

# LIMITATIONS

## APPROVED MANOEUVRES – UTILITY CATEGORY

- |   |                                   |                       |
|---|-----------------------------------|-----------------------|
| 1 | Chandelles .....                  | 109 mph               |
| 2 | Lazy Eights .....                 | 109 mph               |
| 3 | Steep Turns .....                 | 109 mph               |
| 4 | Stalls (Except Whip Stalls) ..... | USE SLOW DECELERATION |

## FORBIDDEN MANOEUVRE – HB-CVZ

- 1 Spins

# FIRE ON GROUND

## DURING ENGINE START

- 1 Cranking.....CONTINUE

## IF ENGINE STARTS

- 2 Power.....1700 RPM FOR A FEW MINUTES
- 3 Engine.....SHUT DOWN & INSPECT

## IF ENGINE FAILS TO START

- 4 Throttle.....FULL OPEN
- 5 Mixture.....IDLE CUT-OFF
- 6 Fuel Shutoff Valve.....OFF
- 7 Engine.....CONTINUE CRANKING (2 – 3 min.)
- 8 Fire Extinguisher.....OBTAIN / GROUND ATTENDANTS
- 9 Engine.....SHUT DOWN
  - a) Master Switch.....OFF
  - b) Ignition Switch.....OFF
- 10 Parking Brake.....RELEASE
- 11 Airplane.....EVACUATE
- 12 Fire.....EXTINGUISH
- 13 Fire Damage.....INSPECT FOR DAMAGE

# ***FIRE IN FLIGHT***

## **ENGINE FIRE**

- 1 Mixture ..... IDLE CUT-OFF
- 2 Fuel Shutoff Valve ..... OFF
- 3 Ignition Switch..... OFF
- 4 Throttle..... FULL OPEN
- 5 Cabin Air & Heat (except wing root vents!).. CLOSED
- 6 Airspeed..... 100 mph

If fire is not extinguished, increase glide speed to find an airspeed which will provide an incombustible mixture! ( $\geq 115$  mph)

- 6 Emergency Landing ..... EXECUTE

## **ELECTRICAL FIRE IN FLIGHT (Smoke in the cabin!)**

- 1 Master Switch ..... OFF
- 2 Avionics Master Switch ..... OFF
- 3 Vents & Cabin Air & Cabin Heat ..... CLOSED
- 4 Fire Extinguisher (if available)..... ACTIVATE
- 5 Cabin ..... **VENTILATE**

If fire appears out and electrical power is necessary for continuance of flight!

- 6 All Individual Radio Switches ..... OFF
- 7 All Other Electrical Switches (except Ignition Switch)..... OFF
- 8 Master Switch ..... ON
- 9 Circuit Breakers ..... CHECK FOR FAULTY CIRCUIT /  
DO NOT RESET!
- 10 Radios & Electrical Switches ..... ONE AT A TIME, WITH DELAY  
AFTER EACH, UNTIL FAULTY  
CIRCUIT IS LOCALIZED

When it is ascertained that fire is completely extinguished!

- 11 Vents & Cabin Air & Cabin Heat ..... OPEN AS REQUIRED
- 12 Precautionary Landing ..... ASAP

# ENGINE POWER LOSS IN FLIGHT

## ENGINE CHECK (Restart Procedure)

- |   |                          |   |
|---|--------------------------|---|
| 1 | Airspeed.....            | 65 mph (best glide)                                 |
| 2 | Carburettor Heat.....    | ON  |
| 3 | Mixture .....            | RICH  |
| 4 | Fuel Shutoff Valve ..... | ON  |
| 5 | Ignition Switch.....     | BOTH (& START if propeller is not<br>wind milling!) |

## IF POWER IS RESTORED

- |   |                       |             |
|---|-----------------------|-------------|
| 6 | Carburettor Heat..... | AS REQUIRED |
| 7 | Mixture .....         | AS REQUIRED |

## IF POWER IS NOT RESTORED

- |   |                         |                     |
|---|-------------------------|---------------------|
| 8 | Airspeed.....           | 65 mph (best glide) |
| 9 | Emergency Landing ..... | EXECUTE             |

# EMERGENCY LANDING

*Trim for best glide speed 65 mph & Flaps Up*

*Locate suitable field*

**MAYDAY CALL**

*Transponder 7700 / ALT*

*When the landing field can easily be reached*

- |    |                          |                           |
|----|--------------------------|---------------------------|
| 1  | Seat Belts .....         | TIGHTEN                   |
| 2  | Fuel Shutoff Valve ..... | OFF                       |
| 3  | Mixture .....            | IDLE CUT-OFF              |
| 4  | Throttle.....            | IDLE                      |
| 5  | Ignition Switch.....     | OFF                       |
| 6  | Flaps .....              | FULL DOWN (for touchdown) |
| 7  | Master Switch .....      | OFF                       |
| 8  | Doors .....              | UNLATCH                   |
| 9  | Speed.....               | SLIGHTLY TAIL LOW         |
| 10 | Brakes.....              | APPLY HEAVILY             |

# ALTERNATOR FAILURE

## AMMETER SHOWS EXCESSIVE RATE OF CHARGE (Full Scale Deflection)

- 1 Alternator Switch .....OFF
- 2 Alternator Circuit Breaker .....PULL
- 3 Nonessential Electrical Equipment .....OFF
- 4 Flight .....TERMINATE (ASAP)

## LOW-VOLTAGE LIGHT ILLUMINATES DURING FLIGHT (Ammeter Discharges)

- 1 Avionics Master Switch .....OFF
- 2 Alternator Circuit Breaker .....CHECK IN
- 3 Master Switch .....OFF (both sides)
- 4 Master Switch .....ON
- 5 Low-Voltage Light .....CHECK OFF (Ammeter charging)
- 6 Avionics Master Switch .....ON

### *if low-voltage light illuminates again (still no charge)*

- 7 Alternator Switch .....OFF
- 8 Nonessential Radio & Electrical Equipment OFF
- 9 Flight .....TERMINATE (ASAP)

# RADIO FAILURE






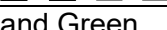
## **NO RADIO CONTACT WITH TWR / ATC**

- 1 Radio .....ON
- 2 Volume .....TEST USING SQUELCH
- 3 Headset / Mike Plugs .....PLUGGED IN

### *if still no contact*

- 4 Transponder .....7600 / ALT
- 5 Communication Failure Procedure .....APPLY AS NECESSARY

## **Air Traffic Control Tower Light Gun Signals**

<b>Colour and type of signal</b>	<b>Aircraft on the ground</b> ↘	<b>Aircraft in flight</b> ↗
Steady Green 	Cleared for take off	Cleared to land
Flashing Green 	Cleared for taxi	Return for landing (to be followed by steady green at the proper time)
Steady Red 	Stop	Give way to other aircraft and continue circling
Flashing Red 	Taxi clear of the runway in use	Airport unsafe - Do Not Land
Flashing White 	Return to starting point on airport	Not applicable
Alternating Red and Green 	Exercise extreme caution	Exercise extreme caution