

**BY ORDER OF THE  
SECRETARY OF THE AIR FORCE**

**AFMAN11-2HH-60GV3CL-1**  
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***Flying Operations***



***HH-60G HELICOPTER CREW  
BRIEFING GUIDES AND CHECKLISTS***

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This checklist establishes amplifying procedures for operation of the HH-60G aircraft. HH-60G crewmembers must carry this checklist for all flights. This checklist complements AFMAN 11-2HH-60G Volume 3, *HH-60G Operations Procedures*.

Submit recommendations for improvements to this volume on an DAF Form 847, *Recommendation for Change of Publication*, to the parent NAF/MAJCOM. Approved recommendations are then forwarded to Air Combat Command (ACC) Personnel Recovery Aviation Branch ACC/A3JO. Forward waiver requests in accordance with waiver guidance in AFMAN 11-2HH-60GV3.

***SUMMARY OF CHANGES***

This change has been revised significantly to align terminology, requirements, and waiver authority with AFMAN 11-2HH-60GV3 and should be reviewed thoroughly.

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## **GENERAL AIRCREW BRIEFING**

This briefing is designed for single ship, non-tactical flight operations. Briefing format is a guide and there is no requirement for items to be briefed in sequence. Additional topics not covered in this guide may also be briefed. Use Specialized Briefings or Checklists when applicable.

### **1. Time Hack**

### **2. Roll Call**

### **3. Classification**

### **4. Mission**

- 4.1. Primary and Alternate
- 4.2. Training Objectives
- 4.3. Desired Learning Objectives
- 4.4. Mission Objective
- 4.5. Sequence of Events
- 4.6. Route of Flight/Hazards to Flight
  - 4.6.1. Visual Search Responsibilities
    - 4.6.1.1. Departure/En Route/Recovery
    - 4.6.1.2. High Density Traffic Areas
  - 4.6.2. Mid-Air Collision Avoidance
    - 4.6.2.1. From Other Military Aircraft
    - 4.6.2.2. From Civilian Aircraft
  - 4.6.3. BASH/Bird Hazard
    - 4.6.3.1. Bird Hazards along Route (en-route and low-level)
    - 4.6.3.2. Bird Hazards in Terminal Area
    - 4.6.3.3. Bird Hazards at Training Range

### **5. Weather**

- 5.1. Takeoff, en-route, destination
- 5.2. Sunrise, sunset, begin morning civil twilight, end evening civil twilight
- 5.3. Moon rise, moon set, angle, illumination, anticipated electromagnetic interference
- 5.4. Sea state/Water temperature

### **6. Flight Planning**

- 6.1. Aircraft Tail Number(s), Spare, Call Sign(s)
- 6.2. Parking
- 6.3. Fuel Load, Mission Capable Fuel, Bingo Fuel, and Aircraft Configuration
- 6.4. Weight and Balance
- 6.5. TOLD/Energy Management (EM) Data
- 6.6. Seat Time, Start Time, Takeoff, Duration
- 6.7. NOTAM, Flight Crew Information File, Go-No-Go, Special Interest Items
- 6.8. Passengers/MEP

- 6.9. Anti-Hijacking
- 6.10. RM/Increased Mission Risk Factors (BASH, unfamiliar area, weather, crew complement, etc.) / Risk Mitigation

## **7. Crew Duties and Responsibilities**

- 7.1. Changing control of aircraft
- 7.2. Emergency Actions/Intentions
- 7.3. SMA Duties
- 7.4. Scanning
- 7.5. Inadvertent IMC

## **8. Equipment**

- 8.1. Flight Publications, Maps, Electronic Map Overlay
- 8.2. Aircrew Flight Equipment
- 8.3. Personal Equipment, ID Tags, Jewelry
- 8.4. Classified Material/COMSEC

## **9. Specialized Mission Briefings**

## **10. Questions**

## **11. RM/Risk Mitigation**

- 11.1. Recap risks
- 11.2. Recap mitigation measures associated with the briefed operation(s).

