G.I.NUMBER **Approved** SAUDI ARABIAN OIL COMPANY (Saudi Aramco) **GENERAL INSTRUCTION MANUAL** 7.021 REPLACES **ISSUE DATE** ISSUING ORG. LOSS PREVENTION DEPARTMENT 08/25/2009 12/03/1983 APPROVAL PAGE NUMBER OPERATING REQUIREMENTS FOR LIFESAVING APPLIANCES SUBJECT: HJK 1 of 6 AT OFFSHORE INSTALLATIONS

CONTENT:

This instruction outlines the minimum requirements, types, responsibilities, maintenance, drills and manning of lifesaving appliances at manned and unmanned fixed offshore facilities. All mobile offshore drilling units, jack-up barges, floating maintenance barges and vessels subject to certification by an approved classification society are excluded from this General Instruction. The text includes:

References

- 1.0 Definitions
- 2.0 Lifeboats
- 3.0 Inflatable Life Rafts
- 4.0 Responsibilities
- 5.0 Maintenance and Inspection
- 6.0 Emergency Drills for Lifesaving Appliances
- 7.0 Manning of Lifeboats
- 8.0 Station Bill
- 9.0 Unmanned Platforms
- 10.0 Use of Inflatable Life Rafts
- 11.0 Training
- 12.0 Manufacturer's Instructions

REFERENCES:

SAES-B-009 Fire Protection and Safety Requirements for Offshore Production Facilities

International Convention for the Safety of Life at Sea (SOLAS), 1974 (International Maritime Organization)

USCG-Title 33, Subchapter N – "Artificial Islands and Fixed Structures on the Outer Continental Shelf"

1.0 DEFINITIONS:

- 1.1 Lifesaving appliances This include lifeboats and inflatable life rafts, which are intended to provide a means of personnel escape from manned and unmanned offshore platforms.
- 1.2 Lifeboat Escape capsules and Totally Enclosed Motor Propelled Survival Craft (TEMPSC).
- 1.3 Artificial island/fixed structure Platforms secured to the seabed by fixed means or submerged onto the seabed so that for all practical purposes they become stationary.
- 1.4 Manned platform Artificial island or fixed structure, which after completion of erection is continuously occupied by persons living and working thereon, i.e., production platforms, sea islands, and offshore gas/oil separation plants (GOSPs).

★ CHANGE ★★ ADDITION NEW INSTRUCTION ☐ COMPLETE REVISION ⊠

SAUDI ARABIAN OIL COMPANY (Saudi Aramco) GENERAL INSTRUCTION MANUAL		G.I.NUMBER	Approved
		7.021	
ISSUING ORG.	LOSS PREVENTION DEPARTMENT	08/25/2009	REPLACES 12/03/1983
SUBJECT:	OPERATING REQUIREMENTS FOR LIFESAVING APPLIANCES AT OFFSHORE INSTALLATIONS	APPROVAL HJK	PAGE NUMBER 2 of 6

- 1.5 Mobile offshore drilling unit (MODU) An offshore drilling facility which includes features which permit it to be moved as an entity from position to position and to be fixed to or submerged into the seabed, e.g., jack-up facility or barge. Note: MODUs covered by classification societies are excluded from the requirements in this instruction.
- 1.6 Unmanned platform Artificial island or fixed structure which is not continuously manned. This includes an artificial island or fixed structure, which is periodically serviced by maintenance personnel.
- 1.7 Classification societies Non-governmental organizations or groups of professionals, ship surveyors and representatives of offices that promote the safety and protection of the environment of ships and offshore structures, for example American Bureau of Shipping (ABS), Lloyds, DNV, etc.
- 1.8 Station bill A poster detailing the emergency instructions for all offshore personnel including contractors and visitors.
- 1.9 Commander/coxswain A designated individual trained in the launching, operation and handling of TEMPSC and or escape capsules.

2.0 LIFEBOATS:

- 2.1 Escape capsules equipped with diesel powered engines and TEMPSC are located on manned offshore facilities including oil/gas production platforms in accordance with SAES-B-009, (Fire Protection and Safety Requirements for Offshore Production Facilities).
- In terminal areas connected to shore facilities by piers, where dedicated service boats, such as tugs or launches, are stationed or operating within 15 minutes travel time to the facility, an independent means of evacuation, e.g. lifeboats are not normally provided.

3.0 INFLATABLE LIFE RAFTS:

3.1 Inflatable life rafts are located on manned offshore facilities in accordance with the requirements of SAES-B-009, and industry performance standards, e.g., USCG-Title 33, Subchapter N – "Artificial Islands and Fixed Structures on the Outer Continental Shelf", International Maritime Organization (IMO), Safety of Life at Sea (SOLAS), and its applicable amendments.

