APOLLO GX50/55 GPS
Basic Operations

▸ This presentation is designed to introduce the basics of the GX50/55 GPS

▸ Focus will be placed on use of the GX50/55 for CAP operations

▸ This presentation is not designed to replace hands on instruction or the owners manual

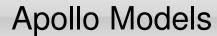▸ Always use your Quick Reference Guide for assistance until you are proficient using this equipment

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- ► The GX50/55 Deluxe simulator is available for download from the Garmin website

    http://www8.garmin.com/include/gxsimulator/SimulatorPopupGX.html

- ► You should use the simulator to gain proficiency before you get in the airplane

- ► Using the arrow keys on your keyboard you can fly the simulator

- ► The up and down arrows control speed and the left right arrows control direction

- ► Be sure that you have the SAR function checked under the options menu before you turn the simulator on

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Apollo GX50 – IFR enroute & approach certified

Apollo GX55 – IFR enroute only

Apollo GX60 – Same as 50 plus com radio

Apollo GX65 – Same as 55 plus com radio

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On / Off

APOLLO GX55

OFF-ON

Data Card Slot

Soft (Smart) Keys

Hard Keys

Large (Outer) Knob

Small (Inner) Knob

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"Chapters" selected by the buttons and,

"Pages" viewed by scrolling with the large and small knobs

▸ Power on – GPS self test

▸ Database message

  If the database is out of date the GPS is VFR only

▸ IFR output tests

  A series of unit interfaces are tested

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Hard Key Functions

NAV (Navigation) Key
Press to reach the NAV functions
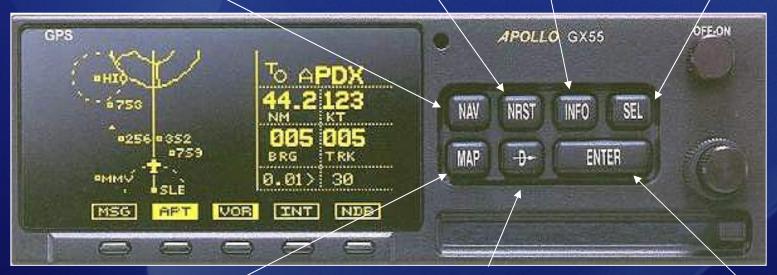Press twice to go to the HOME page

INFO (Information) Key
Supplemental information
about a waypoint. Press twice
to return to the previous page

NRST (Nearest) Key
Displays the closest
waypoints to your position

SEL (Select) Key
Activates editing or selection of
options. Press a second time to
deactivate

MAP Key
Starts the moving map
function

D> (Direct To) Key

Enter Key
Save key

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Soft (Smart) Key Functions

Provide custom controls for specialized functions . They change depending on the page you are on.

The Outer (Large) knob changes pages or cursor position

The Inner (Small) knob changes flashing items or lists more data when there is a diamond on the screen (unless in MAP mode)

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Enter is used to accept what is on the screen. Most times you only have to hit Enter once, two times to enter a search pattern.

```
GPS                          APOLLO GX55      OFF-ON

START:_____
                      NAV   NRST   INFO   SEL
SPACING    :5.0
                      MAP    -Ô-      ENTER
DIRECTION :000

MSG
```

Select is used when you want to prompt the GPS to accept a change in the data shown

In some cases there is nothing to change, so all you can do is hit enter to accept it

- Everything in the database has a name: Ex: MGJ, SWF, HUO (3 letter APT identifiers no K)

- The database has in it's memory; Airport, VOR's, NDB's, INT's, and USER waypoints

- If it is NOT in the database, you **can't** go there using the GPS

Remember! You must press the NAV Hard Key then the DB Soft Key to enter the database

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▶ You can navigate to any point on the map using the GPS… But…….

▶ If it is not already in the database, you have to enter it first

▶ Think of it this way – If it does not have a name
    - *you can't get there from here!*

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The waypoint database is divided into five categories.

▶ Airports

▶ VOR's

▶ NDB's

▶ INT's

▶ USER waypoints

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What's not already in the Database?

- Lat / Lon Coordinates

- Points on a U.S. (CAP) Grid (299A1 etc.)

- 15 NM on the 150 deg Radial from UKW

- The possible wreckage that you just spotted

- Texas Motor Speedway

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▶ You have to be in the NAV screen to add anything to the database (except a SAR mark)

Adding Waypoints to the Database

To enter a new waypoint you have to:

1, Be in the NAV screen

2, Press the DB (Database) soft key

3, Turn the Outer Knob to the appropriate screen

4, Press Enter to accept that selection

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Now you have to give it a Name

You can call other types of waypoints anything you want. (AAB – 2B1 – SAR001 etc.)

