UH-1H/V Helicopters
TM 55-1520-210-CL

HELICOPTER AND SYSTEMS
PREFLIGHT
1. Covers, locking devices, tiedowns, and cables—Remove except main rotor tiedown.
2. Publications—Check.
3. AC circuit breakers—In.
4. BAT switch—ON; Check voltage.
5. Lights—On; check, then off.
6. Fuel—Check quantity.
7. Fuel sample—Check as required
8. Cargo hook—Check as required.
9. BAT switch—OFF.

EXTERIOR CHECK
1. Main rotor blade—Check.
2. Fuselage—Check.
3. Fuselage—Check.
4. Armament system—Check.
5. Engine compartment—Check.
6. Tailboom—Check.
7. Main rotor blade—Check.
8. Tail Rotor—Check.
9. Tail Rotor gearboxes—Check.
10. Tail boom—Check.
11. Engine exhaust—Check.
12. Oil cooling fan and heater compartments—Check.
13. Engine compartment—Check.
14. Hydraulic fluid sight gage—Check.
15. Fuselage—Check.
16. Main rotor system—Check.
17. Transmission area—Check.

INTERIOR CHECK—CABIN.
1. Transmission oil level—Check.
2. Cabin area—Check.
3. Crew and passenger briefing—Complete.

BEFORE STARTING ENGINE
1. Overhead circuit breakers and switches—Set.
2. GPU—Connect for GPU start.
3. Smoke gage—Check.
4. FIRE warning indicator light—Test.
5. Press to test lights—Check.
6. Flight instruments—Check and set.
7. Systems instruments—Check.
8. Center pedestal switches—Set.
9. Flight controls—Check.
10. Altimeters—Set.

This manual supersedes TM 55-1520-210-CL, 1 October 1984, including all changes.

STARTING ENGINE
1. Fireguard—Posted if available.
2. Rotor blades—Check clear and untied.
3. Ignition Key Switch—On.
4. Throttle—Set for start.
5. Engine—start.
6. Engine and transmission oil pressures—Check.
7. GPU—Disconnect.

ENGINE RUNUP
1. Avionics—On; check as required.
2. STARTER GEN switch—STBY GEN.
3. Systems—Check.
4. RPM—6600.
5. Fuel control—Check as required.
6. HIT check—Perform.

HOVER/TAXI CHECK
1. Engine and transmission instruments—Check.
2. Flight instruments—Check.
3. Power—Check as required.

BEFORE TAKEOFF
1. RPM—6600.
2. Systems—Check.
3. Avionics—As required.
4. Crew, passengers, and mission equipment—Check.

BEFORE LANDING
1. RPM—6600.
2. Crew, passengers, and mission equipment—Check.

ENGINE SHUTDOWN
1. Throttle—Idle two minutes.
2. FORCE TRIM switch—ON.

NOTE: Steps 3 through 8 are for the last flight of the day if not used.

3. PITOT HTR—Check.
4. INVTR switch—OFF, then SPARE.
5. AC voltmeter—Check.
6. MAIN GEN switch—OFF; check DC volts
7. NON-ESS BUS—Check as required.
8. MAIN GEN switch—ON.
9. STARTER GEN switch—START.
10. Throttle—OFF.
11. Center pedestal switches—OFF.
12. Overhead switches—OFF.
13. Ignition switch—As required.

BEFORE LEAVING THE HELICOPTER
1. Conduct walk-around inspection.
2. Mission equipment—Secure.
3. Complete DA Forms 2408-12 and -13.
4. Secure helicopter.

THROUGH-FLIGHT CHECKLIST
HELICOPTER AND SYSTEMS—PREFLIGHT
1. Covers, locking devices, tiedowns, and cables—Removed.
2. Fuel—Check quantity as required.

EXTERIOR CHECK
1. Main rotor blade—Check.
2. Armament system—Check.
3. Main rotor blade—Check.
4. Tail rotor—Check.
5. Tail rotor gearboxes—Check.
6. Engine compartment—Check.
7. Hydraulic fluid sight gage—Check.
8. Fuselage—Check.
9. Main rotor system—Check.

INTERIOR CHECK—CABIN
1. Transmission oil level—Check.
2. Cabin area—Check.
3. Crew and passenger briefing—Complete.

BEFORE STARTING ENGINE
1. EXT LTS switches—Set.
2. BAT switch—ON.
3. GPU—Connect for GPU start.
4. Fuel switches—Set.

STARTING ENGINE
1. Fire guard—Posted if available.
2. Rotor blades—Check clear and untied.
3. Ignition key switch—On.
4. Throttle—Set for start.
5. Engine—Start.
6. Engine and transmission oil pressures—Check.
7. GPU—Disconnect.

ENGINE RUNUP
1. Avionics—ON; check as required.
2. STARTER GEN switch—STBY GEN.
3. Sytems—Check.
4. RPM—6600.

HOVER/TAXI/CHECK
1. Engine and transmission instruments—Check.
2. Power—Check as required.

BEFORE TAKEOFF
1. RPM—6600.
2. Systems—Check.
3. Avionics—As required.
4. Crew, passengers, and mission equipment—Check.

By Order of the Secretary of the Army:
JOHN A. WICKHAM, JR.
General, United States Army
Chief of Staff
Official:
R. L. DILWORTH
Brigadier General, United States Army
The Adjutant General

ENGINE EMER GOV OPNS
1. GOV switch—EMER.
2. Throttle—Adjust.
3. Land as soon as possible.

