

O. ROMERO Jr.

8 WOC Co.

FLT B-1

OH-13

OH-13E & G

# COCKPIT PROCEDURE

## 1. COCKPIT CHECK

- a. TIE DOWN, PEDALS, SEAT/SHOULDER HARNESS.
- b. CONTROLS FREE, CENTER CYCLIC, COLLECTIVE DOWN.
- c. THROTTLE CLOSED, FUEL AND HYDRAULICS ON.
- d. CIRCUIT BREAKERS IN, SWITCHES OFF, INST CHECK.
- e. ALTIMETER, RADIO OFF, INSTRUMENT LIGHT OFF.

## 2. STARTING AND WARMUP PROCEDURE

- a. MIXTURE RICH OR AUTO, CARB COLD.
- b. BATTERY AND GENERATOR ON, CHIP LIGHT CHECK.
- c. PRIME, THROTTLE INDENT, CLEAR, MAGS BOTH.
- d. START, OIL PRESSURE, RPM 1700, PURGE.
- e. NEEDLES JOINED, RPM 2300.
- f. RADIO, HELMET ON, CARB HEAT GREEN.
- g. WARM UP 2300, HI MAG CHECK 3200.
- h. NEEDLE SPLIT, LOW MAG CHECK, IDLE 1700 RPM.
- i. RPM 2300, CHECK TRANSMISSION TEMP.

## 3. BEFORE TAKE-OFF

- a. FUEL VALVE ON, MIXTURE RICH, RADIO.
- b. MAGS BOTH, INSTRUMENTS GREEN, CARB HEAT.
- c. BEACON AND SERVO ON, CONTROLS FREE.
- d. RPM 3100, CHECK TIP PATH, SERVO CHECK.
- e. HARNESS LOCK, TIME, RPM 3200, CLEAR.

18 June 1969

# FACILITIES AND RADIO FREQUENCIES

## HELIPORTS

Wltrs(Pri)	Wltrs Twr	229.4	139.40	892'	1500'W
Wltrs(Sec)	Wltrs Twr	241.0	139.00	892'	1800'E
Down(Pri)	Down Twr	257.9	139.20	964'	1500'
Down(Sec)	Down Twr	241.0	139.00	964'	1500'
Demp(Pri)	Demp Twr	229.8	141.10	1153'	1700'
Demp(Sec)	Demp Twr	241.0	139.00	1153'	1700'

## EMERGENCY FREQUENCIES

ALL TOWERS & FAA STATIONS	243.0	121.50
Medical Evac	Med Evac	241.0 141.50

## STAGEFIELDS - PRIMARY I NORTH (SERVED BY WOLTERS HELIPORT)

Stagefield 1	Pinto	230.1	141.05	1003'	1500'
Stagefield 2	Sundance	231.0	142.95	1013'	1500'
Stagefield 4	Mustang	248.8	139.45	1094'	1600'
Stagefield 6	Bronco	229.7	148.90	1053'	1600'
Stagefield 7	Wrangler	248.4	141.20	1040'	1600'
Chu Lai	Chu Lai	241.4	148.75	1019'	1600'
Da Nang	Da Nang	248.2	143.20	1120'	1600'
Qui Nhon	Qui Nhon	231.1	141.90	1125'	1600'

## STAGEFIELDS - PRIMARY I SOUTH (SERVED BY DOWNING HELIPORT)

Stagefield 3	Ramrod	248.6	149.60	955'	1500'
Stagefield 5	Rawhide		149.90	845'	1400'
An Khe	An Khe	231.2	143.30	1010'	1500'
Cam Ranh	Cam Ranh		142.35	1135'	1600'
My Tho	My Tho		143.10	790'	1300'
Phu Loi	Phu Loi		140.40	1082'	1600'
Tuy Hoa	Tuy Hoa	241.5	143.85	1282'	1800'
Vung Tau	Vung Tau		148.80	850'	1400'

# STAGEFIELDS - PRIMARY II (SERVED BY DEMPSEY HELIPORT)

Bac Lieu	Bac Lieu	241.1	141.45	974'	1500'
Ben Cat	Ben Cat	245.5	141.40	1456'	2000'
Can Tho	Can Tho	245.1	142.30	976'	1500'
Hue	✓Hue	246.4	141.35	1068'	1600'
Pleiku	Pleiku	245.3	143.40	968'	1500'
Soc Trang	✓Soc Trang	229.5	139.10	908'	1400'
Tay Ninh	Tay Ninh	246.3	148.85	1225'	1800'
Vinh Long	Vinh Long	245.7	124.15	1120'	1700'
Bien Hoa (MOI)	Bien Hoa	229.6	148.65	1070'	1600'

