CR No. _____ Report No. _____

Check List for the Surveys of the 2012 Cape Town Agreement (Chapter IX)

(only for existing fishing vessel L ≥ 45 m)

SURVEYS OF THE RADIO INSTALLATIONS (SEE ANNEX 1)

1. Basic Data

1.1 Ship navigating sea areas

☐A1 ☐A1+A2 ☐A1+A2+A3 ☐A1+A2+A3+A4

1.2 Methods of ensuring availability of Equipment (reg. IX/14).

☐Duplication of equipment ☐shore based maintenance ☐At-sea maintenance capacity

1.3 Actual Provision of ship's radio equipment:

	VHF	MF	MF/HF	INMARSAT ☐B/☐C
Primary System:	☐	☐	☐	☐
Duplicated System:	☐		☐	☐

2. General	**InS***	**PS***	**RS***
2.1 Confirming that any new equipment has been properly approved before installation and that no changes have been made such as would affect the validity of the certificate.		[ ]	[ ]
2.2 Checking that adequate information is on board to enable the equipment to be properly operated and maintained.		[ ]	[ ]
2.3 Radio records kept in the period since the last survey to the satisfaction of the Administration and as required by the Radio Regulations (reg. IX/16).		[ ]	[ ]
2.4 Checking documentary evidence that the actual capacity of the battery has been proved in port within the last 12 months (reg. IX/12).		[ ]	[ ]
2.5 Confirming that all Radio equipment complies with appropriate performance standards not inferior to those adopted by IMO (reg. IX/13).(Equipment installed prior to the date of entry into force of this Protocol, may be exempted from full compliance with the appropriate performance standards at the discretion of the Administration)	[ ]	[ ]	[ ]
3. Examination of radio installations			
3.1 Examining the position, physical and electromagnetic protection and illumination of each radio installation (reg. IX/5).	[ ]	[ ]	[ ]
3.2 Confirming the provision of equipment for the radio installation with due regard to the declared sea areas in which the ship will trade and the declared means of maintaining availability of functional requirements (regs. VII/13 and 14, IX/6 to 10, 13 and 14).....	[ ]	[ ]	[ ]
3.3 Confirming the ability to initiate the transmission of ship-to-shore distress alerts by at least two separate and independent means, each using a different radiocommunication service, from the position from which the ship is normally navigated (regs. IX/3, 6 to 10).	[ ]	[ ]	[ ]

3.3.1 Secondary means of alerting:

☐VHF(DSC) ☐INMARSAT-B ☐INMARSAT-C ☐MF(DSC) ☐HF(DSC) ☐VHF EPIRB
☐406MHz EPIRB (close to, or by remote activation from bridge)

3.4 Checking that the following ship's radio equipment operates from the main, emergency (if provided) and reserve sources of energy (reg. IX/12): ..... [ ] [ ] [ ]

	VHF	MF	MF/HF	INMARSAT ☐B/☐C
Primary System:	☐	☐	☐	☐
Duplicated System:	☐		☐	☐

3.5 Antennas:

3.5.1 Visually checking all antennas, including RMSS** antennas, and feeders for satisfactory sitting and absence of defects (reg. IX/13);	[ ]	[ ]	[ ]
3.5.2 Checking insulation and safety of all antennas.	[ ]	[ ]	[ ]

* Survey condition code as follows:

0 : Not applicable
1 : Satisfactory
2 : Satisfactory after treatment, see further reports in head page/ Memoranda
3 : Outstanding recommendation/ Surveyor's note, see further reports in head page/ Memoranda

Note: Entries in boxes☐shall be made by inserting a cross (x) as appropriate.

