This publication implements AFI 11-2UH-1NV3, *UH-1N Helicopter Operations Procedures*. It does not apply to the Air National Guard or

Air Force Reserves. Aircrew will use the abbreviated guides/checklists during mission planning and execution. Individuals will carry the applicable guides/checklists in the USAF flight crew checklist binder or the Electronic Flight Bag.

Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS), or any updated statement provided by the AF Records Management office (SAF/CIO A6P).

This publication may be supplemented at any level. Major command (MAJCOM)/direct reporting unit (DRU) level supplements to this publication will be coordinated with AFGSC/A3H and HQ AFFSA/XOF prior to approval and publishing IAW AFPD 11-2, *Aircraft Rules and Procedures*. Copies of MAJCOM/DRU-level supplements, after approval and publishing, will be provided by the issuing MAJCOM/DRU to HQ AFFSA/XOF and HQ AFGSC/A3H.

Field units below MAJCOM/DRU level will forward copies of their supplements to this publication to their parent MAJCOM/DRU office of primary responsibility for approval prior to publication.

Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, Recommendation *for Change of Publication.* Route AF Form 847s from the field through the appropriate functional chain of command to HQ AFGSC/A3HO.

The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to

the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items.

Forward waiver requests IAW waiver guidance in AFI 11-2UH-1N, Volume 3.

(AFDW) AFI 11-2UH-1N, Vol 3, CL-1, 16 March 2015, is supplemented as follows. This supplement prescribes specific guidance for Air Force District of Washington (AFDW) commanders, AND aircrew operating UH-1N helicopters. This supplement does not apply to Air National Guard (ANG) or Air Force Reserve Command (AFRC) units. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Refer recommended changes and questions about this publication to AFDW/A3OV using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate chain of command. AFDW A3/5, 1500 West Perimeter Road, Suite 5370 must approve any supplement to this publication.

The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items.

SUMMARY OF CHANGES

This document has been completely rewritten and must be thoroughly reviewed. Major revisions include updates of multiple briefings, making the Aircrew Briefing applicable to all missions and re-aligning other briefings and checklists by functional area. AIE preflight checklists were incorporated and AFI 11-2UH-1NV3CL-2 is deleted.

(AFDW) This publication has been substantially revised and must be completely reviewed. Major changes include addition of Garmin 530 and EHSI information for instrument procedures. Additionally, AFDW specific items were added to the Aircrew Briefing.

AIRCREW BRIEFINGS

<u>AIRCREW BRIEFING</u>

Use this briefing for all missions. Brief only those items applicable to your profile. This is only a guide. There is no requirement to brief items in sequence, but all topics appropriate to the mission must be included. Additional topics not covered in this guide may also be briefed. Use the Specialized Briefings or Checklists if applicable. (Items marked with * are for formation operations and items marked with # are for tactical operations and may be omitted for single ship or non-tactical operations.)

1. **Time Hack**

2. **Roll Call**

3. **Mission Introduction**
    a. Classification
    b. Mission objective(s)
    c. Training objective(s)
    d. Mission overview/sequence of events
    e. Inventory of references
        (1) Edition number of maps/charts/confirm CHUM
        (2) Mission packets #
        (3) Coordinate types and sources/DATUM
        (4) Information confirmation with supporting/supported forces

4. **Situation #**
    a. Intelligence
        (1) GOB/AOB (Ground Order of Battle/Air Order of Battle)
        (2) Friendly forces

     (3) Safe areas
     (4) Code words and procedures
     (5) SRUF/ROE (Standing Rules on the Use of Force/Rules of Engagement)

5. **Mission Specifics**
   a. Weather
      (1) Departure, en route, destination
      (2) Sun/Moon data
      (3) Limitations
   b. NOTAMS/FCIF
      (1) **(Added-AFDW)** Ramp Freezes
   c. Go/No-Go
   d. Risk assessment
   e. **(Added-AFDW)** Passenger Manifest

6. **Pre-Departure**
   a. Designated lead/alternate(s) *
   b. Call Sign(s), Parking, Tail number(s), Transponder Configuration
   c. Weight and Balance
      (1) Passenger requirements
      (2) Fuel loads (mission capable/Joker/Bingo)
      (3) Special mission equip (mission/classified gear, CBRNE/VIP kit)/configuration
   d. Performance data/TOLD
      (1) Mini-TOLD
   e. Personal equipment
      (1) Personal flight publications (ePubs synched)
      (2) NVGs
      (3) Flashlights/Chem-Lights
      (4) Tape
      (5) Helmet
      (6) Ear protection
      (7) Dog tags
      (8) Remove jewelry

           (9)   Additional personal equip (ACDE/SEA/LPU/CSEL, weapons, survival gear, etc.)

    f.   Step/Station/Load Time

    g.   Communications check *

    h.   Start/Taxi Time and Taxi Route

    i.   Bump plan *

    j.   Abort criteria

    k.   Anti-Hijacking/Security Plan

    l.   **(Added-AFDW)** Coordination for landing/take-off (PPR)

