INTERNATIONAL MARITIME ORGANIZATION

IMO

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SUB-COMMITTEE ON
RADIOCOMMUNICATIONS
29th session
Agenda item 3

MARITIME DISTRESS AND SAFETY SYSTEM

Operator functions in the FGMDSS

Report by the Working Group

1 As instructed the Working Group on Operator Functions in the FGMDSS met from 9 to 12 April 1985 under the Chairmanship of Mr. T.F. Connor (United Kingdom).

2 Representatives from the following countries and organizations participated in this Group:

BRAZIL
CHINA
DENMARK
FINLAND
GERMANY, FEDERAL REPUBLIC OF
GREECE
JAPAN
NETHERLANDS
NORWAY
SPAIN
SWEDEN
UNITED KINGDOM
UNITED STATES

INTERNATIONAL CHAMBER OF SHIPPING (ICS)
INTERNATIONAL CONFEDERATION OF FREE TRADE UNIONS (ICFTU)
INTERNATIONAL RADIO-MARITIME COMMITTEE (CIRM)
INTERNATIONAL SHIPPING FEDERATION LTD (ISF)

3 The Group considered the following documents:

COM 26/3/5 - United Kingdom
COM 26/3/17 - ISF
COM 26/3/18 - ICFTU
COM 26/3/21 - Norway
COM 26/WP.4 - Working Group
COM 28/3/3 - ICFTU
COM 28/3/4 - ICFTU
COM 28/3/5 - ICFTU
COM 28/3/11 - Secretariat
COM 28/3/21 - Spain
COM 28/3/36 - ICS
COM 28/3/38 - United Kingdom
COM 29/3/1 - ICFTU
COM 29/3/17 - Norway
COM 29/3/23 - United States
COM 29/3/24 - United States
COM 29/3/25 - Greece
COM 29/3/35 - Sweden

4 The Group gave consideration to a proposal by the United Kingdom on operating and technical qualifications appropriate to radio personnel on board ships participating in the FGMDSS which is based on duplication of equipment, or shore-based maintenance, combined with two levels of on-board maintenance.

5 Based on this proposal a class 1 maintenance qualification would be carried on those ships which do not carry duplicate equipment over and above that specified by the FGMDSS draft carriage requirements or have no access to shore-based maintenance facilities. A class 2 maintenance qualification would be carried on all other ships.

6 With regard to the table laid down in Annex 1 referring to "Operating qualifications" it was the majority view of the Group that a restricted operating certificate could be applicable to those ships operating in FGMDSS area A1 and carrying only the equipment laid down for ships operating in that area.

7 The majority of the Group agreed that this proposal could be used as a basis for preparing knowledge requirements for maintenance aspects of the operator function in the FGMDSS.

8 Brazil, China, Greece, Spain and the ICFTU did not agree that the proposed option of duplication of equipment should be considered acceptable from the point of view of safety of life at sea as a basis for reducing on-board maintenance requirements. They participated in the preparation of the framework for the two levels of knowledge requirements (Class 1 and Class 2) on the understanding that when it was desired, the complete availability of the equipment at sea would be assured by the performance of the Class 1 Maintainer and that there would be circumstances where a lower level of maintenance might be the result of practical considerations, where the Class 2 Maintainer could be required.

9 It was also the view of those administrations and the ICFTU that the reliance on shore-based maintenance facilities could not occur unless the facilities were defined and qualified as adequate, and that these qualifications and this definition should be included in the new Chapter IV.

Equipment adequate for a viable safety system should be developed in order that repairs can be performed on board at sea. If other types of equipment require special repairing methods in special depots in certain countries this is not valid for an international maritime safety system.

10 The Sub-Committee is invited to approve the draft operating and technical qualifications given at Appendices 1 and 2 to Annex 1 based on concept details given in the table in Annex 1 and to bring them to the attention of the eighteenth session of the Sub-Committee on Standards of Training and Watchkeeping with a request to prepare draft knowledge requirements for the maintenance aspects of the operator function in the FGMDSS.

11 The delegations of Japan, Norway, Sweden, United Kingdom and United States considered that with the development of separate technical and operating qualifications for personnel to be carried on board ships in the FGMDSS the expression "maintenance aspects of the operator functions of the FGMDSS" was ambiguous and that such reference to component parts of a general operator function should now be discarded.

12 The view of Greece and Spain and ICFTU is that the draft being submitted to the Sub-Committee refers to a United Kingdom proposal produced after the Group considered a number of selected documents. This proposal was not previously known by the Group. One of the conflicting points of this proposal says that "the operating and technical qualifications need not necessarily be held by the same person". Never before have functions of the operator (operation and maintenance) been separated. No regulation of SOLAS and STCW Conventions or ITU Radio Regulations contemplates separate functions. The view of those Administrations and ICFTU is as follows:

.1 the person responsible as the FGMDSS principal operator should hold both operating and technical qualifictions; and

.2 there could be one or more other operators, as required, who need not hold necessarily more than operating qualifications.

Since in the Working Group there were discussions on whether the operator should be at the same time a qualified technician, with the qualifications detailed in the Appendices, those Administrations and the ICFTU considered it necessary that the Sub-Commitee has to take a policy decisions on this matter.

13 Greece reserves its position with regard to inclusion of the table in Annex 1 to the report as an approved document since it considers that the Group agreed to use this document as a supporting note only.

14 The Sub-Committee is also requested to invite Members to submit their comments and proposals on the above draft documents for consideration at the eighteenth session of the Sub-Committee on Standards of Training and Watchkeeping.

15 The Group noted the preliminary draft recommendation on minimum knowledge requirements to perform the operational function in the FGMDSS (COM 28/3/11) which was submitted by the Sub-Committee on Standards of Training and Watchkeeping for consideration and agreed that the proposed draft document could be used as a basis for further development of minimum knowledge requirements.

16 In this regard the Group was also of the view that minimum knowledge requirements to perform the operational functions in FGMDSS area 1 (restricted qualification) should be developed in addition to those given in COM 28/3/11.

17 The Sub-Committee is invited to consider this view and to bring it to the attention of the eighteenth session of the Sub-Committee on Standards of Training and Watchkeeping.

18 The Group recognized the urgent need to prepare draft amendments to Articles 55 and 56 of the ITU Radio Regulations to include provisions for certification of operators in the FGMDSS and prepared a preliminary outline of the proposed modifications to Article 55, given at Annex 2.

19 In this regard the Group invited the Sub-Committee to provide guidance on the following subjects:

.1 Should the proposed amendments to Article 55 include requirements for maintenance of GMDSS equipment and specify categories of maintainers?

.2 Should operational and maintenance requirements be set out separately in a new Article 55?

.3 How could the requirements similar to those in Article 56 for personnel of stations in the FGMDSS be reflected with respect to:

- public correspondence;
- different ocean areas of operation; and
- different categories of vessels, including their type, size and trading patterns?

