

M2/CJ3+ Avionics Breakout

Service Alert 1947

- Garmin's G3/5000 TOLD function is currently using the published Takeoff Run Available (TORA) to determine if the runway is long enough to support an aborted takeoff.
- A very small percentage of runways worldwide have an Accelerate and Stop Distance Available (ASDA) that is shorter than the TORA.
- For runways with an ASDA shorter than TORA, the TOLD calculation may incorrectly indicate that the runway provides an ASDA long enough for a worst case rejected takeoff.
- October 2019 DB Cycle will correct this issue.

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SERVICE ALERT NO.: 1947 Rev A

TO: TOLD equipped G3000/G5000 Owners and Operators
DATE: June 17, 2019
SUBJECT: Takeoff/Landing Distance (TOLD)

PRODUCTS AFFECTED

All G3000 and G5000 systems with TOLD are affected.

ISSUE

Some runways have an Accelerate and Stop Distance Available (ASDA) that is shorter than the Takeoff Run Available (TORA). For these runways the TOLD function uses the wrong data to determine available takeoff runway length.

PILOT ACTION

Refer to the Aeronautical Information Manual (AIM) for additional details on TORA and ASDA. Review the runway distance value used by TOLD for takeoff calculation and manually override if a shorter ASDA field distance is charted for the runway.

RESOLUTION

This issue will be fixed in a future Navigation Database update.

GWX 70 Weather Radar Troubleshooting Guide

- Textron Aviation customers have reported various issues with the GWX 70 weather radar.
- Document is intended to provide explanations and additional troubleshooting advice for the following scenarios:
 - Radar Greyed Out Buttons
 - Radar Noise
 - Radar Spoking
 - Radar Paint
- Document is published the Textron Customer Portal.