## MISCELLANEOUS FREQUENCIES

Air to Air	XC	229.3*	139.25*
Air to Air	XC	242.4	141.15
Air to Air	XC	246.2	141.25
Air to Air	XC	246.5	143.05
Air to Air	XC		149.75

(\*Also used for communication between aircraft and Abilene and Waco Towers.)

## LOCAL CONTROL (MILITARY/CIVILIAN DOWNING TOWER)

Down(Pri)	Down Twr	119.50
Down(Sec)	Down Twr (MILF/W)	139.30
Down	Down GRND CONT	121.70
(Ground Cont, F/W)		

## FAA FREQUENCIES

Flt Svc Sta	(Fac Name)	Rad 255.4	122.6 or 123.6
FAA Towers	(Fac Name)	Twr 257.8	(as listed)
Air Force Twrs	(Fac Name)	Twr 236.6	126.2
Army Twrs	(Fac Name)	Twr 241.0	126.2

## SECTION XIV

### OH-13E, G & H HELICOPTER PREFLIGHT INSPECTION

#### Initial Preflight Inspection

1. Untie Main Rotor - Rotate and check cooling fan.
  2. Battery Quick Disconnect.
  3. Cockpit Check:
    - a. Magneto and master switches OFF.
    - b. Parts 12, 13 and 14 of DA Form 2408.
    - c. Battery switch ON, nav and beacon switches ON.
- Check operation of lights.
- d. Battery switch OFF. Check generator switch OFF.
  - e. Mixture control lever to ICO.
  - f. Fuel shut-off valve ON (in).
  - g. Center cyclic stick and tighten friction.
  - h. Release friction on collective pitch.
  - i. Fire extinguisher - CHECK.
  - j. First aid kit - CHECK.
  - k. Door releases - CHECK condition and safetying.
4. Fuel and Oil Levels.
  5. Pitot Tube Cover Removed.
  6. Bubble for Condition.
  7. Flight Controls and Engine Compartment (right side), CHECK:
    - a. Main rotor blade - condition.
    - b. Exterior for obvious damage.
    - c. Lord mount, engine basket and airframe for condition.

- d. Engine shroud for security.
  - e. Engine and transmission for oil leaks.
  - f. Exposed flight control linkages for security.
  - g. Fuel tank, lines and accessories for leaks.
  - h. Drain fuel tank (OH-13G & H).
8. Tail Boom and Tail Rotor, CHECK:
- a. Tail rotor drive system for security.
  - b. Battery and cables - CHECK.
  - c. Tail rotor control cables for security.
  - d. Antennas for condition.
  - e. Tail boom structure for obvious damage.
  - f. Stabilizer/synchronized elevator for condition and security.
  - g. Tail light for security.
  - h. Tail rotor gear box for security and oil leaks.
  - i. Tail rotor blades for condition.
  - j. Tail rotor guard for condition and security.
9. Flight Controls and Engine Compartment (left side), CHECK:
- a. Fuel tank, lines and accessories for leaks.
  - b. Engine and transmission for oil leaks.
  - c. Exposed flight control linkages for condition.
  - d. Hydraulic reservoir - fluid level.
  - e. Main rotor system for security and condition.
  - f. Sprag mounts and cables for condition and security.
  - g. Cooling fan and belts for condition and security.
  - h. Lord mount, engine basket and airframe for condition.
  - i. Drain fuel strainer and tank.

## 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.

## 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 frictions on controls. Check sync/elevator.

(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.

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) Control cable turnbuckles - PROPER LOCK WIRING.
- (6) Battery and battery cables - SECURITY.
- (7) Tail rotor drive shaft and its hangers and bearings - SECURITY AND EXCESSIVE WEAR.
- (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. (E-Model)

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 tail 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. Check drum for rotation.

(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) Check oil breather heater for security.

(3) Sprag mounts for condition by rocking engine.

(4) Sprag cables - SECURITY.

(5) Ignition harness and spark plugs - SECURITY.

