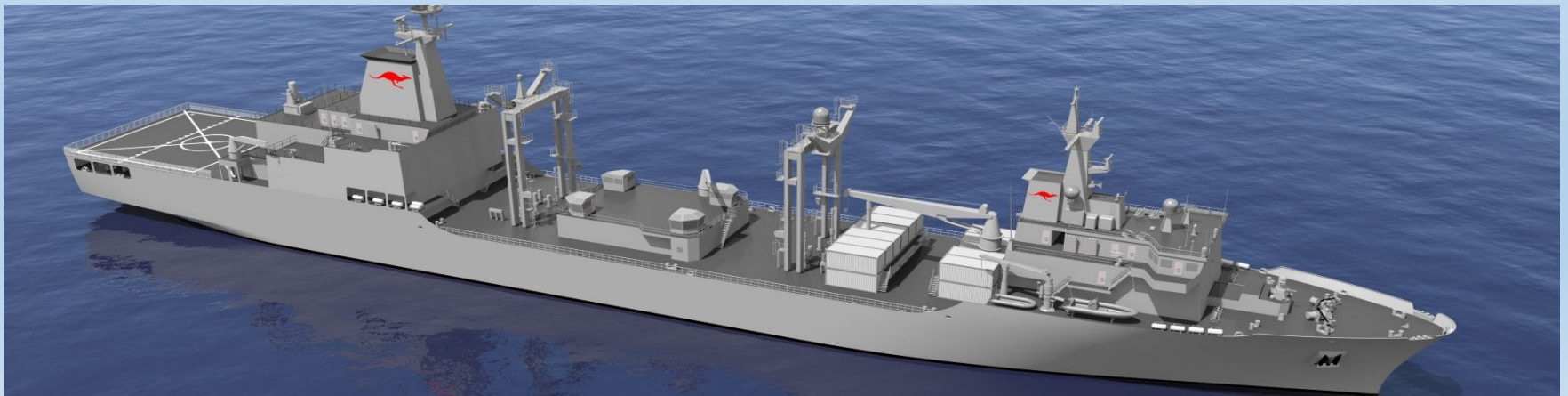




AORSPO Enterprise HMAS Stalwart Induction



Introduction

Safety of all personnel and security of the vessel is paramount

Safety is of the highest priority for the AORSPO Enterprise and we are committed to providing a safe and healthy work environment. This cannot be achieved without the active participation of all personnel in safety.

This presentation forms part of our overall strategy for achieving those objectives. Failure to comply with safety requirements may result in removal from site

You are a necessary part of our day-to-day business. It is important that you understand not only our commercial and technical needs as your customers, but that you are also aware of our safety requirements. You are to take this presentation seriously and act accordingly.

If you require assistance, ask your supervisor

Principal Contractor Responsibility

- Navantia performs the role of Principal Contractor and holds accountability for WHS management whilst also maintaining responsibilities for the governance, monitoring and assurance of AOR Enterprise activities on behalf of the Commonwealth.
- The Royal Australian Navy (RAN) will retain control over all access to the platforms unless control of the vessel is formally transferred to the Principal Contractor

Duty of Care

Everyone has a legal “Duty of Care” in providing a safe place of work whilst on site.

- All personnel must comply with obligations under the Work Health and Safety Act 2011 (Commonwealth), any applicable State or Territory law and with specific RAN policies and processes
- Only competent personnel with the appropriate licences, qualifications, knowledge, skill and experience shall conduct tasks
- All personnel must exercise duty of care to ensure that they comply with their duties and/or obligations
- It is the responsibility and duty of all personnel to stop work when an unsafe act or practice is observed that could affect the safety of personnel and/or damage to the environment

Duty of Care (Cont)

- All personnel at a workplace must take reasonable care for their own health and safety and that of others, comply with reasonable instructions given by AORSPO Enterprise and co-operate with any reasonable health and safety policy or procedure at the workplace.
- Supervisors must ensure a safe system of work exists for their employees prior to commencing and during a task and that all tasks are adequately supervised during the conduct of tasks.
- Workers must ensure that conduct of their work neither harms nor endangers other individuals or themselves.
- If the work cannot be completed safely, STOP working.

HMAS STIRLING – Fleet Base West



- No Plants or Pets (including pot plants & aquarium fish)
- Maximum penalty - \$500 fine
- No camping
- Fires are prohibited
- No access to restricted areas and closed Naval Waters
- Spearguns, gidgees & jet skis are prohibited in Naval Waters



Garbage Management

Waste Collection.

- **General waste:** This is collected from lift bins and collected on Tuesday.
- Use of wheelie bins is allowed however ensure the lids are closed when not in use. Do not over fill bins so lids can not close.
- **Recycle waste:** Are to be used for such items as paper, cardboard and plastics, both lift bins and wheelie bins are collected on Tuesday.
- **Quarantine waste:** This applies for vessels arriving from overseas, this waste is to be loaded into Q Skip these are available through LOGREQ. The cover for this bin must be secured when not in use until the waste can be removed from the site.



EMERGENCIES

IN THE EVENT OF:

- Fire
- Flood
- Toxic Hazard
- Oil Spills
- Bomb Threats
- Suspicious Activity
- Accidents
- Vehicle Breakdowns
- Wild Life Incidents

• Ext 32222

• 9553 2222



PROTECTED WILDLIFE



SNAKES

- All snakes on the island are protected.
- If you see a snake, leave it alone and do not approach it.
- Keep external building doors closed.
- If a snake poses danger contact x32222.

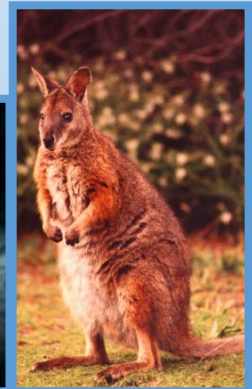
TAMMARS

- Do NOT feed, intentionally harm or interfere with Tammars (Fines up to 10k)
- If you hit a Tammar with your vehicle stop and check the pouch for joey.
- Report it to B119 or call x32222.

Tiger Snake



South West Carpet Python





CAUSEWAY

Report any motor vehicle accidents on x32222

- The causeway may be closed or restrictions put in place during periods of high winds, 35Kts for pushbikes, 40kts for motorbikes and 45Kts for all other traffic.
- Members will be notified when restrictions will come into place.

If your vehicle breaks down on the causeway:

- Do not leave your vehicle.
- Put hazard lights on and stay in vehicle and call for assistance (B119 - 9553 2222)
- **Causeway Weather Advice Line – 9553 4333**



VEHICLES

- Obey all speed limits.
- Marching troops have right of way at all times (30km/h max when passing)
- 40km/h unless otherwise posted.
- Vehicles are only to park in designated areas.
- Personnel caught speeding may be infringed or vehicles banned from FBW.

AUTOMATED SECURITY GATES

- These gates are monitored by ISS Security Guards 24/7.
- All ADF and APS personnel are authorised to access all gates 24/7.
- Access can be added to your Defence ID card by ISS Security at building 119.



Fleet Base West - WHSE

FBW Wharves

FBW wharves are classed as industrial sites. Therefore, only personnel employed in that particular area and wearing the appropriate PPE are permitted with in the area of operation.

*Command Safety Officer

Mr Mark Dewhurst, Bld 15 - x33878



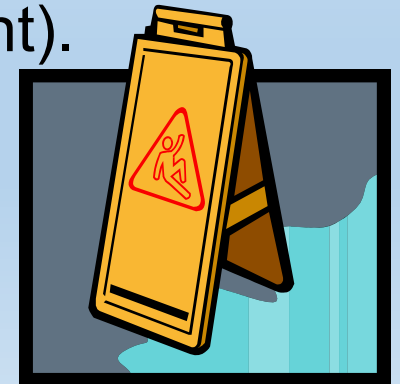
General Ship Safety

- Smoking is not permitted within the Worksite Boundary.
- No eating, drinking (bottled water excepted), or using the vessel toilets, is permitted onboard.
- Irresponsible behaviour will not be tolerated onboard. “Showing off”, acts of bravado or anything else involving risk taking, contrary to safety standards is not permitted.
- No running.
- Beware of slip, trip and fall hazards, low piping and protruding objects when moving about the ship. Keep to the left to avoid collision.
- Use two hands when opening/closing hatches and doors
- All personnel are to be mindful of cleanliness requirements on the vessel.
- Contractors are permitted in their required work space only.



General Ship Safety

- Only follow **accepted** safe work practices.
- Intervene to your colleagues, both senior and junior to yourself, from acting **unsafely or dangerously**.
- Do not take on more than you can handle or take unnecessary risks.
- Never let the pressure of time tempt you to take risks.
- Observe all **safety warning signs** in the area you are working.
- **Observe** all safety signs and directions from Navantia Staff and Supervisors.
- All contractors must be in possession of the Construction Industry White Card (or equivalent).



