

Pro Line 21 System Information Sheet

STC# ST10959SC, Textron 400A, Please Contact Nextant Aerospace at 216-261-9000 or engineering@nextantaerospace.com for STC and Kit Pricing and Availability.

- STC# ST10959SC allows for:
 1. The upgrade of Collins Aerospace Pro Line IV Avionics System to Pro Line 21 Avionics System.
 2. The upgrade of the analog AHS-85E Attitude Heading Reference System (AHRS) to the digital Collins Aerospace AHS-3000A Attitude Heading System (AHS).
 3. The upgrade of the Collins Aerospace RTA-844 Radar to Collins RTA-854 Turbulence Detection Radar per Collins Aerospace STC ST01474WI-D in conjunction with this STC.

- Baseline Installations consist of removing obsolete Collins Aerospace Pro Line IV Cathode Ray Tube (CRT) Integrated Displays and installing:
 - 3 each: Pro Line 21 8" X 10" Flat Panel Liquid Crystal Displays (LCD).
 - Engine Instrument Display Integration (Pratt & Whitney JT15D-5).
 - Fuel Quantity Display Integration.
 - Upgrade of the existing Collins Aerospace FMC-5000 to the FMC-6000.
 - Replacement of the Master Warn/Master Caution Panel.

- Optional Installations:
 - Fourth LCD Panel as #2 Multi-Functional Display (MFD).
 - Collins TCAS 7.0 compliant upgrades to 7.1. Installation location is to be determined based on aircraft's existing system's locations.
 - XM Satellite WX Receiver.
 - Single or Dual IFIS-5000 Integrated Flight Information System (IFIS)
 - Williams FJ44-3AP Engine Instrument Display Integration. Engines MUST be installed under STC# ST02371LA.
 - Three separate TAWS installations are available. Two allow retaining existing aircraft TAWS.
 - FMS-6100 WAAS/LPV approaches.
 - Upgrade of existing incandescent bulbs to LED.
 - Midcontinent Instruments MD302 or Standby Attitude, Altitude and Airspeed Indicator installation
 - Synthetic Vision Reversionary System Upgrade.
 - CDU-6200 Upgrade. Requires removal of the RTU-870 units.
 - CMU-4000/VHF-4000 Datalink System with CPDLC.
 - Automatic Dependent Surveillance – Broadcast (ADS-B).
 - No External Annunciator Required.

- Aircraft Configurations (Equipment installed in table below):
 1. Aircraft equipped with Pratt & Whitney JT15D Engines.
 2. Aircraft equipped with William's FJ44-3AP Engines installed per STC# ST03271LA.

3. Aircraft equipped with William's FJ44-3AP Engines installed per STC# ST02371LA, and additional enhancements per this STC which will be termed as the Nextant "XTi plus" aircraft.

Equipment Description	Part number	QTY	Configurations
MSP850A	622-8330-003/004	2	1, 2, 3
VHF-422C/VHF-422A (only one required for installation)	822-1115-001 /622-7292-101	2	1, 2
ADC-850D**	822-0389-468	2**	1, 2, 3
VIR-432	622-7194-101	2	1, 2, 3
GPS-4000S	822-2189-010	2	1, 2, 3
DBU-5010E	822-3000-202	1	1, 2, 3
Radio Tuning Unit RTU-870T	622-9856-111/-131	2	2 (RK-28 only)
Radio Tuning Unit RTU-870C (for use without Flight ID)	822-1123-11	2	2
Radio Tuning Unit RTU-870C (for use with Flight ID)	822-1825-11	2	2
DAU-650	622-9344-001	1	1
SIA-850	622-9732-001/-002	1	1
ICC-4008	822-1029-001	1	1, 2, 3
Control Display Unit CDU-5000	822-0892-019	2	1, 2
Cursor Control Panel	822-1746-002	1(2)**	1, 2, 3
Adaptive Flight Display AFD-3010E	822-1753-450**	4	1, 2, 3
Display Control Panel DCP-3030	822-1828-002	2	1, 2, 3
Aux Battery	501-1228-04	1	1, 2, 3
Single Aux Battery	PS-835	1	1, 2
Fuel Flow Conditioner	PC920-2A-2000PH-2A-1 or PC920-3A-2000PH-2A-1	1	1 (RK-356 only), 2 (RK-28 only) (RK-49 and above)
Fuel Quantity Conditioner	10852B01Y00	1	1, 2, 3
Master Caution Panel	LT-4001-005 or LT-4001-010	1	1, 2, 3
DCU-3001C Data Concentrator Unit	822-2362-002 or 822-2362-004	4	1
DCU-3001C Data Concentrator Unit	822-2362-003 or 822-2362-004	2	2, 3
TDR-94D Transponder	622-9210-003/-004/-005/-006/-008 (without ADS-B) 622-9210-501 (with ADS-B)	2	1, 2, 3
TTR-4000 TCAS Processor (Optional)**	822-1294-002**	1**	1, 2, 3**
XM Weather Receiver XMNR-1000 (Optional)**	822-2031-002**	1	1, 2, 3**
File Server FSU-5010 (Optional)**	822-1543-201**	2**	1, 2, 3**
TAWS 8000 (Only without Computer, EGPWS, MK-V)	805-18000-001	1	1, 2, 3
Computer, EGPWS, MK-V (Only without TAWS 800)	965-0976-040-208-208	1	1, 3
FMC-6000	822-0868-123	2	1, 2, 3
Glareshield Annunciators	Ref wiring diagram 373-33-1200	--	2, 3
Glareshield Annunciators	Ref wiring diagram 373-33-1205	--	1
MD302 Standby Instrument	6420302-5 SW LEVEL V1.0.4	1	1, 2, 3
Computer, Synthetic Vision (SVC) (Optional)**	866-0232-010**	1**	1, 2, 3**
Video Interface Unit (VIU) (Optional)**	866-0232-060**	1**	1, 2, 3**
Module, Configuration (SVC) (Optional)**	822-3095-XX**	1**	1, 2, 3**
Control Display Unit CDU-6200 (Optional)**	822-1485-064/066**	2**	1, 2, 3**

