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Indian Ocean Tuna Commission
Commission des Thons de l'Océan Indien

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Safety, health, accident and injury

IOTC ROS SFO TR3



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The sea fishing sector is recognised worldwide as the most hazardous industry to work in, accounting for significantly higher rates of fatal and/or serious accidents when compared to other sectors.

This module aims to alert Observers to the need to be constantly aware of the dangers around them while working onboard fishing vessels.

Health and safety can be viewed from various sides:

- personal health and safety and safety awareness onboard; and
- formal safety checks and reporting, which includes pre-boarding safety inspections and in-trip reporting (this follows in a subsequent presentation).



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Safety protocols and Emergency Action Plan Procedures *IOTC ROS SFO TR3.3*

Category: Safety, Health, Accident and Injury

IOTC ROS SFO TR3



By working onboard fishing vessels Observers are exposed to the same risks as professionals from the sea fishing sector. Unfortunately, Observers sometimes face additional safety issues during the fishing trip. These may take several forms but can include intimidation, harassment, interference, bribery, and violence. On occasion this safety issues have been serious enough to endanger Observers lives and have even led to Observer casualties. The need to protect observers whilst at sea has been recently recognized by multiple RFMOs, including the IOTC. This module aims to familiarize Observers with the IOTC ROS Standard on safety-at-sea, i.e., the procedures established to guarantee that observers are deployed on safe/seaworthy vessels, and that at-sea observer emergencies and reports on issues of safety (including instances of harassment, intimidation, or assault) are immediately and effectively handled.



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IOTC ROS STANDARD ON SAFETY-AT-SEA

This standard requires CPCs and their Observer Programmes ensure that:

1. Observers conduct regular **vessel safety checks (VSC)** using a standard form containing a list of minimum safety requirements in line with those of the Commission.
2. An **Emergency Action Plan (EAP)** is in place to accommodate any reported Observer emergency.



A Vessel Safety Check (VSC) it's a procedure outlining vessel minimum safety requirements and safety equipment, established to guarantee that Observers are deployed on safe/seaworthy vessels. The VSC procedure applies to all vessels onto which an Observer is embarked; including any vessels used to transfer Observers.

An Emergency Action Plan (EAP) is a written procedure detailing the appropriate response to Observer emergency situations at sea, and outlining required responses for Observers, Observer Coordinators, vessel Master/Captain, vessel Operators/Owners, and Coastal States and Flag States. The EAP is to provide for all Observer emergencies and include different scenarios on fishing vessels. Observers are to be provided with a checklist covering each emergency and the steps necessary to prepare for and control the emergencies when it arises.



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VESSEL SAFETY CHECK (VSC)

- Conducted by the Observer before each boarding
- Vessel safety conditions surveyed against IOTC ROS list of minimum safety requirements
- VSC form filled out prior to embarkation
- Result of vessels pre-sea safety inspection to be reported to the Coordinator immediately
- Observer not authorized to board if the VSC inspection highlights vessel non-compliance with minimum safety requirements, or if Observer considers the vessel to be un-safe



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The pre-sea inspection affords the opportunity to check that a vessel is compliant with all national and international safety requirement. It should be noticed that Observers are not qualified or to be seen as safety inspection officers, however they can check that equipment is in place and that it complies to service dates and STCW requirements. Therefore, the first thing that observers will check is to check that a list of MINIMUM equipment is onboard. If any of these items are not in place, the observer is not permitted to embark the vessel. The observer is totally removed from this decision, this is the policy of the observer's controlling authority and should be clear to the vessel operator.



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VESSEL SAFETY CHECK (VSC)



- Safety Certificate



- Life Buoys



- Life Rafts

- GMDSS:



- Life Jackets



- Radio Equipment



- Immersion Suits



- EPIRB



- Fire Extinguishers

- SART



The items listed are to be checked by the Observer during Vessel Pre-Safety Check using a standard form in line with the form provided by the IOTC Commission (see Observer Manual Annex 2). Items underlined are to be considered as the minimum compulsory requirements. Should any of these items not comply the Observer will not be permitted to embark on-board the vessel.

