SPECIFICATION
AND DESCRIPTION

UNITS 680-0557 TO TBD

OCTOBER 2015

REVISION F
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 Sovereign+, Units 680-0557 to TBD. This document supersedes all previous Specification and Description documents and describes only the Cessna Citation Sovereign+ Model 680, 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.

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WARNING: This product contains Halon 1211 and Halon 1301. Furthermore, the product is manufactured with 1,1,1 Trichloroethane, substances which harm public health and environment by destroying ozone in the upper atmosphere.
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**1. GENERAL DESCRIPTION**

The Cessna Citation Sovereign+ is a low-wing aircraft with retractable tricycle landing gear and a cruciform tail. A pressurized cabin accommodates a crew of two plus eight to twelve passengers (nine is standard). Two Pratt & Whitney Canada (P&WC) PW306D FADEC controlled 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 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. Certain parts with non-critical loads such as the nose radome and 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 pilots and mechanics, and various manufacturers’ warranties 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 680 is certified to the requirements of U.S. 14 CFR Part 25, Transport Category, including day, night, VFR, IFR and flight into known icing conditions. The Sovereign+ is compliant with all RVSM certification requirements (Note: specific approval is required for operation within RVSM airspace; Cessna offers a no charge 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. GENERAL DESCRIPTION (CONTINUED)

FIGURE I — CITATION SOVEREIGN+ EXTERIOR DIMENSIONS
1. GENERAL DESCRIPTION (CONTINUED)

**FIGURE II — CITATION SOVEREIGN+ INTERIOR DIMENSIONS**
1. GENERAL DESCRIPTION (CONTINUED)

1.2 APPROXIMATE DIMENSIONS

Overall Height ................................................................................................................................. 20 ft 1 in (6.12 m)
Overall Length ................................................................................................................................. 63 ft 6 in (19.36 m)
Overall Width ................................................................................................................................. 72 ft 4 in (22.04 m)

WING

Span ................................................................................................................................................ 72 ft 4 in (22.0 m)
Area .................................................................................................................................................. 542.5 ft² (50.40 m²)
Sweepback (leading edge) ............................................................................................................... 16.3 degrees
Sweepback (at 25% chord) ............................................................................................................. 12.7 degrees

HORIZONTAL TAIL

Span (overall) ................................................................................................................................. 27 ft 7 in (8.40 m)
Area ................................................................................................................................................ 138.5 ft² (12.87 m²)
Sweepback (at 25% chord) ............................................................................................................. 22.6 degrees

VERTICAL TAIL

Height ............................................................................................................................................... 10 ft 11 in (3.33 m)
Area ................................................................................................................................................ 95.3 ft² (8.85 m²)
Sweepback (at 25% chord) ............................................................................................................. 38.3 degrees

CABIN INTERIOR

Height (maximum over aisle) ......................................................................................................... 68 in (1.73 m)
Width (trim to trim) ...................................................................................................................... 66 in (1.68 m)
Length (forward pressure bulkhead to mid pressure bulkhead) ...................................................... 30 ft 9 in (9.37 m)

LANDING GEAR

Tread (main to main) .................................................................................................................... 10 ft 0in (3.05 m)
Wheelbase (nose to main) ............................................................................................................ 27 ft 10in (8.49 m)

1.3 DESIGN WEIGHTS AND CAPACITIES

Maximum Ramp Weight ................................................................................................................ 31,025 lb (14,073 kg)
Maximum Takeoff Weight ........................................................................................................... 30,775 lb (13,959 kg)
Maximum Landing Weight .......................................................................................................... 27,575 lb (12,508 kg)
Maximum Zero Fuel Weight ....................................................................................................... 21,000 lb (9,525 kg)
Standard Empty Weight* ........................................................................................................... 17,710 lb (8,033 kg)
Useful Load .................................................................................................................................. 13,100 lb (5,942 kg)
Fuel Capacity (useable) at 6.70 lbs/gal ....................................................................................... 11,390 lb (5,166 kg)

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

All performance data is based on a 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 ......................................................... 3,530 ft (1,076 m)
(Maximum Takeoff Weight, Sea Level, ISA
Balanced Field Length per FAR 25, Flap Position 2)

Climb Performance ................................................................. 27 min to 45,000 ft (13,716 m)
(Maximum Takeoff Weight, Sea Level, ISA)

Maximum Altitude ................................................................. 47,000 ft (14,326 m)

Maximum Cruise Speed (± 3%) ................................................. 460 KTAS (852 km/hr or 529 mph)
(Mid-Cruise Weight, 35,000 ft (10,668 m), ISA)

NBAA IFR Range (200 nm alternate) (± 4%) .......................... 3,060 nm (5,667 km or 3,521 mi)
(Maximum Takeoff Weight, Full Fuel, Optimal Climb
and Descent, Maximum Cruise Thrust at 47,000 ft)

Landing Runway Length ......................................................... 2,600 ft (793 m)
(Maximum Landing Weight, Sea Level, ISA, per FAR 25)

Certified Noise Levels
Flyover ......................................................... 71.9 EPNdB
Lateral .............................................................. 87.2 EPNdB
Approach .......................................................... 88.1 EPNdB
3. STRUCTURAL DESIGN CRITERIA

The Citation Sovereign+ 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.

Limit Speeds

\[ V_{MO} \text{ at Sea Level to 8,000 ft (2,438 m)} \quad 270 \text{ KIAS (500 km/hr, 311 mph)} \]
\[ V_{MO} \text{ at 8,000 ft (2,438 m) to 30,650 ft (9,342 m)} \quad 3505 \text{ KIAS (649 km/hr, 403 mph)} \]
\[ M_{MO} \text{ at 30,650 ft (9,342 m) to 51,000 ft (15,545 m)} \quad \text{Mach 0.935} \]

Flap Extension Speeds

\[ V_{FE_{Position 1}} \]
\[ V_{FE_{Position 2}} \quad 210 \text{ KIAS (389 km/hr, 242 mph)} \]
\[ V_{FE_{Full Flaps}} \quad 180 \text{ KIAS (333 km/hr, 207 mph)} \]

Landing Gear Operating and Extended Speeds

\[ V_{LO} \quad 210 \text{ KIAS (389 km/hr, 242 mph)} \]
\[ V_{LE} \quad 210 \text{ KIAS (389 km/hr, 242 mph)} \]

4. FUSELAGE

The fuselage has a constant circular cross section and is attached to the wing without any cutouts for the spar. A dropped aisle from just behind the cockpit through the lavatory provides stand-up access throughout the cabin.