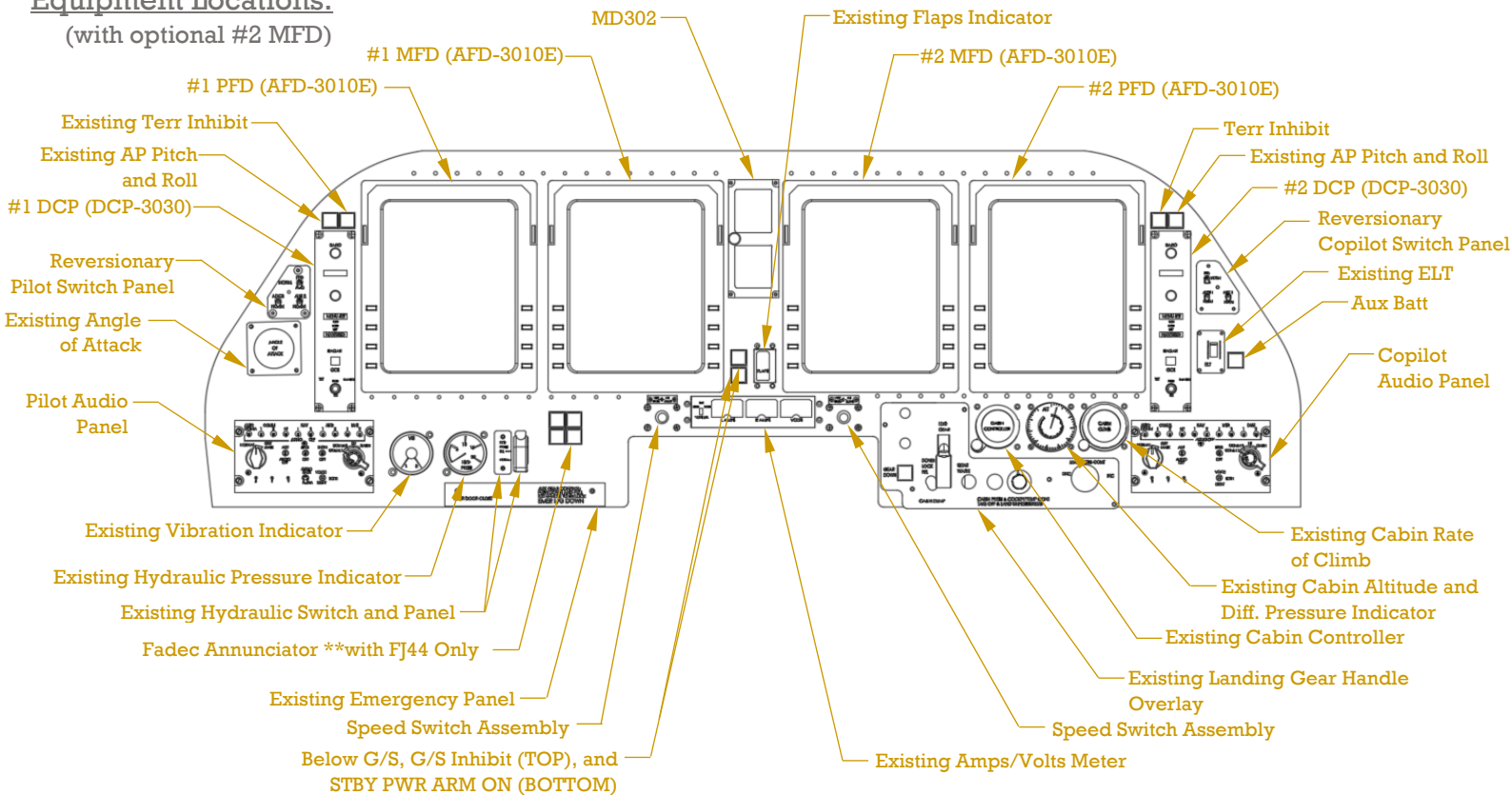
Equipment Description	Part number	QTY	Configurations
CMU-4000 Communication Management Unit (Optional)**	822-1739-003**	1**	1, 2, 3**
ECU-3000 Electronics Control Unit (Optional)** Used with AHS and FSU.	822-1200-999**	1**	1, 2, 3**
VHF-4000 VHF Transceiver (Optional)**	822-1468-390**	1**	1, 2, 3**
VHF Antenna (Optional)**	565-8280-42	1**	1, 2, 3**
Mode Select Panel (MSP)	622-8330-003	2	2
Course Heading Panel (CHP)	822-1280-002	2	2
AHC-3000A Attitude Heading Controller (AHC)	822-1378-001	2	1, 2, 3

