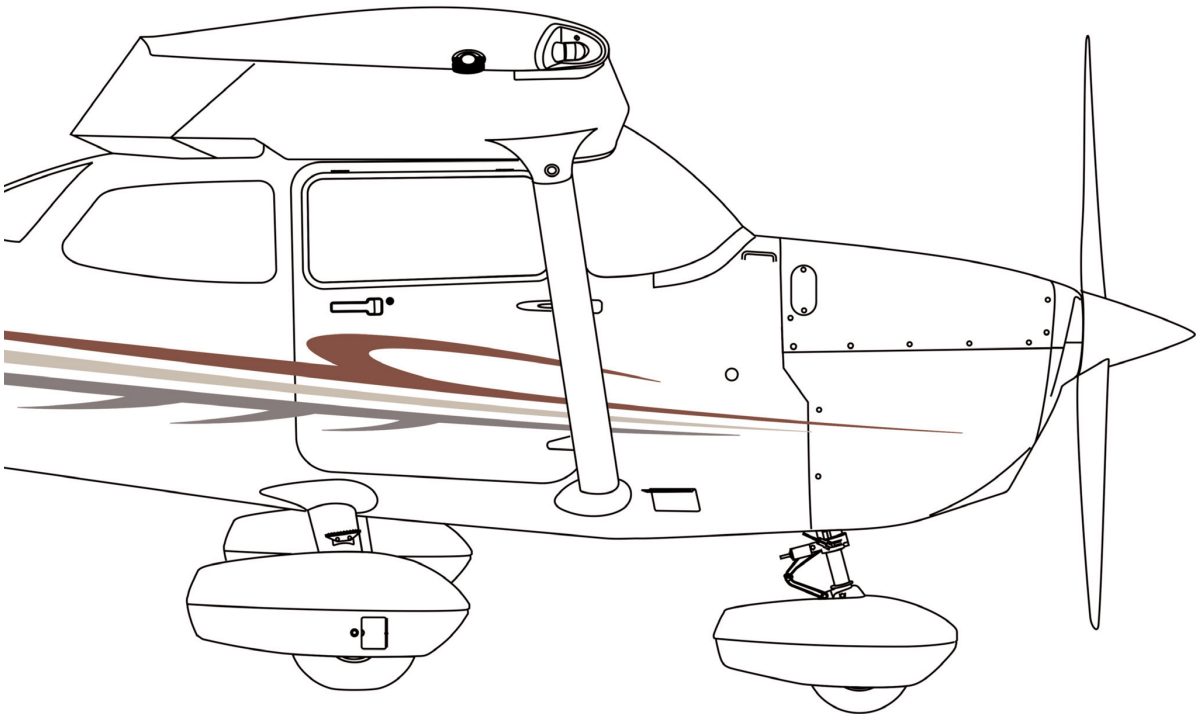
SKYHAWK

MODEL 172R



Specification & Description

Initial _____

Exhibit “A”

March 2011
Beginning With Serial # 17281579

Cessna
A Textron Company

SKYHAWK

SPECIFICATION AND DESCRIPTION

EXHIBIT "A"

MARCH 2011

BEGINNING WITH SERIAL # 17281579

Cessna Single Engine Piston Aircraft
2625 S. Hoover Rd.
Wichita, Kansas 67215

March 2011

INTRODUCTION

This document is published for the purpose of providing general information for the evaluation of design, performance and equipment of the Cessna Skyhawk. Should more information be required, please contact:

Cessna Aircraft Company
Single Engine Piston Aircraft
2625 S. Hoover Rd.
Wichita, Kansas 67215
1-800-4-CESSNA
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This document supersedes all previous Specification and Description documents and describes only the Skyhawk Model 172R, its powerplant and equipment. Also included are the warranties applicable to the Skyhawk Model 172R aircraft, the Textron Lycoming IO-360-L2A engine, the McCauley propeller and the OEM-installed Bendix/King and Garmin avionics. In the event of any conflict or discrepancy between this document and the basic purchase agreement, the basic purchase agreement language shall govern. Due to the time span between the date of this Specification and Description and the scheduled delivery date of the aircraft, Cessna reserves the right to revise the “Specification” whenever occasioned by product improvements, government regulations or other good cause.

