

GE H75-100 Engine STC Information Sheet

STC# SA01902CH, Textron King Air C90A, Nextant Model G90XT aircraft, one time use \$15,000

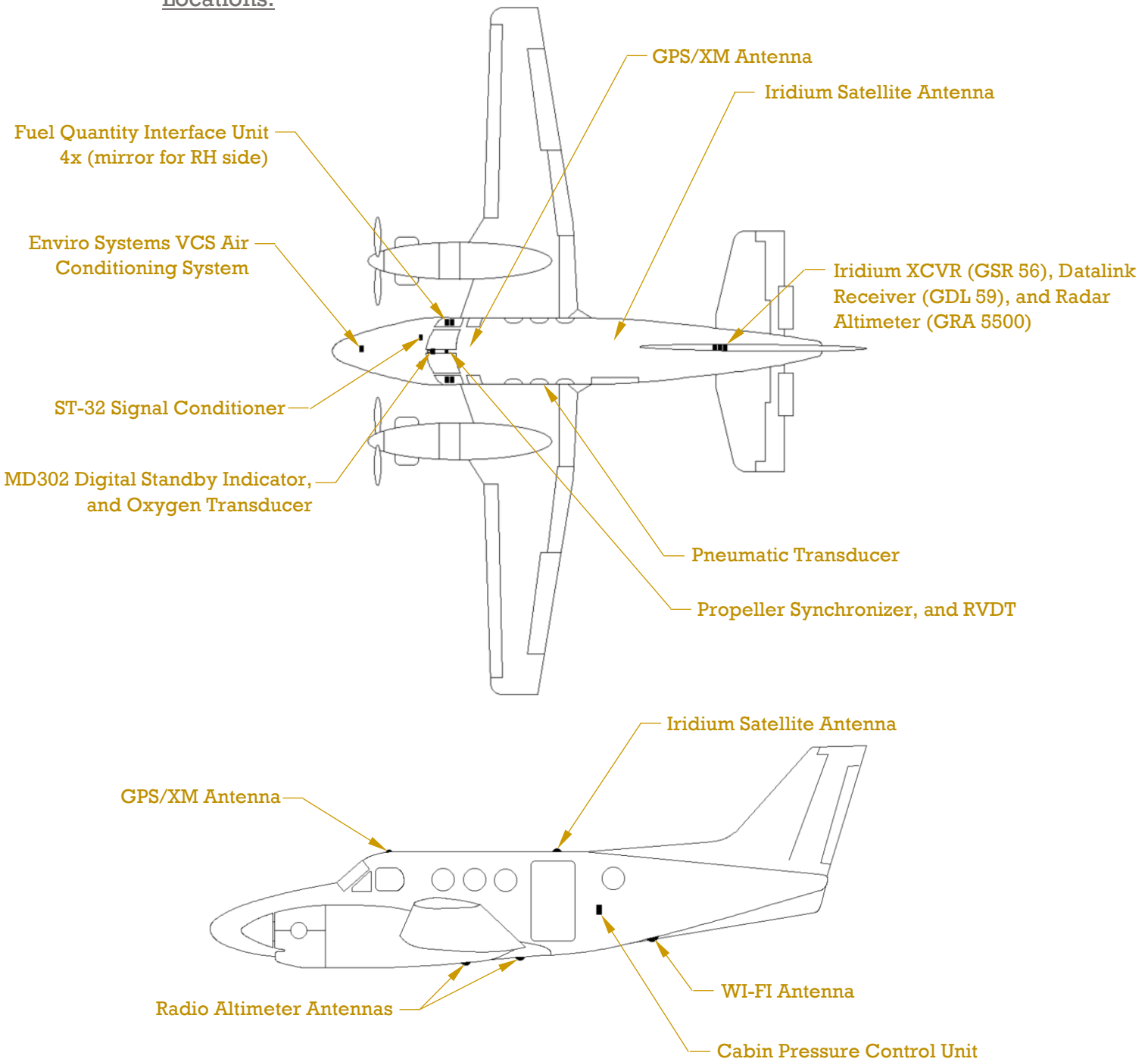
- STC# SA01902CH allows for:

