



Aircraft Information Booklet



Pitts S-2C

VH-JAX

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NOTICE

The information and figures contained in this booklet are to be used for general purposes only. This document is not a substitute for the approved aeroplane flight manual.

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Aircraft Overview

The Pitts S-2C is the newest Pitts available today. It's a highly capable competition aerobatic aircraft and an excellent advanced aerobatic trainer.

Compared to the previous model, the S-2B, there have been a number of changes. The wing tip shape has been improved, belly flattened, engine cowling improved, windshield redesigned, and negative g limit increased. It features a quicker roll rate, improved climb rate, cruises 15 mph faster, and it's also easier to land!

Equipment & Features

- Garmin GNC 250XL (COM/GPS)
- Bendix/King KT76C Digital Transponder
- 3 Canopies – Single bubble, Dual Bubble, Open Cockpit
- Parachutes (by arrangement)

Recency & Restrictions

Private Hire: 10 hours on type, company check.
Dual training: Student occupancy in rear seat determined by instructor.
Recency: Flown type in the last 30 days.

Panel Photo



Performance – Standard Specifications

SPEED:

Maximum at Sea Level	169 KTS
Cruise, 75% Power at 6000 FT	150 KTS

CRUISE:

Using recommended lean mixture with fuel allowance for engine start, taxi, takeoff, climb and 45 minutes reserve.

75% Power at 6000 FT	Range 150 NM
28 Gallons Usable Fuel	Time 1:00 HRS

RATE OF CLIMB AT SEA LEVEL:

Minimum Weight	2900 FPM
Maximum Takeoff Weight	2100 FPM

TAKEOFF PERFORMANCE:

Ground Roll	557 FT
Total Distance Over 50 Ft. Obstacle	893 FT

LANDING PERFORMANCE:

Ground Roll	1320 FT
Total Distance Over 50 Ft. Obstacle	2124 FT

STALL SPEED:

Power Off	54 KIAS
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MAXIMUM WEIGHT:

Takeoff	1700 LBS
Landing	1700 LBS

STANDARD EMPTY WEIGHT

1150 LBS

MAXIMUM USEFUL LOAD:

Normal Category	550 LBS
Aerobatics	475 LBS

BAGGAGE ALLOWANCE

Normal Category	20 LBS
Aerobatic Category	0 LBS

WING LOADING

13.3 Lbs/Sq Ft

POWER LOADING

6.5 Lbs/HP

FUEL CAPACITY

29 GAL

OIL CAPACITY

12 QTS

ENGINE: Textron Lycoming

AEIO-540-D4A5

260 BHP at 2700 RPM

PROPELLER: Hartzell 3 blade composite, Diameter

78 IN

The above performance figures are provided by the manufacturer and based on a standard aeroplane at 1700 pounds, standard atmospheric conditions, level hard-surface dry runways and no wind. They are calculated values derived from flight tests under carefully documented conditions and will vary with our aeroplane and numerous other factors affecting flight performance.

Operating Information

AIRSPEEDS - NORMAL OPERATIONS

Takeoff:

Normal Climb Out.....	87 KIAS
Short Field Takeoff	74 KIAS

Enroute Climb:

Normal, sea level	104 KIAS
Best Rate-of-Climb, Sea level.....	83 KIAS
Best Angle-of-Climb, Sea level	71 KIAS

Landing Approach:

Normal Approach	83 KIAS
Short Field Approach	83 KIAS

Balked Landing:

Maximum Power	83 KIAS
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V-Speeds:

Vne (Never exceed).....	184 KIAS
Vno (Do not exceed except in smooth air)	134 KIAS
Va (No abrupt control movements above this speed).....	134 KIAS

Maximum Demonstrated Crosswind Velocity:

Takeoff or landing	17 KNOTS
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Stall Speed:

Power Off.....	54 KIAS
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Unless otherwise noted, the speeds listed above are based on a maximum weight and may be used for any lesser weight. To achieve the performance specified in the performance section for take-off distance of the aircraft approved flight manual, the speed appropriate to the particular weight must be used.