TABLE OF CONTENTS

1. GENERAL DESCRIPTION

All information herein applies to the Skyhawk (Model 172R). The Skyhawk aircraft is an all-metal, single-engine piston, high-wing monoplane with a four-person seating capacity including a crew of one or two. Suitable allowance for luggage is provided.

1.1 Certification

The Model 172R is certified to the requirements of U.S. FAA Federal Aviation Regulation Part 23 through amendment 23-6, including day, night, VFR and IFR.

1.2 Approximate Dimensions

Overall Height . . . . . 8 ft 11 in (2.72m)
Overall Length . . . . . 27 ft 2 in (8.28m)

Wing

Span (overall) . . . . . 36 ft 1 in (11.00m)
Area . . . . . 174 sq ft (16.2sq m)

Cabin

Height (max) . . . . . 48 in (1.22m)
Width (trim to trim) . . . . . 39.5 in (1.00m)
Length (firewall to aft baggage bulkhead) . . . . . 142 in (3.61m)

Cabin Door

Height (front) . . . . . .40.5 in (1.03m)
Height (rear) . . . . . .39 in (.99m)
Width (top) . . . . . .32.5 in (.83m)
Width (bottom) . . . . . .37 in (.94m)

Baggage Door

Height (front) . . . . . .22 in (.56m)
Height (rear) . . . . . .21 in (.53m)
Width . . . . . .15.3 in (.39m)