## **ALERT CREW BRIEFING**

- 1. Alert Period**
- 2. Response Time**
- 3. Notification Procedures**
- 4. Scramble Procedures**

## **MISSION BRIEFING**

This briefing guide is intended for tactical, formation, and NVG missions. It incorporates the essential elements of the General Aircrew and AIE briefings.

- 1. Time Hack (give source)**
- 2. Roll Call**
- 3. Classification**
- 4. Situation/ Orders of Battle**
- 5. Mission**
  - 5.1. Primary/ Alternate
  - 5.2. Mission Objectives/Weapons Conditions/Rules of Engagement
  - 5.3. Desired Learning Objectives
  - 5.4. Sequence of Events
  - 5.5. Route of Flight/Hazards to Flight
    - 5.5.1. Visual Search Responsibilities
      - 5.5.1.1. Departure/En-Route/Recovery
      - 5.5.1.2. High Density Traffic Areas
    - 5.5.2. Mid-air Collision Avoidance
      - 5.5.2.1. From Other Military Aircraft
      - 5.5.2.2. From Civilian Aircraft
    - 5.5.3. BASH/Bird Hazard
      - 5.5.3.1. Bird Hazards along Route (en-route and low-level)
      - 5.5.3.2. Bird Hazards in Terminal Area
      - 5.5.3.3. Bird Hazards at Training Range
  - 5.6. Mission Precedence (Mandatory, Emergency, Priority, Routine)
  - 5.7. Smart Packs/ Kneeboard Cards/ Comm Card
- 6. Flight Planning**
  - 6.1. Aircraft Numbers, Call Signs, Positions, Support Assets
  - 6.2. Weather
    - 6.2.1. Takeoff/En-Route/Destination
    - 6.2.2. Sunset/Sunrise
    - 6.2.3. Moonrise/Moonset/ % Illum/Azimuth/Elevation/Isothermal Crossover Times

- 6.3. Fuel Load, Mission Capable Fuel, and Bingo
- 6.4. Aircraft and Load Configurations
- 6.5. MEP, Ordnance, Chaff/Flare load and settings, Infrared Countermeasures, AIE Devices
- 6.6. Aircraft Taping and Lighting
- 6.7. Seats time, Communication Check-In, Start, Taxi, Takeoff, Duration
- 6.8. NOTAMS, FCIF, Special Interest Items
- 6.9. Anti-Hijacking
- 6.10. RM/Increased Mission Risk Factors (BASH, unfamiliar area, weather, crew complement, etc.)/Risk Mitigation

## **7. Weight and Balance**

## **8. Performance Computations / TOLD**

- 8.1. Takeoff and Worst Case
- 8.2. EM Data and Dash One Blade Stall numbers

## **9. Departure Taxi, Takeoff, and Join Up**

- 9.1. Lineup/Positions
- 9.2. Communications Procedures
- 9.3. Type of Formation
- 9.4. Aborts/Bumps
- 9.5. Goggle Up Procedures
- 9.6. System Checks/Test Fire

## **10. En-Route**

- 10.1. Navigation Responsibilities
- 10.2. Altitudes/Airspeeds
- 10.3. Type Formation(s)/De-confliction plan
- 10.4. Lead Changes
- 10.5. HIT Check
- 10.6. Communications (Ops Normal, ATC, MSN CC, etc.)
- 10.7. Evasive Tactics/Scatter Plans/Rejoin Procedures
- 10.8. Egress Takeoff/Route of Flight

## **11. Terminal Operations – Primary / Alternate**

- 11.1. Objective/Time on Target
- 11.2. Communications Procedures/Authentication methods
- 11.3. LZ Options (in accordance with AFTTPs, or as briefed)
- 11.4. Approaches and Landings
  - 11.4.1. Type Formation and Spacing
  - 11.4.2. Landing Areas/Site Evaluations
  - 11.4.3. Go-Around/Wave off Procedures