The keyed cabin door is located on the forward left-hand side of the fuselage. It is hinged at the bottom and has six locking cams. The aircraft is certified with a single, passive pressurization seal. In addition, an acoustic seal inflates with service air when the door is closed and the left engine is running. An integrated handrail extends with the door when open to assist entering and exiting via the four-step airstair. A plug-type emergency exit is located in the lavatory on the right-hand side of the cabin.

The glass windshields are designed to meet bird resistance requirements of 14 CFR Part 25. Openable side windows are provided on both sides of the cockpit. Reinforced frame structures surround the main door opening, emergency exit, and windshields, providing structural continuity.

The nose section houses some avionics components and other equipment such as the nose wheel steering accumulator, landing gear pneumatic blow-down bottle, emergency braking bottle, and one of two baggage fire suppression bottles. Behind the composite radome is the high-resolution weather radar antenna.

A large, class C heated baggage compartment in the tailcone includes two optical smoke detectors and is accessed from the left side beneath the engine pylon through a door with integrated steps. A baggage fire extinguishing system, utilizing Halon, provides a high discharge bottle (HDB) in the tailcone and a metered discharge bottle (MDB) in the nose. The high discharge bottle is shared with the APU. The MDB automatically provides a slow, continuous flow of agent into the baggage compartment following use of the HDB.

The equipment bay in the tailcone houses the major components of the hydraulic, environmental, electrical distribution, engine and baggage fire extinguishing systems, and some avionics. External access to the equipment bay is provided through a door on the lower right-hand side of the tailcone. An area work light is provided. Additional equipment may also be accessed through removable panels inside the baggage compartment. The APU is located in and accessed through service doors in the aft part of the tailcone.
5. WING

The Citation Sovereign+ utilizes an advanced, moderately swept wing selected for its low aerodynamic drag and favorable approach and landing characteristics. The winglets were designed to improve the range and performance characteristics while maintaining the low aerodynamic drag.

A three-spar design gives the wing both structural integrity and high internal volume for its integral fuel tanks. It is designed to be damage tolerant and incorporates bonding and riveting techniques with doublers to provide increased skin thickness in highly loaded areas. A shallow drop in the center wing section permits attachment of the fuselage without interruption of the cabin cross-section. Composite fairings blend the wing and fuselage for minimum drag.

Electrically driven aluminum fowler flaps, arranged in three sections on each wing, and hydraulically driven spoilers, five sections per wing, are utilized for lift, reduction, drag, and roll control. Conventional ailerons are installed near the wing tips. The wing leading edges are anti-iced using engine bleed air. The winglets include navigation and anti-collision lights and static wicks.

6. EMPENNAGE

For pitch and yaw, the empennage incorporates the appropriate control surfaces and systems, including mach trim, rudder bias, and a single yaw damper. The horizontal stabilizer is designed with no dihedral and is trimable by an electrically driven actuator. The elevators each have anti-float tabs that are interconnected to the horizontal stabilizer. Engine bleed air protects the leading edge of the horizontal stabilizer from ice. A single rudder on the vertical stabilizer controls yaw with a servo type trim tab. A red flashing beacon is mounted on the top.

7. LANDING GEAR

The main and nose landing gear each use dual wheel assemblies. The landing gear retraction system is electrically controlled and hydraulically actuated. Each main gear is a trailing link type and retracts into the wing and belly fairing. The nose gear automatically centers while retracting forward into the nose and, when retracted, is enclosed by doors. Extension or retraction takes about eight seconds and all V-speeds associated with the gear equal 210 knots. Single chined tires are used on the nose gear for water and slush deflection. Squat switches on all three gear assemblies provide input to the squat switch logic that affects many systems. Two emergency gear extension methods are provided: a pneumatic blow-down system (independent bottle in nose) and manual gear release handles.

Multi-disc carbon brakes are installed independently on all four main gear wheels and are hydraulically actuated. Toe pedal pressure is transmitted via cables to the brake metering valve which regulates main hydraulic system pressure in proportion to pilot input. The metering valve also applies the brakes automatically during gear retraction to stop wheel spin.

Normal braking power is supplied by the main hydraulic system with back-up provided by a pneumatic system. A separate electrically driven hydraulic pump may be used on the ground only for maintenance and to set the parking brake when the engines are not running. A digital antiskid system provides individual wheel skid protection at any speed, and includes touchdown protection, a feature that prevents
7. LANDING GEAR (CONTINUED)

7° either side of center and the handwheel allows up to 81°. Combined, the nose wheel may be turned up to 85° on either side. A back-up nose wheel steering accumulator operates automatically if main hydraulic pressure is lost. Towing the aircraft requires that the nose gear torque links be disconnected to allow full castering and to prevent damage.

braking until the wheels are rotating. The brake back-up system uses a dedicated nitrogen bottle in the nose and, if used, does not provide antiskid protection.

Nose wheel steering is controlled through the rudder pedals and through a handwheel on the pilot's side ledge. The two systems are mechanically linked and are connected to the hydraulically powered rack-and-pinion steering system on the nose gear. The rudder pedals allow steering up to

8. POWERPLANTS

Two Pratt & Whitney Canada PW306D turbofan engines are installed, one on each side of the rear fuselage. This engine features a 4.4 to one, high bypass ratio, twin spool design with a damage resistant wide chord fan. Behind the fan, four axial and one centrifugal compressor stages lead to a high efficiency, low emission, through-flow combustor and five turbine stages. Two stage variable inlet guide vanes and bleed-off valves are controlled by the Full Authority Digital Electronic Controls (FADEC) to optimize compressor performance and engine operability. A forced exhaust mixer improves efficiency and reduces noise. Maximum static takeoff thrust at sea level is flat rated to 5,907 pounds (26.28 kN) up to 89°F (ISA+17.0°C). Advanced alloys and cooling technologies allow for 6,000 hours between overhauls.

