INTRODUCTION
The global impact of the ongoing coronavirus (Covid-19) pandemic has led to imposition of unprecedented measures by governments. Businesses and industries across the world are in a state of abeyance. Shipping, being the backbone of international trade, is also severely impacted. The outbreak has affected almost all vessel types and has led to a number lying idle. It is reasonable to expect that owners will be considering the option to lay-up their assets to tide over the uncertain decline in international trade. Ship-managers and ship-operators are seeking solutions with minimum costs within agreed budgets. The safety of a vessel during lay-up and, its reliability after subsequent reactivation, primarily depends on the strict implementation of recommended procedures and guidelines throughout the tenure of lay-up.

In this document, Allianz Global Corporate & Specialty’s (AGCS)’ Allianz Risk Consulting (ARC) team highlights some challenges that are unsettling the maritime industry and disrupting routine activities on board merchant vessels. It also lists key points to be considered for the safe lay-up of commercial vessels.

All of the recommendations are technical advisory in nature from a risk management perspective and may not apply to your specific operations. Please review recommendations carefully and determine how they can best apply to your specific needs prior to implementation. Any queries relating to insurance cover should be made with your local contact in underwriting and/or broker.
CHALLENGES POSED BY THE COVID-19 PANDEMIC

The indefinite restrictions on supply chains and international travel is causing multiple challenges for the maritime industry. While risks from the perils of the sea are reduced for vessels waiting at anchorage or in lay-up, new challenges have evolved which were not present in similar historical situations involving global economic slowdowns.

CREW RELIEF

Travel-restrictions due to the Covid-19 pandemic has made it very difficult to effect crew-change on vessels. The International Maritime Organization (IMO) has written to all Member States, urging them to recognize all seafarers as “key workers” and facilitate their travel to and from the vessel. However, due to closed international borders there are limited workable options for crew repatriation and in many cases crews have continued working on board months after their normal tour of duty is completed. These long tours of duty coupled with worry for their families at home is causing physical and mental fatigue among seafarers.

It is estimated that 75% to 96% of marine incidents can involve human error and fatigue is one of the major underlying causes.

Adjustments in work and rest hours offers effective fatigue management. Incentives in cash or kind will also have a positive impact on the crew wellbeing. Hiring from the pool of locally available seafarers may be an option in some cases that can be further facilitated by cooperation among the crew management companies.

SPARES AND CONSUMABLES

Disrupted supply chains can cause delays in the forwarding of essential consumables and spares, like lubricating oils, filters and hydraulic oils, necessitating the use of alternative grades/brands in some cases. Incorrect use of such consumables can cause performance issues and even damage to machinery in worst case scenarios.

Lack of spares on board can affect maintenance programs for machinery. Replenishment of critical spares can take longer than planned.

Every effort should be made to source the designated grade of lubricating oil. Planned maintenance programs should continue unabated as much as possible. For any change of grade/type of lube-oil technical advice should be sought from the equipment manufacturer and the changeover procedures well planned and documented. If the maintenance interval is extended, the manufacturer’s instructions should be followed and close monitoring of operational parameters implemented. Stocks held on sister ships may prove handy if vessels have common ports of call.

DELAYS IN SURVEYS, INSPECTIONS AND SERVICING OF EMERGENCY EQUIPMENT

Classification societies are facing difficulties in arranging attendance for scheduled surveys, which is affecting the validity of classification and statutory certification. The servicing of critical equipment may not take place at the scheduled interval as service engineers and technicians are unable to attend onboard. Shortage of work force and implementation of social distancing measures in the yards is causing operational delays.

The risk of infection may lead to reduced inspections by Port State Control Inspectors, which, in turn, may lead to unsafe practices and substandard conditions on board going undetected.

The International Association Of Classification Societies (IACS) has acknowledged the issues faced by ship-owners and permitted “force-majeure” extensions provisioned under their procedural requirements. IACS procedural requirements allow sharing of survey resources in exceptional and duly justified cases and is subject to the discretion of flag administration.

If the timeline for periodic surveys or dry-dock is extended, related communications with flag-state, class and shipyards, needs to be well documented. Risks arising from delays in the statutory servicing of emergency equipment (e.g. fire-fighting appliances) will require implementation of additional control measures. Adequate tools and special supplies may have to be locally purchased to enable the vessel’s staff to carry out checks and measurements in order to maintain the reliability of equipment. Routine jobs involving hot-work or risk of fire can be delayed in the interest of safety.

It is also advisable to exercise caution when using navigational equipment like a gyro compass beyond its prescribed service interval. Simulation drills covering scenarios like gyro failure and steering failure can ensure a faster response from crew in a contingency.
BUNKER ANALYSIS

The operation of courier services is restricted in many regions and it may not be possible to dispatch fuel oil samples for analysis to shore-based laboratories. This in turn may lead to consumption of bunkers without proper analysis and thereby increase the risk of machinery damage.

Procedures laid out in the technical manager’s safety management system manual provide detailed methodology for dealing with this situation. A comprehensive risk assessment will help in mitigating the hazards and consequences arising from use of bunkers without analysis. Where available, on board testing kits are useful for carrying out preliminary checks. Pre-bunker analysis reports can help to address the concerns regarding bunker specifications meeting the International Organization For Standardization quality criteria.