## 11.5. AIE Considerations

### 11.5.1. Devices

### 11.5.2. Intended Hover Heights

### 11.5.3. Emergency Procedures

#### 11.5.3.1. Loss of Power to the Aircraft

#### 11.5.3.2. Hoist Malfunctions

#### 11.5.3.3. Communications Failures

## 11.6. Egress Takeoff/Route of Flight

## **12. Recovery Taxi, Parking Plan, Removing Goggles**

## **13. Contingencies**

### 13.1. IMC Loss Wingman

### 13.2. VMC Blind

### 13.3. Abort Criteria

#### 13.3.1. Weather

#### 13.3.2. Min Force Package/Min Mission Equipment

### 13.4. Lost Communications/ Degraded Communications

### 13.5. Bump Plan

## **14. Equipment**

### 14.1. Flight Publications

### 14.2. Aircrew Flight Equipment

### 14.3. NVG's

### 14.4. Maps/ Charts

### 14.5. Chemlights®

### 14.6. ID Tags

### 14.7. Personal Weapons

### 14.8. Classified Material/COMSEC

## **15. Crew Duties and Responsibilities**

### 15.1. Changing Control of the Aircraft

### 15.2. SMA Duties

### 15.3. Emergency Actions/ Intentions

#### 15.3.1. Takeoff

#### 15.3.2. En-Route

#### 15.3.3. Objective

#### 15.3.4. NVG Malfunction

#### 15.3.5. Crash Landing

#### 15.3.6. Ditching

### 15.4. Crash/Forced Landing Procedures

#### 15.4.1. Water

15.4.2. Medical Kits

15.4.3. Nuclear, Biological, Chemical Gear

15.5. Sanitization

15.5.1 Destruction of Classified/Aircraft Destruction

15.5.1. Weapons/Ammunition

## **16. Questions**

## **17. RM/Risk Mitigation**

17.1. Recap risks

17.2. Recap mitigation measures associated with the briefed operation(s).



## **ALTERNATE INSERTION/EXTRACTION (AIE) BRIEFING**

- 1. Load**
- 2. Communication**
  - 2.1. Frequency
  - 2.2. Call Signs
- 3. Site Description/Hazards**
- 4. Power Available/Required**
- 5. Sequence**
  - 5.1. Device(s) To Be Used and Entry/Exit Side
  - 5.2. Device Length(s)
  - 5.3. Intended Hover Height(s)
- 6. Protective Equipment (Head/Eyes/Hands/Ears)**
- 7. Emergency Procedures**
  - 7.1. Aircraft Malfunction
  - 7.2. AIE Malfunctions
  - 7.3. Hoist Malfunctions(Power Loss/Oscillation/Shear Procedures)
  - 7.4. Damaged Cable (Shock-loaded/Overloaded/Abrasion)
  - 7.5. Communication Failure
- 8. Alternate Recovery Options**

## **ORDNANCE DELIVERY BRIEFING**

- 1. Range/Mission Number/Range Time**
- 2. Range Clearing Operations**
- 3. Range Restrictions/Laser Procedures**
- 4. Arming Procedures**
- 5. Patterns**
  - 5.1. Altitude/Airspeed
  - 5.2. Fields of Fire
- 6. Communications**
  - 6.1. Air-To-Air/Air-To-Ground
  - 6.2. Interplane
- 7. Weapons Malfunction**
  - 7.1. Hot Gun Route
  - 7.2. Dearming Location
- 8. Chaff/Flare Operations**
- 9. Smoke Deployment**
- 10. Range Exiting Procedures**
- 11. Safety Considerations**

## **HELICOPTER AIR TO AIR REFUELING BRIEFING**

- 1. Weather (Air to Air Refueling (AAR) track and Emergency Bases)**
- 2. Tanker and Receiver Call Signs**
- 3. Number of Receivers and Sequencing**
- 4. AR Option (Option 1, 2, Simultaneous)**
- 5. Communications**
  - 5.1. Primary and Secondary Radio Frequencies
  - 5.2. EMCON Option
- 6. AAR Track**
  - 6.1. Air Refueling Initial Point, Air Refueling Control Point
  - 6.2. Air Traffic Control Clearance Limits
  - 6.3. Abort Point/Air Refueling Egress Point
  - 6.4. Emergency Recovery Bases
- 7. Air Refueling Control Time**
- 8. Rendezvous Type**
- 9. Join-Up Type and Altitude**
- 10. AAR Speed**
- 11. AAR Altitude**
- 12. Identification Friend or Foe (IFF)/TACAN/Altimeter Settings**
- 13. Tanker/Receiver Light Configuration**
- 14. Lost Visual Contact Procedures/MSA**
- 15. Fuel Transfer Requirements and Pressure Limitations**
- 16. Helicopter Power Limitations/Max Bank Angle (High DA/Gross Weight)**
- 17. Mission Abort Criteria**
- 18. Standby Tanker Requirements**
- 19. Light Signals:**
  - 19.1. TANKER TO RECEIVER
    - 19.1.1. One Green – Cleared to Contact and/or Cleared to Crossover
    - 19.1.2. One White – Go to Observation Position
    - 19.1.3. Two White – Crossover to other Hose
    - 19.1.4. One Amber – Prepare for Turn
    - 19.1.5. Two Amber – Unable to Refuel, proceed/wait for Spare Tanker
    - 19.1.6. Flashing Red – Breakaway
  - 19.2. RECEIVER TO TANKER
    - 19.2.1. One Flash – Reset Reel Response
    - 19.2.2. Multiple Flashes – Require more Fuel

## **FORWARD AREA REFUELING POINT (FARP) BRIEFING**

- 1. Location**
- 2. Time On Target**
- 3. Communications**
  - 3.1. Call Signs
  - 3.2. Air-To-Ground Frequencies
- 4. Marshalling Procedures**
- 5. Onload**
- 6. Equipment**
- 7. Emergency Procedures**
- 8. Departure Instructions**

## **AIRDROP BRIEFING – PERSONNEL**

- 1. Type of Drop**
- 2. Drop Zone**
  - 2.1. Markings
  - 2.2. Visual Signals
- 3. Communications**
  - 3.1. Air-To-Ground
  - 3.2. Intercom
  - 3.3. Hand Signals
- 4. Drop Procedures**
  - 4.1. Altitude/Airspeed
  - 4.2. Drop Order
  - 4.3. Track
  - 4.4. Door Procedures
- 5. Emergency Procedures**
  - 5.1. Hung Jumper
  - 5.2. Inadvertent Chute Deployment
- 6. Post Deployment Procedures**

## **SEARCH BRIEFING**

### **1. Objective**

- 1.1. Number of Survivors/Description/Medical Condition
- 1.2. Signaling Devices/Equipment
- 1.3. Specialized Aircraft Equipment Required

### **2. Search Area**

### **3. On Scene Search and Rescue (SAR) Forces/On Scene Commander (OSC)**

- 3.1. Establish Contact with OSC; if none, accomplish OSC Duties below:
- 3.2. Inventory Status: Fuel/Wingman/Assets Available
- 3.3. Establish Comm Plan Initial Contact with Survivor: Reassurance/Turn Locator Beacon Off/Etc.
- 3.4. Authenticate as Required
- 3.5. Relay Info: Pass Location to Appropriate Agency
- 3.6. Condition: Injuries/Ability to Move/Any Previous Instructions
- 3.7. Signaling Devices (Prep Survivor: Find and Have Ready Devices in Kit/Vest, Radio, Batteries)
- 3.8. Verify Survivor's Position: Confirm Location/SARDOT/GPS/Overflight/What Can Survivor See?
- 3.9. Survivor Actions: Radio Check-In Schedule as Required, Prepare for Pickup (Hoist, air land)

### **4. Weather (En Route/On Scene/Recovery)**

### **5. Method of Search (Visual/Electronic)**

- 5.1. Type of Pattern
- 5.2. Altitude/Airspeed
- 5.3. LARS Frequency/Code

### **6. Bingo Fuel and Refueling Options**

### **7. Actions Upon Sighting Objective**

### **8. Medical Facilities**

## **CARGO SLING/EXTERNAL LOAD OPERATIONS BRIEFING**

### **1. Load Description**

- 1.1. Anticipated Weight
- 1.2. Rigging
- 1.3. Location

### **2. Power Available/Required**

### **3. Sling Arming/Dearming**

### **4. Hand Signals**

### **5. Hookup**

- 5.1. Grounding
- 5.2. Eye Protection
- 5.3. External Lighting

### **6. En Route Airspeed/Altitude**

### **7. Destination**

### **8. Release**

### **9. Emergency Actions**

### **10. Safety Considerations**

## INSTRUMENT EQUIPMENT TESTS / BRIEFINGS

### 1. NAVIGATION EQUIPMENT CHECK

#### 1.1. VOR SELF TEST

- 1.1.1 Tune a VOR Frequency
- 1.1.2 HSI CRS – set  $315^{\circ}$
- 1.1.3 VOR/MB TEST Switch – Down and hold (MB light on VSI should illuminate)
- 1.1.4 HSI VOR/LOC course bar and VSI course deviation pointer centered  $\pm 1$  Dot
- 1.1.5 No. 2 Bearing Pointer – Centers @  $315^{\circ} \pm 5^{\circ}$
- 1.1.6 TO/FROM Arrow should indicate – “TO”
- 1.1.7 VOR/MB TEST Switch – Release

#### 1.2 TACAN SELF-TEST (Note: Allow 90 seconds for warm-up)

- 1.2.1. Function Selection Switch – T/R
- 1.2.2. Set --  $180^{\circ}$  Course in HSI CRS Window
- 1.2.3. Depress the Test Button and observe:
  - 1.2.3.1. Indicator Light – 1 second
  - 1.2.3.2. DME Indicates \_ \_ . \_ for 7 Seconds
  - 1.2.3.3. NO. 2 Bearing Pointer --  $270^{\circ}$ 
    - 1.2.3.3.1. DME –  $000.0 \pm .5$
    - 1.2.3.3.2. NO. 2 Bearing Pointer --  $180^{\circ} \pm 3^{\circ}$
    - 1.2.3.3.3. CDI – Centered  $\pm 1/2$  Dot
    - 1.2.3.3.4. TO/FROM Indicator – “TO”

**Note:** If the indicator light stays on during test, re-accomplish the check in the REC Mode. If check is good, the malfunction is in the transmitter and bearing information is valid.

#### 1.3. ILS (Tune and Identify prior to check)

- 1.3.1. Check Marker Beacon Volume Control – ON
- 1.3.2. Nav Mode Switch – As Required
- 1.3.3. Select Proper Approach Course
- 1.3.4. Check CDI and GSI Indications

#### 1.4. ADF (Tune and Identify prior to check)

- 1.4.1. TEST Switch – TEST and hold
- 1.4.2. NO. 2 bearing pointer changes about  $180^{\circ}$  (ARN 89) or  $90^{\circ}$  (ARN 149) and stops TEST switch – Release
- 1.4.3. NO. 2 bearing pointer should return to original bearing

## **1.5. Adverse Weather Systems**

- 1.5.1. Anti-Ice/De-Ice Systems – Check as required
- 1.5.2. Pitot Heat & Windshield Wipers – Check as required

## **1.6. GROUND CHECKPOINT TEST**

- 1.6.1. TACAN/VOR (Tune and Identify prior to check)
- 1.6.2. Nav Mode Switch – As Required
- 1.6.3. Bearing Pointers – Point to Station  $\pm 4^\circ$  error from known Checkpoint
- 1.6.4. DME – 1/2 Mile or 3% Error, whichever is greater
- 1.6.5. CDI – Check Centered, Right and Left,  $\pm 4^\circ$  error from Known checkpoint
- 1.6.6. Check – TO/FROM Indicator Ambiguity