7.   **Departure**

    a.   Communications, Aircraft Lighting/Transponder Configuration

    b.   Type of takeoff

    c.   Airspeed and rate of climb

    d.   Power checks

    e.   Rejoin *

    f.   Abort plan

8.   **En route** (Brief once for initial leg and items that change for subsequent legs)

    a.   Description of route

        (1)   **(Added-AFDW)** Airspace restrictions (TFRs, P-40 expansion, etc.)

    b.   Hazards (wires, lights, towers, birds, A/C de-confliction)

    c.   Altitude and Airspeed/Groundspeed

    d.   Type of formation and spacing *

    e.   Communications and lighting

        (1)   **(Added-AFDW)** Frequency changes

    f.   Navigation settings/responsibilities

    g.   Wingman duties *

    h.   Lost visual contact procedures/IMC Breakup plan (ESA) *

        (1)   **(Added-AFDW)** Rejoins*

    i.   Lead changes *

    j.   Contingencies (lost, early, late)

    k.   Fuel management

    l.   Scanner duties

    m.   Cabin security

    n.   Blind Procedures *

    o.   Evasive Maneuvers #

    p.   **(Added-AFDW)** Actions upon receiving HTAWS/TCAD alert

9.   Objective/Terminal Operations (brief for each objective)

    a.   Description of IP and track to LZ

    b.   Description of objective
        (1) Features (elevation, size, suitability, slope, etc.)
        (2) Hazards (obstacles, wind considerations/limitations, etc.)
        (3) Threats #
        (4) **(Added-AFDW)** AF IMT 4303 review

    c.   Approach Procedures
        (1) Altitude/Airspeed/Groundspeed
        (2) Type formation and spacing *
        (3) Point to begin approach
        (4) Aircraft/LZ lighting
        (5) Type of approach

    d.   Arrival/Landing Procedures
        (1) TOT
        (2) Type of arrival (Air Land/AIE – hover height)
        (3) Type formation/spacing/specific touchdown points *
        (4) Aircraft lighting/communications
            (a) Team frequency/call sign
            (b) Code words/authentication
            (c) Communications-out procedures
        (5) Performance data (Arrival/Departure)
            (a) **(Added-AFDW)** Allowable passenger/cargo load and configuration
        (6) Go-Around procedures/intentions

    e.   Refuel plan

    f.   Egress plan/route

    g.   Contingencies
        (1) Downed aircraft
        (2) Actions on Enemy Contact #
        (3) Initiation of alternate LZ #

  (4) Other

10. Recovery
 a. Description of airfield/landing Area
 b. Arrival/Landing procedures
 c. Communications
 d. Taxi/Marshaling
 e. Storage of classified gear or weapons
 f. Aircraft security

11. Crew Duties/Responsibilities (Pilot flying, Pilot not flying, Flight Engineer/Special Mission Aviators and other crew members)
 a. Changing control of the aircraft
 b. Emergency Actions/Intentions (critical/non-critical)
  (1) Takeoff, en route, landing
  (2) Land/over water
  (3) Inadvertent IMC (ESA)
 c. NVG operations
  (1) Donning/Removing goggles
  (2) Goggle malfunctions
 d. Handling of passengers

12. Additional Briefing Items
 a. Applicable specialized briefing(s)
 b. EP of the day
 c. CRM topic of the day
 d. Special Interest Item(s)/Topics
 e. Update Time/Location

POST FLIGHT AIRCREW DEBRIEFING

1. Roll Call

2. Briefing Classification

3. **Mission Accomplishments**
   a. Mission objective(s) achieved
   b. Training objective(s) achieved

4. **Deviations from Plan/Standards**

5. **Lessons Learned**
   a. Preparation/Briefing
   b. Execution
      (1) Formation *
      (2) Route
      (3) En route
      (4) Objective area
      (5) Landing
      (6) Tactics
      (7) Communications/Lighting
      (8) Crew coordination

6. **Documentation/Forms Completion**

7. **Classified gear, mission equipment and/or weapons turn-in**

SPECIALIZED BRIEFINGS

ALERT/STANDBY BRIEFING

(Added-AFDW) Use this briefing for assumption of an alert period. During every subsequent 24 hour period of the alert, or upon a change in conditions, crews will conduct an update brief addressing applicable changes. At a minimum, the asterisk (*) items will be updated or verified current.

