

PRE-WALK AROUND

MASTER SWITCHON
 FUEL INDICATORSCHECK QUANTITIES
 FUEL TANK SELECTORFULLEST TANK
 STALL WARNINGCHECK TAB & HORN
 MASTER SWITCHOFF
 STRAINER DRAIN KNOBPULL 4 SECONDS
 HYDRAULIC FLUIDCHECK WINDOW
 EMERG HYDRAULIC PUMPSTOWED
 CONTROL LOCKREMOVE
 CONDUCT WALK-AROUND

PRE-START

SEATS AND SEAT BELTSADJUSTED AND SECURED
 FLIGHT CONTROLSCHECK
 BRAKESTEST AND SET (AS REQ)
 INSTRUMENT LIGHTS.....OFF
 CIRCUIT BREAKERSIN
 PITOT & LIGHT SWITCHESOFF
 INTERCOM & RADIOSOFF
 NAV AIDSOFF
 TRANSPONDEROFF
 DEFROST KNOBOFF (FULL COUNTERCLOCKWISE)
 MASTER SWITCHON
 STROBE LIGHTON
 INTERCOMON
 LANDING GEARHANDLE NEUTRAL AND DOWN LIGHT GREEN
 LDG GEAR LIGHTS & HORNPUSH TO TEST
 COWL FLAPSOPEN
 ELEVATOR & RUDDER TRIMTAKE-OFF SETTINGS
 FUEL SELECTORFULLEST TANK

STARTING ENGINE

MIXTURERICH
 PROPELLERHIGH RPM (FULL IN)
 THROTTLE CRACKEDONE INCH
 CLEAR AREA“CLEAR” & CHECK FOR PERSONNEL
 AUX FUEL PUMP SWITCHON LOW
 FUEL FLOWINDICATING 2-4 GAL/HR
 IGNITION SWITCHSTART (MAX 30 SEC)
 IGNITION SWITCHRELEASE TO “BOTH” (WHEN ENGINE FIRES)
 AUX FUEL PUMP SWITCHOFF (AFTER ENGINE STARTS)

PRE-TAXI

NAVIGATION LIGHTSON
 DEFROST & VENTILATIONAS REQ
 RADIOS & NAV AIDSON & SET
 TRANSPONDERSTBY
 ATISIF AVAILABLE
 ALTIMETER & COMPASSSET
 VOT CHECKIF AVAILABLE

PRE-TAKE-OFF.

INDUCTION AIRCOLD
 THROTTLE SETTING1700 RPM
 ENGINE INSTRUMENTSWITHIN ARC
 AMMETERCHECK - NO DISCHARGE ABOVE 1000 RPM
 SUCTION METER3.75 TO 5.0
 MAGNETOSCHECK (50 RPM DIFFERENTIAL)
 PROPELLERCYCLE (RETURN TO HIGH RPM)
 THROTTLEIDLE CHECK, THEN AS REQUIRED
 FLIGHT CONTROLSRECHECK
 WING FLAPS0° TO 20°
 COWL FLAPSFULL OPEN
 ELEVATOR & RUDDER TRIMRECHECK TAKE-OFF SETTING
 DOORS & WINDOWCLOSED AND LOCKED
 FLIGHT INSTRUMENTSCONFIRM SET
 NAV INSTRUMENTSSELECTED
 PITOT HEATON
 TRANSPONDERALT
 LANDING LIGHTON (WHEN CLEARED FOR T/O)

TAKE OFF

COMPASSCHECK ALIGNED TO RUNWAY HDG
 ILS LOCALIZERCHECK
 POWERFULL THROTTLE
 ELEVATOR CONTROLLIFT NOSEWHEEL AT 60 MPH
 BRAKESAPPLY (WHEN AIRBORNE)
 LANDING GEARRETRACT
 POWERREDUCE TO 24" MP & 2450 RPM
 FLAPSRETRACT
 LANDING GEARUP LIGHT RED / DOORS CLOSED / HANDLE NEUTRAL
 TIME OFFNOTE

CLIMB & LEVEL OFF

CLIMB IAS120 MPH TO 140 MPH
FUEL & OXYGENCHECK QUANTITIES & FLOW
MIXTUREAS REQ FOR EGT 1400F – 1450F
COWL FLAPSAS REQ FOR CHT 300F – 460F
ENGINE INSTRUMENTSCHECK
LDG LIGHTOFF