## **1.7. INSTRUMENT DEPARTURE BRIEFING**

**Note:** Accomplish immediately before initial simulated/actual instrument profile.

- 1.7.1. Navigation/Communication Radio Settings
- 1.7.2. Departure Instructions/Restrictions
- 1.7.3. Emergency Return Approach
  - 1.7.3.1. DA (Precision) or MDA (Non-precision)
  - 1.7.3.2. Inbound Course
  - 1.7.3.3. Emergency Safe/Sector Altitude
  - 1.7.3.4. Hazardous Terrain/Obstacles
  - 1.7.3.5. Emergency Intentions

## **1.8. INSTRUMENT APPROACH BRIEFING**

**Note:** When accomplishing successive approaches, brief items that have changed.

- 1.8.1. ATIS/Airport Information
- 1.8.2. Type of Approach/Weather Required/Fuel Required
- 1.8.3. Navigation and Communication Radio Settings
- 1.8.4. Heading and Attitude Systems
- 1.8.5. Altimeter – Barometric and Radar
- 1.8.6. Final Approach Fix/Final Approach Course
- 1.8.7. DA (Precision) or MDA (Non-precision)/Descent Rate
- 1.8.8. Missed Approach Point and Intentions
- 1.8.9. Airdrome Sketch
- 1.8.10. Crew Duties
- 1.8.11. Lost Comm Intentions
- 1.8.12. Backup Approach
- 1.8.13. Before Landing Checklist/Landing Light

## **MISSION CHECKLISTS**

### **1. Low Level Checklist:**

- 1.1. Route/Hazards – Briefed
- 1.2. Performance Data – Compute/Confirm
- 1.3. Visors, NVGs, or Eye Protection – Down or On as Required
- 1.4. VAWS – As Required
- 1.5. Shoulder Harnesses – As Required
- 1.6. Before Landing Checklist – Complete

### **2. FENCE IN/OUT Checklist: (See AFTTPs for expanded information.)**

- 2.1. **F** – Fire Power/Fuel/Film – Check Weapons/Fuel Computations
- 2.2. **E** – Electronic Countermeasures/Self Protection – IRCM, Chaff/Flares, RWR, Armor Wings – set as required
- 2.3. **N** – Navigation Equipment – Check accuracy and set as required
- 2.4. **C** – Communications – set as required
- 2.5. **E** – Emitters – (Radar, Radar Altimeter, TACAN, IFF, Doppler, Lighting) set as required

## **MISSION DEBRIEF GUIDE**

- 1. Roll Call**
- 2. Classification**
- 3. Mission Objectives**
- 4. Training Objectives**
- 5. Desired Learning Objectives**
- 6. Mission Accomplishments**
  - 6.1. Flight Discipline
  - 6.2. Mission Effectiveness
- 7. Mission Reconstruction**
  - 7.1. Safety of flight issues, unscheduled terminates or knock-it-offs
  - 7.2. Reconstruct major events
  - 7.3. Specify Debrief Focus Points or Learning Points
  - 7.4. Identify Contributing Factors
- 8. Lessons Learned**
- 9. Comments/Questions**



## SIGNALS/COMMUNICATIONS/EQUIPMENT

### SWIMMER/HELICOPTER SIGNALS

During NVG operations Team Leader/AC will specify light signals to be used.

SIGNAL	MEANING
Crossed Wrists	Need Medical Kit
Breast Stroke Motion	Deploy Backup Swimmer
Paddling Motion	Deploy Raft
Hands Cupped, then arms out-stretched	Deploy Stokes Litter
Climbing Rope Motion	Lower hoist cable without Device
One arm extended overhead, fist clinched	Lower hoist cable with Device
Wave In/Out	Helicopter Move In/Out
MK-13 Flare and/or Inflated LPU	Emergency
Thumbs Up	Affirmative
Hand Clapping Motion	Sharks
Slashing Motion Across Throat	Cease Operations
Flashing Landing Light	Unable to recover, must Depart
Circling arm overhead w/finger pointing Skyward	Team Recall

