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**T.O. 1H-3(C)E-1CL-1**

*CH1 Pos 500 / SEP 50  
w/fe*

# **PILOTS'**

## **FLIGHT CREW CHECKLIST**

**USAF SERIES**

**CH-3E**

**AND**

**9 MAR 1987**

**HH-3E**

**HELICOPTERS**

**NOw63-0373-f  
F09603-84-C-0322**

**COMMANDERS ARE RESPONSIBLE FOR BRINGING THIS  
CHECKLIST TO THE ATTENTION OF ALL PERSONNEL  
CLEARED FOR OPERATION OF THE AIRCRAFT.**

**THIS PUBLICATION SUPERSEDES T.O. 1H-3(C)E-1S-153,  
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# LIST OF EFFECTIVE PAGES

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**TOTAL NUMBER OF PAGES IN THIS MANUAL IS 118 CONSISTING OF THE FOLLOWING:**

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## FOREWORD

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

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

**CONTENT.** This checklist consists of five parts: normal procedures, emergency procedures, performance data, alert procedures, and hot refueling procedures. The numbered items (line items) correspond to identically numbered items in the amplified procedures in Sections II and III of the Flight Manual. Emergency procedures are identified by a black striped border. A Takeoff and Landing Data Card is included at the end of the normal procedures checklist.

**FLIGHT MANUAL.** This checklist does not replace the amplified version of the procedures in the Flight Manual. To fly the helicopter safely and efficiently, you must read and thoroughly understand

why each step is performed and why it occurs in a certain sequence.

**CONCURRENCY.** As changes are made to the amplified checklists in the Flight Manual, concurrent changes will be made to this checklist so that both will agree. However, a change to the Flight Manual may not affect the amplified procedures. Therefore, the Flight Manual date may not be the same as the checklist date. To determine the checklist applicable 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 Supplement affecting this checklist will be considered to represent the latest change date of the Flight Manual.

**SAFETY SUPPLEMENTS.** Whenever you receive a supplement affecting your checklist, write in the appropriate information. Printed, 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 Supplements. Note that there is no action in the checklist program that constitutes

authority for discarding a Safety Supplement. Such action is authorized only through the title page of the Flight Manual or T.O. 0-1-1-5.

**CHANGES AND REVISIONS.** Whenever you receive a normal change or revision to your checklist, check to ascertain that it contains all outstanding Safety Supplements that affect the checklist. If it does not, add in the required information by hand (sometimes you will be able to accomplish this end 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. The binders are available with either 25 or 40 envelopes. The Air Force Stock list numbers for these binders are: 7510-766-4269, and 7510-766-4270, respectively. Be sure to order enough binders. If you have a large checklist you may want to carry it in two small binders instead of a single large one.

**COMMENTS AND QUESTIONS.** Any comments and questions should be directed through your Command Headquarters to Warner Robins ALC, Robins AFB, Ga., 31098-5609, Attention: MMEDF.

## NORMAL PROCEDURES

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## **PREFLIGHT CHECK.**

### **BEFORE EXTERIOR INSPECTION.**

- \*1. Aircraft grounded and chocks in place. (P/FE)
- \*2. Fire extinguisher - POSITIONED OUTSIDE AIRCRAFT. (P/FE)
- \*3. Weapons safety check - GUNS SAFETIED AND STOWED. (P/FE)
- \*4. Aircraft forms and flight publications - CHECKED. (P/FE)
- \*5. Flare case jettison switches - OFF AND SAFETIED. (P/FE)

### **EXTERIOR INSPECTION.**

- 1. Right front fuselage.
  - a. Covers, plugs and tiedowns - REMOVED.
  - b. Pilot's window emergency release handle - SECURED.
  - \*c. Access panels - SECURED.
  - \*d. Engine drain line sump - CHECKED.  
Drain prior to flight (as required).
  - e. Cargo Sling - CHECKED. Check for proper rigging of cables, security of suspension frame, pulleys, and hook release system.
- 2. Upper right fuselage.
  - a. Engine oil level - CHECKED.
  - b. Engine inlet - CHECKED.

- c. Engine - CHECKED.
  - d. Engine exhaust section - CHECKED.
  - e. Engine door - CHECKED.
  - \*f. Main gear box - CHECKED.
  - g. Emergency gear extension bottle - CHECKED. Pressure up (2500 - 3000 PSI, no leakage.
  - \*h. Transmission deck - CHECKED.
  - \*i. Main rotor blades - CHECKED.
  - j. Main rotor head fairing - CHECKED.
  - \*k. Damper reservoir - CHECKED.
  - \*l. Main rotor head reservoirs - CHECKED.
  - m. Main rotor head assembly and control linkages - CHECKED.
  - n. Utility hydraulic reservoir - CHECKED.
  - o. Rotor brake hydraulic reservoir - CHECKED.
  - \*p. Hydraulic power packages and utility heat exchanger - CHECKED.
  - q. Fire extinguishers - CHECKED.
  - \*r. Main rotor head fairing access panels - SECURED.
3. Upper transmission section and tail
- a. Antennas - CHECKED.
  - b. Stabilizer - CHECKED.
  - c. Anti-collision light - CHECKED.
  - \*d. Tail rotor gear box - CHECKED.
  - \*e. Tail rotor hub - CHECKED.
  - \*f. Tail rotor blades - CHECKED.



