

# Civil Air Patrol

GA-8 – N613CP

## CAP FLIGHT 9913

### Preflight Cabin

1. Pilot's operating handbook available
2. Control lock ..... Remove
3. Trim .. Cycle, smooth ops thru range
4. Hobbs, tach, squawks ..... Check
5. Documents ..... AROW in airplane
6. Static pressure alt source ..... Off
7. Magnetos... Off/Keys on glare shield
8. Avionics & other power switches Off
9. Master switches bus 1&2 ..... On
10. Volts, bus 1&2..... Check system voltage and battery condition

### WARNING

When turning off the master switch, using an external power source, or pulling the propeller through by hand, treat the propeller as if the ignition switch were on. Do not stand, nor allow anyone else to stand, within the arc of the propeller, since a loose or broken wire, or a component malfunction could cause the propeller to rotate.

11. Fuel.... On, check gauges contents
12. Alternator warning light Confirm On
13. Caution warning light ..... Check all lights on use press to test button
14. Nav/landing/strobe/pulse lights On or Off as required to check
15. Pitot Heat (IFR conditions) .. Check
16. Master switches Bus 1&2 ..... Off
17. Mixture ..... Idle cut off
18. Flaps ..... Full down
19. Harnesses & seats..... Check
20. Windshield ..... Cleanliness
21. Cockpit area..... General condition
22. Loose objects..... Secure
23. Cockpit Doors/latches..Condition & operation

### Left Wing/Left Center Fuselage

1. Tires ..... Inflation & condition

2. Brake Assy..... Condition of pads, caliper & hose
3. Wing fuel tank drain..... Drain water, check sediment & fuel grade
4. Fuel contents ..Noted or as required
5. Fuel cap ..... Secure
6. Flap..... Down condition, hinges & security
7. Aileron....Condition, horns, hinges & security
8. Wingtip..... Condition & nav / landing lights
9. Pitot Head ..... Uncovered & unobstructed
10. Static ports ..... Uncovered & unobstructed
11. Left fuel tank vent.... Unobstructed
12. Leading edge. Damage & condition
13. Wing strut & fairings.... Condition & security
14. Undercarriage .. Security & obvious defects

### Engine/Propeller/Nose/Nose Gear

1. Engine air outlets/inlets.... Check for obstructions
2. Exhaust..... Condition & security
3. Oil .....Quantity /dipstick secure
4. Accessible engine Components ..... Condition & security
5. Propeller Oil leaks, nicks & damage
6. Spinner ..... Condition & security
7. Cowling ..... Condition & security
8. Nose wheel/tire Condition & inflation
9. Nose strut ..... Condition & oil leaks

### Right Wing/Right Center Fuselage

1. Sump tank fuel drain (1) and fuel strainer drains (2) (water, sediment & fuel grade)..... Drain
2. Wing Fuel Tank Drain..... Drain
3. Fuel Contents . Noted or as required
4. Fuel cap ..... Secure
5. Undercarriage .... Security & obvious defects
6. Tires..... Inflation & condition
7. Brake Assy Condition, pads, caliper & hose
8. Wing strut & fairings ..... Condition & Security

9. Right fuel tank vent .....unobstructed
10. Leading edge..damage & condition
11. Stall warning ..... checked
12. Wingtipcondition & nav/landing light Aileron..Condition of horns, hinges & security
13. Flap.... Down, condition of hinges & security
14. Fuel vent..... Checked & clear
15. Fuel vent plenum drain .Checked & clear

### Rear Fuselage/Empennage

1. Rear fuselage skins ..... Condition
2. Inspection panels ..... Secure
3. Fairings .....Condition & security
4. Stabilizer.....Condition & security
5. Elevators .....Condition & security
6. Rudder .....Condition & security
7. Ventral fin .....Condition & security

### Rear Cabin

1. Sliding door ... Condition & operation
2. Door lock .....Condition & security
3. Door tracks.....Condition & security
4. Cabin..... Clean, no loose articles
5. Seat belts/cargo restraint. Condition & security
6. Cabin locker .....Correct loading & security
7. Sliding Door..... Closed & locked

### PASSENGER BRIEF

1. Seat Belts / Shoulder Harness
2. Personal Electronic Devices off
3. Air Vents / Comfort
4. Fire Extinguisher Location / Operation
5. Emergency Procedures & Exits

### MISSION BRIEF

1. Mission Objective
2. Destination, WX, Route, Alt, ETE
3. NOTAMS
4. Crew Coordination & CRM
5. Sterile Cockpit Procedures
6. Cockpit Layout
7. Intercom & Radio Usage
8. Seats, Seatbelts, Doors
9. Emergency Action & Equipment