Engine start is accomplished electrically through a starter-generator powered by any of the following sources: the aircraft's two batteries, the auxiliary power unit, the other running engine, or a ground power unit. Both low- and high-pressure engine bleed air is extracted for anti-ice and environmental requirements. Fan air is tapped for pre-cooling of bleed air. A continuous loop fire detection system monitors the nacelle area to detect and warn if a fire occurs. A two-shot fire extinguishing system is provided.

Dual FADECs provide automation and efficiency in engine management. The autothrottle system, when activated, will command the throttle levers to move to the optimal engine power setting for the phase of flight. When the autothrottle is not activated, software detents in the EICAS (Bug col- or changes for takeoff, maximum continuous, high speed cruise) permit optimal power settings based on ambient conditions for each phase of flight. The system also provides engine synchronization and exceedance protection.

Hydraulically actuated, target-type thrust reversers are attached to each engine. Deployment requires about one second. The effect of the thrust reversers on runway performance is accounted for under some conditions. Canted nozzles have been designed to vector the thrust outboard by 4 degrees and result in improved handling performance on wet runways.

AUXILIARY POWER UNIT (APU)

A Honeywell RE100[CS] auxiliary power unit is installed in the tailcone to provide supplemental environmental air and electrical power to the aircraft both on the ground and in flight. Its generator is identical to the ones used on the engines, but limited in amperage. It may be started at up to 20,000 feet and operated up to 30,000 feet. Fuel burn for the APU is about 110 to 125 pph.

The APU is not approved for unattended use. However, its electronic control unit monitors all parameters and will automatically shut down the APU if operating limits are exceeded. If fire is detected, the extinguisher (shared with the baggage compartment) will automatically discharge after eight seconds, if not activated sooner by the crew.
9. SYSTEMS

9.1 FLIGHT CONTROLS

The Sovereign+’s flight controls consist of dual control wheel columns and adjustable brake and rudder pedals. Unpowered pushrod and cable systems are used to actuate the rudder, elevators, and ailerons. In addition, a handwheel is provided on the pilot’s side ledge to control the hydraulically powered rack and pinion nose wheel steering system. The handwheel provides 81° of nose wheel deflection either side of center versus 7° for the rudder pedals. Stainless steel cables are used in all primary and secondary systems.

The one-piece horizontal stabilizer has right and left pilot-actuated elevators. Dual independent cable systems are routed from each pilot’s controls to the respective elevator with a mechanical disconnect handle on the pedestal. Stick shakers on each pilot’s control column plus an aural tone provide stall warning in addition to instrument indications.

The single rudder is connected to the rudder pedals by a cable system that is split through the non-containment zone. A single yaw damper is included to augment lateral stability throughout the flight envelope. A two-chamber rudder bias system is incorporated for automatic control enhancement during engine-out conditions. The bias system is connected to the rudder through a variable leverage actuator that automatically adjusts for airspeed, providing the greatest leverage below 125 knots.

There are five hydraulically actuated spoiler panels on each wing. The middle three panels modulate in conjunction with the ailerons to augment roll control. All five function as speed brakes in flight and after landing. The aileron surfaces are operated by the pilot’s yoke while the roll spoilers are hydraulically actuated and are operated by the copilot’s yoke. The two otherwise independent systems are interconnected in the cockpit by a mechanical disconnect system. Within the cable linkage to the ailerons, a ratio changer provides airspeed-dependent variable mechanical advantage to the pilots for moving the control surfaces at different airspeeds. At high airspeeds the force to move the yoke is reduced by approximately 30 percent.

All trim is electrically controlled. The rudder trim knob and the split aileron trim switches (both on the pedestal) activate motors to change the base position of their respective servo tabs. Split elevator trim switches on each yoke affect the electrically driven primary stabilizer trim actuator to change the angle of incidence of the horizontal stabilizer to any point between negative 6.9 and positive 1.2 degrees. A secondary electric actuator serves as back-up and is controlled by a guarded split switch on the pedestal. When the horizontal stabilizer moves, the interconnected anti-float tabs on each elevator also move to complement aerodynamic forces. A mach trim system is installed and is effective between 0.76 and 0.80 mach but is not required for dispatch. An integral control lock is provided for the ailerons, elevators and rudder.

Aluminum fowler flaps are arranged in three sections per wing and are controlled through a lever with detents on the pedestal. Asymmetric protection and soft-start are incorporated in the design with one electric motor driving the flaps to one of four positions: up, 7°, 15°, and 35°. Between 15° and 35° a signal is sent to the stabilizer trim actuator to automatically adjust to prevent pitch changes.

9.2 FUEL SYSTEM

Two integral fuel tanks, one in each wing, provide approximately 11,390 pounds (5,166 kg) of usable fuel. System operation is fully automatic with each engine receiving fuel from its respective wing tank. Crossfeed capability is provided and, when selected, enables both engines to receive fuel from a single tank. Tank to tank transfer is not possible.

Electric boost pumps located in the wing roots supply fuel during engine start, APU start, crossfeed, and as needed to supply the required fuel pressure. For each engine a two-stage engine driven pump provides fuel at low and high pressure. Low pressure fuel flows to the fuel/oil heat exchanger and the fuel filter. High pressure fuel is sent back to the primary and scavenge motive flow pumps in the wing tanks and to the hydromechanical metering unit (HMU). The HMU delivers fuel to the engine and to the variable guide vanes actuator and is fully controlled by the FADECs according to pilot demand and ambient conditions. The fuel/oil heat exchangers eliminate the need for an anti-ice additive.

Fuel levels are monitored by an active probe system. Re-
9. SYSTEMS (CONTINUED)

fueling is accomplished through over wing filler ports with locking caps or through the single point refueling / defueling system. Maximum fuel through the single point system is 1,600 gallons or 10,720 pounds (4,862 kg). To fill to maximum capacity, the over wing filler ports must be used.

9.3 HYDRAULIC SYSTEM

A closed-center, constant pressure 3,000 psi (206.8 bar) hydraulic system operates the landing gear, brakes, nose wheel steering, spoilers, and thrust reversers. Hydraulic pressure is supplied by two engine-driven pressure compensating pumps, one located on each engine. Either pump can supply enough flow to operate the system. An electrically powered pump located in the fairing behind the wing performs certain maintenance functions and is available only on the ground to set the brakes for parking. Ground connections to service the system are located on the right side below the engine.

9.4 ELECTRICAL SYSTEM

The Sovereign+'s electrical system incorporates split bus architecture with a bus tie, designed so that essential equipment operation will not be interrupted in the event of a single power source or distribution system failure.

Two 28 volt DC, 300 ampere, engine-driven starter/generators supply primary electrical power. A third, identical starter/generator is driven by the APU for supplemental power (up to 30,000 feet) but is limited to 275 amperes. Generator control units provide static regulation, overvoltage, feeder fault, and ground fault protection for each generator. Each engine also drives an alternator to support a dedicated AC system for electrical anti-icing of the windshield. Two Transformer Rectifier Units (TRUs) enable the alternators to provide backup DC power, if necessary. Power for the dual-channel FADECs is provided by aircraft power during initial engine start, then by engine driven permanent magnet alternators for normal operations.

Two 44 amp-hour, nickel-cadmium batteries are mounted inside access panels on each side of the fuselage just behind the wings to supply power for starting and emergency requirements. Power for all engine and APU starts are either provided by or assisted by the batteries to minimize the burden on the generators. A receptacle above the right side battery allows connection of an external power unit. Battery voltage, amperage, and temperature monitoring systems are provided.

One 1,200 watt static inverter supplies 110 volt AC power for the needs of the cabin including 6 outlets: one in the cockpit, one in the lavatory, and four in the cabin.

Exterior lighting consists of one red flashing beacon, three anti-collision strobes, two wing inspection lights, navigation lights, two taxi lights (located on the nose gear), and two landing/recognition lights (located at the wing roots).

9.5 PRESSURIZATION AND ENVIRONMENTAL SYSTEM

The pressurization and air conditioning systems utilize engine or APU bleed air through a single air cycle machine (ACM) to pressurize and air condition the cabin and defog the cabin and cockpit side windows. Pressurization is controlled by two outflow valves located in the aft pressure bulkhead. The pressurization controller automatically schedules cabin altitude and rate of change. Ozone converters are included in the bleed air system. The system provides a 7,230 foot (2,204 m) cabin altitude at 47,000 feet (14,326 m) (9.3 psi or 0.64 bar nominal maximum pressure differential). Sea level cabin altitude can be maintained to 25,230 feet (7,690 m).

Bleed air is conditioned as it passes through the ACM. Cold air from the ACM is distributed to the cabin and cockpit via overhead air ducts and outlets. A dual-zone temperature controller automatically maintains the cabin and cockpit temperatures separately. To maintain a comfortable cabin and cockpit temperature, cold air from the ACM is also mixed with warm bleed air and then is distributed to the dropped aisle, foot-level, torso, and sideledge air outlets. The cabin temperature can be controlled from the VIP seat location.

9.6 OXYGEN SYSTEM

A 76.0 cubic foot (2.15 m³) oxygen bottle, located in the belly fairing, is provided with a high pressure gauge and bottle-mounted pressure regulator. A second 76.0 cubic foot oxygen bottle is available as an option. Pressure demand masks
9. SYSTEMS (CONTINUED)

are provided for the crew while automatic-dropout, constant-flow oxygen masks are provided at each passenger seat and the lavatory. Oxygen flow to the cabin is controlled by a sequencing regulator valve for optimal passenger usage.

9.7 ICE AND RAIN PROTECTION

Engine bleed air is used for anti-ice protection of the engine inlets and the leading edges of the wing and horizontal stabilizer. Bleed air plumbing is monitored for leaks using eutectic salt sensing lines. The pitot tubes and static ports (mains and standby), and both angle of attack probes are electrically anti-iced using main DC power. The standby pitot tube and static ports also use emergency DC power for anti-icing. The repellant-coated glass windshields are also electrically heated, however, power for the windshields is provided by dedicated AC alternators, one on each engine, and is on whenever the engines are running. A windshield ice detection light is mounted on the glareshield and two wing inspection lights are mounted on the fuselage to assist in detection of ice buildup during night flights. The two-speed blower fan mounted in the nose avionics bay for avionics cooling is available to assist with rain removal from the windshields during taxi operations.
10. AVIONICS

FIGURE III — CITATION SOVEREIGN+ INSTRUMENT PANEL AND PEDESTAL LAYOUT
10. AVIONICS (CONTINUED)

10.1 GENERAL

The Garmin G5000 system is the featured avionics suite on the Sovereign+. It includes an integrated Flight Director/ Auto-pilot and Electronic Flight Instrument System (EFIS) utilizing three fourteen-inch (diagonal) high-resolution Liquid Crystal Displays (LCD) in widescreen, landscape orientation. The two outer displays are Primary Flight Displays (PFDs) and the centrally located Multifunction Display (MFD) incorporates engine and systems information as well as detailed charts, moving map, synoptics, traffic, and TAWS functionality.

Four full-color, touchscreen control panels provide the crew with the ability to control G5000 system features such as radio tuning, transponders, intercom, flight planning and display information as desired. The control panels also provide control of selected aircraft systems such as environmental control and external lighting. The outboard touchscreen controllers are primarily utilized for PFD control while the inboard two touchscreen controllers are primarily used for MFD control. In the unlikely event a touchscreen controller becomes inoperative, the remaining controllers can take on additional control responsibility.

Two complete crew stations are provided with dual controls including control columns, adjustable rudder pedals, and brakes. The crew seats are fully adjustable and include five-point restraint harnesses.