(6) Rocker box covers - SECURITY AND LEAKAGE.

(7) Fan shroud - CONDITION AND SECURITY.

(8) Push pull tubes for lateral freedom of bearings and proper lock wiring.

(9) Hydraulic reservoir - QUANTITY.

(10) Exposed control and servo linkage - SECURITY.

- (11) Check lines to and from hydraulic pumps.
- (12) Power cylinders for security, leakage and cleanliness.
- (13) Fan and fan drive V-belts - CONDITION AND TENSION.
- (14) Cooling fan pulley for proper security, radial play and lateral movement on shaft.
- (15) Welds of airframe, engine basket and lord mounts - CRACKS.
- (16) Left exhaust stack - SECURITY.
- (17) Drain fuel strainer and fuel tank sump for evidence of water.
- (18) 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 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 collective linkage through its complete travel and observe pitch change in main rotor blades.

(17) Make applicable entries on DA Form 2408-13.

1. Cockpit Check on Entering Helicopter.

(1) Check tie down block and loose equipment for security.

(2) Adjust and check full travel of anti-torque pedals; fasten seat and shoulder harness. NOTE: When flying solo, secure passenger safety belt.

(3) Check all controls for full travel and freedom of movement.

(4) Center cyclic control and apply friction.  
WARNING: In strong winds of 25 MPH or more, the cyclic stick should be displaced to cause the rotor disc to be tilted slightly into the wind.

(5) Collective pitch down and apply friction.  
Throttle closed.

(6) Fuel valve "ON".

(7) Hydraulic boost "ON".

(8) Check circuit breakers "IN".

(9) Check all switches "OFF" (Set oil temperature switch to engine position).

(10) Check condition and static position of instruments. Note position of slippage marks and condition of glass covers on all instruments.

(11) Set altimeter to field elevation.

(12) Check radio switches "OFF".

(13) Check instrument lights "OFF".

2. Starting and Warm-Up Procedure:

a. Before Starting Engine.

(1) Mixture control RICH OR AUTO.

(2) Carburetor heat COLD. NOTE: Gloves must be on prior to starting engine and will remain on during flight.

(3) Battery and generator switches ON (battery switch OFF if APU start).

(4) Check operation of chip detector light.

b. Starting Engine (OH-13E, G & H).

(1) Prime engine by opening and closing throttle two or three times. NOTE: Do not prime a hot engine.

(2) Throttle in the indent.

(3) Visually clear the helicopter of personnel and obstruction. Call out, "CLEAR, ROTOR BLADES DISPLACED." NOTE: Take the necessary precautions to prevent quick starts. Quick starts occur when the helicopter is started at a throttle setting that could cause the transmission clutch to engage immediately, causing a sudden and very rapid acceleration of the entire driven mechanism of the helicopter. This can cause severe damage to both personnel and material. A quick start should be stopped by closing the throttle and shutting off the magneto switch immediately. A helicopter should not be flown after a quick start occurs until it has been thoroughly inspected.

(4) Depress starter pedal (starter button - OH-13H).

(5) Ignition switch to BOTH (OH-13E & G) or RIGHT (OH-13H). As soon as engine starts, pull starter pedal up (OH-13E & G). Turn ignition switch to both (OH-13H).

(6) Check engine oil pressure gauge for indication of proper engine oil pressure. CAUTION: If engine oil pressure is not indicated within 30 seconds after engine start, STOP ENGINE.

(7) External power-DISCONNECTED.

(8) Increase engine RPM to 1700. When oil pressure reaches 65 PSI (OH-13H) or 40 PSI (OH-13E & G) and rotor speed reaches 167 RPM (1500 engine RPM), close throttle to fully engage clutch.

(9) Increase engine RPM to 1700-1800 RPM and purge manifold system. Turn blower switch ON.

(10) Increase engine RPM to 2300. While engine is warming up, turn radio switch ON, put helmet ON and tune in tower.

(11) Adjust carburetor heat to read in the "green".

(12) Maintain 2300 engine RPM until oil temperature reaches 40 degrees C minimum and 100 degree C cylinder head temperature. CAUTION: Avoid continuous operation at 200-230 rotor RPM (1800-2070 engine RPM) to minimize stabilizer bar resonance.

(13) Increase engine RPM to 3200 and with the collective pitch full down, accomplish a normal magneto check. A drop of 200 RPM on either magneto is permissible provided there is no engine roughness.