1. **Alert/Standby Period**
    a. **(Added-AFDW)** Alert risk assessment
    b. **(Added-AFDW)** Situation/Intelligence *
        (1) **(Added-AFDW)** Threats
    c. **(Added-AFDW)** Alert type
    d. **(Added-AFDW)** Mission status *
    e. **(Added-AFDW)** Crew location *
    f. **(Added-AFDW)** Flight planning
        (1) **(Added-AFDW)** Local/destination weather *
            (a) **(Added-AFDW)** Sunrise/sunset
            (b) **(Added-AFDW)** Moonrise/moonset, illumination, predicted EMI
        (2) **(Added-AFDW)** Aircraft number, call sign, spare, parking plan
        (3) **(Added-AFDW)** Fuel load, mission capable fuel, bingo fuel
        (4) **(Added-AFDW)** Weight and balance
        (5) **(Added-AFDW)** Performance data/TOLD (departure/ELZ/destination, allowable load)*
        (6) **(Added-AFDW)** NOTAMs, FCIF, Go/No-Go, Ramp Freezes

2. **Response Time**

3. **Notification Procedures**

4. **Launch/Scramble Procedures**

a. **(Added-AFDW)** Expected objective (ELZ/destination) *

TRANSITION/EMERGENCY PROCEDURES BRIEFING

1. Transition/EP Area

2. Traffic Pattern
a. Direction
b. Altitudes and airspeeds

3. Transition Maneuvers
a. Parameters
b. Calls

4. Practice Emergency Procedures
a. Actual vs. simulated emergency intentions
b. Entry into simulated emergency conditions
c. Expected crew member calls

ORDNANCE DELIVERY BRIEFING

1. Range/Mission Number/Range Time

2. Range Clearing Procedures

3. Range Restrictions

4. Arming Procedures

5. Patterns
a. Altitude/Airspeed
b. Fields of fire

6. Communications
a. Air-To-Air/Air-To-Ground
b. Inter-plane

7. Weapons Malfunctions
 a. Hot gun route
 b. De-arming location

8. Smoke Deployment

9. Range Exiting Procedures

10. Safety Considerations (nearest medical facility, weather aborts, off range fires)

INSTRUMENT COCKPIT CHECK (To be completed in aircraft)

1. Publications - Appropriate and current

2. Airspeed Indicator - At or near zero

3. Attitude Indicator - Check limits and set

4. VVI - At or near zero

5. Turn And Slip - Static position

6. Heading and Magnetic Compass - Check and compare

7. Barometric Altimeter - Set and checked

8. Radar Altimeter - Test and set
 a. **(Added-AFDW)** AN/APN-232(V) Radar Altimeter
   (1) **(Added-AFDW)** Indicator set control knob – Rotate past detent (allow 30 seconds for warm-up)
   (2) **(Added-AFDW)** Set VALI to 400 feet
   (3) **(Added-AFDW)** Test by pressing and releasing the SET knob

        (a) **(Added-AFDW)** Pointer to 500 feet, digital readout 88888 and R/T light illuminates for 1.5 secs

        (b) **(Added-AFDW)** Pointer to 300 feet, digital readout displays 300+/- 10 feet and LO light illuminates

    (4) **(Added-AFDW)** Reset VALI as required

  b. **(Added-AFDW)** AN/APN-171(V) Radar Altimeter (Block 1 Aircraft)

    (1) **(Added-AFDW)** Indicator control knob – Rotate clockwise from OFF (allow 5 minutes for warm-up)

    (2) **(Added-AFDW)** Set VALI to 75 feet

    (3) **(Added-AFDW)** Test by pressing the control knob

        (a) **(Added-AFDW)** Pointer will indicate 100 +/- 15 feet

        (b) **(Added-AFDW)** Release the control knob – pointer will decrease

        (c) **(Added-AFDW)** Low warning lamp and tone will activate as pointer passes below 75 feet

    (4) **(Added-AFDW)** Reset VALI as required

9. **Clock** - Set and checked

10. **Defroster/Pitot Heat** - As Required

11. **Navigation Equipment** – Checked

VOR/ILS/MB NAVIGATION SYSTEM TEST

1. **VOR Frequency -** Tune a valid receivable frequency

2. **Nav Mode Switch -** Select VOR

3. **CI** - Set to 315º

4. **MB/VOR Test Switch -** Press and hold (Look for the following indications)

   a. All MB lights illuminate
   b. BDHI bearing pointer rotates to 315º
   c. CDI centers
   d. TO-FROM indicator displays "TO"

(Added – AFDW) VOR/ILS/MB NAVIGATION SYSTEM TEST (HTAWS/TCAD)

1. **Garmin 530 (inverter must be on)**
   a. Aviation Database – Check currency (if using RNAV or GPS capability)
     (1) Also available at Aux Page 2
   b. Marker Beacon (MB) Test Switch – Test (EHSI displays MT)

TACAN SELF TEST

1. **Function Switch** - Select T/R

2. **Nav Mode Selector Switch** - Select TACAN

3. **CI** - Set to 180°

4. Allow 90 Seconds for Warm-up

5. **Test Button** - Depress and release (Look for the following indications)
   a. Light for 1 second
   b. For 7 seconds: DME off flag and bearing pointer 270°
   c. For next 15 seconds:
     (1) OFF flags gone, DME 0 +/- 0.5
     (2) Bearing pointer 180 +/- 3°
     (3) CDI centered +/- half dot
     (4) TO-FROM indicator displays "TO"
   d. If light stays on - system failure (repeat test in REC mode, and if good, only the transmitter is bad)

