

DROP ZONE



EXPEDITIONARY & SPECIAL WARFARE JUMP SAFETY NEWSLETTER



Navy EOD technicians exit the back of a C-2A Greyhound, assigned to the Providers of Fleet Logistics Support Squadron (VRC) 30, during a static-line training jump run by Explosive Ordnance Disposal Training and Evaluation Unit (EODTEU) 1 April 21, 2022. (U.S. Navy photo by Mass Communication Specialist 2nd Class Jason Waite)

IN THIS ISSUE

Tactical Floatation Support System Maintenance Findings.....1
 NAOP Findings.....2-3
 Malfunction and Incident One-Liners.....4

Your Jump Safety Division Analyst

Safety Command Main Line:
 757-444-3520
 (DSN) 564-3520

Jump
 CWO5 E.J. Nabors
 Jump Analysts Group Ring: ext. 7842

Email:
NAVSAFECOM_CODE44_EXW_JUMP@navy.mil

RMI Help Desk: 866-210-7474

deficiencies related to periodic maintenance actions and initial issue inspections.

Bottom Line

Ensure maintenance is being performed and documented on TFSS at prescribed intervals.

Commander, Naval Expeditionary Combat Command, and Commander, Naval Special Warfare Command, received a second safety assurance letter signed by Chief of Naval Operations, Special Assistant for Safety Matters, March 21 to take appropriate actions to mitigate risks to their forces from improperly maintained TFSSs.

We hope this will prompt corrective action, so please – help us help you.

NAVY AIRBORNE OPERATIONS PROGRAM

The previous edition of Drop Zone discussed the significant changes to the way the Naval Safety Command conducts Navy Airborne Operations Program (NAOP) inspections and assurance visits as well as streamlining the way malfunctions and incidents are reported to Aerial Delivery Manuals and Malfunctions Office in Fort Gregg-Adams, Virginia.

This edition will identify and communicate some of the findings discovered during those revamped inspections and assessments. The findings, along with how we discovered them, are important for the force to learn from and apply to operations and daily maintenance actions.

KEY FINDINGS AND OBSERVATIONS

Tactical Flotation Support System Maintenance

On July 13, 2022, Chief of Naval Operations, Special Assistant for Safety Matters, released a safety assurance letter to both Commander,

Naval Special Warfare Command, and Commander, Navy Expeditionary Combat Command, identifying a lack of required maintenance and documentation on lifesaving personnel flotation equipment.

The letter also provided the following recommended corrective actions for commands that employ the Tactical Flotation Support System (TFSS): immediately conduct a one-time inspection of all systems; immediately begin using the 3-M program to conduct and document maintenance actions; educate supply departments on initial issue inspection requirements and record serial numbers and in-service dates; and inform all TFSS users of maintenance requirements, regardless of how they were issued.

Unfortunately, we are still finding commands that issue the TFSS to members individually without documenting or completing maintenance actions. Spot-checks show

NAOP FINDINGS

During a parachute fatality investigation, investigators discovered pack-in-process Quality Assurance Inspections (QAI) were not being performed per OPNAVINST 3501.225 on main parachutes employed by the command. The mishap recommendations (MISRECs) from this incident included revising verbiage in OPNAVINST 3501.225 to require all parachutes, main and reserve, have QAIs performed by qualified Special Operations Parachute Riggers (SOPR); establish non-tactical, commercial off the shelf ram-air personal parachute training at the SOPR course in Fort Gregg-Adams, Virginia; and require the documentation of QAIs in either the parachute log record books or NAVSEA parachute history card.

In a follow-on, no-notice NAOP inspection in the same command, inspectors discovered QAIs were not being conducted or documented in accordance with OPNAVINST 3501.225.

How Does This Happen?

Unit leadership was ill-advised by their subject matter experts and told they could implement their own qualification process to train parachutists to perform pack-in-process QAIs outside OPNAVINST 3501.225 requirements. They did not realize this practice was a causal factor in a previous fatality. Leaders were also told they could simply request an exception to policy without addressing causal factors or MISRECs from the original investigation.

What's the Fix?

When causal factors are identified, recommendations are made in an attempt to eliminate, or at a minimum mitigate identified risks. The QAI recommendations for this incident were drafted and approved at every level throughout the mishap unit's chain of command, ending at the Chief of

Naval Operations. Entire courses of instruction (COI) were established with increases in SOPR manpower for both the mishap unit and the Fort Gregg-Adams SOPR COI to ensure QAIs could be conducted independent of the parachutist and without interruption to operational requirements.

