

# GTN 6XX/7XX Telligence™ Voice Command Guide

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# **1** TELLIGENCE<sup>™</sup> VOICE COMMAND SYSTEM

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# **1.1** System Description

The Telligence<sup>™</sup> voice command system brings simple and direct voice commands into the cockpit, providing crews the ease ability of page and data recall, radio and audio panel control, without a single touch to the GTN screen.

Operation of this system requires a GMA 35(c) connected to a GTN 7XX, or a GMA 350(c) connected to either a GTN 6XX or GTN 7XX.

The aim of this guide is to provide:

- Voice command formats
- Voice command guidelines
- Voice command instructions
- Comprehensive list of recognized commands
- Voice command qualification procedure
- Quick reference command sheet

## **1.2 Voice Command Formats**

For easy recall, voice commands are simple action/result phrases spoken into a crew headset. To display current ground speed information speak, "Show ground speed." "Show" is the action and the display of ground speed is the result.

The Telligence voice command system recognizes six primary voice command actions.

- 1. Show page and data commands
- 2. Say data commands
- 3. Tune radio commands
- 4. Select audio panel commands
- 5. Toggle audio panel commands
- 6. Turn audio panel commands



## **1.3 Voice Command Guidelines**

# NOTE

If a voice command is uninterpretable, verify the system is performing the intended action or displaying the desired data. If the system does not recognize a command, use the touchscreen to execute the function. The **GTN Voice Command History** details all commands performed.

#### Table 1-1 Voice Command Guidelines

#### ALWAYS REMEMBER TO ...

- Position the headset MIC approximately 1/8-inch from mouth, align with bottom lip to avoid breath sounds in the microphone.
- Speak conversationally.
- Annunciate clearly.
- Speak in normal tone and volume.
- Speak at a normal cadence (not too quickly or slowly).
- Pause briefly between activation of the PTC switch and when speaking the voice command.

## **1.4** Voice Command Instructions

#### STEPS

- 1. Press and hold the Push-to-Command (PTC) switch.
- 2. Speak the entire command into the headset MIC.
- 3. Release the "PTC" switch.
  - A positive tone (low-to-high) indicates a command is successfully executed. (i.e., page changed, radio tuned, MIC selected, etc.)
  - A negative tone (high-to-low) indicates the command is either unrecognizable or it's an invalid request.

## 1.5 "Show" Page Voice Commands

The "show" page voice commands display any page without having to touch the screen. Speak, "show <page name> page."

#### SUCCESSFUL COMMAND EXAMPLE

If "show approaches page" is spoken and the approach selection page displays immediately then a positive tone will sound.

#### UNSUCCESSFUL COMMAND EXAMPLE

If "show map page" is spoken and the traffic page is displayed then a negative tone sounds.



## Table 1-2 "Show" Page Voice Commands

"SHOW" PAGE VOICE COMMANDS		
Show Home Page	Show Voice Callout Setup Page	
Show Map Page	Show Backlight Setup Page	
Show Traffic Page	Show Voice Commands Page	
Show Voice Command History Page	Show Connext Setup Page	
Show Weather Page	Show Flight Stream 210 Setup Page	
Show Messages Page	Show Flight Stream 510 Setup Page	
Show System Audio Page	Show Nearest NDB Page	
Show Flight Plan Page	Show Nearest User Waypoint Page	
Show Procedures Page	Show Nearest Airspace Page	
Show Approaches Page	Show Nearest Center Page	
Show Arrivals Page	Show Nearest FSS Page	
Show Departures Page	Show Nearest Weather Frequency Page	
Show Nearest Page	Show Waypoint Info Page	
Show Nearest Airport Page	Show Airport Info Page	
Show Nearest Intersection Page	Show Intersection Info Page	
Show Nearest VOR Page	Show VOR Info Page	
Show NDB Info Page	Show System Units Page	
Show User Waypoint Info Page	Show VRP Info Page	
Show Services Page	Show Nearest VRP Page	
Show Utilities Page	Show RAIM Prediction Page	
Show VCALC Page	Show Fuel Planning Page	
Show Flight Timers Page	Show Clean Screen Page	
Show Scheduled Messages Page	Show Trip Planning Page	
Show System Page	Show User Field Setup Page	
Show System Status Page	Show DALT/TAS/Winds Page or Show E6B Page	
Show System Info Page	Show Database Conflicts Page	
Show Active Database Info Page	Show GPS Status Page	
Show Standby Database Info Page	Show External LRUs Page	
Show Setup Date Time Page	Show Setup Page	
Show Nearest Airport Criteria Page	Show CDI Setup Page	
Show Default Navigation Page (GTN 6XX Only)	Show COM/NAV Setup Page	
Show Weather Radar Page (GTN 7XX Only)	Show System Alerts Page	
Show Charts Page (GTN 7XX Only)	Show Airspace Alerts Setup Page	
Show Destination Info Page [1]	Show Destination Preview Page [1]	
Show Destination Weather Page [1]	Show Destination Procedures Page [1]	