ENGINE MALFUNCTION—HOVER.
Autorotate.

ENGINE MALFUNCTION LOW ALTITUDE/LOW AIRSPEED OR CRUISE
1. Autorotate.
2. EMER GOV OPNS.

ENGINE RESTART—DURING FLIGHT
1. Throttle—Off.
2. STARTER GEN switch—START.
3. FUEL switches—ON.
4. GOV switch—EMER.
5. Attempt start.
6. Land as soon as possible.

DROOP COMPENSATOR FAILURE
EMER GOV OPNS.

ENGINE COMPRESSOR STALL
1. Collective—Reduce.
2. DE-ICE and BLEED AIR switches—OFF.
3. Land as soon as possible.

ENGINE OVERSPEED
1. Collective—Increase.
2. Throttle—Reduce.
3. EMER GOV OPNS.

EMER SHUTDOWN
1. Throttle—Off.
2. FUEL switches—OFF.
3. BAT switch—OFF.

TRANSMISSIONS AND DRIVE SYSTEMS

MALFUNCTIONS TRANSMISSION OIL—HOT OR LOW PRESSURE
1. Land as soon as possible.
2. EMER SHUTDOWN—After landing.

MAIN DRIVESHAFT FAILURE
1. Autorotate.
2. Throttle—Off.

CLUTCH FAILS TO DISENGAGE
1. Throttle—ON.
2. Land as soon as possible.

CLUTCH FAILS TO RE-ENGAGE
1. Autorotate.
2. Throttle—Off.

FUEL SYSTEM

FUEL BOOST FAILURE
If both FUEL BOOST caution lights illuminate:
1. Check fuel pressure. If fuel pressure is zero.
2. PA—4600 ft or less.
3. Land as soon as practicable.

ELECTRICAL SYSTEM

MAIN GENERATOR MALFUNCTION.
1. GEN & BUS RESET circuit breaker—In.
2. MAIN GEN switch—RESET then ON.
If main generator is not restored or if it goes off again—
3. MAIN GEN switch—OFF.

DITCHING

DITCHING—POWER ON
1. Cockpit doors—Jettison at a hover.
2. Cabin doors—Open.
3. Crew (except pilot) and passengers—Exit.
4. Hover a safe distance away from personnel.
5. Throttle—Off and autorotate.
6. Pilot—Exit when main rotor has stopped.

DITCHING—POWER OFF
1. Cockpit and cabin doors—Jettison.
2. Exit when main rotor has stopped.

MAST BUMPING
1. Reduce severity of maneuver.
2. Land as soon as possible.

FLIGHT CONTROL/MAIN ROTOR SYSTEM MALFUNCTIONS
1. Land as soon as possible.
2. EMER SHUTDOWN

COLLECTIVE BOUNCE
1. Relax pressure.
2. Make a significant collective application.
3. Increase collective friction.

FIRE

FIRE ENGINE STARTING
1. Start switch—Press.
2. Throttle—Off.
3. FUEL switches—OFF.

FIRE GROUND
1. EMER SHUTDOWN.

FIRE FLIGHT
a. Power—On.
1. Land as soon as possible.
2. EMER SHUTDOWN—After landing.
b. Power—Off.
1. Autorotate.
2. EMER SHUTDOWN.

ELECTRICAL FIRE—FLIGHT
1. BAT, STBY, MAIN GEN switches—OFF.
2. Land as soon as possible.
If landing cannot be made—
3. Circuit breakers—Out.
As each of the following steps are accomplished, check for source of fire.
4. MAIN GEN switch—ON.
5. STARTER GEN switch—STBY GEN.
6. BAT switch—ON.
7. Circuit breakers—In one at a time in priority required, GEN & BUS RESET first. When malfunctioning circuit is identified, pull applicable circuit breaker.

OVERHEATED BATTERY
1. BAT switch—OFF.
2. Land as soon as possible.
3. EMER SHUTDOWN.

HYDRAULIC

HYDRAULIC POWER FAILURE
1. Airspeed—Adjust.
2. HYD CONT circuit breaker—Out.
3. HYD CONT circuit breaker—In.
4. HYD CONT switch—OFF.
5. Land as soon as practicable.

CONTROL STIFFNESS
1. HYD CONT switch—OFF then ON.
If control response is not restored—
2. HYD CONT switch—OFF.
3. Land as soon as practicable.

TABLE E—CAUTION LIGHTS

LIGHT	CORRECTIVE ACTION
MASTER CAUTION	Check the CAUTION panel for the condition. If master caution only (no segment light), land as soon as possible.
AUX FUEL LOW	INT AUX FUEL switches—OFF.
DC GENERATOR	See emergency procedure.
INST INVERTER	Switch to other inverter.
EXTERNAL POWER	Close door.
XMSN OIL PRESS	Land as soon as possible.
XMSN OIL HOT	Land as soon as possible.
ENGINE INLET AIR	Land as soon as practicable.
CHIP DETECTOR	Land as soon as possible.
FUEL BOOST	Information/system status. Land as soon as practicable if two boost pump failure.
20-MIN FUEL	Information/system status.
IFF	Information/system status.
ENG OIL PRESS	Land as soon as possible.
ENG CHIP DET	Land as soon as possible.
GOV EMER	Information/system status.
ENG ICE DET	Land as soon as possible.
ENG FUEL PUMP	Land as soon as possible.
ENG ICING	Land as soon as possible.
FUEL FILTER	Land as soon as practicable.
HYD PRESSURE	Land as soon as practicable.
SPARE	Land as soon as possible.