** RMSS: Recognized Mobile Satellite Service.

CR No. _____ Report No. _____

		InS*	PS*	RS*
3.6	Reserve source of energy:			
3.6.1	Checking there is sufficient capacity to operate the basic or duplicated equipment for 1 hour or 6 hours, as appropriate (reg. IX/12);	[ ]	[ ]	[ ]
3.6.2	If the reserve source of energy is a battery:			
3.6.2.1	Checking its sitting and installation(reg. IX/12):	[ ]	[ ]	[ ]
3.6.2.2	Where appropriate, checking its condition by ☐specific gravity measurement or ☐voltage measurement – specific gravity = _____ or voltage = _____ volts ..... (For dry battery which SG can't be measured, fill "dry battery".)	[ ]	[ ]	[ ]
3.6.2.3	With the battery off charge, and the maximum required radio installation load connected to the reserve source of energy, checking the battery voltage and discharge current;	[ ]	[ ]	[ ]
3.6.2.4	Checking that the charger(s) are capable of recharging the reserve battery within 10 hours (reg. IX/12);...	[ ]	[ ]	[ ]
3.7	VHF transceiver(s): ☐Primary ☐Duplicated			
3.7.1	Checking for operation on channels 6,13 and 16 (regs. IX/6 and 13);	[ ]	[ ]	[ ]
3.7.2	Checking for correct operation of all controls, including priority of control units(reg. IX/13);	[ ]	[ ]	[ ]
3.7.3	Checking the operation of the VHF control unit(s) or portable VHF transceiver provided for navigational safety from the wing of bridge (reg. IX/5);	[ ]	[ ]	[ ]
3.7.4	Checking for correct operation by on-air contact with ☐a coast station or ☐other ship.	[ ]	[ ]	[ ]
3.7.5	Checking frequency tolerance, transmission line quality and radio frequency power output (reg. IX/13)	[ ]	[ ]	[ ]
3.8.	VHF DSC: ☐Primary ☐Duplicated			
3.8.1	Confirming that the correct selective calling number is programmed in the equipment;	[ ]	[ ]	[ ]
3.8.2	Checking the off-air self-test programme; (reg. IX/13)	[ ]	[ ]	[ ]
3.8.3	Checking for correct transmission by means of ☐a routine or ☐test call to ☐a coast station, ☐other ship, ☐on-board duplicate equipment or ☐special test equipment.	[ ]	[ ]	[ ]
3.9	CH70 DSC watch receiver: ☐Primary ☐Duplicated			
3.9.1	Checking for correct reception by means of a ☐routine or ☐test call from ☐coast station, ☐other ship, ☐on-board duplicate equipment or ☐special test equipment;	[ ]	[ ]	[ ]
3.9.2	Checking that a continuous watch is being maintained whilst operating VHF transceiver;	[ ]	[ ]	[ ]
3.9.3	Checking the audibility of the VHF/DSC alarm.	[ ]	[ ]	[ ]
3.10	MF radiotelephone equipment (Primary):			
3.10.1	Checking the antenna tuning in all appropriate bands;	[ ]	[ ]	[ ]
3.10.2	Checking for correct operation by contact with ☐a coast station and / or ☐measuring transmission line quality and ☐radio frequency output;	[ ]	[ ]	[ ]
3.10.3	Checking receiver performance by monitoring known stations on all appropriate bands;	[ ]	[ ]	[ ]
3.10.4	If control units are provided outside the navigating bridge, checking the control unit on the bridge has first priority for the purpose of initiating distress alerts.	[ ]	[ ]	[ ]
3.11	MF DSC controller(s) (Primary):			
3.11.1	Confirming that the correct Maritime Mobile Service Identity is programmed in the equipment; ..	[ ]	[ ]	[ ]
3.11.2	Checking the off-air self-test programme;	[ ]	[ ]	[ ]
3.11.3	Checking operation by means of a test call on MF to a coast radio station if the rules of the berth permit the use of MF transmissions	[ ]	[ ]	[ ]
3.12	MF DSC watch receiver(s) (Primary):			
3.12.1	Checking that a continuous watch is being maintained whilst operating MF radio transceivers ;	[ ]	[ ]	[ ]
3.12.2	Checking for correct operation by means of a test call from ☐a coast station or ☐other ship; .	[ ]	[ ]	[ ]
3.12.3	Checking the audibility of the MF DSC alarm.	[ ]	[ ]	[ ]