- \*g. Access steps - CHECKED.
- \*h. Transmission work platform - SECURED.
- 4. Right sponson.
  - a. Sponson and auxiliary tanks - CHECKED.
  - b. Main gear and tires - CHECKED.
  - \*c. Removable cabin windows - CHECKED.
- 5. Right rear fuselage.
  - a. Flare case - CHECKED.
  - \*b. Tail pylon - CHECKED.
- 6. Left rear fuselage.
  - \*a. Intermediate gear box - CHECKED.
  - b. Flare case - CHECKED.
  - \*c. Fire extinguisher thermal disks - CHECKED.  
Ensure disks are not pushed out indicating  
a thermally discharged fire extinguisher.
- 7. Left sponson.
  - a. Sponson and auxiliary tanks - CHECKED.
  - b. Main gear and tires - CHECKED.
  - c. Strobe light - CHECKED.
  - \*d. Removable cabin windows - CHECKED.
- 8. Upper left fuselage.
  - a. Engine oil level - CHECKED.
  - b. Engine inlet - CHECKED.
  - c. Engine - CHECKED.
  - d. Engine exhaust section - CHECKED.
  - e. Engine Door - CHECKED.
  - \*f. Main gear box - CHECKED.
  - \*g. Transmission deck - CHECKED.
  - \*h. Main rotor blades - CHECKED.

- i. Main rotor head fairing - CHECKED.
- \*j. Main rotor head reservoirs - CHECKED.
- k. Main rotor head assembly and control linkages - CHECKED.
- l. Primary and auxiliary reservoirs - CHECKED.
- m. Fire extinguisher - CHECKED.
- \*n. Main rotor head fairing access panels - SECURED.
- \*o. APU cowling - CHECKED.
- \*p. Main transmission work platform - SECURED.
- q. Cargo Sling - CHECKED. Proper security cable routing, electrical connections for security, and frayed wiring.

## 9. Left front fuselage.

- a. Main fuel tank filler caps - SECURED.
- \*b. Engine drain line sump - CHECKED.  
Drain prior to flight (as required).
- \*c. Removable hatch - SECURED.
- d. Antennas - CHECKED.
- e. Copilot's window emergency release handle - SECURED.
- f. Covers, plugs and all tiedowns - REMOVED.

## 10. Front fuselage.

- a. Nose gear and tires - CHECKED. Free of leaks and secure.
- b. Electronics compartment - CHECKED.

- c. Battery door - SECURED. Closed, locked and free of damage. Search light assembly for broken/cracked bulb.
- \*d. Pilot's-copilot's and center windshields - CHECKED.
- e. Refueling probe - CHECKED. Secure and free of leaks.

## **INTERIOR INSPECTION.**

- 1. Pilot compartment - CHECKED.
  - a. Landing gear handle - DOWN.
  - b. Fuel dump switches - OFF.



To preclude the possibility of fuel spillage, fuel dump switches must be off prior to energizing the electrical system.

- c. All electrical switches - OFF.
- d. Battery - ON (Voltage checked).
- e. Inverter - ON.
- f. Fuel quantity - CHECKED.
- g. Fire warning - CHECKED.
- h. All caution/advisory lights - CHECKED,  
CHECK CAUTION AND ADVISORY  
PANEL AND OPERATION OF ALL  
CAUTION LIGHTS.
- i. Battery - OFF.

- j. Emergency exit lights - CHECKED.
- k. Emergency exit lights switch - RESET.
- l. Circuit breakers - CHECKED.
- m. First aid kit and fire extinguisher - CHECKED. (Secured and charged).
- 2. Forward Cargo Compartment - CHECKED.
  - a. Crash axe - SECURE.
  - b. Fuel indentaplate - CHECKED.
  - c. Anchor, sea anchor, and anchor line - SECURED.
  - d. Cargo winch - CHECKED.
- 3. Aux Servo Compartment - CHECKED.
  - a. Servo - FREE OF HYDRAULIC LEAKS.
  - b. Filters - FREE OF LEAKS AND NOT IN BY-PASS.
  - c. Control rods - SAFETIED, ALIGNMENT, AND FREE OF DAMAGE.
- 4. Cargo/Personnel Door - CHECKED FOR OPERATION.
  - a. Emergency release handle - CHECKED AND SAFETIED.
  - b. Personnel door safety strap - CHECKED.
  - c. Rescue hoist and light - CHECKED (Secure and free of leaks).
- 5. Cargo Compartment
  - a. Removeable hatch - SECURE AND SAFETIED.
  - b. Emergency exit lights - SECURE.
  - c. Hoist shear switch - SAFETIED.
  - d. ICS control panels - CHECKED AND SET (insure cords are secured and stowed).

**CAUTION**

Interphone cords must be routed clear of window emergency release handles to preclude inadvertent jettison of windows.

- e. APU hand pump - CHECKED (secure, free of leaks, handle stowed, and accumulator serviced).
- f. Cargo hook storage line - CHECKED (secure and condition).
- g. Left and right removal cabin windows - SECURE AND JETTISON HANDLES ARE SAFETIED.
- h. Tail rotor cables - CHECKED (condition, security).
- i. Portable fire extinguisher - CHECKED (secure and charged).
- j. Bilge pump - CHECKED.

