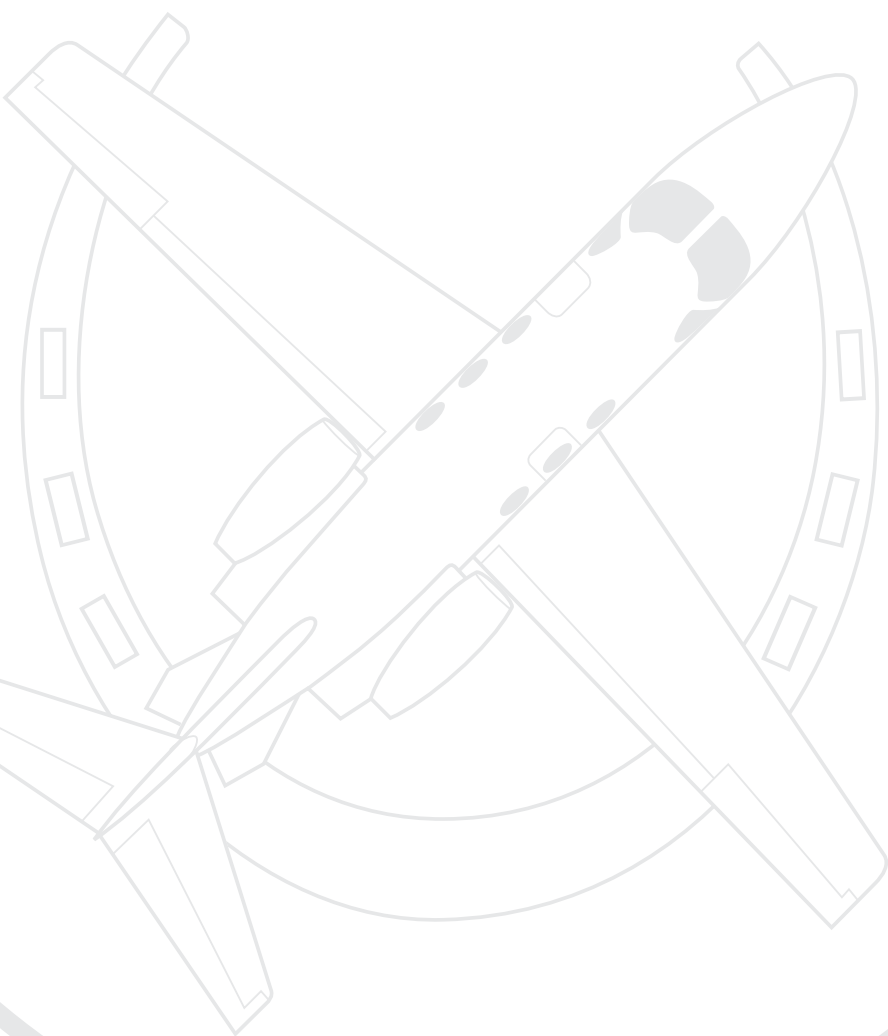




CITATION MUSTANG



Specification & Description

March 2010
Unit 510-0224 and On





SPECIFICATION AND DESCRIPTION

UNITS 510-0224 AND ON

MARCH 2010

**Citation Marketing
Cessna Aircraft Company
P.O. Box 7706
Wichita, Kansas 67277-7706**

March 2010



INTRODUCTION

This Specification and Description is published for the purpose of providing general information for the evaluation of the design, performance, and equipment of the Cessna Citation Mustang, Units 510-0224 and On. This document supersedes all previous Specification and Description documents and describes only the Cessna Citation Mustang Model 510, its powerplants and equipment.

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 as long as such revisions do not result in a material reduction in performance.

In the event of any conflict or discrepancy between this document and the terms and conditions of the purchase agreement to which it is incorporated, the terms and conditions of the purchase agreement govern.

For additional information contact:

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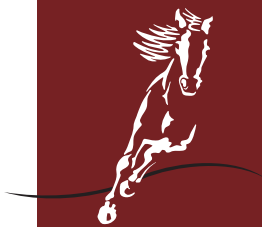
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Warning: This product contains Halon 1211, Halon 1301, and also R-134A. Furthermore, the product was manufactured with CFC-12 and 1-1-1 Trichloroethane, substances which harm public health and environment by destroying ozone in the upper atmosphere.

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MANUFACTURER _____ **CESSNA AIRCRAFT COMPANY**

MODEL _____ **510**

1. GENERAL DESCRIPTION

The Cessna Citation Mustang is a low-wing aircraft with retractable tricycle landing gear and a T-tail. A pressurized cabin accommodates a crew of two and up to four passengers in a spacious club seating arrangement. Two FADEC controlled Pratt & Whitney Canada (P&WC) PW615F turbofan engines are pylon-mounted on the rear fuselage. Fuel stored in the wings offers generous range for missions typical of this class aircraft. Space for baggage is provided in the nose and tailcone with additional storage space available in the cabin.

Multiple structural load paths and system redundancies have been built into the aluminum airframe. Metal bonding techniques have been used in many areas for added strength and reduced weight. The nose radome and bullet fairings are made of composite materials to save weight. The airframe design incorporates anti-corrosion applications and lightning protection.

Cessna offers a third-party training package for one pilot and one mechanic, and various manufacturers' war-

ranties as described in this book. Cessna's worldwide network of authorized service centers provides a complete source for all servicing needs.

1.1 Certification

The Model 510 is certified to the requirements of U.S. 14 CFR Part 23 including day, night, VFR, IFR, and flight into known icing conditions. It is also certified for single pilot operations for U.S. registered aircraft. The Citation Mustang is compliant with all RVSM certification requirements. (Note: specific approval is required for operation within RVSM airspace; Cessna offers a fee-based service to assist with this process.)

The Purchaser is responsible for obtaining aircraft operating approval from the relevant civil aviation authority. International certification requirements may include modifications and/or additional equipment; such costs are the responsibility of the Purchaser.

1.2 Approximate Dimensions

Overall Height	13 ft 5 in (4.09 m)
Overall Length	40 ft 7 in (12.37 m)
Overall Width	43 ft 2 in (13.16 m)

Wing

Span (does not include tip lights)	42 ft 9 in (13.03 m)
Area	210.0 ft ² (19.51 m ²)
Sweepback at leading edge	11 degrees

Horizontal Tail

Span (overall)	17 ft 3 in (5.26 m)
Area	56.5 ft ² (5.25 m ²)
Sweepback at leading edge	27 degrees

Vertical Tail

Height	5 ft 9 in (1.75 m)
Area	37.5 ft ² (3.48 m ²)
Sweepback at leading edge	52 degrees

Cabin Interior

Height (maximum over aisle)	54 in (1.37 m)
Width (window reveal to window reveal)	55 in (1.40 m)
Length (forward pressure bulkhead to aft pressure bulkhead)	14 ft 9 in (4.50 m)

Landing Gear

Tread (main to main)	11 ft 10 in (3.61 m)
Wheelbase (nose to main)	14 ft 4 in (4.37 m)

1. GENERAL DESCRIPTION (Continued)

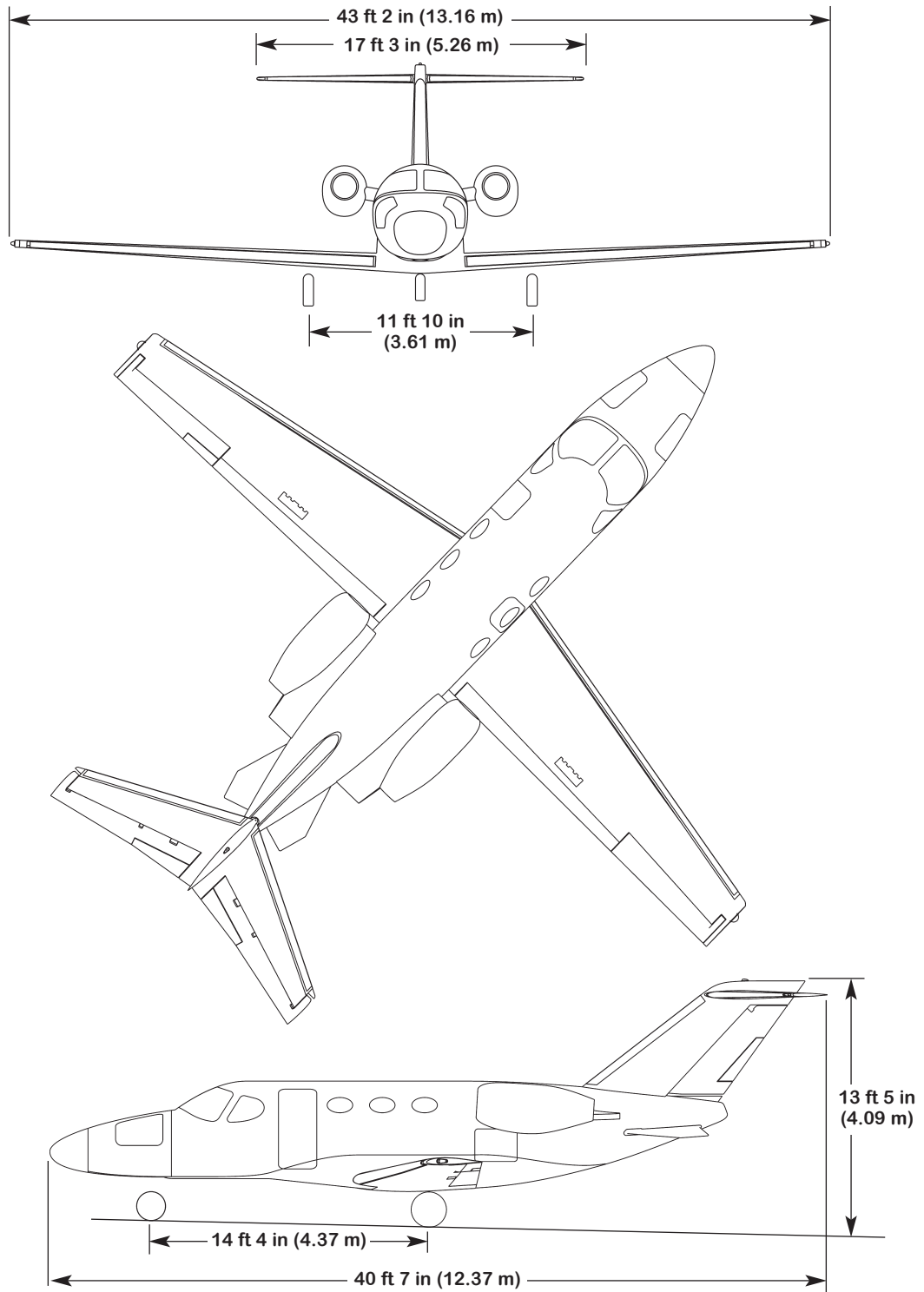
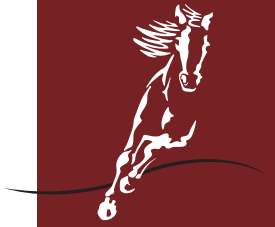