"SHOW" PAGE VOICE COMMANDS		
Show Destination Runways Page [1]	Show Destination Frequencies Page [1]	
Show Destination Notams Page [1]	Show Destination VRPs Page [1]	
Show FIS-B Weather Page [2]	Show GMA Bluetooth Setup Page [3]	
Show Position Reports Page [4]	Show GSR 56 Setup Page [4]	
Show Connext Weather Page [4]	Show Contacts Page [4]	
Show Telephone Page [4]	Show Text Messages Page [4]	
Show Music Page [5]	Show XM Weather Page [5]	
Show Storm Scope Page [6]	Show Terrain Page [7]	
Show Checklists Page [8]		

- [1] The destination airport is in effect when the last waypoint on a flight plan is an airport or an approach is loaded and active.
- [2] Requires GTX 345 or GDL 88.
- [3] Requires GMA 35c.
- [4] Requires GSR 56.
- [5] Requires GDL 69.
- [6] Requires WX 500.
- [7] Requires traffic system.
- [8] Requires checklist file.



## **1.6 "Show" Data Voice Commands**

The "show" data voice commands recall and display navigation information. "Show" data commands are nearly identical to the configurable user fields on the map page. Navigation information displays in the top right-hand corner of the screen. When touched or tuning the radios, or after 10 seconds, the navigation data requested is removed.

"SHOW" DATA VOICE COMMANDS			
Show Trip Timer	Show Timer		
Show Track	Show Ground Speed		
Show Current Time	Show Minimum Safe Altitude [1]		
Show Bearing [1]	Show Distance [1]		
Show Desired Track [1]	Show Track Angle Error [1]		
Show Enroute Safe Altitude [1]	Show Active Waypoint [1]		
Show ETA [1]	Show ETE [1]		
Show Bearing and Distance from Destination Airport [1]	Show Distance to Destination [1] [2]		
Show ETA at Destination [1] [2]	Show ETE to Destination [1] [2]		
Show Vertical Speed Required [3]	Show Time to Descent [3]		
Show OAT [4] *Displays OAT (static) temperature.	Show TAT [4] *Displays OAT (total) temperature.		
Show Fuel Flow [5]			

#### Table 1-3 "Show" Data Voice Commands

[1] Requires an active flight plan or direct-to.

[2] The destination airport is in effect when the last waypoint on a flight plan is an airport or an approach is loaded and active.

- [3] Requires an active VCALC.
- [4] Requires a temperature sensor
- [5] Requires a fuel flow sensor.



# **1.7** "Say" Data Voice Commands

The "say" data voice commands convert navigation information into audio panel, auditory responses played through crew headsets. "Say" data commands are nearly identical to the configurable user fields on the map page.

#### EXAMPLE

Speak: "say winds." The audio panel auditory response is: "345 at 10 knots."

"SAY" DATA VOICE COMMANDS		
Say Bearing [1]	Say Timer	
Say Distance [1]	Say Current Time	
Say Distance to Destination [1] [2]	Say Track Angle Error [1]	
Say Desired Track [1]	Say Trip Timer	
Say ETA [1]	Say Track	
Say ETA at Destination [1] [2]	Say Active Waypoint [1]	
Say ETE [1]	Say Bearing and Distance From Destination Airport [1] [2]	
Say ETE to Destination [1] [2]	Say Time to Descent [3]	
Say Vertical Speed Required [3]	Say TAT [4]	
Say OAT [4]	Say Fuel Flow [5]	
Say Ground Speed	Say Winds [6]	

## Table 1-4 "Say" Data Voice Commands

[1] Requires an active flight plan or direct-to.

[2] The destination airport is in effect when the last waypoint on a flight plan is an airport or an approach is loaded and active.

[3] Requires an active VCALC.

[4] Requires a temperature sensor

[5] Requires a fuel flow sensor.

[6] Requires an airdata computer input.



## **1.8 "Tune" Voice Commands**

The "tune" voice commands simplify the process of tuning frequencies while en route and at the destination. The selected frequency is automatically loaded into the standby frequency location, available to transfer into active.

"TUNE" VOICE COMMANDS			
Tune Nearest Tower	Tune Nearest Ground		
Tune Nearest Unicom	Tune Nearest Clearance		
Tune Nearest Approach	Tune Nearest Pre-taxi		
Tune Nearest Departure	Tune Nearest CTAF		
Tune Nearest ATIS	Tune Nearest FSS		
Tune Nearest ASOS	Tune Nearest Center		
Tune Nearest AWOS	Tune Destination ATIS [1]		
Tune Destination FSS [1]	Tune Destination ASOS [1]		
Tune Destination AWOS [1]	Tune Destination Approach [1]		
Tune Destination Tower [1]	Tune Destination Departure [1]		
Tune Destination Unicom [1]	Tune Destination Ground [1]		
Tune Destination Clearance [1]	Tune Destination CTAF [1]		
Tune Nearest Weather *The GTN searches for the nearest ATIS, ASOS, or AWOS frequency at a nearby airport.	Tune Destination Weather [1] *The GTN selects the appropriate ATIS, ASOS, or AWOS frequency at the destination airport.		