POWER PLANT

Oil Type	W100 / 15W50
Oil Quantities:	
Maximum	12 QTS
Minimum (Company)	9 QTS

Engine operating limits including RPM, pressures, and temperatures, can be found by referring to the green arcs and red lines on applicable gauges. Detailed information can also be found in the approved flight manual.

FUEL SYSTEM

Total Capacity	110 litres / 29.0 US gallons
Total Usable	106 litres / 28.0 US gallons
Main Tank Usable	87 litres / 23.0 US gallons
Wing Tank Usable (Normal category only)	19 litres / 5.0 US gallons
Fuel Consumption per hour:	
Aerobatic (25" / 2500 RPM)	70 litres / 18.5 US gallons
Cruise (75% power)	55 litres / 14.5 US gallons
Approved Fuels:	
Option A	100LL Grade Aviation Fuel (Blue)
Option B	100 Grade Aviation Fuel (Green)

Notes

- Aerobatics prohibited with fuel in wing tank.
- Transfer from wing tank only when main tank is below 18 gallons.
- Transfer of fuel from wing tank to main tank takes 10-12 minutes.
- Maximum inverted flight time is 3 minutes.

TYRE PRESSURES

Main wheels	35 PSI
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MANOEUVRE / LOAD LIMITS

Normal Category - Flight Load Factors	+3.8 G / -1.5 G
Aerobatic Category - Flight Load Factors	+6.0 G / -5.0 G

- No sudden full aileron, rudder or nose up elevator above 134 KIAS.
- No sudden full nose down elevator deflection above 118 KIAS.

Aerobatic Operations

Pilots may only perform manoeuvres that have been specifically endorsed in their logbook. Manoeuvres are endorsed after all aspects of each manoeuvre have been demonstrated during dual training.

Certain advanced manoeuvres are prohibited by company policy. Tail slides, tumbling, torque and other highly aggressive manoeuvres are prohibited. Speak with your instructor if you would like further details.

APPROVED MANOEUVRES (FLIGHT MANUAL)

Approved manoeuvres with maximum and minimum recommended entry speeds in KIAS.

MANOEUVRES	INSIDE		OUTSIDE	
	MAX	MIN	MAX	MIN
Loop (up)	155	110	155	110
Loop (down)	85	60	85	60
Slow Roll	155	85	155	85
Barrel Roll	155	110	155	110
Snap Roll	120	80	95	80
Hammerhead	155	110	155	110
Lazy Eight	155	120	155	120
Chandelle	155	120	155	120
Stalls & Spins	SLOW DECELERATION		SLOW DECELERATION	

Spin Recovery

- Power to idle.
- Aileron neutral.
- Full opposite rudder briskly to stop rotation.
- Neutrally forward elevator.
- Recover aeroplane to straight and level flight.

"Out of Control" Recovery

- Power to idle.
- Stick and rudder held neutral.
- Wait for 85 KIAS.
- Recover aeroplane to straight and level flight.