FIGURE I — CITATION MUSTANG EXTERIOR DIMENSIONS



1. GENERAL DESCRIPTION (Continued)

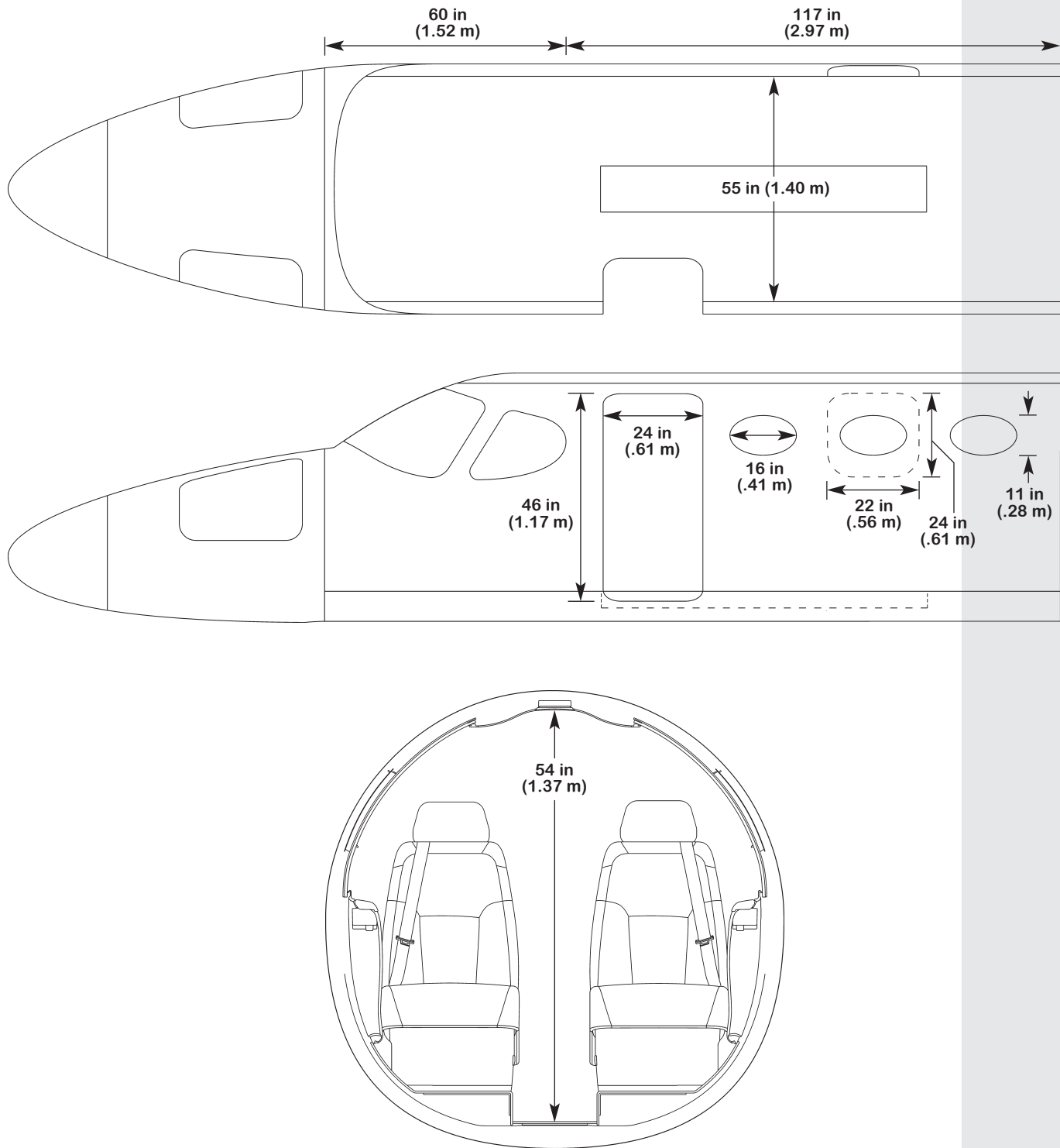


FIGURE II — CITATION MUSTANG INTERIOR DIMENSIONS

1. GENERAL DESCRIPTION (Continued)

1.3 Design Weights and Capacities

Maximum Ramp Weight	8,730 lb (3,960 kg)
Maximum Takeoff Weight	8,645 lb (3,921 kg)
Maximum Landing Weight	8,000 lb (3,629 kg)
Maximum Zero Fuel Weight	6,750 lb (3,062 kg)
Standard Empty Weight *	5,350 lb (2,427 kg)
Useful Load	3,380 lb (1,533 kg)
Fuel Capacity (useable) at 6.70 lb/gal	2,580 lb (1,170 kg)

* Standard empty weight includes unusable fuel, full oil, standard interior, and standard avionics.

2. PERFORMANCE

All performance data is based on the standard aircraft configuration, operating in International Standard Atmosphere (ISA) conditions with zero wind. Takeoff and landing field lengths are based on a level, hard surface, dry runway.

Actual performance will vary with individual airplanes and other factors such as environmental conditions, aircraft configuration, and operational/ATC procedures.

Takeoff Runway Length	3,110 ft (948 m)
(Maximum Takeoff Weight, Sea Level, ISA, Balanced Field Length per Part 23 Commuter Category *, 15° Flaps)	
Maximum Altitude	41,000 ft (12,497 m)
Maximum Cruise Speed (± 3%)	340 KTAS (630 km/hr or 391 mph)
(Mid-Cruise Weight, 35,000 ft (11,668 m), ISA)	
NBAA IFR Range (100 nm alternate) (± 4%)	1,150 nm (2,130 km or 1,323 mi)
(Maximum Takeoff Weight, Full Fuel, Optimal Climb and Descent, Maximum Cruise Thrust at 41,000 feet)	
Landing Runway Length	2,390 ft (728 m)
(Maximum Landing Weight, Sea Level, ISA, per Part 23 Commuter Category)	
Certificated Noise Levels	
Takeoff	73.9 EPNdB
Sideline	85.0 EPNdB
Landing	86.0 EPNdB

* Takeoff distance criteria under Part 23 Commuter Category accounts for the greater of accelerate-stop, accelerate-go, or 115% of the all-engine takeoff distance.



3. STRUCTURAL DESIGN CRITERIA

The Citation Mustang airframe is conventional in design, incorporating aluminum alloys, steel and other materials as appropriate. Engineering principles using multiple load paths, low stress levels and small panel

size are incorporated in the primary structure. The structure supports a nominal maximum cabin pressure differential of 8.3 psi (.57 bar).

Limit Speeds

V_{MO} Sea Level to 27,120 ft (8,266 m)	250 KIAS (463 km/hr, 288 mph)
M_{MO} 27,120 ft (8,266 m) and above	Mach 0.63 (indicated)

Flap Extension Speeds

V_{FE} 0° to Takeoff/Approach Extension	185 KIAS (343 km/hr, 213 mph)
V_{FE} Takeoff/Approach to Landing Extension	150 KIAS (278 km/hr, 173 mph)

Landing Gear Operating and Extended Speeds

V_{LO} (retracting)	185 KIAS (343 km/hr, 213 mph)
V_{LO} (extending)	250 KIAS (463 km/hr, 288 mph)
V_{LE}	250 KIAS (463 km/hr, 288 mph)

4. FUSELAGE

The fuselage has a slightly out of round cross section at the floor level to increase foot room. There are no fuselage penetrations for the wing structure. A dropped aisle runs the length of the cabin. The keyed cabin door is located on the forward left-hand side of the fuselage. It has eight locking pins (four on each side), a passive blade type pressure seal, and is hinged forward with a folding two-step entry stair mounted just inside the entrance. The door is monitored to ensure it is latched and locked. A plug-type emergency exit is located on the right-hand side of the cabin in-between the fore and aft seats. The windshields are designed to meet bird resistance requirements of 14 CFR Part 23, Commuter category. Framing assemblies surround the main door opening, emergency exit, and windshields to provide structural continuity.

The nose section includes a generous baggage compartment from which the oxygen tank, hydraulic power pack, hydraulic accumulator, the emergency gear and brake bottles, and some avionics are accessible. Behind the composite radome is the high-resolution weather radar antenna and processor.

The tailcone houses the major components of the environmental, electrical distribution, and engine fire extinguishing systems. A baggage compartment is also located in the tailcone with room for skis. External access to both the equipment and the baggage area is provided through a baggage door on the lower left-hand side of the tailcone.

5. WING

The Mustang's wing incorporates a new high-lift airfoil designed for low stall speeds while at the same time producing the low drag and pitching moments required for high-speed cruise. The leading edge is swept at 11 degrees and is protected by pneumatic de-ice boots. Three degrees dihedral contributes to lateral stability.

centerline of the airplane. Control surfaces on each wing include an aileron, flap, and upper and lower surface speed brakes. The left-hand aileron incorporates a trim tab. All fuel is carried inside the wing.