## Table 1-5 "Tune" Voice Commands

[1] The destination airport is in effect when the last waypoint on a flight plan is an airport or an approach is loaded and active.



## **1.9** Audio Panel Commands

The audio panel commands control basic audio panel functions for the GMA 35 and GMA 350. The GMA 350 audio panel supports additional voice commands not listed in table 1-6. For a complete list, refer to GMA 350 Pilot's Guide, P/N 190-01134-12.

AUDIO PANEL COMMANDS				
Action	Result			
Select MIC One	Sets the MIC Selection to COM 1.			
Select MIC Two	Sets the MIC Selection to COM 2.			
Select MIC Three	Sets the MIC Selection to COM 3.			
Toggle COM One	Toggles (enables/disables) the monitoring of COM 1.			
Toggle COM Two	Toggles (enables/disables) the monitoring of COM 2.			
Toggle COM Three	Toggles (enables/disables) the monitoring of COM 3.			
Toggle PA	Toggles (enables/disables) the passenger address function.			
Show Co-pilot Volume	Displays the volume pop-up to be manually adjusted.			
Turn Co-pilot Volume Up	Displays and adjusts the volume.			
Turn Pilot Volume Down	Displays and adjusts the volume.			
Show Copilot Volume	Displays the volume pop-up to be manually adjusted.			
Turn Pilot Volume Up	Displays and adjusts the volume.			
Turn Pilot Volume Down	Displays and adjusts the volume.			
Show Passenger Volume	Displays the volume pop-up to be manually adjusted.			
Turn Passenger Volume Up	Displays and adjusts the volume.			
Turn Passenger Volume Down	Displays and adjusts the volume.			
Cancel Cursor *GMA 350 Only.	Cancels the GMA cursor when activated. *This does not affect the GTN, nor is it the cancel command for the GTN. See the GMA 350 Pilot's Guide for details.			

## Table 1-6 Audio Panel Commands



## **1.10** Other Voice Commands

The Telligence voice command system supports other miscellaneous commands for touch-free control of the GTN.

EXAMPLE

To view the navigation map display speak, "show terrain page." To return to the map page speak, "back."

## Table 1-7 Other Voice Commands

OTHER VOICE COMMANDS		
Cancel *Equivalent to the <b>Cancel</b> key on GTN screen.	Create Waypoint Here *A user waypoint is created at the present position.	
Next Tab	Zoom In	
Previous Tab	Zoom Out	
Scroll Down	Back	
Scroll Up		



# 1.11 Telligence Voice Command Qualification Procedure

In order to enable voice command functionality crew members must successfully perform and complete 17/20 (85%) voice commands in the Telligence Voice Command Qualification Procedure Crew members must be comfortable speaking into an aviation headset and proficient in English. If the total number of successful commands is less than 17 the voice commands must be disabled in configuration mode. Speak the unbold phrase if the voice command in this procedure is not applicable to the aircraft's configuration. This procedure is to be completed on the ground with the engine running.

- 1. Start the GTN and acquire a GPS position.
- 2. Conduct the voice commands in sequential order while wearing an aviation headset. If necessary, a command can be attempted twice.
- 3. When the command is successful check the box next to the command.
- **Given Show Flight Plan PAGE**
- \*\*\*Manually enter a flight plan with a towered airport as the destination\*\*\*
- **Given Show Trip Planning PAGE**
- **TUNE nearest Ground** or SHOW Nearest Airport PAGE
- **TUNE Nearest ATIS** or SHOW Nearest Weather Frequency PAGE
- + TOGGLE COM 2 or SAY Distance
- SHOW Map PAGE
- **ZOOM OUT**
- □ SAY Distance to Destination
- **SHOW Flight Timers PAGE**
- □ + SELECT COM 2 or SAY ETA at Destination
- **SAY Active Waypoint**
- **CREATE Waypoint Here**
- **TUNE Destination Tower** or SHOW Destination Runways PAGE
- **\$ SHOW Traffic PAGE** or SHOW Nearest PAGE
- **Given Show procedures PAGE**
- SHOW V-Calc PAGE
- SHOW Current Time
- SAY Desired Track
- **BACK**
- **Given Show Voice Command History Page**
- \* GTN COM radio is required.
- + Two COM radios connected to the GMA are required.
- + Traffic capability is required on the GTN.



## 1.12 Quick Reference Command Sheet

Page commands – "Show <title> page>" Recommended: "Show traffic page"; "Show flight plan page"; "Show map page" Favorites:

Show data commands – "Show <data>" Recommended: "Show vertical speed required"; "Show bearing and distance from destination airport"; "ETA at Destination" Favorites:

Say data commands – "Say <data>" Recommended: "Say winds"; "Say time to descent"; "Say current time" Favorites:

Tune radio commands – "Tune nearest <frequency type>" OR "Tune destination <frequency type>" Recommended: "Tune nearest weather"; "Tune nearest approach"; "Tune destination tower"; "Tune destination ground"

Favorites:

Audio panel commands Recommended: "Select MIC 1"; "Toggle COM 2"; "Turn pilot volume up" Favorites:

Other commands Recommended: "Back"; "Cancel"; "Zoom in" Favorites: