

T.O. 1H-1(U)N-1CL-2

CREW MEMBERS'

FLIGHT CREW CHECKLIST

USAF SERIES



UH-1N

HELICOPTER

**Bell Helicopter Co.
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Commanders are responsible for bringing this check list to the attention of all personnel cleared for operation of the helicopter.

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LIST OF EFFECTIVE PAGES

Insert latest changed pages; dispose of superseded pages in accordance with applicable regulations.

NOTE: On a changed page, the portion of the text affected by the latest change is indicated by a vertical line in the outer margin of the page.

Total number of pages in this manual is 28 consisting of the following:

Page No.	# Change No.
Title	11
A	11
i	11
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* Zero in this column indicates an original page.

FOREWARD

YOUR RESPONSIBILITY: In accordance with AFR 60-9, the flight crew is required to use this checklist when operating the subject helicopter.

TECHNICAL ORDER NUMBER: This check list is identified by a T.O. number that is identical to that of the applicable Flight Manual except for the addition of letters "CL" (checklist) and a suffix number indicating the crew member to whom it applies.

CONTENT: This checklist consists of normal procedures and the numbered items (line items) correspond to identically numbered items in the amplified procedures in Section VIII of the Flight Manual. A (W) or (C) following a checklist heading or line item indicates one or more Warnings (W) or Cautions (C) are contained in the flight manual amplification. Emergency procedures (when included) will be identified by a striped border.

CONCURRENCY: As changes are made to procedures in the Flight Manual, concurrent changes will be made to this checklist so that both will agree. However, changes may be made to the Flight Manual that do not affect procedures. Therefore, the Flight Manual date may not be the same as the checklist date. To determine the applicable checklist to a given Flight Manual issue, refer to the bottom of the Flight Manual "A" page under "Current Flight Crew Checklist." For purposes of determining the concurrency between the Flight Manual and this checklist, the latest date of a Safety of Flight Supplement affecting this checklist will be considered to represent the latest change date of the Flight Manual.

SAFETY OF FLIGHT SUPPLEMENTS: When you receive a supplement affecting your checklist write in the appropriate information. Replacement checklist pages will be made available to you as quickly as possible through the "quick change" checklist program. A notation on the bottom inside corner of these pages will indicate that they reflect certain Safety of Flight Supplements. There is no action in the checklist program that constitutes authority for discarding a Safety of Flight Supplement. Such action is authorized only through the title page of the Flight Manual or T.O. 0-1-1-5.

CHANGES AND REVISIONS: When you receive a normal change or revision to your checklist, check to ascertain that it contains all outstanding Safety of Flight Supplements that affect the checklist. If it does not, add in the required information by hand (sometimes you will be able to accomplish this by retaining the appropriate quick change page which references the outstanding supplement).

BINDERS: Binders containing plastic envelopes, to hold and protect the checklist pages, are available through normal AF supply channels.

COMMENTS AND QUESTIONS: Any comments and questions regarding any phase of the Flight Manual Program should be forwarded on AF Form 847 through your aircrew Standardization/Evaluation channels to Warner Robins ALC, Georgia 31098, Attn: MMSRDD.

NORMAL PROCEDURES

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PILOT

In addition to the pilot's primary duties outlined in NORMAL PROCEDURES, Section II, the manner and proficiency with which each crewmember performs his related duty is the responsibility of the pilot. Therefore the pilot must possess and maintain a thorough knowledge of each crewmember's duty and is responsible for crew coordination.

COPilot

The copilot should be familiar with the duties of the pilot and other crewmembers so that he may perform functions as directed by the pilot.

FLIGHT MECHANIC

The flight mechanic will be responsible for maintenance, servicing, inspection, and security of the helicopter. He will also determine that all required miscellaneous equipment is aboard and

FLIGHT MECHANIC (Cont)

properly stowed before each flight. In certain instances he may have to act as a fireguard and accomplish those duties normally performed by ground personnel. Before takeoff, he should insure that both cargo doors are secured for flight. The flight mechanic may have to accomplish these additional duties: Rescue hoist operator, Assist the pilot during external cargo operation, Cargo and/or passenger loadmaster, Litter attendant, Gunner.

CARGO SLING OPERATION

Pre-Flight

1. Form 781 – CHECKED.
2. Main Fuel Switch – OFF.
3. Cargo Hook Release Circuit Breaker – IN.
4. Battery Switch/External Power – ON.
5. Cargo Release Switch – ARMED, check for light.
6. External Cargo Suspension Assembly – CHECKED.
For proper installation of assembly and rigging of manual release arm (visually inspect hook for cracks and mechanical release cable for fraying).
7. Pilots Manual Cargo Release – CHECKED.
8. Pilots and Copilots Electrical Release Switches – Check Operation.