** Optional Equipment.

*** Refer to STC data package for AFD-3010E part number configurations.

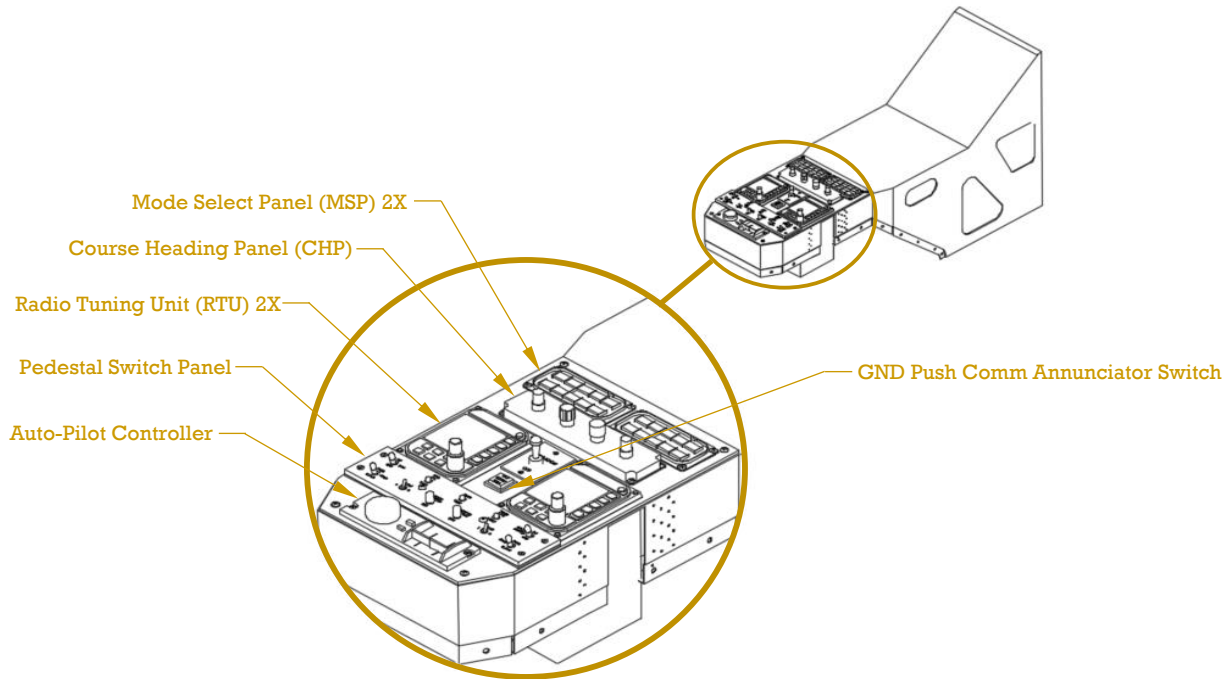
Equipment Locations:

(with optional #2 MFD)



Instrument Panel

View looking FWD



Pedestal

- Pre-requisites:
 - The aircraft MUST already have dual Collins AMS-5000 Avionics Management Systems installed prior to the incorporation of the Pro Line 21 STC.
 - This can be upgraded per Collins STC ST00485WI-D in conjunction with this STC.
- 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