



**OH-13E, G & H HELICOPTER**

**COMPLETE PREFLIGHT**

**INSPECTION**

**ROMERO**



## Complete Preflight Inspection

### 1. Preflight Inspection.

#### a. Cockpit Check.

(1) Untie Main Rotor Blade, remove tie down block. Visually check under surface and leading edge of main rotor blade for defects. Insure 20 yards clearance (hub to hub). Stow main rotor tie down right side co-pilot's seat. Rotate main rotor in direction of rotation; proceed to the engine compartment; check for rotation of cooling fan.

NOTE: If the fan is rotating, slight pressure applied to the top side of the belts with the fingers should stop the rotation. If the fan cannot be stopped, investigate before a flight is attempted.

(2) Check battery quick disconnect for attachment.

(3) Check level of fuel (Both tanks OH-13G & H) and oil.

(4) Check parts 12, 13 and 14 of the Form 2408. Insert date on parts 12 and 13.

(5) Turn on battery switch and note fuel quantity indication. (Move fuel quantity selector switch to left and right tank position for G model). Check anti collision light, landing light, right and left running light and tail light. (Turn off battery switch)

(6) Check that magneto and generator switches are OFF.

(7) Mixture control idle cut off. (E & G if installed).

(8) Release friction on collective pitch.

(9) Cockpit interior, for security and condition of safety belts, shoulder harness, emergency door release, fire extinguisher, first aid kit, and ballast assembly for security. NOTE: See placard in aircraft cockpit for positioning of ballast weight—OH-13E only.

#### b. Cabin and Landing Gear Area (left side) CHECK.

(1) Bubble and left door - CONDITION.

(2) Left nav light - SECURITY AND CONDITION.

(3) Forward skid upright and parts.

(4) Left skid and welds in cross tube supports.

#### c. Nose Area, CHECK:

(1) Check underside of front rotor blade for defects.

(2) Forward bubble - CONDITION.

(3) Pitot tube for obstructions.

(4) Landing light - SECURITY AND CONDITION.

(5) Under surface of cockpit.

#### d. Cabin and Landing Gear Area (right side) CHECK.

(1) Bubble and right door - CONDITION.

- (2) Right nav light - SECURITY AND CONDITION.
- (3) Forward skid uprights and parts.
- (4) Right skid and welds in cross tube supports.

e. Engine Compartment Area (right side) CHECK:

- (1) Check security of engine accessories.
- (2) Security of sprag cables.
- (3) Underside for cuts, dents, popped rivets, frayed or chafed lines, oil and fuel leaks.
- (4) Ignition harness and spark plugs - SECURITY.
- (5) Fan shroud - SECURITY AND CONDITION.
- (6) Cooling fan for free rotation.
- (7) Rocker box covers - LEAKAGE AND SECURITY.
- (8) Security of XMSM oil pressure line.
- (9) Welds of air frame, engine basket, and lord mounts - CONDITION.
- (10) Drain fuel sump on right fuel tank (OH-13G & H).
- (11) Security and proper lock wiring of throttle and mixture controls.
- (12) Right exhaust stack - SECURITY.
- (13) Rear cross tube for deflection and welds in cross tube supports for cracks.
- (14) Breather heater - SECURITY.

f. Tail Boom Area (right side) CHECK:

- (1) Tail rotor drive transmission to forward coupling shaft for end play.
- (2) Couplings for lubrication and for proper lock wiring and condition of the grease boots.
- (3) Tail rotor control cables, guides, and pulleys - SAFETY AND CONDITION.
- (4) Tail boom attaching bolts for security.
- (5) Tail rotor drive shaft and its hangers and bearings - SECURITY AND EXCESSIVE WEAR.
- (6) Control cable turnbuckles - PROPER LOCK WIRING.
- (7) Battery and battery cables - SECURITY.
- (8) Airframe and welds - CRACKS.
- (9) Stabilizer/synchronized elevator - CONDITION AND SECURITY.
- (10) Universal joint for excessive play and grease zerk clearance on universal joint.
- (11) Fixed ballast - SECURITY.

g. Tail Section (Rotor area) CHECK:

- (1) Delta hinge bolt for movement; lock wiring of castellated nut: condition of neoprene washer and boot.

