# C150 NORMAL PROCEDURES N704YE

## BEFORE ENGINE START

1) Hobbs Time..... NOTED
2) Preflight..... COMPLETE
3) Fuel /Oil quantity .....ADEQUATE
4) Seats & Seat Belts .....ADJUSTED & LATCHED
5) Fuel selector.....ON
6) Circuit breaker panel..... CHECK

## STARTING ENGINE

1) Ignition switch ..... KEY IN - SWITCH OFF
2) Radio Master .....OFF
3) Carb Heat .....OFF
4) Beacon ..... ON
5) Mixture .....RICH
6) Primer.....AS NEEDED
7) Master switch ..... ON
8) Throttle.....OPEN ¼ inch
1) Brakes ..... .....HOLD
2) Propeller area.....CLEAR
3) **Ignition.....START (10 seconds max)**
   - Throttle ..... 1000 RPM
   - Oil pressure...NORMAL (within 30 seconds)
   - Radio Master .....ON
   - Ammeter .....Positive Charge
4) Mixture ..... LEAN for smooth idle

## AFTER START

1) AWOS/ ATIS..... LISTEN
2) Lights .....AS REQUIRED
3) Flaps..... RETRACT
4) Brake and steering check .....ON TAXI
5) IFR taxi checks
   - RAIM/WASS Check
   - Alt with 75ft of field elevation
   - VSI =0
   - Airspeed =0 and not negative
   - Attitude indicator <5° during ground turns
   - Compass moves freely
   - Turn coordinator indicates turn
   - Ball moves freely to outside of turn
   - Clock working

## RUN UP

1) Brakes.....HOLD
2) Flight controls..... FREE & CORRECT
3) Fuel ..... .....BOTH
4) Flight instruments (Heading Ind) .....SET
5) Elevator Trim ..... SET for TAKEOFF
6) Primer ..... .....IN/ LOCKED
7) Mixture .....RICH
   - Throttle.....1700 RPM
   - Magnetos ..... CHECK (150 Max, 75 DIF)
   - Carb heat.....CHECK
   - Ammeter.....POSITIVE CHARGE
   - Oil temp/ pressure ..... NORMAL RANGE
   - Vacuum gauge..... CHECK
   - Throttle..... 1000 RPM
8) Door ..... LOCKED
9) Lights ..... AS REQUIRED
10) Flaps..... SET for TAKEOFF
11) Radios .....Comm & Nav SET
12) NAV/GPS .....SET
13) Power Loss on Takeoff.....BRIEF

## PRE-TAKEOFF

2) Lights
3) Camera (Transponder)
4) Action
   - Fuel.....Both
   - Flaps.....Set
   - Mixture.....Rich
   - Carb heat.....Cold
   - Trim.....Takeoff
   - Key.....On
   - Master.....On
   - Primer.....Locked

## TAKEOFF & CLIMB

1) Normal takeoff ..... Flaps 0 degrees
2) Rotate.....55 MPH (50 KTS)
3) Climb..... 80 MPH (70 KTS)
   SHORT FIELD ..... Flaps 0 degrees
   Climb.....70 MPH (60 KTS)
   SOFT FIELD ..... Flaps 10 degrees
4) Flaps ..... RETRACT
5) Mixture..... LEAN above 3000 ft

## CRUISE

1) Level at altitude.....ACCELERATE
2) Throttle .....SET DESIRED POWER (2400-2600)
3) Trim ..... for LEVEL FLIGHT
4) Mixture.....LEAN
5) Heading Indicator .....TO COMPASS

## DESCENT

1) Throttle .....(as necessary)
2) Mixture..... .....Richen as necessary

## IN RANGE

1) ATIS – AWOS -- Advisories ..... NOTED
2) Altimeter ..... SET
3) Approach Plate ..... BRIEFED
4) Radios..... SET
5) NAV/GPS switch..... SET
6) Lights..... AS REQUIRED
7) Initial approach speed..... TRIMMED

## BEFORE LANDING

1) Mixture..... RICH
2) Carb Heat ..... ON
3) Flaps.....Flaps 10°– 80 MPH (70 KTS)
4) NORMAL LANDING.....Flaps 20° – 75 MPH (65 KTS)
5) SHORT FIELD.....Flaps 30°– 70 MPH (61 KTS)

## MISSED APPROACH / GO AROUND

1) Throttle .....FORWARD
2) Speed .....80 MPH (70 KTS)
3) Flaps .....20°
4) Flaps.....RETRACT at 70 MPH (65 KTS)

## AFTER LANDING

1) Flaps .....UP
2) Trim ..... TAKEOFF SETTING
3) Carb Heat ..... OFF
4) Lights..... AS REQUIRED
5) Mixture.....LEAN

## ENGINE SHUTDOWN

1) Throttle ..... IDLE
2) Radio master..... OFF
3) Mixture.....CUT OFF
4) Magnetos ..... OFF (remove key)
5) Lights..... OFF
6) Master switch..... OFF