1. GENERAL DESCRIPTION (Continued)

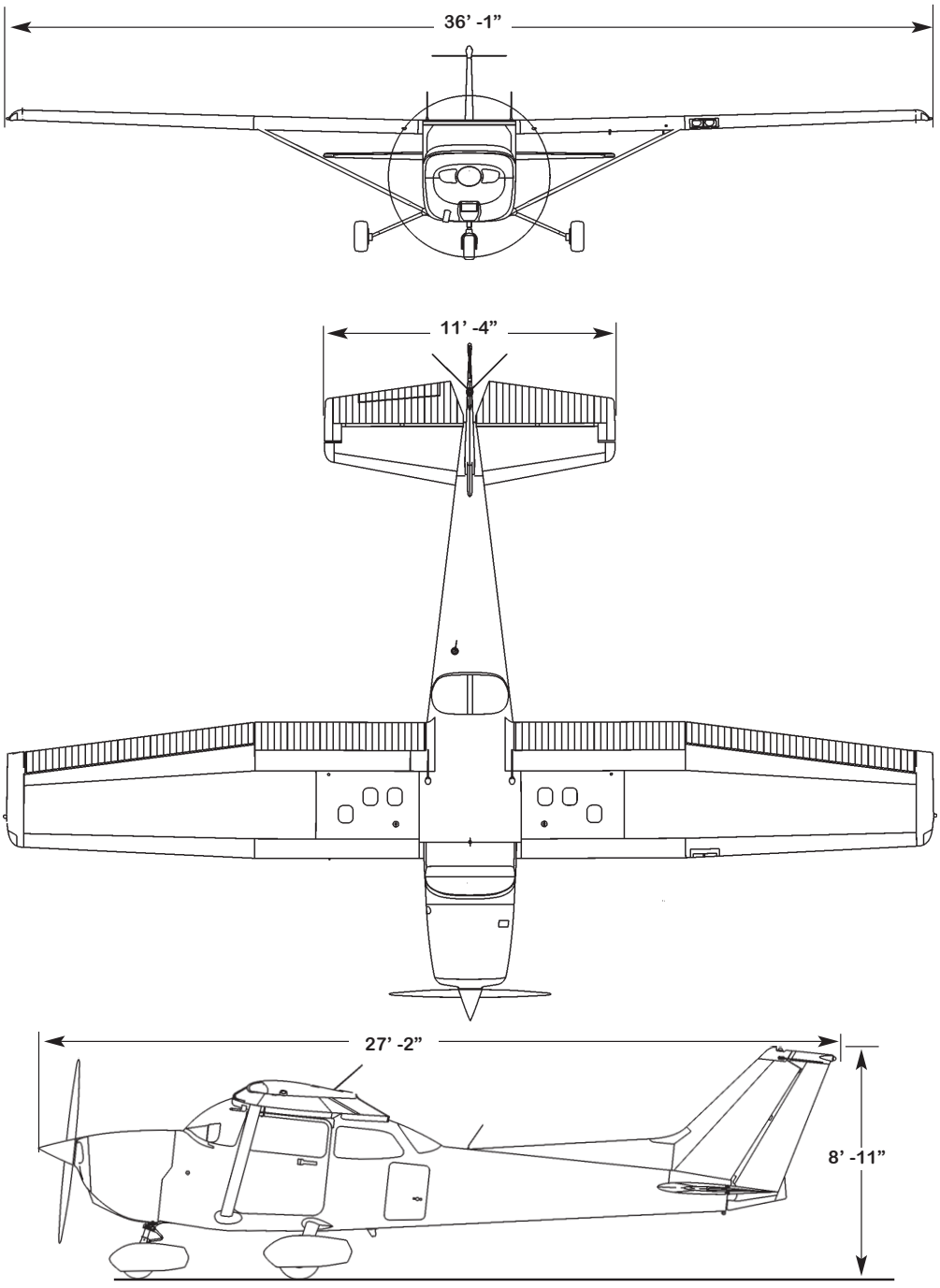
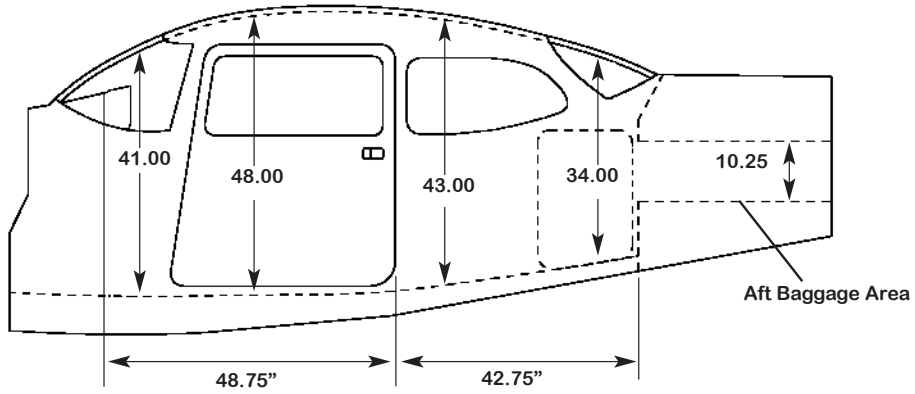
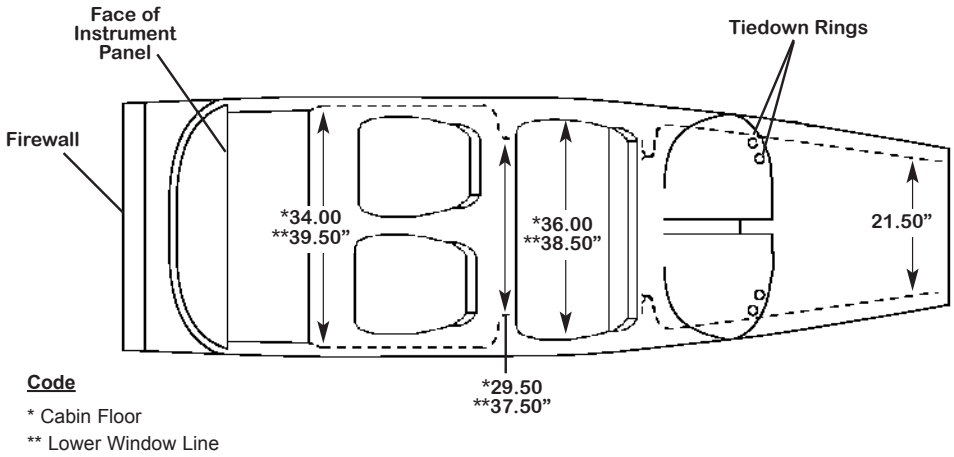