Site Access Pass

- After you have completed this induction and the Induction Questionnaire, ASP Ship Management will issue an induction card to allow personal to enter the work site.
- **No Induction No Access**
- The Induction card allows access to the site.
- Do not go into areas you are not authorised to be in.
- When contractors come on board they will hand their induction card over to the gangway staff.
- The gangway staff will then handover the visitor pass. (Reverse procedure is used upon disembarkation).
- For access to secure and locked spaces, ship's staff at the gangway will hold the keys to those spaces or arrange access.

Personnel Protective Equipment (PPE)

- High Visibility top, secured for all round visibility.
 - Helmet (may be removed where head space is restricted).
 - Long Sleeve Shirt and Trousers (of natural fibre ie “Cotton Drill”).
 - Steel Capped Footwear; and
 - Safety Glasses (Clear – below decks and Tinted – above deck).
- (Additional PPE may be required for specific tasks – Hearing Protection, Welding Gloves, Aprons, etc)



- Slip, Slop, and Slap

Personnel Protective Equipment (PPE)

- Contractors are required to provide and maintain the appropriate PPE.
- Note: Personnel not complying with PPE requirements will be required to cease work until appropriate PPE is obtained/used. Continuous deviation from PPE requirements may result in personnel being removed from site/ship

Drugs and Alcohol

- AORSPO Enterprise reserves the right to conduct random drug and alcohol testing at any time whilst contractors are engaged to conduct work.
- Drug and alcohol testing may be conducted, but not limited to, on suspicion a worker is affected by drugs and/or alcohol, random checks and following an incident
- Refusal to submit to drug and alcohol testing will result in removal from site.
- **No** alcohol is to be consumed on HMAS Stirling, wharf or vessel.
- **No** mind altering or otherwise illegal substances may be consumed or taken onto the ship (note that possession of illegal substances may lead to prosecution).

Drugs and Alcohol

- **No** work is to be conducted while under the influence of any substance (including prescription medication and certain cold and flu medications).
- **Persons** found to be under the **influence of alcohol, illicit drugs,** prescription medication or any **mind altering substance,** or to be **in possession** of any of the same, will be removed from the ship immediately and the authorities informed.



Noise Management

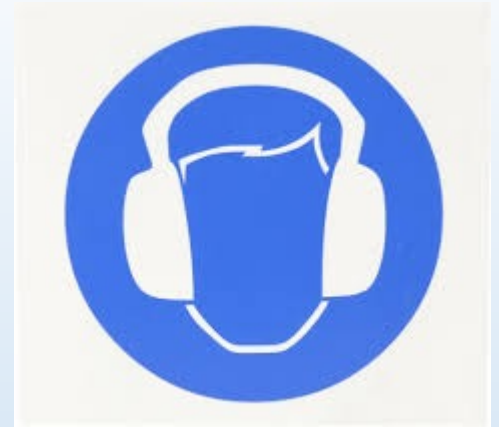
Contractors are responsible for identifying sources of noise generated as a result of their activities that may have an adverse impact on surrounding workers or Ship communities.

There may be significant noise levels on board the Vessel e.g. machinery spaces. Contractors must assess the workspace for noise hazards and identify and document appropriate controls on the JSEA/SWMS.

Signage must be displayed by contractors or project staff notifying personnel of the requirement and type of hearing protection to be worn wherever there is the potential for damage to hearing from operational activities.

In the event you are found to be working without compliant hearing protection, you will be removed from the work area until compliant.

Hearing Protection



Hearing Protection is to be **worn** in noise hazard areas, as sign posted and when:

- a grinder, needle gun, or similarly noisy equipment is in operation
- Hearing Protection is identified as risk mitigation within a Job Safety and Environmental Hazard Analysis

If you are the operator of equipment which constitutes a noise hazard, you must:

- **Ensure** that you inform others in your immediate work area of the potential for noise and the possible need for Hearing Protection.
- **Ensure** Hearing Protection PPE is available at all times.

Security

- The Main Gangway is the **only** point of access to the ship.
- **Access Pass** (issued after successful completion of this induction with a photo identification) is to be placed on the Ship or Contractor Access Board when boarding and removed when disembarking.
- All visitors or non-inducted persons **must be fully escorted** at the direction of ship staff.
- **Restricted areas** are not to be entered without escort. Authority to enter from ship staff may be given.
- **Park** in designated parking areas as directed.
- Cameras/photography is **not** permitted without express permission of ship staff.
- Contractor passes are to be displayed at all times.
- Do not go into areas you are not authorised to enter.



Security – Base Lockdown

In the event of a 'Serious Security Incident' such as unwanted intruder(s) gaining access to HMAS STIRLING, the Commanding Officer of HMAS STIRLING may initiate a Whole of Base Lockdown

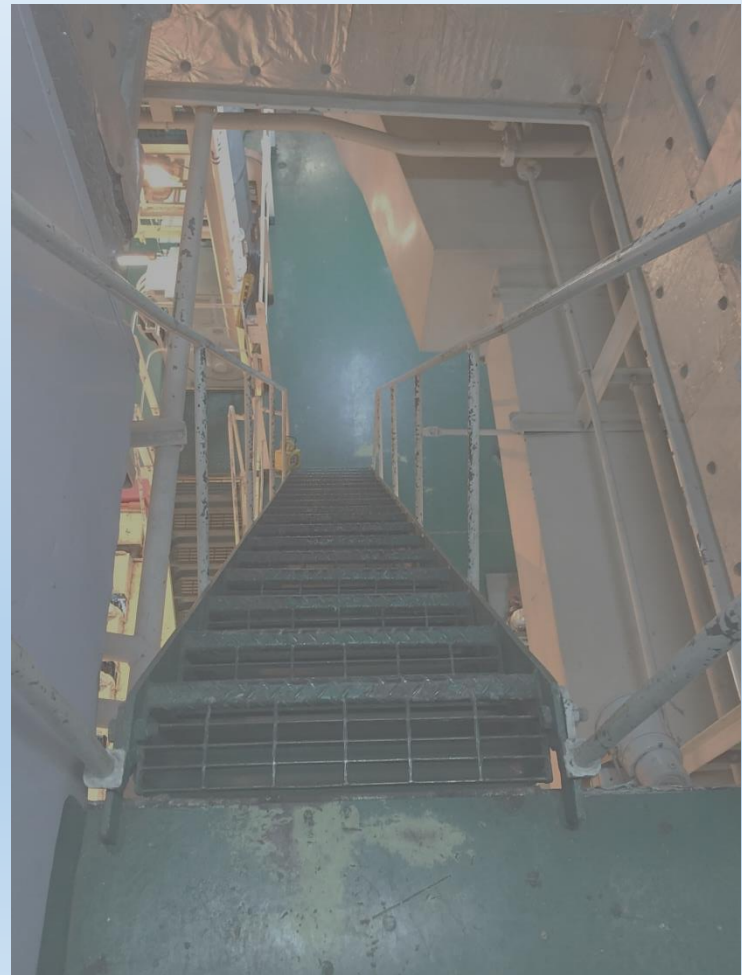
During a Whole of Base Lockdown, all contractors shall take the following steps;

- **Always obey the directions given by Navy personnel,**
- Clear the vessel upper deck and remain inside the SHIP superstructure until the Lockdown is complete,
- If outdoors on HMAS STIRLING, seek shelter in the nearest building,
- Stay clear of windows, doorways etc.

Ladder Safety

Ladders can be deceptively dangerous and a slip potentially fatal. Take care when using ship ladders with the following basic rules:

- Maintain 3 points of contact with the steps and handrails
(ie 1 hand, 2 feet or 2 hands, 1 foot)
- Do not carry equipment while using ladders
- Do not rush
- Take care to maintain your balance





Ladder Safety -
Continued



Emergency Procedures

The Ship's Emergency Alarm and Public Address system is tested every day

- The following terms are designated as Emergency Announcements and will always be used in multiples of three (example – Fire! Fire! Fire!):
 - Fire
 - Flood
 - Toxic Hazard
 - Alarm
 - Emergency Clear Lower Deck
- Unless preceded by the term “Exercise” or “Test”, you **must** treat each and every Emergency announcement as an **emergency** and **evacuate** the vessel.

Procedures on Hearing the Emergency Alarm

- **Stop** work, notify work mates, make your worksite safe.
- **Consider** whether your escape route is still safe (your standard escape route is to be determined prior to starting work, during the risk assessment).
- **Evacuate** in a safe, orderly manner, **collecting your induction card** from the Gangway staff either on leaving the ship or immediately after and proceed to the evacuation assembly point.
- **Leave** all doors and hatches as you find them.
- **Do not** leave the evacuation area vicinity until your supervisor has accounted for you and informed Navantia
- **Remain at the muster point until the end of the incident.**
- **Only** return to the ship when directed to do so

If the emergency brow is used at the direction of ship staff, gangway staff will take the access board to the assembly point where you will be able to and must collect your induction pass.

Working in Machinery Compartments

- Contractors are only to enter the Main Engine Room and other machinery compartments in order to conduct work in that particular compartment.
- Hearing protection (ear muffs) must be worn in the Main Engine Room when machinery is running and noise levels exceed 80db.

