



EXERCISE BARRACUDA XII
JANUARY
2024



Director General's Message

It is my profound privilege to hold the 12th series of Exercise BARRACUDA which has become a regular feature since its conception in 2007. The exercise has grown in its scope and scale of participation which is a tantamount of Pakistan's commitment to fulfill its international obligations for preserving and protecting seas as a global common.

The dependence of mankind on sea, its resources and environment has increased manifold in today's globalized world. The corresponding upscale in maritime activities is threatening marine environment. Mercantile traffic accounting for more than 90% of global trade carries along a perpetual danger of marine pollution through oil/ chemical spills during collisions/ groundings and port operations. Timely and effective containment of such pollution requires regular rehearsals of response options besides coordination among national and international stakeholders. Likewise, being Regional Coordinator of Search and Rescue (SAR) setup of IMO, maritime services of Pakistan are required to coordinate and respond to distress situations at sea where human life and property are at risk.

In this context, Pakistan Maritime Security Agency (PMSA) under the ambit of Pakistan Navy conducts Ex BARRACUDA Biennially involving national and international maritime stakeholders. In the same stride, 12th series of Ex BARRACUDA is scheduled in January 2024. The exercise is aimed at coordinating and rehearsing maritime disaster contingency plans entailing oil & chemical spill containment practices both ashore and at sea as well as SAR procedures.

I look forward to welcome all national stakeholders and maximum international participants/ observers at the inaugural session of Ex BARRACUDA XII as I remain hopeful of a rewarding and mutually beneficial exercise.

BACKGROUND

Oil and chemical spills are common source of marine pollution and cause irreparable damages to marine ecosystem around the globe. One such calamity occurred in Pakistani waters when an oil tanker "Tasman Spirit" carrying 67,535 tons of light crude oil got grounded at the entrance of Karachi port in 2003 which led to more than 30,000 tons of crude oil spill into sea. It affected an offshore area of more than 2000 sq km and about 16 Km long coastline. Marine life, mangroves community, wildlife refuges and critical habitats were severely impacted besides creating various health issues along the densely populated coast of Karachi due to air pollution caused by evaporation of hazardous substances from the oil slicks. Post event analysis highlighted the need of a dedicated national setup and well deliberated response strategy to deal with such and other calamities in maritime zones of Pakistan. Moreover, international obligations also required Pakistan to protect and preserve marine environment

as a global common due being signatory to international conventions/ protocols such as Marine Pollution (MARPOL), Oil Pollution Preparedness, Response & Cooperation (OPRC) and Noxious Substances Protocol (NSP) 2000. Likewise, being signatory to

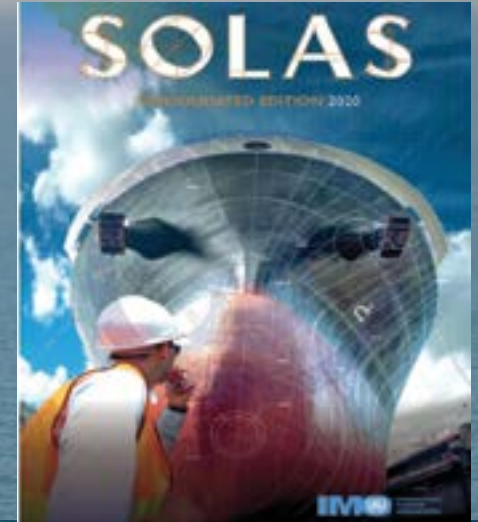


SOLAS convention, a large area including and beyond maritime zones of Pakistan has been assigned to Pakistan for coordinating response to distress situations at sea.

In the above backdrop, National Marine Disaster Contingency Plan (NMDCP) was prepared and adopted in 2007. The plan covers three broader contingencies i.e, spillage of oil and hazardous/ noxious substance; Search and Rescue (SAR) and salvage operations. The NMDCP is overseen and executed by Pakistan Maritime Disaster Contingency Board (PMDCB) through Maritime Disaster Response Committee (MDRC). The MDRC monitors and generate a collective response against maritime disasters in maritime zones of Pakistan through Disaster Response Centre (DRC) established at HQ PMSA.

DRC maintains necessary coordination with concerned organizations both inland and abroad for receiving early warning on maritime incidents inside maritime zones of Pakistan and assigned SAR area per IMO SAR setup. Moreover, it ensures preparedness of all national maritime stakeholders through regular inspections and conduct of periodic

exercises. As part of these efforts, Exercise BARRACUDA is conducted biannually with the participation of all national stakeholders and relevant international organizations/ authorities. So far, 11 exercises have been conducted whereas 12th of the series is scheduled in January 2024.



