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***CONTRACTOR INDUCTION BOOKLET***

***FOR HMAS STALWART***

April 22

**BASIC SAFETY RULES**

The following basic safety rules must be adopted. All are self-explanatory and simple to follow:

1. One hand for yourself; one hand for the ship.

2. Only follow accepted safe working practices.

3. Prevent your colleagues, whether senior or junior to yourself, from acting unsafely or dangerously.

4. Always use the equipment and clothing provided for personal protection. Keep it in good order and report any defects.

5. Keep your workplace clean and tidy, e.g. clean up spills immediately, replace tools, and remove rubbish. 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.

6. Always inspect equipment and tools before use. Never use defective equipment.

7. If items are too heavy or awkward to lift, seek assistance.

8. Ensure ladders and scaffolding are well secured.

9. When moving around the ship, never run, jump or take unsafe short cuts.

10. Do not take on more than you can handle or take unnecessary risks.

11. Accurately assess the capabilities, limitations and skills of your colleagues.

12. Never let the pressure of time tempt you to take chances.

13. No person may board the vessel whilst under the influence of alcohol or drugs.

14. Never allow someone who is under the influence of alcohol or drugs to work on the ship.

15. Contractors are **not** to smoke on the vessel. Ship’s staff are permitted to smoke, however only in approved places.

16. Report every injury, however small, and identify hazards.

17. Report any “near miss” so we can fix a problem before someone gets hurt.

18. Observe all safety warning signs in the areas you are working.

19. Don’t go into areas you are not authorised to enter.

20. Comply with ship’s staff requests.

21. You are responsible for making yourself aware of all AOR Enterprise safety rules while on HMAS STALWART.

**BEFORE THE COMMENCEMENT OF ANY WORK**

**THE CONTRACTOR SHALL REPORT TO THE PRODUCTION MANAGER OR HIS NOMINATED REPRESENTATIVE AND THE NOMINATED SHIP’S POINT OF CONTACT PRIOR TO THE COMMENCEMENT OF AND ON COMPLETION OF WORK.**

**No work is to be commenced on board until you have checked with the Production Manager or his representative, signed the Contractor’s Induction Checklist and completed the induction process for contractors.**

**All contractors and persons working on HMAS STALWART must read and understand the safety requirements as noted in this booklet.**

The contractor will advise the Production Manager or his representative of:

* The planned number and names of personnel to be onboard during the contracted work period.
* The JHA (Job Hazard Analysis) undertaken for the relevant jobs.
* The Permit to Work.
* The contractor’s appointed Supervisor and Accident Prevention Officer.
* Any environmental controls required.

The relevant health and safety issues pertinent to the work to be carried out shall be discussed with the Navantia Safety Officer or his representative (ie relevant permit to work system and risk analysis as applicable) prior to commencing work.

The contractor is to ensure that his/her personnel are instructed in:

* The emergency exits and their location from the spaces in which the work is to be undertaken.
* The emergency alarm signals for the ship.

This information is available from any of the Navantia Supervisors and the ship’s nominated point of contact.

**MUSTER STATION IN THE EVENT OF AN EMERGENCY**

Upon sounding of the ship’s emergency alarm, all contractors are to muster at the muster station advised by the Navantia Safety Officer or as advised by any of the Navantia Supervisors (usually on the wharf adjacent to the ship or in the immediate vicinity of the site office).

**It is extremely important that contractors collect their Induction card when leaving the ship**.

Each contractor Supervisor shall make a head count of all personnel for whom he/she is responsible and immediately report any person who is missing and their last known location, to the Naval person in charge of the emergency.

No contractor or contractor’s personnel shall leave the vicinity until the contractor’s Supervisor has accounted for his/her personnel and reported same to the Navantia Safety Officer.

**RELEVANT LEGISLATION**

**All work conducted on HMAS STALWART is to be conducted in accordance with the Work Health and Safety Act 2011 and Work Health and Safety Regulations 2011.**

**No statement in this induction shall waive the responsibility of individual contractors to comply with relevant legislation.**

**SMOKING AND USE OF MOBILES AND NAKED LIGHTS**

HMAS STALWART is a replenishment vessel and therefore a fuel carrier and so utmost care must be taken to prevent fires and explosions.

