

**PREFLIGHT**

1. Aircraft Documents.....ON BOARD
2. Fire Extinguisher ..... CHARGED & SECURE
3. Structural Temperature Indicator ..... CHECK
4. Tie Downs.....REMOVED/ON-BOARD
5. Flight Control Lock ..... REMOVE
6. Rudder Pedals ..... ADJUSTED & LOCKED
7. Parking brake..... ON
8. Magnetos ..... OFF
9. Avionics Master Switch & Electrics..... OFF
10. GEN/BAT Master Switch ..... ON
11. Fuel Quantity..... CHECK
12. Flaps..... LDG
13. Warning Lights ..... ON
14. GEN/BAT Master Switch ..... OFF

**EXTERIOR INSPECTION**

- LEFT WING**
1. Left Main Landing Gear..... CHECK
  2. Stall Warning..... CHECK
  3. Pitot-Static Probe ..... CLEAN, HOLES-OPEN
  4. Lights ..... VISUAL CHECK
  5. Aileron, Wing Flap..... VISUAL CHECK
- FUSELAGE**
1. Fuel Tank Vent..... CHECK
  2. Fuel Drains ..... DRAIN WATER
  3. Maintenance Fuel Drains ..... NO LEAKS
  4. Fuel Quantity..... VISUAL INSPECTION
  5. Antennas..... VISUAL INSPECTION

- TAIL**
1. Stabilizers and Control Surfaces ..... CHECK

- RIGHT WING**
1. Aileron, Wing Flap..... VISUAL CHECK
  2. Lights ..... VISUAL CHECK
  3. Right Main Landing Gear ..... CHECK

- NOSE**
1. Oil ..... CHECK LEVEL ( 6-4 QUARTS)
  2. Cowling ..... VISUAL INSPECTION
  3. Air Intakes..... CLEAR
  4. Propeller ..... CLEARANCE MIN 25 CM
  5. Propeller Blades..... CHECK
  5. Spinner ..... VISUAL INSPECTION
  6. Nose Gear ..... CHECK

**BEFORE STARTING ENGINE**

1. Parking Brake ..... ON
2. Brake Pressure ..... CHECK
3. Baggage ..... STOWED & SECURED
4. Seatbelts..... FASTENED & ADJUSTED
5. Flight Controls..... FREE & CORRECT
6. Canopy ..... CLOSED & SECURE
7. Circuit Breakers ..... CHECK
8. Fuel Shut-off Valve... OPEN(PUSH IN & LOCK)
9. Throttle..... FREE/IDLE
10. Throttle Friction ..... CHECK
11. Alternate Air ..... OFF
12. GEN/BAT Master Switch ..... ON
13. Avionics Master Switch ..... ON
14. ATC Clearance ..... RECEIVED
15. Avionics Master Switch ..... OFF
16. Altimeter..... SET QNH
17. Generator Warning Light ..... ILLUMINATE
18. Canopy Warn Light ..... OFF( PRESS/CHECK)

**ENGINE START**

1. Strobe/Position Lights.....ON
2. Throttle ..... IDLE
3. Mixture ..... FULL RICH
4. Brakes ..... HOLD
5. Fuel Pump ..... ON
6. Fuel Prime ..... ON
7. Throttle. FULL (10-15SEC) THEN IDLE ¼ INCH
8. Propeller Area..... CLEAR
9. Starter ..... ENGAGE ( MAX 30 SEC)
10. Throttle ..... 800 - 1000 RPM
11. Oil Pressure.....CHECK
12. Engine instruments ..... CHECK
13. Fuel Prime ..... OFF

**FLOODED/WARM ENGINE START**

1. Strobe/Position Lights.....ON
2. Mixture ..... FULL RICH
3. Brakes ..... HOLD
4. Fuel Pump ..... OFF
5. Fuel Prime ..... OFF
6. Throttle ..... HALF OPEN
7. Propeller Area..... CLEAR
8. Starter ..... ENGAGE
9. Throttle ..... ADJUST 1000 RPM
10. Oil Pressure.....CHECK

