free. Detailed information is available on request at any time.

The SWEDISH MARITIME MOBILE RADIO CLUB (SMMRC)

Headquarters Address:

President: Göran, SMØHIH

Lammholmsbacken 238
S-12749 Skärholmen

Our contacts to the SMMRC and its ex President Ben, SM6CKU, date back to May 1972. They have more than one hundred members now, and affiliation negotiations are going on between our two societies. SMMRC news bulletin is issued once a year. A Swedish maritime network does not yet operate.

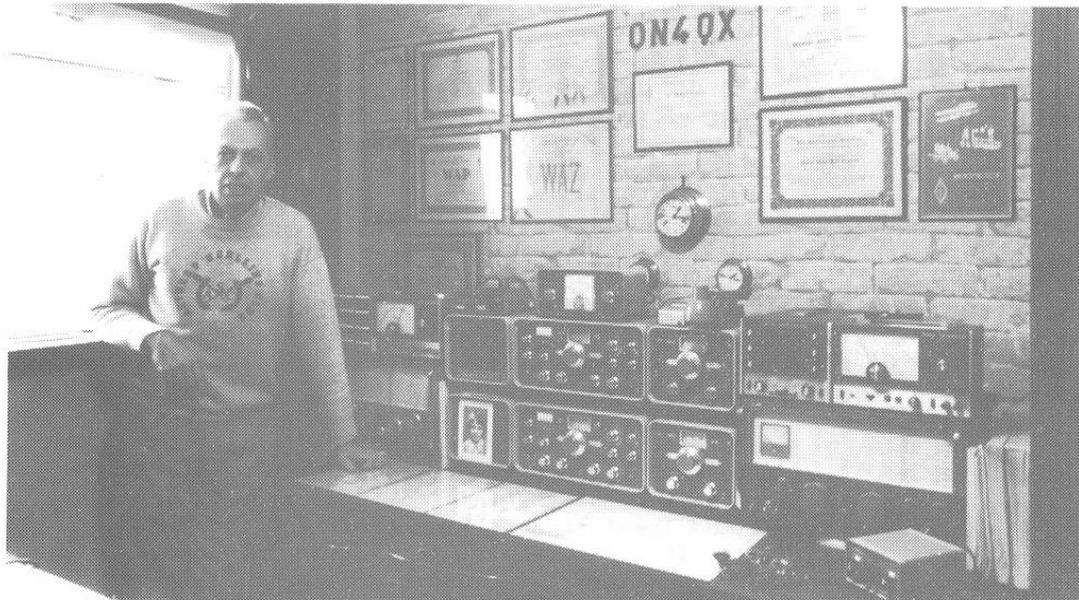
BELGIAN NAVAL AMATEUR
RADIO SOCIETY

Vice President: OM Rogiers, ON50J, Brieversweg 7o, B-831o Brugge 3

Our contacts to BNARS date back to September 1973. Their Headquarters and net control station is ON5SB, international telephone 32-5o-354297. They have several maritime stations operating aboard fishing vessels and coasters. Operation aboard a naval ship was done by ON50E/MM. This, however, is no longer permitted by Belgian naval authorities.

M E E T A M E M B E R

In this issue: Meet ON4QX, member IMMC, RNARS, AMMC, FOC, AIOC.



In fact, Bob is a HAM since 1934. Due to his late studies for Dr. jur. at the Louvain and Brussels Universities, he became a Radio Officer in 1939. During WW II he joined the RNVR as a Lieutenant R/O doing convey jobs. Bob is the only one of his family who went to sea. For some time later, he was a Judge and a Lector at University. At international conventions, he acts as a specialist for tax laws.

Licensed in 1953, Bob has always operated CW and his main interest, of course, is maritime. He holds the first WPX-MM and several MM awards. His total score in CW is 340/319 and 1188 WPX. He performed the following expeditions: LX3QX, 3A2CZ, I1IQX (Linosa Island), 9A1QX, FØCZ, PA9QX and ON8ITU. In July 1976 he planned to operate as an HBØ station. Bob is the chairman of the Antwerp CW DX club which issues a maritime award as well.

During th past years, Bob has handled emergency cases such as "Xarifa", DI2AA, and a lost aeroplane in Liberia, also the relay traffic of the Belgian south pole expeditions. Living in the port city of Antwerp, Bob has a lot of maritime visitors. His 14 year old son reads 17 words per minute and is preparing for his licence examination in 1977. ON4QX is commonly known as "Bob with the filter". A filter is an exclusively Belgian system for preparing special coffee, hi. His XYL donates such a filter to each maritimer visiting their VILLA "SHAMROCK" at Edegem 2520.