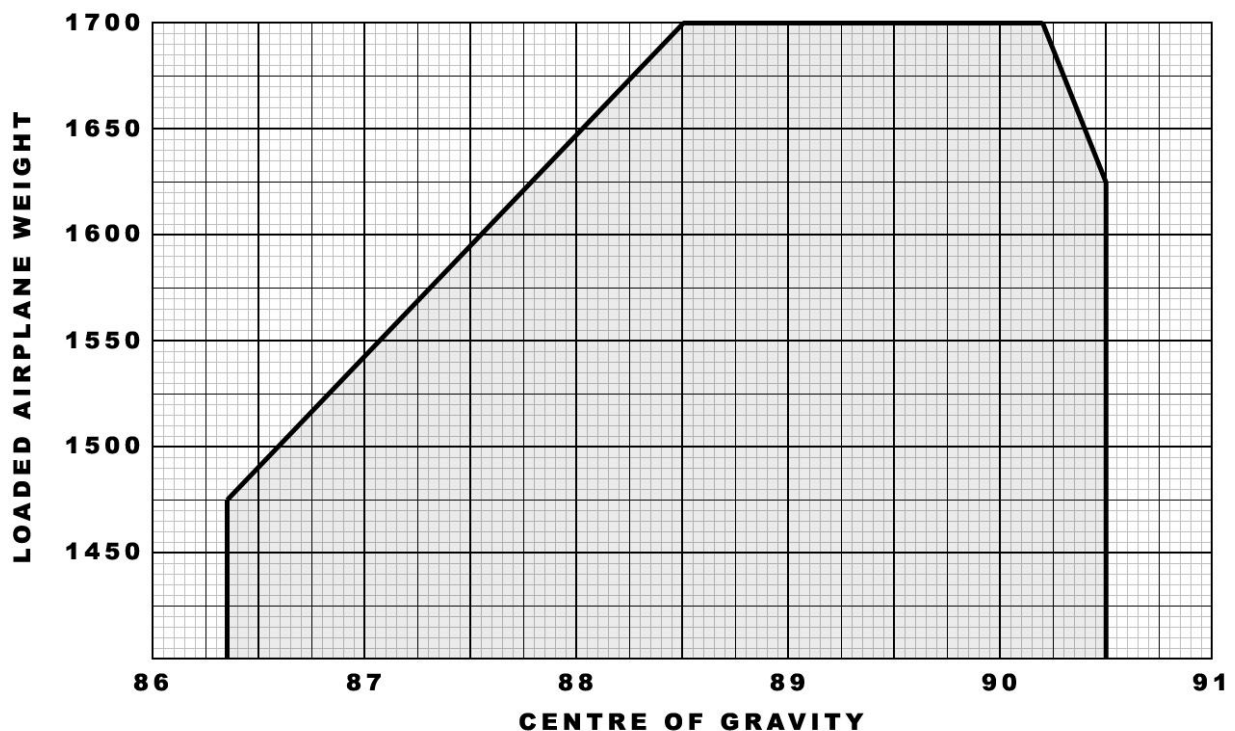
Weight and Balance

ITEM	WEIGHT (LBS)	ARM (INCHES)	MOMENT (IN-LB)
STANDARD WEIGHT	1170	81.70	95589.0
FUEL MAIN		81.32	
FUEL AUX		81.75	
PILOT FWD		105.15	
PILOT REAR		136.50	
BAGGAGE		157.81	
TOTAL		CG = (MOMENT/WEIGHT)	

HINTS

- Full main fuel - 138.4 lbs, moment 11254.7
- Full auxiliary fuel - 30.1 lbs, moment 2460.7
- To convert pilot/pax weight from kilos to pounds multiply by 2.2.
- Centre of gravity is calculated by dividing the sum of the moments by the total weight.

CENTRE OF GRAVITY LIMITS



Performance Tables

TAKEOFF (1700 lbs – MTOW)

1. No wind.
2. Hard surface runway, Level, Dry.
3. Lift-off 65 KIAS.
4. Airspeed at 50 ft. 74 KIAS
5. Full throttle, 2700 RPM.

Pressure Altitude	Temperature	Ground Roll	Over 50ft Obstacle
0 ft	-18.5° C	130 m	213 m
	15.0° C	169 m	272 m
	37.2° C	199 m	316 m
4000 ft	-25.0° C	181 m	293 m
	7.2° C	238 m	377 m
	29.0° C	280 m	440 m
8000 ft	-32.2° C	259 m	415 m
	-1.0° C	343 m	539 m
	20.0° C	406 m	631 m

LANDING (1700 lbs – MTOW)

1. No wind.
2. Hard surface runway, Level, Dry.
3. Brakes - Apply heavily.
4. Airspeed at 50 ft. 83 KIAS, throttle idle from 50ft.

Pressure Altitude	Temperature	Ground Roll	Over 50ft Obstacle
0 ft	-18.5° C	356 m	588 m
	15.0° C	403 m	648 m
	37.2° C	434 m	698 m
4000 ft	-25.0° C	400 m	658 m
	7.2° C	453 m	745 m
	29.0° C	489 m	787 m
8000 ft	-32.2° C	449 m	723 m
	-1.0° C	512 m	824 m
	20.0° C	554 m	892 m

CRUISE PERFORMANCE

RPM: 2400 RPM

Manifold: 23"

Mixture: CHT and EGT no more than half scale.
Lean to approximately **55 litres per hour**.
Fuel flow will vary slightly with altitude.