FIGURE I — SKYHAWK EXTERIOR DIMENSIONS

1. GENERAL DESCRIPTION (Continued)



Cabin Height Dimensions



Cabin Width Dimensions

FIGURE II — SKYHAWK INTERIOR DIMENSIONS

1. GENERAL DESCRIPTION (Continued)

1.3 Design Weight and Capacities

Ramp Weight
- Normal Category . . . . . 2,457 lbs (1,115 kg)
- Utility Category . . . . . 2,207 lbs (1,001 kg)

Takeoff Weight
- Normal Category . . . . . 2,450 lbs (1,111 kg)
- Utility Category . . . . . 2,200 lbs (998 kg)

Landing Weight
- Normal Category . . . . . 2,450 lbs (1,111 kg)

Standard Empty Weight[1] . . . . . 1,699 lbs (770.61 kg)

Maximum Useful Load
- Normal Category . . . . . 758 lbs (344 kg)
- Utility Category . . . . . 509 lbs (231 kg)

Baggage Allowance
- Normal Category . . . . . 120 lbs (54 kg)

Fuel Capacity
- Total Capacity . . . . . 56 gal (212 L)
- Total Useable . . . . . 53 gal (200.6 L)
- Total Capacity each Tank . . . . . 28 gal (106 L)
- Total Useable Capacity each Tank . . . . . 26.5 gal (100.3 L)

Oil Capacity
- Sump . . . . . 8 qts (7.6 L)
- Total Capacity . . . . . 9 qts (8.5 L)

NOTES

1. Standard empty weight based upon:
   a) 0.6-mil primer on all details, 0.6-mil primer on all exterior surfaces and 2.0-mil paint on all exterior surfaces.
   b) GA Avionics Package
2. Total oil capacity is with 8 qts. in sump and 1 qt. in oil filter.

2. PERFORMANCE

All estimated performance data are based on airplane weights at 2,450 pounds; standard atmospheric conditions; level, hardsurface, dry runways; and no wind. They are calculated values derived from flight tests conducted by Cessna Aircraft Company under carefully documented conditions and will vary with individual airplanes, pilots, and numerous other factors affecting flight performance.

Service Ceiling	13,500 ft
Takeoff Distance S.L. (Ground Roll)	945 ft
Takeoff Distance S.L. (To Clear 50ft. Obstacle)	1685 ft
Max Climb Rate S.L.	720 fpm
Max Speed S.L.	123 kts / 141 mph
Max Range and Endurance	687 nm / 6.6 hrs
Cruise Speed (80% pwr at 8,000 ft)	122 kts / 140 mph
Cruise Range and Endurance (80% pwr at 8,000 ft)	580 nm / 4.8 hrs
Landing Distance (Ground Roll)	550 ft
Landing Distance (To Clear 50 ft Obstacle)	1295 ft

3. POWERPLANT & ACCESSORIES

- Lycoming IO-360-L2A Engine
- 160 HP @ 2400 RPM
- Certified for 100LL & 100 Fuel
- Fuel Injection System
- Tubular Steel Engine Mount
- Dynafocal Rear Mount
- Engine Driven Vacuum Pump
- Automatic Alternate Engine Air
- Oil Cooler
- Shock Mounted Cowling
- Induction Air Filter
- Full Flow Oil Filter
- Throttle Control
- Vernier Mixture Control
- Dual Ignition System, Shielded Magneto
- Engine Exhaust Muffler
- McCauley Fixed Pitch 2 – Blade Metal Propeller
- Propeller Spinner, Painted
- Electric Starter

