



KISH P & I LOSS PREVENTION CIRCULAR KPI-LP-17-2012
(Laying Up & Points to Ponder)

Laying Up as a need:

In the shipping industry, there are times that due to various reasons the owners/managers may decide to lay ships up. There are many aspects for such decision & the following circular has extracted valuable points to reiterate in order to reduce the amount of losses & possible problems.

Recalling the ISM Code & its requirements, the pre-requisite action is probably a Risk Assessment in order to be able to have a systematic approach to the matter.

Categories of risks existing:

1. Collision with other ships –Breaking loose, dragging, shifting
2. Loss or damage to property –Breaking loose, dragging, shifting
3. Pollution risks –Grounding, corrosion, valve leakage, garbage, emissions, anti fouling, sewage
4. Injury /Illness and death (seamen or others) in the course of maintenance, modification, upgrading, structural work, etc.
5. Liability arising out of towage
6. Cargo liabilities
7. Salvage
8. Liability to persons other than seamen (Watchman)
9. Repatriation and substitution expenses
10. Loss of and damage to the effects of seamen and others
11. Stowaways and refugees
12. Quarantine expenses
13. Life salvage
14. Special compensation to salvor
15. Wreck liabilities –Sinkings, fires
16. Various possible Fines

Risks concerned with Cold Lay Up:

1. Groundings
2. Damage to underwater cables, aquaculture, beaches, reefs, pleasure craft etc
3. Sinkings
4. Fires
5. Pollutions 5-1. Bunkers 5-2. Deck run off 5-3. Garbage 5-4. Emissions
5-5. Antifouling
6. Collisions 6-1. Confined areas 6-2. Bigger ships
7. Adequate fendering
8. Wreck removal



Risks concerned with Hot Lay Up:

1. Groundings
2. Damage to underwater cables, aquaculture, beaches, reefs, pleasure craft etc
3. Sinkings
4. Fires
5. Pollutions 5-1. Bunkers 5-2. Deck run off 5-3. Garbage 5-4. Emissions
5-5. Antifouling
6. Collisions 6-1. Confined areas 6-2. Bigger ships
7. Adequate fendering
8. Wreck removals
9. Personal Injury 9-1. Heavy maintenance work 9-2. Possible greater risks than normal

Changes in the risk profile, gravity & contemporary conditions:

1. The ships are larger. They have deeper Draughts & more Freeboards,
2. Lay-Up is more costly nowadays, so is Re-activation,
3. There are higher Skill level requirements,
4. The Systems are more Complicated:
 - Button batteries
 - Cooling fans
 - Software updates
 - Engines kept warm
 - Computer control
5. The value involved is much more so the chances of theft are increased,
6. World is more unforgiving about the environment damages such as Wreck removal & Pollution,
7. Claims expectations are higher,
8. The Media are more active nowadays,
9. Authorities are more aware about the Political & Environmental pressures,
10. Security matters are more stringent & taking decisions are more difficult & costly.

After all points mentioned above we should consider a full risk assessment covering:

- A. Lay up site
- B. Mooring arrangements
- C. Security, safety, protection and environment
- D. Preservation and maintenance
- E. Inspections



A. Lay up site:

1. Degree of shelter
2. Method of mooring
3. Availability of spare mooring equipment
4. Availability of weather information
5. Local currents, tides
6. Tidal range
7. Holding ground
8. Availability of tugs, firefighting, medical & safety services
9. Proximity to obstructions
10. Likelihood of fouling
11. Proximity of effluent, corrosive discharges
12. Proximity of passing traffic, other moored vessels
13. Proximity to aquaculture
14. Proximity to underwater cables, wrecks etc
15. Security of location
16. Availability of fresh water, waste water disposal shore power, repairers

B. Mooring arrangement:

1. Sufficient to hold against severest wind from most unfavourable direction
2. Ensure anchors are well pulled in, chains straight and stretched tight
3. Buoys in position to mark anchors if slipped
4. If wires used to buoys, wires to be under even tension and taut
5. Position of links to be varied against hawse pipe etc to prevent uneven wear
6. Suitable fendering and safe gangways with good lighting
7. Adequate ballast taken to reduce windage
8. Due allowance made for high sided vessels, vessels with container stacks
9. Final lay up draughts to be emphasised with white paint markings
10. Emergency tow lines fore and aft
11. Alongside no more than 3 abreast
12. In rafts no more than 6 abreast

C. Security, safety, protection and environment:

1. Sufficient crew to maintain full time fire, leakage, mooring and safety watch (Hot lay up)
2. Independently powered fire and flooding alarms fitted for machinery spaces, bilges etc (Cold lay up)
3. Minimisation of fire risk by removal of flammable material plus gas freeing
4. Safe containment and frequent removal of garbage and sewage
5. Maintain evacuation facility lifeboats/liferafts
6. Protection of compartments/machinery by sealing air intakes and exhausts

7. Secure vessel by limiting access, sealing doors, provision of suitable alarm systems with remote monitoring
8. Oil tanks drained cleaned and maintained in gas free condition

D. Preservation and maintenance:

1. Sealing of accommodation/ER spaces
2. Controlled dehumidification of internal air spaces
3. Regular turning of rotating machinery
4. Application of preservatives
5. Hull/tank cathodic protection

E. Inspections:

1. Frequent checks of mooring and fendering arrangements
2. Frequent checks of embarkation lighting and other safety systems
3. Frequent checks on communications systems
4. Regular bilge and other soundings
5. Regular checks of emergency equipment and apparatus, fire, leakage, and security systems and alarms
6. Visual checks on controlled space sealing arrangements
7. Measurement checks on relative humidity levels
8. Visual checks on protective coatings
9. Visual checks on oil levels
10. Visual check for system leaks, hydraulics, fuel, lubrication oil, air conditioning, water
11. Visual checks battery systems
12. Live tests emergency fire pump
13. Measurement checks electrical insulation continuity
14. Visual check storage tank levels
15. Periodic underwater survey
16. Measurement checks on hull potential (cathodic protection system)





It is imperative that if the above measures are taken & inspections are held at regular intervals, the re-activation process will be less costly, taking less time & chances of machinery or system breakdowns are minimised.

It is equally important to bear in mind that although the various classification regulations or insurance conditions may diminish the requirements to simpler or easier levels; but the ship-owners or managers should come up with programmes that hibernation of their ships are at the closest status to re-activation without burdening too much of expenditures.