20 The Sub-Committee is invited to consider the proposed outline and to request the Ad Hoc Group (Operational) and the Sub-Committee on Standards of Training and Watchkeeping to take it into account in the preparatory work for WARC-Mob-87 Conference.

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ANNEX 1

OPERATING AND TECHNICAL QUALIFICATIONS APPROPRIATE TO RADIO PERSONNEL ON BOARD SHIPS PARTICIPATING IN THE FGMDSS[1]

The range of skills required for Class 1 and Class 2 Technical Certificates is given at Appendices 1 and 2.

FGMDSS AREAS	OPERATING QUALIFICATIONS	MAINTENANCE OPTIONS (ALL AREAS)
A1	RESTRICTED OPERATING CERTIFICATE	CLASS 2 TECHNICAL CERTIFICATE[2] + SHORE BASED MAINTENANCE [3] OR CLASS 2 TECHNICAL CERTIFICATE+DUPLICATION[3] OR CLASS 1 TECHNICAL CERTIFICATE[4]
A2	GENERAL OPERATING CERTIFICATE	
A3/A4	GENERAL OPERATING CERTIFICATE	

Notes:

1 The operating and technical qualifications need not necessarily be held by the same person.

2 To cover sufficient knowledge to be capable of testing the equipment for serviceability, trace and repair simple faults and initiate action by outside agencies or others to undertake repair of more complex faults or replacement of equipment by outside agencies.

3 To be defined.

4 To cover sufficient knowledge to be capable of testing equipment for serviceability, trace and repair faults down to "board" and, where practicable, component level.

APPENDIX 1

FRAMEWORK FOR DEVELOPMENT OF KNOWLEDGE REQUIREMENTS FOR THE FGMDSS MAINTAINERS

Class 1 Technical Certificate

The performance of the maintenance functions at the class 1 level requires that maintainers be qualified with the knowledge and practical skills necessary to effect the following:

1 Preventive maintenance of FGMDSS equipment should include:

.1 Routine monitoring and testing of equipment;

.2 Conduct of routine maintenance procedures, inspections and adjustment of equipment to maintain optimum performance;

.3 Updating of technical records including manufacturer's modifications; and

.4 Maintenance of sources of energy such as rotating machinery, inverters and accumulator batteries.

2 Diagnostics and repair should include:

.1 Identification of fault conditions and diagnosis of symptoms by use of the following:

1.1 systems analysis and logical testing;
1.2 use of check facilities where provided;
1.3 use of built-in test equipment (BITE) and maintainer operated test equipment;

1.4 comparison and evaluation of test data against previously established test data; and

1.5 testing of inputs to/outputs from units and sub-units. Checking signals paths and interface connections.

.2 Isolation, replacement and, where practicable, repair of faulty units, printed circuit boards (PCBs) and components;

.3 Protection of equipment during testing and repair; and

.4 Testing of equipment when repairs are completed.

3 Supportive tasks should include:

.1 Recording of maintenance tests as specified by the log-keeping requirements of the new Chapter IV of the 1974 SOLAS Convention;

.2 Preparing reports and maintaining records of repair work done and replacement parts used; and

.3 Requisitioning spares.

4 Safety during maintenance should include:

Preventive measures for the safety of ship and personnel in connexion with hazards related to radio equipment including electrical, radiation, chemical and mechanical hazards.

APPENDIX 2

FRAMEWORK FOR DEVELOPMENT OF KNOWLEDGE REQUIREMENTS FOR THE FGMDSS MAINTAINERS

Class 2 Technical Certificate

The performance of the maintenance functions at the class 2 level requires that maintainers be qualified with the knowledge and practical skills necessary to effect the following:

1 Preventive maintenance of FGMDSS equipment should include:

.1 Routine monitoring and testing of equipment;

.2 Adjustments of equipment (operator accessible controls) to maintain optimum performance; and

.3 maintenance of accumulator batteries.

2 Diagnostics and repair should include:

.1 Use of check facilities where provided;

.2 Identification of faulty units and sub-units where faults are indicated by built-in test equipment (BITE) indicators;

.3 Locating and repairing simple faults (e.g. blown fuses, faulty indicator lamps); and

.4 Testing of equipment when repairs are completed.

3 Supportive tasks should include:

.1 Recording of maintenance tests as specified by the log-keeping requirements of the new Chapter IV of the 1974 SOLAS Convention;

.2 Maintaining records of repair work done and replacement parts used;

.3 Reporting of uncleared malfunctions to ensure remedial action; and

.4 Requisition of replacement spares.

4 Safety during maintenance should include:

Preventive measures for the safety of ship and personnel in connexion with hazards related to radio equipment including electrical, radiation, chemical and mechanical hazards.

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ANNEX 2

DRAFT OUTLINE OF THE PROPOSED MODIFICATIONS TO
ARTICLE 55 OF THE RADIO REGULATIONS

ARTICLE 55

1 Introduction

It is suggested to place the provisions for certification of GMDSS operators in a new article which could parallel the structure and content of the existing Article 55 and the superseded provisions of Article 55 could be suppressed in future. The provisions in this new article could be divided into two parts: requirements for operator's certification and requirements for maintainer's certification.

2 Suggested content of a new Article 55 (Part 1) - Operator's certification

2.1 Section I General Provisions

It is proposed that the following provisions, similar to the current regulations, would be appropriate in this section:

3861 (with appropriate modifications to include GMDSS equipment)

3866-3877 (with appropriate modifications to the references)

3947-3948 (with appropriate modifications to reflect the GMDSS operators' certificates)

2.2 Section II Categories of certificates for ship station operators

The following provisions, similar to the current regulations, could be included in this section:

3878 (with modifications to include two categories of certificates for the GMDSS operators)

3879 could be amended to read: a) the radiocommunication operator's general certificate

3880 could be amended to read: b) the radiocommunication operator's restricted certificate

3884 (with appropriate modifications)

3887-3889 (with appropriate modifications. To be further developed dependant on the Sub-Committee's decision related to a restricted certificate)

2.3 Section III Conditions for the issue of operators' certificates

The following provisions, similar to the current regulations, could be included in this section:

3891-3896 The provision of this sub-section could be retained with appropriate modifications to the regulations to reflect the knowledge requirements required for GMDSS operators.

3897 The title of this sub-section could be modified to include the GMDSS.

3898 The text of this regulation could be retained with deletion of the words "technical and professional" on the third line.

3898-3907 (with appropriate modification in accordance with COM 28/3/11, Annex and the carriage requirements for the GMDSS)

New sub-section could be included in Section III with a title similar to that in No. 3880 as amended. Appropriate texts for this sub-section could be developed (dependent on the Sub-Committee's decision with respect to the restricted certificate)

Sub-sections D, E and F could be deleted.

2.4 Section IV Qualifying Service

Entire section to be examined with respect to the GMDSS and the qualifying service to be implemented. The difficulty of requiring qualifying service during the initial period, if applicable, after GMDSS comes into force should be taken into account.

3 [Suggested content of a new Article 55 (Part 2) - Maintainers' certification

This part of Article 55 could be entitled "Technical Certificates for Maintenance of GMDSS Ship Stations".

3.1 Section I General Provisions

It is suggested that the following provisions, similar to the current regulations, would be appropriate in this section:

3860 (with appropriate modifications to reflect maintenance requirements in the GMDSS)

3869-3876 (with appropriate modifications to reflect maintenance aspects in the GMDSS)

3.2 Section II

The title of this section could be amended to include maintainers.

It is suggested that the following provisions, similar to the current regulations, would be appropriate in this section:

3878 (with modifications to include two categories of maintainers as proposed in Appendices 1 and 2 to Annex 1 of this document)

3879-3880 (with modifications to include two classes of maintainers as proposed in Appendices 1 and 2 to Annex 1 of this document)

3883-3886 (appropriate modifications could be required to reflect the maintenance aspects)

3.3 Section III

.1 Title of the section could be adjusted for maintainers certificates.

.2 Sub-section A could contain provisions similar to those in Nos. 3891-3896 with modifications to reflect the maintenance aspects and could also include provisions similar to those given in Nos. 3948 and 3949.

.3 Sub-section B could contain provisions for certification of Class 1 maintainer (see Appendix 1 to Annex 1) and should be developed by the Sub-Committee on Standards of Training and Watchkeeping.

.4 Sub-section C could contain provisions for certification of Class 2 maintainer (see Appendix 2 to Annex 1) and should be developed by the Sub-Committee on Standards of Training and Watchkeeping.

3.4 Section IV Qualifying Service

Entire section to be examined with respect to the FGMDSS and the qualifying service to be implemented. The difficulty of requiring qualifying service during the initial period, if applicable, after GMDSS comes into forece should be taken into account.]

INTERNATIONAL MARITIME
ORGANIZATION

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SUB-COMMITTEE ON
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IMO

OPERATOR FUNCTIONS IN THE FGMDSS

Statement by Canada, Finland, Japan, Liberia, Netherlands, Norway, Sweden, United Kingdom and United States

1 The above delegations support in principle the ideas regarding the communication availability and on-board maintenenace explained in COM 29/WP.2 and COM 29/WP.4, which provide for flexibility in requirements concerned with qualifications for on-board maintenance.

2 It should be recognized that the requirements of the present Convention also allow for flexibility with respect to maintenance for ships' radio equipment.

3 The maintenance capability, required in accordance with Regulation 9(i), Chapter IV of the present SOLAS Convention, is decided by the Administration and we know that the actual fulfilment of these requirements varies from country to country. Some countries require a high level of on-board maintenance capability, which is provided by the education and training of their radio officers. Other countries rely more on the support of shore-based service organizations and do not require a high level of maintenance capability on board,

4 There is no reason why the flexibility of the present system should not be allowed to be continued in the FGMDSS, where there shall be a higher level of equipment availability than in the present system.

5 It would be wrong to impose rigid and inflexible requirements which would not give credit to long-standing practices existing in different countries.

6 The proposals submitted to COM 29/WP.2 and COM 29/WP.4 point the way to a sound compromise which could accommodate the different views expressed in the Sub-Committee. After all none of the existing practices in connection with on-board maintenance of ships' radio equipment are prohibited by the approach laid down in Annex 1 of COM 29/WP.2. The approach is rational and sensible and we trust that this approach, after further study and careful consideration at home, can be further developed at the next session of the Sub-Committee.

INTERNATIONAL MARITIME ORGANIZATION

IMO

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SUB-COMMITTEE ON
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MARITIME DISTRESS AND SAFETY SYSTEM

Operator Functions in the FGMDSS

Communication Availability through On Board Maintenance and Duplication of Equipment

Note by the Governments of Norway, Sweden, United Kingdom and United States

1 The draft Assembly resolution for transition to the FGMDSS quotes duplication of equipment, electronic maintenance at sea and shore based maintenance as possible means of ensuring equipment availability. The same philosophy could also be applied to the fully implemented FGMDSS.

2 In an attempt to obtain agreement of administrations and taking into account aid progress towards implementation of the FGMDSS the above administrations propose that a flexible yet detailed framework is established such that administrations have a choice regarding maintenance philosophy whilst ensuring that there is no ambiguity of meaning when referring to the methods to be used.

3 With this aim in mind and in the interests of expediting the work to achieve consensus, the above administrations submit that the two levels of on board maintenance put forward by the Working Group on Operator Functions for consideration by the Sub-Committee should be incorporated into a wider maintenance concept.

4 In that wider concept it is suggested that each of the nine functions required in the FGMDSS is allocated one of three degrees of importance.

5 To achieve an acceptable level of function availability when a Class 1 level of on board maintainer is carried it is suggested that those functions having the highest importance, e.g. ship-shore alerting, must be able to be performed by at least two independent equipments. Functions of medium and low level importance, e.g. shore-ship alerting and general communications must be able to be performed by at least one piece of equipment. (This basic duplication of the most essential functions is already accommodated in the draft carriage requirements for the FGMDSS.)

6 Leaving the question of shore based maintenance aside and to achieve an equivalent level of function availability on ships where a Class 2 level of on board maintainer is carried, it is suggested that functions of the highest importance must be able to be performed by at least three independent equipments, functions of medium importance by two independent equipments and functions of low importance by one piece of equipment.

7 An example chart showing possible levels of importance allocated to each function together with the equipments which may perform those functions in each area is attached at Annex. To translate the information given in chart form into actual carriage requirements, examples are given at the appendices for areas 1, 2, 3 and 4:

.1 when a Class 1 maintainer is carried; and

.2 when a Class 2 maintainer is carried.

8 From the examples given it can be seen that the additional equipment to be carried when a Class 2 maintainer is carried is not excessive yet full duplication and triplication of certain functions is achieved.

9 These examples of equipment carriage are intended as a means of seeking agreement on the meaning of "duplication of equipment" as expressed in

paragraph 6 of document COM 28/10, Annex 3. This would allow administrations to apply an appropriate philosophy regarding maintenance of FGMDSS equipment to take full advantage of modern communication techniques and developments. The same philosophy could also be applied to the fully implemented FGMDSS.