TAS: 150 KTAS

AEROBATIC PERFORMANCE

RPM: 2500 RPM

Manifold: 25"

Mixture: Lean to **70 litres per hour**.
CHT and EGT no more than half scale.

Checklists – Normal Operations

PREFLIGHT INSPECTION

Visually check the aeroplane for general condition during walk-around inspection. Aeroplane should be parked in a level ground attitude to ensure that fuel drain valves allow for accurate sampling. In cold weather, remove even small accumulations of frost, ice or snow from wing, tail and control surfaces. Also, make sure that control surfaces contain no internal accumulations of ice or debris.

(1) COCKPIT

1. Control locks -- REMOVE if installed.
2. Ignition Switch -- OFF.
3. Master Switch -- OFF.
4. Seat Belts -- CHECK for wear and security.
5. Front Seat -- SECURE front belts for solo flight.
6. Loose Items -- SECURE or REMOVE for aerobatics.
7. Baggage -- SECURED.
8. Baggage Door -- CLOSED and SECURED.
9. Battery -- SECURE and no leaks.
10. Tail Section -- INSPECT for loose articles.
11. Pilots Operating Handbook -- available in aeroplane.
12. Canopy -- CLOSED and LOCKED.

(2) EMPENNAGE

1. Fabric -- CHECK general condition.
2. Tail Surfaces -- SECURE and good condition.
3. Tail Wheel and Springs -- SECURE and in good condition.
4. Crankcase Breather Tube -- CLEAR.
5. Tie-Down -- DISCONNECT.
6. Control Surfaces -- CHECK freedom of movement and security.
7. Wing Tank Valve Drain – DRAIN, check for water and sediment.

(3) RIGHT WINGS

1. Fabric -- CHECK general condition.
2. Ailerons -- CHECK freedom of movement and security.
3. I Strut -- CHECK security.
4. Stall Vane -- CHECK operation, master on required.
5. Flying and Landing wires -- SECURE, tensioned, no nicks.
6. Tie down -- DISCONNECT.

(4) NOSE

1. Main wheels -- CHECK for wear, proper inflation, spat security.
2. Alternate Engine Breather Hole -- OPEN and clean.
3. Propeller and Spinner -- No nicks, secure, free of oil leaks.
4. Air Inlet Screen -- CHECK for restrictions.
5. Engine Oil Level -- CHECK, do not operate with less than 9 quarts.
6. Fuel drains -- CHECK all three drains for water and sediment.

(5) LEFT WINGS

1. Pitot Tube -- CHECK that holes are open and clean.
2. Flying and landing wires -- SECURE, tensioned, no nicks.
3. I Strut -- CHECK security.
4. Ailerons -- CHECK freedom of movement and security.
5. Fabric -- CHECK general condition.
6. Tie down -- DISCONNECT.

PASSENGER BRIEFING

In your briefing the following points should be discussed for the comfort and safety of your passenger.

- General information about the flight.
- Normal entry and exit from the aircraft.
- Emergency exit and basic parachute operation, if applicable.
- The flight is about them having a good time! You will be in constant communication with them, checking on them regularly, and they shouldn't be afraid to ask you to stop or take a break.
- Tips to avoid air sickness, as well as directions on using sick bags.
- Remaining clear of controls in flight and on the ground.

BEFORE STARTING ENGINE

1. Pre-flight Inspection -- COMPLETE.
2. Canopy -- CLOSED and LOCKED.
3. Passenger Briefing -- COMPLETE.
4. Sick Bags -- ONBOARD and accessible.
5. Seatbelts and Shoulder Harnesses -- ADJUSTED and LOCKED.
6. Brakes -- TEST and ON.
7. Cowl Flaps -- OPEN.
8. Engine Alternate Air Control -- CLOSED.
9. Circuit Breakers -- CHECK IN.
10. Avionics Master Switch -- OFF.

WARNING

THE AVIONICS MASTER SWITCH MUST BE OFF DURING ENGINE START TO PREVENT POSSIBLE DAMAGE TO AVIONICS.