**NOTE**

If overwater flight is anticipated, check bilge covers to insure they can be opened.

- 6. Forward and AFT ramps - CHECKED.
  - a. Ramp control panel - CHECKED, SECURED, AND PROPER SWITCH POSITION.

- b. Forward ramp uplocks and actuating cylinders - FREE OF LEAKS AND UP LOCKS SAFETIED.
- c. AFT ramp cylinders - CHECKED FREE OF LEAKS.
- d. Cables checked - CONDITION AND SECURE.

## **BEFORE STARTING ENGINES.**

- \* 1. Passenger and crew briefing - "COMPLETED." (P)
- \* 2. Flight stations - "CHECKED" (P, CP, FE)
- 3. Cockpit console "SET." (CP/FE)
- \* 4. Overhead control panel - "SET." (CP/FE)
- 5. Engine controls - "CHECKED." (P/CP)
- \* 6. Rotor brake - "LOCK-OFF, BRAKE-ON." (P)
- 7. Pressure refuel panel - "SET." (CP)
- \* 8. Fuel management system - "SET." (CP)
- \* 9. Caution-advisory lights - "CHECKED." (P)
- \* 10. Intercom - "CHECKED." (ALL)
- \* 11. Fire warning system - "CHECKED." (P, CP)
- \* 12. APU - "CLEAR" (FE/FIREGUARD)  
"STARTING." (CP/FE)
- 13. Generator switches - "ON" (CP/FE).
- \* 14. Caution and advisory lights - "CHECKED." (P)
- \* 15. Transmission and hydraulic indicators - "CHECKED." (P)

16. External power - "AS REQUIRED." (CP/FE)
- \*17. Comm/Nav/Radios - "SET." (P, CP)
18. Cargo sling releases - If sling operations are planned, refer to Cargo Sling Procedures in Section VIII.
19. Rescue hoist - "CHECKED AS REQUIRED." (FE) If hoist operations are anticipated.
- \*20. Ramp - "AS REQUIRED; CABLE ATTACHED." (FE)
- \*21. Lights - "CHECKED." (FE/FIREGUARD) "SET" (CP/FE)
- \*22. J-4 compass - "SLAVED AND ALIGNED." (P) "ALIGNED" (CP)
23. Voltmeter selector - "CHECKED." (CP)
- \*24. Landing gear and warning light - "CHECKED." (CP)
25. Flight controls and cyclic trim - "CHECKED." (P, FE/FIREGUARD)
26. Primary servo - "OFF." (CP) "CHECKED, INTERLOCK CHECKED." (P)
27. Auxiliary servo - "OFF" (CP) "CHECKED, INTERLOCK CHECKED." (P)
28. Servo switches - "CENTERED." (CP) "PRI, AUX-CENTERED." (P)
29. Parking brake - "RESET." (P)
- \*30. "Before Starting Engines checklist completed." (CP/FE)

## ENGINE STARTING AND ROTOR ENGAGEMENT.

1. Ignition switches - "NORMAL" (CP)
2. Fuel management system - "CHECKED AND SET." (CP)
3. No. 1 engine - "CLEAR" (FE/FIREGUARD)  
"STARTING" (P/CP)
4. No. 2 engine - "CLEAR" (FE/FIREGUARD)  
"STARTING." (P/CP)
5. External auxiliary fuel tanks - "CLEAR"  
(FE/FIREGUARD) "FLOW" (CP/FE)  
"CHECKED." (FE/FIREGUARD)
6. Pins, chocks and static wire - "REMOVED."  
(FE/FIREGUARD)
7. AFCS - "ON AND INDICATORS CHECKED"  
(P, CP)
8. Area - "CLEAR." (ALL)
9. Rotors - "ENGAGED." (P)
10. APU master switch - "OFF." (P/FE)
11. Unloaded engine throttle - "SET - 102%."  
(P)
12. Refueling probe - "CHECKED AS  
REQUIRED." (CP, FE)
13. Boost pumps - "OFF." (CP)
14. Engine Starting and Rotor Engagement  
checklist completed." (CP/FE)



## **BEFORE TAXIING.**

1. Engine anti-ice caution and advisory lights -  
"AS REQUIRED" (CP/FE).
2. Doppler - "STANDBY." (CP)
3. Alarm bell - "CHECKED." (CP/FE)
4. Engine and windshield anti-ice - "AS REQUIRED" (CP/FE)
5. Pitot heat - "CHECKED AS REQUIRED."  
(CP/FE)
6. Engine acceleration - deceleration, flat pitch,  
and freewheeling - "AS REQUIRED." (P/CP)
7. Personnel door emergency release handle -  
"CHECKED." (FE)
8. Crew and passengers - "READY FOR TAXI."  
(FE)
9. Safety belt, shoulder harness, and inertial reel  
lock - "FASTENED AND CHECKED" (FE)
10. Radio call - "COMPLETED." (P/CP)
11. Clocks and altimeters - "SET, STATE  
SETTING." (P, CP)
12. Area - "CLEAR." (ALL)
13. Parking brake - "OFF." (P)
14. "Before Taxiing checklist completed."  
(CP/FE)