Unless absolutely unavoidable, machinery compartments are NOT to be used to transit through to other areas of the ship

Warning! Main Broadcast Dead Spots

There are areas of the Ship that are currently designated and sign posted as 1MC (main broadcast) dead spots. In these areas, personnel will be unable to hear broadcast pipes and audible alarms.

It is imperative that personnel who are conducting a task in dead spots and machinery spaces, ensure Ship Access, Safety and Security Desk/Hut personnel are kept updated on their whereabouts, to allow the Schematic Man Below ID Card Holder held at the Ship Access, Safety and Security Desk/Hut to be updated.

Hazard and Incident Reporting

Definition of an Incident

“An unplanned event resulting in or having a potential for injury, ill-health, damage to the environment, property damage, other loss or regulatory action”.

All incidents **MUST** be reported immediately to your supervisor and Navantia WHSE Advisor, the Project Safety Officer, after the area is made safe and medical assistance is provided, where applicable.

Subject to the severity of the incident, a consultation meeting may be held by Navantia.

Each PCBU must complete their own incident and/or investigation reports for all incidents and submit to the Navantia WHSE Advisor, the Project Safety Officer.

Hazard and Incident Reporting

Until an authorisation is received (through a consultative process) the scene of the incident is to be preserved/maintained as is. This will allow:

Classification of the incident to determine the extent of investigation/communication
Compliance with regulatory notification requirements.

Investigators to identify causal factors to prevent recurrence of the incident.

“If we report, we can stop another similar incident and prevent an injury”

Incident Reporting

You **MUST** report **ALL** incidents such as:
injuries
dangerous occurrences, and
near misses
to your Supervisor / Safety Officer
and the Gangway staff

IMMEDIATELY

Commencing Work

- Contractors **shall not enter the Work Site or commence** any work on HMAS Stalwart until completion of the AORSPO Enterprise Induction.
- All contractors must read and comprehend the safety requirements as noted in this presentation.
- A Work Permit is required for all work activities within the AOR. A Work Permit exemption may be granted by the **Navantia Ship Maintenance Manager (SMM)** through the Ship Plan Of The Day Meeting.
- Work Permit requests are required 24 hours prior to the required start time. **High Risk Permit to Work** requests are required **48 hours prior** to required start time.
- Approved activities will be promulgated daily through the Ship Plan of the Day. (Copy available at the Gangway).

Commencing Work

- Approval and authorisation from the **Production Manager Assistant (PMA)** MUST be granted before any activity is commenced.
- Supervisors and Contractors are to **ensure** that all personnel are **aware of the emergency exits** and their location from the spaces in which work is to be undertaken.
- All contractors must be in possession of the Construction Industry White Card (or equivalent) to gain access to all AORs
- All work must be listed and approved in the SPOD
- All Work Permit numbers will also be listed in the SPOD

Safe Working Method Statement (SWMS)

- **Prior** to commencing any work
 - a hazard assessment is to be conducted
 - a **SWMS** completed,
 - **SWMS approved** by the subcontractor's supervisor, signed by all team members, and submitted to Navantia 48 hours prior to job start for approval with the PTW.
- The **SWMS must** contain all possible **Safety and Environmental** hazards and the intended **mitigation** and / or **control** for such hazards.
- The **SWMS** must be available at the work location.
- **Any** significant change in working conditions must be considered in a supplementary risk assessment and the **SWMS** amended accordingly.

Work Permit

The following high risk tasks require additional permits in support of the PTW:

- Working in a Confined Space, (48Hrs notice)
- Hot Work, (including welding, burning, and grinding), (48 Hrs notice)
- RADHAZ Electromagnetic Radiation, (sign RADHAZ register & 48 Hrs notice)
- Working at Height/Aloft, (48 Hrs notice)
- Working over the side, (48 Hrs notice)
- Mobile Plant and Cranage, (48 Hrs notice)
- High Pressure systems or pipes, (eg sewage system)
- Any Live Electrical work.
- Diving (5 days notice)

The relevant Safety and Health issues pertinent to the work to be carried out shall be discussed at the Site Plan of the Day with Navantia prior to commencing work

The above topics are now covered in the following slides – if in doubt talk with your supervisor

The minimum documentation that must be present at the workspace:

- Standard Activity, Work Instruction and associated documentation.
- A relevant and authorised JSEA or SWMS. Personnel must review, update and sign onto the JSEA/SWMS daily and ensure it is in close proximity at all times.
- High Risk Construction Work (HRCW) permits must be obtained before commencing work.
- An approved Work Permit issued by the **PMA** at least 24 hours beforehand (48 hours for High Risk Work) (Contractors requiring isolations are to request the isolations at least 48 hours in advance).
- Authorised scope of work. Examples are Work Instruction, Task Inspection and Test Plan (ITP) (where applicable).

Emergency Response Team

An Emergency Response Team is available for all High Risk Works to respond to incidents involving Working at Heights and in Confined Spaces.

The Emergency Response Team must be kept informed of all activities they may need to respond to with details of a rescue plan included in the Safe Work Method Statement (SWMS). 48hrs notice is required for all High Risk Works.



Confined Space and Working at Heights Responsibilities

The Emergency Response Team (ERT) Responsibilities:

- Isolation of tanks / handover from Ship initial vent free
- Controlling the receipt of the Confined Space handover form at the beginning and conclusion of confined space activities for each space
- Maintaining of register's
- Communication of key confined space and working at heights activities during the daily meeting
- Reviewing/auditing and confirming the competencies of personnel required to enter Confined Spaces or undertake any Working at Heights
- Periodically monitoring the conditions of entry permits
- Completing, in consultation with the ship's staff, the Confined Space handover form for the work in the space and the completion of work
- The ERT is to ensure that the area is safe and secure prior to the acceptance of space handover
- Development of Emergency Response Plan in conjunction with SWMS.

Confined Space and Working at Heights Responsibilities

Contractor Responsibilities:

- Task supervisors to liaise with ERT to establish Emergency Rescue Plan
- Liaise with ERT for Issue of Confined Space Entry Permit (CSEP) (valid for 12 hrs only) and place at entry point
- On completion of access controls, task supervisor/stand by person will report to the ERT to inform the commencement of task
- Liaise with ERT for a Confined Space risk assessment (CSRA)
- Conduct regular atmospheric testing - person must be certified as competent in confined space by a Registered Training Organisation
- Erect their own signs, protective barriers and ventilation.
- All materials e.g. steam, liquids, gases, electricity, that could enter the Confined Space have been positively isolated.
- Task Supervisor/stand by person will report to the ERT when task is complete and no longer working in confined space and/or working at heights

Confined Space

Entry Criteria

Prior to taking control of the confined space there must be:

- Copies of Confined Space Entry Permit (F-AUS-WHSE-032), Confined Space Risk Assessment (F-AUS-WHSE-031) and SWMS at the Confined Space Entry Point
- Signage erected with information tags, contact details
- Protective barriers around the work area to indicate confined space work taking place.
- Personnel must not enter the space unless they are authorised to do so
- A signed copy of the Tank Handover Form
- A Rescue Plan written and approved by the ERT and revalidated daily.
- If the Confined Space has to be entered for the purposes of gas testing, the gas tester shall wear air-supplied respiratory protective equipment with a Sentry in place.

Confined Space

Completion:

- Contractor to inform the ERT of the completion of work. The ERT to complete a final inspection of space prior to closing the confined space cover.



Confined Space – Conduct of Work

Contractor must ensure:

- Ventilation, dependent on provider, is arranged to control and eliminate atmospheric hazards
- Areas around and leading up to/into the Confined Space entry/exit areas are kept clear and free of clutter, tools or other materials at all times
- At the start of each shift the Confined Space is inspected to ensure all isolations are in place
- Emergency Response Team and contractor gas tests have been performed, personnel have signed on to the Risk Assessment, conditions have not changed within the Confined Space or vicinity around the Confined Space and conditions of the entry permit and risk assessment are still applicable
- Continuous atmospheric monitoring is conducted at all times whilst personnel are in a confined space - it is the contractor's responsibility to provide calibrated atmospheric monitoring equipment for its personnel.

Confined Space - Sentry

All entry into a Confined Space will require the use of a sentry supplied by the contractor who shall:

- Confirm all personnel entering the Confined Space are certified as competent for confined space entry and authorized to enter the Confined Space
- Ensure 48 hrs notice of all requirements of the entry permit are met
- Maintain continuous communication with the internal work crew and, where possible visual observation should be provided between those in the Confined Space and Sentry(s)
- Remain in attendance and vigilant AT ALL TIMES while personnel are in the confined space

Confined Space – Sentry - Continued

- Ensure all team members have exited the Confined Space and are accounted for
- Ensure appropriate barricading and signage is replaced to prevent unauthorised entry into confined space
- Initiate the emergency response plan should an incident occur.
- Ensure all personnel entering the confined space are signing in and out of the entry log.

At NO time shall Sentry(s) enter the confined space.