Bob sends his best greetings to all IMMC members and other radio amateurs.



CORDIAL INVITATION TO ALL HAMS

Dear Salt:

News about the INTER MARITIME CLUB is getting around the globe every day. This international society of seafaring HAMS has been founded for all radio amateurs having a special interest in maritime affairs. It is the first and only one of its kind in the world.

Most of our members are marine radio officers whether active at sea, back home on vacation, or retired from sea life. We are happy, however, to have shipmasters, navigators, engineers, electricians and boatswains among our crew as well. The INTER MARITIME CLUB is open to all radio amateurs officially licensed. We aim at promoting the use of HAM radio at sea, binding together our shipmates and rendering assistance to our blue boys, anywhere in the world.

To perform this, we operate the INTER MARITIME NETWORK on the fixed channel 3 frequency of 14100 kilohertz every day. Our net control stations are located within all three Regions of the International Telecommunication Union. We are using maximum legal transmitting power and the best rotary antenna systems available. They secure most reliable communication with our members in any sea area, at any time, under most propagation conditions.

We express our sincere hope that you will be interested in joining our fine crew. If so, please write for detailed information to our Headquarters.

WELCOME ABOARD!

INTER MARITIME CLUB

The International Maritime Mobile Amateur Radio Club, Inc.

The 1976 Officers Group

Signed for Secretary General,

(Arno Mueller-Henze)

Edition of 500, printed for the IMMC by:

Friedrich Hormann Hannover-Wülfel



MEMBERS' ADVERTISEMENTS

The following commodities we offer to our members at reasonable prices:

Maritime QSL cards with individual ships' photographs, per 1000: 95.00
Member's correspondence forms, letter head with IMMC badge, per 100: 14.00

Lapel badges, gold plated copper relief, Navy Blue enamel, each 5.00
Neckties, golden IMMC badge on Navy Blue Trevira, each 20.00
Car stickers, rhombic plastic, for windscreen fixing, each 1.00
Rubber signet stamps, with IMMC badge and membership number, each 30.00
1976 INTER MARITIME LETTER (this issue),
per copy 3.00



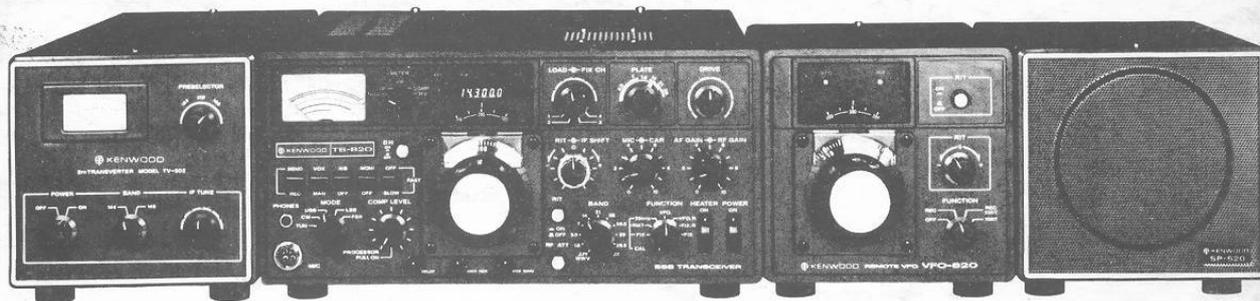
On this page 19, IMMC members may advertise free of charge. Selling prices are indicated net in Gold Francs as per rate. For purchase, please contact our Headquarters soonest.

One CDE HAM-II rotor, number 5 series, brand new 256.00
One two-element Hy-Gain 244 Hy-Quad, all aluminium, tri-gamma 266.00
One Q multiplier unit Heathkit HD-11-E, like new 45.00
One auto-transformer, from 220 to 110 volts or reverse 50.00
One electronic digital clock MOS-Mini 3000, very neat 80.00
One all-band S/W transceiver UNIDEN 2020, mobile AC/DC etc vfb 2,200.00
four-element Skylane Super-Quad, glass fiber, ring balun, new 1,425.00
Mobile SSB transmitter Heathkit HX-20 plus:
Mobile receiver Heathkit HR-20 in excellent condition, plus:
Dynamic microphone Heathkit GH-12, plus:
12 volts DC power supply Heathkit HP-13, plus:
110/220 volts AC power supply, vfb home made for above RIG,
all units in best possible condition, all units together 842.00

WANTED: RTTY short wave converter, DJ6HP type, in operative condition!