**AFTER STARTING ENGINE**

1. Cabin Heat and Defrost ..... AS REQUIRED
2. Flaps ..... CHECK/ CRUISE
3. Avionics Master Switch..... ON
4. Transponder ..... STBY
5. Radios/NAV/GPS ..... SET
7. Fuel Pump ..... ON
8. Fuel Pressure ..... CHECK > 3.5 PSI
9. Engine Instruments..... CHECK
10. Trim Indicator.....NEUTRAL

**TAXI**

1. Parking Brake/Taxi light ..... OFF/ON
2. Brakes/Flight Instruments ..... CHECK

**RUN UP POSITION**

1. Parking Brake/Taxi light ..... ON/OFF
2. Mixture ..... FULL RICH
3. Throttle ..... 1700 RPM
4. Oil Temp..... GREEN ( 170° - 220°F)
5. Oil Pressure..... NORMAL ( 30-60 PSI)
6. Alternator Load ( Ammeter) ..... CHECK
7. Vacuum Gauge..... CHECK
8. Mixture Lean Function ..... CHECK
9. Magnetos..... CHECK (DROP 150 DIFF±50)
10. Alternate Air..... ON/OFF ( NO RPM DROP)
11. Throttle ..... MAX/IDLE THEN 1000 PRM
12. Engine instruments ..... GREEN
13. Warning Lights..... NO ILLUMINATE
14. Take-Off Briefing ..... COMPLETED

CHECK LISTS MARKED WITH THE THICK VERTICAL LINE ON THE LEFT SHOULD BE MEMORIZED  
 VERSION V – 23.03.2016  
 BASED ON DA20-C1 AFM Rev 28

**LINE UP**

1. Parking Brake/Taxi/Landing Lights ..... OFF/ON
2. Gyro ..... CHECK
3. Trim Indicator ..... NEUTRAL
4. Fuel Pump ..... ON
5. Transponder..... ALT
6. Flaps..... T/O
7. Mixture ..... FULL RICH

**TAKE-OFF**

1. Take-off power ..... SET
2. RPM..... MIN 2000
3. Engine Gauges ..... CHECK
4. Rotation ..... 44 KIAS
5. Climb speed ..... 58 KIAS

**CLIMB**

1. Throttle..... FULL
2. Flaps..... UP
3. Landing/Taxi Light..... OFF

**CRUISE**

1. Cruise Power ..... SET ( 2200 RPM)
2. Fuel Pump ..... OFF
3. Altimeter..... SET
4. Mixture ..... ADJUST

**DESCENT**

1. Mixture ..... FULL RICH
2. Fuel Pump ..... ON
3. Throttle..... AS REQUIRED

**FINAL**

1. Mixture ..... FULL RICH
2. Flaps..... LDG
3. Fuel Pump ..... ON
4. Landing/Taxi Light..... ON
5. Approach Speed ..... 65 KIAS

**GO AROUND**

1. Throttle..... FULL POWER
2. Flaps..... T/O
3. Airspeed..... 58 KIAS

**RUNWAY VACATED**

1. Landing Light ..... OFF
2. Flaps..... CRUISE
3. Transponder..... STBY

**SHUT DOWN POSITION**

1. Parking Brake/Taxi light ..... ON/OFF
2. Electrics & Avionics ..... OFF
3. Avionics Master Switch ..... OFF
4. Throttle..... IDLE
5. Fuel Pump ..... OFF
6. Engine ..... COOLING
7. Mixture ..... CUT OFF
8. Strobe/Position Lights ..... OFF
9. Magnetos ..... OFF
10. GEN/BAT Master Switch ..... OFF
11. Tie Downs ..... AS REQUIRED