* Contractors are **not** permitted to smoke: **not** in the superstructure, **not** forward of the superstructure **nor** on the wharf.
* Naked lights, welders, grinders and any equipment which may generate flame, sparks or temperature are **not** to be used without written approval (for example: a hot work permit): **not** in the superstructure, **not** forward of the superstructure **nor** on the wharf
* Electrical and electronic equipment may **not** be used forward of the superstructure (including any equipment with a battery). The **only** exception this rule applies to “intrinsically safe” electrical and electronic equipment. If your equipment is **not** clearly marked and certified as “intrinsically safe” then it is **not** safe for use in the gas envelope and **must not** be used.

If you are ever in any doubt, seek advice from any of the Navantia Supervisors

**BEHAVIOUR**

Irresponsible behaviour must be discouraged. “Showing off”, acts of bravado or anything else involving risk taking, contrary to safety standards should be stopped immediately and the potential danger of the actions explained.

**DANGERS OF ALCOHOL/DRUGS IN THE WORKPLACE**

Drunkenness and consumption of alcohol – to the extent that a person is affected when conducting work – is **strictly forbidden.**

The use of illicit drugs, abuse of medication drugs or possession of any illicit drug while onboard is **strictly forbidden**.

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 may be handed over to the police.

**PERSONAL PROTECTIVE EQUIPMENT – HAZARDOUS AREAS**

Contractors are responsible for providing suitable personal protective equipment (PPE) for their personnel.

In addition to the standard requirements, **minimum** PPE requirements for the following hazardous areas are:

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| **Hazardous Area** | **Minimum PPE Requirements** | **Relevant Standard** |
| Whole of Ship | Appropriate footwear – protective boots | **AS 2210** – Safety Footwear |
| Whole of Ship | Appropriate clothing – 100% long sleeve overalls or similar work wear (natural fibre such as cotton) | **AS 2919** – Industrial Clothing |
| Noise Areas  Running Machinery | Hearing protection – 25bB attenuation | **AS 1269** – Occupational noise management |
| Whole of ship | Appropriate gloves:  Leather – hot, cold, sharp, abrasive materials  Rubber – chemicals, acids, caustic materials | **AS 2161** – Occupational protective gloves |
| Whole of ship  In dockyard | Helmet:   * when in the vicinity of operational cranes/davits * when in dock below ship * when working at height | **AS 1801** – Occupational protective helmets |
| Aloft / At height  Over the side | Fall arrestor and/or safety harness – when working at height | **AS 1891** – Industrial safety belts and harnesses |
| Upper decks | Buoyancy aid – where risk of falling into the water | **AS 1499** – Personal floatation devices |
| Whole of ship | Eye protection – where risk of foreign particle entering the eye | **AS 1337** – Eye protectors for industrial applications |
| Whole of ship | Dust / vapour protection – where risk of inhaling dust, vapours or other contaminants | **AS 1715** – Selection, use and maintenance of respiratory protective devices  **AS 1716** – Respiratory protective devices |
| Whole of ship | Appropriate face, eye, hand and body protection – when cutting and welding | **AS 1674** – Safety in welding and allied processes |
| Whole of ship | Appropriate face, eye and hearing protection – when using pressure equipment | **AS 4343** – Pressure Equipment – Hazard levels |

**PERSONAL PROTECTIVE EQUIPMENT – RISK ACTIVITIES**

Contractors are responsible for providing suitable personal protective equipment (PPE) for their personnel.