(Added-AFDW) TACAN SELF TEST (HTAWS/TCAD)

1. **Tune and Identify** – If no station is receivable, verify OFF indications on CDI and bearing pointer(s)
2. **TACAN Function Switch** - T/R

3. **NAV Source** – Select TCN1

4. **EHSI OBS switch** – Pilot or copilot as required

5. **CDI** – Set to 180º

6. **Allow 90 seconds for warm-up**

7. **Test button** - Depress and release, look for the following indications:
   a. Light for 1 second
   b. Off flag (Red X) over CDI scale for 7 seconds
   c. For next 15 seconds:
       (1) OFF flag disappears, DME +/- 0.5
       (2) Bearing pointer 180 +/-3º
       (3) CDI centered +/- half dot
       (4) TO-FROM indicator displays "TO"
   d. DME and course displayed in upper left corner of EHSI and also with bearing pointer(s)
   e. If light stays on – system failure (repeat test in REC mode, if pass only transmitter is bad)

(Added-AFDW) TACAN SELF TEST (BLOCK 1)

1. **TACAN Mode** – Select F2, then Select T/R

2. **Tune** - an <u>unavailable</u> channel

3. **Select TACAN subsystem TEST page**
   a. **IDX button**

    b.   **Select System test (lower left softkey)**

    c.   **Select TCN (lower right softkey)**

    d.   **Select Initiate test (upper left softkey)**

4.   Check status for BIT GO/NO GO results

TACAN/VOR TEST (at ground checkpoint)

1.   Tune and Identify

2.   Nav Mode Switch - As required

3.   Bearing Pointer - Points to station (+/- 4° error from TACAN/VOR ground checkpoint)

4.   DME - +/- .5 mile or 3% error, whichever is greater

5.   CDI - Check centered, (+/- 4° error from known checkpoint)

6.   Check TO-FROM Ambiguity

(Added-AFDW) TACAN/VOR (at ground checkpoint) (HTAWS/TCAD)

1.   Tune and Identify

2.   EHSI NAV Source – TCN1/NAV1 as required

3.   EHSI OBS switch – Pilot or copilot as required

4.   Define Bearing Pointers – As required

5.   Bearing Pointer – Points to station (+/- 4º error from TACAN/VOR ground checkpoint)

6.   DME - +/- 0.5 Mile or 3% error whichever is greater

7.   **CDI –** Check Centered, (+/-4º error from TACAN/VOR ground checkpoint)

8.   **Check TO-FROM Ambiguity**

ILS TEST(at an airfield with an ILS)
1.   **Tune and Identify**

2.   **Marker Beacon Volume Control -** Checked on

3.   **Nav Mode Switch** - VOR

4.   **Select Proper Approach Course**

5.   **Check CDI and GSI Indications**

(Added-AFDW) ILS (at an airfield with an ILS or LOC) (HTAWS/TCAD)

1.   **Tune and Identify**

2.   **EHSI NAV Source –** Select ILS1/LOC1

3.   **EHSI OBS Switch –** Pilot or copilot as required

4.   **Garmin 530 CDI button –** Select VLOC

5.   **Select proper approach course**

6.   **Check CDI and GSI Indications**

INSTRUMENT DEPARTURE BRIEFING

To be accomplished in aircraft; if briefed elsewhere, re-brief any changes in aircraft prior to departure

1. **Navigation/Communication Radio Settings** (set for IFR departure or emergency return)

2. **Restrictions/Clearance**

3. **Hazardous Terrain/Obstacles**

4. **Emergency Intentions**

5. **Emergency Return Approach**
    a. Type of approach/page #/TCN
    b. DA/MDA
    c. Inbound course
    d. Emergency safe/sector altitude

6. **Single Engine Procedures** (departure routing, emergency escape routing and obstacle avoidance)

INSTRUMENT APPROACH BRIEFING
To be accomplished in aircraft prior to IAF

1. **ATIS/Airport Information**

2. **Type of Approach/Page #/TCN**
    a. **(Added-AFDW)** RNAV/GPS – Compare charted vs. GPS waypoints, distances and headings

3. **Weather Required for the Approach**

4. **Navigation/Communication Radio Settings**
    a. **(Added-AFDW)** Primary radios, GPS, HTAWS control panel, EHSI

5.   Heading and Attitude Systems

6.   Altimeter (Barometric/Radar)

7.   Final Approach Fix/ Final Approach Course

8.   DA/MDA/Descent Rate
   a.   **(Added-AFDW)** Identify location of final approach fix
   b.   **(Added-AFDW)** Review intermediate step downs

9.   Missed Approach Point and Intentions

10. Minimum Safe Altitudes (min sector/emergency safe)

11. Airfield Review (alignment, lights, obstacles, elevation)

12. Crew Duties

13. Lost Communications Intentions

14. Backup Approach

15. Before Landing Checklist/Landing Light

NOTE: When accomplishing successive approaches, only the items that have changed need be briefed