Confined Space – Completion of Work

Upon completion of work, contractor shall:

- Inspect the space to ensure all personnel, equipment and materials have been removed
- On successful completion of inspection, the Confined Space Coordinator will be notified that the Confined Space is ready for delivery and the accompanied handover certificate will be signed off

Confined Space – Completion of Work - Continued

Confined Space workers shall:

- Remove work pack including confined space documentation from work area
- Ensure Ship's Staff is notified and inspect the confined space to confirm completion of work
- Ensure all internal fittings are secured and there are no tools, equipment or cleaning gear remaining in the space
- Obtain authorised Ship's Staff signature on their ITP confirming they have taken control of the confined space
- Remove their signage and protective barriers

Hot Work

- **ALL Hot Work**, including welding, burning, naked lights, and grinding, (any work/equipment which may generate flame, sparks or temperature) **must** be approved by Navantia SMM and the Permit Officer, where applicable, with a Hot Work Permit. This includes drilling in Hazardous Areas.
- 48 Hours notice **is required** prior to work.
- Only personnel who are authorised, trained and qualified are permitted to perform such work.
- **Correct PPE** must be used at all times.
- The **safety of personnel** not directly involved must be actively considered in the **SWMS** along with the effects of the work on adjacent structure and surrounds with regards to **heat transfer, falling slag and sparks etc.**

Hot Work (continued)

- A qualified Fire Sentry **is required** for each surrounding or adjacent compartment, spaces, bilges etc with:
 - 2 suitable fire extinguishers
 - water bucket
 - cleaning cloths
 - squirt bottle
 - gloves, and
 - a copy of the permit.
- The sentry is to remain at the required position for a minimum of 30 minutes after the hot work has ceased.
- A thorough inspection of adjacent compartments at the conclusion of Hot Works is required to **ensure** no smouldering material is present.
- A **SWMS** and risk assessment must be completed prior to starting any Hot Work.

Hot Work Fire Sentry

Trained Fire Sentry(s) must:

- Remain vigilant throughout the required task
- Ensure that the conditions in which the Hot Work Permit was introduced does not change during the course of the work
- Ensure no introduction of flammable, hazardous materials or extending the work area beyond the system or boundaries as listed in the permit
- Have the correct training and current competencies
- Must ensure two (2) task related fire extinguishers are in the work area at all times (extinguishers must be pressurised and in date)

Hot Work Fire Sentry

- Have a minimum of 2 spray water bottles and unsoiled cotton cloths in the work area at all times.
- Remain at the workspace whilst hot work is being conducted and for a minimum of 30 minutes after the ignition source is stopped to assure that all surfaces are cool and there are no smoldering materials.
- Conduct regular rounds of the compartment in which you are stationed.
- Must NOT use Ship's fire extinguishers.



Hot Work Fire Sentry

At the conclusion of the day's work, hot work Fire Sentry(s) must:

- Advise authorised Permit Approver when monitoring has been complete and for a final inspection before leaving the worksite to sign off on the Hot Work Permit.
- Ensure the Hot Work Permit is signed by the Permit Approver after inspection on completion of the shift.

Note: Where a break in conduct of Hot Work e.g. Lunch, Fire Sentry must remain for the required 30 mins, and no Hot Work may recommence until Fire Sentry has returned.

Hot Work Fire Sentry - Responsibilities

Fire Sentry is authorised to stop Hot Work activity:

- If personnel or the Ship's safety is being compromised
- Where an unsafe work practice is being undertaken
- If the portable firefighting appliance is faulty and/or when a fire starts.

If a fire occurs, Fire Sentry is to:

- Advise the worker(s) to stop work
- If safe to do so attack the fire IMMEDIATELY with the correct extinguisher
- Raise the alarm by calling "FIRE, FIRE, FIRE "
- Raise the alarm across the whole ship in accordance with the Site Emergency Response Plan.

Hot Work and Confined Spaces

- Welding and hot work **should be avoided in confined spaces**, but when it is absolutely necessary these additional precautions are to be observed:
- Particular care must be taken to ensure that **conditions are safe** before a break and are re-checked after the break prior to re-commencing work to **ensure that they are still safe**.
- **On completion of all hot work in a confined space**, all non-intrinsically safe items are to be removed, and only intrinsically safe lighting and communication devices may be used in the confined space.

Managing the Risk of Falls

Working at Heights is any time there is a risk of a fall from one level to another, including when working around open hatches. Personnel must seek guidance from Ship's Staff as to whether Working at Heights Permit is required.

Authorised Ship's Staff shall determine when a Working a Heights (WAH) Permit is required and are responsible for issuing the WAH Permit. e.g. when RADHAZ is occurring.

Ship's Staff must be notified at least 48 hrs before Working at Heights activity is due to commence.

Fall Arrest System is equipment that is designed to **reduce** the severity of an injury to a person if a fall does occur, for example catch platforms, industrial safety nets and safety harnesses.

Fall Restraint System are designed to **prevent** a fall from heights.

Managing the Risk of Falls - Continued

Contractors using a fall arrest system must directly liaise with the ERT to ensure there is an Emergency Rescue Plan developed 24 hrs before activity is due to commence.

Working at Heights Requirements

Prior to commencing WAH, supervisors must ensure that:

- Personnel working at heights are certified as competent by a Registered Training Organisation (RTO)
- A WAH permit (AE302), ERT Rescue Plan and SWMS has been authorised prior to task commencement
- Permission is sought from the OOD and entered into WAH Register with the ERT

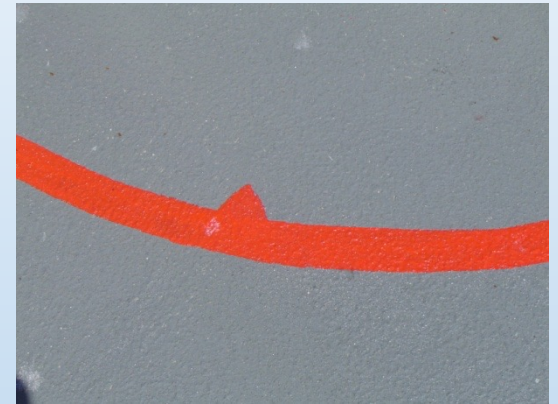
Managing the Risk of Falls - Continued

- A sentry is available at all times
- All tools and equipment are appropriately secured using lanyards
- A safety harness is secured to an overhead strong point (guardrails are not strong points).
- If unable to secure to an overhead strong point, access the work area by a crane / EWP / man box
- Personnel DO NOT lean on or over hand or guard rails
- An exclusion zone or drop zone is established below the work area
- Ship's Staff and ERT are notified upon completion of WAH to enable the closure of WAH Permit.

Warning! – Prior to a task commencing above an exhaust or engine, Ship's Staff must ensure that their engines and diesel generators are switched off and Isolated i.e., working from a Man Box or scaffolding above.

RADHAZ - Warning Signs

- RADHAZ areas are marked with broad Red lines with red arrows pointing to the radiation *hazard*



RADHAZ

Contractors must notify the **PMA and gain permission from authorised Ship's Staff at least 48 hrs prior to proposed rotating or radiating of aerials, antennae, radars or transmitters/emitters.**

For work required in a RADHAZ zone contractors must:

- Obtain written approval in the RADHAZ log at the vessel gangway from the OOD prior to proceeding to their work area.
- Counter sign the RADHAZ Log prior to proceeding.
- Inform the OOD when work has been completed and the RADHAZ zone has been exited.

RADHAZ - Continued

- Counter sign the RADHAZ Log at the gangway with the OOD prior to exiting the vessel.

NOTE: If the work being conducted in a RADHAZ zone is also Working at Heights (WAH), contractors must also complete this procedure as well. Refer to the WAH section of this induction on how to work safely at heights.

Personnel must immediately report to their supervisor any direction given which conflicts with this procedure.

During External Maintenance Periods (EMP) the Ships are often in RADHAZ Lockout. This means that all RADHAZ emitters are locked out and cannot be rotated or radiated. When RADHAZ Lockout is in force a sign will be at the gangway informing contractors. If unsure a vessel is in RADHAZ Lockout, contractors are to contact the OOD.

RADHAZ - Continued

OOD approval to enter an area is not required when a RADHAZ SAFE is displayed on gangway.

All RADHAZ information and risk mitigations should be clearly identified in the task JSEA/SWMS.