The **Global Maritime Distress and Safety System (GMDSS)** is a worldwide system for automated emergency signal communication for ships at sea. It's a set of safety procedures, types of equipment, and communication protocols used for safety and rescue operations. GMDSS consists of several systems which are intended to perform the following functions: alerting (including position determination of the ship in distress) ships in the vicinity and ashore authorities; search and rescue coordination, locating (homing), maritime safety information broadcasts, general communications, and bridge-to-bridge communications. Specific radio carriage requirements depend upon the ship's area of operation, rather than its tonnage. The system also provides redundant means of distress alerting, and emergency sources of power.



VSC Minimum Safety Requirements

1. Vessel Safety Certificate

- ✓ Check if present onboard
- ✓ Check if valid (not expiring during the following 4 months at least)
- ✓ Check that crew complement, **INCLUDING THE OBSERVER**, does not exceed the maximum number of crew specified in the safety certificate
- ✓ Photograph vessel safety certificate

Name of Ship	Distinctive Number or Letters	Part of Registry	Gross Tonnage	Length (L)	Date of Next Valid
JIN SHYANG YH 666	VZVD	BELIZE	99	25.52	2011

Completion date of the survey on which this certificate is based: 24 FEBRUARY 2011
 The vessel is valid from 11th of APRIL of 2011 to 23rd of MAY of 2011
 Signature: JOSE DELGADO
 Name and Signature of authorized officer issuing the Certificate



Check that a vessel safety certificate is present onboard, that all fields are filled out correctly and that the certificate is valid and not expiring during the following four (4) months at least. Check that the crew complement, **INCLUDING THE OBSERVER**, does not exceed the maximum number of crew specified in the safety certificate. If in doubt photograph the vessel safety certificate and send it to your coordinator to check. Forged documents are not unheard of.



VSC Minimum Safety Requirements

2. Life Rafts

- ✓ Check if present onboard
- ✓ Check if within service date (not expiring during the trip)
- ✓ Check if it has the capacity to accommodate full crew & OBSERVER
- ✓ Photograph vessel service documents if service dates are not clear on life rafts



Check that life rafts are present onboard, and that they have capacity to accommodate full crew and the OBSERVER. Check that they are within service date (not expiring during the trip). Photograph vessel service documents if service dates are not clear on life rafts.



VSC Minimum Safety Requirements

2. Life Rafts (continued)

- ✓ Check if fitted with a Hydrostatic Release Mechanism
- ✓ Should not be tied down with ropes



Check that life rafts are mounted properly, that bullet points are adhered to and that they are fitted with an hydrostatic release mechanism.



VSC Minimum Safety Requirements

3. Life Jackets & Immersion Suits (for vessels operating south of 30° S)

- ✓ Check if present onboard & enough for the full crew and the OBSERVER
- ✓ Check if readily available at emergency muster stations
- ✓ Check of comply with IMO – SOLAS LSA standards



Check that life jackets are present onboard, that there are enough for the full crew and the OBSERVER, and that they are compliant with IMO – SOLAS LSA standards.

VSC Minimum Safety Requirements

4. Global Maritime Distress and Safety Systems (GMDSS)

a. EPIRB (Emergency Position Indicating Radio Beacon)

- ✓ Check if present on-board
- ✓ Check if within service date (not expiring during the trip)



