



SAFETY TIPS

Aviation Slip, Trip & Falls



Personnel falling off aircraft continues to be a serious hazard. This is mainly occurring while performing aircraft maintenance tasks to include transitioning on and off the aircraft utilizing ladders. Falls represented 19% of Marine Aviation Maintainer Injuries and 17% of Navy Aviation Maintainer Injuries. These mishaps were 100% preventable. When working on or inspecting aircraft it is imperative that maintainers and others exposed follow SOP's, use sound judgment and sustain a high state of situational awareness. It is every leaders responsibility to ensure that their personnel are at the highest level of readiness possible by ensuring all procedures are followed, incorporate Risk Management in all operations, assure controls are in place and provide appropriate safe and healthful SOPs, facilities and equipment for all personnel.

- FALL HAZARDS:** Any time an individual is elevated more than four (4) feet they are exposed to a fall risk and proper fall protection training and equipment may be required! Falls from elevations can result in broken bones, head trauma and even death. Assessing the operation for these exposures involves fall hazard survey / assessments to be conducted, knowing your SOPs, tech manual warnings, and tasks. You must identify all areas or tasks where it is possible that individuals may fall from elevated work surfaces. Samples and guidance for conducting a fall hazard survey / assessment can be found in the Department of The Navy Fall – Protection Guide 02 July 2020. Link to the guide is provide in Resources at the bottom of this safety tip.
- ENGINEERING CONTROLS:** Engineering controls are those measures which if used properly, eliminate the human error component by altering the facility or equipment in such a way that the individual's exposure is minimized or eliminated. Some examples of engineering controls are maintenance stands, railings, aerial lift equipment or other systems that protect the Marine from falling. Maintenance is required for these types of equipment. Engineering controls are the preferred method for protecting personnel from fall exposures.
- ADMINISTRATIVE CONTROLS:** Administrative controls are procedures put into place by SOP, tech manual or other means to reduce your exposure to falls. This includes introducing new work practices that reduce the risk of a person's falling (e.g., erecting warning lines or designated areas, restricting access to certain areas, posting of warning signs or training).
- PERSONAL PROTECTIVE EQUIPMENT (PPE):** These shall be used after other control measures are determined not to be practical, or when secondary systems are needed. PPE for falls can consist of a full body harness with a lanyard attached to an approved anchorage point.



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Anchorage points will be identified from conducting fall hazard survey / assessments by a trained and designated command Competent Person for Fall Protection. Further guidance and reference can be found in the Department of The Navy Fall – Protection Guide 02 July 2020.

- **LADDERS AND STANDS**: Ensure the correct ladder for the maintenance is being used and extends three feet past the point of access. All ladders in Aviation Maintenance are single person usage. Maintenance Stands must be in good working condition, inspected prior to use and placed close enough to the aircraft to prevent a fall. Swing gates must be installed on all B-4 stands.
- **RISK MANAGEMENT**: Risk management is a process used to identify hazards and help control risks. When hazards are identified, risk mitigation procedures must be implemented to reduce injury potential. Risk Management may not be used to circumvent SOPs, engineering controls, or PPE!
- **MISHAP SUMMARY**: There have been 1 Class B, 10 Class C, 12 Class D and 2 Class E mishaps and several other HAZREPS in the past 3 years. Below is a summary of a few of these reported mishaps:
 1. MV-22B - Marine fell from RH Nacelle platform w/out proper PPE while conducting preflight inspection, resulting in multiple injuries resulting in lost work days.
 2. MV-22B - Maintainer fell from top of wing resulting in lost work days.
 3. CH-53E - Marine was performing maintenance on the No. 1 nose gear box, slipped and fell off sponson.
 4. MV-22B - Marine was performing maintenance while on a ladder and inadvertently fell. Marine was injured to the extent that EMS was required resulting in lost work days.
 5. MV-22B - Maintainer fell off wing during night maintenance evolution resulting in concussion.
 6. MV-22B - Marine fell from aircraft empennage while conducting maintenance; fractured left wrist and L1 compression fracture; surgery required.
 7. MV-22B - Maintenance; Maintainer fell off B-4 stand; Lower spine fracture; Confined to quarters 3 days, light duty 1-3 months.



RESOURCES:

<https://intelshare.intelink.gov/sites/nsc/Pages/Fall-Protection.aspx>

<https://intelshare.intelink.gov/sites/nsc/OnOffDuty/DON%20FALL%20PROTECTION%20GUIDE%2002%20July%202020%20%28FINAL%29.pdf>

Manage the Risk



Protect the Force