TACTICAL INGRESS CHECKLIST
Items may be pre-briefed but should be reviewed in the aircraft.
Required prior to tactical operations only (may or may not include low level profiles)

1.   Radio Responsibilities – Assumed

2. **Mission Capable Fuel** – Verified

3. **Bingo Fuel** – Confirmed

4. **Performance Data/TOLD** – Computed/Confirmed

5. **Exterior Lights** – Set (state setting)

6. **Transponder** – Set (state setting)

7. **Radar Altimeter** – Set (state setting)

8. **Shoulder Harness** – Locked/Unlocked

9. **AIE Checklist/Equipment** – Complete (if applicable)

10. **Aircraft Weapons –** State Weapons Status (brief status, if applicable)

11. **Before Landing Checklist** – Completed

<u>TACTICAL POST EGRESS CHECKLIST</u>
Intended to be accomplished in the aircraft

1. **Exterior Lights** – Set (state setting)

2. **Transponder** – Set (state setting)

3. **Radar Altimeter** – Set (state setting)

4. **Shoulder Harness** – Locked/Unlocked

5. **AIE Checklist/Equipment –** Completed (if applicable)

6. **Aircraft Weapons –** "Clear", State Weapons Status

7.   **Mission Capable Fuel** – Verified

(Added-AFDW) MEDEVAC BRIEFING

1.   **Type**
   - a.   Stretcher/ambulatory
   - b.   Time Critical
   - c.   Number of patients

2.   **Flight Planning**
   - a.   DD 175 filed (as applicable)
   - b.   Coordination for fuel
   - c.   Passenger manifest

3.   **Aircraft Configuration**
   - a.   Incubator/Transformer
   - b.   Cargo straps
   - c.   Litters
   - d.   Headsets/Y-cords

ALTERNATE INSERTION/EXTRACTION BRIEFING

1.   **Device to Be Used**

2.   **Intended Hover Height**

3.   **Load/CG**

4.   **Protective Equipment**

5.   **Go Around**

6.   **Power Available/Power Required/TOLD**

7.   **Communications (Air to Ground)**

    a.   Radio

    b.   Hand signals

Table 1. HOIST HAND SIGNALS

ACTION	MEANING
Open palm of hand indicating direction	Aircraft movement
Index finger in a circling movement overhead; point in the direction of flight	Survivor in Secure, Ready for Takeoff; Or Go-Around
Clenched fist	Stop Aircraft; Cable Movement; Hold hover
Clenched fist with thumb pointing up or down	Hoist Cable Up / Down
Clenched fist held horizontally with thumb pointing left or right	Hoist Boom Left / Right
Fingers extended, joined moving and chopping motion against the opposite wrist	Cut Cable
Two fingers extended moving lower arm forward and backward at head height	Hoist Power Switch in Opposite Position

8.   **Emergency Procedures**

    a.   Aircraft malfunctions

    b.   Equipment malfunctions

    c.   Oscillations/Pendulum action

    d.   Communication/Intercom failure

    e.   Emergency Procedures for Hung Rappeller or Hung Climber

9.   **Cable Cut Procedures**

10. **Crew Duties**

11. **Hazards** (Terrain, Wind, Weather)

ROPE LADDER PRE-DEPLOYMENT CHECKLIST

1.   **Anchor Cable –** Installed/Inspected

2.   **Carabiners and Attachment Straps** – Attached

3.   **Rope Ladder** - Positioned for deployment

4. Conduct Hot Mike Check - "Rope Ladder Pre-Deployment Checklist Completed - One (state length) Foot Rope Ladder Ready for Deployment. Acknowledge" (FE/AG/SMA)

5. "Loud and Clear" - (P, CP) (Acknowledgment completes this checklist)

FAST ROPE PRE-DEPLOYMENT CHECKLIST

1. Fast Rope - Attach to gantry hook.

2. Fast Rope - Positioned for deployment

3. Conduct Hot Mike Check - "Fast Rope Pre-Deployment Checklist Completed, One (state length) Foot Fast Rope Ready for Deployment. Acknowledge" (FE/AG/SMA)

4. "Loud and Clear" - (P, CP) (Acknowledgment completes this checklist)

RAPPEL ROPE PRE-DEPLOYMENT CHECKLIST

1. Anchor Cable – Installed/Inspected

2. Snap links/Carabiners – Attached

3. Rappel Rope - Positioned for deployment

4. Conduct Hot Mike Check - "Rappel Rope Pre-deployment Checklist Completed, one (state length) Foot Rappel Rope Ready for Deployment. Acknowledge" (FE/AG/SMA)
5. "Loud and Clear"- **(P, CP)** (Acknowledgment completes this checklist)

SMOKE/FLARE DROP CHECKLIST

1. Aircrew Restraint Device - On

2. **ICS** – Set

3. **Gloves** – On

4. **Door** – Open

5. **Smoke/Flare Device** - Prepared for deployment

6. **SMOKE/FLARE DROP CHECKLIST** – "**COMPLETED**"
(FE/AG/SMA)