- (2) Pitch change links for excessive side play.
- (3) Tail rotor blades for cracks around blade grips and leading edges. Check for other rotor damage and security of balance weights if installed.
- (4) Tail rotor for proper clearance between tail guard and pylon.
- (5) Tail rotor gear box drive shaft - SECURITY AND EXCESSIVE PLAY.
- (6) Tail guard and nav light - SECURITY AND DAMAGE.
- (7) Control cable for tension and pitch change drum for proper lock wiring. Insure that set-screw does not pierce cable.
- (8) Tail rotor gear box for security, leakage and proper lock wiring of gear box drain.
- (9) Whip antenna - SECURITY.

h. Tail Boom Area (left side) CHECK:

- (1) Stabilizer/synchronized elevator - CONDITION AND SECURITY.
- (2) Tail boom airframe and welds for cracks.
- (3) Tail boom attaching bolts - SECURITY.
- (4) Homing group antenna and radio box for security, condition and cleanliness.

i. Landing Gear Area (left side) CHECK:

- (1) Left skid aft and cross tube supports - CRACKS.
- (2) Left handling wheel - SECURITY AND SAFETY.

j. Engine Compartment (left side) CHECK:

- (1) Oil quick drain for leaks and lock wiring.
- (2) Sprag mounts for condition by rocking engine.
- (3) Sprag cables - SECURITY.
- (4) Ignition harness and spark plugs - SECURITY.
- (5) Rocker box covers - SECURITY AND LEAKAGE.
- (6) Fan shroud - CONDITION AND SECURITY.
- (7) Push pull tubes for lateral freedom of bearings and proper lock wiring.
- (8) Hydraulic reservior - QUANTITY.
- (9) Exposed control and servo linkage - SECURITY.
- (10) Check lines to and from hydraulic pumps.
- (11) Power cylinders for security, leakage and cleanliness.
- (12) Fan and fan drive V-belts - CONDITION AND TENSION.
- (13) Cooling fan pulley for proper security, radial play and lateral movement on shaft.
- (14) Welds of airframe, engine basket and lord mounts - CRACKS.

- (15) Left exhaust stack - SECURITY.
- (16) Drain fuel strainer and fuel tank sump for evidence of water.
- (17) Carburetor air filter for security and obstructions.

k. Transmission and Main Rotor Area (left side),  
CHECK:

- (1) Swashplate for excessive radial play, up and down movement, and security of attached controls.
- (2) Lock wiring and security on swashplate dust cover.
- (3) Push-pull tubes (scissors to mixing levers) - SECURITY AND CONDITION.
- (4) Mixing levers - SECURITY AND CONDITION.
- (5) Dampers - SECURITY AND CONDITION.
- (6) Check damper action by depressing stabilizer.
- (7) Stabilizer bar - SECURITY AND CONDITION.
- (8) Dynamic stop cables - condition and proper lock wiring.
- (9) Check tension of dynamic stop cables by depressing main rotor blades.
- (10) All linkage and bearings to main rotor blades - CONDITION AND SECURITY.
- (11) Main rotor hub, yoke, gimbal ring and pillow blocks - CONDITION.
- (12) Proper lock wiring of adapter nut on main rotor grips.
- (13) Mast locking nut and washer tang - CONDITION AND SECURITY.
- (14) Main rotor blades (top) - CONDITION.
- (15) Return to left side cabin area and loosen collective pitch and throttle controls.
- (16) Visually check up and down stops at top of transmission while moving collective pitch stick through its complete travel. At the same time, observe pitch stick through its complete travel. At the same time, observe pitch change in main rotor blades.
- (17) Make applicable entries on DA Form 2408-12-13

## Secondary Preflight Inspection

1. Untie Main Rotor Blade.
2. Magneto and Master Switch OFF—2408-13.
3. Fuel, Oil and Hydraulic Fluid Quantity.
4. Helicopter Exterior—Front.
5. Flight Controls and Engine Compartment (right side).
6. Tail Rotor Drive System and Boom.
7. Flight Controls and Engine Compartment (left side).
8. Drain Fuel Sump and Fuel Strainer.
9. Main Rotor System.
10. Skid Gear and Cross Tubes.