4.0 RESPONSIBILITIES:

4.1 The department manager shall ensure that the appropriate training and resources are provided to meet the operating requirements for lifesaving appliances detailed in this instruction.

★ CHANGE ★★ ADDITION NEW INSTRUCTION ☐ COMPLETE REVISION 🗵

SAUDI ARABIAN OIL COMPANY (Saudi Aramco)		G.I.NUMBER	Approved	
GENERAL II	GENERAL INSTRUCTION MANUAL		7.021	
ISSUING ORG.	LOSS PREVENTION DEPARTMENT	1SSUE DATE 08/25/2009	REPLACES 12/03/1983	
SUBJECT:	OPERATING REQUIREMENTS FOR LIFESAVING APPLIANCES AT OFFSHORE INSTALLATIONS	APPROVAL HJK	PAGE NUMBER 3 of 6	

- 4.2 The foreman of the offshore facility is responsible for implementing this instruction.
- 4.3 The foreman shall assign specific duties of this instruction as described in the station bill including dedicated commander/coxswain(s) to properly launch and operate TEMPSC and escape capsules.
- 4.4 The foreman is responsible for developing a suitable regular inspection schedule and, at predetermined intervals, thorough examination and testing of the lifesaving appliances, including lifeboats and life rafts, by a third party inspector, see 5.1.1.
- 4.5 The foreman is responsible for ensuring all drills and exercises required by this instruction are performed, critiqued and recorded.
- 4.6 The foreman is responsible to deliver any life raft due for maintenance to the Marine Department, Aids-to-Navigation (A to N) Group. Advance notice of the size and quantity of life rafts required should be sent to Marine Department A to N Group. The foreman should also ensure that all maintenance and inspection records are up to date and communicated to the Marine Department A to N Group.

5.0 MAINTENANCE AND INSPECTION:

- 5.1 Lifeboats (Escape capsules and TEMPSC)
 - 5.1.1 Certification of lifeboats shall be carried out annually by the proponent department, utilizing a third party inspector, e.g. ABS, Lloyds or an equivalent classification society that employs appropriately trained inspectors. This inspection shall include a dynamic test of the winch brake with an empty boat.
 - 5.1.2 All lifeboats shall have a scheduled monthly inspection and maintenance procedure to include the lifeboat systems, release gear, davit (including davit mounting arrangements and associated supporting structure), wire ropes and winch. A Saudi Aramco crane inspector shall inspect and certify the winch and wire ropes on a quarterly basis.
 - 5.1.3 Launches and retrievals with personnel onboard for drill purposes are prohibited. Simulated weights during annual third party inspections and during five-year mechanical integrity inspections and dynamic testing shall be undertaken.
 - 5.1.4 In accordance with manufacturer's instruction but at least every five years a dynamic test of the winch brake shall be carried to a proof load of 110% the maximum winch load. This interval may vary for offshore facilities dependent on the inspection and replacement cycle for the launch system falls.
 - 5.1.5 During inspection activities, defective equipment found shall be fixed or replaced immediately and a second inspection made. A log of the inspection date and findings

★ CHANGE ★★ ADDITION NEW INSTRUCTION ☐ COMPLETE REVISION 🗵

SAUDI ARABIAN OIL COMPANY (Saudi Aramco) GENERAL INSTRUCTION MANUAL		G.I.NUMBER	Approved
		7.021	
ISSUING ORG.	LOSS PREVENTION DEPARTMENT	08/25/2009	REPLACES 12/03/1983
SUBJECT:	OPERATING REQUIREMENTS FOR LIFESAVING APPLIANCES AT OFFSHORE INSTALLATIONS	APPROVAL HJK	PAGE NUMBER 4 of 6

shall be kept in the office of the foreman.

5.2 Inflatable Life Rafts

- 5.2.1 Inflatable life rafts shall be serviced yearly and coordinated through the Marine Department.
- 5.2.2 Inflatable life rafts shall be serviced annually by the manufacturer or his certified representative and date of servicing shall be printed on the raft.

6.0 EMERGENCY DRILLS FOR LIFESAVING APPLIANCES:

- 6.1 Simulated emergency evacuation drills shall be conducted on all manned platforms **weekly**. All persons shall report to their assigned stations for personnel accounting and perform their assigned duties in simulation and timing.
- 6.2 Full emergency evacuation drills shall be conducted on all manned platforms semi-annually. A semi-annual drill shall include the actual boarding of the lifeboat but not launching. Personnel shall not be on board during the lowering or retrieval period. If practical they may embark to both check and exercise the lifeboat systems from water level. Standby boats shall be employed to ensure safety of drill participants.
- 6.3 The time and date of the weekly drills shall be recorded in a log book and semi-annual drills shall be formally documented and critiqued for improvement. Names of persons that participated in the drill shall also be recorded. Missed drills or parts of drills omitted shall be stated along with justification for the omission.