The availability of local laboratories at the port of bunkering should be checked where samples can be hand carried by local agents. Where feasible, supply and use of distillate fuels can be considered.

PILOTAGE SERVICES

There have been reports that port authorities are adopting remote pilotage services to protect the pilots from the risk of infection. Some ship masters have also voiced similar concerns for the protection of their crew when in certain cases the pilot refused to don personal protective equipment. Safe navigation within pilotage waters depends heavily on a good master-pilot relationship and its failure has been the cause of several maritime accidents in the past. Language barriers between the crew and pilot also have a detrimental effect on the relationship. Remote pilotage seems to offer a ready solution in providing against Covid-19, but this could also bring an enhanced risk to safe navigation of the vessel.

Despite successful trials, the concept of remote pilotage for merchant vessels is in a developmental stage with many unknowns. Therefore, remote pilotage services may only be considered in compelling circumstances. The local conditions and previous experience of the master will be deciding factors in this case. To avoid risk of infection, the remote pilotage might be undertaken from the vessel’s bridge wing rather than from the vessel traffic service control room.

LOSS PREVENTION DURING IDLING, STORAGE AND LAY-UP

Comprehensive plans including risk assessments covering storage and lay-up are crucial for ensuring the safety of the vessel during downtime and its subsequent return to service. An unplanned lay-up can result in a prolonged recommissioning exercise that can last for months and may even require docking.

IDLING AND Floating STORAGE

Idling and floating storage scenarios can present an opportunity for carrying out maintenance of equipment under continuous use but due care should be taken in assessing risk of immobilization and response times at the geographic location. Prolonged storage of certain cargoes may require special care to prevent microbial degradation and maintain the quality specifications e.g. biofuels/ Fatty Acid Methyl Esters (FAME).

KEY POINTS

- Periodic steaming for short durations to preserve main and auxiliary machinery
- Port and starboard anchors used alternatingly
- Marine Growth Prevention System (MGPS) and cathodic protection systems should remain active and monitored
- Planned immobilization of the vessel should occur only with permission from local authorities
- Care of cargo - Risks of prolonged storage.

LAY-UP

As a good practice, a comprehensive lay-up plan can be prepared and submitted to the stakeholders for their review. Ship-owners are encouraged to use guidance documents and checklists provided by classification societies when preparing this plan. The lay-up plan should present a clear picture in terms of risks specific to the location and type of vessel. The submission of a detailed plan will expedite turnaround time for approvals and agreements from stakeholders.
Lay-up plan and risk assessment should cover:

- Lay-up location and known exposures – swell, tropical storms, currents, traffic lanes and seabed and any local phenomenon – monsoon, tidal bore, freshets etc.
- Mooring arrangements
- Preservation and maintenance of main machinery and nautical equipment
- Fire-fighting arrangements (by ship or shore)
- Availability of tugs – identify contact of first responder during contingency
- Hull integrity – bilge alarms and monitoring of hull spaces

**ACCUMULATION RISKS**

Increasing numbers of vessels being laid-up in the same location can create accumulation exposure and have the potential to cause multiple losses from a single catastrophic event. The availability of tugs and support vessels may not be adequate to respond to a contingency involving several vessels.

A considerable number of large cruise vessels are reported to be laid up around the US East coast. The onset of the hurricane season in the North Atlantic creates imminent risks to these vessels, and a multi-billion dollar exposure for underwriters. It is imperative that ship-owners ensure the vessels are always ready to move out of harm’s way in case of an approaching hurricane.

**ADOPTING A COLLABORATIVE AND EVOLVING APPROACH**

IMO has issued circular letter No. 4204 calling for understanding and close cooperation between all Member States and Port States to overcome challenges related to the implementation and enforcement of the relevant IMO instruments. New addendums are being issued as the situation continues to evolve.

It is important to note that the waivers and extensions from the authorities are meant to facilitate essential trade and commerce activities. The prerogative of ship-owners and technical managers to maintain the seaworthiness of the vessel remains unchanged.

The unprecedented situation necessitates a collaborative approach by the stakeholders to ensure safe operation of ships and preservation of maritime assets.

**USEFUL INFORMATION***

- IMO Circular No. 4204

- IACS: Open letter to industry associations:

**CONTACT DETAILS**

Captain Rahul Khanna
Global Head of Marine Risk Consulting, AGCS
rahul.khanna@allianz.com

Captain Nitin Chopra
Senior Marine Risk Consultant, AGCS
nitin.chopra@allianz.com

---

*Any references to third-party websites are provided solely as a convenience to you and not as an endorsement by Allianz Global Corporate & Specialty SE of the content of such third-party websites. Allianz Global Corporate & Specialty SE is not responsible for the content of such third-party sites and does not make any representations regarding the content or accuracy of materials on such third-party websites. If you decide to access third-party websites, you do so at your own risk.

Allianz Global Corporate & Specialty SE, Fritz-Schäffer-Strasse 9, 81737 Munich, Germany

Commercial Register: Munich, HRB 208312