SEARCH BRIEFING

1. **Objective**
   a.   Number of survivors/description/medical condition
   b.   Specialized aircraft equipment required

2. **Search Area**

3. **On Scene SAR Forces/On Scene Commander (OSC)**
   a.   Establish contact with OSC; if none, accomplish OSC duties

4. **Communications** (with SAR forces & controlling agency)

Table 2. DISTRESS AND EMERGENCY FREQUENCIES

Frequency	Use/Agency
40.50 MHz	VHF-FM Emergency
121.5 MHz	International Aeronautical Emergency
123.1 MHz	NATO/ICAO Scene of Action (SAR)
156.8 MHz	International Maritime Distress Channel (16)
243.0 MHz	International Aeronautical Emergency
282.8 MHz	International Scene of Action (SAR)
406.0 MHz	Primary Search and Rescue frequency (SAR)

5. **Weather** (en route/on scene/recovery)

6. Search Pattern, Track Spacing, Altitude/Airspeed

Table 3. VISUAL DETECTION CHART

(Ranges Shown in Miles)					
Equipment Type	*Down Sun*	*Cross Sun*	*Up Sun*	*Overcast*	*Night*
Yellow Raft (1 to 7 man)	1.9	1.4	1.1	1.0	-
Signaling Mirror	6.3	7.0	4.3	-	-
Dye Marker	3.8	2.5	2.2	-	-
Smoke	8.3	7.4	7.1	6.7	-
Life Jacket	0.2	0.18	0.16	0.15	-
Life Jacket Light	-	-	-	-	0.5
2-Cell Flashlight	-	-	-	-	2.4
Hand-Held Star Signal	-	-	-	-	32.0
Ferry Cartridge	-	-	-	-	17.5

7. Power Available/Power Required

8. Bingo Fuel/Refueling options

9. Actions upon sighting objective

10. Recovery Location/Medical facilities

CARGO SLING BRIEFING

1. Load Description

2. Sling Length/Hover Height

3. Radar Altimeter Setting

4. Power Available/Power Required

5. Cargo Hook Sling Arming/De-arming

6. Hand Signals

7. Hookup

    a.   Grounding
    b.   Eye protection
    c.   Restraint devices
    d.   External lighting

8.   En route Airspeed and Altitude

9.   Release

10. Emergency Actions

11. Safety Considerations

CARGO SLING PRE-PICKUP CHECKLIST

1.   Power Available/Power Required - Computed/Confirmed

2.   Cargo Release Switch - Armed

3.   Radar Altimeter(s) - Set

4.   Cargo Sling Load- Attached

5.   Conduct Hot Mike Check - "Cargo Sling Pre-Pickup Checklist Completed and Ready for Pickup. Acknowledge" (FE/AG/SMA) "Loud and Clear" (P, CP) (Acknowledgment completes the checklist)

AIRDROP - EQUIPMENT/PERSONNEL BRIEFING

1.   Type of Drop

2.   Drop Zone
    a.   Markings
    b.   TOT
    c.   Visual signals

3. **Air to Ground Communication**s
 a. Radio/Intercom
 b. Hand signals

4. **Drop Procedures**
 a. Altitude/airspeed
 b. Track
 c. Drop order
 d. Door procedures

5. **Crew Coordination**

6. **Emergency Procedures/Hung Jumper/Bundle**

7. **Post Deployment Procedures**

FIRE BUCKET BRIEFING
This briefing replaces the cargo sling briefing when using the fire bucket.

1. **Fire Location**

2. **On Scene Forces**
 a. Call signs
 b. Frequencies

3. **Aircraft Configuration**
 a. Cabin seats/seatbelts
 b. Cargo tie downs
 c. External lighting
 d. Fly-away/TDY kit

4. **Cargo Hook Arming/De-arming**

5. **Hand/Ground-To-Air Signals**

6. **Radar Altimeter Setting**

7. **Bucket Load/Fuel Burn-Off Time**

8. **Power Available/Power Required**

9. **En route Altitude/Airspeed/MSA**

10. **IMC Avoidance**

11. **Water Source** (if known)

12. **Refuel Location**

13. **Emergency Actions/Safety Considerations**

FIRE BUCKET INGRESS CHECKLIST
Complete Part A or Part B first, as applicable to the fire situation.
Part A: (complete prior to flying with the bucket suspended)
1. **Water Release Mechanism** - Check

2. **Bucket Load -** Set Percentage

3. **Cargo Release Switch -** Arm

4. **Sacks-a-foam Panel** – Configure

5. Loud Speaker Switch (or Instrumentation Master Switch) - On

6. **Radar Altimeters** - Set

7. **Power Available/Power Required/TOLD -** Compute/Confirm
    a. Mini TOLD
    b. Confirmation, if less than 10% power margin

8. **Water Release Mechanism -** Check (after filling bucket)

Part B: (complete prior to entering the fire area)

1. **Controlling Agency -** Contact

2. **Bingo Fuel -** Confirm

3. **Radio Responsibilities** - Assume

4. **Shoulder Harness -** As required

5. **Before Landing Checklist -** Complete

FIRE BUCKET EGRESS CHECKLIST

1. **Controlling Agency** - Notify off fire

2. **Shoulder Harness** – As required

3. **Loud Speaker Switch (or Instrumentation Master Switch)** – Off

AIE PREFLIGHT GUIDE

The following information was extracted from T.O. 00-25-245, *Testing and Inspection for Personnel Safety and Rescue Equipment*.   Reference T.O. 00-25-245 for expanded information.