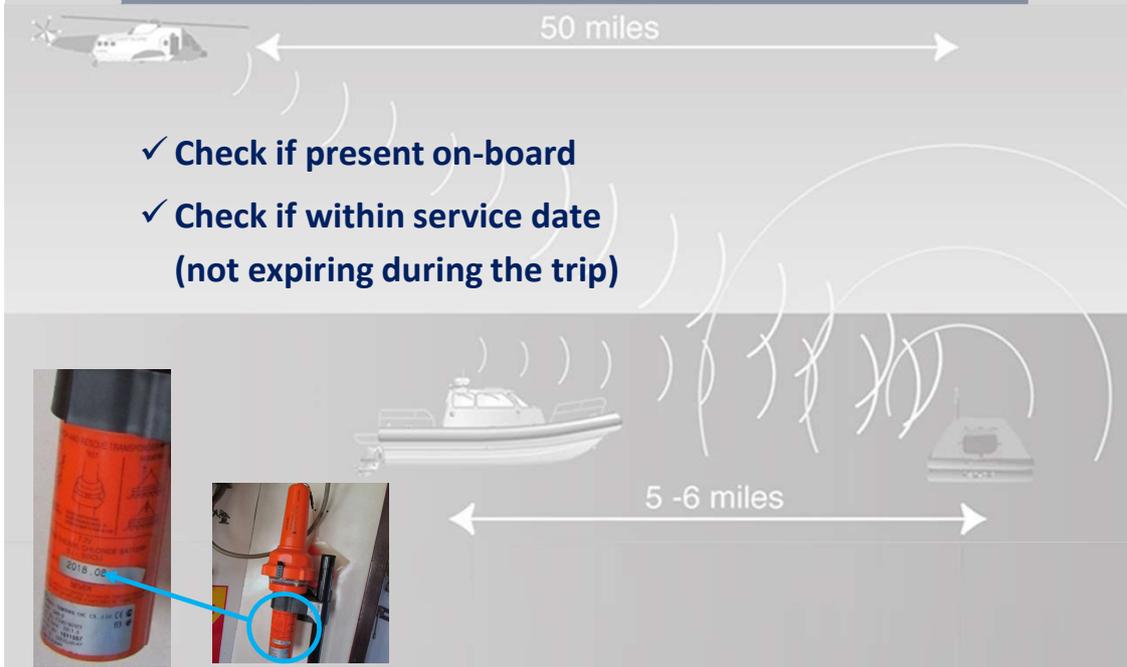
Check that Global Maritime Distress and Safety Systems (GMDSS) are present onboard and compliant with the vessel tonnage and area of operation.

EPIRBs are Emergency Position Indicating Radio Beacon used to alert search and rescue services in the event of an emergency. It does this by transmitting a coded message via the free to use, multinational Cospas Sarsat network. A 406 MHz distress frequency signal is sent via satellite and earth stations to the nearest rescue co-ordination centre. EPIRBs are installed on marine vessels and are registered through the national search and rescue organisation to that specific boat. Check if EPIRBs are present on board and within service date.

VSC Minimum Safety Requirements

5. Global Maritime Distress and Safety Systems

b. SART (search and rescue transponder)



SARTS, (Search and Rescue Radar Transponders), are location beacons used to locate a survival craft or distressed vessel. They send a homing signal when interrogated by a 9 GHz radar. SARTs are normally carried on the ship's bridge or similar convenient place where they are readily accessible. The detection range of a SART varies depending upon the height of the radar and the height of the SART. A SAR Unit searching for a life raft can expect to make contact at about five to six miles. An aircraft at 3,000 feet could detect the same SART from about 50 miles. The transmissions from a SART are considered to be a Distress Call. Check if SARTs are present on-board and if they are within service date.



VSC Minimum Safety Requirements

6. Global Maritime Distress and Safety Systems

c) Radio equipment (HF, VHF, Satellite phone, etc.)

- ✓ Check if present onboard
- ✓ Check if operational
- ✓ Check if serviceable



Inmarsat C



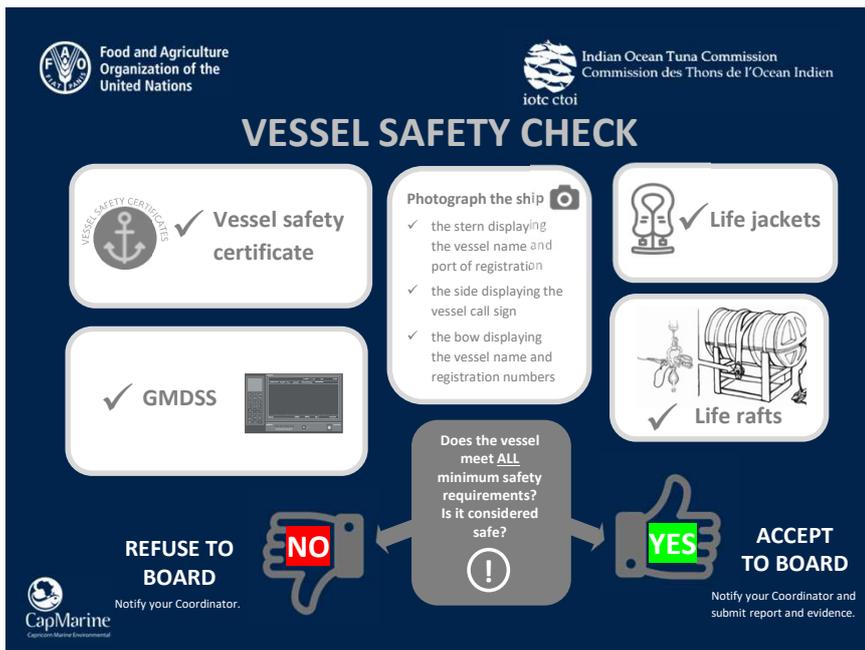
Inmarsat B



Vessels should comply with GMDSS radio carriage requirements:

- NAVTEX (international, automated system for instantly distributing maritime safety information (MSI) which includes navigational warnings, weather forecasts and weather warnings, search and rescue notices and similar information to ships.)
- Satellite (there are two certified providers of GMDSS satellite services, INMARSAT and Iridium)
- HF ((narrow-band direct printing) equipment)
- VHF (very high-frequency radiotelephone equipment)

Check if these are present on-board, if they are functional and if they meets the requirement for the area of operation (to be communicated by your flag state).



Observers are not to board a vessel if the VSC highlights that the vessel does not comply with required standards or if they consider a vessel to be un-safe.



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EMERGENCY ACTION PLAN

A response to Observer emergency situations at sea

Observer Restriction Situation:

- Work safety
- Obstruction
- Wellbeing

Observer Emergency Situation:

- Attempted Suicide
- Death of observer at sea
- Depression / Anxiety
- Kidnap / Intimidation / Assault / Harassment / Attempt to bribe
- Observer missing out at sea
- Observer overboard
- Serious illness and injury



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An Emergency Action Plan (EAP) is a written standard operating procedure (SOP) detailing the appropriate response to Observer emergency situations at sea, and outlining required responses for key personnel or entities including Observers, Observer Coordinators, vessel Master/Captain, vessel Operators/Owners, and Coastal States and Flag States to deal with at sea emergency situations. The EAP shall provide for all Observer emergencies and include different scenarios on fishing vessels. Observers, Observer Coordinators, vessel Master/Captain, vessel Operators/Owners and relevant entities are to be provided with a checklist covering each emergency and the steps necessary to prepare for and control the emergencies when it arises. Note that:

- **An “Observer Emergency Situation”, means** any critical incident or situation where the safety of the observer is compromised.
- **An “Observer Restriction Situation”, means** an incident or situation - where an observer’s life is NOT in danger- driven by restrictions/impediments imposed by the vessel to observer work, safety and and/or wellbeing.



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Responsible bodies for the application of the EAP

At the central command centre

- The Observer Coordinator
- The vessel operator/owner
- The Regional Maritime Rescue Coordination Centre (RMRCC)
- The Coast Guard
- The Navy

At the scene of the incident

- The Master/Captain of the fishing vessel
- The Observer



- At the central command centre:
 - **The Observer Coordinator**, through the Observer Management Authority, whom assumes the role as the central command centre
 - **The vessel operator/owner** assumes the role as the last communication mean to establish contact with the Observer/Vessel.
 - The **Regional Maritime Rescue Coordination Centre (RMRCC)**, assumes the role to:
 - a) receive, acknowledge and relay notification of distress from vessels;
 - b) establish and implement the Search and Rescue (SAR) Plan;
 - c) coordinate the activities of SAR operations;
 - d) enforce the SAR plan for the national and regional area of responsibility;
 - e) request assistance from other Maritime Rescue Coordination Centres (MRCC's) as appropriate.
 - The **Coast Guard**, assumes the role of undertaking maritime SAR actions on the country territorial waters;
 - The **Navy** assumes the role of undertaking maritime SAR actions on the country EEZ and international waters.
- At the scene of the incident:
 - The **Master/Captain** of the fishing vessel assumes the role as the person in charge, who gives immediate strategic directions or best course of action to mitigate the risk and is responsible for notifying the Observer Coordinator and relevant authorities. Subject to the incident occurring as the Master/Captain/Crew might be responsible for the incident itself.
 - The **Observer** deployed on the fishing vessel assumes the role of the person at risk and is responsible for notifying the Observer Coordinator of risks and incidents due to Master, Captain or crew actions or refusing or failing to act.