7.0 MANNING OF LIFEBOATS:

The foreman shall ensure trained individuals are assigned for all shifts as commander(s) and adequate crew members are provided on each shift for the launching of each lifeboat in the event of an emergency.

8.0 STATION BILL:

- 8.1 Each platform shall have station bills posted in conspicuous places at living quarters and control rooms.
- 8.2 The station bill shall state the duties and duty station (reporting station) of each person on the platform in case of an emergency.

★ CHANGE ★★ ADDITION NEW INSTRUCTION \square COMPLETE REVISION \boxtimes

SAUDI AR	ABIAN OIL COMPANY (Saudi Aramco)	G.I.NUMBER	Approved
GENERAL INSTRUCTION MANUAL `		7.021	
ISSUING ORG.	LOSS PREVENTION DEPARTMENT	08/25/2009	REPLACES 12/03/1983
SUBJECT:	OPERATING REQUIREMENTS FOR LIFESAVING APPLIANCES AT OFFSHORE INSTALLATIONS	APPROVAL HJK	PAGE NUMBER 5 of 6

- 8.3 The station bill shall contain the signals for calling personnel to their emergency station and to abandon platforms.
- 8.4 The station bill shall be written in Arabic and English with reflective black and white paint on an orange background.

9.0 UNMANNED PLATFORMS:

- 9.1 Work crews visiting unmanned platforms must have adequate escape provisions for all crew members. Crew members must be trained in the use of escape equipment and procedures. The normal escape requirements for such crews would be to have a powered boat standing by in the area.
- 9.2 When a crew visits unmanned platforms by a helicopter, the helicopter shall stay with the crew all the time unless a powered boat standing by in the area is available.
- 9.3 The crew work foreman/supervisor shall assign one person to be in charge of a controlled evacuation to the support vessel in the event of an emergency.

10.0 USE OF INFLATABLE LIFE RAFTS:

- 10.1 In the event of an emergency, inflatable life rafts shall not be inflated on the platform but rather launched first into the water according to the procedure posted on the raft housing.
- 10.2 The mounting rack and the release mechanism shall be maintained free of dirt and rust and ready for release.
- 10.3 A plastic coated operating instruction placard shall be displayed on the inflatable life raft and shall be in English and Arabic. The writing shall be in reflective black and white on an orange background.

11.0 TRAINING:

- 11.1 Every employee assigned to offshore platform duties shall receive training on proper use of lifeboats, inflatable rafts, personal flotation devices, escape routes, stairways, ladders and use of fixed ropes for accessing the platform. This training shall be in addition to the regular emergency drills carried out to practice emergency response.
- 11.2 All visitors to offshore installations must be given an orientation as to their designated lifeboat and the required actions in case of an emergency.

★ CHANGE ★★ ADDITION NEW INSTRUCTION ☐ COMPLETE REVISION 🗵

Saudi Aramco 7180 (5/89)

CALIDI AD ADIANI	OUL COMPANY (Court Average)	G.I.NUMBER	Approved
SAUDI ARABIAN (GENERAL INSTRUC	7.021		
LOGG DI	DEVENITION DEDARENT	ISSUE DATE	REPLACES
ISSUING ORG. LUSS PI	REVENTION DEPARTMENT	08/25/2009	12/03/1983
	TING REQUIREMENTS FOR LIFESAVING APPLIANCES	APPROVAL	PAGE NUMBER
AT OFF	SHORE INSTALLATIONS	НЈК	6 of 6
11.3 Lifeboat crews shall be trained in the operation of the specific lifeboat they are assigned to whether escape capsule or TEMPSC. This training shall be provided by Training & Career Development in conjunction with third party specialized trainers. All lifeboat crews shall be appropriately certified to perform their assigned functions.			
12.0 MANUFAC	TURER'S INSTRUCTIONS:		
	r's manuals provide instructions on the use and oper pection and actual usage should be based on such instruction		ng appliances.
CONCURRED BY	EXAMPLE DATE: MANAGER Marine Department		
CONCURRED BY	T: DATE: MANAGER Safaniya Offshore Producing Dept.		
APPROVED BY:	MANAGER Loss Prevention Department		

★ CHANGE **★** ★ ADDITION NEW INSTRUCTION \square COMPLETE REVISION \boxtimes