



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
US ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND
AVIATION AND MISSILE RESEARCH, DEVELOPMENT, AND ENGINEERING CENTER
5400 FOWLER ROAD
REDSTONE ARSENAL, ALABAMA 35898-5000

3 Nov 17 | R19
2 Oct 01

RDMR-AE

MEMORANDUM FOR All U.S. Army Units

SUBJECT: Airworthiness Release (AWR) for Rescue Hoist Equipment on UH/HH-60 Helicopters (AWR 980)

1. This memorandum constitutes an AWR in accordance with (IAW) Army Regulation (AR) 70-62 for use of approved listed rescue equipment on the UH/HH-60 helicopters equipped with a rescue hoist. This AWR ensures safety compatibility with the host aircraft. This AWR does not ensure durability and performance of the subject equipment.
2. Validity: This AWR is terminated on **30 Nov 19**, changes in configuration of the subject equipment, or issuance of a later AWR, whichever occurs first.
3. List of Appendices: This memorandum and Appendix A will be carried in the logbook, and a complete AWR copy with all appendices shall be kept in the aircraft historical record file.

- Appendix A. Restrictions and Operating Information
- Appendix B. Configuration and Installation Detail
- Appendix C. Inspections, Maintenance, and Logbook Instructions
- Appendix D. References

4. The point of contact for this action is Mr. Nathan Proper RDMR-AEU, DSN 897-3124, Commercial (256) 313-3124, or e-mail: nathan.j.proper.CIV@mail.mil, alternate POC is Bill Silvey, (Support Contractor, CGI Federal) DSN 897-3147, Commercial (256) 313-3147, or e-mail: william.e.silvey2.CTR@mail.mil or usarmy.redstone.rdecom-amrdec.mbx.ae-utts@mail.mil.

KEITH R. DARROW
Director
Aviation Engineering Directorate

2 Encls

1. Addendum, Rev 1 - Rescue Hoist Hooks
2. Brochure - 2UP Device

RDMR-AE

SUBJECT: Airworthiness Release (AWR) for Rescue Hoist Equipment on UH/HH-60 Helicopters (AWR 980)

Appendix A. Restrictions and Operating Information:

1. Operate the UH-60A/L/M and HH-60L/M IAW the Operator's Manual (reference 1, 2, or 3), as appropriate, except as modified by this AWR.

WARNING

Dynamic rollout occurs when the rescue device bypasses the hook gate keeper and separates from the hook assembly. Failure to ensure the locking mechanism remains in the locked position on the rescue hoist hook assembly or failure to maintain positive control of cable slack may result in a dynamic rollout of the rescue device, which can lead to serious injury or death of personnel.

2. During hoist operations, comply with standards outlined in Training Circular (TC 3-04.33), Task 2060 (reference 7).
3. The 2UP Hoist Assist Device shall be marked with P/N "2UP-510D" to ensure it is not susceptible to dynamic rollout with any hook listed in the Addendum (reference 9). All other versions of the 2UP Hoist Assist Device are not approved for use.

RDMR-AE

SUBJECT: Airworthiness Release (AWR) for Rescue Hoist Equipment on UH/HH-60 Helicopters (AWR 980)

Appendix B. Configuration and Installation Detail:

1. The basic UH-60A/L/M and HH-60L/M helicopter is defined in reference 1, 2 or 3, with exceptions as noted within this AWR.
2. The following equipment (Table 1) is compatible with all current existing AWRs:

Item Description	NSN	P/N
Forest Penetrator	4240-00-199-7353	K26-1000-9
Forest Penetrator	4240-01-500-8115	K26-1000-105
SKED Complete Rescue System**	6530-01-301-0796	SK-800
SKED Basic Rescue System**	6530-01-260-1222	SK-200
Rescue Net	1670-01-172-3592	X-872-SF
Rescue Strop (Quick Strop)	4240-01-545-6722	214
Rescue Strop	1680-01-347-4946	216-1
#402 Hoistable Litter	6530-01-187-0104	402
#402-TI Hoistable Litter w/ Titanium Variant	6530-01-187-0104	402-TI
#415 Static Discharge Cable *	N/A	#415
#420 Rescue Seat without Lift Insert**	4240-01-465-2302	420
#420 Rescue Seat with Lift Insert	4240-01-465-2302	420
495 Rescue Basket	1670-01-566-6578	495
495-L Rescue Basket *	N/A	495-L
499-B Rescue Basket	4240-01-250-0313	499-B
#404 Stokes Litter Basket	6530-01-338-6094	404
#406 Stokes Litter Basket	6530-01-397-0094	406
#190 Litter Hoist Slings **	1670-01-226-5300	190
#193-A Litter Hoisting Sling*	N/A	193-A
Steel "O" Ring*	N/A	2004* (Source List in Ref 8)
2UP Hoist Assist Device*	N/A	2UP-510D

Table 1.