RADHAZ Zones

There are 10 RADHAZ zones on the AOR class vessels, and RADHAZ clearance is required for contractors working or transiting in the following areas:

SATCOM Cobra FWD

SATCOM Cobra AFT

HF FWD

HF AFT

NAV RADAR (S Band)

NAV RADAR (X Band)

HF QMCSS

CWIS FWD

CWIS AFT

HCR & IFF

RADHAZ Zones - Continued

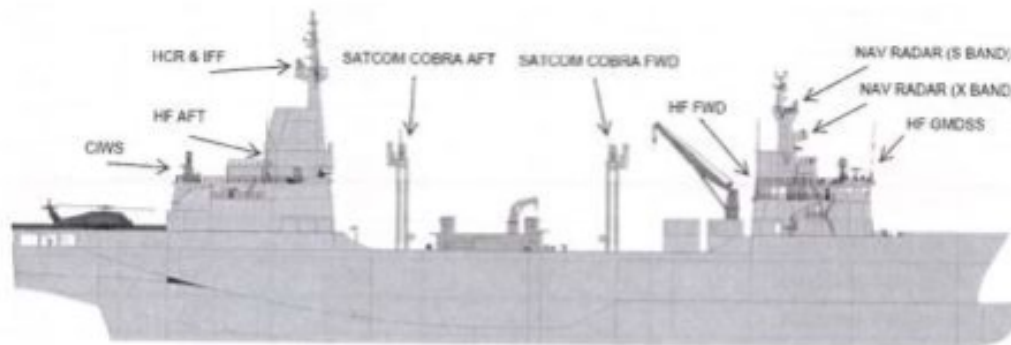
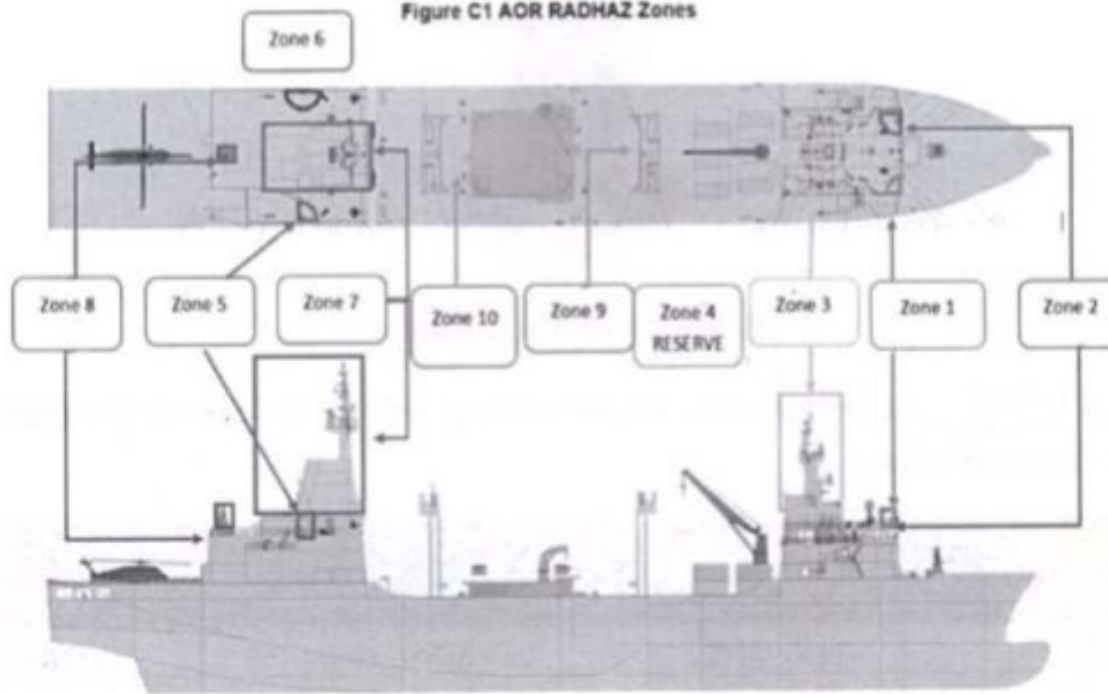


Figure C1 AOR RADHAZ Zones



RADHAZ Zones - Continued

RADHAZ is controlled by the Ship's Weapons Electrical Officer (WEEO) with the following general conditions applying:

- A Work Permit and Working at Heights permit is required prior to accessing any deck above 05 Deck (Bridge Roof) and other areas as marked.
- When working aloft ensure area below is barricaded off, provide a sentry, and sign post.
- A rescue plan/team must be in place.
- The RADHAZ keyboard is located at the gangway. all workers must ensure they sign in to the RADHAZ log before proceeding to work and sign out upon completion of works.

Electrical Safety

The dangers arising from the misuse of electrical equipment are well known. Electrical shock and fire can cause loss of life, damage to equipment and ultimately, loss of the vessel.

Before undertaking any electrical maintenance work, the following precautions must be taken:

- **Remove** rings, wrist watches, necklaces etc.
- Where practical, always work on a dry **insulating surface**.
- **Safety boots** without metal studs or rivets must be worn. Where practical, overalls should be dry and insulating gloves worn.
- Ensure your working position is **safe and secure to avoid FATAL** contact with live conductors.

Electrical Safety - Continued

- Beware of alternate or auxiliary supplies.
- **IF IN ANY DOUBT**, check with ship staff.
- **All** Power Equipment and electrical power leads **must have current Test and Tag certification.**
- **Check** all electrical equipment for serviceability and **correct Test and Tag certification** prior to taking on board.
- **Elevate** all cables where possible, use plastic hooks etc.
- **Avoid** running cables and services through Doors and Hatches where possible.
- Doors and hatches to be **chocked** where running cables through is unavoidable.
- **Remove** leads from Work Areas and Watertight Hatches daily.
- **DO NOT** use electrical equipment near wet surfaces.

Electrical Safety – Live Equipment

Where possible, contractors are to avoid working on **LIVE** electrical equipment. However, if this is deemed necessary, the **PMA must** be informed and a risk analysis of the intended work shall be completed prior to the issue of a Work Permit.

Electrical Safety – Live Equipment Continued

The following additional precautions must be implemented:

- **NEVER WORK ON LIVE ELECTRICAL EQUIPMENT UNLESS A SECOND PERSON IS PRESENT.** The second person (sentry) **must** know where to isolate the circuit and how to treat for electrical shock.
- Minimise risk of hand-to-hand shock by keeping one hand in your pocket whenever practicable.
- Use only the correct test equipment and insulated tools.
- Remove and replace equipment covers whilst the apparatus is switched off. Serious accidents have occurred when a cover has dropped on the “live” conductors.

NOTE: Electrical wiring colouring may not meet AS

Power Mobile Plant - Crane

Crane Operators/Dogmen and Riggers must hold the appropriate High-Risk Work Licence.

Contractors must submit Crane Request Form to the **PMA** for approval at least 72 hrs before activity is due to commence. An Incompatible Operations Card will be issued to the crane personnel and must be completed and handed to the gangway/QM/OOD.

All craning operations must be individually approved by Ship's Staff the day prior to raising any structure adjacent to or on the Ship. The crane boom must stay in lowered (travelling) position until written approval is received from the Ship. RADHAZ log is to be signed and in place prior to commencing any craning work.

Power Mobile Plant – Crane - Continued

General rules:

- Must only be operated by authorised, trained and competent persons
- Never stand under a suspended load
- Restrict access to the lift area by barricading and erecting signage
- The Dogman controls the lift area
- Clear area of personnel before lifting
- Never give anyone a lift on plant or equipment
- Plant/Lifting equipment and lifting tackle must be certified & tagged and inspected prior to use
- A risk assessment is to be conducted and a SWMS completed prior to any lift
- Safety helmets must be worn at all times during crane ops
- Loads/Work boxes are not to be slewed over personnel below

Power Mobile Plant – Crane - Continued

Warning! – Prior to a task commencing above an exhaust or engine, such as from a man box or scaffolding, Ship's staff must ensure that engines and diesel generators are switched off and isolated'

Please remember to use cranes and chain-blocks for lifting heavy awkward objects.

Note: The onboard Ship's Davit must not be used by anyone other than Ship's Staff.

Portable Tools

All tools and equipment, (electric, pneumatic, hydraulic etc) including extension leads, hoses, adapters etc. are to be maintained in a **safe working condition** in accordance with the manufacturers recommended procedures.

Electrical Tools are to have a current test tag attached.

Portable Tools - Continued

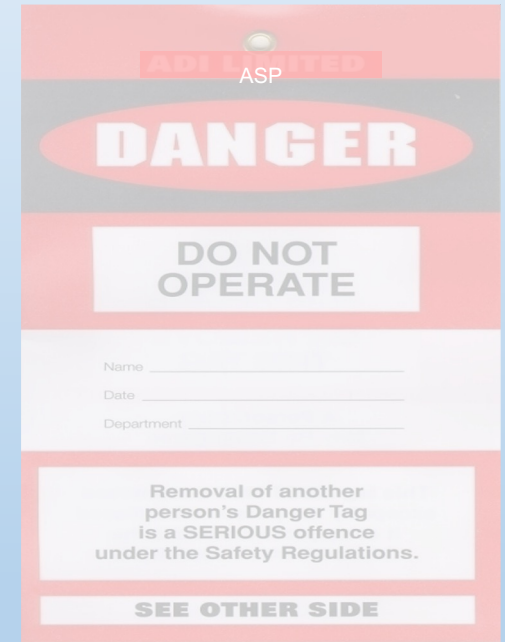
Note: All portable tools that require extension leads and air hoses through watertight/fire zone doors will require in line disconnects no further than 1 metre from the door and must get approval from the MEO to ensure doors can be shut for an emergency response situation.