**BEFORE TAKEOFF.**

1. Boost pumps - "ON." (CP), "CHECKED ON." (P)
2. Electronic altimeter - "ON." (P, CP)
3. Flight instruments - "CHECKED." (P, CP)
4. Navigation equipment - "CHECKED AND SET." (P/CP/FE)
5. IFF - "AS REQUIRED." (P, CP)
- \*\* 6. AFCS - "CHECKED ON." (P)
- \*\* 7. Engine and transmission instruments - "CHECKED." (CP)
- \*\* 8. Caution and advisory lights - "CHECKED." (P)
- \*\* 9. Passenger and crew - "BRIEFED AND READY FOR TAKEOFF." (P)
- \*\* 10. Parking brake - "OFF." (P)
- \*\* 11. Throttles - "MAXIMUM." (P)
- \*\* 12. Lights - "SET." (CP/FE)
13. Electronic altimeter - "CHECKED" (P, CP)
14. Hover check - "COMPLETED." (P)
- \*\* 15. "Before Takeoff checklist - COMPLETED." (CP/FE)

**AFTER TAKEOFF.**

1. Engine and transmission instruments - CHECKED. (CP/FE)

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2. Lights - SET. (CP/FE)
3. Landing gear - INDICATORS CHECKED.  
(CP/FE)
4. Throttles - ADJUSTED. (CP/FE)
5. AN/ALE-20 arming switch - ON (ARMED).  
(CP/FE)
6. Visual Aircraft Inspection - "COMPLETED"  
(FE)
7. "After Takeoff checklist completed." (CP/FE)

### **BEFORE LANDING.**

1. Fuel - CHECKED. (CP/FE)
2. Engine and transmission instruments -  
CHECKED. (CP/FE)
3. Parking brake - AS REQUIRED. (CP/FE)
4. Throttles - 103% N<sub>r</sub>. (CP/FE)
5. AN ALE-20 arming switch - AS REQUIRED.  
(CP/FE)
6. Landing gear - AS REQUIRED. (CP/FE)
7. "Before Landing checklist completed." (CP/  
FE)

### **TRAFFIC PATTERN.**

1. Engine and transmission instruments -  
CHECKED. (CP/FE)
2. Landing gear - INDICATORS CHECKED.  
(CP/FE)

3. Lights - AS REQUIRED. (CP/FE)
4. Throttles - 103% N<sub>r</sub>. (CP/FE)
5. "Traffic Pattern checklist completed."  
(CP/FE)

## **AFTER LANDING.**

1. Throttles - 102% N<sub>r</sub>. (CP/FE)
2. Lights - SET. (CP/FE)
3. Heater switch - OFF. (CP/FE)
4. Pitot heat switch - OFF. (CP/FE)
5. IFF - AS REQUIRED. (P/CP)
6. Electronic altimeters - OFF (P, CP)
7. Doppler - STBY (CP/FE)
8. "After Landing checklist completed." (CP/FE)

## **ENGINE SHUTDOWN.**

1. Parking brake - "ON." (P)
2. Navigation sets, unnecessary radios, and doppler - "OFF." (CP)
3. APU - "START." (CP/FE)
4. Engine and windshield anti-ice - "OFF."  
(CP/FE)
5. Ignition switches - "OFF." (CP/FE)
6. Throttles - "GRD IDLE." (CP)
7. Droop stops - "IN." (FE/FIREGUARD)
8. Throttles - "SHUTOFF." (CP)
9. Fuel management system - "OFF." (CP)

10. Rotor brake - "ON." (P)
11. AFCS - "OFF." (P)
12. Pins and chocks - "IN." (FE/FIREGUARD)
13. T<sub>5</sub> - "CHECKED." (P/CP)
14. APU - "OFF." (CP/FE)
15. All radios - "OFF." (CP/FE)
16. All electrical switches - "OFF." (CP/FE)
17. Emergency exit lights switch - "RESET."  
(CP/FE)
18. "Engine Shutdown checklist completed."  
(CP/FE)

## **ROTOR SHUTDOWN AND ENGAGEMENT (ENGINES RUNNING).**

### **AFTER LANDING.**

1. Throttles - 102%. (CP)
2. Lights - SET. (CP/FE)
3. APU - START. (CP/FE)
4. Doppler/IFF - STBY. (CP)

### **ROTOR SHUTDOWN.**

1. Parking brake - "AS REQUIRED." (P)
2. Throttles - "GRD IDLE." (CP)
3. Droop stops - "IN." (FE)
4. Rotor brake - "ON." (P) (45% N<sub>r</sub> OR LESS)
5. "Rotor Shutdown checklist completed."  
(CP/FE)

**ROTOR ENGAGEMENT AND BEFORE TAKEOFF.**

1. Passenger and crew briefing - "COMPLETED." (P)
2. Ramp - "AS REQUIRED, CABLES ATTACHED." (FE)
3. Area - "CLEAR." (ALL)
4. Rotors - "ENGAGED." (P)
5. APU master switch - "OFF." (P)
6. Unloaded engine throttle - "SET, 102%." (P)
7. Doppler/IFF - "AS REQUIRED." (CP)
8. AFCS - "CHECKED ON." (P)
9. Engine and transmission instruments - "CHECKED." (CP)
10. Caution and advisory lights - "CHECKED." (P)
11. Parking brake - "OFF." (P)
12. Personnel door emergency release handle - "CHECKED." (FE)
13. Passenger and crew - "READY FOR TAKEOFF." (FE)
14. Radio call - "AS REQUIRED." (P/CP)
15. Throttles - "AS REQUIRED." (State setting) (CP)
16. "Rotor Engagement and Before Takeoff checklist completed." (CP/FE)

