

GENERAL SPECIFICATION

Logistics and Operational Support

GS EP LSO 202

Personnel transfer between watercrafts and between watercrafts and offshore structures

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06	06/2016	Reference documents update
05	08/2015	Incorporation of GM EP LSO 212
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1. Scope

This General Specification defines the conditions and methods required by Company for the transfer of personnel between watercrafts and/or fixed offshore structures.

This General Specification defines the conditions and methods required by the Company for transfer of personnel at sea. This document defines the minimum requirements for the watercrafts access. It covers the design, preparation, performance, limits and procedure of the transfer system during marine operations.

2. Reference documents

The reference documents listed below form an integral part of this General Specification.

External Documents

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and addendums, is the latest revision published at the effective date of this document.

Reference	Title
IMO-SOLAS	International Convention for the Safety of Life at Sea (SOLAS)
IMPA Guideline	International Maritime Pilots' Association, Shipping Industry Guidance on Pilot Transfer Arrangements
IAGC Guideline	International Association of Geophysical Contractors, Guidelines for Marine Small Boat Operations
IMCA D 046	Guidance on operational communications
IMCA M 205	Guidance on operational communications
MSC/Circ 568	Pilot Transfer Arrangements
MSN 1716	Merchant Shipping Notice
NSL	The International Rigging and Lifting Handbook
SPS Code	Code of Safety for Special Purpose Ships

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Reference	Title
GS EP LSO 209	Life Jackets and Immersion Suits Specifications
GS EP LSO 306	Selection and Operation of Dynamically Positioned Vessels
GS EP STR 105	Boat landings and bumpers
GS EP STR 901	Design rules and construction standards for ancillary structures of offshore and onshore installations

3. Personnel transfer

For the transfer of personnel to offshore installation usage are made of:

- Helicopters ;
- Watercraft.

Risk Assessment for personnel transfer at sea should include (wherever applicable but not limited to) the following:

- Necessity of the transfer ;
- Frequency of transfers ;
- Environmental conditions :
 - Wind speed and direction ;
 - Sea state including swell height and direction ;
 - Current or tidal speed and direction ;
 - Fog/mist ;
 - Water temperature ;
 - Visibility.
- Vessel movement (pitch, roll and heave) ;
- Station keeping ability of the vessel(s) involved ;
- Operability and constraints of lifting equipment ;
- Slip/trip hazards ;
- Any SIMOPS or other relevant activities in the area ;
- Roles and responsibilities of the personnel involved ;
- Verify that a 'test run' of the personnel transfer operation has been conducted before the actual transfer.

Should the equipment or conditions change at the time of the transfer, the impact of these changes should be considered and appropriate Management of Change (MoC) procedures shall be followed.

Whatever method of transfer is employed, all personnel involved in the transfer, whether making the transfer or assisting with it, should have received sufficient training to provide assurance of their competence.

It should be noted that there can be different training requirements between the personnel transferring (Travel Safely by Boat – OPITO) and those assisting the transfer, i.e. vessel crew. All passengers shall be provided with a full briefing prior to the transfer, for the particular method or device to be used.

Radio and visual communications between the personnel involved should be established prior to transfer operations as per [IMCA D 046](#) and [IMCA M 205](#). Communications shall be maintained during operations and shall be tested and verified at regular intervals throughout the transfer operation.

If there is any doubt about the safety of the transfer procedure the transfer shall not go ahead.

3.1 Transfer by boat landing

3.1.1 General

Where personnel has to be transferred between watercrafts or between a watercraft and an installation/floating unit fitted with a boat landing, only crew boats with purpose fitted boat landing facilities shall be used.

Luggage shall be transferred **separately**. Personnel shall have both hands free and shall not carry any bag on the shoulders.

Personnel shall be briefed prior to the transfer and a crew member shall be standing by to assist with the transfer on both watercraft and installation. The personnel to be transferred shall wear a fully donned work vest or life jacket of an approved type as per [GS EP LSO 209](#).

Boat landings and its equipment shall be designed and certified in accordance with [GS EP STR 105](#) and [GS EP STR 901](#).