PRE-DESCENT

FUELCHECK
HYDRAULIC FLUIDCHECK WINDOW
HARNESSESTIGHT
DEFROSTAS REQ
ALTIMETERSET
LANDING LIGHTON

BEFORE LANDING

FUEL SELECTORFULLEST TANK
LANDING GEAR LEVERDOWN (BELOW 160 MPH)
LANDING GEAR INDICATORSDOWN LIGHT GREEN / DOORS CLOSED
HANDLE NEUTRAL
FLAPSDOWN 10⁰ (BELOW 160 FPH)
MIXTURERICH
AIRSPEED85-95 MPH (FLAPS RETRACTED)
PROPELLERHIGH RPM
FLAPSDOWN 10⁰ – 40⁰ (BELOW 110 MPH)
AIRSPEED75-85 MPH (FLAPS EXTENDED)

AFTER LANDING

COWL FLAPSOPEN
WING FLAPSRETRACT
PITOT HEATOFF
LGD LIGHTOFF
TRANSPONDEROFF
TIME DOWNNOTE

SHUT DOWN

- DEFROSTOFF
- NAV AIDSOFF
- INTERCOM & RADIOSOFF
- LIGHT SWITCHESOFF (EXCEPT STROBE)
- INSTRUMENT LIGHTSOFF
- MIXTUREIDLE CUT-OFF.
- IGNITION SWITCHOFF
- STROBEOFF
- MASTER SWITCHOFF
- BRAKES OR CHOCKSAS REQ

HOT ENGINE STARTING PROCEDURE.

WITH VAPOR IN THE FUEL SYSTEM, THE AUXILIARY FUEL PUMPS ON "LO" OR "HI" WILL RUN WITH A DEEP GROWLING OR RATTLING SOUND UNTIL THE VAPOR IS PURGED. UNDER THESE CONDITIONS, START THE ENGINE AS FOLLOWS:

1. MIXTURE -- IDLE CUT-OFF
2. THROTTLE -- CLOSED
3. MASTER SWITCH -- ON
4. AUXILIARY FUEL PUMP SWITCH -- HI (UNTIL VAPOR IS PURGED)
5. THROTTLE -- CRACKED (ONE INCH)
6. IGNITION SWITCH -- START TO ENGAGE STARTER
7. MIXTURE -- PUSH TO FULL RICH
8. IGNITION SWITCH -- RELEASE TO "BOTH" (WHEN ENGINE FIRES)

NOTE

THE ENGINE SHOULD START IN 3 TO 4 REVOLUTIONS. IF IT DOES NOT, THE MIXTURE SHOULD BE MOVED TOWARD IDLE CUT-OFF TO LEAN OUT THE FUEL MIXTURE IN THE CYLINDERS. AGAIN THE ENGINE SHOULD START IN 5 TO 7 ADDITIONAL REVOLUTIONS; IF IT DOES NOT, STOP CRANKING AND START AGAIN FROM STEP (1) AFTER A BRIEF REST (APPROXIMATELY 30 SECONDS).

9. MIXTURE -- ADJUST (SMOOTHLY) BETWEEN FULL RICH AND IDLE CUT-OFF TO OBTAIN A FUEL-AIR MIXTURE THAT WILL ACCELERATE ENGINE TO 1000-1200 RPM.
10. AUXILIARY FUEL PUMP SWITCH -- LO AFTER ENGINE STARTS
11. THROTTLE -- IDLE THE ENGINE 800-1000 RPM ON "LO" AND FULL RICH MIXTURE UNTIL THERE IS NO SIGN OF VAPOR.

NOTE

UNDER SEVERE VAPOR CONDITIONS IT MAY TAKE 2 TO 5 MINUTES TO PURGE THE VAPOR FROM THE SYSTEM. IF THE AUXILIARY PUMP IS NOT ON, THE ENGINE RPM MAY SLOWLY START TO DROP OFF AS THE FUEL FLOW FLUCTUATES WITH VAPOR; OPENING THE THROTTLE SLIGHTLY AND TURNING THE AUXILIARY FUEL PUMP ON WILL STABILIZE ENGINE OPERATION.