vulcanair aircraft

A-VIATOR (AP68TP-600) STANDARD EQUIPMENT LIST

V15.05.18

IMPORTANT NOTE: this document is a general description of the aircraft equipment only. It is not a technical document and is to be used only for the purpose of generally describing the aircraft standard equipment. Vulcanair S.p.A. reserves its right to change the aircraft equipment at any time without any notice.

POWERPLANT AND PROPELLER

Engines:
Two Turbine Rolls Royce Model 250 B17/F, flat rated at 328 shp each.

Propeller:
Hartzell, Three Blade, Constant Speed Fully Reversible Propellers, Two
Propeller Spinners, Two
Hydraulic Propeller Governor, LH
Hydraulic Propeller Governor, RH

FLIGHT INSTRUMENTS AND INDICATORS

Magnetic Compass (Illuminated)

Mid-Continent Digital Standby Attitude Module (SAM) MD-302

Heated Pitot System, two

ELT switch remote controller

COCKPIT, FLIGHT AND GROUND CONTROLS

Dual primary Flight Controls

Landing gear, retractable electrohydraulic

Engine Control Pedestal mounted with adjustable friction

Flight Trim Controls:
Rudder: Mechanic wheel on Pedestal with Indicator
Stabilator: Mechanic wheel on Pedestal with Indicator
Aileron: Mechanic wheel with Indicator
Stabilator: Electric switch on control Wheel

Heavy Duty Brake System:
Pilot Toe Brake Cylinders
Co-pilot Toe Brake Cylinders
Parking Brake

Stall Warning System:
Stall Warning Horn
Heated Stall Detector

Main Wheels 6.50-8 8 Ply Good Year Tyre and Tubes, Two

Nose wheel 6.00-6 8 Ply Good Year Tyre and Tubes

Flap Position Electric Control

Retractable landing gear control lever

Emergency gear extension system control lever

Mic Button on Control Wheel

Microphone with Headset

Mic /Phone Jacks, ten

Automatic Emergency Locator Transmitter ELT , ELT 406 MHZ

Dimmer Light

Radio Light

Lighted Instruments

ELECTRICAL SYSTEMS

The electrical system consists of a 28 Volt DC power supply.
The system is powered by two 28 V, 150 A starter/generators and a 24 V lead battery with a 29 Ah capacity.
Power to all electrical equipment is supplied through three independent buses, two connected to the generators
and the third to the battery circuit.
External Power Supply Receptacle
Static Discharge Wicks

FUEL SYSTEM

The supply is divided in two separate and independent systems with cross feed capability. These are six interconnected tanks: four located in the wings with 386 lt (102 USG) total capacity and two, contained in the engine nacelles, with a 38 lt (10 USG) capacity. Total fuel capacity is 840 Litres (222 gallons USG).
The engines are gravity-fed with the help of two electro-pumps.
Two additional electro-pumps are installed as a back-up.

Permanent Electric Pump, Two

Auxiliary Electric Pump, Two

Individual Fuel Tank Quick Drains

Fuel Strainers

Fuel Filters

LIGHTING SYSTEMS

EXTERIOR LIGHTING:

Navigation Light LED

Recognition Lights Wing Tip, Two LED

Strobe Lights-Comet Flash Wing Tip, Two LED

Strobe Light Tail LED

Taxi Light (mounted on landing gear) LED

Landing Light (mounted on landing gear) LED

INTERIOR LIGHTING:

Map Light LED

Under-wing Courtesy Light (LH) LED

Cabin Reading Lights LED

Internally Lighted Switches

CABIN COMFORT SYSTEM

Cabin heating system

Cabin Fresh Air Vent with Ventilation Fan

Pilot/Co-Pilot Cabin Fresh Air Distribution Vents, Two

Pilot door (on LH side of fuselage)

Co-Pilot Door (on RC side of fuselage)

Main Cabin Door (on LH side of fuselage)

Rear Door Cargo/Passenger (on RH side of fuselage)

Soundproofing and Heat Insulation (in strategic locations in between the fuselage and the interior panels

EXTERNAL FEATURES

Standard paint scheme overall white with one stripe

Full Chemical Corrosion Protection

Tow Bar

Tie-Down Rings, Three

Jack Pads

Control Surface Lock Kit (Tail + Aileron)

Locks with Keys Cabin and Baggage Doors, Two

COCKPIT AND CABIN APPOINTMENTS

Speaker

Luggage Compartment

Pilot and Co-Pilot Seats reclining fore/aft and vertical adj.