11. Fuel Selector -- ON.
12. Fuel Transfer Valve -- OFF.

STARTING ENGINE

1. Throttle -- OPEN ¼ INCH (5mm).
2. Mixture -- RICH.
3. Propeller -- HIGH RPM.
4. Master Switch -- ON.

NOTE

If engine is warm omit priming procedures in steps 5 & 6.

5. Boost Pump – ON for 2-3 seconds.
6. Mixture -- IDLE CUT OFF position.
7. Confirm area around aircraft is clear -- call "CLEAR PROP!"
8. Ignition Switch -- START (release when engine starts).
9. Mixture -- ADVANCE smoothly to RICH when engine fires.
10. Set throttle -- 1000 RPM.

NOTE

If engine floods, turn off auxiliary fuel pump, place mixture in idle cut off, open throttle ½ to full, and crank engine. When engine fires, advance mixture to full rich and retard throttle promptly.

11. Oil Pressure -- CHECK, confirm rising within 30 seconds or shut down.
12. Alternator -- ON.
13. AMPS/VOLTS -- Check for discharge.
14. Avionics Master Switch -- ON.
15. Radio -- ON, set as required.
16. Transponder -- STANDBY.

TAXYING

1. Brakes -- CHECK.
2. Temps and pressures -- MONITOR.
3. S turns as required, more frequently when following another aircraft.

BEFORE TAKEOFF

1. Canopy -- Confirm LOCKED.
2. Brakes -- SET.
3. Flight Controls -- FULL FREE and CORRECT movement.
4. Flight Instruments -- CHECK and SET.
5. Fuel Selector -- ON.
6. Mixture -- RICH below 5000 feet MSL.
7. Elevator Trim -- Takeoff neutral.
8. Throttle -- 1800 RPM.
 - a. Magnetos -- CHECK. RPM drop should not exceed 175 RPM on either magneto or 50 RPM differential between Magnetos. Confirm on BOTH.
 - b. Engine Instruments and Ammeter -- CHECK.
 - c. Propeller -- Cycle from high to low RPM twice, return to high RPM. Do not allow RPM to drop more than 300 RPM during checks.
 - d. Set 1000 RPM.
9. Engine Alternate Air -- CHECK for RPM drop.
10. Avionics -- ON and set.
11. Seatbelts and Shoulder Harnesses -- CHECK SECURE.
12. Fuel Quantity -- CHECK.

HOLDING POINT CHECKS

1. TRANSPONDER -- 1200 ALT or as required.
2. RADIO – Frequency set, volume tested, clearance.

TAKEOFF

NORMAL TAKEOFF

1. Elevator Control – FULL FORWARD.
2. Throttle -- FULL OPEN smoothly, 2700 RPM.
3. Checks -- POWER achieved, AIRSPEED rising, GAUGES in the green.
4. Lift Off -- 64 KIAS.
5. Initial Climb Speed – 90-100 KIAS.

ENROUTE CLIMB

NORMAL CLIMB

1. Airspeed -- 104 KIAS.
2. Throttle -- 23".
3. Propeller -- 2400 RPM.
4. Mixture -- LEAN slowly, monitor EGT.
5. Cowl Flaps -- As required. (Suggest 2/3 closed)

MAXIMUM PERFORMANCE CLIMB

1. Airspeed -- 83 KIAS.
2. Throttle -- FULL.
3. Propeller -- 2700 RPM.
4. Mixture -- LEAN slowly, monitor EGT.
5. Cowl Flaps -- OPEN.

CRUISE

1. Throttle -- 19-20".
2. Propeller -- 2200-2300 RPM.
3. Elevator Trim -- Adjust.
4. Mixture -- LEAN, monitor EGT.
5. Cowl Flaps -- As required for cooling. (Suggest 2/3 closed)

AEROBATIC FLIGHT

1. Throttle -- 25".
2. Propeller -- 2500 RPM.
3. Elevator Trim -- Adjust.
6. Mixture -- ADJUST to 18.0 GPH, monitor EGT.
4. Cowl Flaps -- As required for cooling. (Suggest 2/3 closed)

DESCENT

1. Power -- AS DESIRED.
2. Mixture -- ENRICHEN on descent, full rich for idle power.
3. Cowl Flaps -- CLOSED, or as required for cooling.