* * *

ANNEX

FUNCTION	CATEGORY	AREA	VHF O/B	VHF EPIRB	VHF S/C	MF	HF	EPIRB SAT	INM SES
F1 ship-shore alert	A	1	P	P	P	P		S	S
		2				P		P	P
		3					S	P	P
		4					S	P	
F2 shore-ship alert	B	1	P			P			S
		2				P			P
		3					P		P
		4					P		
F3 ship-ship alert	A	1	P			S			
		2	S			P			
		3	S			P			
		4	S			P			
F4 SAR co-ord.	B	1	P						P
		2				P			P
		3					P		P
		4					P		
F5 on-scene comms.	A	1	P		P*	S			
		2	P		P*	S			
		3	P		P*	S			
		4	P		P*	S			
F6 locating	TX B	1	P	P	P				
		2	P	P	P				
	RX C	3	P	P	P				
		4	P	P	P				
F7 a nav/met wng to/from CS	C	1	P				S		P
		2				P	S		P
		3					P		P
		4					P		
F7 b nav/met wng ship-ship	C	1	P						
		2	S			P			
		3	S			P	P		
		4	S			P	P		
F7 c nav/met wng broadcast	C	1				P			
		2				P			
		3					P		P
		4					P		
F8 general comms.	C	1	P						P
		2				P			P
		3					P		P
		4					P		
F9 bridge-bridge comms.	C	1	P						
		2	P						
		3	P						
		4	P						

*may be used on board as second alternative

Category A - of highest importance
Category B - of medium importance
Categroy C - of low importance

P = primary method S = secondary method

APPENDIX 1

EQUIPMENT ARRANGEMENT TO SATISFY FUNCTION REQUIREMENTS FOR AREA 1

WITH CLASS 1 MAINTAINER

	Primary method	Secondary method	Secondary method
F1 ship-shore alert	VHF EPIRB	VHF	/
F2 shore-ship alert	VHF	/	/
F3 ship-ship alert	VHF	VHF s/c	/
F4 SAR co-ordinating	VHF	/	/
F5 On-scene communication	VHF	VHF s/c	/
F6 locating - transmission	VHF	/	/
F6 locating - reception	VHF	/	/
F7 a nav/met warnings to/from CS	VHF	/	/
F7 b nav/met warnings ship to ship	VHF	/	/
F7 c nav/met warnings broadcast reception	NAVTEX	/	/
F8 general communications	VHF	/	/
F9 bridge to bridge comms.	VHF	/	/

Equipment required: 1 VHF, 1 Navtex receiver.
plus VHF EPIRB and survival craft VHF

APPENDIX 2

EQUIPMENT ARRANGEMENT TO SATISFY FUNCTION REQUIREMENTS FOR AREA 1

WITH CLASS 2 MAINTAINER

	Primary method	Secondary method	Secondary method
F1 ship-shore alert	VHF EPIRB	VHF	VHF S/C
F2 shore-ship alert	VHF	VHF	
F3 ship-ship alert	VHF	VHF S/C	VHF S/C
F4 SAR co-ordinating	VHF	VHF	
F5 On-scene communication	VHF	VHF S/C	VHF S/C
F6 locating - transmission	VHF	VHF S/C	
F6 locating - reception	VHF		
F7 a nav/met warnings to/from CS	VHF		
F7 b nav/met warnings ship to ship	VHF		
F7 c nav/met warnings broadcast reception	NAVTEX		
F8 general communications	VHF		
F9 bridge to bridge comms.	VHF		

Equipment required: 2 VHF, 1 Navtex receiver.
plus VHF EPIRB and 2 survival craft VHF

APPENDIX 3

EQUIPMENT ARRANGEMENT TO SATISFY FUNCTION REQUIREMENTS FOR AREA

WITH CLASS 1 MAINTAINER

	Primary method	Secondary method	Secondary method
F1 ship-shore alert	SEPIRB	MF	/
F2 shore-ship alert	MF	/	/
F3 ship-ship alert	MF	VHF	/
F4 SAR co-ordinating	MF	/	/
F5 On-scene communication	VHF	MF	/
F6 locating - transmission	VHF	/	/
F6 locating - reception	VHF	/	/
F7 a nav/met warnings to/from CS	MF	/	/
F7 b nav/met warnings ship to ship	MF	/	/
F7 c nav/met warnings broadcast reception	NAVTEX	/	/
F8 general communications	MF	/	/
F9 bridge to bridge comms.	VHF	/	/

Equipment requirements: 1 MF, 1 VHF, 1 Navtex receiver.
plus SEPIRB and survival craft VHF

APPENDIX 4

EQUIPMENT ARRANGEMENT TO SATISFY FUNCTION REQUIREMENTS FOR AREA 2

WITH CLASS 2 MAINTAINER

	Primary method	Secondary method	Secondary method
F1 ship-shore alert	SEPIRB	MF	SEPIRB
F2 shore-ship alert	MF	MF	/
F3 ship-ship alert	MF	VHF	MF
F4 SAR co-ordinating	MF	MF	/
F5 On-scene communication	VHF	MF	VHF S/C
F6 locating - transmission	VHF	VHF	/
F6 locating - reception	VHF	/	/
F7 a nav/met warnings to/from CS	MF	/	/
F7 b nav/met warnings ship to ship	MF	/	/
F7 c nav/met warnings broadcast reception	NAVTEX	/	/
F8 general communications	MF	/	/
F9 bridge to bridge comms.	VHF	/	/

Equipment required: 2 MF, 2 VHF, 1 Navtex receiver.
plus 2 SEPIRBs and survival craft VHF

APPENDIX 5

EQUIPMENT ARRANGEMENT TO SATISFY FUNCTION REQUIREMENTS FOR AREA 3

WITH CLASS 1 MAINTAINER

	Primary method	Secondary method	Secondary method
F1 ship-shore alert	SEPIRB	INM	/
F2 shore-ship alert	INM	/	/
F3 ship-ship alert	MF	VHF	/
F4 SAR co-ordinating	INM	/	/
F5 On-scene communication	VHF	S/C VHF	/
F6 locating - transmission	VHF	S/C VHF	/
F6 locating - reception	VHF	/	/
F7 a nav/met warnings to/from CS	INM	/	/
F7 b nav/met warnings ship to ship	MF	/	/
F7 c nav/met warnings broadcast reception	INM + NAVTEX	/	/
F8 general communications	INM	/	/
F9 bridge to bridge comms.	VHF	/	/

Equipment required: 1 INM, 1 MF, 1 VHF, 1 Navtex receiver.
plus SEPIRB and survival craft VHF

APPENDIX 6

EQUIPMENT ARRANGEMENT TO SATISFY FUNCTION REQUIREMENTS FOR AREA

WITH CLASS 2 MAINTAINER

	Primary method	Secondary method	Secondary method
F1 ship-shore alert	SEP.RB	INM	SEP.RB
F2 shore-ship alert	INM	HF	~~N/R~~
F3 ship-ship alert	MF	VHF	VHF
F4 SAR co-ordinating	INM	HF	~~N/R~~
F5 On-scene communication	VHF	VHF	S/C VHF
F6 locating - transmission	VHF	VHF	S/C VHF
F6 locating - reception	VHF	~~N/R~~	~~N/R~~
F7 a nav/met warnings to/from CS	INM	~~N/R~~	~~N/R~~
F7 b nav/met warnings ship to ship	MF	~~N/R~~	~~N/R~~
F7 c nav/met warnings broadcast reception	INM + NAVTEX	~~N/R~~	~~N/R~~
F8 general communications	INM	~~N/R~~	~~N/R~~
F9 bridge to bridge comms.	VHF	~~N/R~~	~~N/R~~

Equipment required: 1 INM SES, 1 MF/HF, 2 VHF, 1 Navtex receiver.
plus 2 SEPBs and 3 survival craft VHFs

APPENDIX 7

EQUIPMENT ARRANGEMENT TO SATISFY FUNCTION REQUIREMENTS FOR AREA 4

WITH CLASS 1 MAINTAINER

	Primary method	Secondary method	Secondary method
F1 ship-shore alert	SEPIRB	HF	/
F2 shore-ship alert	HF	/	/
F3 ship-ship alert	MF	VHF	/
F4 SAR co-ordinating	HF	/	/
F5 On-scene communication	VHF	VHF s/c	/
F6 locating - transmission	VHF	/	/
F6 locating - reception	VHF	/	/
F7 a nav/met warnings to/from CS	HF	/	/
F7 b nav/met warnings ship to ship	MF	/	/
F7 c nav/met warnings broadcast reception	HF + NAVTEX	/	/
F8 general communications	HF	/	/
F9 bridge to bridge comms.	VHF	/	/

Equipment required: 1 MF/HF 1 VHF, 1 Navtex receiver.
plus SEPIRB and survival craft VHF.

