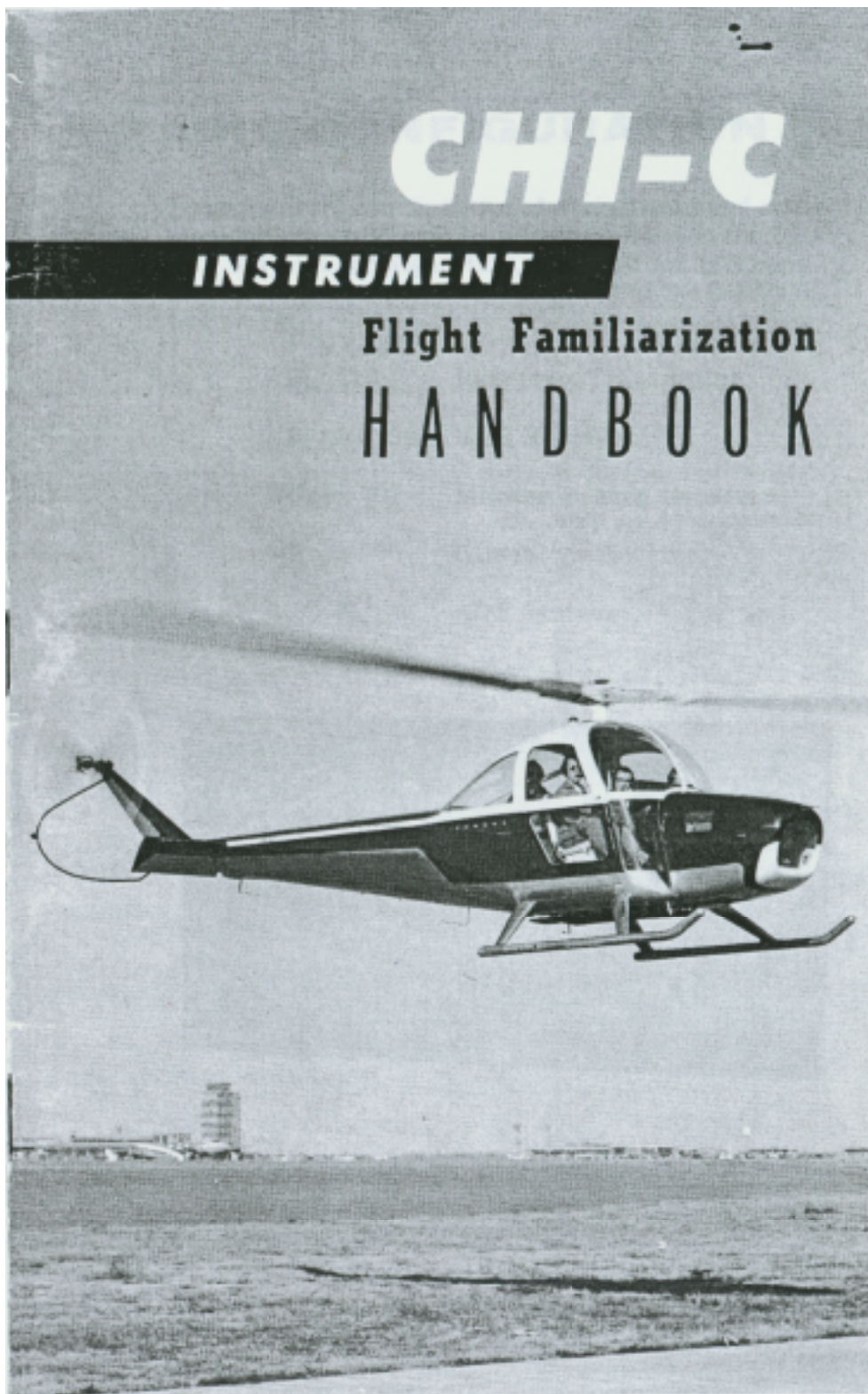
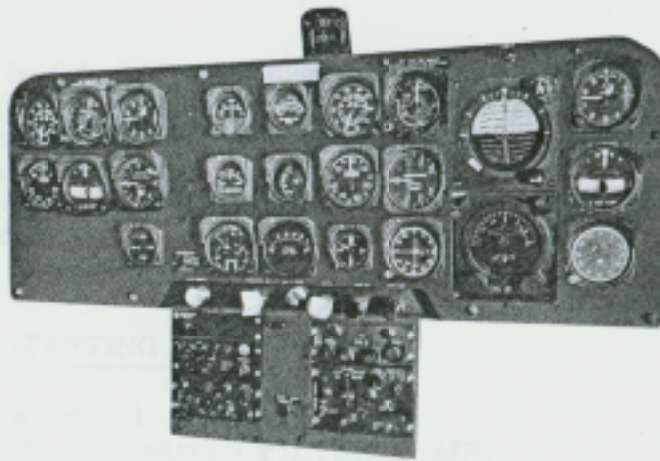