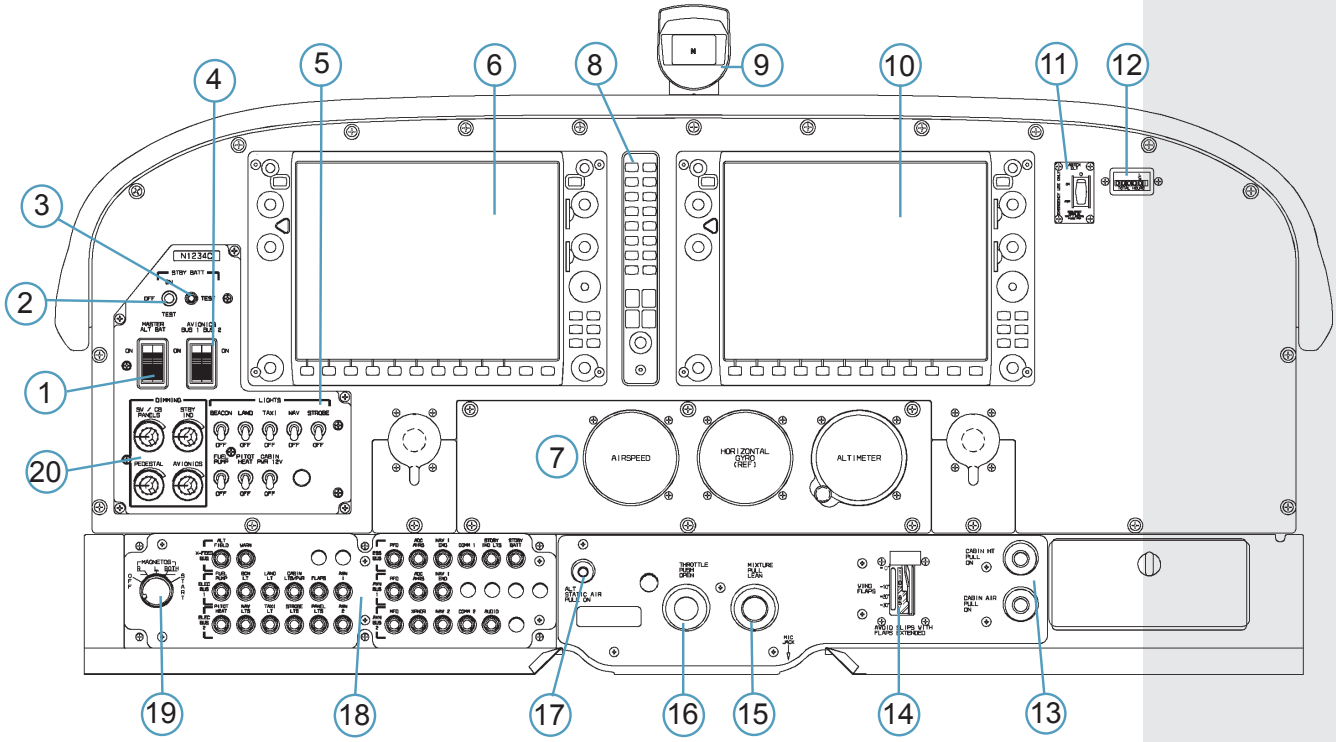
4.SKYHAWK EQUIPMENT LIST

The following list of equipment is included on the standard aircraft with the GA Avionics Package and does not reflect optional equipment.

GA Avionics Package

- GMA-1347 Digital Audio Panel with Marker Beacon/Intercom
- GTX-33 Transponder-Mode S w-TIS
- GIA-63W NAV/COM/GPS/WAAS with GS #1
- GIA-63W NAV/COM/GPS/WAAS with GS #2
- GDU-1040 Primary Flight Display (PFD)
- GDU-1040 Multi-Function Display (MFD)
- GEA-71 Engine/Airframe Computer
- GRS-77 AHRS
- GDC-74A Air Data Computer with OAT Probe
- GMU-44 Magnetometer
- Garmin SafeTaxi & FliteCharts
- Electronic Checklists
- ME406 Two Frequency Emergency Locator Transmitter
- Emergency Locator Transmitter Remote Mounted Switch
- Backup Attitude Gyro, Altimeter and Airspeed Indicator
- Control Wheel Push-To-Talk Switch-Pilot/Copilot
- Mic & Phone Jacks-Pilot/Copilot/Passengers
- Auxiliary Stereo Input Jack
- Antennas:
    - Marker Beacon Antenna
    - Transponder Antenna
    - VHF/GPS Antenna (2)
    - NAV Antenna
    - Emergency Locator Transmitter External Antenna
- Pitot System - Heated
- Static System
- Hand Held Microphone
- Alternate Static Source
- Compass