APPENDIX 8

EQUIPMENT ARRANGEMENT TO SATISFY FUNCTION REQUIREMENTS FOR AREA 4

WITH CLASS 2 MAINTAINER

	Primary method	Secondary method	Secondary method
F1 ship-shore alert	SEPIRB	HF	SEPIRB
F2 shore-ship alert	HF	HF	
F3 ship-ship alert	MF	VHF	VHF
F4 SAR co-ordinating	HF	HF	
F5 On-scene communication	VHF	VHF	VHF S/C
F6 locating - transmission	VHF	VHF	
F6 locating - reception	VHF		
F7 a nav/met warnings to/from CS	HF		
F7 b nav/met warnings ship to ship	MF		
F7 c nav/met warnings broadcast reception	HF + NAVTEX		
F8 general communications	HF		
F9 bridge to bridge comms.	VHF		

Equipment required: 1 MF/HF, 1 HF, 2 VHF, 1 Navtex receiver.
plus 2 SEPIRBs and 3 survival craft VHFs

INTERNATIONAL MARITIME
ORGANIZATION

COM 29/WP.8
17 April 1985
Original: ENGLISH

SUB-COMMITTEE ON
RADIOCOMMUNICATIONS -
29th session
Agenda item 3.2

IMO

MARITIME DISTRESS AND SAFETY SYSTEM

DRAFT ASSEMBLY RESOLUTION ON GUIDELINES ON TEST AND EVALUATION, EXEMPTIONS, EQUIVALENTS AND EQUIPMENT FOR INTRODUCTION OF THE FUTURE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (FGMDSS) DURING THE TRANSITION PERIOD

Report of the Drafting Group

1 As instructed by the Sub-Committee, the Drafting Group on Transition to the Future Global Maritime Distress and Safety System (FGMDSS) met from 16-17 April 1985 and unanimously elected Mr. R. Swanson (United States) as Chairman of the Group.

2 The representatives from the following countries participated in the Drafting Group:

BRAZIL
GREECE
SPAIN
NORWAY
UNITED KINGDOM
UNITED STATES.

3 The Group examined paragraphs 1.7, 2.4.1, 5.3 and 6 of the draft Assembly resolution on guidelines on test and evaluation, exemptions, equivalents and equipment for introduction of the future global maritime distress and safety system during the transition period (COM 27/10, Annex 3 as amended by

COM 28/10, Annex 3) with regard to identifying potential changes which take account of comments made at the Maritime Safety Committee (COM 29/2, Annex 1, paragraph 1) including:

.1 criteria for defining areas A1 and A2;

.2 maintaining the existing level of safety for all ships, as a consequence of the granting of exemptions in accordance with the draft Assembly resolution;

.3 maintaining the same level of radio station availability as that of the existing system regardless of the maintenance method used.

4 The Group used as guidance COM 29/2, Annex 1 and as instructed by Plenary, attempted to identify areas of agreement relating to the concern expressed by the Maritime Safety Committee.

5 The Group could not identify any practical alternative method to the draft resolution which might be used to ensure uniform arrangements which will allow the FGMDSS to evolve from the existing system while providing sufficient incentive for the new techniques to be properly developed and for ships to be fitted with FGMDSS equipment so that new techniques can be adequately proven during the transition period.

6 The Group discussed whether the draft Assembly resolution would enable it to be used to introduce changes to the present requirements of Chapter IV of the 1974 SOLAS Convention. The Group could not resolve this question and referred the matter to the Sub-Committee. The Group agreed to proceed on the assumption that the draft resolution was not in conflict with the Convention.

7 The Group emphasized that the prime purpose of the draft resolution was to ensure that Governments introducing elements of the FGMDSS on board their ships followed a uniform procedure to provide for implementation of the FGMDSS in an orderly manner. It was recognized that the guidelines would not relieve Administrations applying them to their ships from their responsibilities under Regulation I/4, I/5 and IV/5 of the 1974 SOLAS Convention and from notifying the Organization with respect to exemptions granted or equivalents declared.

8 The Drafting Group recommended that the definitions of FGMDSS areas (COM 29/4, Annex 8) under consideration by the Ad Hoc Working Group (Technical) should be expedited and approved at the Sub-Committee's present session for appending to the draft Assembly resolution to specify the necessary criteria.

9 The Group agreed that A1 and A2 areas should be determined by Administrations in accordance with the criteria given in the appendix to the resolution, and notified to the Organization (paragraph 1.9) prior to the application of the guidelines given in the draft resolution to their ships and in sufficient time for circulation of such information to all Member Governments.

10 Consideration was given to the Committee's instructions to examine A.420(XI) and identify with reasons, areas of the FGMDSS and the draft Assembly resolution which do not conform completely with resolution A.420(XI).

11 The Group concluded that during the transition period, the draft Assembly resolution follows the spirit and intent of Section 6 of resolution A.420 (XI) dealing with transitional measures.

12 It was noted that since resolution A.420(XI) was originally developed, several changes to Chapter IV have been made including new requirements for 2182 kHz radiotelephone equipment, VHF radiotelephone equipment, survival craft EPIRBs etc. The requirements for the FGMDSS have also been developed, [changes and improvements in radiocommunication technology during the period since the resolution was adopted in 1979 have necessitated some deviation from the precise policy recommended in resolution A.420 (XI). While these developments imply a need to amend resolution A.420(XI), it was considered that little would be gained by such a time-consuming exercise.] [The Group did not consider the aspects, other than paragraph 6, on which the planning of the FGMDSS deviates from Assembly Resolution A.420 (XI)].

13 Some consideration was given to the deletion of the words "test and evaluation" from the title of the Draft Assembly resolution. In this regard, the opinion was expressed that ships should install equipment in addition to the present requirements of Chapter IV of the 1974 SOLAS Convention for testing and evaluation purposes.