# EMERGENCY PROCEDURES

# DA-20 C1 KATANA

# SP-KWG SP-KWH SP-KPX

## ENGINE FAILURE DURING TAKE-OFF RUN

1. Throttle.....IDLE
2. Brakes ..... AS REQUIRED
3. Flaps ..... CRUISE
4. Mixture..... CUT OFF
5. Magnetos ..... OFF
6. GEN/BAT Master Switch..... OFF

## ENGINE FAILURE AFTER TAKE-OFF

### INSUFFICIENT ENGINE POWER

1. Airspeed.....60 KIAS
2. Throttle..... FULL
3. Mixture ..... FULL RICH
4. Alternate Air ..... OPEN
5. Fuel Shut-off Valve..... OPEN
6. Magnetos ..... BOTH
7. Fuel Pump ..... ON

### SHORTLY BEFORE LANDING

1. Mixture ..... CUT OFF
2. Fuel Shut-off Valve..... CLOSED
3. Magnetos ..... OFF
4. Flaps..... AS REQUIRED
5. GEN/BAT Master Switch..... OFF

## ENGINE FAILURE DURING FLIGHT

### ENGINE RUNNING ROUGHLY

1. Mixture ..... FULL RICH
2. Alternate Air ..... OPEN
3. Fuel Shut-off Valve..... OPEN
4. Fuel Pump ..... ON
5. Magnetos ..... L-BOTH-R-BOTH
6. Throttle..... PRESENT POSITION
7. No improvment.. THROTTLE IDLE/LAND ASAP

## RESTARTING THE ENGINE WITH PROPELLER WINDMILLING

1. Airspeed.....73 KIAS
2. Mixture ..... FULL RICH
3. Fuel Shut-off Valve..... OPEN
4. Magnetos ..... BOTH
5. Fuel Pump ..... ON
6. Fuel Prime ..... ON
7. Throttle..... 3/4 INCH FORWARD

### AFTER SUCCESSFUL RE-START

1. Oil Pressure ..... CHECK
2. Oil Temp ..... CHECK
3. Fuel Prime ..... OFF
4. Electrically Equipment..... ON IF REQUIRED

## RESTARTING THE ENGINE WITH PROPELLER AT FULL STOP

1. Airspeed.....73 KIAS
2. Electrically Equipment..... OFF
3. GEN/BAT Master Switch..... ON
4. Mixture..... FULL RICH
5. Fuel Shut-off Valve..... OPEN
6. Fuel Pump ..... ON
7. Fuel Prime ..... ON
8. Throttle..... 3/4 INCH FORWARD
9. Magnetos ..... START

### AFTER SUCCESSFUL RESTART

1. Oil Pressure ..... CHECK

2. Oil Temp.....CHECK
3. Fuel Prime ..... OFF
4. Electrically Equipment ..... ON IF REQUIRED

## GLIDING

1. Flaps ..... CRUISE
2. Airspeed ..... 73 KIAS
3. Glide ratio ..... 11:1

## EMERGENCY LANDING

### INSUFFICIENT ENGINE POWER

1. Airspeed ( Flaps CRUISE) ..... 64 KIAS
2. Airspeed ( Flaps T/O) ..... 60 KIAS
3. Airspeed ( Flaps LDG) ..... 55 KIAS
4. Fuel Shut-off Valve ..... CLOSED
5. Mixture ..... IDLE CUT-OFF
6. Magnetos..... OFF
7. Safety Belts ..... SECURED
8. Radio..... TRANSMIT
9. Flaps ..... AS REQUIRED
10. GEN/BAT Master Switch..... OFF

## ENGINE FIRE DURING ENGINE-START-UP ON THE GROUND

1. Fuel Shut-off Valve ..... CLOSED
2. Cabin Heat ..... CLOSED
3. Mixture ..... IDLE CUT-OFF
4. GEN/BAT Master Switch..... OFF
5. Magnetos..... OFF
6. Evacuation..... IMMEDIATELY