# CH1-C

**INSTRUMENT**

Flight Familiarization  
HANDBOOK





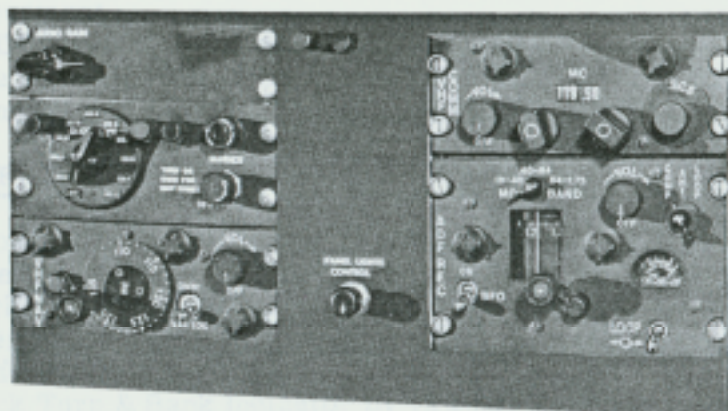
## INSTRUMENT PANEL

The CH-1C is fully equipped for IFR operations. A large, 3-row-deep instrument panel is installed which is easily adaptable to a number of different instrument arrangements. The arrangement installed in the prototype CH-1C is shown above.

## RADIO CONFIGURATION

Many different combinations of navigational and communications radio may be accommodated in the CH-1C. A typical configuration, designed for IFR operations, is shown below and consists of the following equipment:

ARC-210	Receiver-Transmitter
AN/ARN-30A	VOR Receiver
Wilcox 702	Marker Beacon Receiver
Wilcox 700	Glideslope Receiver
ARC-21	ADF System



## **PILOT'S CHECK LIST**

Note: Prior to entering cockpit, check fuel content of auxiliary tanks. No auxiliary fuel is to be carried when rear seat is occupied. For all flights, refer to weight and balance data to make sure gross weight and CG limits are not exceeded.

### **BEFORE STARTING ENGINE**

1. Mixture control - IDLE CUTOFF.
2. Alternate air control - FILTERED AIR.
3. Battery switch - OFF (On if external power is not available)
4. Generator switch - OFF
5. External power - Connect if available.
6. Auxiliary fuel pump switch - ON.
7. Cyclic Control stick - Neutral position.
8. Cyclic Trim Control Switch - Depress momentarily.
9. Throttle - Closed.

### **STARTING ENGINE**

1. Ignition switch - BOTH.
2. Primer switch - MOM. Position for 3-5 secs. for cold engine, 1-3 secs. if warm.
3. Auxiliary fuel pump switch - OFF.
4. Mixture control - Full rich.
5. Starter button - Depress.
6. Throttle - Idle engine at 1000-1100 RPM.
7. External Power - Disconnect (if used)
8. Battery switch - ON.
9. Generator switch - ON.
10. Engine driven fuel pump - Check.
11. Turn on Inverter and radios.



## **PILOT'S CHECK LIST- cont'd**

### **ENGINE WARM-UP & RUNUP BEFORE TAKEOFF**

1. Throttle - Gradually increase to 1500 RPM. Maintain this RPM until tachometer needles line up, indicating full clutch engagement.
2. Throttle - 2200 to 2500 RPM until oil temperature gage indicates 20°C.
3. Engine Instruments - Check.
4. Magnetos - Check at 3000 RPM & 20" Hg. Permissible drop 100 RPM.
5. Freewheeling unit - Check.
6. Tail Rotor Pedals - Check. Set rpm at 1500 with full low collective, actuate tail rotor pedals and observe tendency of aircraft to change heading in proper direction.
7. Cyclic Pitch Control - Check for freedom of movement.
8. Set Directional Gyro to magnetic compass.
9. Cage and uncage Attitude gyro to erect.
10. Tune omni and ADF.

### **TAKEOFF**

1. Throttle - Increase gradually to 3200 RPM.
2. Collective Pitch Stick - Increase gradually until airborne at 5 to 10 feet.
3. Hover momentarily to determine that helicopter is functioning properly.
4. Check Turn & Bank Indicator by yawing.
5. Use 3200 RPM for not more than 5 minutes (take-off power rating).

## **PILOT'S CHECK LIST cont'd**

### **BEFORE LANDING**

1. Throttle - 3200 RPM.
2. Carburetor heat - Full in.
3. Auxiliary fuel pump switch - ON.

### **AFTER LANDING**

1. Collective pitch - Full low.
2. Cyclic pitch stick - Approx. neutral.
3. Throttle - Idle engine until cylinder head temperature is below 150°C.
4. Mixture Control - IDLE CUT-OFF.
5. Ignition switch - OFF when engine stops.
6. All electric switches - OFF.
7. Battery switch - OFF.