14 The Group was of the opinion that the testing and evaluation referred to in the title was not meant to apply to feasibility tests or technical evaluation but to specific operational testing involving the use of the entire system. The Group concluded that testing in this sense was needed and that Administrations applying the provisions of the draft Assembly resolution should report their findings to the Organization.

15 After lengthy discussion the Group identified the areas of the draft Assembly resolution which presented the greatest difficulty. These were paragraphs 2.4.1 (COM 27/10, Annex 3) and 6 (COM 28/10, Annex 3) of the draft Assembly resolution.

16 The Group agreed that there were specific areas, for example the North Sea and the Baltic Sea, where the coverage from coast stations is adequate with respect to MF radiotelephony, MF radiotelegraphy and NAVTEX broadcasts and that ships could be safely allowed to sail in these areas without a requirement for radiotelegraphy equipment.

17 In this context, the Group decided to amend the resolution by adding a basic requirement for MF radiotelegraphy equipment (paragraph 2.4.1) and on-board maintenance capability in areas A1 + A2 (paragraph 6.1). However, in areas which are fully covered by coast stations as referred to in paragraph 16, the requirements for radiotelegraphy equipment could be exempted.

18 Satellite EPIRBs and MF DSC equipment will be required on exempted ships in these areas as soon as the local coast stations are equipped. Until that time, ships may only operate under the arrangements of this draft Assembly resolution in areas A1 + A2 by fitting an INMARSAT SES.

19 The Group agreed with comments by the delegation of Romania that during the whole transition period, it would be necessary to maintain watchkeeping on the international distress frequencies 500 kHz and 2182 kHz. However, provided coast stations maintain watch on 500 kHz in the A1 + A2 areas referred to in paragraph 16, safety would be satisfactorily maintained for all radiotelegraph ships.

20 The Greek delegate was not in a position to accept the text as a whole and in particular the first alternative in paragraph 2.4.2 and paragraph 6.2 because the text was developed on the additional assumption that resolution A.420 (XI) was being complied with by a limited number of delegations without any prior substantive discussion in Plenary at this session of the Sub-Committee.

21 The draft Assembly resolution, as revised by the Group is attached at Annex for consideration by the Sub-Committee.

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ANNEX

DRAFT ASSEMBLY RESOLUTION

GUIDELINES ON TEST AND EVALUATION, EXEMPTIONS, EQUIVALENTS AND EQUIPMENT FOR INTRODUCTION OF THE FUTURE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM DURING THE TRANSITION PERIOD

THE ASSEMBLY,

RECALLING Article 16(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations concerning maritime safety,

RECALLING ALSO resolution A.420(XI) on the development of the maritime distress and safety system, in particular Part III relating to the future system,

NOTING that the Maritime Safety Committee has approved the requirements of the Future Global Maritime Distress and Safety System (FGMDSS) and on the basis of these requirements is developing a revised Chapter IV of the International Convention for the Safety of Life at Sea, 1974,

NOTING ALSO Resolution No.321 of the World Administrative Radio Conference for the Mobile Services, 1983 relating to the development of operational provisions for the FGMDSS and to their introduction into the Radio Regulations,

RECOGNIZING that a transition period is necessary before the FGMDSS can replace the present distress and safety system,

RECOGNIZING FURTHER the need for the FGMDSS to be introduced in an orderly manner,

BEARING IN MIND Regulation I/5 and Regulation IV/5 of the 1974 SOLAS Convention concerning equivalents and exemptions,

HAVING CONSIDERED the recommendations of the Maritime Safety Committee at its fiftieth session,

RESOLVES that the transition period is the period between the adoption of this resolution and the entry into force of the revised Chapter IV of the 1974 SOLAS Convention,

RECOMMENDS that Governments considering the introduction of elements of the FGMDSS and related equipment and procedures during the transition period, take into account the uniform principles and guidelines set out in the Annex to this resolution before allowing or declaring equipment or procedures as equivalent or permitting related exemptions in accordance with the provisions of the 1974 SOLAS Convention,

REQUESTS the Maritime Safety Committee to keep the recommendation, annexed hereto, under continuous review during the transition period of the FGMDSS, subject to confirmation by the Assembly,

REQUESTS FURTHER the Maritime Safety Committee to inform the Assembly in due course on the results of the testing and evaluation of the FGMDSS.

ANNEX

RECOMMENDATION ON TEST AND EVALUATION, EXEMPTIONS, EQUIVALENTS AND EQUIPMENT FOR INTRODUCTION OF THE FUTURE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM DURING THE TRANSITION PERIOD

1 INTRODUCTION

1.1 The Maritime Safety Committee:

.1 has approved the requirements of the Future Global Maritime Distress and Safety System (FGMDSS) which will support the International Convention on Maritime Search and Rescue 1979 (1979 SAR Convention) and will involve integrated communication networks at sea and ashore designed to perform a number of functions and to provide, as fast and efficiently as possible, assistance to units in distress;

.2 has approved in principle draft FGMDSS carriage requirements for equipment which can operate with the appropriate FGMDSS radio sub-systems and meet the functional requirements of the new system; these requirements apply, on an area of operations basis, to all ships covered by the present Chapter IV of the 1974 SOLAS Convention; generally agreed requirements for ships of 300 tons gross tonnage and upward but less than 1600 tons gross tonnage are yet to be developed;

.3 is developing, in support of the 1979 SAR Convention an international search and rescue plan which will take account of the FGMDSS requirements and will be based upon an integrated network of coast stations, coast earth stations and rescue co-ordination centres and appropriate procedures for routeing distress traffic; and

.4 is preparing requirements for personnel to be carried on board ships participating in the FGMDSS during the transitional period and in the fully implemented system.

1.2 The 1983 World Administrative Radio Conference for the Mobile Services:

.1 made provisions, for the use of certain frequencies from 15 January 1985 which will enable testing, evaluation and introduction of the FGMDSS; and

.2 adopted resolutions requesting the next World Administrative Radio Conference for the Mobile Services to introduce detailed regulatory and operational provisions into the Radio Regulations, and IMO in co-operation with the ITU, to co-ordinate a plan for selected coast stations to assume additional watchkeeping responsibilities on FGMDSS frequencies.

1.3 It is planned to introduce the various elements of the FGMDSS in parallel with the present maritime distress and safety arrangements in the safest, most practical and economical way so that the new system can be fully implemented in about 1990, when the revised Chapter IV of the 1974 SOLAS Convention enters into force and at the conclusion of a transition period which provides for:

.1 a degree of safety which is at least as high as that provided under the present distress and safety arrangements; and

.2 all existing provisions of the Radio Regulations pertaining to distress and safety communications being maintained at least until the full implementation of the FGMDSS.

1.4 Orderly testing and evaluation of the FGMDSS will take place and appropriate administrative, technical and operational experience will be gained with the new system so that the next World Administrative Radio Conference for the Mobile Services can make detailed regulatory and operational provisions for the FGMDSS.