## **PASSENGER AND CREW BRIEFING.**

### **PASSENGER BRIEFING.**

#### **Predeparture Briefing.**

1. Introduction of crew.
2. Destination.
3. Flight altitude.
4. Departure time and estimated time enroute.
5. Enroute weather.
6. Seats and safety belts.
7. Movement in the helicopter.
8. Smoking.
9. Emergency exits (location and operation).
10. Emergency landings or autorotations (signals and exits).
11. Bailout (signals and exits.)
12. Emergency equipment (fire extinguishers, crash axe, first aid kits, parachutes, and emergency exit lights).
13. Use of portable electronic device.
14. Helicopter characteristics. Passenger information card in helicopters.

### **Over Water Briefing.**

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

### **CREW BRIEFING.**

1. Mission requirements
2. Flight plan.
3. Fuel load.
4. Emergency - survival equipment.
5. Weather.
6. Special equipment.
7. Weight and balance.
8. Crew duties and responsibilities.

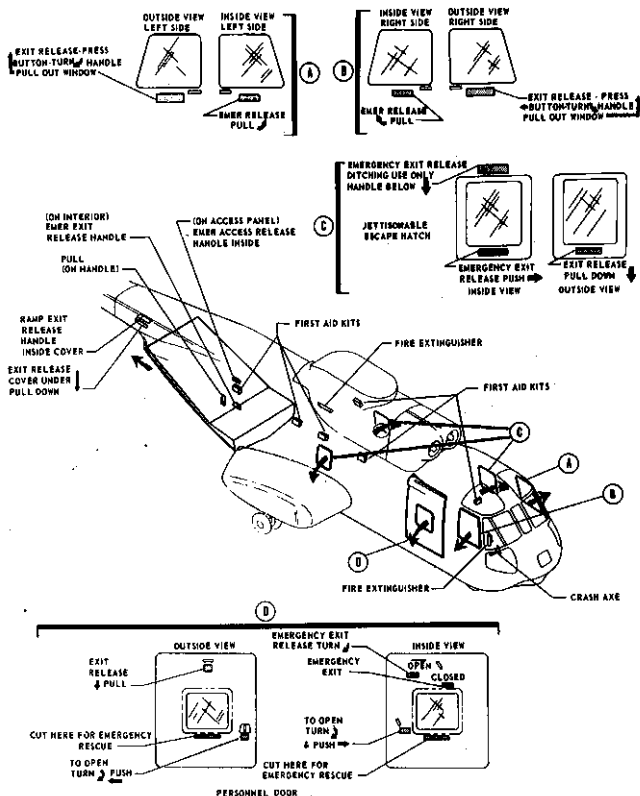


## PASSENGER INFORMATION

1. Smoking is prohibited during ground operation, takeoffs, landings, aerial refueling and when directed by the helicopter commander.
2. Safety belts will be securely fastened for all takeoffs, landings, aerial refueling and flight through turbulent air.
3. Operation of portable electronic equipment, butane and/or plastic reservoir type lighters is prohibited.
4. All passengers should wear ear protective devices to avoid ear damage.
5. If it becomes necessary to evacuate the helicopter, refer to diagram on reverse side for exits.
6. If a crash landing becomes necessary, proceed as follows:
  - a. Jettison emergency exits as directed by the helicopter commander.
  - b. Loosen tie.
  - c. Fasten safety belt tight.

Just prior to contact with the surface, passengers will fold arms resting them on their knees. Bend body forward as far as possible and rest head firmly on arms. If available, hold pillow, blanket, or clothing in front of head to cushion possible impact.

7. Alarm bell.
  - a. Bail Out: 3 short rings followed by one continuous ring.
  - b. Crash Landing: 6 short rings followed by one continuous ring.



## EMERGENCY EXITS AND EQUIPMENT

## **FUEL DUMPING SYSTEMS PROCEDURES.**

### **INTERNAL AUXILIARY FUEL TANK DUMPING (JETTISONING) SYSTEM.**

1. Auxiliary fuel jettison switch - JETTISON.

### **MANUAL FUEL DUMPING SYSTEM.**

1. Crew - ALERTED.
2. Communication - MAKE APPROPRIATE RADIO CALLS.
3. Heater/vent fan - OFF.
4. No Smoking.
5. Aft ramp and cargo door - CLOSED.
6. All boost pumps - ON.
7. Crossfeed valves - OPEN.
8. Manual fuel close line valve - CLOSED.
9. Manual fuel dump line valve - OPEN.
10. Fuel quantity gages - MONITOR.

### **To Stop Fuel Dump.**

1. Manual fuel dump line valve - CLOSED.
2. Manual fuel close line valve - OPEN.
3. Crossfeed valve - AS REQUIRED.
4. Boost pump - AS REQUIRED.
5. Visually check that fuel dumping has stopped. Residual fuel may continue to flow for a short time after fuel dumping has been terminated.