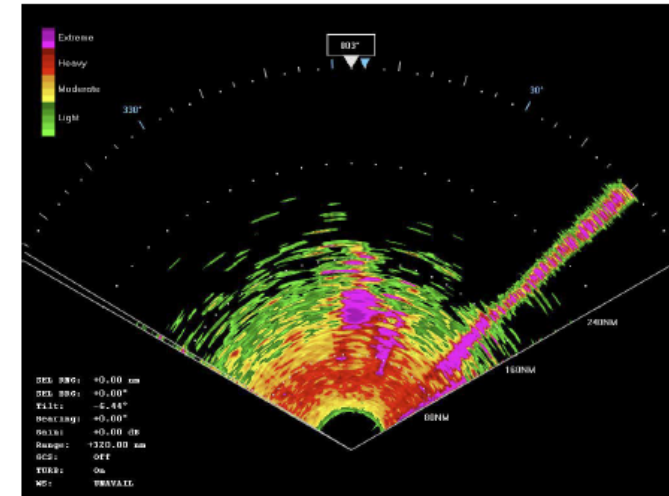


Figure 3.1: Radar Interference

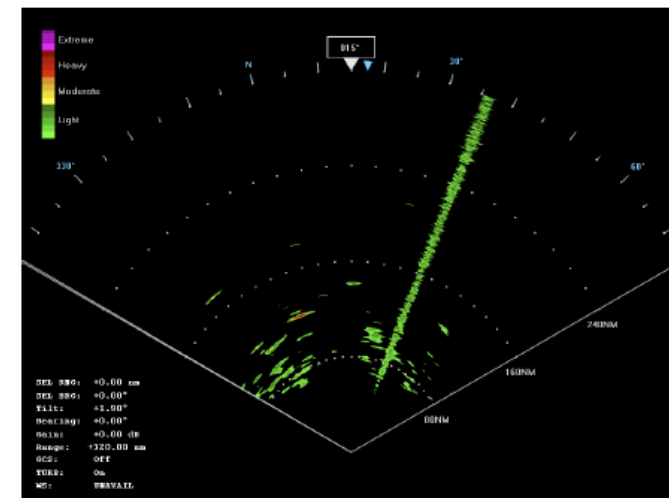


Figure 3.2: Radar Interference

Change 7.1 TCAS II Mandate Documentation

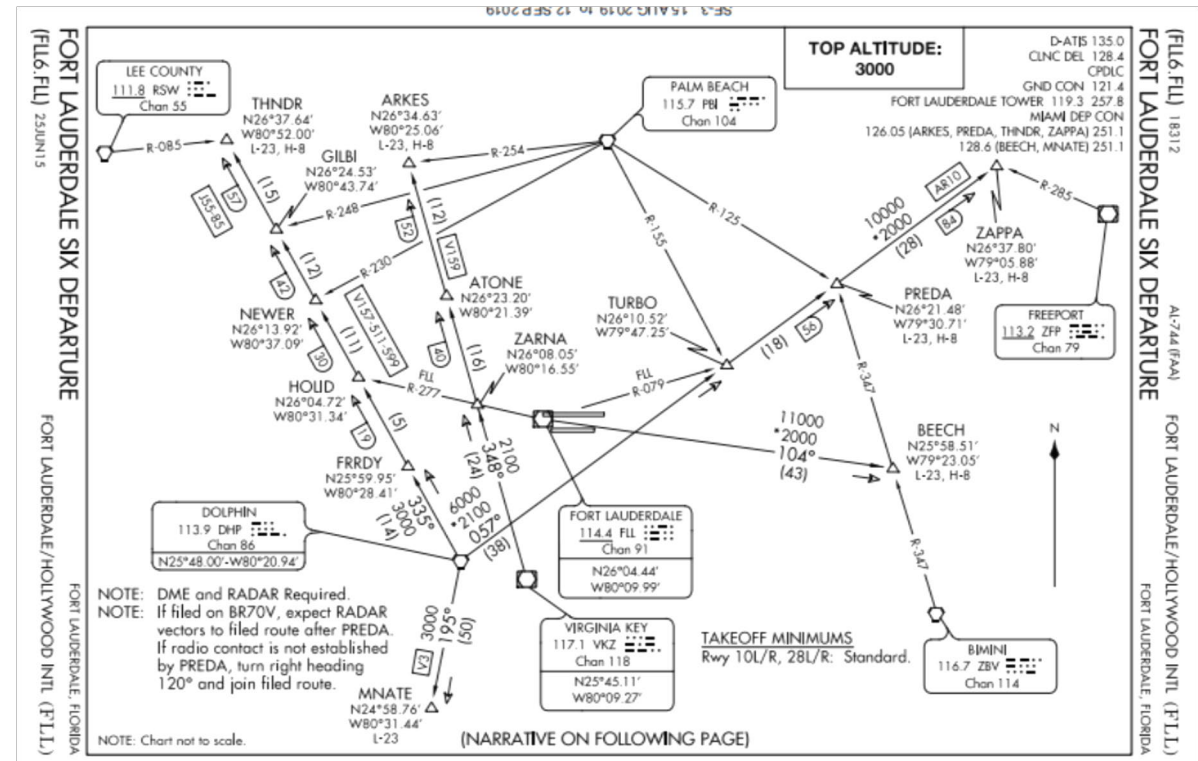
- Recent requests from Textron Aviation customers to provide official letter/documentation relating Change 7.1 compliance.
- Garmin’s GTS 8000 product has carried TSO-C119c (Change 7.1 definition) from product inception.
- Garmin requests clarification from users on the basis for the request and/or the originating request from the governing agency.

Table 1-2 Configuration Options

Model Number	Garmin Part Number	Applicable TSO	Traffic Advisory System (TAS)	Traffic Alert and Collision Avoidance System (TCAS I)	Traffic Alert and Collision Avoidance System (TCAS II)	1090 ES ADS-B Receiver and Aircraft Surveillance Applications	Transmit Power (Watts)
GTS 825	011-02571-00 011-02571-05	TSO-C147	X			X	400
GTS 855	011-02571-00 011-02571-05	TSO-C118		X		X	400
GTS 8000	011-02571-00 011-02571-05	TSO-C119c			X	X	400

Fort Lauderdale Six Departure Update

- CJP Forum feedback was used to establish the Fort Lauderdale Six departure is not coded in the Jeppesen Navigation Database.
- Upon further investigation into this specific scenario, it was determined that the FLL6 departure is coded in the Garmin Navigation Database, and is included as a published departure procedure from FXE.
- Different interpretations of ARINC 424 lead to the difference. FAA was notified and agreed to redesign departure.
- **Update:** Fort Lauderdale Seven departure is under development with an anticipated publish date of Jan. 30, 2020.



Garmin's FAA DataCom Service

DCL (Departure Clearance) Similar to PDC but message delivered directly to avionics by a CPDLC message.

- 62 US towers are equipped with DCL capability.
- Parts of the clearance can be encoded by ATC to allow the clearance to be imported into FMS.



Figure 2 - DCL Example

Garmin's FAA DataCom Service

En Route – Communications between center controllers and aircrew done by CPDLC.

- Allows for textual requests/clearances to be issued. Serves as a compliment to traditional voice communications.
- Various types of clearances (e.g. speed, position, route, squawk code, level) can be encoded in a manner that allows the message to be imported into various parts of the GIFD such as FMS, AFCS, radio, XPDR.