27. FOREST PENETRATOR

1. Inspection/Weight-Check Label – Check for current date.
2. Condition – Check the following items:
    a. Damaged parts (broken, bent, deformed, or fractured). Bent seats, broken springs, bent bolts, etc., can be replaced with new parts. If main body of assembly is damaged, condemn complete assembly without replacement of parts.
    b. Missing parts, bolts, nuts, cotter pins, springs and straps.
    c. Flotation Collar. Secure as required.

d. Seats and hooks for freedom of movement to all positions, and proper latching and unlatching.
e. Corrosion.
f. Document any discrepancies in AFTO Form 781A.

28. RESCUE STROP

1. Weight check date current.
2. Inspect fabric for cuts, deterioration, and abrasions.
3. Inspect seams for proper adhesion and stitching.
4. Inspect retainer straps for security of attachment and wear.
5. Inspect all hardware for security of attachment, corrosion, damage, wear, and if applicable, ease of operation.

29. RESCUE LITTER ASSEMBLY (STOKES LITTER)

The following Stokes Litters are approved for use:
   # 402 Medevac one piece, confined area
   # 404 Medevac II one piece
   # 406 Medevac IIA break-apart model
   # 406-TI Medevac IIA TI Titanium break-apart

A 5000-pound locking carabiner will be used to attach the stokes sling assembly to the hoist hook.

If any of the following conditions are noted, repair or replace prior to placing in service:

1. Inspect stokes litter for general condition.
2. Inspect all metal for cracks, indents, corrosion and security of attachment.
3. Inspect all welds for cracks and security of attachment.
4. Inspect snow skids for general condition (if applicable).
5. Inspect suspension bed webbing for cuts, tears, stains, fraying and security of attachment
6. Inspect quick release fittings for ease of operation, sharp edges and corrosion.

7. Inspect all straps for cuts, tears, stains, fraying and security of attachment.
8. Inspect lift rings for deformity or cracks.
9. Inspect all stitching for fraying and security of attachment.
10. Inspect all webbing for cuts, tears, fraying and grease contamination.
11. Inspect carabiners for proper gate alignment, ease of operation, cracks and corrosion.
12. Inspect carabiner gate pin hinge for deformity/security of attachment.
13. Inspect for reflective tape on rescue litter and carabiners.
    a. Red reflective tape (2 places, 1-1/2 x 1/2-inch) at upper attachment points (as required).
    b. White reflective tape (2 places, 1-1/2 x 1/2-inch (NIIN 01-078-8660) at lower attachment points (as required).
14. Inspect entire flotation assembly for general condition, cleanliness, cuts, tears, fraying and for presence of oil, fuel, grease or chemical contamination.
15. Inspect lift cable sets for one crimp, identified by 1/2-inch wide compression on swaging sleeves and defects such as kinks, broken wire strands, corrosion.

30. RANDON TECH ROPE LADDER
(H-1 ELPD800PD-1)
If any nicks or excessive fraying to the point of broken strands are found, do not use the rope ladder for live operations, as serious injury or death may result. See figures 5-7 and 5-8 in T.O. 00-25-245.

The following indicate obsolete equipment and should not be used for live operations, serious injury or death may result:

• Corrosion on the rivet-washer connection points (should be stainless-stainless).
• Rope ladder fabric with shiny appearance (similar to a vehicle seat belt).
• Detacher housings without beveled or rounded edges

When preparing the rope ladder for night operations, do not use duct tape on the nylon fabric.
Duct tape residue hinders the post flight fabric cleansing, and hides potential problem areas. (e.g. use rubber bands, plastic zip ties).

During inspection, dragging the rope ladder on concrete should be kept to a minimum to reduce abrasion and maintain normal service life.
1. Ensure detacher serial numbers match rope ladder.
2. Inspect detacher device fasteners for loosening and failure.
3. Inspect detacher pip pin for proper spring/operation.
4. Inspect carabineers for corrosion and proper operation.
5. Inspect wheeled rungs/fasteners for loosening and failure.
6. Inspect main ladder straps for dry-rot, holes, nicks and excessive fraying.
   • Ensure both sides of the rope ladder are visually inspected.
   • Detachers are "powder-coated", there is no need to oil parts.
   • Small amounts of hydraulic fluid are allowed on the fabric.
7. Ensure the ladder is cleaned after use.
8. Inspect ladder rungs for damaged tubes or grip tape.
9. Inspect rung rivet-washer points for corrosion, cracks or stretched fabric.
10. Ensure no twists exist with main ladder straps.