Each half of the wing is constructed of three monolithic spars, meaning each spar assembly, including spar caps, webs, and rib stiffeners, is machined from a single piece of aluminum. The spars are then spliced at the

Located on the wing tips are LED navigation and anti-collision strobe lights, and static wicks. Aluminum fairings blend the wing with the fuselage. High intensity discharge (HID) landing/taxi lights are located below the fuselage in the belly fairing.

6. EMPENNAGE

The empennage section is a T-tail design consisting of aluminum monolithic spars, aluminum skins, and a composite fairing. Composite strakes are mounted on the tailcone. The one-piece, fixed horizontal stabilizer has two elevators, each with trim tabs, and a 27 degree leading

edge sweep. The vertical stabilizer is swept 52 degrees at the leading edge and has a single rudder with one trim tab. A red LED ground recognition light is mounted on the top. Both the vertical and the horizontal stabilizers are protected from ice by pneumatic de-ice boots.

7. LANDING GEAR

Each main gear is a trailing link, single wheel, air/oil shock assembly that retracts inboard into the wing with a partial coverage door. The nose gear is a single wheel assembly that retracts forward into the fuselage and, when retracted, is fully enclosed by two doors. The landing gear retraction system is electrically controlled and hydraulically actuated. Once retracted it is secured by up-locks. The landing gear may be extended and flown at speeds up to V_{MO} or 250 KIAS. To retract the gear, air-speed must be at or below 185 KIAS. Emergency landing gear extension is accomplished by manual release of the uplocks for free fall followed by use of the pneumatic blow-down system.

Dual rotor steel disc brakes are installed on the main gear wheels. Toe pressure on the rudder pedals is mechanically transferred to the brake metering valve to provide normal powered braking. Digital antiskid protection is available for speeds above 10 knots. Power to the system is supplied by an electric motor-driven hydraulic pump and accumulator. A pneumatic bottle system in the nose with a pilot operated valve handle under the instrument panel serves as back-up for the brakes. The parking brakes are toe pedal actuated while pulling a cockpit handle to trap pressure on the brake assemblies.

Steering is mechanically controlled through the rudder pedals and stabilized with an internal shimmy damper. The nose gear tire is chinned for water and slush deflection.

8. POWERPLANTS

Two Pratt & Whitney Canada PW615F turbofan engines are installed on the Mustang, one on each side of the rear fuselage in easily accessible nacelles. This engine is a 2.8 to one bypass ratio, counter-rotating twin-spool design with 3 compression stages and 2 turbine stages. It produces 1,460 pounds (6.49 kN) of thrust at sea level static conditions, flat rated up to 77°F (25°C). A forced exhaust mixer improves fuel burn and reduces noise. Expected intervals for major maintenance are 1,750 hours for HSI and 3,500 hours for overhaul. Engine indications are shown on the multi-function display (MFD).

The FADEC system also provides time-limited dispatch (TLD), engine synchronization according to switch position, an auto-relight function, and limited diagnostics as indicated on the multi-function display (MFD). Extensive engine diagnostic capability is available with specialized maintenance equipment. Electrical power for the FADECs comes from engine driven permanent magnet alternators (PMAs) rectified to DC, or normal aircraft voltage. If normal aircraft DC power is lost, the PMAs ensure the FADECs remain powered.

Two dual channel Full Authority Digital Engine Controls (FADECs), located in the tailcone, provide automation and efficiency in thrust management. Throttle lever angle signals are sent to the FADECs to indicate the demanded thrust. Detents in the throttle quadrant (takeoff, climb, cruise, and idle stops) give pilots the optimal power settings for each phase of flight based on ambient conditions. Note: Installed in each throttle handle are a speed brake switch and a takeoff/go-around button.

The PW615F engine incorporates a modular design and multiple borescope locations for easier maintenance and inspections. A continuous loop fire detection system monitors the nacelle area to detect and warn if a fire occurs. A single-shot fire extinguishing system using Halon is provided in the tailcone area.



9. SYSTEMS

9.1 Flight Controls

The Citation Mustang has traditional flight controls including trim and autopilot for each axis. Dual pilot controls are provided through panel mounted yokes for aileron and elevator control and rudder pedals for rudder, brakes, and nosewheel steering. All primary control surface connections are mechanical using pushrod, bellcrank, sector, and stainless steel cable systems. Dual rudder control cables allow separate routing paths through the rotor non-containment zone. Separate switches and knobs control flaps, speed brakes, and trim. All control surface trailing edges are equipped with static wicks.

Hinged aluminum flaps, one on each wing, are driven by a single electric motor in the belly. Motion is transferred by a flexible drive shaft to one jackscrew actuator in each wing to push or pull the flap. The flap handle on the pedestal commands three positions only: up, takeoff/approach, and landing. Electric position sensing allows flap position to be displayed on the MFD. A cable interconnect protects against asymmetric extension in the event of a drive shaft or actuator failure.

Speed brake panels extend above and below each wing by electrically powered actuators and are available at any speed. The speed brake switches are located in the sides of the throttle handles.

Means are provided to trim the airplane in all three axes. Electric trim switches are installed on the aft side of the pedestal to drive actuators inside the rudder and left aileron. For manual pitch trim an elevator trim wheel is located left of the throttles and is connected to dual trim tabs by cables. Interconnected to these cables is an electric pitch trim servo allowing use of yoke mounted thumb switches for elevator trim. Trim position is shown on the MFD for the rudder and ailerons, and by a mechanical position pointer on the pedestal for the elevator.

Three electric servos, in addition to the pitch trim servo, are installed for autopilot functions in pitch, roll, and yaw. The yaw servo also performs Dutch roll damping and turn coordination even when the autopilot is disconnected.

A control lock (loose equipment) fits between the panel and the yoke to hold the elevators and ailerons during storage. Its rigid flag covers the Primary Flight Display (PFD). A small lever on the left side of the tailcone turns up to lock the rudder in the centered position or down to unlock it. Aft movement of the control yoke will also unlock it.

9.2 Fuel System

There are two integral fuel tanks, one per wing, providing 2,580 pounds (1,170 kg) total of usable fuel. System operation is fully automatic throughout the normal flight profile with each engine receiving fuel from its respective wing tank. Fuel is heated through an oil heat exchanger and anti-ice additive is not required.

One electric boost pump in each tank sump delivers fuel during engine start, fuel transfer, and is activated by low fuel pressure. Each engine has an engine driven fuel pump and a fuel metering unit (FMU) controlled by the respective FADEC to deliver high pressure fuel to the engine. Some of that high pressure fuel from the FMU is routed back to a motive flow ejector pump in each fuel tank sump to generate the low pressure fuel supply required by the engine driven pump and the two motive flow scavenge pumps per tank that are located near the sump. Fuel may be transferred from tank to tank as needed. A vented surge tank is integrated near each wing tip.

Fuel levels are monitored by five passive capacitance probes per wing and one dual channel signal conditioner for accurate quantity indications which are shown on the Engine Indicating and Crew Alerting System (EICAS) display. Refueling is accomplished through over wing filler ports with flush mounted caps.

9.3 Hydraulic System

The primary components of the Mustang's hydraulic system consist of an electric motor to drive a hydraulic pump to charge an accumulator. A reservoir with a sight gage, a control manifold, and associated plumbing and actuators are also part of the system. The pump operates intermittently to maintain accumulator pressure for use by the landing gear retraction/extension system and the power brake system. The accumulator pressure varies from 1,100 to 1,500 psi. depending on the gear handle position and squat switch logic in order to minimize pump operation and maximize response time.

All major components are located in the lower left nose section. There are no hydraulic system components in the tailcone. No system indications are needed in the cockpit except EICAS messages for malfunctions. Two independent pneumatic systems are provided for emergency gear extension and emergency braking.

9. SYSTEMS (Continued)

9.4 Electrical System

The Model 510 electrical power generation and distribution system features traditional parallel bus architecture designed to provide 600 amperes at 28 volts DC from two engine driven 300 ampere starter/generators. One 28 ampere-hour sealed lead acid battery is used for initial engine starts and serves as a limited backup to the generators.

Each generator is connected to a remote digital generator control unit (GCU) in the tailcone. The two GCUs are connected to each other to allow proportionate load sharing. If one generator becomes disabled in flight, two systems respond automatically to shed electrical load: the vapor cycle air conditioning system will turn off and the electric windshield heat, if selected, will protect only one anti-ice zone per side. All other essential electrical systems are supplied by the remaining generator through the respective main and crossfeed busses.

All system controls are located on the LH tilt panel with indications shown on the MFD. Left and right circuit breaker panels are positioned on the lower cockpit sidewall within easy reach of each pilot. The junction box is located behind an access panel on the forward wall of the aft baggage compartment. The battery, with quick disconnect, is directly across from the baggage compartment door behind an easy access panel. An external power receptacle is provided below the right engine pylon.

12 volt DC power is provided for pilot and passenger use through a DC-DC converter to two DC outlets in the cabin: one in the RH forward storage cabinet and one in the aft center console between the aft passenger seats.

9.5 Pressurization And Environmental Systems

The Mustang's pressurization and heating system is divided into two separate systems: cabin and cockpit. High pressure bleed air is drawn from the right engine for the cabin while the left engine supplies the cockpit. The air is conditioned through a heat exchanger in the engine pylon, then passes through a pressure regulator and muffler before entering the cockpit and cabin. Right engine air is delivered to the cabin through sidewall shoulder and floor vents while air from the left engine is routed to the cockpit through foot warmers and sidewall

shoulder vents. If conditioned air to the cockpit is interrupted a check valve redirects cabin air to the cockpit.

The pressurization control system automatically schedules cabin altitude and change rate while maintaining a nominal maximum pressure differential of 8.3 psi (.57 bar) which permits a sea level cabin altitude up to 21,280 feet (6,486 m), increasing to 8,000 feet (2,438 m) at the maximum cruise altitude of 41,000 feet (12,497 m). The basic components include an avionics linked digital controller and two outflow valves mounted in the aft pressure bulkhead. The MFD displays all pressurization parameters and the PFDs provide pilot interface for entry of landing field elevation. Other pressurization switches are mounted on the RH tilt panel.