BOTTOM LINE

Follow policy and review MISRECs during all in-depth, deliberate and time-critical risk management phases of planning for high-risk airborne operations.

If you have any questions regarding MISRECs or don't know the process for obtaining them, please email PRCM Jeff Schmidt or PRCS Patrick St.Clair at NAVSAFECOM_CODE44_EXW_JUMP@navy.mil.

Significant Equipment Maintenance Findings

Finding 1

During inspection of a ready-for-issue MC-6 main static line parachute, significant corrosion was discovered on the canopy release assembly, chest strap friction adapter and leg ejector snaps.

Recommendation

Ensure maintenance personnel conduct Technical Rigger Type Inspections, per NAVSEA SS400-A1-MMO-010.

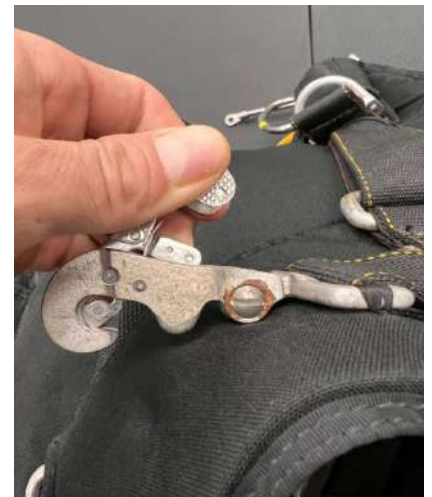


Finding 1 Example

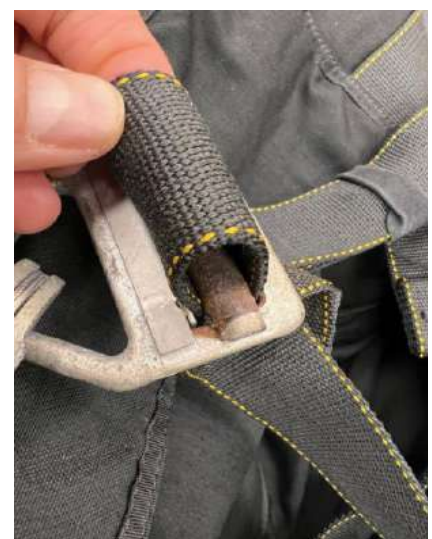
Finding 2

During inspection of two ready-for-issue MT2-XX/SL Personal Parachute Systems, severe corrosion was discovered on metal components, including main lift web friction adapters, leg ejector snaps, and reserve static line snap, shackle and ring assemblies.

Recommendation: Ensure MT-2XX/SL maintenance procedures are conducted per NAVSEA SS400-AX-MMO-010 Rev. 1 with all corrosion treated prior to system repack.



Finding 2 Example #1



Finding 2 Example #2

NAOPS FINDINGS (cont.)



Finding 2 Example #3



Finding 2 Example #4



Finding 2 Example #5

Finding 3

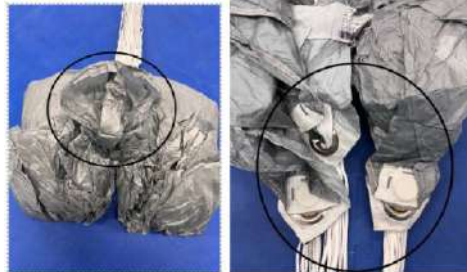
The center cell/leading edge of both reserve parachutes were pulled out significantly and over the width reduction folds. The reserve slider was incorrectly positioned and not in accordance with the Army Technical Manual used for maintenance, TM 10-1670-335-23&P.

Recommendation

Follow the packing and maintenance requirements per Army Technical Manual TM 10-1670-335-23&P without deviation.

BOTTOM LINE

Do not deviate from prescribed packing or maintenance procedures. Follow the applicable publications. Stop asking “Would I jump it?” Instead, strive for perfection. Remember the rigger motto: “I will be sure always.”



Finding 3 Example #1



Finding 3 Example #2

DIVING SAFETY LINES

Commander, Naval Safety Command
RADM Christopher Engdahl

Deputy Commander
Col Hugh Atkinson

Command Master Chief
CMDMCM (A/SW) Dean Sonnenberg

EDITORIAL STAFF

Public Affairs Officer
Jeffrey Jones

**Media & Communications
Division Head**
Priscilla Kirsh

Editors
Leslie Tomaino
Amy Robinson

JUMP SAFETY DIVISION

**Expeditionary & Special Warfare
Director**
Don Ciesielski

**Expeditionary & Special Warfare
Deputy Director**
Bradley Loftis

Jump Safety Division Head
CWO5 E.J. Nabors

The Team
PRCM Jeff Schmidt
PRCS Patrick St.Clair

Stop asking, “Would I jump it?” Instead, strive for perfection.
Remember the rigger motto: “I will be sure always.”