VISUAL DETECTION CHART (Ranges Shown in Miles)					
Equipment Type	Down Sun	Cross Sun	Up Sun	Overcast	Night
Yellow Life Raft (1 or 7 man)	1.9	1.4	1.1	1.0	—
Signaling Mirror	6.3	7.0	4.8	—	—
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

## FORMATION LIGHT SIGNALS

SIGNAL	MEANING
Single Flash (tail position light)	Go to Trail
Two Flashes (tail position light)	Stagger Left
Three Flashes (tail position light)	Stagger Right
Dot – Dot	Return to Base
Dash – Dash	Lead Change *
Dash – Dot	Slow Down
Dot – Dash	Speed Up
Dash – Dash – Dash	Lights (increase)
Dot – Dot – Dot	Lights (decrease)
Dot – Dash – Dot	Lights (check)
Dot – Dot – Dot – Dot	Lost Comm **
Circular motion with light source	Attention Signal
Infinity Symbol (horizontal figure 8 motion)	Execute
<b>AMPLIFYING NOTES</b>	
Move light in a Vertical motion	YES
Move light in a Horizontal motion	NO
Momentary Flash from Light	“DOT”
Two second Flash from Light	“DASH”
* Infinity Symbol. Follows the lead changes light signal for execution.	
** Assume Radio Responsibilities	
All signals will be echoed by the receiver back to the sender.	

## DISTRESS / 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 Mobile Safety and Distress (Channel 16 Maritime)
243.0 MHz	International Aeronautical Emergency
282.8 MHz	International Scene of Action (SAR)
406.025 MHz	International Distress Beacon

### AIRCRAFT EQUIPMENT REQUIRED FOR FLIGHT

\* NVG flight requires an operational FLIR, an IR landing/search light, or a variable intensity landing/search light, in addition to a visible landing/searchlight **Note:** When only one instrument is available, it must be on the side occupied by the pilot on the flight controls.

EQUIPMENT	DAY	NIGHT/IMC	OVERWATER
Barometric Altimeters	1	2	2
VSI's	1	2	2
HSI's	1	2	2
Airspeed Indicators	1	2	2
Engine Instruments	YES	YES	YES
Communication Radios	YES	YES	YES
Mode 3/C Transponder	YES	YES	YES
Radar Altimeters	1	2/(1 IMC)	2
Anti-collision Lights	1	1	1
Position Lights	YES	YES	YES
Landing/Search Lights	1	1*	1
Cockpit Instrument Lights	NO	YES	NO
Pitot Heat, Anti-Ice, Blade De-Ice	In accordance with T.O. 1H-60(H)G-1 based on Environmental Conditions		

## **AIE PREFLIGHT GUIDE**

The following information was extracted from TO 00-25-245. Reference the TO for expanded information. TO 00-25-245 inspection procedures take precedence over this guide. Inspections and discrepancies will be documented on each equipment piece's AFTO Form 244, *Industrial Support Equipment Record*. **(T-2)** Discrepancies will be reported to the unit AIE Monitor. **(T-3) Warning:** Reject any device for live use if it fails any part of the preflight inspection.

## **FOREST PENETRATOR**

1. **Inspection/Weight-Check Label** – Checked for current date.
2. **Condition** – Checked.
  - 2.1. Damaged parts (broken, bent, deformed, or fractured). Bent seat, 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.
  - 2.2. Missing parts - Bolts, Nuts, Cotter Pins, Springs, and Straps.
  - 2.3. Flotation Collar - Secure as required
  - 2.4. Seats and hooks for freedom of movement to all positions, and proper latching and unlatching.
  - 2.5. Corrosion.

## **RESCUE STROP**

1. **Inspection/Weight Check Label** – Checked for current date.
2. **Condition** – Checked.
  - 2.1. Inspect fabric for cuts, deterioration, and abrasion.
  - 2.2. Inspect seams for proper adhesion and stitching.
  - 2.3. Inspect retainer straps for security of attachment and wear.
  - 2.4. Inspect all hardware for security of attachment, corrosion, damage, wear, and if applicable, ease of operation.