CR No. _____ Report No. _____

		InS*	PS*	RS*
3.13	MF/HF radiotelephone equipment: ☐Primary ☐Duplicated			
3.13.1	Checking the antenna tuning in all appropriate bands;	[ ]	[ ]	[ ]
3.13.1b	Checking that the equipment is within frequency tolerance on all appropriate bands (reg. IX/13);	[ ]	[ ]	[ ]
3.13.2	Checking for correct operation by contact with ☐a coast station and / or ☐measuring transmission line quality and ☐radio frequency output;	[ ]	[ ]	[ ]
3.13.3	Checking receiver performance by monitoring known stations on all appropriate bands;	[ ]	[ ]	[ ]
3.13.4	If control units are provided outside the navigating bridge, checking that the control unit on the bridge has first priority for the purpose of initiating distress alerts (regs. IX/8, 9, 10, and 13);	[ ]	[ ]	[ ]
3.14	MF/HF radiotelex equipment: ☐Primary ☐Duplicated			
3.14.1	Confirming that the correct selective calling number is programmed in the equipment;	[ ]	[ ]	[ ]
3.14.2	Checking correct operation ☐by inspection of recent hard copy or ☐by a test with a coast radio Station (regs. IX/9 and 10).	[ ]	[ ]	[ ]
3.15	MF/HF DSC controller(s): ☐Primary ☐Duplicated			
3.15.1	Confirming that the correct Maritime Mobile Service Identity is programmed in the equipment; ..	[ ]	[ ]	[ ]
3.15.2	Checking the off-air self-test programme;	[ ]	[ ]	[ ]
3.15.3	Checking operation by means of a test call on MF and/or HF to a coast radio station if the rules of the berth permit the use of MF/HF transmissions (regs. IX/8, 9, and 10))	[ ]	[ ]	[ ]
3.15.4	Checking the audibility of the MF/HF DSC alarm.	[ ]	[ ]	[ ]
3.16	MF/HF DSC watch receiver(s): ☐Primary ☐Duplicated			
3.16.1	Checking that a continuous watch is being maintained whilst operating MF/HF radio transceivers (reg. IX/11);	[ ]	[ ]	[ ]
3.16.2	Checking for correct operation by means of a test call from ☐a coast station or ☐other ship; .	[ ]	[ ]	[ ]
3.16.3	Confirming that only distress and safety DSC frequencies are being monitored (regs. IX/8 to 11);	[ ]	[ ]	[ ]
3.17	INMARSAT - ☐B/☐C, ship earth station(s), ☐Primary ☐Duplicated:			
3.17.1	Checking that the correct RMSS** Identity is programmed in the equipment;	[ ]	[ ]	[ ]
3.17.2	Checking that the equipment operates from the main, emergency (if provided) and reserve sources of energy, and that where an uninterrupted supply of information from the ship's navigational or other equipment is required ensuring such information remains available in the event of failure of the ship's main or emergency source of electrical power (regs. IX/12 and 13);	[ ]	[ ]	[ ]
3.17.3	Checking the distress function by means of an approved test procedure where possible (regs. IX/9, 11 and 13);	[ ]	[ ]	[ ]
3.17.4	Checking for correct operation by ☐inspection of recent hard copy or ☐ by test call.	[ ]	[ ]	[ ]
3.18	NAVTEX equipment (regs. IX/6, 11 and 13):			
3.18.1	Checking for correct operation by ☐monitoring incoming messages or ☐inspecting recent hard copy;	[ ]	[ ]	[ ]
3.18.2	Running the self-test programme if provided.	[ ]	[ ]	[ ]
3.19	Enhanced group call equipment, if provided (regs. IX/6 and 13):			
3.19.1	Checking for correct operation and area by monitoring incoming messages or by inspecting recent hard copy;	[ ]	[ ]	[ ]
3.19.2	Running the self-test programme if provided.	[ ]	[ ]	[ ]
3.20	Radio equipment for receipt of maritime safety information by HF NBDP; if provided(regs. IX/6, 11 and 13):			
3.20.1	Checking for correct operation by ☐monitoring incoming messages or ☐inspecting recent hard copy;	[ ]	[ ]	[ ]
3.20.2	Running the self-test programme if provided.	[ ]	[ ]	[ ]