# C150 COM MANEUVERS / EMERGENCY N704YE

## PRE-MANEUVER

1) Clearing Turns ..... 2x 90°
2) Altitude ..... Adequate
3) Fuel ..... Both
4) Mixture ..... Set
5) Carb Heat .....Off In Green Arc

## CHANDELLES

6) Clearing Turns ..... 2x 90°
7) Cruise Speed ..... +100 MPH (90Kts)
8) Add full power (Remain coordinated)
   - Roll into 30° bank,
   - Pitch up 15° by 90° (Constant bank – chg pitch)
   - At 90° hold pitch, beg roll out const pitch- chg bank
   - Wings level at 180°, just above stall
   - +/- 10° on heading

## EIGHTS ON PYLONS

9) Clearing Turns ..... 2x 90°
10) Cruise Speed ..... 100 MPH (90Kts)
11) Pivotal Alt: Groundspeed²/15= MPH
12) Pivotal Alt: Groundspeed²/11.3= MPH
    - 100 MPH (90 kts) =670 ft
    - 110 MPH (96 kts) = 810ft
13) First turn into wind. Points 0.5 Miles apart or 20 sec

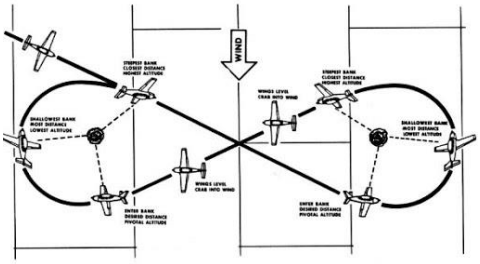

Figure 11-10 Eights-On-Pylons

## LAZY EIGHTS

14) Clearing Turns ..... 2x 90°
15) Cruise Speed (2500rpm) ..... 109 MPH (97Kts)
    - 45°= 15° Pitch/ 15°Bank
    - 90°= 0° Pitch/ 30°Bank (5-10 kts above stall)
    - 135°= -5° Pitch/ 15° Bank
    - 180°= Level
16) Left first then right.
    - R-rudder on right turn
17) ACS:
    - Heading: +/- 10°
    - Airspeed: +/- 10 Kts
    - Altitude: +/- 100 ft

## STEEP SPIRALS

18) Clearing Turns.....2x 90°
19) Alt.....6000ft
20) Enter into the wind
21) Power to Idle, carb heat
22) Trim for 80MPH (70KTS)
23) 3 turns- constant radius
24) Clear engine on upwind
25) Recover on turn 3
26) ACS
    - Heading: +/- 10°
    - Airspeed: +/- 10 Kts

## ACCELERATED STALLS

- Power to 1500
- Slow to 100mph (90 kts)
- 45° turn
- Maint altitude
- At 80mph (70kts) pull back

**Recover**

- Full power
- Release back pressure
- Level wings
- Vy

## POWER LOSS ON TAKEOFF

1) On Ground
   - Pull power
   - Brake as necessary
   - Mayday call
2) Runway remaining
   - Pitch 60 kts
   - Land
   - Mayday call
3) No Runway Remaining
   - Pitch 60kts
   - Land straight or 30° either way
   - Mayday Call
4) 1000 ft
   - Pitch 60kts
   - Return to airport- Land
   - Mayday call

## POWER LOSS IN FLIGHT

1) Best Glide..... 70MPH (60KTS)
2) Best Field ..... PICKED

## ENGINE RESTART

3) Fuel ..... BOTH
4) Mixture ..... RICH
5) Throttle ..... FULL
6) Carb Heat..... ON
7) Mags ..... BOTH
8) Master ..... ON
9) Primer ..... LOCKED
10) Key..... START

## EMERGENCY LANDING

11) Fuel ..... Off
12) Mixture ..... Cut Off
13) Throttle ..... IDLE
14) Mags ..... OFF
15) Primer ..... LOCKED
16) Transponder ..... 7700
17) Radio: 121.5 unless in contact with ATC
    - DECLARE EMERGENCY
18) Harnesses ..... SECURED
19) Passengers ..... BRIEFED
20) Master ..... OFF
21) Doors ..... UNLATCHED

## ELECTRICAL FIRE IN FLIGHT

22) Master ..... OFF
23) Avionics master..... OFF
24) All Switches besides Ignition ..... OFF
25) Land .....NEAREST AIRPORT

## ENGINE FIRE IN FLIGHT

26) Mixture ..... Idle Cut Off
27) Fuel ..... OFF
28) Master ..... OFF
29) Cabin Heat ..... OFF
30) Overhead Vents..... OPEN
    - Increase Airspeed to Extinguish
31) Land ..... ASAP

**V Speeds (MPH/*Kts*)**

Vso: 48/*42*
Vs1: 54/*48*
Vr: 55/*50*
Vx: 70/*60*
Vy: 78/*68*

B Glide: 70/*60*
Vfe: 100/*86*
**Va: 109/*97***
Vno: 120/*111*
Vne: 162/*141*
Max X-wind: 15kts