1.5 On completion of satisfactory practical tests, ships may carry, depending on their area of operation, equipment relating to the various radio systems of the FGMDSS together with reduced equipment and relaxed radio watch-keeping

arrangements for the present system, subject to a provision that the level of safety for such ships and the effectiveness of the assistance they can give to others, is at least as high as for ships carrying equipment designed for the present system.

1.6 Experience will be needed with the distress and safety facilities of the maritime mobile and maritime mobile satellite services in order to assist with the development of the search and rescue planning arrangements and the integrated network of coast stations, coast earth stations and associated rescue co-ordination centres.

1.7 For the purpose of this Recommendation the areas referred to are explained in the Appendix and defined as follows:

.1 "Sea area A1" means an area within the VHF coverage providing for continuous availability of DSC alerting, as defined by a Contracting Government.

.2 "Sea area A2" means an area, excluding Sea area A1 within the MF coverage providing for continuous availability of DSC alerting, as defined by a Contracting Government.

.3 "Sea area A3" means an area, excluding Sea areas A1 and A2, within the coverage of geostationary satellites providing for continuous availability of alerting.

.4 "Sea area A4" means the remaining sea areas outside Sea areas A1, A2 and A3.

1.8 The areas referred to in the Appendix provide for adequate watchkeeping on relevant distress frequencies, shore-to-ship distress alerting and SAR co-ordinating communications.

1.9 A1 and A2 areas should be determined by Administrations and notified to the Organization prior to the application of these guidelines to ships and in sufficient time for circulation of such information to all Member Governments.

2 INTRODUCTION ON RADIOTELEGRAPH SHIPS OF SUB-SYSTEMS OF THE FGMDSS

2.1 General

2.1.1 Administrations when considering any proposals which would support introduction of the FGMDSS sub-systems should be guided by the following arrangements which would ensure compatibility between the present and future systems.

2.2 Ships which operate in areas A1, A2, A3 and A4

2.2.1 This arrangement can only be considered as suitable when DSC and satellite EPIRBs are fully tested and a sufficient number of HF coast stations have been equipped with DSC.

2.2.2 The following requirements should apply:

2.2.2.1 The radio station should include:

.1.1 MF radiotelegraph transmitter and receiver;

.1.2 MF/HF radiotelephone transmitter and receiver, MF/HF direct-printing telegraphy transmitter and receiver and a DSC transmitter and receiver. These requirements may be fulfilled by one or more pieces of equipment;

.1.3 a radiotelegraph auto alarm;

.1.4 a radiotelephone distress frequency watch receiver;

.1.5 a VHF radiotelephone installation;

.1.6 a NAVTEX receiver if the ship operates in any coastal area in which a NAVTEX system is provided;

.1.7 a satellite EPIRB when available;

.1.8 the equipment listed in paragraph .1.1 should be electrically separate and electrically independent from the equipment in paragraph .1.2 above.

2.2.2.2 The radiotelephone installation listed in paragraph .1.2 above should be provided with electrical energy from the ship's main power supply and from the ship's emergency source of electrical power required by Chapter II-1 of the 1974 SOLAS Convention. The equipment listed in paragraph .1.1 and optionally, equipment in paragraphs .1.3, .1.4 and .1.5 above should be provided with electrical energy from the ship's main power supply and from the ship's reserve source of energy required by Chapter IV of the 1974 SOLAS Convention.

2.3 Ships which operate in areas A1, A2 and A3

2.3.1 Where an INMARSAT ship earth station capable of telephone and direct-printing telegraphy is provided the following should apply:

2.3.1.1 The radio station should include:

.1.1 a ship earth station;

.1.2 MF radiotelegraph transmitter and receiver, MF radiotelephone transmitter and receiver and an HF radiotelephone transmitter and receiver. These requirements may be fulfilled by one or more pieces of equipment;

.1.3 a radiotelegraph auto-alarm;

.1.4 a radiotelephone distress frequency watch receiver;

.1.5 a VHF radiotelephone installation;

.1.6 a NAVTEX receiver if the ship operates in any coastal area in which a NAVTEX service is provided;

.1.7 when available, a satellite EPIRB should be included. When this requirement is fulfilled, the requirement in paragraph .1.2 above for an HF radiotelephone transmitter and receiver no longer applies.

2.3.1.2 The ship earth station including antenna tracking system should be provided with electrical energy from the ship's main power supply and from either the ship's emergency source of electrical power required by Chapter II-1 of the 1974 SOLAS Convention or a suitable independent source of electrical power located above the uppermost continuous deck. The MF radiotelegraph equipment listed in paragraph .1.2 and optionally the other equipment listed in paragraphs .1.2, .1.3, .1.4 and .1.5 above should be provided with electrical energy from the ship's main power supply and from the ship's reserve source of energy required by Chapter IV of the 1974 SOLAS Convention.

2.3.2 Where an HF DSC installation is provided instead of an INMARSAT ship earth station, the radio station should fulfil the requirements listed in paragraph 2.2.2.

2.4 Ships which operate in areas A1 and A2

2.4.1 Except as provided in paragraph 2.4.2, the following radio station is considered appropriate in areas having MF DSC coverage:

.1 MF radiotelegraph transmitter, receiver and auto-alarm;
.2 MF radiotelephone transmitter which is independent of the ships radiotelegraph installation, including a device for generating the radiotelephone alarm signal and receiver;
.3 radiotelephone distress frequency watch receiver;
.4 VHF radiotelephone installation;
.5 NAVTEX receiver if the ship operates in any coastal area in which a NAVTEX service is provided;
.6 MF DSC facilities;
.7 satellite EPIRB when available.

2.4.2 In special A1 + A2 areas where the Administration is satisfied that well established SAR organizations and facilities exist and the areas concerned are continuously covered by coast stations with respect to MF radiotelephony, MF radiotelegraphy and NAVTEX transmissions, Administrations [may permit ships to carry the following radio station in lieu of the station required by paragraph 2.4.1:

.1 MF radiotelephone transmitter, including a device for generating the radiotelephone alarm signal, and receiver;

.2 radiotelephone distress frequency watch receiver;

.3 VHF radiotelephone installation;

.4 NAVTEX receiver;

.5 MF DSC facilities when available;

.6 satellite EPIRB when available;

.7 prior to the availability of MF DSC facilities and satellite EPIRBs, an INMARSAT ship earth station.]

[may exempt ships, under Regulation 5 of Chapter IV, from requirements of paragraph 2.4.1 when they consider that they are unreasonable or unnecessary, having regard to the effect that exemptions may have upon the general efficiency of the distress service for the safety of all ships.]

2.4.3 The radiotelephone equipment, DSC installation and, where fitted, the MF radiotelegraph equipment should be provided with electrical energy from the ship's main power supply and from the ship's reserve source of electrical power required by Chapter IV of the 1974 SOLAS Convention. The radiotelephone distress frequency watch receiver and the VHF radiotelephone installation may be provided with electrical energy from the ship's reserve power required by Chapter IV of the 1974 SOLAS Convention.

2.4.4. The ship earth station, when fitted, including antenna tracking system, should be provided with electrical energy from the ship's main power supply and from the ship's emergency source of electrical power required by Chapter II-1 of the 1974 SOLAS Convention.