## ENGINE FIRE DURING FLIGHT

1. Fuel Shut-off Valve ..... CLOSED
2. Cabin Heat ..... CLOSED
3. Airspeed ..... 73 KIAS
4. Fuel Pump ..... OFF
5. Emergency Landing..... PERFORM

## ELECTRICAL FIRE INCLUDING SMOKE DURING FLIGHT

1. GEN/BAT Master Switch..... OFF
2. Cabin Air..... OPEN
3. Fire Extinguisher.....USE IF SMOKE CONTIN
4. Avionics Master Switch..... OFF
5. Electrically Equipment ..... OFF
6. Circuit Breakers ..... PULL ALL
7. Circuit Breaker..... PUSH BATTERY
8. GEN/BAT Master Switch..... ON BAT ½ ONLY
9. Circuit Breaker..... PUSH GEN
10. Circuit Breaker..... PUSH GEN CONTROL
11. GEN/BAT Master Switch..... ON
12. Circuit Breaker ..... PUSH AVIONICS
13. Circuit Breaker ..... PUSH AVIONICS MASTER
14. Avionics Master Switch ..... ON
15. Circuit Breaker..... PUSH REQUIRED SYS
16. Radio..... ON

### LAND AS SOON AS POSSIBLE

## ELECTRICAL FIRE INCLUDING SMOKE ON THE GROUND

1. GEN/BAT Master Switch ..... OFF
- ### IF ENGINE RUNNING
1. Throttle.....IDLE
  2. Mixture ..... CUT OFF
  3. Fuel Shut-off Valve..... CLOSED
  4. Magnetos ..... OFF
  5. Canopy ..... OPEN
  6. Fire Extinguisher ..... USE IF REQUIRED

## CABIN FIRE DURING FLIGHT

1. GEN/BAT Master Switch ..... OFF
  2. Cabin Air ..... OPEN
  3. Cabin Heat..... CLOSED
  4. Fire Extinguisher ..... USE IF REQUIRED
- ### LAND AS SOON AS POSSIBLE

## STARTER RELAY FAILURE

### STARTER LIGHT REMAINS ILLUMINATED

1. Throttle..... IDLE
  2. Mixture ..... CUT OFF
  3. Magnetos ..... OFF
- ### MAINTENANCE ACTION IS REQUIRED

## ELECTRICAL POWER FAILURE

1. Circuit Breaker ..... RESET
  2. GEN/BAT Master Switch ..... ON
- ### IF POWER NOT RESTORED

1. GEN/BAT Master Switch ..... OFF
- ### LAND AT NEAREST SUITABLE AIRPORT

## GENERATOR FAILURE

### GENERATOR LIGHT ILLUMINATED

1. GEN Master Switch..... OFF-ON
  2. Circuit Breaker ..... GEN RESET
  3. Circuit Breaker ..... GEN CONTROL RESET
- ### IF UNSUCCESSFUL
4. Electrical load.....REDUCE
- ### LAND AT NEAREST SUITABLE AIRPORT

## AIRSPEED FOR SAFE OPERATION

- Best Rate-of-Climb Sp ( $V_Y$ ) CRUISE.....75 KIAS  
Best Angle-of-Climb Sp ( $V_X$ ) CRUISE..... 60 KIAS  
Best Rate-of-Climb Speed ( $V_Y$ ) T/O.....68 KIAS  
Best Angle-of-Climb Speed ( $V_X$ ) T/O.....57 KIAS  
Max Flaps Extended T/O Sp ( $V_{FE\ T/O}$ ).....100 KIAS  
Max Flaps Extended LDG Sp ( $V_{FE\ LDG}$ ).....78 KIAS  
Normal Operating Speed ( $V_{NO}$ ).....118 KIAS  
Landing Final App Speed LDG.....55 KIAS  
Best Glide Angle Speed.....73 KIAS  
Maneuvering Speed ( $V_A$ ).....106 KIAS  
Max Demo Crosswind.....20 KIAS

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Manufactured by PUND®