A Gold Franc might look like this:
According to official information,
its rate of exchange is:
1.051882 Deutsche Mark.

SSB/CW/FSK Transceiver System TS-820



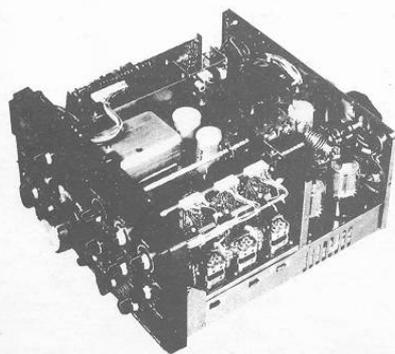
For years the Kenwood Transceiver TS-900 has been rated the Ultimate in Shortwave Radio Amateur equipment engineering. But this deluxe transceiver with its outstanding performance, professional engineering and advanced technology could be afforded only by very few amateurs since it was entirely hand-made in limited quantities which, of course, also reflected in its retail price.

We are very pleased to offer a new type of SSB/CW/FSK transceiver which will match its predecessor in every aspect of performance, technical perfection and features at a considerably lower price — the TS-820. By extensive use of state-of-art structural elements and electronics components, especially the latest modular assemblies, combined with application of modern, economic production methods, the TS-820 has achieved quality standards, hitherto unknown in series-produced communication equipment. Its price will please numerous discriminating radio amateurs who could never before realize the dream of owning a transceiver of this class. These are its outstanding features:

Ultra-stable PLL Circuitry — PLL (Phase-Locked-Loop) circuits, a late achievement in hifi equipment engineering, have now been adopted for communication equipment by Kenwood because of their outstanding features. PLL circuits allow accurate frequency derivation without introducing spurious radiation in transmitters and offer superb protection against unwanted mixing products in receivers. The PLL "locks" the oscillator frequency to an internally produced reference frequency and assures optimum frequency stability, especially when switching from LSB to USB and vice versa. The operating frequency remains correct and eliminates recalibration when changing operation modes.

Precision Tuning — Heart of the transceiver's tuning system is the highly stable, fully encapsulated FET-VFO with additional VCO — in fact the very same as that used in the TS-900. In connection with a new silk-smooth planetary dial drive and the twin-disc monoscale, the TS-820's precision tuning system guarantees direct and accurate reading of LSB, USB and CW operating frequencies and the razor-sharp tuning of the receiver to ± 1 kHz accuracy. After installation of the optional Digital Frequency Readout DG-1, a dial resolution of ± 100 Hz can be achieved. You'll find a more detailed description of the 6-digit display under "Optional Accessories".

IF Shift — or "bandpass tuning". This circuit allows variation of the IF bandpass centre frequency, thus enabling you to eliminate unwanted signals by moving them beyond the bandpass curve. In practical use this means less interference in RX mode and more pleasant DX-QSOs.



Multi-function Metering — A truly versatile measuring system, operating as S-Meter in the receive mode and allowing accurate ALC, plate voltage, plate current and RF output measurements in the transmit mode. The five-position meter switch includes a COMP setting for monitoring the compression level of the built-in speech compressor.

Speech Compressor — As opposed to the IF clippers used on most other equipment, the TS-820 features a unique RF speech compressor, operating with a subsidiary 455 kHz oscillator to provide quick time constant compression, thus assuring optimum voice modulation and legibility of TX signals. The built-in RF monitor permits listening to your own signal during transmission.

AF Signal Shaper — Especially useful when receiving CW signals. It automatically modifies the audio frequency response to suit the mode in use.

RF Attenuator — By simply pressing a pushbutton switch, very strong RX signals can be attenuated by -20 dB, thus eliminating the background noise level during local QSOs.

Deluxe Extra Features: Silent blower for efficient cooling of PA tubes; Receiver Incremental Tuning (RIT); built-in VOX with adjustable gain, delay and ANTI-VOX; built-in FSK circuit with adjustable shift (170 Hz/850 Hz); built-in 25 kHz crystal marker generator for fast and accurate dial calibration; CW sidetone and semi-break-in; microphone and carrier level controls; RF and AF Gain controls; heater switch for driver and final tube filaments; Driver, Plate and Final vernier tuning; built-in speaker; jacks and sockets for microphone, key, extra speaker, headphone. External VFO, 2 m-Transverter, linear amplifier, etc.