## TAKEOFF AND LANDING DATA CARD

| DATA              | TAKEOFF | LANDING |                   |
|-------------------|---------|---------|-------------------|
| FIELD ELEVATION   | _____   | _____   | FT                |
| PRESSURE ALTITUDE | _____   | _____   | FT                |
| FREE AIR          |         |         |                   |
| TEMPERATURE       | _____   | _____   | °C                |
| WIND              | _____   | _____   | KT/DEG            |
| DENSITY ALTITUDE  | _____   | _____   | FT                |
| OPERATING WEIGHT  | _____   | _____   | LB                |
| EXTRA CREW AND    |         |         |                   |
| EQUIPMENT         | _____   | _____   | LB                |
| FUEL              | _____   | _____   | LB                |
| PAYLOAD           | _____   | _____   | LB                |
| MISSION GROSS     |         |         |                   |
| WEIGHT            | _____   | _____   | LB                |
| POWER AVAILABLE   | _____   | _____   | % Q               |
| MAXIMUM GROSS     |         |         |                   |
| WEIGHT            | _____   | _____   | LB                |
| WHEEL HEIGHT FOR  |         |         |                   |
| HOVER             | _____   | _____   | FT                |
| POWER REQUIRED    | _____   | _____   | % Q               |
| POWER RESERVE     | _____   | _____   | % Q               |
| MAXIMUM AIRSPEED  | _____   | _____   | KT                |
| TOPPING LIMITS    | _____   |         | % Ng              |
|                   | _____   |         | °C T <sub>5</sub> |

## CRUISE INFORMATION:

|                   |       |        |
|-------------------|-------|--------|
| PRESSURE ALTITUDE | _____ | FT     |
| TEMPERATURE       | _____ | °C     |
| DENSITY ALTITUDE  | _____ | FT     |
| TORQUE            | _____ | % Q    |
| FUEL CONSUMPTION  | _____ | LB/HR  |
| TAS               | _____ | KT     |
| CAS               | _____ | KT     |
| WIND              | _____ | KT/DEG |
| GROUND SPEED      | _____ | KT     |

## **ALERT PROCEDURES**

|                                  |            |
|----------------------------------|------------|
| <b>ALERT PROCEDURES</b> .....    | <b>A-2</b> |
| <b>COCKING CHECKLIST</b> .....   | <b>A-2</b> |
| <b>UNCOCKING CHECKLIST</b> ..... | <b>A-3</b> |
| <b>SCRAMBLE CHECKLIST</b> .....  | <b>A-3</b> |

## **ALERT PROCEDURES.**

### **COCKING PROCEDURES.**

Prior to assuming alert, the helicopter will be run up to include completion of all checks through BEFORE TAKEOFF, systems checkout, and shut-down using the AFTER LANDING and ENGINE SHUTDOWN checklists, after which the helicopter may be cocked using the COCKING checklist. When a helicopter requires to be cocked following a flight, it is considered to have all required systems checked, and it may be cocked using the COCKING checklist provided the AFTER LANDING and ENGINE SHUTDOWN checklists were accomplished. The SCRAMBLE checklist will not be used unless the COCKING checklist has been accomplished.

### **COCKING CHECKLIST.**

1. Parking brake - "RESET." (P)
2. Rotor brake - "ON." (P)
3. Overhead switch panel - "SET." (P) (Battery switch off)
4. Ignition switches - "NORMAL." (CP)
5. Fuel management system - "SET." (CP)
  - a. Fuel shutoff valves - OPEN.
  - b. Boost pumps - ON.
6. Electronic altimeters - "ON." (P) (CP)

7. Navigation and communications radios -  
"SET." (P, CP) (Doppler Set Off)
8. Cocking checklist - "COMPLETED." (CP)

### **UNCOCKING CHECKLIST.**

1. All electrical switches - OFF.
2. Ignition switches - OFF.
3. Fuel shutoff valves - CLOSED.
4. Boost pumps - OFF.
5. Electronic altimeters - OFF.
6. Navigation and communication radios - OFF.
7. Parking brake - AS REQUIRED.
8. Uncocking checklist - COMPLETED.

### **SCRAMBLE CHECKLIST**

1. Battery switch - "ON" (OFF IF EXTERNAL POWER USED). (P)
2. Protective covers, pitot covers, engine plugs, tiedowns, and static wire - "REMOVED". (FE)
3. Safety belt and harness - "FASTENED." (P, CP)
4. Rotor brake - "LOCK-OFF, BRAKE-ON". (P)
5. Caution and advisory lights - "CHECKED". (P)
6. APU - "CLEAR" (FE/FIREGUARD),  
"STARTING" (P/CP/FE)
7. Caution and advisory lights - "CHECKED". (P)