In addition to the standard requirements, **minimum** PPE requirements for the following risk activities are:

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| **Minimum PPE Requirements** | **Risk Activities** | **Relevant Standard**  (PPE and Risk Activity specific) |
| Eye Protection | Working with lathes, planers, drills, mills and grinders.  Working with, or in the vicinity of descaling tools, wire brushers/grinders, etc.  Working with a cold chisel.  Handling batteries containing electrolyte solutions (eye protection and face shields).  Working with or storing acids, caustic solutions and chemicals (ditto).  Boiler cleaning.  Using high pressure washing equipment.  Working with high pressure gas or hydraulic equipment e.g. gas cylinders, etc.  Breaking cargo (gas or liquid) lines.  Using compressed air tools or blow guns.  Arc or gas welding. | **AS 1337** – Eye protectors for industrial applications  **AS 1674** – Safety in welding and allied processes  **AS 4343** – Pressure equipment – Hazard Levels |
| Helmet | Crane Operations | **AS 1801** – Occupational protective helmets  **AS 1418** – Cranes (including hoists and winches)  **AS 2550** – Cranes – Safe Use |
| Gloves | Crane Operations  Arc or gas welding | **AS 2161** – Occupational protective gloves  **AS 1418** – Cranes (including hoists and winches)  **AS 1674** – Safety in welding and allied processes  **AS 2550** – Cranes – Safe Use |
| Dive Gear | Diving Operations | **AS 2299** – Occupational diving operations |

**HIGH RISK WORK**

No High Risk Work, as defined in the Work Health and Safety Regulations 2011, is to be conducted by contractor personnel who do not hold the appropriate license for conducting High Risk Work.

**High Risk work includes but it not necessarily limited to: scaffolding, crane operations (rigging and dogging), crane and hoist operation (driving), forklift operation and work with pressure equipment.**

**Diving operations are only to be conducted by personnel with appropriate certification. AS 2299 applies.**

**SAFETY PROCEDURES**

Safety procedures are laid down for many tasks and operations performed onboard in Codes of Safe Working Practices and Manufacturer’s Handbooks etc. This section is designed purely to illustrate the kind of procedures that exist. For example:

**ENTRY INTO CONFINED SPACES**

All confined spaces are potentially dangerous. Entry to such spaces is strictly controlled and extensive safety precautions must be taken. Confined spaces are deficient in oxygen or could contain harmful gases. Prior to entry, a competent person using properly calibrated instruments must test the atmosphere within the spaces – after the first test (following 24 hours ventilation) this will be the responsibility of the contractor.

To enter any confined space, contractors **must**:

* Have a completed and registered confined space entry permit authorised by the EO or his representative.
* Have certification that the space is tested to ensure adequate oxygen content and freedom from toxic or flammable gases. Certificates are valid for 24 hours, the first is provided by the ship.
* Wear specified personal protective clothing.
* Station a sentry at the entrance to the space controlling and documenting entries and exits from the space.
* Establish communications systems (only intrinsically safe devices are to be used)
* Have rescue equipment to hand.
* Understand relevant emergency procedures.

If attempting a rescue in a confined space, that space shall not be entered without breathing apparatus. There is a possibility that the rescuer will be similarly overcome and also require rescuing, particularly if the cause of injury is not immediately apparent or the accident was not observed.

**Remember:** **Do not put yourself in danger by entering a space to rescue another person – get help, wear a breathing apparatus and where possible, work in pairs.**

**Entry into a space by the Sentry is only permissible after a relief is stationed and approval given by the EO or his Representative.**

**WELDING AND HOT WORK**

Ships procedures for all welding and hot work operations and AS 1674 – “Safety in welding and allied processes” must be followed at all times. These can be summarised as follows:

* Only personnel who are authorised, trained and qualified are permitted to perform such work.
* Prior to turning on the gas supply, the system is to be physically inspected for integrity, with particular emphasis being placed on the fitment of flame arresters, if the torch is fitted to hoses and all unions have been tightened.
* Correct PPE must be used, particularly eye protection.
* The safety of personnel not directly involved in the operation must be actively considered.
* The effects of the work on the adjacent structure and surrounds with regard to heat transfer, falling slag and sparks etc. must be considered.
* Equipment must be inspected before use. Faulty equipment must be withdrawn immediately from service until repaired.
* A hot work permit must always be issued by the EO or his delegated representative (also check approval from Port Authority).
* Instructions contained in the International Safety Guide for Oil Tanks and Terminals are to be followed.
* Sufficient fire watch sentries for each authorised welding, burning or heating task must be maintained during all hot work on surrounding spaces, bilges, etc. These places must be thoroughly checked on completion of hot work.
* Where an Impressed Current Device has been fitted to a vessel, this must be switched off.
* Flammable liquids are not to be used for cleaning in areas where hot work is being conducted, not for cleaning hot equipment.
* Inform the Port Authority as necessary.