CAP Grid waypoints must be named using the point on the grid that you are navigating to (299A1, 302B4 etc.)

Create User Waypoint by Lat/Long

1, Press the NAV button

2, Press the DB soft key

3, Turn Outer Knob to Create User Waypoint by Lat / Lon

ACCESS DATABASE

PRESS ENTER

CREATE USER WPT
BY LAT/LON
PRESS ENTER

4, Press Enter to accept

AA   USER
41°25.70N RWLEN
074°10.68W 0000'

AA   USER
41° 5.70N RWLEN
074°10.68W 0000'

5, First cursor position will be flashing turn Inner Knob to enter first digit

6, Turn Outer Knob to right to move cursor to the next position – repeat previous step until you have completed naming the waypoint and entered the Lat / Lon. Press Enter to accept

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Press NAV and DB or press Direct To button

AIRPORT SWF
NEWBURGH
CITY NY USA

The waypoint type will flash

Turn the small knob to select APT, VOR, NDB, INT, or USER

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Selecting a waypoint

Turn the large knob to move the flashing cursor

Press DIRECT TO and the ENTER to fly to that waypoint

Turn the small knob to change the flashing character

- Press NAV
- Press DB
- Turn the Large Knob to "DELETE USER WAYPOINT"
- Press ENTER and the waypoint point identifier will flash
- Turn the Small Knob to find your waypoint
- Press ENTER to delete

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- Press NAV
- Press DB
- Turn the Large Knob to "MODIFY USER WAYPOINT"
- Press ENTER and the waypoint point identifier will flash
- Turn the Small Knob to find your waypoint
- Press ENTER to edit
- Press ENTER again when done

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The Ground Team calls and says "Where are you right now?"

3, You are Here!
Degrees, minutes, seconds or UTM coordinates

1, Press the NAV Button

2, Turn the Outer Knob until the GPS Position screen appears

Press the NRST Key to see the nearest airport

Turn the outer Knob to see other types of waypoints – VOR, NDB etc.

```
GPS                        APOLLO GX55    OFF.ON
NEAR  1 TO PPos
SWF       AIRPORT
BRG 046°    5.8NM         NAV  NRST  INFO  SEL
                         MAP   Đ-   ENTER
M50 DB FPL SYS
```

```
GPS                        APOLLO GX55    OFF.ON
NEAR  1 TO PPos
HUO       VOR
BRG 281°   18.8NM         NAV  NRST  INFO  SEL
                         MAP   Đ-   ENTER
M50 DB FPL SYS
```

```
GPS                        APOLLO GX55    OFF.ON
NEAR  2 TO PPos
IGN       VOR
BRG 060°   21.5NM         NAV  NRST  INFO  SEL
                         MAP   Đ-   ENTER
M50 DB FPL SYS
```

Turn the Inner Knob to see the next closest waypoint

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The INFO (Information) Key is an onboard facility directory at the touch of a button

After pressing the INFO Key, turn the Inner Knob to access multiple pages of information

WARNING – If you database is not current, you may be getting bad info! Always Double Check!

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Pressing the MAP Key brings you to the moving map screen

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SAR Map

Full Screen Map

Split Screen Map

Map Setup Screen

Use the Outer Knob to move between screens

Note: The diamond means more data on this page – turn Inner Knob

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The Inner Knob changes map scale on these three

But it changes pages on this one (remember the diamond?)

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- The GX50 will store up to 30 flight plans with up to 20 legs each

- The flight plan name can be up to 8 characters

- You must enter a flight plan to use the SAR Route Search functions

- You must have a flight plan with a destination airport to load IFR approaches

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Create Flight Plans

1, Press NAV

2, Press FPL

3, Turn Outer Knob Until you see Create A New Flight Plan
You are prompted to press SEL

4, Press SEL

Create Flight Plans

1, Name the Flight Plan
Turn Inner Knob to select first letter

2, Turn Outer Knob to move to next position
Repeat until done

3, Press Enter
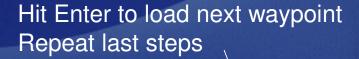
4, Turn Small Knob to insert waypoints

5, Press Select

6, Press Enter to begin inserting waypoints

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Create Flight Plans

Select start point using Inner and Outer knobs

Press Enter when done

Hit Enter to load next waypoint
Repeat last steps

Your Flight Plan is now STORED in the database and can be retrieved at any time until it is deleted

Once you have your waypoints loaded hit Select to accept the flight plan

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Activate Flight Plans

1, Press NAV

4, Press Select

2, Press FPL

3, Turn Outer Knob to the desired flight plan

5, Press Enter to activate

Flight plan is now active

- Press NAV and FPL
- Scroll to the Flight Plan name you wish to delete
- Pre SEL and scroll to DELETE PLAN
- Press ENTER