LED illuminated panels, instrument floodlights, and blue-white background lighting are provided for all cockpit instruments and switches. Illuminated LED pushbutton switches, overhead map lights and floodlights are also provided. The emergency oxygen system provides two pressure demand masks with microphones for the crew members. Circuit breakers are installed on circuit breaker panels located on the pilot’s and copilot’s sidewalls.

10.2 INSTRUMENT AND CONTROL PANELS

The instrument layout includes a tilt panel below the vertical instrument panel across the width of the cockpit. The tilt panel improves visibility of components mounted low in the panel. Oxygen mask stowage has been incorporated in the lower sidewall.

A. Installed on Left-Hand Panel (pilot):
   - Touchscreen LCD Control Panel
   - Primary Flight Display (PFD)
   - Secondary PFD Controller

B. Installed on Right-Hand Panel (copilot):
   - Touchscreen LCD Control Panel
   - Primary Flight Display (PFD)
   - Secondary PFD Controller

C. Installed on Center Panel:
   - Multi-Function Display (MFD)
   - Dual Touchscreen LCD Control Panels
   - Electronic Standby Flight Display (ESFD)

D. Installed Beneath Glareshield:
   - Flight Guidance Panel (FGP)

E. Installed on LH Tilt Panel:
   - Electrical Power Panel

F. Installed on RH Tilt Panel:
   - Anti-Ice/De-Ice Panel
   - Landing Gear Control Panel

G. Installed on Pedestal:
   - Engine power levers - Autothrottle assembly
   - Flap control
   - Speed Brake Control Lever
   - Pressurization/Environmental Panel
   - Engine Control/Start Panel

H. Installed in Overhead:
   - Lighting Control Panel
10. AVIONICS

10.3 AVIONICS

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

A. FLIGHT DISPLAYS

The Garmin G5000 avionics system in the Citation Sovereign+ features three fourteen-inch (diagonal), widescreen-format liquid crystal displays (LCDs). Two Primary Flight Displays (PFDs) are located on the pilot’s and copilot’s instrument panels, and one Multi-Function Display (MFD) is located on the center panel. In addition to flight display information, the PFDs can display an inset window with moving map, Terrain Awareness Warning System (TAWS), and Traffic Collision Avoidance System (TCAS) imagery. Color-coded Crew Alerting System (CAS) messages are displayed on the PFD. The MFD displays detailed moving map, terrain, traffic, and weather information as well as a dedicated engine and systems information window. Display of electronic charts and taxi diagrams with aircraft position shown is included. (Applicable subscription services are the responsibility of the Purchaser.) In addition, aircraft system synoptic diagrams are available for display on the MFD. The PFDs and the MFD can operate in full-screen or split-screen mode.

B. SYNTHETIC VISION TECHNOLOGY

Garmin Synthetic Vision Technology (SVT) is included. The system presents terrain and obstacle information on the PFDs in a dynamic, three-dimensional format, providing for increased situational awareness. Airports, runways, heading, traffic, color-coded terrain alerts, and a flight path indicator are displayed on the SVT presentation.

C. TOUCHSCREEN CONTROL PANELS

Four full-color, touchscreen LCD control panels provide the primary user interface with the G5000 system. Two control panels are located on the center pedestal for MFD control, and two additional panels occupy positions outboard of each PFD for PFD control. The control panels provide pilots with the ability to arrange and tailor display information, tune communication and navigation radios, and manage specific aircraft systems. Multiple reversionary modes provide for control redundancy.

D. AUTOMATIC FLIGHT CONTROL SYSTEM

The G5000 system includes a full-featured Automatic Flight Control System (AFCS) that supports single flight directors and a three-axis autopilot. Multiple computational paths in the system provide for a high level of redundancy. The AFCS also provides yaw damping functionality. Pilot control is provided through a single AFCS mode controller centrally located in the glareshield. The AFCS integrates with the autothrottle system and includes an Emergency Descent Mode that provides automatic aircraft descent to 15,000 feet should the aircraft cabin experience depressurization at high altitude.

E. ATTITUDE HEADING REFERENCE SYSTEMS (AHRS)

Two Litef LCR-100 gyrocompassing Attitude Heading Reference System (AHRS) computers are installed to supply attitude, heading, and flight dynamics information to the flight control and display system.

F. INTEGRATED AVIONICS UNITS

Dual Integrated Avionics Units include Global Positioning System (GPS) Wide Area Augmentation System (WAAS) receivers, Very High Frequency (VHF) communication radios, VHF navigation radios, and glideslope receivers in addition to supporting input/output processing, aural alert generation, and flight director functions.

G. DISTANCE MEASURING EQUIPMENT

Dual scanning Distance Measuring Equipment (DME) units are installed to provide DME information to the pilots as well as to provide scanning DME/DME input capability for the Flight Management Systems.

H. FLIGHT MANAGEMENT SYSTEMS

Dual Flight Management Systems (FMS) provide extensive navigation and flight planning capabilities as well as basic performance calculations. Supported navigation capabilities include the following (among others):

- Enroute and terminal operations
10. AVIONICS (CONTINUED)

- Precision and non-precision approach operations, including LNAV/VNAV and Localizer Performance with Vertical Guidance (LPV) approaches

The FMSs calculate aircraft position based upon GPS/WAAS, as well as scanning DME/DME input. (Applicable FMS database subscription services are the responsibility of the Purchaser.)

I. WEATHER RADAR

A Garmin GWX 70 weather radar system with a 12-inch antenna is included. Solid-state electronics (i.e. no magnetron) and a transmitter power of 40 Watts provide for improved safety and reliability compared with traditional radar systems having higher output power. WATCHTM automatic range limiting, vertical scan capability, ground mapping, altitude compensated tilt, manual gain control, ground clutter suppression, Doppler turbulence detection capability in rain cells, and weather target alerting are included.

J. TRAFFIC COLLISION AVOIDANCE SYSTEM (TCAS II)

A Garmin TCAS II system is included, providing traffic advisories and resolution advisories. This system is compliant with Change 71 requirements.