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 coffee or meal break, are checked after the break and prior to recommencing work, to ensure that they are still safe.
* Tag-Out/Lock-Out procedures must be strictly followed to ensure that gases or flammable liquids cannot transfer to a working space via open pipelines, vent systems, unauthorised valve operation, leaking bulkheads, etc.
* Only intrinsically safe lighting and communications are to be used.

**ELECTRICAL SAFETY**

Contractors must operate all electrical equipment in a safe manner and in accordance with the manufacturer’s recommendations. They must ensure that all equipment is maintained in a safe condition in accordance with the manufacturer’s recommended procedures and display an appropriate safety test inspection tag in accordance with AS 3760.

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:

* Proper permit submitted and authorization given by the EO or the ship’s nominated point of contact.
* Remove rings, wrist watches, necklaces, etc
* Where practical, always work on a dry insulating mat.
* 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.
* Follow Tag-Out procedures (see below).
* **BEWARE OF ALTERNATE OR AUXILIARY SUPPLIES – ALWAYS TEST BEFORE TOUCHING.** Just because a light goes out or a motor stops does not necessarily mean a circuit is dead.
* **IF IN DOUBT, CHECK WITH THE EO OR THE SHIP’S NOMINATED POINT OF CONTACT**

**ISOLATIONS: DOUBLE “TAG-OUT” PROCEDURES**

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.

1. **It is the contractor’s responsibility to fasten a uniquely identified “danger tag” to the main isolating switch, control device or valve of any system contract personnel are to work on, if there is any possibility that contract personnel may be injured if someone were to activate the system. Any system isolated by a contractor must also have a “danger tag” placed by ship’s staff. Details of both tags are to be entered in the ship’s tag-out log and signed appropriately before any work commences.**

2. The contractor’s “danger tag” must be clearly marked with the name and contact number of the responsible person (either the worker or supervisor or both) along with the date, time and reason that the isolation was carried out. The ship’s “danger tag” will similarly be marked with the name and contact details of a representative who can remove it.

3. **NO-ONE** is to remove a tag marked with another person’s name. In the event that the responsible person named on the tag is completely unavailable, then a supervisor representing the contractor together with the ship’s EO may remove the tag only after **personally** investigating the situation and ensuring that it is safe to do so.

4. If two or more tasks require isolation of the same system then a separate a danger tag **must** be placed on the isolating switch, valve, etc for each task and marked accordingly.

5. 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 ship’s nominated point of contact.

6. **ALWAYS TEST BEFORE YOU TOUCH.**

**AIR TOOLS vs. POWER TOOLS**

**WARNING: RCD’s/ELCB’s cannot function on board and will not provide users with protection against electrocution.**

Wherever possible to avoid the risk of electrocution, air tools are to be preferred over power tools. Compressed air is available throughout the ship.

Where the use of power tools cannot be avoided, shipboard power outlets are **not** to be used due to the risk of electrocution. All power tools and electrical equipment used by contractors, including extension leads and adapters, are to be maintained in a safe condition in accordance with the manufacturer’s recommended procedures and display current quarterly safety test inspection tags in accordance with AS 3760.

Safe, earthed power boards which can be connected up to mains supply from the wharf will be provided by Navantia.

**LIVE EQUIPMENT**

Where possible, avoid working on **LIVE** electrical equipment. However, if this is deemed necessary, the Navantia Safety Officer and EO are to be informed and a risk analysis of the intended work shall be completed. The EO’s permission must be given before any such work is undertaken and the following additional precautions shall be implemented.