The cooling system is independent of the heating system and is divided into separate pilot-controlled cabin and cockpit zones. The pilot controls temperatures and fan speeds through independent cabin and cockpit rheostats mounted on the RH tilt panel. The system consists of a compressor and condenser assembly in the tailcone, two evaporator fan assemblies inside the pressure vessel, and cold air ducting. The cockpit evaporator fan assembly is located in the lower right hand sidewall. A second evaporator assembly located on the aft pressure bulkhead serves the cabin. Each draws in surrounding air and distributes chilled air through outlets in the cockpit and overhead vents in the cabin, respectively. The system may be operated anytime in flight, or on the ground when ground power is connected or either engine is running. In flight, the vapor cycle compressor automatically shuts down if one generator falls off line. A fresh air vent with a blower and a check valve is located beneath the nose baggage compartment to provide outside air to the cockpit whenever the cabin is not pressurized.

9.6 Oxygen System

A 22.0 cubic foot (.62 m³) oxygen bottle, located in the nose, is provided with a high pressure gauge and bottle-mounted pressure regulator. Quick-donning pressure demand masks with microphones are provided at each crew seat, while automatic dropout constant-flow oxygen masks are provided at each passenger seat and above the toilet. Oxygen flow to the cabin is controlled by a sequencing regulator valve for optimal passenger usage.



9. SYSTEMS (Continued)

9.7 Ice and Rain Protection

The wing, horizontal stabilizer, and vertical stabilizer leading edges are fitted with full span pneumatic de-ice boots which are inflated by service air (pressure regulated bleed air). The inflation cycle is managed automatically by a timer in normal operation or by manual mode if necessary. Unconditioned, pressure regulated engine bleed air is used for anti-ice protection of the engine inlets.

The Mustang's glass windshields are electrically anti-iced and defogged by normal 28 volt DC power. Two independent controllers regulate current in three zones per windshield. Embedded wire filaments are arranged to provide essential protection of one zone on the left

and right windshield in the event of loss of either generator. Control switches on the LH tilt panel are designed to remain on during all normal operations. For rain removal, the windshields are coated with a water repellent. The cockpit side windows are acrylic and use dual frost panes for defogging.

The pitot tubes and static ports, and the stall warning vane are electrically anti-iced using main DC power. One pitot tube and set of static ports are also protected through the emergency bus. Two windshield ice detection lights are mounted on the glareshield and a wing inspection light is mounted on the left side of the fuselage to assist in detection of ice buildup during night flights.

10. FLIGHT COMPARTMENT, INSTRUMENTATION AND AVIONICS

10.1 General

The Citation Mustang features the Garmin G1000 advanced avionics system, a large-format glass cockpit with integrated sensors and lightweight modular avionics. The system presents to the crew all the flight, navigation, and situational inputs as well as aircraft systems information for a precise picture of the total flying environment. Three active matrix liquid crystal displays (AMLCDs)--designed with high resolution, wide viewing angles, and clear sunlight readability--comprise the windows into Garmin's sophisticated G1000 system. Complete flight management functionality and a three axis digital autopilot ease the workload for one or two pilots.

The Garmin G1000 avionics system and flight guidance package on the Mustang consists of the following components:

- Dual 10.4-inch (diagonal) TFT LCD Control Display Units with integrated Terrain Awareness System (TAWS B) utilized as Primary Flight Displays (PFD) - Garmin GDU 1040A
- Single 15-inch (diagonal) TFT LCD Control Display Unit with integrated Terrain Awareness System (TAWS B) utilized as a Multi-Function Display (MFD) - Garmin GDU 1500
- Dual Engine/Airframe Interface Units - Garmin GEA 71
- Dual digital Air Data Computers (ADC) - Garmin GDC 74B
- Dual digital Attitude Heading Reference Systems (AHRS) - Garmin GRS 77
- Dual Magnetometers - Garmin GMU 44
- Dual Integrated Avionics Units with VHF Nav/Com, GPS receivers, Flight Directors, and Aural Warning Generator - Garmin GIA 63W
- Single Distance Measuring Equipment (DME) receiver - Honeywell KN 63
- Dual digital Audio Control Panels - Garmin GMA 1347D
- Single Remote Flight Management System (FMS) / MFD control keyboard - Garmin GCU 475
- Three Axis Automatic Flight Control System (AFCS) with Integrated Pitch Trim - Garmin GFC 700 with Garmin GMC 710 Mode Controller
- Dual Mode S Diversity Transponders with Enhanced Surveillance and Traffic Information System (TIS) - Garmin GTX 33D
- Single four-color Weather Avoidance Radar - Garmin GWX 68
- Single Satellite Data Link Weather Transceiver - Garmin GDL 69A
- Single Electric Standby Attitude Indicator - Mid Continent Instruments 4200
- Single electromechanical Standby Airspeed Indicator - Aerosonic 261440
- Single electromechanical Standby Altimeter - Aerosonic 162350
- Single Emergency Locator Transmitter (ELT) - Artex C406-N

10.2 Instrument and Control Panels

A. Installed on Left-Hand Panel (pilot):

- Master Caution / Master Warning Lights
- Digital Audio Control Panel (GMA 1347D)
- Primary Flight Display
- Oxygen Control Valve
- HF Radio (KHF-1050)

B. Installed on Right-Hand Panel (copilot):

- Rotary Test Knob
- Master Caution / Master Warning Lights
- Primary Flight Display
- Digital Audio Control Panel (GMA 1347D)
- Oxygen Supply Pressure Indicator

C. Installed on Center Panel:

- Flight Director / Autopilot Mode Controller (glareshield mounted)
- L and R Engine Fire Warning / Arm / Discharge Buttons
- Standby Airspeed Indicator
- Standby Attitude Indicator
- Standby Altimeter
- Multi-Function Display

D. Installed on Tilt Panel (Left to Right):

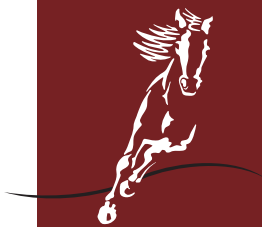
- Generator and Battery Switches
- Engine Start Switches
- Avionics Power Switches
- Ignition Switches
- Fuel Boost Pump Switches
- Fuel Transfer Knob
- Oxygen Mask Microphone Switch (Pilot)
- FADEC Reset Button
- Ice Protection Switches
- Gear Selector Knob
- Gear Horn Silence Button
- Anti-skid Switch
- Instrument and Exterior Lighting Controls
- Environmental Control Panel
- Oxygen Mask Microphone Switch (Copilot)
- ELT Switch
- Flight Hour Meter
- Oxygen Supply Cutoff Knob

E. Installed on Pedestal:

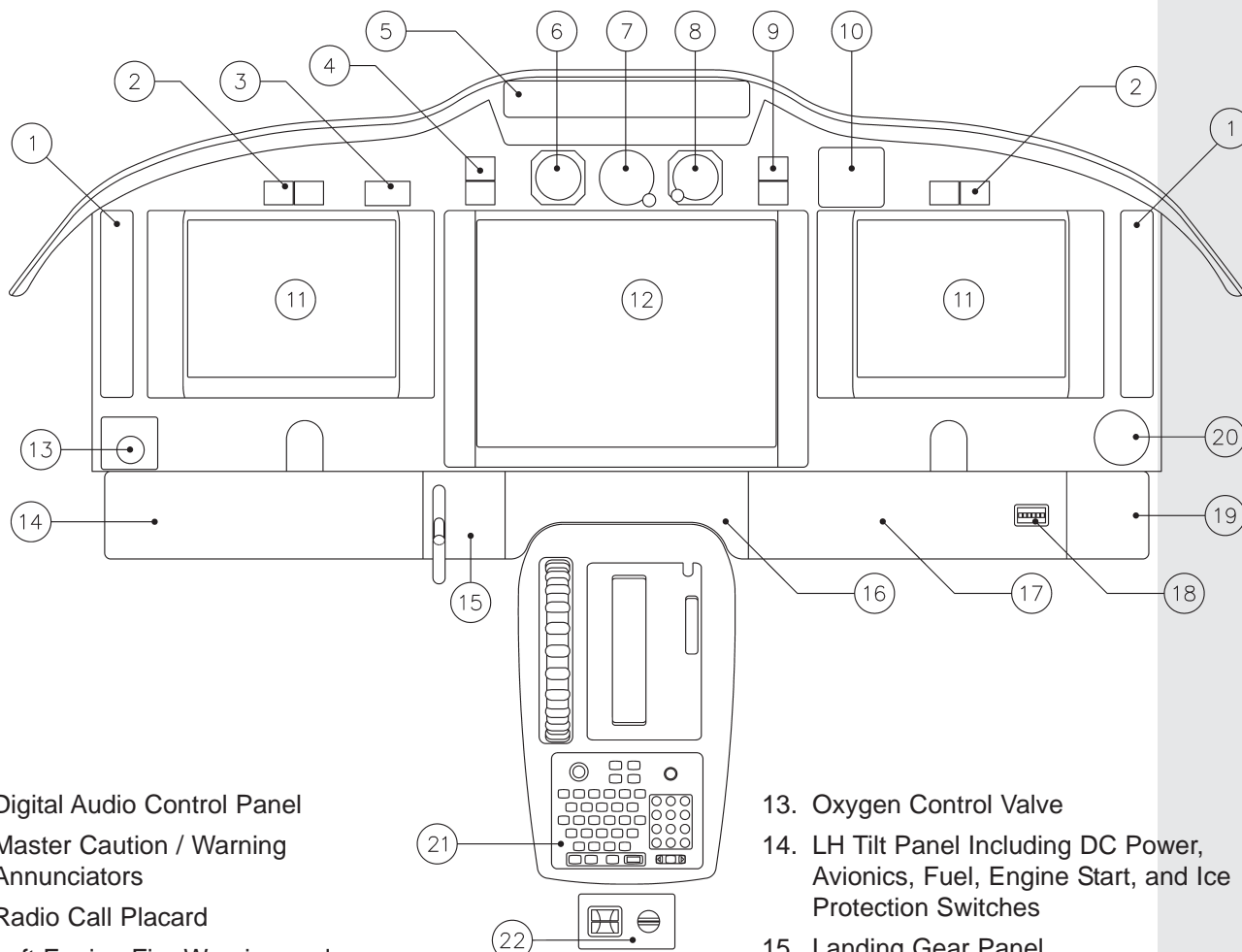
- Elevator Trim Control and Indicator
- Engine Power Levers with Speed Brake Controls and Takeoff / Go-Around Buttons
- Flap Control Handle
- Engine Synchronizer Switch
- FMS / MFD Control Keyboard
- Rudder Trim Control
- Aileron Trim Control
- Emergency Gear Release and Blow-down Handle