Passenger Seats , Eight

Seat Belts, as required for each seat.

Wall to Wall Carpeting

Pilot and Co-pilot Storm Windows

Sunvisors, Two

24 Volt, 5 Amp Auxiliary Power Sockets, (Three)

Map Pockets, Two

Emergency Torch

First Aid Kit

Manual Fire Extinguisher

Pitot Tube Cover

Fuel Stick Gauge

PRODUCT SUPPORT DOCUMENTS

Flight Manual

Parts Catalogue

Maintenance Manual

MMEL

FCD

Vulcanair Limited Warranty

OEM Manufactures Limited Warranty

Aircraft Log Book

Engine Log Book, Two

Certificate of Airworthiness or equivalent if applicable

NEW GENERATION STANDARD AVIONICS PACKAGE AND COCKPIT
Increasing internal and external visibility and situational awareness.

Function	Q.ty	Proposed system
Auto Pilot 	01	**S-TEC 2100** The S-Tec 2100 is a roll and pitch autopilot system with an integrated yaw damper/trim function for the control on horizontal plane.. Main technical characteristics are: Heading select, VOR/LOC front and back course intercept and tracking. Control Wheel Steering; Altitude Hold with Altitude Trim Dual Mode - HDG/NAV or HDG/APR VOR/LOC/GS/REV/GPS Coupling with 3 Gain Levels VOR/LOC/GS/REV/GPS Course Deviation and NAV Flag Warning Vertical Speed Command in precise 100' increments Pitch Trim Annunciation GPSS Roll Steering Mode
DISPLAY 	02	**GDU 1050** The GDU 1050 provides a central display and user interface for the G950Nxi Integrated Cockpit System. The display is mounted flush to the aircraft instrument panel and is configured as Primary Flight Display (PFD). One is available to pilot, the second to co-pilot **Function flight instruments** Display of attitude (pitch and roll), rate of turn, slip/skid, heading, airspeed, altitude, and vertical speed information (PFD) Display of engine and airframe instrumentation (MFD) **Function navigation instruments** Display of position and ground speed Display of stored navigation and map databases Control and display of the HSI, Selected Heading and Selected Course (PFD) Area navigation functions using the determined position/velocity and stored navigation data Approach navigation functions and associated databases **Interfaces** Interfacing with the GIA 64W Integrated Avionics Unit (IAU) and other GDU 1050 Control and display of dual communications transceivers operating in the 118.00 to 136.975 MHz range in 8.33 kHz or 25 kHz frequency spacing Control and display of dual VOR/ILS receivers tuning from 108.00 to 117.95 MHz in 50 kHz increments Control and display of transponder(s) GTX 345, GDU 1050.
DISPLAY 	01	**GDU 1550** The GDU 1500 provides a central display and user interface for the G950Nxi Integrated Cockpit System. The display is mounted flush to the aircraft instrument panel and is configured as Multifunction Display (MFD)