BEFORE LANDING

BUMPFISH

1. Brakes -- Checked.
2. Undercarriage -- DOWN and locked.
3. Mixture -- RICH.
4. Propeller -- HIGH RPM.
5. Fuel -- Check quantity, and selection valve is ON.
6. Instruments -- Check temps and pressures in GREEN.
7. Switches -- MAGS both, MASTER on.
8. Hatches and Harnesses -- SECURE and LOCKED.

LANDING

NORMAL LANDING

1. Airspeed -- 83 KIAS.
2. Trim -- ADJUST as desired.
3. Touchdown -- TAIL WHEEL FIRST.
4. Elevator Control -- FULL STICK BACK.
5. Braking -- MINIMUM REQUIRED.

BALKED LANDING (GO AROUND)

1. Throttle -- FULL OPEN.
2. Climb Speed -- 83 KIAS.
3. Cowl Flaps -- OPEN.

AFTER LANDING

1. Cowl Flaps -- OPEN.
2. Transponder -- STANDBY.

SHUT DOWN/SECURING AEROPLANE

1. Throttle -- IDLE.
2. Avionics Master Switch -- OFF.
3. Mixture -- IDLE CUT OFF.
4. Ignition Switches -- OFF.
5. Master Switch -- OFF.
6. Alternator Switch -- OFF.
7. Interior -- TIDY.
8. Canopy -- CLOSED and LOCKED.
9. Aircraft -- SECURE with chocks or tie downs.

Checklists – Emergency Procedures

INTRODUCTION

Emergencies caused by aeroplane or engine malfunctions are extremely rare if proper pre-flight inspections and maintenance are performed.

Section 3 of the approved flight manual provides amplified procedures for coping with emergencies that may occur.

Should an emergency arise the basic guidelines described in this section and the approved flight manual should be considered and applied as necessary to correct the problem.

AIRSPEEDS

AIRSPEEDS FOR EMERGENCY OPERATION

Engine Failure After Takeoff	83 KIAS
Manoeuvring Speed	134 KIAS
Maximum Glide Speed	83 KIAS
Precautionary Landing With Engine Power	83 KIAS
Landing Without Engine Power.....	83 KIAS

ENGINE FAILURES

ENGINE FAILURE DURING TAKEOFF ROLL

1. Throttle -- IDLE.
2. Brakes -- APPLY.
3. Mixture -- IDLE CUT OFF.
4. Ignition Switch -- OFF.
5. Master Switch -- OFF.

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

1. Airspeed -- 83 KIAS.
2. Mixture -- IDLE CUT OFF.
3. Fuel Selector Valve -- OFF.
4. Ignition Switch -- OFF.
5. Master Switch -- OFF.
6. Land – WITHIN 30° OF STRAIGHT AHEAD.

ENGINE FAILURE DURING FLIGHT (Restart Procedures)

1. Airspeed -- 83 KIAS (Best glide speed).
2. Fuel Selector Valve -- ON.
3. Fuel Boost Pump -- ON.
4. Mixture -- RICH (if restart has not occurred).
5. Ignition Switch -- BOTH (or START if propeller is stopped).

FORCED LANDINGS

EMERGENCY LANDING WITHOUT ENGINE POWER

1. Airspeed -- 83 KIAS.
2. Mixture -- IDLE CUT OFF.
3. Fuel Selector Valve -- OFF.
4. Ignition Switch -- OFF.
5. Canopy -- JETTISON (Pilots option)
6. Master Switch -- OFF when landing is assured.
7. Touchdown -- TAILWHEEL FIRST.
8. Brakes -- AS REQUIRED, maintaining aircraft control.

PRECAUTIONARY LANDING WITH ENGINE POWER

1. Airspeed -- 83 KIAS
2. Selected Field -- FLY OVER, noting terrain and obstructions, then retract flaps upon reaching a safe altitude and airspeed.
3. Avionics Master Switch and Electrical Switches -- OFF.
4. Airspeed -- 83 KIAS
5. Master Switch -- OFF.
6. Touchdown -- TAILWHEEL FIRST.
7. Ignition Switch -- OFF.
8. Brakes – AS REQUIRED, maintaining aircraft control.