(14) Close throttle quickly to split needles and simultaneously apply right pedal. While needles are split, make a low speed magneto check and momentarily switch to "OFF" to check proper grounding.

(15) Check engine idle speed (approximately 1700 RPM). Return engine RPM to 2300.

(16) Check transmission oil temperature (minimum 40 degrees C). Leave switch on "transmission" (E & G).

c. Before Take-Off.

(1) Fuel valve "ON".

(2) Mixture "RICH".

(3) Radio transmitter selector on "2".

(4) Magneto "BOTH" and guard down; battery/generator switches "ON".

(5) Engine instruments "GREEN", carburetor heat as required.

- (6) Beacon "ON".
- (7) Servo "ON".
- (8) Controls friction "OFF". Increase engine RPM to 3100.
- (9) Maintain 3100 engine RPM with collective pitch full down, and check tip path plane.
- (10) Turn servo shut-off valve "OFF" and check control operation. Place servo valve "ON" after checking system.
- (11) Take-off area "CLEAR".
- (12) Lock shoulder harness (also required before landing).
- (13) Check take-off time.
- (14) Increase RPM to 3200.

d. Shutdown procedure.

- (1) Reduce engine RPM to 2300.
- (2) Friction cyclic and collective pitch.
- (3) Carburetor heat "COLD".
- (4) Check magnetos at 3200 RPM, collective pitch full down.
- (5) Split needles, simultaneously apply right pedal and accomplish low speed magneto check and grounding check. Check engine idle speed.
- (6) Return engine RPM to 2300. Cool cylinder head temperature to 150 degrees C or a 20-degree drop.
- (7) Place mixture in idle cut-off position.
- (8) When engine stops (tachometer needle 0), turn off all switches.
- (9) Secure main rotor.
- (10) Accomplish "walk-around" inspection.
- (11) Complete Form 2408-12 and 13 and place in proper location to denote refueling is required.

# TELEPHONE DIRECTORY

FT. WOLTERS - From off-post dial 327 then dial extension

MILITARY FLT DEPT A . . . . .	2651
MILITARY FLT DEPT B . . . . .	2651
MILITARY FLT DEPT C . . . . .	.2253/2450
Southern Airways Br A . . . . .	2754
Southern Airways Br B . . . . .	3237
Center Safety Div . . . . .	3246
Weather . . . . .	.3206/3207/2588
OTM . . . . .	.3636/3611/3344
Flt Eval Dept . . . . .	3298/3396
Post Transportation . . . . .	.2225
Fixed Wing Operations . . . . .	.3421/3422/3423
MWL APT FSS . . . . .	.325-5922
Stagefield 1 . . . . .	.3219
Stagefield 2 . . . . .	.3218
Stagefield 3 . . . . .	.3217
Stagefield 4 . . . . .	.3223

Stagefield 5 . . . . .	3619
Stagefield 6 . . . . .	3542
Stagefield 7 . . . . .	3610
Beach Army Hosp Emergency . . . . .	3548/2548
Med Evac, Dempsey Heliport . . . . .	2428
Helicopter Crash Calls . . . . .	3289

OH-13E & G OVERSPEEDS  
(O-335 ENGINE)

- 3330 or more engine RPM or 370 or more rotor RPM -  
land at nearest available airport, heliport,  
stagefield or refueling area and shut down.
- 3568 or more engine RPM or 400 or more rotor RPM -  
land at nearest available clear area and shut  
down. Follow rules for precautionary landing.



## AIRCRAFT MISHAP REPORTING

1. In the event of an aircraft mishap the following information is required by the most expeditious means of communications. Information must be relayed to one of the three (3) heliport control towers in order to provide immediate assistance by necessary agencies. If this information cannot be transmitted by radio and a telephone is available, call collect to 327Ext3289.

2. Relay the following items of information in sequence:

a. Report of:

(1) Precautionary landing (further flight inadvisable). Note: Do not fly until aircraft is cleared by maintenance personnel.

(2) Forced landing (further flight impossible).

b. Damage.

c. Aircraft type and serial number.

d. Fire, yes or no.

e. Injuries, yes or no.

f. Dual, solo or buddy ride.

g. Class number of occupant(s), if known.

h. Location (be specific).