K. TERRAIN AWARENESS WARNING SYSTEM (TAWS)

The G5000 system includes a Class A Terrain Awareness Warning System (TAWS). The TAWS function is allocated to the flight display units, providing weight and hardware resource savings as well as increased redundancy and availability. Reactive wind-shear alerting capability is also included.

L. TRANSPONDERS WITH ADS-B OUT CAPABILITY

Dual Mode S transponders with antenna diversity and 1090 MHz Extended Squitter (ES) Automatic Dependent Surveillance - Broadcast Out (ADS-B Out) transmission capability in accordance with FAA TSO-166B are included. The transponders meet European Mode S mandates for Enhanced Surveillance (EHS).

M. STANDBY INSTRUMENTATION

An Electronic Standby Flight Display (ESFD), powered by the emergency bus and having its own backup battery provides standby airspeed, attitude, heading, altitude, and VOR/ILS navigation information.

N. RADIO ALTIMETER

A radio altimeter is included with the Aircraft for PFD display and in support of TCAS II and TAWS A.

O. COCKPIT VOICE RECORDER

A Cockpit Voice Recorder (CVR) is included with the aircraft. The CVR will also record Controller-Pilot Data Link Communications (CPDLC) when equipped with an applicable data-link system.

P. EMERGENCY LOCATOR TRANSMITTER

A 406 MHz Emergency Locator Transmitter (ELT) with navigation interface is installed. (Note: Some authorities may not permit the use of navigation interface capability.)

Q. MAINTENANCE DIAGNOSTICS

The G5000 system includes the capability to record specific maintenance diagnostic information, which can be reviewed on the MFD while on the ground and downloaded for review off the Aircraft. In addition, the Sovereign+ incorporates full time data storage through a Cessna Aircraft Recording System (AReS). AReS records useful data during the previous 500+ operating hours in non-volatile memory for advanced troubleshooting and analysis by systems specialists from the Seller Service and Support network.

Purchaser agrees that Seller has a perpetual license to use all information contained in the Aircraft recording and/or diagnostic system for any reason, including maintenance and accident investigation. Purchaser expressly provides Seller with licensed permission to download, use, and/or read such information at any time. Purchaser further agrees this perpetual license runs with and is automatically transferred with the title to the Aircraft and is binding on any and all subsequent purchasers of the Aircraft.
R. COCKPIT VOICE/DATA SATELLITE TRANSCEIVER (IRIDIUM) – GARMIN

Single-channel Iridium satcom system to enable voice calling capability via crew headsets as well as specific cockpit data communications. Available data communication services include request/response-based Garmin Connext Worldwide Weather with graphical and text weather services (where available), sending and receiving of in-flight text messages, aircraft position reporting, and in flight transmission of specific aircraft diagnostics data to ground based maintenance/support operations, enabling remote support prior to landing. Seller will cover costs associated with aircraft diagnostics data transmission through the Iridium satcom system (GSR56) for an introductory period of 2 years from the date of delivery of a new Citation Sovereign+. Subscription/Data charges for other services associated with the Iridium satcom system still apply.
11. INTERIOR

11.1 GENERAL

The Citation Sovereign+ cockpit has been designed for maximum comfort on long flights. The flight compartment bulkhead location has been designed to easily accommodate crew members in the 95th percentile.

The cabin is separated from the flight compartment by a closet and refreshment center. A one-piece half-length cockpit curtain is mounted on the RH forward side of the cabinets and may be pulled across the aisle and fastened on the LH side. The cabin is approximately 25 feet 3 inches (7.70 m) long and extends from the flight compartment dividers to the aft pressure bulkhead. The constant section of the cabin provides a continuous width of 66 inches (1.68 m) measured softgoods to softgoods. A dropped aisle with indirect lighting extends aft from the cockpit divider to the aft wall of the lavatory and provides a cabin height of 68 inches (1.73 m) measured softgoods to softgoods. All passenger seats are equipped with seat belts, a shoulder harness strap with inertia reel, and an overwater life vest stored nearby.

Bagged soundproofing and insulation are consistent with this category of aircraft, its operating speeds, and environment. Certified burn-resistant materials are used throughout the cockpit and cabin.

Fifteen elliptical windows with pleated electric window shades allow generous natural lighting throughout the cabin and lavatory. A drop-down, constant-flow oxygen mask is furnished for each passenger. General LED lighting with variable adjustment settings, dropped aisle LED lighting, and entrance and emergency exit lights are also provided in the passenger cabin.

The aft lavatory has an externally serviceable flushing toilet (non-belted) and is separated from the cabin by sliding divider doors. It includes a vanity sink with temperature controlled water and numerous storage compartments. Within the lavatory a large centerline closet accommodates several hanging clothes bags, coats, briefcases and additional storage for passenger amenities.

11.2 CABIN

The cabin supports a variety of seating configurations. The standard arrangement accommodates nine passengers in a double-club with a single forward side-facing seat just aft of the refreshment center. The eight pedestal seats track forward and aft 7 inches (.18 m) and laterally 4 inches (.10 m) on the seat base with 360 degree swiveling capability. These seats recline to an infinite number of positions including full berthing. All passenger seats are equipped with seat belts, an inertia reel shoulder harness, and an overwater life vest stored nearby.

Included in the typical interior offering are the following:

- A left hand coat closet forward of the cabin entry door with navigation chart, flight manual, fire extinguisher, and briefcase storage and a 12.1” display;
11. INTERIOR (CONTINUED)

- A right hand refreshment center with hot and cold beverage capability, large ice drawer, numerous storage areas, large trash receptacle, glassware storage capability, microwave oven option and provisions for ample catering;
- Eight pedestal mounted seats with full berthing, swivel and pedestal tracking features;
- Four executive tables with ample work area;
- The customer will be provided with one iPad that includes the new Clairity Wireless Application (which can also be installed on the customer’s personal device). The Clairity Wireless system provides passengers with VIP functions such as light and temperature control as well as audio, video, and moving map entertainment. The VIP functions are also available in a VIP switch panel at the refreshment center.
- Axxess II Iridium Satellite Telephone – Includes two Iridium satellite telephone channels. The system offers PBX functionality, including call waiting, call forwarding, and conference calling capability. Service charges apply.
- Indirect/accent lighting in the continuous dropped aisle;
- Six individual Universal 110 VAC outlets to operate various personal electronic devices (four in the cabin, one each in the cockpit and lavatory);
- An aft lavatory with externally serviceable flushing toilet (non-belted), a vanity sink with running, temperature controlled water and numerous storage compartments;
- A large centerline closet to accommodate hanging clothes bags, coats, briefcases or additional storage for passenger amenities, as well as designated storage areas for optional life rafts; and
- A full range of fabrics, leathers, carpets, laminates, selected wood veneers and metal finishes are available to custom configure the interior furnishings to meet a wide variety of customer tastes.