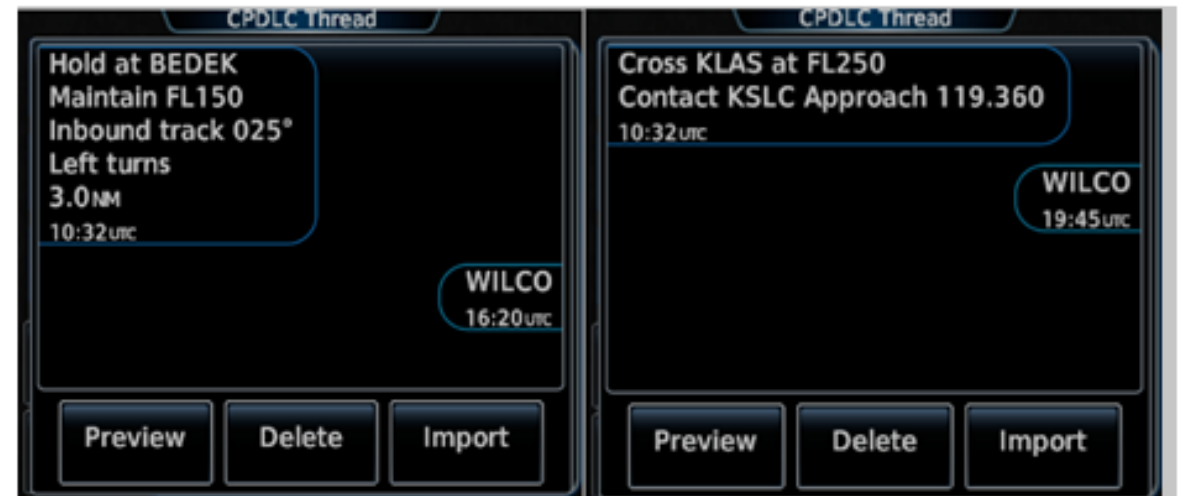


Figure 3 - En Route Message Examples

Garmin's FAA DataCom Service

How is Garmin different?

- NO ACARS SUBSCRIPTION REQUIRED
 - Garmin has partnered with SITA to provide access to the domestic CPDLC network.
 - Garmin is bundling DCL/PDC service via FltPlan.com for \$499/yr. with no data or access limitations. Also includes PDC service where DCL not available.
 - Requires GDR 66 VDL Mode 2 radio and FAA Datacom Enablement
 - Note – Aircraft with Link 2000+ are equipped with the required hardware but will require the software enablement.