F. Installed Beneath the Instrument Panel:

- Emergency Brake Handle
- Parking Brake Handle



10. FLIGHT COMPARTMENT, INSTRUMENTATION AND AVIONICS (Continued)



- | | |
|---|---|
| <ul style="list-style-type: none"> 1. Digital Audio Control Panel 2. Master Caution / Warning Annunciators 3. Radio Call Placard 4. Left Engine Fire Warning and Extinguisher Bottle Arm / Discharge Button 5. Flight Director / Autopilot Mode Controller 6. Standby Electronic Airspeed Indicator 7. Standby Electronic Attitude Indicator 8. Standby Electronic Altimeter 9. Right Engine Fire Warning and Extinguisher Bottle Arm / Discharge Button 10. Rotary Test Knob Panel 11. Primary Flight Displays (PFD) Left and Right 12. Multi-Function Display (MFD) | <ul style="list-style-type: none"> 13. Oxygen Control Valve 14. LH Tilt Panel Including DC Power, Avionics, Fuel, Engine Start, and Ice Protection Switches 15. Landing Gear Panel 16. Lighting Panel 17. RH Tilt Panel Including Environmental and ELT Switches 18. Flight Hour Meter 19. Oxygen Shutoff Knob 20. Oxygen Supply Pressure Indicator 21. Remote Flight Management System (FMS) / MFD Control Keyboard 22. Rudder and Aileron Electric Trim Panel |
|---|---|

FIGURE III — CITATION MUSTANG INSTRUMENT PANEL AND PEDESTAL LAYOUT

10. FLIGHT COMPARTMENT, INSTRUMENTATION AND AVIONICS (Continued)

10.3 Flight Compartment

Two complete crew stations are provided on the Mustang with dual controls including panel-mounted control yokes, rudder pedals, and toe-actuated brakes. The crew seats are adjustable forward and aft, by height and recline, and have seatback pockets. Each is equipped with an adjustable headrest and an inboard stowable armrest. Three-point restraint harnesses are installed.

Dual tinted sun visors are installed above the windshield. A magnetic compass and an assist handle are installed on the windshield center post. Air vents and foot warmers are placed on each side with control of the cockpit temperature separate from the cabin. Dual cupholders are installed on both pilots' sideledges below which are map pockets. Flight manual and chart case storage is located in the right hand forward storage cabinet within reach of the pilot.

The brightness of the display units may be set to self-adjust through feedback from a photocell or may be manually controlled through a knob on the lighting panel. A soft key menu on the PFDs also provides manual dimming control. All other panel lights are LEDs and manually controlled by a knob on the lighting panel. Individual map lights and a panel focused floodlight, each with adjacent controls, are provided overhead in the cockpit.

Two overhead speakers are part of the audio system as well as headset outlets in the sideledges. Two pairs of Telex Airman 850 Active Noise Reduction headsets are included. The emergency oxygen system provides two quick-donning diluter demand masks for the crew members, stowed in a container on the divider behind each pilot seat. The pedestal is shaped to allow easy ingress and egress. The cockpit may be closed from the cabin with a curtain.

10.4 Avionics

Described below is the Citation Mustang standard avionics suite as referred to in section 17, Limited Warranties.

The Garmin G1000 is an integrated avionics and flight guidance system providing flight, navigation, communication, surveillance, situational awareness, and aircraft systems status and alerting on three large glass displays. The system incorporates numerous functions and features; only a few may be described in this document.

A. Electronic Flight Instrument System (EFIS)

The G1000 system utilizes two 10.4 inch (26 cm) (diagonal) Control Display Units (GDU 1040A) as Primary Flight Displays (PFDs) and one 15 inch (38 cm) (diagonal) Control Display Unit (GDU 1500) as a Multi-Function Display (MFD). All three are XGA Thin Film Transistor Liquid Crystal Displays (TFT LCDs) having a resolution of 1024 x 768.

Behind each PFD and within the pressure vessel are the main Garmin Interface Adapter Units (GIA 63W) incorporating all communication, navigation, automatic flight control, and extensive data management functions. These two interface adapter units are directly linked to the AHRS, ADCs, transponders, audio panels, and Engine/Airframe Interface units (GEA 71, located in the tailcone). Data from each source is processed and sent to the Control Display Units for display on the PFDs and MFD. Ethernet architecture and various ARINC cabling are used for high-speed data transfer. Most components are line replaceable units (LRUs) contained in two integrated avionics racks.

Three glareshield cooling fans continuously circulate cockpit air around the avionics whenever cockpit temperature is above 40° F and the battery is on, or when the airplane is airborne. In addition, when the cockpit evaporator fan is in use by the pilot, a dedicated vent diverts some chilled air around the avionics.

B. Primary Flight Display (PFD)

The following elements are shown on the PFDs in normal mode: attitude (full screen horizon line), altitude tape (feet or meters with six-second trend vectors), airspeed tape (with six-second trend vectors), Mach, vertical speed, flap limit speeds, slip/skid, heading, horizontal situation, glide slope, flight director (cross pointer or single cue), navigation and communication frequencies (active and standby), navigation station/waypoint identification, track, distance, transponder code, altimeter setting (inches or hectopascals), clock, timer (up or down), temperature (RAT), ISA deviation, and many other items. V-speeds are entered manually by the pilot and will appear on the airspeed tape. At the bottom edge of the display several menu items are shown directly above corresponding soft keys on the bezel. The soft keys are used to select the menu and submenu items. Selection of the "Inset" soft key places a smaller version of the



10. FLIGHT COMPARTMENT, INSTRUMENTATION AND AVIONICS (Continued)

MFD navigation map in the lower left corner of the PFD for added situational awareness.

C. Multi-Function Display (MFD)

The Mustang's large MFD serves primarily as a moving map and EICAS platform. The moving map may be populated with a wide variety of information including traffic, terrain, airborne weather radar, data link weather, political and airspace boundaries, airports, nav aids, waypoints, cities, roads, Garmin FlightCharts and Safe Taxi, and many others, all at various ranges. The pilot may choose a north-up or track-up orientation. These and many other options may be selected using the soft keys along the bottom edge of the bezel or by using the remote FMS / MFD control keyboard located on the pedestal. A subscription through Garmin is required for database updates.

D. Engine Indicating and Crew Alerting System (EICAS)

The EICAS information is presented on the left side of the MFD and includes: engine speeds and temperatures; oil pressures and temperatures; fuel flow, quantity and temperature; electrical and pressurization systems data; and trim and flap positions. The crew alerting section shows colored text messages as determined by system inputs. Up to 13 messages are shown in the CAS box; additional messages may be scrolled into view by using the MFD soft keys. Pre-programmed logic determines the color, order, and flashing characteristics of all messages.

Each display may show the essential components of the EICAS in reversionary mode. Reversion may be selected manually or will occur automatically if necessary.

E. Air Data and Attitude Information

The pitot-static system includes two electrically heated pitot and static sources. Each is cross-plumbed into dual solid state digital air data computers (ADCs) located behind each PFD. The ADCs perform source error corrections and calculate indicated airspeed, true airspeed, mach number, vertical speed, density altitude, pressure altitude, and total temperature for output to the Interface Adapters and the PFDs.

In addition, ADC output is received by the integrated Attitude and Heading Reference Systems (AHRS). Two solid state digital AHRS reside behind the MFD and are

each tied to the three-axis magnetometers located in the tail. The AHRS are capable of in-flight and on-the-move initialization. Output from the AHRS is received and processed by the Interface Adapter Units and the PFDs. The system meets RVSM requirements.

Input from an electrically heated stall warning vane on the right side of the nose is processed by the Interface Adapter Units for display on the PFDs and for input to the aural warning system. Dual outside air temperature probes (GTP 59) are provided to feed temperature data to the ADCs.

F. VHF Communication Transceivers

Dual VHF communication transceivers are part of the Interface Adapter Units and provide 16 watts of transmission power. They are compliant with European 8.33 kHz channel spacing requirements. Tuning and management is accomplished through dual concentric knobs on each PFD bezel. An HF radio is available as an option for units 33 and on.

G. Audio Control Panel

Dual Garmin GMA 1347D digital audio control panels provide transmitter selection for microphone inputs and direct audio outputs from all receivers to the speakers and/or headphones at each crew station. The system includes crew intercom and the ability to record and playback up to 2½ minutes of incoming audio. One handheld microphone is connected to the pilot's audio panel.

H. Navigation

Dual Garmin navigation receivers located in the Interface Adapter Units provide VOR, Localizer and Glideslope functions. The Marker Beacon receivers are integrated in the Audio Panels. Navigation information is displayed on both PFDs and the reversionary mode of the MFD. Tuning and management is accomplished through dual concentric knobs on each PFD bezel. A single ADF receiver may be ordered as an option.

I. Distance Measuring Equipment (DME)

A single DME is located in the nose of the aircraft forward of the baggage compartment. DME information is tuned via the navigation receivers and can be displayed on each PFD.

10. FLIGHT COMPARTMENT, INSTRUMENTATION AND AVIONICS (Continued)

J. Global Positioning System (GPS)

Each Interface Adapter Unit includes a WAAS capable GPS receiver. Both receivers are capable of monitoring 12 channels to provide satellite-based position data for use by the FMS.

