CESSNA CORVALIS TTx

INTRINZIC™ Flight Deck
powered by Garmin
The purpose of this booklet is to introduce pilots to the INTRINZIC™ Flight Deck powered by Garmin.

Hardware and software orientation new to the Corvalis TTx will be introduced.

This booklet is not an all inclusive training document and should not be used as such by flight crews.

Training for specific Garmin applications for Cessna products is conducted by Cessna Pilot Training in Independence, Kansas

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Garmin Display Unit - GDU

GDU 1400W (Widescreen)

• High Resolution – 1280 x 800
• Internal cooling fans
• LED Backlighting – Increased reliability; better dimming capabilities
  “Clean panels” – no knobs or buttons on the sides
• Context-sensitive line select keys at the bottom
• Aspect ratio (16:19) optimized for Synthetic Vision display
• Full screen or split screen formats
• Clear presentation in reversionary mode
Garmin Touch Controller - GTC

- **GTC 570**
  - Operation similar to personal mobile devices
  - Back Icon – ability to return to previous screen/cancel entry at any time
  - Home Icon – ability to go to the main menu screen
  - Frequency information always available (single touch to “flip”)
  - Easy list scrolling by sliding a finger
Garmin Marker Audio - GMA

- GMA 36
- Programmed by touching the GTC
  - or use Volume Knob and dual Concentric Knobs
- Digital Audio Processor
Garmin Marker Audio – GMA

Intercom operation

Touch – Intercom
Opens Intercom Page

Touch the connection you want to change
Garmin Mode Controller - GMC

- GMC 720
- AFCS Controller
- Turbine-like Style and Location
- Larger Keys
- Altitude Sync
- Vertical Mode Adjustment Wheel
- Layout of Keys Corresponds to AFCS Status Box Annunciation Layout on PFD
Garmin Control Unit - GCU

- GCU 275
- PFD Control Unit
- Larger Keys
- BARO Knob – Push for Standard Baro
- Backup in the event of a GTC failure
- May be used for some system programming. Especially helpful in a heads-up environment.
Environmental Control System - ECS

Touch - Aircraft Systems

Touch - ECS

Touch or Swipe Desired Selection to Adjust ECS
Building a Flight Plan

Touch – Flight Plan

Touch – Add Waypoint
Building a Flight Plan

• Touch Letters to Enter Waypoint Identifier or City Name
• Touch - Enter

Add an Arrival
• Touch - PROC
Building a Flight Plan

Add an Arrival
• Touch - Arrival

Add an Arrival
• Touch - Arrival
Building a Flight Plan

Add an Arrival
• Touch Desired Arrival

Add an Arrival
• Touch Desired Transition
Building a Flight Plan

Add an Arrival
- Touch - Load

Flight Plan with Arrival
Loading an Approach

Touch - PROC

Touch - Approach
Loading an Approach

Touch - Approach

Touch Desired Approach
Loading an Approach

Touch Desired Transition

Touch - Load
Loading an Approach

Approach Loaded into Flight Plan
Activate Approach

Touch - PROC

Touch – Activate Approach
L³ Trilogy ESI – Electronic Standby Instrument

- Analog free – All Digital Display
- Combines attitude, altitude, airspeed, and slip/skid data into a single digital display
- Logically grouped flight data eliminates multiple instruments, making the transition to standby easier
- Single instrument reduces weight and scan times vs. reading multiple instruments
- Solid-state design offers increased reliability compared to electro-mechanical instruments
ESP - Electronic Stability & Protection

• Enhances safety by providing electronic stability and protection for aircraft being hand-flown
• Activates whenever the airplane exceeds one or more flight parameters
• Uses autopilot servos and sensors, yet operates when the autopilot is turned off
• Helps correct excessive pitch attitude, roll attitude, or airspeed
• Augments pilot vigilance: assists, but does not take control
• Can be overridden by the pilot at any time
• Increases corrective pressure as exceedances move beyond safe limits
• Gently returns the aircraft to stable, straight-and-level flight
• Operates unobtrusively; simulates aircraft’s natural stability
• Can be temporarily turned off for training or flights where extreme maneuvering is anticipated
GSR – Garmin Satellite Receiver (Optional)

Powerful GSR-56 Iridium transceiver provides worldwide connectivity and affordable worldwide access to datalink weather for aviation

GPS- referenced position reporting capability

Direct on-demand updating to help control cost

Voice communication and text messaging capabilities
Avidyne TWX670
Tactical Weather Detection System
(Optional)

• Lightning based weather detection system
• Real time weather avoidance – accurately detects and clearly displays electrical discharges
• Close-range lightning detection (0nm-25nm and up to 200nm)
• Provides a meaningful dynamic map of the lightning discharge rate and density

G1000 WX-500 page shown for example purposes only
Tips

• All data entry and MFD interaction is accomplished on the GTC

• The Home Screen on the GTC is the normal starting point
  • Use the Home Icon to get there quickly
  • Use the Back Icon to return to the previous screen

• Terminology
  • Press “Keys” on the GCU & GMC
  • Touch “Icons” on the GTC
  • Swipe to move through “Lists”
  • Touch the Icon with the information you want to change
    • Touch what you want it to do
  • Lists are scrolled by swiping your finger on the displayed list
    • Similar to iPhone / iPad or other consumer devices
  • Always build a flight plan
Notes
Notes