Doors and Hatches with leads, hoses or services running through them need to be chocked.

Isolations (Electrical / Mechanical / Hydraulic / Air / Stored Energy)

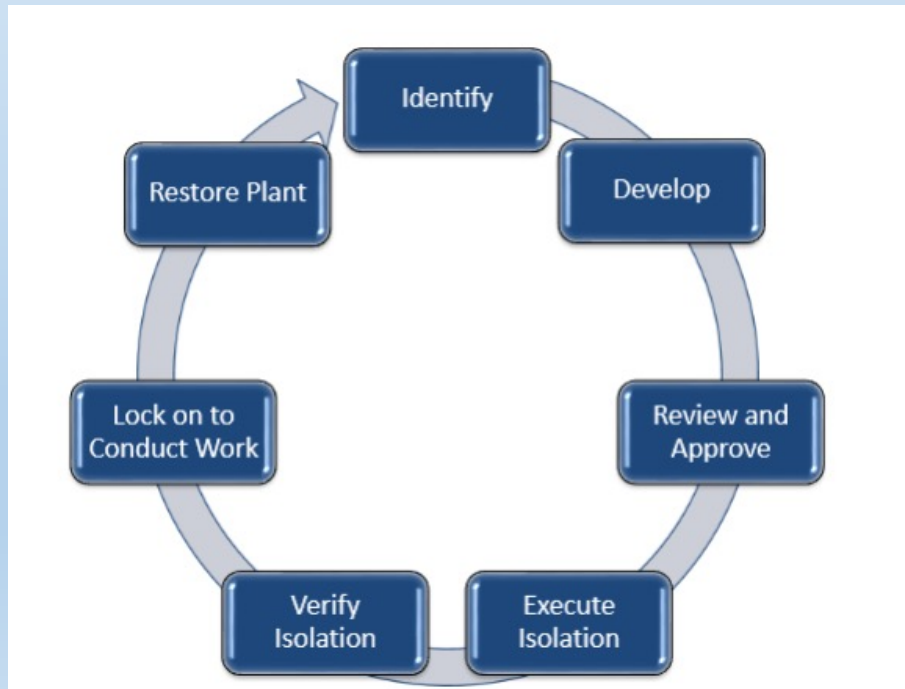
- **ALL ISOLATIONS MUST BE IN ACCORDANCE WITH ANP4202 – CHAPTER 10, ISOLATIONS AND TAG OUT PROCEDURE**

- A copy of ANP4202 Chapter 10 will be available in the site hut



Isolations (Electrical / Mechanical / Hydraulic / Air / Stored Energy)

- The RAN Isolation process follows a Seven Step sequence shown below, irrespective of the type (Single RI, Multiple RIs) or level of complexity of the isolation. Uniform and contractor personnel are to strictly adhere to the processes listed in Annex 10B to ANP4202 – Chapter 10 ‘Seven Step Isolation Process’.



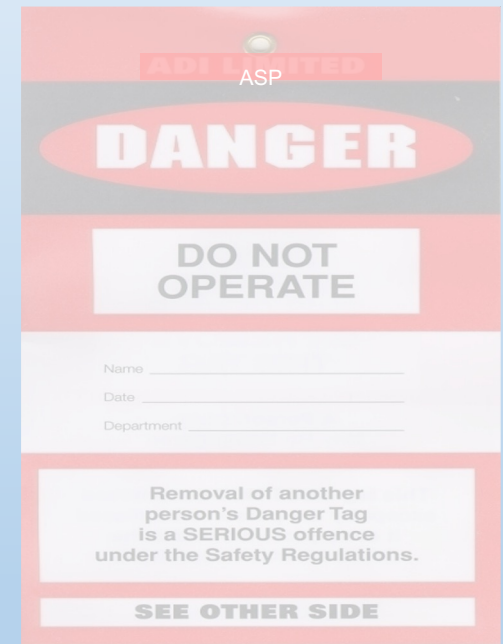
Isolations (Electrical / Mechanical / Hydraulic / Air / Stored Energy) Continued

- **The Contractor is to supply and bring with them their own locks and tags.**
- **All isolations must be carried out by Ship staff.**
- All contractors must always confirm isolations with Ship Staff prior to commencing work.
- Note: all isolations shall be locked out.

Isolations (Electrical / Mechanical / Hydraulic / Air / Stored Energy) - continued

- **Ensure** a physical measurement of 'NO VOLTS' is present for all electrical isolations.
- **Details** required on the isolation include Job Number, Contractor Reference Number, PTW Number, Equipment Type and Person in Control of Tag.

All isolation requests must go through your supervisor and be performed by the Ship Staff.



Tag-Out Procedure

Tag-out procedures apply to all work undertaken on **machinery, electrical circuits or gas, air, water, hydraulic, fuel oil, lube oil and refrigerant** systems where the inadvertent activation of any apparatus or system could endanger those people working on them

- It is the **contractor's responsibility** to confirm isolation prior to starting the task and to lock onto the lock box with red personal isolation padlock.
- All isolations will be completed and verified by ASP Ship Keeping Team utilising yellow isolation locks, isolation devices and danger tags.

Tag-Out Procedure - Continued

- If two or more tasks require isolation of the same system then a **separate danger tag and lock must be placed on the isolating point for each task and marked accordingly.**
- It is the contractor's responsibility to ensure the isolating switch, control device, valve, etc is the correct one to be tagged-out. If there is any doubt whatsoever, ask the Navantia SME.
- **ALWAYS TEST BEFORE YOU TOUCH.**

Tag-Out Procedure - Continued

- Contractors must reference Ship's Staff Danger Tag number on their Danger Tag, and place a “C” in front of the number, to denote a Contractor’s Danger Tag.
- Ship's Tag-Out Log (AE267) must be completed by Ship's Staff and Contractor.
- Danger Tag(s) must be readily visible, legible and securely attached to the equipment, associated breaker and fuses if required

Tag-Out Procedure - Continued

- Tags must contain;
- Name of the person
- Mobile number
- Organisation they work for.



Energy Isolation

Isolations MUST be tested, and verified for 'dead' in the case of electrical, and verified prior to commencing work to confirm that these isolations achieve their objective. This includes confirming the operational integrity of the locking mechanism of the isolator.

When Dead Testing:

- Equipment to be in calibration and proved to be working prior to use.
- It must be assumed that all parts are energised until they have been proven to be de-energised.
- Testing equipment for isolation must be done in a manner that is safe and does not place anyone at risk of harm
- The person carrying out the testing must be competent and have the appropriate electrical/mechanical training and understand the testing procedures

Energy Isolation - Continued

- If testing the systems reveals that appropriate isolation has not been achieved, work shall not commence
- Systematic review of the process must identify where failure occurred and it must be rectified prior to work commencing.



Energy Isolation - Continued

De-Isolation

Upon completion of work on the system / equipment, the authorised contractor/s must ensure integrity of the system and in conjunction with Ship's Staff, remove their personal danger tag/s and complete the Ship's Tag-Out Log (AE267).

Note: Ship's Staff must accompany contractor when changing over tags to a different contractor (handover).

In an emergency, authorised Ship's Staff may remove a danger tag.

At no time may you remove the lockout device or danger tag of another person without authority. Please ensure all locks are returned to the Issuing Officer.

Note: A copy of the isolation form inclusive of isolation plan shall be handed to the Ship's Isolation Officer upon completion of the task.

Scaffolding

- Erected / dismantled / modified only by those who hold the appropriate Certificate of Competency
- Must be erected in accordance with the SCAFFTAG system and the relevant Australian Standard (AS)
- Must not be used until a green SCAFFTAG is in place
- Must be inspected by a scaffolder, signed, and dated, within a 4 week period or if the working conditions are altered
- If the scaffold is tagged 'not to be used' – don't!



Exclusion Zones

Contractors must notify Authorised Ship's Staff of proposed exclusion zones at least 24hrs before task commencement.

Contractors shall establish exclusion zones to prevent unauthorised access to an area and to control any situation where hazardous conditions are evident or potentially foreseeable and which may present danger to persons or damage to equipment or property.

Exclusion zones shall be established using barricading such as:

- Danger tape – no entry without Authorisation
- Caution tape – enter but proceed with caution
- Signage
- Barriers e.g. temporary handrailing, fencing and rope.

Exclusion Zones - Continued

Information tags (**completed in full**) must be placed on all barricading. Barricading must be removed immediately when activity is complete or hazard no longer exists.

All penetrations and man holes must be securely covered when not in use to prevent falls.

NEVER BREACH A BARRICADE



CAUTION CAUTION CAUTION



Exclusion Zones - Continued

- A risk exists for people working below open hatches or where work is being conducted aloft.
- Small objects when dropped from a height can have significant consequences.
- At **ALL** times people are working aloft or where a risk exists from an object being dropped from a height, an exclusion zone is to be implemented.
- **Red** and **white** barrier tape and signage is to be erected and strictly adhered to. Breaches of exclusion zones is treated seriously and may result in removal from site.