### Before Starting Engine

1. Preflight Inspection..... Completed
2. Brakes ..... On/park

3. Passenger/egress briefing complete
4. Personal Electronic devices ..... Off
5. Pilot seat.....Adjusted and locked
6. Doors and windows .....As required
7. Seat, seat belt & shoulder harness .....As required
8. Radios, electrical equip ..... Off
9. Circuit breakers ..... In

### Starting Engine

1. Master switches, Bus 1& 2 ..... On
2. Volts, Bus 1 & 2 ..... Check voltage
3. Fuel shutoff valve ..... On
4. Alternate Air ..... Off
5. Mixture..... Idle cut off
6. Propeller ..... Full forward
7. Throttle ..... ½ inch open
8. Navigation Lights ..... On
9. Fuel pump ..... On
10. Prime... Mixture to full rich until fuel flow indicates then idle cut off.
11. Fuel pump ..... Off
12. Propeller area .....Clear
13. Starter ..Engage, when engine fires RELEASE otherwise REPRIME
14. Mixture .....Full rich
15. Throttle..... Idle approx 1000 RPM
16. Oil pressure..Check (pressure to be indicated within 30 sec)
17. Volts/Amps..... Check charging system
18. Avionics power..... On
19. HSI power .....As required
20. Fuel flow/consumption meter..Reset if necessary
21. Mixture ..... Adjusted
22. Flaps ..... Retracted
23. Flight instruments .....Set
24. Radios.....Set

### NOTE

If engine fails to achieve a normal start, assume it to be flooded. Crank engine over with throttle wide and mixture in Idle Cut Off, if engine fires retard throttle and advance mixture to full rich, otherwise repeat above start procedure.

### Taxi

1. Brakes ..... Test
2. Turn and slip indicator .....Checked
3. Flight instruments .....Checked



## **EMERGENCY PROCEDURES**

### **GA-8 N613CP CAP FLIGHT 9913**

#### **Engine Failure During Takeoff Run**

1. Throttle ..... Closed
2. Brakes ..... Apply
3. Wing flaps ..... Up
4. Master switches bus 1&2 Off
5. Ignition ..... Off
6. Fuel shutoff valve ..... Off

#### **Engine Failure Immediately After Takeoff**

1. Airspeed ..... 64 – 71 KIAS  
(Refer section 3.2 for weight specific speed)
2. Ignition ... Off (As time permits)
3. Fuel shutoff valve. Off (As time permits)
4. Master switches bus 1&2. Off
5. Wing flaps . Full recommend
6. Braking ..... Heavy after touchdown

#### **Engine Failure During Flight**

1. Airspeed ..... 69 – 78 KIAS  
(Refer section 3.2 for weight specific speeds)
2. Fuel Pump ..... On  
Check fuel pressure
3. Fuel shutoff valve ... Confirm On
4. Fuel quantity ..... Check
5. Mixture ..... Rich
6. Oil ... Check temp and press
7. Ignition Cycle Both-L-R-Both
8. Throttle ..... Check linkage operation

9. Starter ..... Activate if prop stopped

#### Notes:

If engine does not restart commence forced landing procedures.

If clear symptoms of a mechanical failure exist, or if the engine has seized due to the loss of oil pressure, do not attempt a restart.

If engine operates with only L or R magneto selected, leave the ignition switch in this position while a suitable landing area is selected.

At high altitudes or altitudes roughness or loss of power may result from over-richness. In these cases the mixture should only be adjusted sufficiently to obtain smooth running. Observe instruments for temperature rise. Rough engine operation due to over-richness is most usually encountered at altitudes above 5000 feet.

#### **Emergency Landing w/o Engine Power**

1. Airspeed ..... 64 – 71 KIAS  
(Refer section 3.2 for weight specific speed)
2. Ignition ..... Off
3. Fuel shutoff valve ..... Off
4. Master switches bus 1&2 .. Off
5. Throttle ..... Closed
6. Mixture ..... Idle cut off
7. Propeller .... Course (low RPM)
8. Wing flaps ..... Full prior to touchdown
9. Braking ..... Heavy after touchdown

#### **Precautionary Landing With Engine Power**

1. Airspeed ..... 75 KIAS
2. Wing Flaps ..... Takeoff
3. Selected Field ..... Overfly and inspect
4. Wing flaps ..... Full on final
5. Braking .. Heavy after touchdown
6. Mixture ..... Idle cut off
7. Ignition ..... Off
8. Fuel shutoff valve ..... Off
9. Master switches Bus 1&2 ..... Off

#### **Ditching**

1. Airspeed ..... 75 KIAS
2. Wing Flaps ..... Takeoff
3. Power (If available) . Est. 300 ft/min @ 65 KIAS
4. Approach

#### **High winds, heavy seas ..... Into the Wind.**

- Light winds, heavy swells ..... Parallel to swells.
5. Wing Flaps ..... Full prior to touchdown
  6. Touchdown ..... Slowest practical speed
  7. Evacuate ..... Open main cabin door first (if necessary flood cabin)

#### **Fire During Start On Ground**

1. Cranking ... Continue, to get a start which would suck the flames and accumulated fuel through the fuel injector and into the engine.