Refer to T.O. 00-25-245 for post flight requirements.

31. FAST ROPE

1. Check the woven loop on the mount end for excessive wear or chemical contamination.
2. Check the rope along its entire length for fraying, cuts and chemical contamination. Inspect for any cut, chafe, or nicks that affect the integrity of the rope.
3. Do not use a rope that is severely frayed (light fraying on the rope from normal use does not weaken the rope).
4. Do not use a rope when any single strand is cut halfway through.

5. Inspect the rope for contamination of acid, alkaline compounds, saltwater, fire extinguisher solutions or petroleum-based solvents. Changes in color caused by chemicals are usually blotchy and have an unusual odor. Although used ropes gradually change color, such changes do not indicate a decrease in strength unless the change is due to contact with strong chemicals. Changes occurring because of use are usually uniform throughout the length of the rope.
6. Make necessary inspection entries on the appropriate form.

Refer to T.O. 00-25-245 for post flight requirements.

(AFDW)

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Director, Operations, Plans and Requirements

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 11-2, *Aircraft Rules and Procedures*, 14 Jan 2005

AFI 11-2UH-1N Volume 3, *UH-1N Helicopter Operations Procedures,* 19 Apr 2012

AFI 11-2UH-1N Volume 3 CL-1, *UH-1N Helicopter Crew Briefing Guides and Checklists,* 27 Feb 2007

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AFI 33-360, *Publications and Forms Management,* 25 Sep 2013

AFMAN 33-363, *Management of Records*, 1 Mar 2008

T.O. 00-25-245, *Testing and Inspection for Personnel Safety and Rescue Equipment, 1 Sep 2006, change 4, 10 Aug 2013*

Forms Adopted

AF Form 847, *Recommendation for Change of Publication,* 22 Sep 2009

AFTO Form 781A, 11 Sep 2008

Abbreviations and Acronyms
AC—Aircraft Commander
ACDE—Aircrew Chemical Defense Equipment
AFDW—Air Force District of Washington
AFFSA—Air Force Flight Standards Agency
AIE—Alternate Insertion/Extraction
AOB—Air Order of Battle
BDHI—Bearing-Distance-Heading Indicator
(Added-AFDW) BIT – Built-in-Test

CBRNE— Chemical, Biological, Radiological, Nuclear Explosive
CDI—Course Deviation Indicator
CG—Center of Gravity
CHUM—Chart Update Manual
CI—Course Indicator
CSEL—Combat Survivor Evader Locator
DA—Decision Altitude
DME—Distance Measuring Equipment
(Added-AFDW) EHSI - Electronic Horizontal Situation Indicator
(Added-AFDW) EMI – Effective Moon Illumination
EP—Emergency Procedure
EPUBS—Electronic Publications
ESA—Emergency Safe Altitude
FCIF—Flight Crew Information File
GOB—Ground Order of Battle
GSI—Glide Slope Indicator
(Added-AFDW) GPS – Global Positioning Sensor
(Added-AFDW) HEEDS – Helicopter Emergency Egress Device System
(Added-AFDW) HTAWS/TCAD – Helicopter Terrain Awareness Warning System/Traffic Collision Avoidance Device
IAF—Initial Approach Fix
ICS—Intercommunications System
(Added-AFDW) ID - Identification
IFR—Instrument Flight Rules
ILS—Instrument Landing System
IMC—Instrument Meteorological Conditions
IP—Initial Point
(Added-AFDW) IR - Infrared
(Added-AFDW) LOC - Localizer
LPU—Life Preserver Unit
LZ—Landing Zone
MB—Marker Beacon
MDA—Minimum Decent Altitude
(Added-AFDW) MEDEVAC – Medical Evacuation
(Added-AFDW) MT – MB Test

(Added-AFDW) MSA – Minimum Safe Altitude
(Added-AFDW) NAV - Navigation
NOTAMS—Notice to Airmen
NVG—Night Vision Goggles
(Added-AFDW) OBS – Omni Bearing Selector
(Added-AFDW) PED – Portable Electronic Device
(Added-AFDW) PPR – Prior Permission Required
(Added-AFDW) REC – Receive
(Added-AFDW) RNAV – Area Navigation
ROE—Rules of Engagement
SAR—Search and Rescue
SEA—Survival Egress Air
SRUF—Standing Rules on the Use of Force
TACAN—Tactical Air Navigation System
TCN—Terminal Change Notice
TOLD—Takeoff and Landing Data
TOT—Time On Target
(Added-AFDW) VALI – Variable Altitude Limit Index
(Added-AFDW) VLOC – VOR/Localizer Receiver
VHF—Very High Frequency
VOR—VHF Omni-Directional Radio Range
VVI—Vertical Velocity Indicator