Exclusion Zones - Continued

Barricading work areas

A barricade is put in place to restrict access to a potentially hazardous area

Any person undertaking hazardous activities which may impact upon other workers **must** barricade the work area:

- Use warning signs, sentries, screens, close off compartments etc for welding, burning, needle gunning, grinding, painting etc
- Notify your supervisor, **SMM** and **PMA** when barricading areas.
- Ensure Contact details / Point of Contact is placed on the barricade i.e. contractors name, mobile phone number, reason for barricade and duration.
- All Contractors must be 'Hazard Aware' to avoid trips and falls

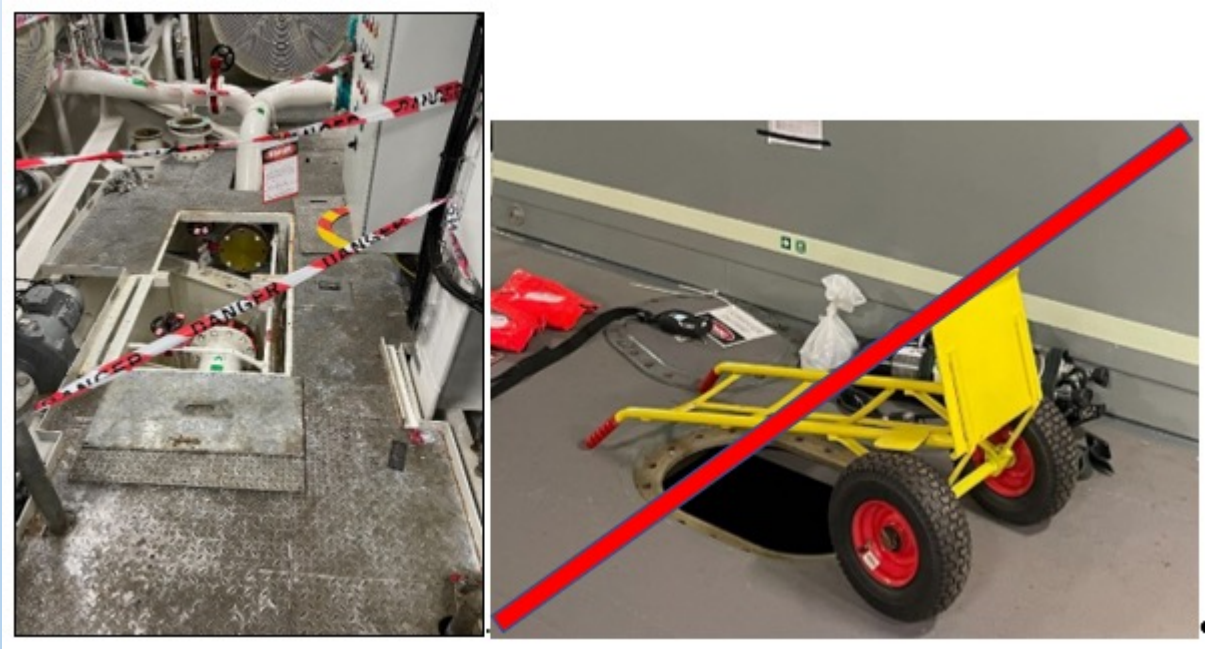
NEVER BREACH A BARRICADE

Open Hatches

If hatches are opened, or deck plates removed, suitable barriers are to be erected and signage posted indicating the reason, duration and POC with phone number.

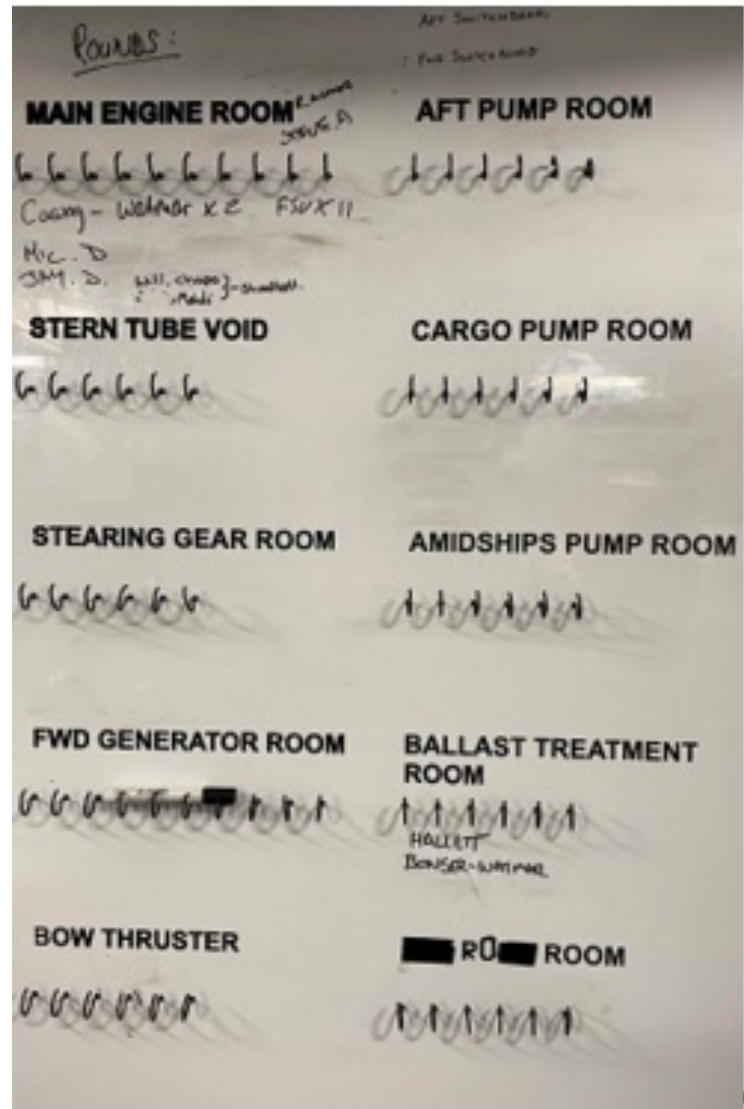


Open Hatches - Continued



Man Below Board

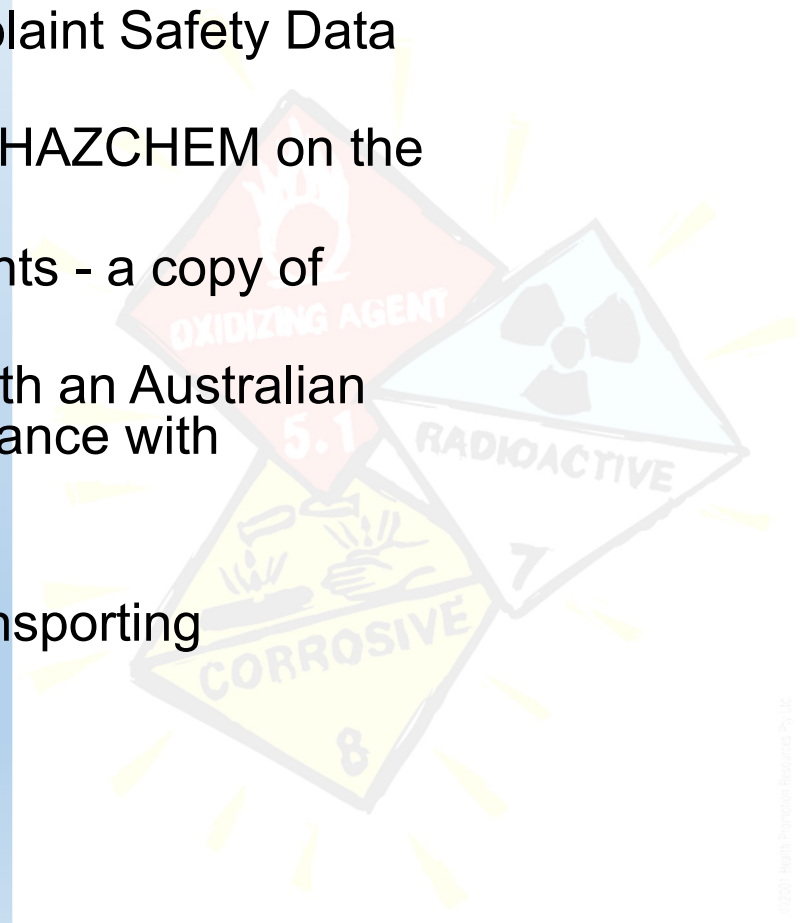
- All personnel must use the 'Man below Board' when entering these compartments.



Hazardous Substances

Prior to bringing HAZCHEM on board, contractors must:

- Report to the safety desk/hut in order to register HAZCHEM
- Provide a copy of an Australian GHS compliant Safety Data Sheet (SDS)
- Record the risk associated with the use of HAZCHEM on the JSEA/SWMS
- Comply with Safety Data Sheet requirements - a copy of which must be at the workspace
- Ensure all HAZCHEM is clearly labelled with an Australian GHS compliant label, and stored in accordance with legislative requirements
- Take minimum quantities on board
- Ensure lids are securely in place when transporting HAZCHEM



Disembarking HAZCHEM

- No HAZCHEM to remain onboard overnight unless prior permission has been obtained from the HCSA or the refit liaison officer.
- Upon disembarking notify Ship's Staff at the Safety Desk/Hut and update HAZCHEM Register
- Do not dispose of used or unused HAZCHEM in waste skips.