MALFUNCTION & INCIDENT ONE-LINERS

Total reported jumps since March 1, 2022:
36,208

Total reported malfunctions and incidents
since March 1, 2022: **28**

Malfunction and incident One-Liner

Highlights:

1. Parachute landing training; emergency cut-away; main parachute; landed safely on drop zone.
2. Military free fall; off drop zone landing; fractured right tibia.
3. Military static line parachuting; improper parachute landing fall; sprained left ankle; first aid treatment.
4. Military free fall; main canopy malfunction; no injury or damage to personnel or equipment; cut away of main chute and deployment of reserve.
5. Military free fall parachute training; member fell during landing sequence; injured fingers; treated and released.
6. Military free fall; hook turn at low altitude, impacted ground; sustained lower back injury; member treated.
7. Military free fall; poor landing; left fibula and ankle; surgery.
8. Military free fall; bag lock; cut-away; landed safely.
9. Military free fall; bag lock; main parachute; student landed on drop zone under reserve parachute.
10. Military free fall; dual canopy deployment due to inadvertent activation of red reserve ripcord handle; main canopy loss due to cut-away; no injuries.
11. Military free fall; main canopy malfunction; service member performed cut-away and landed safely.
12. Military free fall; dual canopy deployment; neck and back; hospitalized.
13. Military free fall; dual canopy deployment; suspending use of PS2 system.
14. Military free fall; hard landing with MMPS; bruised right knee.
15. HAHO, CE, O2 parachute insert; off drop zone landing due to lower-than-planned opening; jumper on light duty for seven days.
16. Military free fall; possible line over; MMPS main parachute not recovered; jumper landed on drop zone under reserve.
17. Military free fall; unstable at pull altitude; automatic activation device (AAD) (Cypress) activated; dual canopy landing.
18. Military free fall; service member conducted emergency cut-away procedures; main parachute; service member landed safely on drop zone with no injures.
19. Military free fall; unstable at opening altitude; No damage or injury; landed on drop zone under reserve parachute.
20. Military free fall; hard landing; parachutist injured neck; Surgery.
21. Military free fall; closed-end cells; cut-away main parachute.
22. Parachute operation; main closing pin torn from HDPC bridle; MMPS; Service member successfully deployed reserve parachute, landed safely on drop zone.
23. Military free fall; failure to locate pilot chute, AAD fire, dual canopy deployment/ landing; jumper experienced back injury; broken L1.
24. Static line parachute training; landed on runway; minor abrasions to shoulder/hands; first aid treatment.
25. Military free fall; hard landing; fractured ankle; further treatment required.
26. Military free fall; hung slider; lost main parachute; cut-away; landed under reserve on drop zone.
27. Military free fall; member impacted ground obstacle; serious injuries incurred; fatal.
28. Personnel parachute operations; towed jumper; no damage, towed parachutist uninjured; parachutist soreness.

Self-Assess/Self-Correct

Naval Safety Command will never know if any of the above incidents and malfunctions had causal and contributing factors that were the result of residual, unidentified or unmitigated risk. ONLY the supervisors and participants at each command know if more could have been done to prevent them. Remember – incidents and malfunctions are different, and most incidents have supervisory or organizational influences that lead to or contribute to the occurrence. Malfunctions can have human errors and result in an incident, but typically they do not “just happen.” We ask that you self-assess and self-correct during your Malfunction Officer Investigations. Human factors are the leading cause of DOD mishaps, and human interaction with tools, tasks, working environments and other people can both positively and negatively influence human performance.

****REMEMBER – it usually requires a SERIES of events to cause a mishap, but only ONE defense mechanism to prevent it.****

Do you have feedback or ideas? Let us know!



NAVAL SAFETY COMMAND
EXPEDITIONARY & SPECIAL
WARFARE DIRECTORATE
375 A STREET
NORFOLK, VA 23511

Phone : 757-444-3520 x 7842

DSN : 564-3520

Fax: DSN 564-3520

Email: NAVSAFECOM_CODE44_EXW_JUMP@
navy.mil

www.navalsafetycommand.navy.mil