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EMERGENCY ACTION PLAN

Detailed procedures :

1. Communication protocols and appropriate contact information
2. Standard operating procedures (SOPs) to deal with reported Observer emergencies
 - ✓ Follow up responses
 - ✓ Remedial action
 - ✓ Completing of the EAP protocols
 - ✓ Reporting to national authorities and RFMOs



To guarantee that at-sea Observer emergencies and reports on issues of safety (including instances of harassment, intimidation, or assault) are immediately and effectively handled, the Programme EAP is to include, as a minimum, agreed safety-at-sea procedures detailed under the IOTC ROS Standards and Guidelines. These include the establishing of a:

- **Communications protocol** inclusive of routine reports (deployment report and five-day status report), and of a 24-hr emergency service ensured by the Observer Management Authority via, the maintaining of a device capable of receiving a signal from an independent two-way satellite communication device to be allocated to deployed Observers.
- **SOPs to deal with reported Observer emergencies**, to ensure that Observers work in an environment that is free from, obstruction, harassment, intimidation, assaults and other threats, and that provides them with adapted work and living conditions. These shall include instructions on follow up responses , remedial action , the completing of the EAP protocols and reporting in case of an Observer emergency/restriction situation at-sea.



EAP: Communication Protocols

✓ Deployment Report

- logistics
- pre-sea safety inspection
- establish communications

FOR YOUR SAFETY

WITHIN 24 HR:

Request bridge officers email your deployment report to your Coordinator to open a channel of communication.

If the report is not received within 24 hr of its due date, your Coordinator will try to establish contact via the vessel operator to ensure that you’re safe.



Date
Observer
Vessel Name / Call sign
Company
Captain / Fishing Master
Vessel Contact Details
Number
Email
Deployment Details
Briefing Date
Contract “Start Date”
Flight No.s
<i>(Observers must retain their flight boarding passes)</i>
Departure date from
Departure time from
Landing date at destination
Landing time at destination
Safety Inspection completed (yes /no)
Boarding date
Sailing Date
Sailing Time
Port of departure
Comment

Within 24 hours of the vessel sailing the observer must send a deployment report to their controlling organisation. The content will include confirmation of the contact details of the vessel and serves to set up and confirm the line of communication between the observer and their controlling organisation. This report includes the outcome of the pre-sea inspection as details of flights and logistics prior to boarding.



EAP: Communication Protocols

✓ Five-day Status Report

- area
- CPUE
- vessel sightings
- problem codes
- environmental interactions
- sampling summary

FOR YOUR SAFETY

EVERY 5 DAYS:

Request bridge officers email your 5-days status report to your Coordinator to ensure that the channel of communication is kept open.

If the report is not received within 24 hr of its due date, your Coordinator will try to establish contact via the vessel operator to ensure that you're safe.



Tuna Observer Five-Day Report			
Vessel			Observer
Date			
Set Number			
Start Set Position			
Start Set Time			
End Set Position			
End Set Time			
Number Hooks Set			
Total number fish measured			
Tori Line Deployed (Yes/No)			
Tori Line ID No.			
Sea Bird Mortalities (Number)			
Mammal Interactions (Yes/No)			
Turtle / Interactions (Yes/No)			
Permit Code			
Record of Daily Catches			
YFT			
BET			
SBY			
SWO			
Shark Trunks			
Total Other			
General Comments			

Throughout deployment Observers will be required to send 5-day status reports to their controlling agency on specific dates. The main objective of this report is to ensure that the channel of communication is kept open. The report can also be used to provide a summary of fishing operations, catch and sampling undertaken during the period covered, and clarify doubts related to sampling.



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EAP: SOPs to Deal with Observer Emergencies

✓ Restriction Situations

- Work safety
- Obstruction
- Wellbeing

✓ Emergency Situations

- Kidnap
- Intimidation
- Assault
- Harassment
- Attempt To Bribe

FOR YOUR SAFETY

Always notify your Coordinator if you find yourself in a restriction/emergency situation by including to your 5-day status report the agreed communication code.

Examples of communication codes: Kidnap → Whish your Coordinator Happy Birthday when it's not his/her birthday.



Always notify your Coordinator if you find yourself under a restriction/emergency situation by including to your 5-day status report the agreed communication code. Upon notification your Coordinator shall establish direct contact, via any reliable communication system, to confirm the situation and shall take action to mitigate and resolve the situation on board. If there are reasonable grounds to believe that your health or safety is endangered your Coordinator will immediately remove you from the fishing vessel. If not, your Coordinator shall immediately take action to preserve your safety, mitigate and resolve the situation on board.



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ANY QUESTIONS?



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