* **NEVER WORK ON LIVE ELECTRICAL EQUIPMENT UNLESS A SECOND PERSON IS PRESENT.** The second person (sentry) should 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.

**SLIPS, TRIPS AND FALLS**

Slips, trips and falls are a common cause of injury. They may occur as a result of tools or materials being left where they should not be or through leaks/spills not being immediately attended to.

Contract personnel must immediately remove any hazard that may cause a slip, trip or fall whilst work is being progressed and if appropriate, the hazardous area shall be “roped off” or suitably guarded.

Areas where floor plates, access walkways, gratings or manhole plates are lifted shall be “roped off” and significantly highlighted to protect and warn other personnel.

**WORKING AT HEIGHTS**

Contractors are only to use ladders or scaffolding to access working platforms. Appropriately tagged scaffolding or authorised working platforms are the only approved methods for working at heights. AS 1576 and AS 4576 refer. When working at heights greater than 1m, safety harnesses complying with AS1891are to be used.

When working aloft (in excess of 2 metres), ship’s staff (Quartermaster and Officer of the Day) are to be informed. All tools used while working aloft are to be secured by lanyards.**SERVICING OVERHEAD RADAR AND RADIO EQUIPMENT**

Navy ships are fitted with electromagnetic radiation emitters which, although similar in function to civilian emitters (radar and radio aerials), have significantly higher peak power output. Some emitters exceed 1000 watts which can have significant health risks. All personnel working in RADHAZ (radiation hazard) areas (selected areas of 04 deck and all of 05 deck and the main mast) **must** comply with the following safety precautions:

When working on or near **radar scanners, communication antennas, working aloft or “Satcom” equipment**, the ship’s staff (Quartermaster and Officer of the Day) must be informed so that the ship’s RADHAZ procedures can be implemented. The tag out/lock out procedure shall be used to prevent operation whilst work is in progress. Contractors must ensure that the systems to be worked on have been isolated and warning notices placed on the equipment.

Work shall not be undertaken on a stationary radar scanner when the equipment itself is operational. There would be a radiation hazard and eyes would be particularly at risk.

When working on overhead radar and radio equipment in the vicinity of the funnel, care should be taken to avoid prolonged exposure to funnel exhaust fumes or gases.

**Radio antennae** connected to transmitters are capable of causing severe RF burning if accidentally touched during transmission. Contractors are to ensure that the transmission aerials have been switched off, earthed and tagged/locked out.

Ship’s staff (Quartermaster and Officer of the Day) are to be informed when work in the RADHAZ area is finished for the day so that the correct safety procedures can be implemented.

**HANDLING CHEMICALS**

Protective clothing of the recommended type must be worn when handling chemicals.

**When handling chemicals the following must always be observed:**

* Unlabelled containers **must not** be used and **must** be returned to the supplier.
* All chemicals must always be handled with the utmost care and used only for their designated purpose.
* Eyes and skin must be protected from accidental exposure or contact. Protective eye goggles, face shields, gloves, gauntlets and rubber aprons must be worn at all times whilst chemicals are being handled.
* All chemicals must be used in accordance with the specific preparation, ventilation and application advice as detailed on its **Material Safety Data Sheet (MSDS).**
* Chemicals must not be mixed other in accordance with the manufacturer’s instruction.
* All chemicals used by contractors on board **must** be accompanied by MSDS:s containing the manufacturer’s or supplier’s advice on the correct use of those chemicals and the medical treatment necessary in the event of an accident. All personnel who are expected to use these specific chemicals **must** be thoroughly briefed on the contents of the MSDS **prior** to use.

Chemicals are not to be stored on-site without express permission of the Navantia Safety Officer. Permission to store chemicals will be contingent on adequate storage arrangements in accordance with:

* **AS 1940** (flammable and combustible liquids)
* **AS 3780** (corrosive substances),
* **AS 4452** (toxic substances) and
* **AS 4681** (dangerous goods and articles).