If engine starts:

2. Power . 1700 RPM for a few minutes
3. Engine ..... Shutdown and Inspect for damage

If engine fails to start:

4. Cranking ..... Continue
5. Throttle ..... Full open

6. Mixture ..... Idle Cut-off
7. Fuel shutoff valve ..... Off
8. Ignition ..... Off
9. Master switches Bus 1&2 .... Off
10. Aircraft ... Evacuate and extinguish fire using best available means

#### **Engine Fire in Flight**

1. Fuel shutoff valve ..... Off
2. Fuel pump ..... Off
3. Throttle ..... Closed
4. Propeller ..... Coarse
5. Mixture ..... Idle cut-off
6. Master switches bus 1&2 ..... Off
7. Vents ... Close heater & air vents
8. Airspeed ... 140 KIAS to try to blow fire out. Increase up to VNE if required.
9. Forced landing ..... Execute.  
Refer to Airspeeds for Emergency Operation on back.

#### **Electrical Fire in Flight**

1. Master Switches Bus 1&2 ..... Off
2. Electrical switches ..... Off
3. Extinguisher ..... Activate

#### **If fire goes out:**

4. Smoke . Use oxygen if available.  
Ventilate cabin
5. Precautionary landing ..... As soon as practical

#### **If fire does not go out:**

6. Land ..... Execute immediately

#### **Warning**

**Do not take the alternator off line (either by turning off the Bus 2 Master or by pulling the alternator field circuit breaker) in flight except in an emergency.**

### Cabin Fire

1. Master Switches Bus 1&2.....Off
2. Vents...Close heater & air vents
3. Extinguisher ..... Activate
4. Land ..... As soon as practical

### Smoke/Fume Evacuation

Once fire is extinguished:

1. Vents..... Open heater and air vents
2. Power ..... Reduce
3. Airspeed ..... Approx 80 KIAS
4. Cockpit doors ..... Open ensure seat belts secure
5. Cabin door..... Open approx. 6 inches
6. Power ... Adjust to maintain 80 KIAS
7. Doors ... Close when cabin clear

Note

Aircraft may be landed with door(s) open if necessary

### Landing With a Flat Main Tire

1. Landing area ..... Suitable
2. Approach..... Normal
3. Wing Flaps ..... Full down
4. Touchdown..... Good tire(s) first, Hold aircraft off flat tire as long as possible with aileron and/or elevator control.
5. Mixture ..... Idle cut-off
6. Ignition ..... Off
7. Fuel shutoff valve ..... Off
8. Master switches 1&2 ..... Off

### Inadvertent Icing Encounter

Flight into known icing conditions is prohibited, however, if icing is inadvertently encountered

1. Pitot heat..... On
2. Altitude ..... Change level or turn back to obtain an outside temperature less conducive to icing
3. Window Demist ..... On

### Excessive Rate of Electrical Charge

1. Bus 2 Master switch ..... Off
2. Non-essential electrical equipment ..... Off
3. Land.....As soon as practical

### Alternator Failure

To check for tripping of over-volt relay:

1. Bus 2 Master switch ..... Off
2. Bus 2 Master switch ..... On
3. Alternator warning light. Check Off
4. Ammeter ..... Check for charge

To check for opened circuit breaker:

1. Alternator field circuit breaker. Check & reset if required
2. Alternator warning light. Check Off
3. Ammeter ..... Check for charge

If condition not corrected:

1. Bus 2 Master switch ..... Off
2. Non-essential electrical equipment..... Off
3. Land.....As soon as practical

### Airspeeds for Emergency Operations

Maneuvering Speed (4000 lbs) -----	121 KIAS
Maximum Glide	
4000 lbs-----	78 KIAS
3600 lbs-----	74 KIAS
3000 lbs-----	68 KIAS
Landing Without Engine Power (Flaps 38°)	
4000 lbs-----	71 KIAS
3600 lbs-----	68 KIAS
3000 lbs-----	64 KIAS

**For all other  
Emergency/Abnormal  
Procedures. See the  
POH – Section 3.**

This checklist is a guide to coordinate Pilot Operating Handbook and STC data applicable to this particular aircraft only. The applicable Pilot Operating Handbook and STC installations remain the official documentation for this aircraft.

The pilot in command is responsible for complying with all items in the Pilot Operating Handbook and applicable STCs.

I certify this checklist has been coordinated for accuracy.

\_\_\_\_\_  
Wing Director of Maintenance  
Dated: \_\_\_\_\_