CARGO SLING OPERATION (CONT)

9. Cargo Release Switch – OFF.
10. Battery Switch/External Power – OFF.

RESCUE HOIST OPERATOR

This portion of the checklist contains itemized procedure with necessary amplification for operation of the rescue hoist by the hoist operator. The line items in the flight manual and checklist are identical with respect to arrangement and item number. When a checklist item is followed by a crew position designator i.e. (P) (CP) (HO) etc. that crewmember takes the action and if the action is in quotes, the hoist operator will request the action and response by the crewmember designated. The hoist operator will not proceed to the next checklist item until the response has been received. If the action is not in quotes, he completes the action and remains silent.

The rescue hoist operator may be any crewmember designated to that position as the mission dictates. Therefore, this duty should be thoroughly understood by all crewmembers.

RESCUE HOIST OPERATION – HOIST OPERATOR

Preflight

1. Forms 781 – CHECKED.
2. Hoist Forms – CHECKED.
3. Battery Switch/External Power – OFF.
4. Cabin door by rescue hoist – FULL OPEN.
5. Hoist assembly (C)(W) – CHECK CONDITION AND INSTALLATION.
 - a. Base of hoist assembly positioned on cabin floor stud at station 82.0, BL 35.10 or station 131.01, BL 39.50 either side.
 - b. Top of hoist assembly aligned to cabin roof stud at station 82.0, BL 35.10 or station 131.01, BL 39.50 on either side and lock nut secured.
 - c. Check hoist general condition and security.
 - d. Actuator Plate – INSTALLED AND SECURE.
 - e. Actuator Lever – POSITIONED AND SECURE.
 - f. Actuator – INSTALLED AND SECURE.
 - g. Electrical Connectors – Checked.

- h. Hoist Boom – CHECKED.
 - (1) Retaining Pin Installed
 - (2) Turnbuckle Adjusted and Secure (Ensure boom head clears airframe).
- i. Boom Head – CHECKED.
 - (1) Boom swivel head rotates freely. (Approximately 45 degrees in both directions).
 - (2) Hoist hook is secured and free to rotate with a minimum of 50 lbs. on hook.
 - (3) Slide lock safety pin is installed and slide lock condition and security.
- 6. Pilot's Cable Cut Switch Guard – DOWN AND SAFETIED.
- 7. HOIST Operator's Cable Cut Switch Guard – DOWN AND SAFETIED.
- 8. Circuit Breakers – CHECKED.
 - a. Cable Cut Circuit Breaker – IN.
 - b. Hoist Control Circuit Breaker – IN.
 - c. Hoist Power Circuit Breaker – IN.
 - d. Boom Actuator Circuit Breaker – IN.
- 9. Battery Switch/External Power – ON.

10. Non-Essential Bus Switch – MANUAL.
11. Hoist Power Switch – ON.
12. Rescue hoist Caution Lights – ON (Both pilot's panel and hoist control box).
13. Pilot's Rescue Hoist Switch – (C) CHECKED.
 - a. RIGHT – Boom pivots outward to the fully extended position.
 - b. NEUTRAL – Boom remains in the fully extended position.
 - c. DOWN – Cable extends.
 - d. NEUTRAL – Cable holds position.
 - e. UP – Cable retracts.
 - f. LEFT – Boom pivots inward to the stowed position.
14. Hoist Operator's Pendant (C)(W) – CHECKED.
 - a. Boom switch – OUT (Boom pivots outward to the fully extended position).
 - b. Pendant Cable Control Switch – RIGHT AND TOWARD DOWN (Cable extends).
 - (1) Traction sleeve motor is operational (As cable extends, hold cable in a fixed position by hand to insure slack is not introduced from traction sleeve to hoist motor).

- (2) Rescue hoist caution lights – OFF AT 5 TO 8 FEET OF CABLE EXTENSION.
- (3) Hoist oil sight gauge – CHECKED (Check hoist oil level sight gauge during fast mode only. Oil level should be 1/2 of the sight gauge, minimum).
- (4) Hoist cable – CHECK CONDITION.

c. Pendant cable control switch – LEFT AND TOWARD UP (Cable retracts).

- (1) Check deceleration mode.
- (2) Up Limit Switch – CHECKED. Manually actuate up limit switches individually after cable is within three feet of boom. If satisfactory, slowly reel in the cable until the up limit switches shut off hoist operation.

d. Boom Switch – IN (Boom pivots inward to the stowed position).

15. Hoist Power Switch – OFF.

16. Audio Control Panel – CHECK.

- a. ICS Position – CHECKED.
- b. Hot Mike Position – CHECKED.
- c. Loudhailer Position 5 – CHECKED (If boom is applicable).

17. Non-Essential bus switch – NORMAL.

18. Battery switch/external power – OFF.
19. Gunners Harness – CHECK CONDITION.
20. Forest Penetrator – CHECK CONDITION AND OPERATION.

INFLIGHT (W)

1. Safety harness – ON.
2. Cabin interphone control – Set.
3. Gloves – ON.
4. Non-essential Bus Switch – "MANUAL" (P).
5. Pilot's Cable Cut Switch Guard – "DOWN AND SAFETIED" (P).
6. Loudhailer – AS REQUIRED (On aircraft modified by TCTO 1H-1(U)N-513).
7. Hoist Operator's Cable Cut Switch Guard – "DOWN AND SAFETIED" (HO).
8. HOIST CON, HOIST PWR, and HOIST CABLE CUT Circuit Breakers – "IN" (P).
9. HOIST ACTUATOR CIRCUIT BREAKER (on control box) (W) – IN (HO).
10. Door – FULL OPEN AND LOCKED (HO) (Obtain clearance from pilot prior to opening door).
11. Hoist Power Switch – "ON" (P).