*495-L Basket, #415 Cable, 2UP Hoist Assist Device and #193-A Sling must be ordered directly from the manufacturer.

**These items are subject to possible rollout due to the size of the attachment eyelet. The Mil-Spec Hook (without pin), Slide-Lok, and Slide-Lok II Hooks require use of the P/N 2004 Steel Alloy "O" Ring as a preventative measure against dynamic rollout. The auto-locking hooks (Auto-Lok, D-Lok, and Mil-Lok) have no susceptibility to dynamic rollout.

NOTE

The subject equipment has no interface with the host helicopter other than physical connection to rescue hoist hook.

The Medic must ensure that the grounding cable does not get snagged/entangled on/with anything on the ground.

RDMR-AE

SUBJECT: Airworthiness Release (AWR) for Rescue Hoist Equipment on UH/HH-60 Helicopters (AWR 980)

3. The approved rescue hoists hooks are in the attached Rescue Hoist Hook Addendum. See Addendum for more information and pictures of these hooks.
4. The Forest Penetrator (NSN 4240-00-199-7353, P/N K26-1000-9) is mounted to the rescue hoist by the rescue hook passing through a lifting eyebolt. The Forest Penetrator is maintained and operated IAW NAVAIR 13-1-6.5 (reference 5).
5. The Forest Penetrator (NSN 4240-01-500-8115, P/N K26-1000-105) is the same as the obsolete P/N K26-1000-9 it replaces, with the addition of a Fouling Preventer Assembly and full length eyebolt. The Forest Penetrator is mounted to the rescue hoist by the rescue hook passing through a lifting eyebolt. The Forest Penetrator is maintained and operated IAW TO 14S6-3-1 (reference 6).
6. Deleted
7. The SKED Complete Rescue System (NSN 6530-01-301-0796, P/N SK-800) consists of the SKED Basic Rescue System (P/N SK-200), the Inflatable Flotation System, and the Oregon Spine Splint II. The SKED stretcher is mounted to the rescue hoist by the rescue hook passing through the large steel locking carabiner that passes the four ends of the equalizing straps. The SKED Complete Rescue System is maintained and operated IAW FM 8-10-6 (reference 4).
8. The SKED Basic Rescue System (NSN 6530-01-260-1222, P/N SK-200) is mounted to the rescue hoist by the rescue hook passing through the large steel locking carabiner that passes the four ends of the equalizing straps. The SKED Basic Rescue System is maintained and operated IAW FM 8-10-6 (reference 4).
9. The Rescue Net (NSN 1670-01-172-3592, P/N X-872-SF) is mounted to the rescue hoist by the rescue hook passing through the pickup ring. The Rescue Net is maintained and operated IAW NAVAIR 13-1-6.5 (reference 5).
10. The Rescue Strop (NSN 1680-01-347-4946, P/N 216-1) is mounted to the rescue hoist through the rescue hook passing through the dual "V" rings. The Rescue Strop is maintained and operated IAW NAVAIR 13-1-6.5 (reference 5).
11. The #420 Rescue Seat (NSN 4240-01-465-2302, P/N 420) is mounted to the rescue hoist through the rescue hook passing through the lifting eyelet. The Rescue Seat is maintained and operated IAW NAVAIR 13-1-6.5 (reference 5). The aluminum Rescue Seat Lift Insert, while not hindering the use of the #420 Rescue Seat, changes the geometry of the lifting connection point so that the seat is no longer susceptible to dynamic rollout.
12. The Rescue Basket (NSN 1670-01-566-6578, P/N#495 and #495-L) is mounted to the rescue hoist through the rescue hook passing through the lifting eyelet. The #495-L is recommended to

RDMR-AE

SUBJECT: Airworthiness Release (AWR) for Rescue Hoist Equipment on UH/HH-60 Helicopters (AWR 980)

be used with the internal rescue hoist due to the inverted lifting eye. The #495 and 495-L Rescue Basket is maintained and operated IAW NAVIR 13-1-6.5 (reference 5).

13. The Rescue Basket (NSN 4240-01-250-0313, P/N 499-B) is mounted to the rescue hoist through the rescue hook passing through the lifting eyes. The Rescue Basket is maintained and operated IAW NAVAIR 13-1-6.5 using the P/N 495 maintenance information (reference 5).

14. Lifesaving Systems Corp, Static Discharge Cable, P/N #415, is mounted to the rescue hoist through the rescue hook. The static discharge cable is used to dissipate the static charge sometimes experienced during hoist operations.

15. Life Savings System Corp, Rescue Strop (Quick Strop), P/N #214, is mounted to the rescue hoist through the rescue hook passing through the dual "V" rings. The Rescue Strop is maintained and operated IAW NAVAIR 13-1-6.5 (reference 5).

16. The Lifesaving Systems Corp (LSC) #404 / #406 Stokes Litter Baskets and #190 / #193-A Slings are maintained and operated IAW NAVAIR 13-1-6.5 (reference 5).