EXERCISE OBJECTIVES

Marine pollution has become a perpetual threat in the Maritime Zones of Pakistan. A similar danger like that of Tasman Spirit of 2003 re-appeared in year 2021 when MV HENG TONG went aground near Clifton beach. Similarly, last year, a vessel under tow (MV ERA) went aground inside Somiani Bay after parting of her tow due to rough weather. In another incident, a Tanker ALJAWAZA discharged oil sludge inside Somiani Bay in 2019 which lately proved detrimental for human as well as marine health. A coordinated response per NMDCP ensured timely and effective response in all the above incidents. In this context, the exercise is mainly focused

on dealing with oil/ chemical spills in maritime zones of Pakistan with broader objectives as follows:

- To validate the effectiveness of procedures delineated in NMDCP for dealing with maritime disasters in maritime zones of Pakistan.
- To strengthen coordination among national stakeholders for responding to maritime contingencies.
- To validate material preparedness of national stakeholders vis-à-vis their responsibilities in respective areas of jurisdiction.

• To provide first hand training opportunity to national stakeholders and international partners.

• To identify shortcomings (if any) in existing response mechanism/ setup of maritime SAR to national and international distress calls.

• To generate awareness about the importance of safe & secure marine environment for national as well as international community.

SCOPE OF THE EXERCISE

The exercise was initially limited to rehearsing responses against oil spill which has gradually been expanded to include all aspects of possible maritime disasters. Besides practicing procedures for containment of maritime disasters and SAR operation, a maritime seminar has also been incorporated in the exercise to deliberate upon issues related to protection of maritime environment. Moreover, participation of international partners and organizations have also become a regular feature of the exercise.



OPENING BRIEF AND MARITIME SEMINAR

The exercise commences with opening brief followed by a maritime seminar which is attended by all national stakeholders including policy makers, practitioners, academia and international participants.

The opening brief provides a detailed overview/ construct of the exercise and organization of Pakistan Maritime Disaster Response setup. In the subsequent seminar, scholars from maritime community share their research and thoughts on maritime issues related to maritime environment and safety of life at sea.



COASTAL SPILL CONTAINMENT EXERCISE

Practical phase of the exercise commences with drills of containing oil/ chemical spill along the coast. The exercise is aimed at validating Level-2 response of all national stakeholders by demonstrating their material & operational capabilities at beaches/ internal waters of Karachi. All the international participants & observers remain in attendance.



SPILL CONTAINMENT EXERCISE AT SEA

Major part of the spill containment exercise is conducted at sea in which a maritime incident with level 2 oil/ chemical spill is simulated in open sea. Requisite responses are generated as per NMDCP with all the tentacles taking their respective actions for containment of oil/ chemical spill and/ or undertaking salvage operation. DRC at HQ PMSA is activated to coordinate the responses of national stakeholders whereas PMSA's surface and air fleet lead the operation at sea. All the participants are taken to sea to witness the exercise.



SEARCH AND RESCUE EXERCISE AT SEA

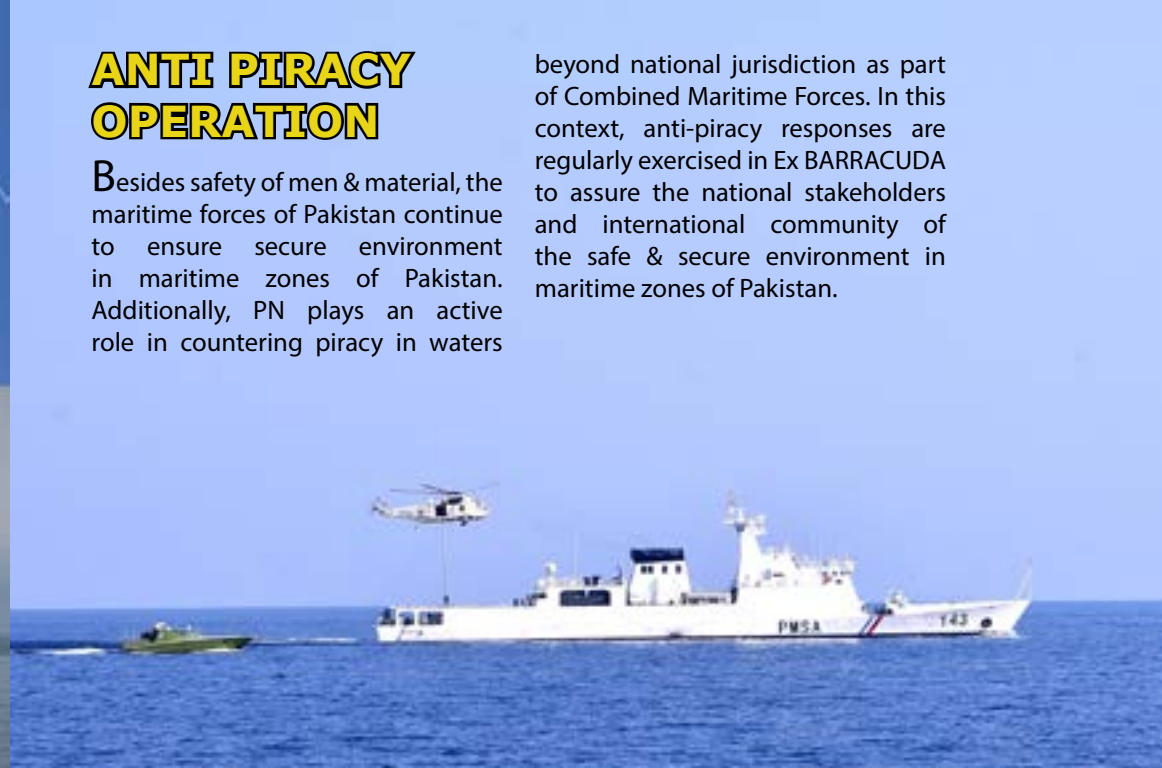
The oil spill containment exercise is followed by SAR at sea in which air and surface units of PN and PMSA are tasked to locate and recover the survivors of a simulated sunken ship/ditched aircraft. Additionally, the SAR setup ashore is activated and a large scale search is coordinated from the Maritime Rescue Coordination Centre (MRCC) at HQ PMSA.