Optional Accessories:

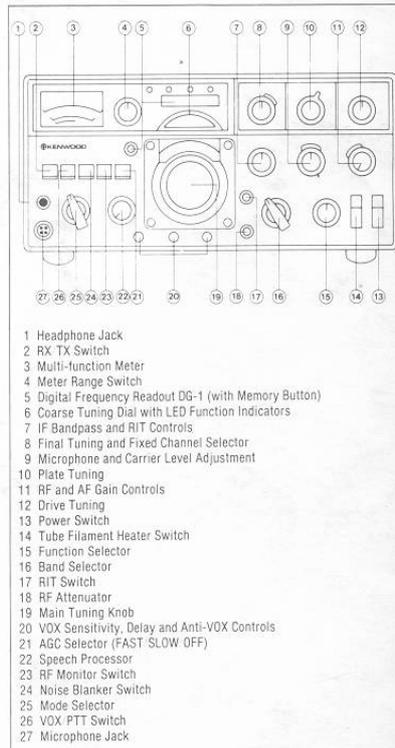
The wide variety of accessories, custom-tailored for the TS-820, allows the step-by-step addition of other equipment to build a complete radio amateur station capable of all bands and all operating modes:

External VFO-820 — For independent TX and RX operation with different frequencies. Detailed description on page 6.

2 m-Transverter TV-502 — Allows SSB and CW transceive operation on 2 metres between 144 and 146 MHz. Detailed description on page 6.

Digital Frequency Readout DG-1 — In addition to the standard precision dials, this 6 digit LED display can be installed to further improve setting and readout of RX and TX frequencies. The DG-1 employs a 1 MHz crystal time base with associated counter and mixes carrier, VFO and 1st heterodyne frequencies, thus assuring accurate indications with ± 100 Hz resolution. The unit comes ready assembled and can be installed within one hour. No soldering is required. Other recommended accessories are shown on page 6.

KENWOOD
KENWOOD COMMUNICATION
 Generalvertretung für Deutschland
Georg Weiland
 3000 Hannover
 Hildesheimer Straße 341
 Tel.: SA-Nr. 0511/86 40 81
 Telex 923620



Specifications

Frequency Range	160 meter band 1.8 to 2.0 MHz 80 meter band 3.5 to 4.0 MHz 40 meter band 7.0 to 7.3 MHz 20 meter band 14.0 to 14.35 MHz 15 meter band 21.0 to 21.45 MHz 10 meter band 28.0 to 28.5 MHz 28.5 to 29.0 MHz 29.0 to 29.5 MHz 29.5 to 29.7 MHz WWV 15.0 MHz (receive only) A U X band (e.g. 11 m - CB)
Mode	CW, USB, LSB, FSK
RF Input Power	SSB: 200 watts PEP CW: 160 watts DC FSK: 100 watts DC
Antenna Impedance	50 to 75 ohms, unbalanced
Carrier Suppression	better than 40 dB (Mod. freq. at 1.5 kHz)
Sideband Suppression	better than 50 dB (Mod. freq. at 1.5 kHz)
Spurious Radiation	Harmonics Less than -40 dB
Receiving Sensitivity	$0.25 \mu\text{V}$ for 10 dB S + N
Image Ratio	160 to 15 meter band: better than 60 dB 10 meter band: better than 50 dB
IF Rejection	better than 80 dB
Frequency Stability	Within ± 1 kHz during one hour after one minute of warm-up, and within 100 Hz during 30 minute period thereafter
Receiving Selectivity	SSB: 2.4 kHz (-6 dB) 4.4 kHz (-60 dB) CW: 0.5 kHz (-6 dB) 1.5 kHz (-60 dB) *) with optional CW filter
AF Output Power	More than 1.5 watts into 8 ohms
Audio Output Impedance	4 to 16 ohms (speaker or headphone)
Tube and Semiconductors	3 tubes, 5 ICs, 30 FETs, 74 transistors, 165 diodes
Power Requirements	120, 220 VAC, 50/60 Hz or 12-13.8 VDC (with optional Power Converter DS-1) Transmit: 280 watts, Receive: 26 watts
Power Consumption	333 x 153 x 335 mm
Dimensions (W x H x D)	16 kg
Weight	