17. The Lifesaving Systems Corp (LSC) #402 / #402-TI Hoistable Litter (also known as MEDEVAC Litter) are maintained and operated IAW NAVAIR 13-1-6.5 (reference 5).

18. The Steel "O" Ring P/N 2004 (also known as 3-4 Ring to emphasize the inside/outside diameter, or a Multiple Attachment Point (MAP) Ring) is maintained and operated IAW NAVAIR 13-1-6.5 (reference 5).

19. The Air Rescue Systems 2UP Hoist Assist Device, stamped with 2UP-510D, is the only approved version for use. All other 2UP Hoist Assist Devices are not approved due to susceptibility of dynamic roll out. The 2UP Hoist Assist Device shall be maintained IAW the 2UP Brochure 2015 (Enclosure 2 and reference 8).

20. The logistical POC for rescue hoist equipment is Mr. Keith Little, DSN 788-2103 or commercial (256) 842-2103, email: keith.c.little.civ@mail.mil.

Appendix C. Inspections, Maintenance, and Logbook Instructions:

1. The subject equipment shall be inspected and maintained IAW all applicable maintenance manuals and associated messages.
2. Any/all logistics support required for such equipment/system installation must be established and maintained by the operating unit with appropriate, locally established, support activities. Parts needed for this modification may not be available in the supply system. Your activity/facility must locally procure/manufacture the modification parts (plus any additional spare parts). This AWR is not authorization to procure any material or sources "Sole Source."

RDMR-AE

SUBJECT: Airworthiness Release (AWR) for Rescue Hoist Equipment on UH/HH-60 Helicopters (AWR 980)

3. Unit Commanders are responsible for training on operation of subject equipment and any aircraft-unique training required as a result of subject equipment installation.
4. In the event any operating limits established by this release are exceeded, in addition to the normal entry on DA Form 2408-13, appropriate inspections for security and condition of modifications shall be performed prior to next flight. Any incident or malfunction of the aircraft suspected of being related to these configuration modifications shall be reported immediately to the POC.
5. When not in use, the subject equipment shall be stowed and secured IAW reference 1, 2 or 3, Chapter 6, Section VI.
6. Logbook Entries:
 - a. In accordance with Department of the Army (DA) Pamphlet 738-751, the following entry shall be made on the DA Form 2408-13-1 and shall be perpetuated on each form during the period of installation or until superseded by another AWR, or until reason for limitation is removed. Any recurring maintenance action may be entered on the DA Form 2408-18. Enter the required action, frequency, when due, and AWR number on the DA Form 2408-18. Place a circled "X" in the Status block. In the Faults/Remarks block, make the following entry: "Operate IAW AWR 980, dated **3 Nov 17**."
 - b. For Army Materiel Status System (AMSS) or DA Form 1352 reporting purposes, the above write-ups shall not cause the aircraft to be reported as Partially Mission Capable (PMC). Aircraft which are nonstandard configured and operating under this release may be reported as Fully Mission Capable (FMC).
 - c. The aircraft DA Form 2408-15 shall be annotated to cite this AWR by subject and date. The 2408-15 shall be annotated to reflect temporary installations as well as permanent changes to configuration.
 - d. Unit Level Logistics System-Aviation (ULLS-A) users shall use the equivalent electronic form.

RDMR-AE

SUBJECT: Airworthiness Release (AWR) for Rescue Hoist Equipment on UH/HH-60 Helicopters (AWR 980)

Appendix D. References:

1. Technical Manual 1-1520-237-10, Operator's Manual for UH-60A, UH-60L, and EH-60A Helicopters, 25 Sep 09, with all changes.
2. Technical Manual 1-1520-253-10, Operator's Manual for HH-60A and HH-60L Helicopters, 30 Jun 10, with all changes.
3. Technical Manual 1-1520-280-10, Operator's Manual for UH-60M and HH-60M Helicopters, 14 Aug 09, with all changes.
4. Field Manual 8-10-6, Medical Evacuation in a Theatre of Operations, Tactics, Techniques and Procedures, 14 Apr 00.
5. Technical Manual NAVAIR 13-1-6.5, Aviation-Crew Systems, Rescue and Survival Equipment, 1 Sep 10, with all changes.
6. Technical Manual TO 14S6-3-1, Operation and Maintenance with Parts List, Forest Penetrator, Rescue Seat Assembly P/N K26-1000-5 and K26-1000-9, 30 Aug 95, with all changes.
7. Training Circular TC 3-04.33 (TC 1-237), Aircrew Training Manual (ATM) Utility Helicopter, H-60 Series, Aug 16.
8. Air Rescue Systems (ARS) Brochure, 2 UP Device Hoist Assist Device, 2015 (Enclosure 2).
9. Rescue Hoist Hook Addendum, Rev 1, subject: Authorized Hoist Hooks (Enclosure 1).