8. Transmission and hydraulic indicators -  
"CHECKED". (P)
9. No. 1 engine - "CLEAR" (FE/FIREGUARD)  
"STARTING" (P/CP)
10. No. 2 engine - "CLEAR" (FE/FIREGUARD)  
"STARTING" (P/CP)
11. Pins and chocks - "REMOVED." (FE)
12. Area - "CLEAR" (P, CP, FE)
13. Rotors - "ENGAGED." (P)
14. APU master switch - "OFF." (P/FE)
15. Unloaded engine throttle - "SET - 102%." (P)
16. Engine and windshield anti-ice - "AS  
REQUIRED" (CP/FE)
17. Pitot Heat - "AS REQUIRED" (CP/FE)
18. Doppler - "STBY." (CP/FE)
19. Engine and transmission instruments -  
"CHECKED." (CP)
20. Flight instruments - "CHECKED." (P, CP)
21. AFCS - "ON AND INDICATORS CHECKED." (P, CP)
22. Doppler/IFF - "ON." (CP/FE)
23. Cabin, crew and passengers - "SECURE AND  
READY FOR TAKEOFF" (FE)
24. Lights - "SET." (P) (CP/FE)
25. Radio call - "COMPLETED." (P, CP)
26. Parking brake - "OFF." (P)
27. Throttles - "AS REQUIRED." (CP)
28. "Scramble checklist - COMPLETED." (CP)

## HOT REFUELING PROCEDURES

|                                |     |
|--------------------------------|-----|
| HOT REFUELING OPERATIONS ..... | R-2 |
| PREPARATION .....              | R-2 |
| HOT REFUELING .....            | R-2 |
| POST HOT REFUELING .....       | R-2 |

## **HOT REFUELING OPERATIONS.**

### **PREPARATION.**

1. Doppler/IFF - "STBY" (CP)
2. TACAN - "REC" (CP)
3. Radar altimeter - "OFF" (P,CP)
4. Lights - "SET" (CP)
5. Radios - "AS REQUIRED" (P, CP)
6. Refuel panel - "SET" (CP)
7. Ramp - "LEVEL" (FE)
8. Preparation checklist - "COMPLETED" (FE)

### **HOT REFUELING.**

1. Parking Brakes - "ON" (P)
2. Cockpit window and cabin door — "AS REQUIRED" (ALL)
3. Ground wires - "INSTALLED" (FE)
4. Fire guard - "POSTED" (FE)
5. Refueling nozzle - "CONNECTED AND CHECKED" (FE)
6. Fuel flow - "ESTABLISHED" (CP)
7. Preshutoff test - "COMPLETED" (CP)
8. Hot Refueling Checklist - "COMPLETED" (CP)

### **POST HOT REFUELING.**

1. Fuel Flow - "STOPPED" (CP)
2. Fueling nozzle/adaptor - "DISCONNECTED" (FE)

3. Refueling nozzle from probe adapter -  
"REMOVED" (FE) (if required)
4. SPR access panel - "CLOSED" (FE)
5. Refuel panel - "SET" (CP)
6. Ground wires - "REMOVED" (FE)
7. Parking brakes - "RELEASED" (P)
8. Electronic equipment - SET (P, CP)
9. Post Hot Refueling Checklist -  
"COMPLETED" (FE)

## EMERGENCY PROCEDURES

|  |       |
|--|-------|
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| FIRE DURING GROUND OPERATIONS . . . . .                              | E-2   |
| FIRE IN APU COMPARTMENT . . . . .                                    | E-2   |
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| EMERGENCY ENGINE SHUTDOWN AND<br>EGRESS . . . . .                    | E-2   |
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| SHUTDOWN WITH TAIL TAKEOFF FREE<br>WHEEL UNIT INOPERATIVE . . . . .  | E-8   |

## **GROUND OPERATIONS.**

### **FIRE DURING GROUND OPERATIONS.**

#### **FIRE IN APU COMPARTMENT.**

- 1. APU EMERGENCY FUEL - SHUTOFF.**
- 2. APU FIRE EXTINGUISHER - (ON).**
3. Master switch - OFF.
4. Fire in APU Compartment checklist completed.

#### **ENGINE COMPARTMENT FIRE.**

- 1. THROTTLES - SHUTOFF.**
- 2. T-HANDLE (AFFECTED ENGINE) PULL.**
- 3. FIRE EXTINGUISHER - MAIN/RESERVE.**
4. Fuel management system - OFF.
5. APU - OFF.
6. Battery - OFF.
7. Engine Compartment Fire checklist completed.

#### **EMERGENCY ENGINE SHUTDOWN AND EGRESS**

1. Parking Brakes - SET
2. Throttles - SHUTOFF

3. Fuel Management System - OFF
4. Rotor Brake On



Application of rotor brake at a higher than normal speed may cause an over-heat condition possibly resulting in a fire. If conditions permit, apply rotor brake when rotor speeds drop below 45% Nr.

5. Radio Call - AS REQUIRED
6. Aircraft - EVACUATE
7. Battery Switch - OFF

## **HOT REFUELING**

### **Emergency Procedures**

1. Fuel leak/spill:
  - a. Shutdown refueling operation (HRS)
  - b. Determine cause of leak (HRS)
  - c. Repair or replace hose or nozzle (HRS)
  - d. If unrepairable, terminate refueling operations (HRS/P)
  - e. Wash down any fuel spill (HRS)
2. Aircraft Evacuation:
  - a. Shutdown refueling operation (HRS)
  - b. Nozzle and bonding wires removed and clear (HRS)

- c. Clear aircraft to taxi to prebriefed holding area (HRS)
- 3. Fire/Sparks:
  - a. Shutdown refueling operation (HRS)
  - b. Disconnect hose from tanker and receiver(s) if possible (HRS)
  - c. Extinguish fire or determine cause of sparks (HRS)
  - d. Evacuate aircraft if necessary (P)
- 4. First aid for personnel sprayed with fuel:
  - a. Immediately flood the contaminated area with large quantities of water, wash with soap if possible.
  - b. Remove all contaminated clothing.
  - c. Continue irrigation of the contaminated area with water as long as burning persists.