Spillage of Contaminants

In the event of a chemical spill:

- Communicate the nature and type of spill to other nearby workers, supervisors and the Emergency Response Team, if required
- If necessary evacuate the area, and provide first aid to contaminated or injured workers
- Control the spill by closing valves, or righting a container, if safe to do so
- Contain the spill using spill kit contents and, if safe to do so, prevent flow to the environment
- Clean up the area and dispose of contaminated material IAW SDS

Report all spills to the Navantia Project Safety Officer

Toxic Hazard - ELSRD

If you find yourself within a Toxic Hazard area during an emergency situation, locate and don an Emergency Life Saving Respiratory Device (ELSRD) as shown below:

Always remember to put your own ELSRD on first before helping others.



Hydrogen Sulphide



- Hydrogen Sulphide is produced as a result of the microbial breakdown of organic materials in the absence of oxygen. Strainers and associated pipework may contain seawater and decaying material, such as seaweed which, when disturbed, can release hydrogen sulphide, otherwise known as rotten egg gas due to its pungent smell.
- Low level exposures can cause irritation to the respiratory tract and high level, repeated high concentration level exposures damage to the central nervous system.
- Where this is the possibility of H₂S being released from a system, especially when that risk is increased due to the water being stagnant for a period of time, controls to be considered and included in JSEA/SWMS include:

Hydrogen Sulphide - Continued

- Only 1 strainer to be opened at a time
- using a gas monitor, are to be included in SWMS/JSEA's.
- system is to be operated, where practicable, and the strainer flushed through to eliminate the potential of toxic hazard from stagnant fluid inside the strainer/system.



Water Mist System

- The water mist heads on the fire protection system are very fragile and easily damaged which results in the activation of the system.
- Extreme care should be taken when moving equipment in the vicinity of sprinkler heads.
- Non restrictive caps should be placed over the srinkler head to reduce the risk of damage or red and white tape as a visual reminder of the proximity of the head.



Heavy Doors

- Heavy doors present a risk of musculoskeletal injury and/or crush injuries to fingers and hands.
- Open doors carefully as there may be personnel on the other side



High Risk Work

- **NO High Risk Work**, as defined in the Work Health and Safety Act and Regulations 2011, is to be conducted by Contractor personnel **who do not hold the appropriate** licence for conducting such work.
- **High Risk Work** includes, but is not limited to: scaffolding, crane operations, (including rigging and dogging), crane and hoist operating, fork lift operating and work with pressure equipment.
- **Diving operations** are only to be carried out by personnel with the appropriate diving qualifications. As part of the procedure Port Services must approve the activity prior to final Authorization from the SMM.

Cranes/Mobile Plant/Lifting Equipment

- **Must** only be operated by authorised, trained and competent persons
- **Restrict** access to the lift area by barricading and erecting signage
- **The Dogman** controls the lift area - obey their instructions!!
- **Clear** area of personnel before lifting
- **Never** give anyone a lift on plant or equipment
- Crane bookings require 24 hours notice
- Plant/Lifting equipment and lifting tackle must be **certified & tagged**
- A **risk assessment** is to be conducted and a **SWMS** completed prior to any lift
- Safety helmets **must** be worn at all times during crane ops
- A Work Permit is required.

Radiation Hazards may impact on a lift – Check first!

Manual Handling

Many serious, painful and long lasting injuries occur when moving material, equipment etc.

However, the risk of injury can be significantly reduced if we observe some basic rules:

- Check the lift first
- If the load is too heavy, get help
- Where possible use mechanical equipment
- When lifting, face load, keep back straight and lift with legs - not your back
- Never twist when lifting
- When lifting overhead, do not overreach. Lift to a platform, reposition then lift further; and
- When group lifting, nominate someone to “direct” the lift and ensure the area is clear of obstructions.



First Aid



☺ Seek immediate first aid

- ✓ First Aid Box – Located within the site office complex.
- ✓ First Aid requirements should be detailed within the task's *SWMS*.
- ✓ In an Emergency, contact a ship staff Representative or your Supervisor who will arrange the appropriate assistance.
- ✓ Eye Wash Stations will be positioned as appropriate.

Environment

Protecting the environment is the responsibility of everyone on site

- Waste Water
- Chemicals (paint, solvents or oil)
- Transfer of liquids
- Dispose of waste
- Report any spills or leaks immediately to gangway staff
- Reduce noise pollution where possible



Do the right thing!

General Housekeeping

- DO NOT leave trade waste aboard. **Contractors must remove trade waste on a daily basis.**
- Tidy as you go.
- Keep work area free of trip hazards.
- Ensure equipment is serviceable, secured and neatly stored if left aboard.
- Remove potential fire hazards such as rags and flammable liquids.
- DO NOT remove any ships equipment without authority, including the repositioning of RAN safety equipment.
- Ensure opened systems are suitably protected to prevent contamination.
- Clean up spills immediately.

If you don't need something onboard remove it!

General Housekeeping

- Any area of the decks, flooring etc, that appears slippery must be immediately reported and cautionary notices exhibited around the area until the problem is rectified.
- Always inspect equipment and tools before use.
- Never use defective equipment.

Wharf Area

- The wharf area is **not to be used as** a contractor work area.
- A PFD is to be worn if access is required 1.5 meters from the wharf edge.
- The wharf area is **not** to be used as a storage area by contractors.
- The wharf is a **No Smoking area.**
- Contractors vehicles may be permitted onto the wharf for delivery of spares / tools / equipment / etc. as necessary, however vehicles must be removed on completion of the delivery and parked in the Fleet Car Park.
- Refuelling of cranes and powered equipment is **not** to take place on the wharf without prior approval from Navy Port Services
- **At least 24 hours notice** is required for such activity

COVID 19

The worksite is a Registered Covid Safe Area.

All workers attending the site must comply with CoA and WA Regulations and Health Directives.

DO NOT attend the site if you are unwell.

To prevent or reduce the spread of COVID 19, screening measures will be implemented for all personnel entering the site.

A screening area will be established and the following checks will be conducted:

Questionnaire with following questions

- Are you suffering from any of the following symptoms: fever, cough, sore throat, fatigue, shortness of breath, are you fit and well, have you been to any areas or had close contact with any possible COVID 19 persons?
- A temperature check may also be conducted
- Hot spot location updates

COVID 19

On completion, personnel will be issued with a colour coded wrist band, valid for that day only.

A hand washing station, hand sanitizer, alcohol wipes and face masks will be provided at the gangway when required.

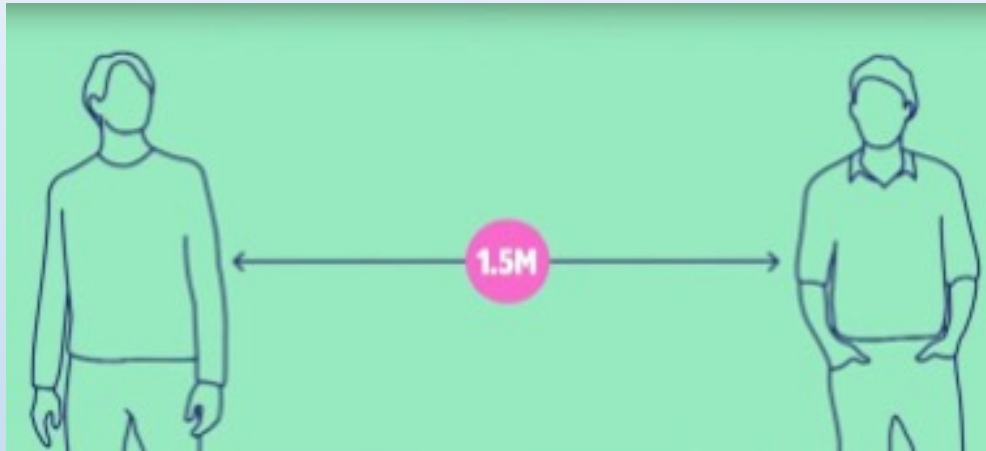
Physical distancing is to be maintained.

Face masks may become mandatory for indoor and outdoors on construction sites.

Occupancy levels will be set and signage posted on enclosed spaces such as crib rooms and offices in the worksite.

Controls may vary as health advice is updated

COVID 19



Remember:

You **MUST** report **ALL** incidents such as:

injuries

dangerous occurrences, and

near misses

to your Supervisor / Safety Officer

and the Gangway staff

IMMEDIATELY

**“If we report, we can stop another similar incident and
prevent an injury”**

Questionnaire

Thank you for completing this online presentation.

You will now be required to complete the online questionnaire on the ASPDSS website.

If you require any assistance **at all**, please contact your supervisor prior to submitting the questionnaire.