DITCHING

1. Radio -- TRANSMIT MAYDAY on 121.5 MHz or appropriate frequency, giving location and intentions and SQUAWK 7700.
2. Power -- ESTABLISH 300FT/MIN DESCENT AT 83 KIAS.
3. Approach -- High Winds, Heavy Seas -- INTO THE WIND.
Light Winds, Heavy Swells -- PARALLEL TO SWELLS.
4. Canopy -- JETTISON.
5. Touchdown -- LEVEL ATTITUDE AT ESTABLISHED RATE OF DESCENT.
6. Aeroplane -- EVACUATE.

FIRES

DURING START ON GROUND

1. Cranking -- CONTINUE to crank the engine in an attempt to start the engine and use any fuel in the lines.

If engine starts:

2. Power -- 1800 RPM for a few minutes.
3. Engine -- SHUTDOWN and inspect for damage.

If engine fails to start:

4. Throttle -- FULL OPEN
5. Mixture -- IDLE CUT OFF.
6. Cranking -- CONTINUE.
7. Fuel Selector Valve -- OFF.
8. Auxiliary Fuel Pump -- OFF.
9. Fire Extinguisher -- OBTAIN and ACTIVATE.
10. Engine -- Master Switch OFF, Ignition Switch OFF.
11. Aeroplane -- EVACUATE.
12. Fire -- EXTINGUISH using fire extinguisher, wool blanket or dirt.
13. Fire Damage -- INSPECT, repair damage or replace damaged components or wiring before conducting another flight.

ENGINE FIRE IN FLIGHT

1. Mixture -- IDLE CUT OFF.
2. Fuel Selector Valve -- OFF.
3. Master Switch -- OFF.
4. Airspeed -- 83 KIAS. (If fire is not extinguished, increase glide speed to find an airspeed within airspeed limitations – which will provide an incombustible mixture. If fire is not extinguished and you have a parachute jettison canopy and leave the aircraft if you have sufficient altitude.)
5. FORCED LANDING – Execute as described in “Emergency Landing Without Engine Power”.

ELECTRICAL FIRE IN FLIGHT

1. Master Switch -- OFF.
2. Avionics Master -- OFF.
3. Cabin Vents -- CLOSED.
4. Fire Extinguisher -- ACTIVATE.

WARNING

AFTER DISCHARGING FIRE EXTINGUISHER AND ASCERTAINING THAT THE FIRE HAS BEEN EXTINGUISHED, VENTILATE CABIN.

5. Vents, Cabin Air, Heat -- OPEN when it is ascertained that fire is completely extinguished.

If fire has been extinguished and electrical power is necessary for continuance of flight to the nearest suitable airport or landing area:

6. Master Switch -- ON.
7. Circuit Breakers -- CHECK for faulty circuit, do not reset.
8. Radio Switches -- OFF.
9. Avionics Master Switch -- ON.
10. Radio/Electrical Switches -- ON one at a time, with delay after each until short circuit is localised.

ICING

INADVERTENT ICING ENCOUNTER

1. Turn back or change altitude to obtain an outside air temperature that is less conducive to icing.
2. Increase engine speed to minimize ice build-up on propeller blades.
3. Watch for signs of air intake ice and apply alternate air as required. An unexplained loss in manifold pressure could be caused by air intake screen ice.
4. Plan a landing at the nearest airport. With an extremely rapid ice build up, select a suitable "off airport" landing site.
5. With any ice accumulation on the wing leading edges, be prepared for significantly higher stall speed.
6. Approach at 95 to 100 KIAS depending upon the amount of the ice accumulation.
7. Touchdown tail wheel first.

STATIC SOURCE BLOCKAGE

(Erroneous Instrument Readings Suspected)

1. Alternate Static Source Value -- ON.
2. Airspeed/Altitude -- See placard for corrected value.

WARNING

**BEFORE ANY FLIGHT IN TO TEMPERATURES BELOW FREEZING
CHECK THAT THE ENGINE ALTERNATE BREATHER HOLE IS OPEN
AND CLEAR OF OIL OR OTHER FOREIGN MATERIAL.**