It is recommended that a graduated painted marking is applied to the side of the boat landing; this graduated marking will assist to estimate the significant height of the swell/waves.

Figure 1 – Transfer of personnel using ‘Surfer/Mamolino’ type crew boat



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3.1.2 Boat landing Assistant

All manned installations/floating unit or watercraft, carrying out personnel transfers by crew boat via a boat landing platform shall designate a Boat Landing Assistant (BLA).

The Boat Landing Assistant (BLA) is the designated person on the installation/floating unit or watercraft supervising personnel transfer via crew boats. He is to ensure safety of passengers and the surfer vessel at the Boat Landing Platform; and that all safety conditions are fulfilled to allow a safe transfer from and to the crew boat.

In ensuring the safe transfer, the BLA shall ensure (but not limited to) the following:

- Estimate the significant height of the swell/waves and determine the limits to allow access on the boat landing ladder with the help of the painted graduations on the boat landing side and always be in contact with the crew boat pilot about the procedure to be followed during the personnel transfer;
- Give brief instruction to the crew boat personnel and personnel to be transferred about the prevalent weather conditions and the boat landing condition;
- Ensure that passenger training (Induction film: 'SURFER/MAMOLINO') safety film have been shown onboard;
- Supervise in close collaboration and coordination with the crew boat crew for the transfer of personnel and their luggage;

In case no radio contact can be established with the crew boat a sign/flag shall be posted by the BLA at boat landing to inform the crew boat pilot about the accessibility or non- accessibility of the boat landing.

A green flag or sign shall be used by the BLA to indicate that all conditions are fulfilled for a safe personnel transfer nevertheless the ultimate decision to conduct the personnel transfer will always be on the crew boat pilot.

For an unmanned platform, the team supervisor shall be the first person to embark on the platform and conduct a safety round around the platform. Once he is satisfied that it is safe, he will then act as a temporary BLA and start the personnel transfer process.

For disembarkation, the team supervisor/temporary BLA will be the last person to disembark the unmanned platform.

3.1.3 A red flag/sign utilisation

A red flag/sign shall be used to indicate that the conditions are such that a safe transfer cannot be done and the transfer needs to be postponed until all conditions are fulfilled to allow a safe transfer of personnel.

In order to facilitate the decision making a "Decisional Matrix" should be prepared and implemented.

The "Decisional Matrix" is to guide, help and assist the crew boat Pilot's decisions. It's not intended to be a 'stand-alone' direction. The crew boat pilot has the over-riding authority and responsibility to make all decisions as seen fit related to the safety of personnel, assets and the environment.

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The matrix takes two majors factors into account to determine the risk during the personnel transfer:

- Environmental conditions, i.e.; sea conditions, current, wind and visibility ;
- Human factors and equipment, i.e.; personnel, boat-landing assistants, condition of the boat-landing and fast crew boat.

The level should be established by site RSES/OIM or his deputy, confirmed by the crew boat pilot and the BLA.

The BLA shall provide the crew boat pilot a brief overview of prevailing conditions (weather, boat landing, crew boat) in order to allow the captain to verify his decisional matrix.

A detailed example is available on Appendix 1.

3.2 Transfer by personnel transfer carrier basket

Three types of personnel baskets are currently in use in the offshore industry:

- Rigid type personnel basket ;
- FROG type personnel basket ;
- Billy Pugh type personnel basket.

The use of the RIGID type personnel basket and FROG type personnel basket are recommended, the Billy Pugh type personnel basket should be avoided as far as practically possible.

Personnel baskets should only be used in emergency, exceptional or other circumstance where the use of alternative means of transferring personnel is either impracticable or unsafe.