K. Flight Management System (FMS)

The Garmin FMS provides a multiple waypoint navigation solution suitable for enroute, terminal, and WAAS precision approach navigation. An alphanumeric keyboard (GCU 475) on the pedestal is the primary FMS interface on the MFD. It includes controls for selection and manipulation of moving map functions such as range and pan. In addition each PFD contains FMS flight planning capabilities via bezel mounted controls and soft keys. Each PFD calculates and displays the current flight plan using the onside GPS sensor. Automatic GPS sensor reversion occurs in the event the onside sensor is degraded or failed.

Airway flight planning, plain language identifiers and airport communication and navigation frequency lookup features are included. Flight plans may be created, stored, accessed, and activated as needed and are shown on the MFD moving map. Both lateral and vertical modes (to the final approach fix) may be displayed and coupled to the autopilot. Present position referenced geopolitical and airspace boundaries, and airways may be overlaid on any of the FMS map formats.

Precision guidance from the FMS meets the operational requirements of oceanic/remote, NAT MNPS, RNP10, and RNP5/BRNAV. The navigation database requires periodic updates via subscription and must be uploaded to the aircraft through the upper SD flash card port on each of the three displays.

L. Automatic Flight Control System (AFCS)

Automatic flight control is provided in the Mustang by the Garmin GFC 700 system. The autopilot system (AP) includes dual flight director computers (integrated in the Interface Adapter Units), a single Garmin Mode Controller (GMC 710), and four electric servos for roll, yaw, pitch, and pitch trim.

The GMC 710 Mode Controller, located just below the glareshield, enables the selection of flight director and autopilot modes for either pilot. The AFCS modes may

be hand flown using the flight director command bars or coupled to the autopilot for automatic flight. Selection of the autopilot will automatically enable the flight director. Modes of operation include attitude, heading, altitude, speed, and vertical speed, as well as VNAV and the various NAV radio and GPS navigation modes. In addition, the AFCS provides a takeoff/go-around mode activated by buttons on either throttle handle. Touch control steering (TCS) and AP disconnect functions are controlled via switches on each yoke.

The pitch trim servo also provides electric pitch trim when the autopilot is not engaged, through yoke mounted trim switches. The yaw servo may be activated by the pilot during normal maneuvers to provide Dutch roll damping and turn coordination. Or, it will automatically engage with autopilot activation.

M. Transponders

Dual Garmin Diversity (GTX 33D) solid-state Mode S transponders are linked to the interface adapter units. Each provides enhanced surveillance data link and includes ATC based Traffic Information System (TIS) for display on the MFD and the PFD inset map. Altitude reporting information is supplied from the digital ADCs. Each transponder is mounted in the integrated avionics racks behind the PFDs and tuned through the PFDs.

N. Weather Avoidance Radar

The Garmin GWX 68 digital weather avoidance radar is a four-color weather detection sensor consisting of an integrated receiver/transmitter/12-inch antenna unit controlled through and displayed on the MFD. The system provides 6,500 watts of nominal transmitter power, 90 degree scan angle, ± 15 degrees tilt, a maximum range of 320 nm and a minimum range of 2.5 nm. The system also includes several additional features:

- Penetration Compensation compensates for radar signal attenuation or shadowing caused by heavy precipitation.
- Automatic Tilt Compensation automatically adjusts the tilt angle with changes in altitude.
- Target Alert notifies the pilots of significant weather beyond the selected range.
- Pilot selectable Flight Path Scan narrows the scan range to ± 10 , 20, or 30 degrees and increases the scan rate.
- Ground Mapping depicts terrain features with a separate color scheme from the weather modes.



10. FLIGHT COMPARTMENT, INSTRUMENTATION AND AVIONICS (Continued)

- Pilot selectable receiver gain.
- Adjustable brightness.

O. Broadcast Weather Presentation

The Garmin GDL 69A, located in the nose, links weather information through XM WX Satellite Weather Data Services for display on the G1000 MFD. Such products as high resolution NEXRAD, winds aloft, lightning, textual METARs and TAFs provide pilots with comprehensive situational awareness. A subscription with XM is required and provides coverage throughout North America.

P. Traffic Information System (TIS)

The Garmin GTX 33D transponders are the Mustang's link to ground based traffic information through Air Traffic Control. Anytime within participating ATC radar coverage, the crew may show on the MFD traffic depictions within the selected range identical to what ATC "sees." The TIS issues traffic advisories (TAs) via a yellow "Traffic" flag on the PFD when triggered by proximity criteria. Note: TIS is not available in all areas. The Honeywell KTA-870 Traffic Advisory System (TAS) is available as an optional upgrade at unit -0019 and on.

Q. Terrain Avoidance Warning System (TAWS)

The Garmin Terrain Avoidance Warning System is a Class B TAWS. The system provides basic terrain awareness and ground proximity alerting. Terrain information is displayed in standard colors on the MFD and gives both audible and visual warnings as required. The terrain database resides in the secure digital data storage cards located in the lower port on the right hand side of each PFD and MFD bezel. Data is independently processed by all three Control Display Units for display when selected and when activated by ground proximity criteria.

R. Standby Attitude Indicator

Mid Continent Instruments Standby Attitude Indicator is a two-inch electrically driven gyroscopic instrument for emergency use, located above the MFD. If normal electrical power is interrupted the backup battery pack provides at least 30 additional minutes of power.

S. Standby Electronic Altimeter and Airspeed Indicators

The Aerosonic Standby Altimeter and Airspeed Indicators are both two-inch electromechanical instru-

ments mounted on either side of the Standby Attitude Indicator above the MFD. Air data is received from the pilot side pitot-static source. The indicators utilize solid-state pressure sensors with digital signal processors to power motor driven pointers for traditional analog-style presentation. If normal electrical power is interrupted the backup battery pack provides at least 30 additional minutes of power.

T. Emergency Locator Transmitter (ELT)

The Artex C406-N is a three frequency ELT that transmits on the emergency frequencies of 121.5 and 243.0 MHz and the satellite frequency of 406 MHz. It is located in the tailcone and interfaces with the FMS to transmit the last known aircraft position on the satellite frequency if activated. (Interface feature disallowed by some certifying agencies.) The C406-N has a remote control switch panel on the right hand tilt panel and a six-year lithium battery pack.

U. Maintenance Diagnostic System

The Cessna Diagnostics and Maintenance System (CDMS) has the ability to interrogate and display analog and digital diagnostic data in plain English on the MFD. The Maintenance Diagnostic database is kept on the SD card located in the upper port of the MFD. It is only available on the ground and provides detailed information on the aircraft's electrical systems.

In addition the Garmin G1000 system has built-in-test (BIT) diagnostics that are exercised during the normal power-up cycle. A BIT failure of a line replaceable unit (LRU) will result in an annunciated message. G1000 system operation status can be verified through the MFD "AUX" status page.

11. INTERIOR

11.1 General

With attractive styling and numerous amenities the Citation Mustang invites pilots and passengers to enjoy cabin class comfort on every flight. This section describes the features offered in the cabin and baggage compartments. A description of the cockpit furnishings is located in section 10.3, Flight Compartment.

The Citation Mustang features club seating for four passengers with generous head room and leg room. The cabin is approximately 9 feet 9 inches long (2.97 m) measured from the cockpit curtain to the aft pressure bulkhead. A 4-inch (0.10 m) dropped aisle extending from the aft edge of the storage cabinets to the aft center console provides a cabin height of 54 inches (1.37 m). The constant cross section of the cabin provides a continuous width of 55 inches (1.40 m). Measurements represent distance between softgoods.

Left and right forward storage cabinets, immediately aft of the pilot seats serve as the cockpit dividers and include a full length curtain. The RH cabinet provides storage for beverage cans or bottles, ice, cups, and general storage. The lower section of the cabinet, within reach of the pilot, provides storage for one flight manual and two Jeppesen chart books. A single 12 volt DC outlet (aviation style) is mounted in the lower section in this cabinet for cockpit or cabin use. The LH cabinet provides a large general storage area and houses the fire extinguisher.

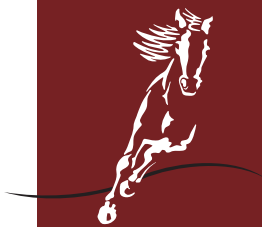
A side-facing non-belted toilet is located on the right side across from the cabin door. A removable privacy curtain is provided and stored in the lid. A net is also provided to secure baggage stored on top of the lid. A flush-mounted coat hook is installed above the toilet.

Each passenger seat has a lap belt with shoulder harness and an adjustable headrest. The two aft-facing seats have seat back pockets, inboard stowable arm rests and may be reclined about 25 degrees from fully upright. The two forward-facing seats are separated by a center console that incorporates dual cupholders, a storage compartment and drawer, and a fold-down center armrest. A 12 volt DC outlet is provided on the face of the console, just above the drawer. Dual cupholders are built into the sideledges at each passenger seat. Left and right hand monoleaf executive tables are featured in the sideledges between the seats.

Automotive-style adjustable air vents and fixed position halogen reading lights are placed above each seat. Separate, fixed position lights illuminate both tables. A light over the toilet and the entrance are controlled by a switch on the LH cabinet, just forward of the entry door. The entry light and the RH table light in front of the emergency exit are included on the emergency electrical bus. Five constant-flow drop-down oxygen masks for the seats and the toilet are installed in the overhead for emergency use.

Six elliptical windows offer excellent natural lighting throughout the cabin. Each window is tinted and has pleated manual window shades. Two window plies, one tinted frost pane per window and bagged insulation in the walls contribute to a quiet, comfortable cabin environment even at high speeds.

Three distinctive color selections are available for the interior furnishings as part of the base price of the aircraft: Bronze, Platinum, and Sterling. Each interior design selection offers a complementary blend of fabrics, leathers, tailored carpet, and high durability painted coatings. All materials used are certified burn-resistant.