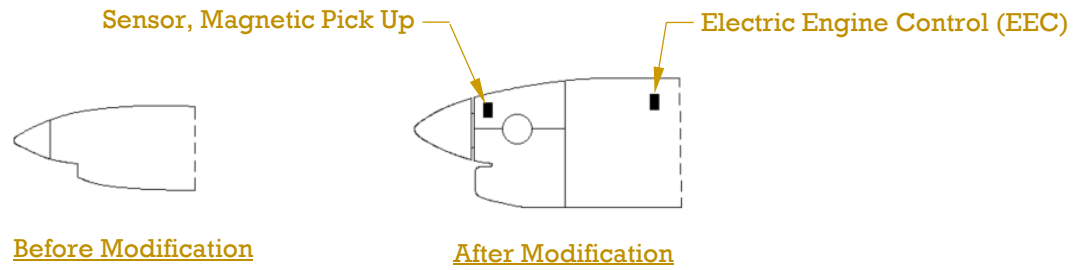
1. The replacement of existing Pratt & Whitney PT-6 engines with either of the two engines listed below:
 - A general electric H75-100 with an electro-mechanical fuel control, which operates through mechanical throttle cables.
 - H75-100 BC01E, which is an H75-100 except it has an electric fuel control and an electronic engine control (EEC). This engine is controlled electronically by means of an RVDT connected to the throttles.
2. Interfacing to the Garmin 1000, i.e. Engine Instrument Display configuration that is covered by this STC and, addition of other non-engine related gauges to the Garmin MFD.
3. The installation of MD302 Digital 3-1 Standby Instrument.
4. The upgrade of existing cockpit annunciators, switches, and lighting to LED.
5. The removal of the existing prop feather pump.
6. The installation of new exhaust stacks.
7. The necessary cowling modifications to facilitate H75-100 or H75-100E engine.
8. The installation of a new cabin pressure control system.
9. The installation of a vapor cycle air conditioning system which includes installing two cabin evaporator units.
10. The installation of a Garmin Radio Altimeter.
11. The installation of a Garmin TCAS I system.
12. The installation of a Garmin Wi-Fi Datalink system which includes maintenance data logging capabilities.
13. The installation of a Garmin GSR 56 Iridium Satellite Radio system interfaced to the Garmin (GDL 59) Wi-Fi Datalink system.
14. High & Low RPM propeller speed selection. In the event of a power loss this reverts back to high propeller speed.
 - Only applicable to H75-100 BC01E engines*
15. The replacement of existing propeller feather levers with guarded prop feather switches.
 - Only applicable to H75-100 BC01E engines*
16. The replacement of mechanical throttles to electronic power controls using RVDT connected to each throttle lever which sends electrical signals to an EEC.
 - Only applicable to H75-100 BC01E engines*
17. The installation of a propeller synchronizer system.
 - Only applicable to H75-100 BC01E engines*
 - Requires installing magnetic sensor on prop housing.
18. Garmin ground test "Demo Mode" – flight simulation.

- Aircraft Configurations (Equipment installed in table below):
 1. Basic installation with GE H75-100 engines.
 2. Basic installation with GE H75-100 BC01E engines with single lever power control, electronic engine fuel control and propeller synchronizer.

Equipment Description	Part number	QTY	Config
Electronic Engine Control (EEC)	517440-1	2	2
Sensor, Magnetic Pick Up	3015A	2	2
Propeller Synchronizer	P-8SP-1	1	2
Fuel Filter (LH)	90005-1743640-29	1	1, 2
Fuel Filter (RH)	90005-1743640-19	1	1, 2
Oxygen Transducer	APTE-420KBS-2500SG	1	2
Pneumatic Transducer	APTE-74-1000-25A	1	1, 2
Fuel Quantity Interface Unit	10818B02Y00	4	2
ST-32 Signal Conditioner	ST-32	1	1, 2
GPS/XM Antenna	CI-428-410	1	1, 2
Cabin Pressure Control Unit	52811-411 or 52812-411	1	1, 2
MD302 Digital 3-1 Standby Instrument	6420302-1	1	1, 2
Iridium Transceiver (GSR 56)	011-02268-00	1	1, 2
Iridium Satellite Antenna	CI490-1	2	1, 2
Datalink Receiver (GDL 59)	010-00666-00	1	1, 2
Radar Altimeter (GRA 5500)	010-00946-00	1	1, 2
Radar Altimeter Antenna	03-00378-00 or S67-2002	2	1, 2
Enviro Systems VCS Air Conditioning System	1150630-1, 1150680-1, 1150710-1, 1150720-1, 1150730-1, or 1150850-1	1	1, 2
Rotational Variable Differential Transducer RVDT, Single Channel	3A1351A	2	2

Locations:





- Pre-requisites:
 - The aircraft must have the following installed either before or in conjunction with this STC.
 - ✓ Garmin G1000 installed per STC (STC# SA01465WI-D).
 - ✓ Hartzell 4 blade straight prop installed per STC (STC# SA3593NM).
 - ✓ Luma Tech LED Annunciation system installed per AML STC (STC# SA02133SE).
- STC Data Package:
 - Letter of Authorization (LOA)
 - FAA STC Certificate
 - Master Data List (MDL)
 - Instructions for Continued Airworthiness (ICA)
 - Airplane Flight Manual Supplement (AFMS)
 - Weight and Balance Supplement
 - Electrical Load Analysis (ELA)
 - Wiring Diagrams
 - Structural/Installation Drawings