# VHF FREQUENCY ASSIGNMENT

FREQUENCY	FACILITY	FIELD/ELV.	TRAFFIC/ALT
139.20	DOWNING (PRI)	964'	1500'
139.25	FAA / ABILENE / WACO		
139.30	FIXED WG		2000'
139.40	WOLTERS (PRI)	892'	1500/1800'
141.10	DEMPSEY (PRI)	1153'	1700'
141.35	HUE <del>9 10 12</del>	1068'	1600'
148.75	CHU LAI	1019'	1600'
141.50	MED EVAL (LOCAL)		
140.40	PHU LOI	1082'	1600'
141.45	BAC LIEU	974'	1500'
148.85	TAY NINH	1225'	1800'
142.35	CAM RANH	1135'	1600'
143.85	TUY HOA	1282'	1800'
139.00	WOLTERS (SEC)		1500/1800'
141.90	QUI NHON	1125'	1600'
139.45	SF 4 MUSTANG	1094'	1600'
141.05	SF 1 PINTO	1003'	1500'
141.20	SF 7 WRANGLER	1040'	1600'
141.30	VINH LONG	1120'	1700'
141.40	BEN CAT	1456'	2000'
142.30	CAN THO	976'	1500'
139.10	SOC TRANG <del>11 13 14</del>	908'	1400'
142.95	SF 2 SUNDANCE	1003'	1500'
143.10	MY THO	790'	1300'
143.20	DA NANG	1120'	1600'
143.30	AN KHE	1010'	1500'
143.40	PLEIKU	968'	1500'
148.65	BIEN HOA	1070'	1600'
149.60	SF 3 RAMROD	955'	1500'
149.90	SF 5 RAWHIDE	845'	1400'
148.90	SF 6 BRONCO	1053'	1600'
148.80	VUNG TAU	850'	1400'
141.15	CROSS COUNTRY		
141.25	CROSS COUNTRY		
143.05	CROSS COUNTRY		
149.75	CROSS COUNTRY		

# UHF RADIO FREQUENCIES

## DEMPSEY HELIPORT

CH.	FREQ.	FACILITY	FIELD/ELV.	TRAFFIC/ALT
1.	229.5	SOC TRANG HUE	908'	1400'
2.	229.6	BIEN HOA	1070'	1600'
3.	229.8	DEMPSEY (PRI)	1153'	1700'
4.	OPEN			
5.	245.1	CAN THO	976'	1500'
6.	245.3	PLEIKU	968'	1500'
7.	245.5	BEN CAT	1456'	1800'
8.	245.7	VINH LONG	1120'	1700'
9.	241.0	DEMPSEY (SEC)		
10.	241.1	BAC LIEU	974'	1500'
11.	242.4	CROSS COUNTRY		
12.	243.0	EMERGENCY		
13.	246.2	CROSS COUNTRY		
14.	246.3	TAY NINH	1225'	1800'
15.	246.4	HUE (9-10-12)	1068'	1600'
16.	246.5	CC/ABILENE/WACO		

## WOLTERS HELIPORT

1.	229.3	CROSS COUNTRY		
2.	229.4	WOLTERS (PRI)	892'	1500/1800'
3.	229.6	BIEN HOA	1070'	1600'
4.	229.7	SF 6 BRONCO	1053'	1600'
5.	230.1	SF 1 PINTO	1003'	1500'
6.	231.0	SF 2 SUNDANCE	1013'	1500'
7.	231.1	QUI NHON	1125'	1600'
8.	231.2	AN KHE	1010'	1500'
9.	241.0	WOLTERS (SEC)		1500/1800'
10.	241.4	CHU LAI	1019'	1600'
11.	241.5	TUY HOA	1282'	1800'
12.	243.0	EMERGENCY		
13.	248.2	DaNANG	1120'	1600'
14.	248.4	SF 7 WRANGLER	1040'	1600'
15.	248.6	SF 3 RAMROD	955'	1500'
16.	248.8	SF 4 MUSTANG	1094'	1600'