CR No. _____ Report No. _____

		InS*	PS*	RS*
3.21	EPIRB: ☐406MHz ☐CH 70 EPIRB			
	In case of EPIRB 406 MHz : (regs. IX/6 and 13)			
3.21.1	Checking position and mounting for float-free operation;	[ ]	[ ]	[ ]
3.21.2	Verifying the presence of a firmly attached lanyard in good condition.	[ ]	[ ]	[ ]
3.21.3	Carrying out visual inspection for defects;	[ ]	[ ]	[ ]
3.21.4	Carrying out the self-test routine;	[ ]	[ ]	[ ]
3.21.5	Checking that the EPIRB identification and other information are clearly marked on the outside of the equipment, and decoding the EPIRB 15 Hex ID and other information from the transmitted signal, checking that the decoded information is identical to the identification marked on the beacon.	[ ]	[ ]	[ ]
3.21.6	Checking the EPIRB identification (15 Hex ID): _____			
3.21.7	Checking registration through documentation or through the point of contact associated with that country code.	[ ]	[ ]	[ ]
3.21.8	Checking the battery expiry date: _____ (D/M/Y)	[ ]	[ ]	[ ]
3.21.9	Checking the hydrostatic release and its expiry date, as appropriate: _____ (D/M/Y)	[ ]	[ ]	[ ]
3.21.10	Checking the emission in the 406 MHz band without transmission of a distress call to the satellites;	[ ]	[ ]	[ ]
3.21.11	If possible, checking the emission on the 121.5 MHz frequency without activating the satellite system;	[ ]	[ ]	[ ]
3.21.12	Checking that the annual test has been carried out for the Satellite EPIRB (reg. IX/14).....		[ ]	[ ]
3.21.13	Checking that the EPIRB has been maintained by an approved shore-based maintenance facility not exceeding five years. (reg. IX/14)	[ ]	[ ]	[ ]
	Last maintenance date: _____ (D/M/Y)			
3.21.14	After the test, remounting the EPIRB in its bracket, checking that no transmission has been started;.....	[ ]	[ ]	[ ]
3.21.15	Verifying the presence of beacon operating instructions.;	[ ]	[ ]	[ ]
3.22	Two-way VHF radiotelephone apparatus (reg. VII/13):			
3.22.1	Checking for correct operation on channel 16 and one other by testing with another ☐fixed or ☐portable VHF installation (reg. IX/13);	[ ]	[ ]	[ ]
3.22.2	Checking the battery charging arrangements, where rechargeable batteries are used ;	[ ]	[ ]	[ ]
3.22.3	Checking the expiry date of primary batteries, where used ;			
	No.1 _____ No.2 _____ No.3 _____ (D/M/Y)	[ ]	[ ]	[ ]
3.22.4	Where appropriate, checking any fixed installation provided in a survival craft	[ ]	[ ]	[ ]
3.23	Search and rescue locating devies (☐Radar transponder/☐AIS-SART) (regs. VII/14, IX/6 and 13)			
3.23.1	Checking the position and mounting;	[ ]	[ ]	[ ]
3.23.2	Monitoring response on ship‘s ☐9 GHz radar/☐AIS;	[ ]	[ ]	[ ]
3.23.3	Checking the battery expiry date: No.1 _____ No.2 _____ (D/M/Y).	[ ]	[ ]	[ ]
3.24	Checking that all two-way communication equipment is either provided with the ship's position from an internal or external navigation receiver which is powered by means other than main and emergency power sources, or manually updated the ship's position with time at intervals not exceeding 4 hours while underway if the receiver is not installed;	[ ]	[ ]	[ ]
3.25	Examining the test equipment and spares carried to ensure carriage is adequate in accordance with the sea areas in which the ship trades and the declared options for maintaining availability of the functional requirements (reg. IX/14).	[ ]	[ ]	[ ]

CR No. _____ Report No. _____

InS* PS* RS*

4 Documentation

4.1 A valid radio license issued by the flag Administration (ITU RR Art. 24). ..... [ ] [ ] [ ]

4.2 Radio operator's certificates of competence (reg. IX/15 and ITU RR Article 56) (SEE ANNEX 2**)**. [ ] [ ] [ ]

*	Name of Radio Operator	Class & Certificate No.	Certificate issued by

* Entry in the box shall be made by inserting a cross (x) mark for the radio operator who is designated to have primary responsibility for radiocommunications during incidents.