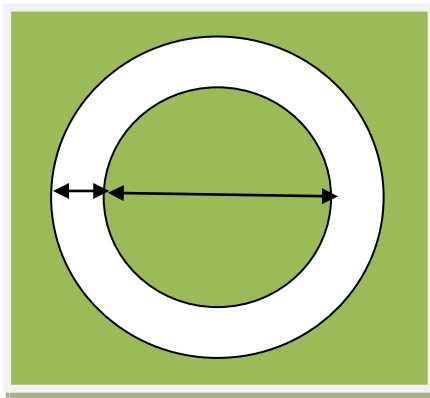
The basket and associated rigging shall be stored, used, inspected, maintained and certified according to the manufacturer's instructions. A pre-use checklist shall be in place and implemented by a competent person. After use, it must be rinsed with fresh water and stored in a shaded area. Every 6 months, they shall be inspected by a qualified inspector; load bearing areas are most critical. A two-yearly inspection shall be conducted by an approved manufacturer's representative; a new certificate of conformity must be issued at this time ([NSL](#), paragraph 27.13).

Personnel are to be briefed prior to the transfer on the instructions from the manufacturer and crew members are to be standing-by to assist with the transfer on the installation/floating unit or watercraft and the watercraft to/from which the personnel will be transferred.

3.2.1 Watercraft Suitability

In order to allow a personnel transfer by personnel basket a free deck space area with a diameter of six (6) meters is required for the safe landing of the basket on the deck plus a area around the landing circle of minimum two (2) meters in order to allow a safe transfer. There shall be no obstructions within these areas such as masts, aerals, superstructures, funnels, cranes or any other obstruction.

Figure 2 – Free deck space area



3.2.2 Means of Rescue

At all times during a transfer by personnel basket, means of rescue from the water shall be provided and ready to be used. This could be in the form of rapidly deployable buoyancy aids and/or a fast rescue craft.

3.2.3 Conditions for Personnel Transfer Carrier

Before authorizing a personnel transfer, the following conditions shall be considered by the OIM/RSES and Watercraft Master:

- Cranes used shall be certified for man riding ;
- Crane drivers shall be trained and certified for man riding operations ;
- The personnel basket shall be of an approved type and shall be certified by an independent certification company ;
- Transfer to take place in daylight hours ;
- Wind force/sea state shall be within operating limits (appendix 1) ;
- Unrestricted visibility between crane and landing area's ;
- Movement of the watercraft ;
- Familiarity of personnel with the transfer procedure ;

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- No obstructions on the landing areas ;
- Availability of rapidly deployable buoyancy aids and/or fast rescue craft ;
- Crane Operator, Rigger(s) and Banksman (3 people minimum) shall be present during a transfer ;
- Anyone involved in the operation, including passengers, should have the right to call a STOP and the team should reassess the situation.

3.2.4 Authorization

The transfer operation shall be approved by the watercraft Master and OIM/RSES of the offshore watercraft or installation/floating unit. Both have to agree that the transfer can be safely executed. Each person to be transferred shall only be transferred if he/she voluntarily consents to the basket transfer.

3.2.5 Responsibilities of the Watercraft Master involved in a transfer by personnel basket / personnel transfer carrier

The Master is responsible for the transfer, and shall verbally confirm to the OIM/RSES, or Unit Master that:

- He accepts the transfer and understands the procedure ;
- The watercraft has a satisfactory station keeping capability ;
- There is a safe unobstructed landing area of 6 + 2 diameter on the watercraft ;
- Communications have been established between the watercraft and crane operator/banksman on the installation/floating unit or watercraft ;
- The deck crew on the watercraft has been fully briefed on the basket personnel transfer operation.

The persons to be transferred from/to the watercraft have been briefed about the transfer procedures, are medically fit and have verbally agreed to their transfer by basket.

3.2.6 Procedures for Transfer of personnel by personnel transfer carrier basket

Proper procedures for the transfer of personnel by basket shall be available and complied with.

Such procedures shall describe the duties of all involved in the transfer operation and shall cover as a minimum the following points:

- Evaluation of the necessity for the transfer by basket ;
- The RSES or OIM will approve the transfer of personnel by personnel basket ;
- Evaluation of the weather conditions acceptable for a personnel transfer by basket (wind, sea, current and visibility), Transfers by personnel basket should only be done in calm or moderate weather conditions except in case of emergency or MEDEVAC ;
- Identification of the personnel involved in the basket personnel transfer ;
- Banksman shall be clearly identified and shall wear a clearly visible identification jacket ;