11.3 BAGGAGE COMPARTMENTS

The Sovereign+ has forward and aft baggage storage closets in the cabin to accommodate passengers’ carry-on luggage and coats. The following limits apply:
- Forward coat closet - 123 lb (55.8 kg), 8 ft$^3$ (0.23 m$^3$)
- Aft bulkhead closet - 312 lb (141.5 kg), 27 ft$^3$ (0.76 m$^3$)
- Combined total - 435 lb (197.3 kg), 35 ft$^3$ (0.99 m$^3$)

In addition, a heated baggage compartment with a coat rod is located in the tailcone subject to the following limits:
- 1,000 lbs (453 kg), 100 ft$^3$ (2.83 m$^3$) total
- Floor loading limit - 150 lb (68.0 kg) per ft$^2$
- Coat rod - 50 lb (22.7 kg), part of the total limit

The compartment is located on the left hand side and is accessible through a lockable door with an integral step. A toggle switch is recessed into the door frame to control the baggage compartment lights. If inadvertently left on, the lights will turn off automatically when the door closes.

12. EXTERIOR

Distinctive exterior styling featuring polyurethane paint in a variety of colors is provided.
13. ADDITIONAL EQUIPMENT

- Pitot Covers
- Static Discharge Wick Covers
- Engine Inlet and Exhaust Covers
- Thrust Reverser Stow Locks
- Emergency Door Ground-Locking Pin
- Center Aisle Carpet Assembly
- Interior Cleaning Kit
- Six Umbrellas
- Cargo Net
- Jack Pad Adapters
- Main Landing Gear Jacking Adapters

14. EMERGENCY EQUIPMENT

- Fire Extinguisher in Cockpit and Cabin
- Individual Overwater Life Vests
- Crew and Passenger Oxygen
- Emergency Exit Lights
- Emergency Lighting Battery Packs
- First Aid Kit
- Flashlight (two D-cells)
- Water Barrier

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
- Weight and Balance Report
- Equipment List
- Pilot’s Operating Manual
- Abbreviated Procedures Checklist
- Interior Components Operations Manual
- Log Books (Aircraft and Engines)
- Maintenance Manual (Airframe) *
- Illustrated Parts Catalog (Airframe) *
- Wiring Diagram Manual (Airframe) *
- Interior Maintenance Manual *
- Component Maintenance Manual *
- Structural Repair Manual *
- Nondestructive Testing Manual *
- Illustrated Tool and Equipment Manual *
- Maintenance Manual (Engine) **
- Illustrated Parts Catalog (Engine) **
- Service Bulletins and Service Letters (Engine) **
- Maintenance Manual (APU) **
- Illustrated Parts Catalog (APU) **
- Service Bulletins and Service Letters (APU) **
- Passenger Information Cards
- Additional Miscellaneous Information Concerning Engine and Airframe Support

Seller will provide technical manual revisions for documents published by Seller for five years beginning from the start date of airframe warranty. Service Bulletins, Service Letters, and Instructions for Continued Airworthiness documents provided via www.txtavsupport.com.

* These publications are provided via Windows based computer Download or Online, and via the Apple iPad.
Note: Registration at www.txtavsupport.com required, up to 4 additional user access available.

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

16. COMPUTERIZED MAINTENANCE RECORD SERVICE

Seller will provide an online computerized maintenance record service for one full year from the date of delivery of a Citation Sovereign+ 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 Sovereign+ Aircraft Limited Warranty which covers the aircraft, other than Pratt & Whitney Canada (P&WC) engines and associated engine accessories and the Honeywell auxiliary power unit (APU) and associated APU accessories which are separately warranted, is set forth below. Seller specifically excludes vendor subscription services and the availability of vendor service providers for Optional, and Customer Requested Equipment (CRQ) from Seller’s Limited Aircraft Warranty. Following Seller’s Limited Warranty, the engine and engine accessory warranty of P&WC and the APU and APU accessory warranty of Honeywell is set forth. All warranties are incorporated by reference and made part of the Purchase Agreement.

All warranties are administered by Seller’s Citation Warranty Department.

17.1 CESSNA CITATION SOVEREIGN+ LIMITED WARRANTY (LIMITED WARRANTY)

Seller expressly warrants each new Citation Sovereign+ Aircraft (exclusive of engines and engine accessories supplied by P&WC and APU and APU accessories supplied by Honeywell which are covered by their separate warranty), including factory-installed avionics and other factory-installed optional equipment to be free from defects in material and workmanship under normal use and service for the following periods after delivery:

(a) Five years or 5,000 operating hours, whichever occurs first, for Aircraft components manufactured by Seller;

(b) Five years or 5,000 operating hours, whichever occurs first, for Garmin Standard and Optional Avionics;

(c) Five years or 3,000 hours, whichever occurs first, for other Standard Avionics and Optional Avionics, Actuators, ACMs, Brakes, GCUs, Oleos, Starter Generators, Valves, Windshields, and Vendor items including engine accessories supplied by Seller unless otherwise stated in the Optional Equipment Selection Guide;

(d) Two years for Interior Furnishings and Paint;

(e) One year for Customer Requests (CRQs);

Any remaining term of this Limited Warranty is automatically transferred to subsequent purchasers of the aircraft.

