REMOLCADORES DE PUERTO Y ALTURA, S.A.

REPASA

INST-RE-14: Static Tow FSO “Kingsway”

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Revisado / Aprobado – Revised / Approved

H. Bethencourt / D. J. Bueno
1. Introduction

1. The present manual describes the instructions to be taken into account while the Red Fox is under static towing with the FSO “Kingsway”.

2. This instruction apply to all persons on board the “Red Fox”, been crew members or not.

3. The Captain is the responsible of the operation and from him emanate all actions to be taken.

2. Definitions

2.1 “FSO” “Floating Storage & Offloading”.

2.2 “SBM” “Single Buoy Mooring”. Is a buoy anchored in open sea used as mooring point and connection to tankers in order to carry out loading and discharging operations.

2.3 “Towing Equipment” are the items used for the connection between the tug and the FSO to keep the position of the last.

3. Operations

3.1 Preliminary.

We assume the tug boat nominated to carry out this operation is the proper one and the Client or his surveyors has already made all necessary calculations in order to approve her.

Procedures supplied by the Client should always been taken into account, properly filed and ready for consult.

3.2 FSO “Kingsway”.

- The “Kingsway” is a tanker acting as FSO in the oil field. Her main particulars are:
  - L.O.A.: 260 m
  - B.O.A.: 48 m
  - Draught: 17 m
  - Deadweight: 159.719 tons.
• The “Kingsway” is forward moored to an SBM by means of two pieces of chain and stretchers, one on each side.

• The “Red Fox” is fasten in the stern of the “Kingsway”, keeping his heading and position according with her Captain instructions.

• The unit is fitted with her own chain, attached to an Smit Bracket installed amidships in the aft deck. This chain has a shackle for the connection of the “Red Fox” towing equipment.
3.3. Towing Equipment.

- The tugboat is fitted with a main tow wire, an stretcher (10mx96mm), a Pennant (30mx54mm) and the suitable shackles for connection.
- The main towing wire is fitted with an anti chafing toe.
- Tools: Piles, hammers, skew, plies, screw drivers, etc., all of them inside a bucket to avoid to be scattered on deck.

3.4. Safety in connection/disconnection.

Before start any connection or disconnection operation the Captain of the tug, will meet all the crew engaged (Toolbox Meeting) where he will clearly explain all steps to be done in order to carry out the operation.

The use of towing pins, Karm Fork and tools, will be commented and all the crew will assure the knowledge of their use according with the INST-RE-05.

Before start any operation, take into account the correspondent Risk Assessment as well as our instructions INS-RE-05 Operations with Towing Pins and Karm Fork and INS-RE-09 Towing Operations.

Also be sure all crew is wearing the proper PPE’s.

Always remember:
IN CASE OF DOUBT, STOP OPERATIONS IMMEDIATELY

When any member of the crew must go on deck for inspections or maintenance works, take into account to put the wire between the pins AND Karm-Fork BEFORE any person is on main deck.

3.5. Making Fast.

3.5.1. Before start any connection operation to FSO “Kingsway”, the Captain will be contacted by VHF or telephone in order to receive all details.

3.5.2. The “Red Fox” will have ready on deck the towing line according with:
- The stretcher, will be fastened to the main tow wire with a proper shackle.
- A pennant will be fastened by means of another shackle to the stretcher.

3.5.3. The connection will be done on board the “Kingsway”. Once the tugboat is in position, and with the pins raised, operation will start. Pass a heaving line fastened to the pennant to the “Kingsway”, been sure the line is inside the pins. Once the connection is ready on board the FSO, start to slack the wire till the proper length, normally between 350 and 400 metres.

3.5.4. Once connected, pay special attention to the location of the anti chafing toe. Meanwhile the anti chafing toe is not in the proper and definitive place keep the wire always inside the pins.

3.6 Let Go.

3.6.1. Before start any disconnection operation from the FSO, contact with the Captain in order to ensure how to proceed.

3.6.2. First of all put the wire inside the towing pins and start to heave up the wire making way, stern first, to the “Kingsway” till the “Red Fox” arrives to the desired position from the “Kingsway” in order to allow the crew to disconnect the pennant. Once the pennant is in the water heave up all the line to deck.
3.7. Operation.

3.7.1. Length of towing wire

The length of the towing wire should be the proper one according with weather conditions.

Also follow FSO’s Captain orders and advise.

3.7.2. Anti chafing toe

The protector used in the Red Fox is made of two halves and have a length of two meters. These two pieces must be fixed to the wire by means of bolts and nuts, remaining fixed when all of them are tight.

3.7.3. Fixing the anti chafing toe.

To ensure a proper towing wire protection against any part of the ship, 3 pieces of two meters must be fixed to the wire in order to achieve 6 meters of protection.

It must be always on board at least one spare toe.

Every fifteen days, or before if necessity arise, the wire must be heaved up in order to locate the anti chafing toe on main deck and inspect condition as well as bolts and nuts.
3.7.4. Main Engines Use.

The Red Fox is able to carry out the stand-by work using only one main engine. However, the second engine will be always standing-by and ready to start immediately if operations or weather conditions so requires. Watch officer has full authority to start second engine in any circumstances he considers necessary.

**BY NO WAY MAINTENANCE WORKS WILL BE CARRIED OUT ON THE STAND-BY ENGINE IN SUCH A WAY THAT DON’T ALLOW AN IMMEDIATE START.**

4. Communications

A close communication between “RED FOX” and “Kingsway” shall always be maintained.

Should any event downgrading towing performance occurs, “Kingsway” shall be immediately informed.

In addition, any maintenance work on tow wire while “RED FOX” is under tow, shall be carefully planned and discussed with “Kingsway”, in order to define jointly the most suitable time for it.

Also remember to carry out Toolbox Meetings and Risk Assessment for every operation to be done or act accordingly with the proper procedure or instruction if already done.

5. References

- User Manual for KARM FORKS AND TOWING PINS
- INST-RE-05. Operations with Pins and Karm Fork
- INST-RE-09. Towing Operations
- Risk Assessment
- Use of PPE