11. INTERIOR (Continued)

11.2 Standard Interior Configuration

A. Left Hand Forward Storage Cabinet

- General Storage
- Fire Extinguisher Storage

B. Right Hand Forward Storage Cabinet

- General Storage
- Beverage Storage Drawer
- Removable Cup / Water Bottle Holder
- Ice Drawer
- Jeppesen Book (two) / Flight Manual Storage
- Single 12 volt DC Outlet

C. Right Hand Forward Side Facing Toilet

- Non-Belted, Non-Flushing, Removable
- Toilet Tissue / Facial Tissue Storage Drawer
- Trash Storage Drawer
- Baggage Net Storage Area
- Removable Privacy Curtain and Storage
- Flush Mounted Coat Hook (overhead)

D. Aft Facing Passenger Seats

- Three-Point Restraint System
- Inboard Stowable Armrest
- Recline Adjustment
- Adjustable Headrest
- Seat Back Pocket

E. Left Hand/Right Hand Sideledge

- Stowable Monoleaf Executive Table (one per side)
- Dual Cupholders (one set per seat)

F. Forward Facing Passenger Seats

- Three-Point Restraint System
- Adjustable Headrest

G. Aft Center Console

- General Storage Compartment
- General Storage Drawer
- Dual Cupholders
- Single 12 volt DC Outlet
- Fold Down Armrest

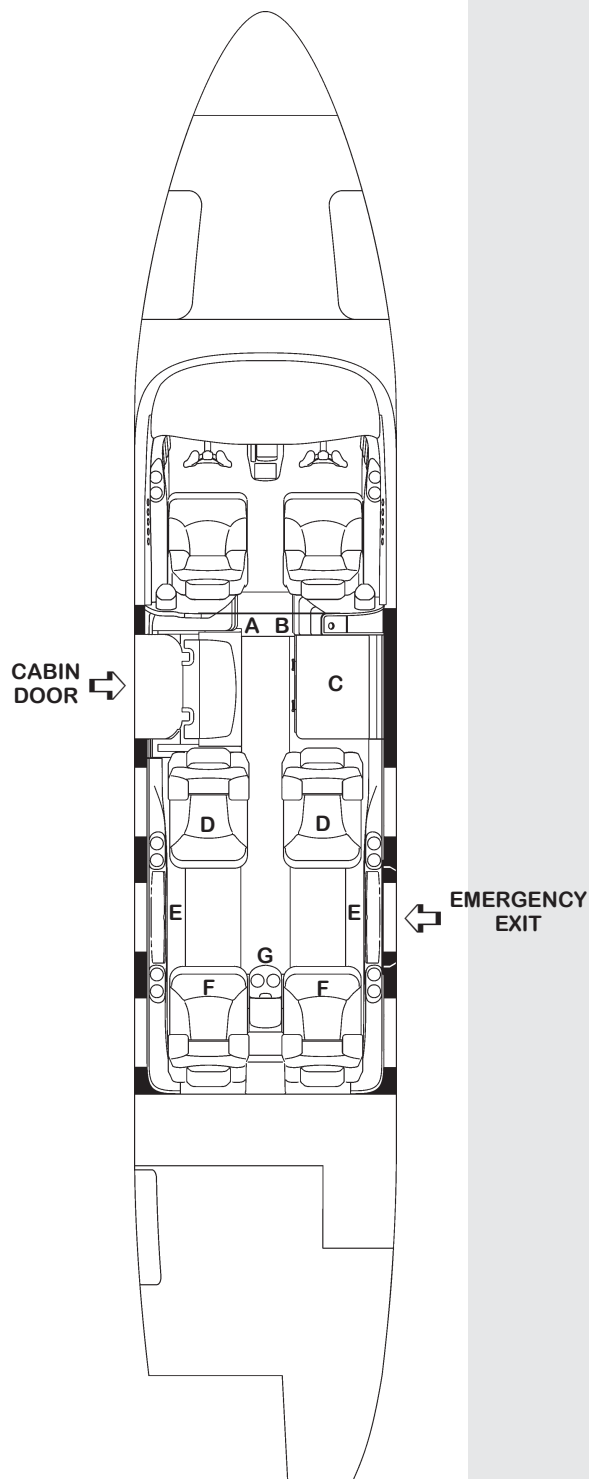


FIGURE IV — CITATION MUSTANG
STANDARD FLOORPLAN

11. INTERIOR (Continued)

11.3 Baggage

The unpressurized nose baggage area is accessible from both sides of the aircraft through two top-hinged doors. Each door has a weather seal and is secured with two flip down latches and one pin latch. Each of these latches is monitored. Additionally, there is a keyed security lock. An area light with a rocker switch is mounted in the ceiling. The floor is lined with a durable vinyl covering. The bottom edge of the opening is approximately 41 inches (1.04 m) above the ground for easy loading. Preflight checks of the oxygen bottle pressure, hydraulic accumulator, and the emergency gear and brake bottles are made through the nose baggage compartment.

The unpressurized tailcone baggage compartment is accessed from the left side just aft of the wing. The 24 x 18 inch (0.61 x 0.46 m) lockable door is hinged forward and the bottom edge is about 41 inches (1.04 m) above

the ground for easy loading. Durable vinyl covers the floor. The aft wall is recessed on the right side to accommodate skis up to 191 cm. A domed light with a recessed switch is provided on the sidewall aft of the door opening. Several latched panels allow access to systems such as the electrical junction box and the battery.

The Mustang's baggage capacities are as follows:

Nose baggage compartment:

- 20.0 ft³ (0.57 m³), 320 lb (145 kg)

Tailcone baggage compartment:

- 37.0 ft³ (1.05 m³), 300 lb (136 kg)

Cabin storage areas combined:

- 6.0 ft³ (0.17 m³), 98 lb (44 kg)

Total:

- 62.3 ft³ (1.76 m³), 718 lb (325 kg)

12. EXTERIOR

Five stripe designs are available to choose from to customize the aircraft's exterior. The Mustang paint color palette offers a wide variety of stripe colors in both metallic and high gloss to complement the Matterhorn White overall aircraft base color. Wheel wells also receive the base color while the landing gear is painted Cloud Gray.

13. ADDITIONAL EQUIPMENT

- Two Telex Airman 850 ANR Headsets
- Control Lock
- Pitot Covers
- Inlet Covers for Engine, Exhaust, Generator, and Pylon
- Static Discharge Wick Covers
- Tow Straps
- Tailcone Baggage Restraint Strap
- Emergency Escape Hatch Ground-Locking Pin
- Jack Pad Adapter (Nose)

14. EMERGENCY EQUIPMENT

- Fire Extinguisher
- Crew and Passenger Oxygen
- Emergency Exit Lighting (two lights in cabin)



15. DOCUMENTATION AND TECHNICAL PUBLICATIONS

- U.S. Standard Airworthiness Certificate, FAA8100-2; Export Certificate of Airworthiness, FAA8130-4 or Special Airworthiness Certificate FAA8130-7 as appropriate
- Airplane Flight Manual
- Pilot's Operating Manual
- Abbreviated Procedures Checklist
- Weight and Balance Report
- Weight and Balance calculator software *
- Citation Performance Calculator (CPC) pending availability
- Cabin Operating Manual
- Passenger Information Cards

- Log Books (Aircraft and Engines)
- Service Bulletins and Service Letters - Engine **
- Maintenance related documents such as Maintenance Manuals, Illustrated Parts Catalogs, and Wiring Diagrams for the airframe, interior, avionics, and/or engines *

Cessna will provide Service Bulletins, Service Letters and manual revisions for documents published by Cessna for three years beginning from the start date of airframe warranty.

* These documents are provided on CD-ROM or DVD.

** These publications / revisions are provided by the supplier following delivery.

16. COMPUTERIZED MAINTENANCE RECORD SERVICE (CESCOM)

Cessna will provide an online computerized maintenance record service for one full year from the date of delivery of a Citation Mustang to the Purchaser.

This service will provide management and operations personnel with the reports necessary for the efficient control of maintenance activities. The service provides an accurate and simple method of keeping up with aircraft components, inspections, service bulletins and airworthiness directives while providing permanent aircraft records of maintenance performed.

Reports, available on demand, show the current status, upcoming scheduled maintenance activity and the history

of the aircraft maintenance activity in an online format, which is printable locally. Semi-annual reports concerning projected annual maintenance requirements, component removal history and fleet-wide component reliability are provided as part of the service.

Services are provided through a secure Internet site requiring a computer with Internet connectivity. A local printer is required to print paper versions of the online reports and documentation. If receiving these services through the Internet is not feasible for an operation, a paper-based service delivered through the U.S. mail is available at an additional fee.

17. LIMITED WARRANTIES

The standard Citation Mustang Aircraft (Aircraft) Limited Warranty, which covers the Aircraft, other than Pratt & Whitney Canada, Inc. (P&WC) engines and engine accessories, is set forth. The engine and engine accessory warranty of P&WC is set forth below, immediately following Cessna's Limited Warranty. Both warranties are incorporated by reference and made a part of the Purchase Agreement. All warranties are administered by Cessna.

17.1 Cessna Citation Mustang Limited Warranty (Limited Warranty)

Cessna Aircraft Company (Cessna) expressly warrants each new Citation Mustang Aircraft (exclusive of engines and engine accessories supplied by P&WC, which are covered by a separate P&WC warranty), including factory-installed avionics and other factory-

installed equipment to be free from defects in material and workmanship under normal use and service to the first user for the following periods after delivery:

- (a) Three years or 1,000 operating hours, whichever occurs first, for Aircraft component parts manufactured by Cessna, except avionics;
- (b) Two years for Garmin avionics;
- (c) One year for all other items not detailed in a) or b) above (all vendor items, interior furnishings, exterior paint, and all other items not manufactured in total by Cessna).

Any remaining term of this Limited Warranty is automatically transferred to subsequent Purchasers of the Aircraft.