	01	**GCU 475** The GCU 475 is the primary means of inputting information for flight planning. It provides alphanumeric, softkey and flight planning function keys used to interface with the G950Nxi system. It interfaces the GDU1550 and GDU1050 PFD through a RS232 serial link.
COM/NAV 	02	**GIA 64W** The GIA 63W is a microprocessor-based input/output Line Replaceable Unit (LRU) configured through the GDU 1050. The GIA 64W contains the following sub-assemblies: A main processor that interfaces with all LRUs in the G950 sub-system. A twelve channel parallel GPS receiver that simultaneously tracks and uses up to 12 satellites. The GIA64W includes a 15 channel WAAS certified GPS receiver. A VHF COM transceiver that provides tuning from 118.00 to 136.992 MHz in 25 kHz or 8.33 kHz spacing for 760 or 2280 channel configuration respectively. A VOR/ILS localizer receiver that provides tuning from 108.00 to 117.95 MHz in 50 kHz increments. An ILS glideslope receiver that provides tuning from 328.6 to 335.4 MHz as paired with the frequency tuned on the VOR/ILS localizer receiver.
AHRS 	2	**GSU 75 ADAHRS** The Garmin GSU75 ADAHRS (Air Data, Attitude and Heading Reference System) is a remote mounted device that provides flight altitude, airspeed, attitude and heading data for flight instrumentation. The GSU75 provides the following information in ARINC 429 format: • Aircraft Altitude and Airspeed • Aircraft Vertical Speed, Mach, and Air Temperature • Aircraft Heading, Pitch, and Roll • Aircraft Yaw, Pitch, and Roll rates • Aircraft Body-axis Accelerations • Rates of Change of Heading, Pitch, and Roll • Aircraft Accelerations Expressed in a Local Level Frame of Reference • Density Altitude • Pressure Altitude • Indicated Airspeed • True Airspeed. The GMU 44 magnetometer provides magnetic information to support the function of the GSU75.
	02	**GEA71B** The GEA71B is a micro-processor based input/output Line Replaceable Units (LRUs) used to monitor sensor inputs and drive annunciator outputs for airframe and engine systems. The unit interfaces with various sensors on the aircraft and communicates airframe and engine information via RS-485 digital interface to a GIA64W Integrated Avionics Unit. The GEA71B is a remote-mount LRU with no user controls or indicators. All user interface is accomplished through the MFD. The GEA71B converts sensor measurements to digital data that is communicated to the display device The GIA 64Ws then interface with the 2 GDU 1040 Primary Flight Display (PFDs) and , through the HSDB between PFD and MFD, the MFD shows engine instrumentation while the PFD normally shows airframe alerts provided by the GEA 71B. Engine/airframe instrumentation is also displayed on the PFD and/or MFD while the system is in reversionary mode. The PFD and MFD displays serve as the user interface for the GEA 71B. All configuration settings are controlled via software settings accessed by the MFD and PFD displays.

AUDIO PANEL 	02	**GMA 1360**
TRANSPONDER 	01	**GTX 345R** The Garmin GTX 345R rack mounted Mode S Transponder is a radio transmitter and receiver. Other all functions of model GTX33ES it adds new functions: **ADSB-In and TAS/ACAS traffic integration**: The GTX 345R includes receivers for both the UAT and the 1090 MHz frequency bands for all ADS-B In data reception capabilities. The GTX 345Rreceives ADS-B transmissions from other ADS-B Out equipped aircraft, ADS-R, and TIS-B information from ground stations. Traffic information received from ADS-B, ADS-R, and TIS-B transmissions supplies compatible ADS-B In data to PFD/MFDs to show to the pilot. **FIS-B Capabilities:** The GTX 345 receives FIS-B information from UAT ground stations in the United States. A direct line-of sight between the ground station and aircraft is necessary to receive FIS-B data. The GTX 345 supplies the data to the avionic displays showing the following information: • NOTAM (includes TFRs) • AIRMET • SIGMET • SUA • METAR • TAFs • PIREP • Winds/Temps Aloft • Regional NEXRAD • CONUS NEXRAD **Connext Bluetooth**: The GTX345 Connext interface allows communication with apps (i.e. Garmin Pilot and ForeFlight Mobile), while running on a PED. Connext works via the Bluetooth datalink to provide up-to-date, wireless information throughout the cockpit. Up to two Bluetooth connections are supported by the GTX345.

PICTURE FOR INFO ONLY INCLUDES SOME OPTIONAL EQUIPMENT

END OF DOCUMENT