ANTI PIRACY OPERATION

Besides safety of men & material, the maritime forces of Pakistan continue to ensure secure environment in maritime zones of Pakistan. Additionally, PN plays an active role in countering piracy in waters

beyond national jurisdiction as part of Combined Maritime Forces. In this context, anti-piracy responses are regularly exercised in Ex BARRACUDA to assure the national stakeholders and international community of the safe & secure environment in maritime zones of Pakistan.



DEBRIEF

Debrief of the exercise is held at HQ PMSA to deliberate on the shortcomings (if any) observed during the exercise. All national stakeholders attend the debrief and provide their input/ feedback for improvement

in response options against maritime disasters and distress at sea. Feedback by international participants/ observers is obtained beforehand in case of their early departure.



LIST OF PARTICIPANTS

- Ministry of Defence
- Ministry of Maritime Affairs
- Ministry of Climate Change
- Ministry of Petroleum and Natural Resources
- Ministry of Interior
- Ministry of Energy (Petroleum Div)
- Pakistan Navy
- Pakistan Maritime Security Agency
- Pakistan National Shipping Corporation.
- Karachi Port Trust
- Port Qasim Authority
- Gwadar Port Authority
- Karachi Metropolitan Corporation
- Pakistan Coast Guard
- Civil Aviation Authority
- National Institute of Oceanography
- Provincial Disaster Management Authority (Sindh) (PDMA(S))
- PDMA(Balochistan)
- Sindh Environmental Protection Agency
- Balochistan Environmental Protection Agency
- Pakistan Meteorological Department
- Cantonment Board Clifton
- SUPARCO
- China Power Hub Generation Company (Pvt) Ltd
- Shell Pakistan (Pvt) Ltd
- Pakistan Refinery Ltd
- National Refinery Ltd
- Oil Companies Advisory Committee
- Cnergyico Pakistan Ltd
- Pakistan State Oil
- TOTAL Parco Marketing Ltd
- Karachi Nuclear Power Plant (KANUPP)
- Pakistan National Shipping Corporation
- Engro LNG Terminal
- FOTCO
- HUBCO

LIKELY SCHEDULE OF EVENTS

S No	Time	Event & Venue	Remarks
Day - 1: Opening Brief & Maritime Seminar			
1.	0930	Flag hoisting & wreath laying ceremony at HQ PMSA	-
2.	1010	Call on DG PMSA by foreign dignitaries at HQ PMSA	-
3.	1100	Registration of guests for Opening Brief	Dress: Service: Working Civilian: Smart Casual
4.	1150	Opening Brief – Session I	-"-
5.	1500	Opening Brief – Session II (Maritime Seminar)	-"-
6.	2000	Exercise Dinner	-"-
Day - 2: Conduct Phase at Land			
7.	0900	Oil/ chemical spill containment exercise at sea view beach of Karachi	
8.	OC	Foreign dignitaries visit PMSA Fleet at West Wharf Karachi	
Day - 3: Conduct Phase at Sea			
9.	AM	Foreign observers/ media teams/ senior reps board PMSA ships at West Wharf Karachi	Dress: Service: working Civilian: Smart Casual
10.	1000 – till comp letion	Sea phase would include: <ul style="list-style-type: none"> • Oil/ chemical spill containment exercise • Large scale SAR • Anti-Piracy Demo by SSG(N) • Fly Past • Fleet Review 	-"-
11.	PM	Return harbour	
Day - 4: Debrief			
12.	AM	Debrief at HQ PMSA	