17. LIMITED WARRANTIES (Continued)

Cessna's obligation under this Limited Warranty is to repair or replace, at its sole option, any part or parts which within the applicable warranty period are returned at the owner's expense to Cessna or any Cessna-owned or Cessna-authorized Citation Service Facility (defined as a Citation Service Facility authorized by Cessna to work on your model aircraft) with completed claim information and which, upon examination by Cessna or its designee, are found to be defective. The replacement part must have been procured from Cessna or a Cessna-owned or Cessna-authorized Citation Service Facility, and the defective part and claim information returned to the Cessna Facility where such replacement part was procured. Such replacement parts are only warranted for the remainder of the applicable original aircraft warranty period. A new warranty period is not established for replacement parts. The repair or replacement of defective parts under this Limited Warranty will be made by any Cessna-owned or Cessna-authorized Citation Service Facility without charge for parts and/or labor for removal, installation and/or actual repair. All import duties, customs brokerage fees, sales taxes and use taxes, if any, on such warranty repairs or replacement parts are the warranty recipient's sole responsibility. (Location of Cessna-owned and Cessna-authorized Citation Service Facilities will be furnished by Cessna upon request.)

This Limited Warranty applies to only Aircraft and the detailed items herein, which have been used, maintained, and operated in accordance with Cessna and other applicable manuals, bulletins, and other written instructions. However, this Limited Warranty does not apply to items that have been subjected to misuse, abuse, negligence, or accident; to items that have been installed, repaired, or altered by repair facilities not authorized by Cessna; or to items that, in the sole judgment of Cessna, have been installed, repaired, or altered by other than Cessna-owned service facilities contrary to applicable manuals, bulletins, and/or other written instructions provided by Cessna so that the performance, stability, or reliability of such items are adversely affected. Limited Warranty does not apply to normal maintenance services (such as engine adjustments, cleaning, control rigging, brake and other mechanical adjustments, and maintenance inspections); or to the replacement of service items (such as brake linings, lights, filters, de-ice boots, hoses, belts, tires, and rubber-like items); or to normal deterioration of appurtenances (such as paint,

cabinetry, and upholstery), corrosion, or structural components due to wear and exposure.

WITH THE EXCEPTION OF THE WARRANTY OF TITLE AND TO THE EXTENT ALLOWED BY APPLICABLE LAW, THIS LIMITED WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, IN FACT OR BY LAW, APPLICABLE TO THE AIRCRAFT. CESSNA SPECIFICALLY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE REMEDIES OF REPAIR OR REPLACEMENT AS ABOVE SET FORTH ARE THE ONLY REMEDIES UNDER THIS LIMITED WARRANTY. CESSNA EXPRESSLY AND SPECIFICALLY DISCLAIMS ALL OTHER REMEDIES, OBLIGATIONS, AND LIABILITIES, INCLUDING, BUT NOT LIMITED TO, LOSS OF AIRCRAFT USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOSS OF PROFITS, LOSS OF GOODWILL, AND ANY AND ALL OTHER CONSEQUENTIAL AND INCIDENTAL DAMAGES. CESSNA NEITHER ASSUMES NOR AUTHORIZES ANYONE ELSE TO ASSUME ON ITS BEHALF ANY FURTHER OBLIGATIONS OR LIABILITIES PERTAINING TO THE AIRCRAFT NOT CONTAINED IN THIS LIMITED WARRANTY.

17.2 Pratt & Whitney Canada Corp. New Engine Warranty

The following is an outline of the Pratt & Whitney Canada Corp. (P&WC) warranty for new PW615F Engines, which is contained in the purchase contract with the original customer.

P&WC warrants that at the time of delivery, all parts of a new PW615F Engine are free from defects in material and/or manufacturing workmanship.

This Warranty shall take effect immediately upon delivery of the Engine to the original Operator, either installed in an aircraft or delivered as a spare, and shall remain in force until the expiration of 1,000 Engine operating hours or 3 years, whichever occurs first. Notice of a warranty defect shall be provided to P&WC within 30 days of the occurrence, and P&WC reserves the right to refuse any warranty claim received more than 180 days after the removal from operation of any Engine or Engine part.



17. LIMITED WARRANTIES (Continued)

Application

The Warranty is applicable only to engines operated on non-military aircraft used for commercial, corporate or private transportation service.

Coverage

P&WC will repair or replace any Engine parts found to be defective due to a defect in material and/or manufacturing workmanship (including resultant damage to the Engine) within 1,000 Engine operating hours or 3 years, whichever occurs first. P&WC will pay reasonable Engine removal and reinstallation costs, and reasonable transportation costs (excluding insurance, duties, brokerage fees, and taxes) to and from the facility designated by P&WC Warranty Administration.

Extended Engine Service Policy

After expiration of the Basic Coverage Period, P&WC will provide commercial support to assist an Operator in the event of extensive damage to an Engine resulting from an Engine chargeable defect. This maximum event cost will be based on total Engine hours and cycles run since new or since last overhaul, adjusted for Engine age as well as environmental and operating conditions. P&WC reserves the right to cancel or change this extended coverage at any time.

Operator's Responsibility

The Operator is responsible for operating and maintaining the Engine in accordance with P&WC's written

instructions. Any Warranty work performed on the Engine must be carried out at a facility designated by P&WC Warranty Administration. P&WC shall not be responsible for defects or damages resulting from improper use or damages resulting from improper maintenance, normal wear, and accident or foreign object damage (FOD).

Limitations

Other terms and conditions apply to the Warranty and Extended Engine Service Policy outlined above. A complete copy of the Warranty for New Engines and Extended Engine Service Policy will be available from P&WC Warranty Administration upon request.

In no event shall P&WC be responsible for incidental or consequential damages.

For complete information on how this Warranty may apply and for more complete Warranty details, please write to:

Manager, Warranty Administration
Citation Parts Distribution
Cessna Aircraft Co.
P.O. Box 7706
Wichita, KS 67277-7706

Or:

Manager, Warranty Administration (M/C 01RD4)
Pratt & Whitney Canada Corp.
1000 Marie Victorin
Longueuil, QC J4G 1A1
Canada

18. CITATION MUSTANG CREW TRAINING AGREEMENT

Training for one (1) Citation Mustang pilot and one (1) mechanic will be furnished to the First Retail Purchaser, subject to the following:

1. The pilot shall be at least a private pilot with an instrument rating and the mechanic shall possess an A&P license or have equivalent experience.
2. Training shall be conducted by Cessna or by its designated training organization, at Cessna's option.
 - a. A simulator shall be utilized which is FAA certificated to provide training for the CE-510 FAA type rating.
 - b. In lieu of a model specific simulator, training may be provided in the most appropriate type simulator

available capable of accomplishing the FAA type rating, with differences training provided.

- c. Additional training as requested by the customer, shall be conducted in the customer's aircraft.
- d. Location of training to be Wichita, Kansas and/or Farnborough, United Kingdom*, unless mutually agreed otherwise. The organization conducting the training is hereinafter called the "Trainer."

*A European Price Differential charge will apply to all training received at the Farnborough, United Kingdom facility.

3. Training furnished shall consist of the following:

18. CITATION MUSTANG CREW TRAINING AGREEMENT (Continued) —

- a. Flight training to flight proficiency in accordance with Trainer's standards aimed toward type certification of one (1) Captain under applicable Federal Air Regulations, not to exceed two and one half (2.5) total hours for the one (1) pilot.
 - b. Flight simulation training to simulator proficiency in accordance with Trainer's standards but not to exceed twenty (20) total hours for the pilot.
 - c. Ground school training for the pilot and classroom instruction for the mechanic in accordance with Trainer's standards.
4. Purchaser shall be responsible for:
- a. Transportation of pilot and mechanic to and from training site and for living expenses during training.
 - b. Providing an interpreter during the course of training for any Purchaser's pilot or mechanic not conversant with the English language.
 - c. Payment to Trainer for additional simulator or flight training beyond that required to attain proficiency in accordance with the Trainer's standards for the course in which the pilot is enrolled.
 - d. All aircraft required for flight training as well as all landing fees, fuel costs, aircraft maintenance and insurance and all other direct costs of operation, including applicable taxes required in connection with the operation of said aircraft during such flight training.
 - e. Payment to Trainer for a European Price Differential in the event training is conducted at Trainer's Farnborough facility.
 - f. Extra charges, if any, for scheduling pilots in separate training classes.
 - g. Reimbursing to Cessna the retail rate for training in the event of training before actual sale/delivery, if sale/delivery is cancelled.
5. Seller or Trainer shall schedule all training, furnish Purchaser schedules of training and endeavor to schedule training at a convenient time for Purchaser. A cancellation fee of Two Hundred Dollars (\$200) will be paid to Cessna by Purchaser if pilot or mechanic fails to appear for scheduled training, except for reasons beyond their reasonable control, unless Purchaser gives Seller written notice of cancellation received at Wichita, Kansas, at least seven (7) days prior to scheduled training. In the event of such cancellation Seller shall reschedule training for the next available class.
6. Neither Seller nor Trainer shall be responsible for the competency of Purchaser's pilot or mechanic during and after training. Trainer will make the same efforts to qualify Purchaser's pilot as it makes in training of other Citation Mustang pilots; however, Seller and Trainer cannot guarantee Purchaser's pilot shall qualify for any license, certificate or rating.
7. The Proficiency Index™ will be used by Seller and Trainer to predict pilot training success. Purchaser will provide this information when queried by Seller or Trainer.
8. Participation in the Mustang Training Program does not guarantee aircraft insurability.
9. Neither Seller nor Trainer shall be responsible for any delay in providing training due to causes beyond its or their reasonable control.
10. All Training furnished to Purchaser under the Agreement will be scheduled to commence no earlier than three (3) months prior to delivery and will be completed within twelve (12) calendar months after delivery of the Aircraft unless mutually agreed otherwise.
- Signature of the Purchaser to the Purchase Agreement to which this Training Agreement is attached as a part of the Specification and Description shall constitute acceptance by Purchaser of the foregoing terms and conditions relative to training to be furnished by Seller. Purchaser agrees that Seller can provide Purchaser's name, address, and Proficiency Index™ data to the training organization for the purpose of coordinating training.