2.5 Ships which operate in areas A1

2.5.1 The radio station should include:

.1 VHF radiotelephone installation;
.2 radiotelephone distress frequency watch receiver;
.3 NAVTEX receiver;
.4 when available, VHF DSC facilities should be included;
.5 VHF EPIRB or when available, a satellite EPIRB.

2.5.1.2 The equipment listed in paragraph .1 and optionally in paragraph .2 above should be provided with electrical energy from the ship's main power supply and reserve source of energy required by Chapter V of the 1974 SOLAS Convention.

3 PERFORMANCE STANDARDS FOR SHIPBORNE RADIO EQUIPMENT

3.1 The equipment to be used during the transition period shall comply with relevant CCIR recommendations and the performance standards adopted by the Organization.

4 PRINCIPLES GOVERNING THE PROVISION OF PERSONNEL DURING THE TRANSITIONAL PERIOD

4.1 All ships to which the 1974 SOLAS Convention applies which introduce sub-systems of the FGMDSS in accordance with the arrangements set out in this recommendation should carry personnel who are qualified to ensure that the relevant functional requirements of the FGMDSS are met while the ships are at sea.

4.2 Pending the establishment and entry into force of new provisions in the ITU Radio Regulations and the 1978 STCW Convention for personnel and their qualifications in the fully implemented FGMDSS, personnel on board ships participating in the transitional arrangements for the FGMDSS should be qualified in accordance with the current requirements of the Radio Regulations and the 1978 STCW Convention and, in addition, should satisfy the Administration as to their knowledge of the operational procedures and equipment associated with the relevant FGMDSS sub-systems.

5 PERSONNEL AND WATCHKEEPING REQUIREMENTS

5.1 Ships operating in FGMDSS areas A1 + A2 + A3 + A4 , A1 + A2 + A3 or A1 + A2

Passenger ships and cargo ships of 1600 tons gross tonnage and upwards engaged in international voyages, operating in FGMDSS areas A1 + A2 + A3 + A4, areas A1 + A2 + A3 or A1 + A2 and fitted with the equipment arrangements prescribed in paragraphs 2.2 , 2.3 or 2.4.1 as appropriate, may be exempted from the requirements of paragraphs (b), (c) and (d) of Regulation IV/6 of the 1974 SOLAS Convention subject to the:

.1 carriage of a radio officer qualified in accordance with the ITU Radio Regulations and, where applicable, the 1978 STCW Convention;

.2 qualification of personnel in accordance with paragraph 4; and

.3 provision of satisfactory arrangements to monitor the frequency 500 kHz during silence periods and to receive distress messages following receipt of the radiotelegraph alarm signal.

5.2 Ships operating in accordance with paragraphs 2.4.2 and 2.5

5.2.1 Passenger ships and cargo ships of 1600 tons gross tonnage and upwards engaged on international voyages which are fitted with the equipment arrangements prescribed in paragraphs 2.4.2 or 2.5 and which operate in FGMDSS

areas A1 + A2 or A1 and are fully covered by coast station with respect to MF radiotelephony, radiotelegraphy and NAVTEX transmissions:

.1 may be exempted by Administrations from the requirements of Regulation IV/6 of the 1974 SOLAS Convention subject to the qualification of personnel in accordance with paragraph 4. Exemption from the requirements of Regulation IV/6 of the 1974 SOLAS Convention on ships trading in areas A1 + A2 or A1 should only be granted if they have access to shore-based maintenance capabilities.

.2 should carry personnel qualified in accordance with paragraph 4.2.

5.2.2 Each of the following responsibilities and duties should be allocated to a crew member but not necessarily to the same person:

.1 to act solely as radio operator during distress incidents;

.2 to be responsible for the use and operation of the radio systems and the equipment provided on board for performing distress and safety communications;

.3 to perform administrative duties related to radiocommunication matters; and

.4 to be responsible for:

.4.1 the good working condition of the ship's radiocommunications installations;

.4.2 determining that the radio systems and equipment meet the relevant functional requirements of the FGMDSS while at sea; and

.4.3 when necessary, taking appropriate action as provided for in paragraph 6.2.

6 MAINTENANCE

6.1 On ships carrying a radio officer, the requirements of the 1974 SOLAS Convention relating to maintenance shall be complied with.

6.2 On ships not carrying a radio officer in accordance with the provisions of paragraph 5.3, the various electronic systems required for the FGMDSS shall be maintained using suitable methods, within specified station performance requirements, so as to ensure safe and efficient ship operation. The following methods are considered appropriate dependent upon the type of ship and its geographical area of operation:

.1 electronic maintenance capability at sea;

.2 duplication of equipment;

.3 shore-based maintenance.

A combination of the method referred to in .1 and one or both of those in .2 and .3 will be necessary.

7 SHIP'S AREA OF OPERATION

For the purpose of applying the requirements of paragraphs 2, 5 and 6 the direct route between the ship's ports of call should determine the FGMDSS area in which it operates.

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APPENDIX

CRITERIA FOR FGMDSS AREAS

(Insert Annex 8 to COM 29/4, as amended by Ad Hoc Working Group (Technical) and approved by the Sub-Committee.)

INTERNATIONAL MARITIME ORGANIZATION

COM 29/WP.8/Corr.1
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IMO

MARITIME DISTRESS AND SAFETY SYSTEM

DRAFT ASSEMBLY RESOLUTION ON GUIDELINES ON TEST AND EVALUATION, EXEMPTIONS, EQUIVALENTS AND EQUIPMENT FOR INTRODUCTION OF THE FUTURE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (FGMDSS) DURING THE TRANSITION PERIOD

Report of the Drafting Group (Corrigendum)

1 Page 4, paragraph 12

Delete the square brackets.

2 Page 5, paragraph 20

Delete.

3 Annex, Page 9, paragraph 2.4.2

2.4.2 In special A1 + A2 areas where the Administration is satisfied that well established SAR organizations and facilities exist and the areas concerned are continuously covered by coast stations with respect to MF radiotelephony, MF radiotelegraphy and NAVTEX transmissions*, Administrations may permit ships to carry the following radio station in lieu of the station required by paragraph 2.4.1 when they consider that these requirements are unreasonable or unnecessary, having regard to the effect that

* e.g. North Sea and Baltic Sea.

exemptions may have upon the general efficiency of the distress service for the safety of all ships:

.1 MF radiotelephone transmitter, including a device for generating the radiotelephone alarm signal, and receiver;
.2 radiotelephone distress frequency watch receiver;
.3 VHF radiotelephone installation;
.4 NAVTEX receiver;
.5 MF DSC facilities when available;
.6 satellite EPIRB when available;
.7 prior to the availability of MF DSC facilities and satellite EPIRBs, an INMARSAT ship earth station.

4 Annex, Page 13, paragraph 6.2

Second line, replace paragraph 5.3 by 5.2. and "shall" by "should".