## AIRCRAFT MISHAP PROCEDURES

1. Precautionary landing:

a. Follow procedures in Aircraft Mishap Reporting.

b. Remain with aircraft, except to telephone, and do not attempt to fly the aircraft until it is inspected and released by maintenance personnel.

## 2. Forced landing:

a. Follow procedures in Aircraft Mishap Reporting.

b. Signal other aircraft by:

(1) OH-13 and OH-23 - Align main rotor blades perpendicular to the fuselage.

(2) TH-55 - Place one blade straight out in front of the fuselage. Place a T-shirt or flight jacket (orange side out) on the tip of the forward blade.

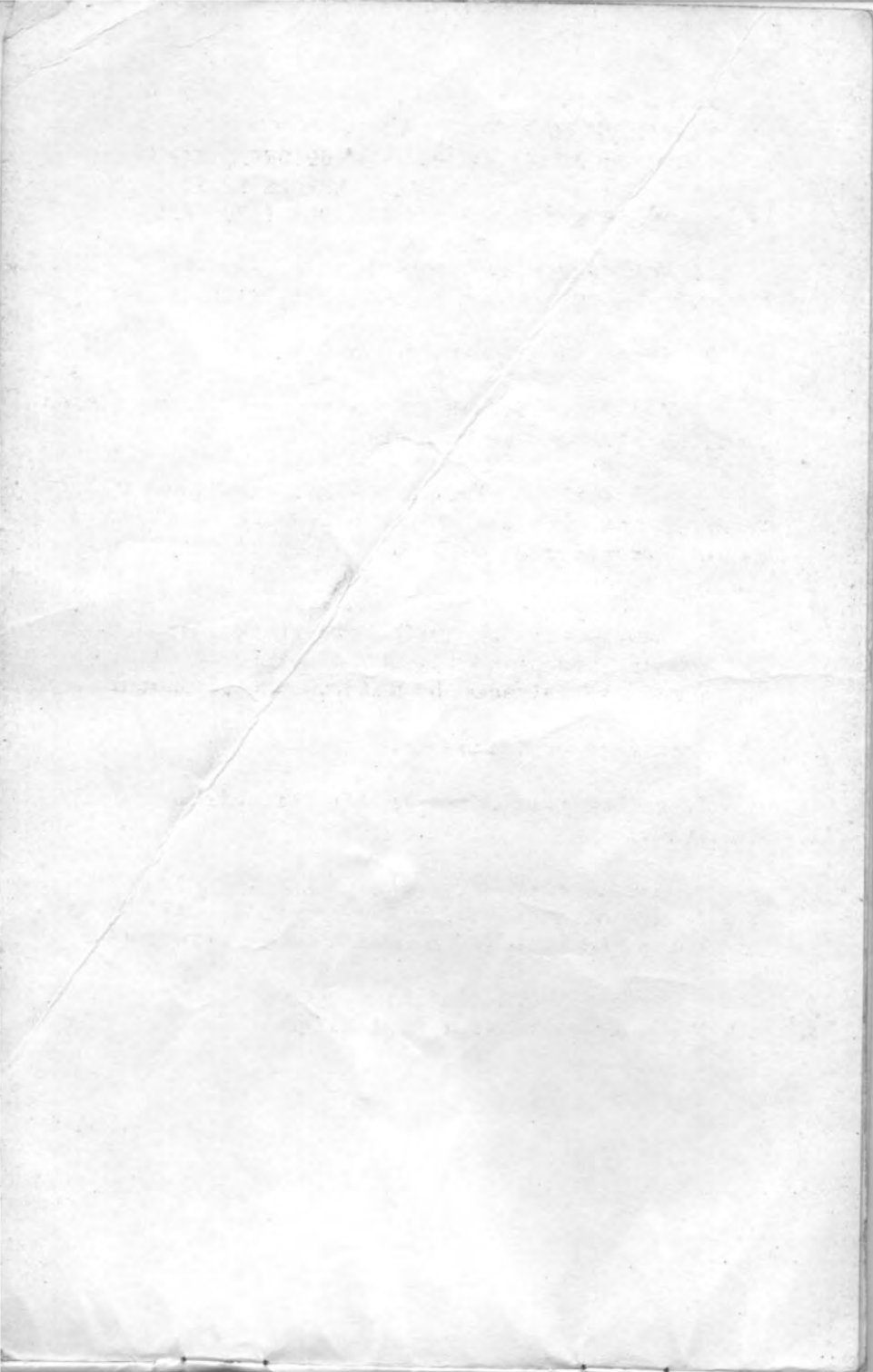
c. Remain with aircraft, except to telephone, and do not attempt to fly the aircraft until it is inspected and released by maintenance personnel.