12. Rescue Device – ATTACHED (HO).
13. Hot Mike (W)(C) – CHECKED (HO) (To conduct this check, place the interphone on HOT MIKE and inform the pilot "Hoist Operator's Checklist is complete and ready for pick up." His acknowledgement completes the check. Return the HOT MIKE Switch to OFF until on final approach, then ON).

SMOKE/FLARE DROP CHECKLIST

1. Safety harness – ON.
2. Interphone control – SET.
3. Gloves – ON.
4. Door – OPEN.
5. Smoke/flare device – PREPARED.
6. Smoke/flare drop checklist) "COMPLETED" (HO).

MULTIPLE HOIST (AFTER PICK UP)

1. "SURVIVOR IN AND SECURE, READY FOR TAKEOFF" (HO).
2. Hot Mike – OFF (HO).
3. "After pick up checklist (C) – "COMPLETED" (HO).

(N-9 – N-12 Deleted)

INFLIGHT (AFTER PICKUP – MISSION COMPLETE).**GUNNER**

The gunner will be responsible for maintenance, servicing, inspection, and security of the Armament Subsystems. He will perform duties as directed by the Pilot and be familiar with the duties of the flight mechanic. Refer to T.O. 1H-1(U)N-34-1-1.

MEDICAL TECHNICIAN

The medical technician will be a fully qualified medic, capable of accompanying patients on medical evacuation flights.

Preflight

1. Crew Medical Briefing – given.
2. Medical supplies and equipment – checked.
3. Litters – installed.
4. Fluid hanging devices – installed.

Preflight (Cont)

5. Oxygen/respirator equipment — checked and off.
6. Fire extinguisher — checked.
7. Communications/hot mike — as required.

Loading

1. Litters — installed
2. Local fire/range equipment — in place.
3. Patients — secured.
4. Patients (W) — briefed.

In-Flight

1. Monitor patient/IV fluid status.

Before Landing

1. Local fire/rescue equipment — alerted.
2. Patients — alerted and secured.
3. Equipment — secured.

Unloading

1. Rescue equipment/patient transport — in place.
2. Patients — deplaned.

Before Leaving Aircraft

1. Medical supplies and equipment — inventoried and removed.
2. Oxygen equipment — off and secured.
3. Suction equipment — cleaned and secured.
4. Litter stanchions and straps — removed and stowed.

CREW AND PASSENGER BRIEFING GUIDES

The following briefing guides are provided to assist the pilot in conducting assigned mission briefings:

Crew Briefing Guide. The following checklist includes the items to be discussed during the briefing:

CREW AND PASSENGER BRIEFING GUIDES (Cont)

1. Mission requirements.
2. Flight plan.
3. Fuel load.
4. Emergency/survival equipment.
5. Weather.
6. Special equipment.
7. Personal equipment.
8. Weight and balance.
9. Crew duties and responsibilities.
10. Formation Procedures (if applicable).

Passenger Briefing Guide. When the helicopter is used to transport personnel, they will be briefed before flight and during flight as necessary. The pilot or his representative will perform this duty. The following checklists include the items to be discussed during the briefing:

Predeparture Briefing Guide.

1. Introduction of crew.
2. Designate compartment commander.
3. Destination.

Predeparture Briefing Guide. (Cont)

4. Flight altitude.
5. Departure time and estimated time enroute.
6. Enroute weather.
7. Seats and safety belts.
8. Movement in the helicopter.
9. Smoking.
10. Emergency exits (location and operation).
11. Emergency landings or autorotations.
12. Emergency/survival equipment.
13. Bailout.
14. Use of portable electronic devices.
15. Helicopter characteristics.

Over Water Briefing Guide. If flight plan includes the crossing of any extensive bodies of water, the following items will be included in addition to the emergency procedures contained in Predeparture Briefing Guide.

1. Use of survival equipment.
2. Escape from parachute after entering water.
3. Emergency landing (signals, positions, exits, location of first aid kits and emergency radio).

T.O. 1H-1(U)N-1CL-2

EMERGENCY PROCEDURES

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DITCHING CHART. E-2

CABIN OCCUPANTS

PLANE DITCHING

1. Survival Equipment — PREPARED
2. Personal Equipment — CHECKED
3. Cabin Doors — OPEN
4. Helicopter —
EVACUATE ON
PILOT'S COMMAND
WITH SURVIVAL
EQUIPMENT

IMMEDIATE DITCHING

1. Cabin Door - OPEN
2. Seat Belt - FASTENED
3. Personal Equipment...
CHECKED
4. Brace for Ditching
5. Helicopter —
EVACUATE WITH
SURVIVAL EQUIP-
MENT

FIGURE 1. DITCHING CHART