## **INFLIGHT OPERATIONS.**

### **SINGLE ENGINE FAILURE.**

- 1. THROTTLES - MAXIMUM.**
- 2. LANDING GEAR - AS REQUIRED.**
- 3. Weight - REDUCE AS NECESSARY.**
- 4. Accomplish ENGINE SHUTDOWN or RESTART checklist.**

### **ENGINE SHUTDOWN IN FLIGHT.**

- 1. Throttle - SHUTOFF.**
- 2. Ignition switch - OFF.**
- 3. Fuel shutoff valve - CLOSED.**
- 4. Boost pumps - AS REQUIRED.**
- 5. Fuel crossfeed valve - AS REQUIRED.**
- 6. Engine anti-ice - OFF.**
- 7. Engine Shutdown checklist completed.**



If an engine fire should occur and the corresponding engine fire warning light illuminates during or after engine shutdown, proceed with steps 3 through 6 of ENGINE COMPARTMENT FIRE IN FLIGHT checklist.

## **ENGINE RESTART DURING FLIGHT.**

1. Ignition switch - NORMAL.
2. Throttle (inoperative engine) - SHUTOFF.
3. Emergency fuel control lever - CLOSED.
4. Fuel shutoff valve - OPEN.
5. Boost pumps - AS REQUIRED.
6. Fuel crossfeed valve - AS REQUIRED.
7. Engine - START.
8. Engine Restart During Flight checklist completed.

## **TWO-ENGINE FAILURE DURING FLIGHT (AUTOROTATIVE LANDING).**

### **Maintain Helicopter Control and Initiate Autorotation.**

1. COLLECTIVE - DOWN.
2. LANDING GEAR - AS REQUIRED.
3. Throttles - SHUTOFF.
4. Ignition switches - OFF.
5. Fuel shutoff valves - CLOSED.
6. Boost pumps - OFF.
7. Battery - OFF.
8. Autorotation checklist completed.

## **MAIN ROTOR BLADE IBIS PRESSURE WARNING.**

- 1. Airspeed - Attain 70 to 90 KIAS.**
- 2. Land as soon as practical and visually check the IBIS indicators.**

## **FIRE IN FLIGHT.**

### **ENGINE COMPARTMENT FIRE IN FLIGHT.**

- 1. THROTTLES - MAXIMUM.**
- 2. THROTTLE (AFFECTED ENGINE) - SHUTOFF.**
- 3. T-HANDLE (AFFECTED ENGINE) - PULL.**
- 4. FIRE EXTINGUISHER - MAIN/RESERVE.**
- 5. LANDING GEAR - AS REQUIRED.**
- 6. Weight - REDUCE AS NECESSARY.**
- 7. Accomplish Engine Shutdown in Flight checklist.**

## **BAILOUT.**

1. IFF - EMERGENCY.
2. Radio call - MAYDAY (Give position report.)
3. Cabin occupants - ALERTED (warn occupants via interphone, loudspeaker or alarm bell).
4. Personnel door - OPEN (Jettison if necessary).
5. Cabin occupants - BAIL OUT.
6. Pilot and copilot - BAIL OUT.

## **EMERGENCY WATER LANDING PROCEDURES.**

### **Planned Ditching.**

1. Crew/cabin occupants - ALERTED FOR DITCHING.
2. IFF - EMERGENCY.
3. Distress call - COMPLETED.
4. Tip tanks - AS REQUIRED.
5. Ramp - CLOSED.
6. Search and landing lights - AS REQUIRED.
7. Cockpit windows and personnel door - OPEN

**After Landing.**

1. Landing gear - DOWN.
2. Anchor/sea anchor - DEPLOYED.
3. Bilge pump - AS REQUIRED.

**Before Leaving The Helicopter.**

1. Bilge covers - SECURED.
2. Anchor lights - ON.
3. Windows and hatches - CLOSED.

**SYSTEMS EMERGENCIES.****GENERATOR FAILURE.****Failure Of One Generator.**

1. No. 1 boost pumps - ON, if required.
2. Generator switch - OFF/RESET, then ON.
3. Generator switch - OFF, if power is not restored.

## **Failure Of Both Generators.**

1. No. 1 generator switch - OFF/RESET, then ON.
2. No. 2 generator switch - OFF/RESET, then ON.
3. Generator switch(es) - OFF, if power is not restored.
4. If the No. 1 or No. 2 generator is not restored, turn off all unnecessary equipment, abort mission and land as soon as practical.

## **SERVO HYDRAULIC PRESSURE FAILURE.**

1. Servo switch (affected system)-OFF. Land as soon as possible.

## **SHUTDOWN WITH TAIL TAKEOFF FREE WHEEL UNIT INOPERATIVE.**

1. Pins and chocks - IN.
2. Throttles - GROUND IDLE.
3. Droop stops - IN.
4. No. 2 engine - SHUTDOWN.
5. Rotor brake - ON (45 %  $N_r$  or less).
6. No. 1 engine - SHUTDOWN.
7. Continue with Engine Shutdown checklist.