Seller’s obligation under this Limited Warranty is limited to repairing or replacing, in Seller’s sole discretion, any part or parts which: (1) within the applicable warranty period and 120 days of failure, (2) are returned at the owner’s expense
to the facility, where the replacement part is procured, whether through Textron Aviation Service Parts & Programs or a Textron Aviation-owned Citation service facility or a Citation service facility authorized by Seller to perform service on the aircraft (collectively “Support Facility”), (3) are accompanied by a completed claim form containing the following information: aircraft model, aircraft serial number, customer number, failed part number and serial number if applicable, failure date, sales order number, purchased part number and serial number if applicable, failure codes, and action codes, and (4) are found by Seller or its designee to be defective. Replacement parts must be procured through a Support Facility and 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 Textron Aviation-owned Citation service facility or a Citation service facility authorized by Seller to perform service on the aircraft without charge for parts and/or labor for removal, installation, and/or repair. All expedited freight transportation expenses, 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 Textron Aviation-owned and Textron Aviation-authorized Citation service facilities will be furnished by Seller upon request.)

This Limited Warranty applies to only items detailed herein which have been used, maintained, and operated in accordance with Seller 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, accident, or neglect; to items that have been installed, repaired, or altered by repair facilities not authorized by Seller; or to items that, in the sole judgment of Seller, have been installed, repaired, or altered by other than Textron Aviation-owned service facilities contrary to applicable manuals, bulletins, and/or other written instructions provided by Seller 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, exposure, and neglect.

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. SELLER SPECIFICALLY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE ABOVE-MENTIONED REMEDIES OF REPAIR OR REPLACEMENT ARE THE ONLY REMEDIES UNDER THIS LIMITED WARRANTY. SELLER 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. SELLER 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. THIS LIMITED WARRANTY SHALL BE CONSTRUED UNDER THE LAWS OF THE STATE OF KANSAS AND ANY DISPUTES AND/OR CLAIMS ARISING THEREFROM SHALL BE EXCLUSIVELY RESOLVED IN THE STATE AND/OR FEDERAL COURTS LOCATED IN WICHITA, KANSAS. THE PARTIES HERETO CONSENT TO PERSONAL JURISDICTION IN THE FORUM CHOSEN.

17.2 NEW ENGINE WARRANTY

The following is an outline of the Pratt & Whitney Canada (P&W), warranty for new PW306D engines.

P&W warrants that at the time of delivery all parts of a new engine comply with the relevant specification and 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 3,000 engine operating hours (EOH) or Five
17. LIMITED WARRANTIES (CONTINUED)

(5) years, whichever occurs first. Notice of warranty defect must 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.

Application

This 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 parts found to be defective due to a defect in material and/or manufacturing workmanship (including resultant damage to the engine) within 3,000 EOH or 5 years, whichever occurs first. P&WC will pay reasonable engine removal and reinstallation costs and reasonable transportation costs (excluding insurance, duties, customs brokerage charges and taxes) to and from a facility designated by P&WC, Warranty Administration.

Extended Coverage

After expiration of new engine warranty, P&WC will provide commercial support to assist an operator in the event of extensive damage to an engine resulting from a 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 engines 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, improper maintenance, normal wear, 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. 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 (01RD4)
Pratt & Whitney Canada
1000 Marie Victorin
Longueuil, QC J4G 1A1
Canada

17.3 SUMMARY OF HONEYWELL APU WARRANTY

The following is an outline of the Honeywell warranty for the new RE100[CS] APU.

Each RE100[CS] APU sold for installation as original equipment on new aircraft will, at the time of delivery to the aircraft operator, be free from defects in material and workmanship and shall conform to the applicable specifications. Warranty shall expire after five (5) years or 2,500 APU operating hours, whichever occurs first.

The above APU warranty is provided as a general description only. Specific terms and conditions are available through Honeywell (Garrett Division) or Seller.

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

Honeywell Engines
Post Office Box 29003
Phoenix, Arizona 85038-9003
18. CITATION SOVEREIGN+ CREW TRAINING AGREEMENT

Training will be furnished to First Retail Purchaser (hereinafter called the “Purchaser”), subject to the following:

1. A crew shall consist of up to two (2) licensed pilots with current private or commercial instrument and multi-engine ratings and a minimum of 1,500 hours total airplane pilot time and up to two (2) mechanics with A&P licenses or equivalent experience.

2. Training shall be conducted by Seller or by its designated training organization.
   a. A simulator shall be utilized which is FAA certified to provide training for the CE-680 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 Purchaser, shall be conducted in the Purchaser’s aircraft.
   d. Location of training to be Wichita, Kansas, 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:
   a. Flight training to flight proficiency in accordance with Trainer’s standards aimed toward type certification of two (2) Captains under applicable Federal Air Regulations not to exceed five (5) total hours for the two (2) pilots.
   b. Flight simulation training to simulator proficiency in accordance with Trainer’s standards but not to exceed fifty (50) total hours for both pilots.
   c. Ground School training for each pilot and theoretical classroom instruction for each mechanic in accordance with Trainer’s standards.

4. Purchaser shall be responsible for:
   a. Transportation of crew to and from training site and for living expenses during training.
   b. Providing an interpreter during the course of training for any of Purchaser’s crew 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 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 Seller the retail rate for training in the event of training before actual sale/delivery, if sale/delivery is cancelled.
   h. Due to TSA regulations, all current United States citizens must present a current United States passport before training will be able to commence.

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 by Purchaser if crew fails to appear for scheduled training, except for reasons beyond its 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 cancel-
18. CITATION SOVEREIGN+ CREW TRAINING AGREEMENT (CONTINUED)

lation Seller shall reschedule training for the next available class.

6. Neither Seller nor Trainer shall be responsible for the competency of Purchaser’s crew during and after training. Trainer will make the same efforts to qualify Purchaser’s crew as it makes in training of other Citation Sovereign+ crews; however, Seller and Trainer cannot guarantee Purchaser’s crew shall qualify for any license, certificate or rating.

7. Neither Seller nor Trainer shall be responsible for any delay in providing training due to causes beyond its or their reasonable control.

8. 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) 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 and address to the training organization for the purpose of coordinating training.