## 3. Accidents or incidents:

a. Follow procedures in Aircraft Mishap Reporting.

b. Remain with aircraft, except to telephone, and do not attempt to fly the aircraft until it is inspected and released by maintenance personnel.

c. Report to the Flight Surgeon as soon as possible and prior to your next flight.



4. SHUTDOWN PROCEDURE

- a. RPM 2300, CONTROLS FRICTIONED, CARB COLD.
- b. RPM 3200, MAG CHECK, NEEDLE SPLIT.
- c. LOW MAG CHECK, CHECK IDLE (1700 RPM).
- d. RPM 2300, COOL ENGINE.
- e. MIXTURE OFF, SWITCHES OFF.
- f. SECURE ROTOR, POST FLIGHT, 2408-12 & 13.

## BEFORE TAKEOFF

FUEL VALVE * ON	RPM * 3100
MIXTURE * RICH	TIP PATH PLANE CK
RADIO SEL * NO. 2	SERVO VALVE * OFF
MAGNETOS * BOTH	CONTROLS * CHECK
BATT/GEN * GUARD DWN	SERVO VALVE * ON
INSTRMS * GREEN	AIRCRAFT * CLEAR
CARB HEAT * AS REQ	SHLD HARNESS * LCKD
BEACON * ON	TAKEOFF TIME * CK
SERVO * ON	ALTIMETER * RESET
CONTROL FRCT * OFF	RPM * 3200

## SHUTDOWN PROCEDURE

RPM * 2300	RPM * 2300
CYCLIC & COLL * FRCT	COOL ENGINE
CARB HEAT * COLD	MIXTURE * IDLE CUTOFF
RPM * 3200	ENG STOP, TACH ZERO
MAGNETOS * CHECK	ALL SWITCHES * OFF
THROTTLE * CLOSED	MAIN ROTOR * SECURE
LOW MAG & GRND CHECK	POST FLIGHT
IDLE * CHECK	COMPLETE 2408 12-13

# IRONFIRE

## OH - 13E, G & H COCKPIT PROCEDURE

2408 \* SECURE

TD BLOCK \* SECURE

PEDALS \* ADJUST

BELTS \* SECURE

CONTROLS \* FREE

CYCLIC \* CENT-FRICT

COLL PTCH \* DWN-FRICT

THROTTLE \* CLOSED

FUEL \* ON

HYD BOOST \* ON

BREAKERS \* IN

SWITCHES \* OFF

OIL TEMP TO ENG

INSTRMS \* STATIC CHECK

ALTIMETER \* SET

RADIO SWTCHS \* OFF

INSTRM LGTS \* OFF

MIXTURE \* RICH-AUTO

CARB HEAT \* COLD.

GLOVES \* ON

BATT/GEN SWTCHS \* ON

OFF FOR APU START

CHIP DETECTOR \* CHECK

PRIME \* AS REQUIRED

THROTTLE \* INDENT

VISUALLY CLEAR

CALL OUT \* CLEAR,  
ROTOR BLADES DISPLACED

STARTER \* DEPRESS

IGNITION \* ON, BOTH,  
OR RIGHT-13 H

OIL PRESSURE \* CHECK

RPM \* 1700

OIL PRESSURE \* CHECK  
ROTOR RPM 167 (ENG RPM 1500)

THROTTLE \* CLOSED

RPM \* 1700-1800

PURGE VALVE \* DEPRESS

BLOWER \* ON

RPM \* 2300

RADIO \* ON

HELMET \* ON

INTERPHONE \* CHECK

RADIO \* TUNE

CARB HEAT \* AS REQUIRED

OIL TEMP 40 Deg.

CYL HEAD 100 Deg.

RPM \* 3200

MAGNETOS \* CHECK

THROTTLE \* CLOSED  
LOW MAG & GRND CHECK

IDLE CK \* APPX 1700

RPM \* 2300

XMSM OIL TEMP \* CK  
LEAVE ON XMSM (E & G)