5. INSTRUMENT PANEL



1. MASTER Switch (ALT and BAT)
2. STBY BATT Switch
3. STBY BATT Test Annunciator
4. AVIONICS Switch (BUS 1 and BUS 2)
5. Electrical Switches
6. GDU-1040 Primary Flight Display
7. Backup Attitude Gyro, Airspeed & Altimeter Indicator
8. GMA-1347 Audio Panel
9. Backup Compass
10. GDU-1040 Multi-Function Display
11. ELT Remote Switch/Annunciator
12. Flight Hour Recorder (Hobbs Meter)
13. Cabin Air Control
14. Wing Flap Switch Lever And Position Indicator
15. Mixture Control
16. Throttle (With Friction Lock)
17. ALT Static Air Valve Control
18. Electrical and Avionics Circuit Breakers
19. Ignition/Starter Switch, Key Operated
20. Dimming Panel

FIGURE III — SKYHAWK INSTRUMENT PANEL

6. ELECTRICAL POWER

- Alternator, 28 Volt, 60 Amp
- Battery, 24 Volt, 8.0 AH (1 hr rate), Manifold Type
- Standby Battery, 24 volt, 6.2 AH (1 hr rate), Sealed Type
- Standby Battery Controller
- Electrical Circuit Panel
  - Alternator/Battery Master Switch
  - Split Avionics Master Switch
  - Circuit Breakers, Electrical
  - Switches, Electrical
- Electrical J-Box
  - Alternator Control Unit
  - Ground Service Receptacle
  - Battery Current Sensor
  - Starter Relay
  - Alternator Relay
  - Battery Relay
  - Ground Power Relay
  - Bus Circuit Protection
- Cabin Power Jack - 12 Volt, 10 Amp

7. ENGINE INDICATING SYSTEM (ELECTRONIC)

- Ammeters
- Voltmeters
- Vacuum
- Oil Pressure and Temperature
- Tachometer - Hour Recorder
- Fuel Flow (GPH)
- LH/RH Fuel Quantity
- CHT - Cylinder Head Temperature
- EGT - Exhaust Gas Temperature
- Backup Single Pump Vacuum System
- Annunciation – Caution and Warning Alerts (PFD)

8. ENVIRONMENTAL

- Windshield Defroster, Pilot/Copilot
- Ventilator, Adjustable (6 places)
- Heating System, Shrouded Muffler with Firewall Valve
- Soundproofing
- Carbon Monoxide Detection System

9. EXTERIOR

- Epoxy Corrosion Proofing, All Structure
- LH Door, Pilot with Hinged Window, Lock and Key
- RH Door, Copilot with Hinged Window
- LH Baggage Door, with Lock and Key
- Rear Window
- All Windows Tinted
- Gear Jack Pads
- Fixed Landing Gear
- White Polyurethane Exterior Paint
- Refueling Steps and Handles, Wing Struts and Fuselage
- Fixed Cabin Entrance Steps
- Tie Down Rings, LH/RH Wing & Tail and Nose
- Tube Type Tires
  - Nose - 5.00 X 5
  - Mains - 6.00 X 6
- Conical Camber Wing Tips
- Strut Braced, Camber Lift Wings
- Static Wicks

10. EXTERIOR LIGHTS

- LED Ground Recognition Beacon - Vertical Tail
- LED Navigation, LH/RH Wing Tip & Vertical Tail
- Wing Tip Navigation Light Detectors, LH/RH
- Wing Tip Strobe, LH/RH
- Dual Wing LED Landing and Taxi Lights with integrated Pulse Recognition Technology
- Underwing Courtesy, LH and RH Wing

11. FLIGHT CONTROLS

- Hydraulic Brakes, Toe-Operated
- Parking Brake
- Stainless Steel Control Cables
- Pilot/Copilot All Purpose Control Wheels
- Pilot control wheel
- Electrical Preselect - Flaps
- Dual Flight Controls -Aileron/Elevator/Rudder
- Steerable Nose Wheel
- Aileron and Elevator Control Lock
- Elevator Trim

12. FUEL SYSTEM

- Electric Auxiliary Fuel Pump
- Engine Driven Fuel Pump
- Integral Fuel Tanks, 53 Gal. Usable
- Fuel Selector Valve, Left/Both/Right
- Fuel Shutoff
- Fuel Strainer, Incorporated with Fuselage Quick Drain
- Fuel Tank Quick Drain, 5 per wing
- Fuel Sampler Cup
- Fuel Return System