**ASBESTOS, LEAD-BASED PAINT AND PRIMERS CONTAINING ZINC CHROMATE**

No asbestos, lead-based paint or primers containing zinc chromate have been used in the construction of HMAS STALWART.

**No asbestos, lead-based paint or primers containing zinc chromate material shall be used in any repairs to the ship.**

**FIRE EMERGENCY PROCEDURE**

The first few moments after a fire is discovered are vital in bringing it under control. Contractors who discover an outbreak of fire must immediately **RAISE THE ALARM by shouting FIRE FIRE FIRE.**

**USE OF FIRE EXTINGUISHERS**

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| --- | --- | --- | --- | --- |
|  | **Class of Fire Risk** | | | |
| TYPE | **A -** Paper, wood, textile and rubbish | **B -** Flammable liquids | **C -** Flammable  Gases | **D -** Electrical hazard |
| **WATER** - (red) | YES | NO | NO | NO |
| **FOAM** - (blue) | YES | YES | NO | NO |
| **CO** - (red with a black band) | NO | YES | YES | YES |
| **DRY POWDER** - (red with a white band) | YES | YES | YES | YES |

**ACCIDENT REPORTING SYSTEM**

**Navantia’s safety policy is based on the principle that:**

* **All accidental injuries can be prevented.**
* **Safety precautions can and must be taken for every hazardous situation.**

**For these objectives to be realised, every accident and near miss involving contract personnel must be reported immediately to the Navantia Safety Officer or his Representative.**

**It is the contractor’s responsibility to ensure that Ship’s Staff and Navantia are immediately informed of any suspected injury or illness allegedly sustained while on board HMAS STALWART.**

The Navantia Supervising Officer or ships nominated point of contact shall advise the contractor of the location of the vessel’s available first aid facilities/equipment as appropriate.

**WORKING IN THE MAIN ENGINE ROOM**

It is essential that all personnel entering the Main Engine Room register their presence by means of the whiteboard or pegboard. Of equal importance is that personnel update the whiteboard or pegboard when leaving the compartment.

**EMERGENCY ALARMS**

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| --- | --- |
| **FIRE ALARM:** | Continuous ringing on the ship’s General Alarm Bells and/or ship’s whistle |
| **EMERGENCY MUSTER STATIONS ALARM SIGNAL:** | A series of 7 short, 1 long on the General Alarm Bells |
| **ABANDON SHIP ALARM SIGNAL:** | A series of 1 short, 1 long on the General Alarm Bells and/or ship’s whistle sounded at least 3 times in succession |
| **CO2 OR HALON DISCHARGE ALARM:** | A combination of visual and audible alarms. This will be advised by the Chief Engineer or Chief Officer |

**ENVIRONMENTAL ISSUES**

Contractors are reminded that HMAS STIRLING Garden Island is located in a National Park, protected under the Conservation and Land Management Act 1984. While work on HMAS STALWART should always be conducted with environmental concerns in mind, extreme care must be taken when working on a ship alongside at HMAS STIRLING.

Specifically:

* A number of protected species make their home on Garden Island, including Tammar wallabies, carpet pythons, tiger snakes, Fairy Penguins and bottle-nosed dolphins. Killing any of them deliberately attracts a hefty fine but if any are injured accidentally, you are required to contact the ranger, Naval Police or a member of Naval personnel who will arrange for someone to assess whether the animal must be euthanized and, in the case of a female Tammar, whether a joey might be saved.
* All industrial and other waste is to be removed from the island.
* No contaminants are to be allowed to enter the water.
* No plants are to be brought onto the island.
* No animals are to be brought onto the island
* Fox sightings are to be reported.
* Fishing is prohibited from the ship, the wharf and any work area.

**PASSES**

Contractor passes are to be displayed at all times.

**CLEANLINESS, TIDINESS AND CONSIDERATION**

Contractors are reminded that while HMAS STALWART may be a workplace for some, it is a home for the crew. Work areas are to be kept clean and tidy as much as possible, particularly at the end of the working day.

Your consideration while working on and moving around the ship is appreciated.

**Please complete the Contractor Induction Checklist provided**