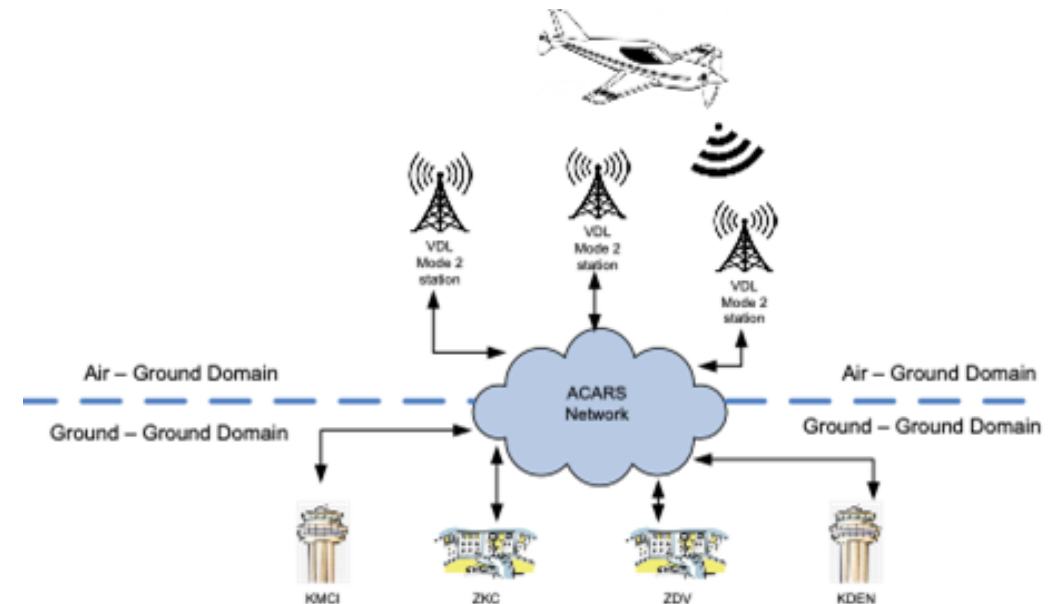
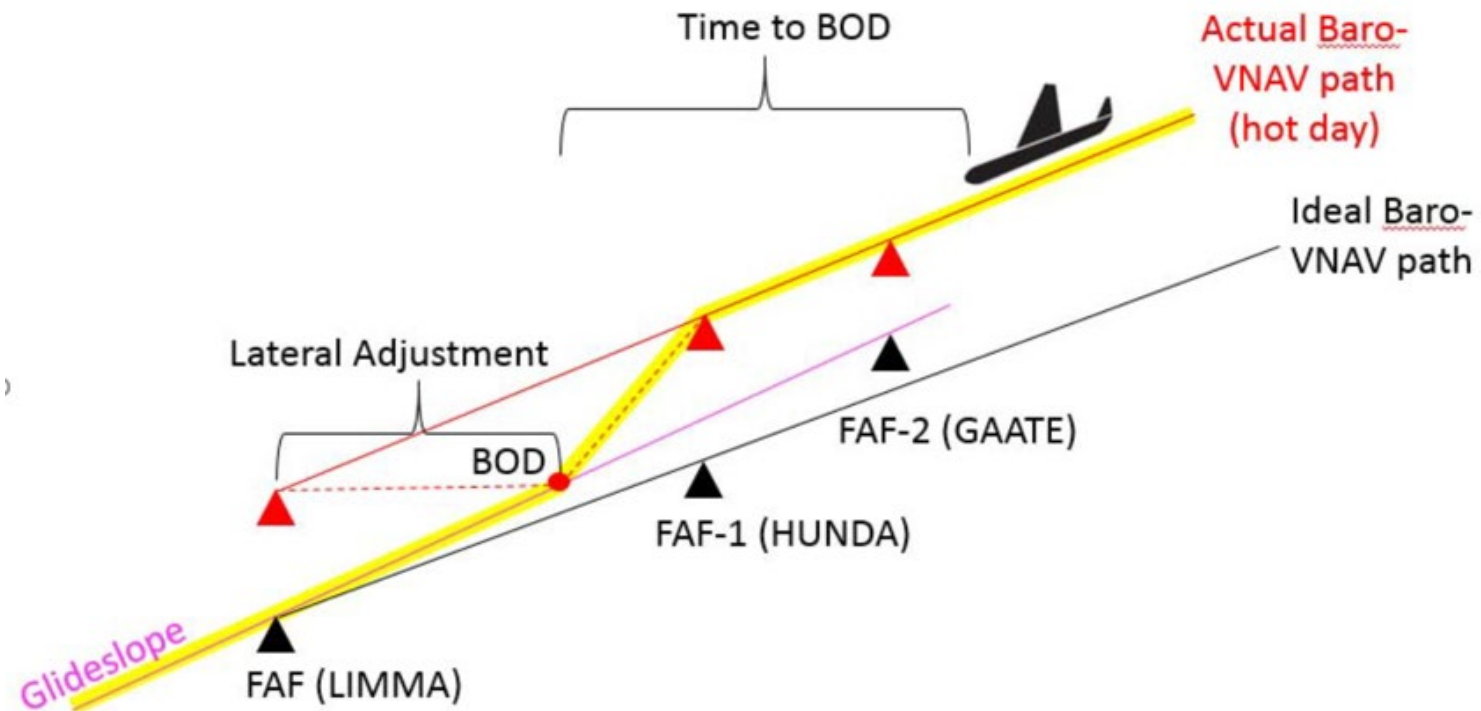


Figure 4 - Data Comm Architecture

FAQs from CJP 2019

Transition to Approach

- Available in SysRel 4.8 and Later



FAQs from CJP 2019

Fly-Over vs. Fly-By Waypoint

- Available in SysRel 4.5 and Later

Enabling/disabling a fly over waypoint:

- 1) From MFD Home, touch **Flight Plan**.
- 2) Touch a waypoint button to display the Waypoint Options Window.
- 3) Touch the **Fly Over Waypoint** Button to enable/disable the waypoint as a fly over waypoint.

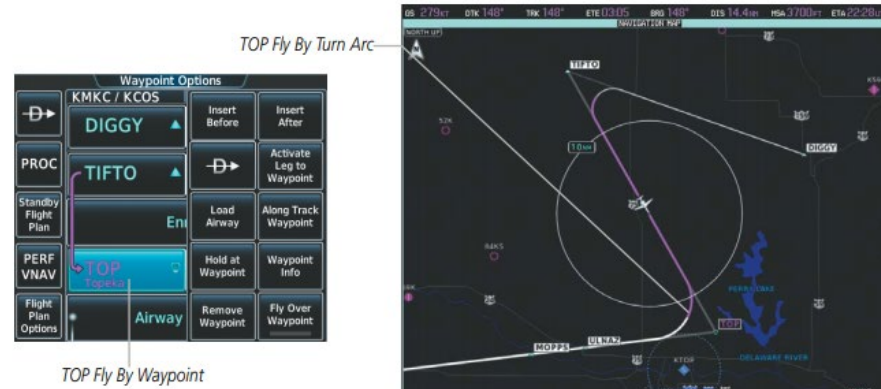


Figure 5-119 TOP Defined as a Fly By Waypoint



Figure 5-120 TOP Defined as a Fly Over Waypoint

Questions?