4.3 Radio record (log) for GMDSS (reg. IX/16and ITU RR App.16) ..... [ ] [ ] [ ]

4.4 Carriage of up-to-date ITU publications (ITU RR App. 11). ..... [ ] [ ] [ ]

4.5 Carriage of operating manuals for all equipment (reg. IX/14) (SEE ANNEX 1) ..... [ ] [ ] [ ]

4.6 Carriage of service manuals for all equipment when at-sea maintenance is the declared option (reg. IX/14). ..... [ ] [ ] [ ]

5. Survey Results

☐ The above survey items have been checked and found in compliance with relevant provisions of the Convention

6. Memoranda

☐ Surveyor's Note

☐ Outstanding Recommendation

☐ The record of safety radio installation is updated if the equipment has been altered

Surveyor _____ Technician _____

( ) ( )

ANNEX 1 RADIO EQUIPMENT SUMMARY TABLE

Radio equipment (Chapter IX and IMO Resolution A.702(17))	Sea area [1]				
	A1	A2	A3		A4
			SES [6] option	HF option	
VHF/DSC	X	X	X	X	X
MF/DSC		X	X		
Recognized mobile satellite SES			X		
MF/HF DSC + NBDP				X	X
Duplicated VHF/DSC			X	X	X
Duplicated Recognized mobile satellite SES			X	Either	
Duplicated MF/HF DSC + NBDP					X
NAVTEX receiver [3.a]	Note[3.a]	Note[3.a]	Note[3.a]	Note[3.a]	Note[3.a]
EGC (reception of maritime safety information) [3.b]	Note[3.b]	Note[3.b]	Note[3.b]	Note[3.b]	Note[3.b]
HF NBDP (reception of maritime safety information) [3.c]	Note[3.c]	Note[3.c]	Note[3.c]	Note[3.c]	Note[3.c]
EPIRB [4]	X	X	X	X	X
Hand held (Two-way) GMDSS VHF radiotelephone app. [5]	X	X	X	X	X
SART 9 GHz or AIS-SART [2]	X	X	X	X	X

Notes:

1) As defined in Regulation IX/2.
2) Resolution MSC.246(83) Performance standards for survival craft AIS search and rescue transmitters (AIS-SART) for use in search and rescue operations.
   At least one search and rescue locating devices shall be carried on each side of every vessel. Alternatively, one search and rescue locating devices shall be stowed in each survival craft.
3) Maritime Safety Information (MSI):
   (a) In any area in which an international NAVTEX service is provided.
   (b) If international NAVTEX service is not provided in voyage's area, an EGC for reception of MSI shall be provided on board.
   (c) Vessels engaged exclusively on voyages in areas where an HF NBDP maritime safety information service is provided.
4) MSC/Circ.1171 Closure of INMARSAT-E services by INMARSAT LTD.
   If EPIRB installed on or after 1 July 2022, conform to performance standards and type-approval standards not inferior to those specified in Resolution MSC.471(101).
5) At least, 3 hand held (two-way) GMDSS VHF radiotelephone apparatus.
6) Resolution A.1001(25) Criteria for the provision of mobile satellite communication systems in the Global Maritime Distress and Safety System (GMDSS)

ANNEX 2 GMDSS OPERATOR'S CERTIFICATES –FOR REFERENCE

Category of GMDSS operator's certificates	Competency		Sea areas	
	Maintenance	Operational	A1, A2, A3, A4	A1
First-class radio electronic certificate	✓ (full)	✓	✓	
Second-class radio electronic certificate	✓ (limited)	✓	✓	
General operator's certificate (GOC)		✓	✓	
Restricted operator's certificate (ROC)		✓		✓