## **RESCUE BASKET (Life Saving Systems 490 Series)**

1. Follow manufacture recommendations for maintenance, inspection, and testing.

## **RESCUE LITTER ASSEMBLY (STOKES LITTER)**

**Note:** The following Stokes Litters are approved for use:

1. # 402 Medevac one piece, confined area.
2. # 404 Medevac II one piece.
3. # 406 Medevac IIA break down model.
4. # 406TI Medevac IIA TI Titanium break down.

**Note:** A 5000 pound (23 Kilonewton (kN)) locking carabineer will be used to attach the stokes sling assembly to the hoist hook. **(T-2)**

- 1. Inspection/Weight-Check Label** – Checked for current date.
- 2. Condition** – Checked.
  - 2.1. Inspect all metal for cracks, indents, corrosion, and security of attachment.
  - 2.2. Inspect all welds for cracks and security of attachment.
  - 2.3. Inspect snow skids for general condition (if applicable).
  - 2.4. Inspect suspension bed webbing for cuts, tears, stains, fraying and security of attachment.
  - 2.5. Inspect quick release fittings for ease of operation, sharp edges, and corrosion.
  - 2.6. Inspect all straps for cuts, tears, stains, fraying and security of attachment.
  - 2.7. Inspect Lift Rings for deformity or cracks.
  - 2.8. Inspect all stitching for fraying and security of attachment.
  - 2.9. Inspect all webbing for cuts, tears, fraying and grease contamination.
  - 2.10. Inspect carabineers for proper gate alignment, ease of operation, cracks, and corrosion.
  - 2.11. Inspect carabineer gate pin hinge for deformity and security of attachment.
  - 2.12. Inspect for reflective tape on rescue litter and carabineers.
    - 2.12.1. Red reflective tape (2 places, 1-1/2 x 1/2-inch) at upper attachment points (As required)
    - 2.12.2. White reflective tape (2 places, 1-1/2 x 1/2-inch NIIN 01-078-8660) at lower attachment points (As required).
  - 2.13. Inspect entire flotation assembly for general condition, cleanliness, cuts, tears, fraying and for presence of oil, fuel, grease or chemical contamination.
  - 2.14. 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.

## **RANDON TECH ROPE LADDER (HH-60 ELD800PD SERIES AND TCL600)**

### **WARNINGS**

If any nicks or excessive fraying to the point of broken strands are found, do not use the rope ladder for live operations, serious injury or death may result.

The following indicate obsolete equipment and should not be used for live operations; serious in-jury or death may result:

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

### **CAUTIONS**

1. 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 or plastic zip ties).
2. During inspection, dragging the rope ladder on concrete should be kept to a minimum to reduce abrasion and maintain normal service life.

### **NOTES**

1. Ensure both sides of the rope ladder are visually inspected.
2. Detachers are "powder-coated", there is no need to oil parts.
3. Small amounts of hydraulic fluid are allowed on the fabric.
4. Ensure the ladder is cleaned after use.

### **INSPECTION**

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 and fasteners for loosening and failure.
6. Inspect main ladder straps for dry-rot, holes, nicks and excessive fraying.
7. Inspect ladder rungs for damaged tubes or grip tape.
8. Inspect rung rivet-washer points for corrosion, cracks or stretched fabric.
9. Ensure no twists exist with main ladder straps.
10. Fold or roll the ladder into the stowed position on the cabin floor.
11. Refer to TO 00-25-245 for post flight requirements.

## **FRIES/FAST ROPES**

- 1.** Check the woven loop on the mount end for excessive wear or chemical contamination.
- 2.** Checks the rope along its entire length for fraying, cuts, and chemical contamination. Inspect for any cut, chafe, or nicks that affect 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 or has two or more cuts that penetrate one-third or more through any strand's thickness within 1 foot of the running length of the FRIES.
- 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.** Inspect the extraction loops to the same standard as the main rope. Ensure the woven attachment loops are secure.

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