

Operating Principles and SAR Procedures for Apollo GX-55

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Large Knob (OK) with no cursor flashing scrolls to next page. OK with cursor flashing, moves cursor to next changeable field.

Small Knob (IK) with cursor flashing, changes flashing field or character. ^{IK}OK with diamond on lower right side, displays additional subpages.

Creating a Flight Plan

1. Press FPL. Turn OK to the "Create New Flight Plan" page and then press Enter.
2. To enter a new plan name, press SEL.
3. Turn the IK to select characters. Turn the OK to move to the next character.
4. Press ENTER when the name is complete.
5. Turn the IK to start inserting waypoints into the flightplan. At the INS? Prompt, press ENTER.
6. Turn the IK to select the first character, Turn the OK cw to move to the next character.
7. Use the IK and OK to select the waypoint name and then press ENTER.
8. The INS? Prompt will flash for the next waypoint. Press ENTER and repeat steps 5-7 until finished.
9. Press SEL to stop editing your flight plan.

Activating A Flight Plan:

1. Press FPL.
2. Turn the OK to the desired active flight plan and press SEL.
3. Turn the IK to select the desired option and press ENTER.

Creating A New Waypoint:

1. Press DB.
2. Turn the OK to the Create User Wpt By Lat/Lon page and then press ENTER.
3. Use the IK to select characters and turn the OK to move the cursor to set the waypoint name.
4. Continue to select the necessary characters for the Lat/Lon and runway length.
5. Press ENTER when finished.

Finding Information on a Waypoint:

1. Press DB
2. Turn the OK to the Access Database page and press ENTER
3. Turn the IK to select waypoint type
4. Turn the OK to the desired character and turn the IK to select characters
5. Press INFO
6. Turn the IK to view information
7. Press INFO again or any mode key to exit.

Nearest Waypoint Search:

1. Press NRST.
2. Turn the OK to change Wpt type.
3. Turn the IK to view nearby waypoints.
4. Press DIRECT-TO and then ENTER to fly direct to the selected waypoint.

Moving Map:

1. Press MAP.
2. Use IK to select map scale.
3. Use OK to reach Map setup.
4. Press APT, VOR, INT, or NDB keys to view or declutter waypoints.

Direct-To:

1. Press DIRECT-TO.
2. Use OK and IK to select wpt and type.
3. Press ENTER.

Available Wpt:

Last viewed wpt by INFO, NRST, or in DB will be available as the default wpt the next time you want to insert a wpt.

SAR Mode Setup: Set Search and Rescue Map Page

MAP

OK- counter clockwise to map setup page

SEL

OK and IK to obtain:

Set Route -Yes

Set Orientation - North

Set Reference -Plane

~~ENTER~~

IK ccw to SAR map setup page

SEL

OK and IK to obtain:

SAR Map -- "ON"

Grid Type---"US" rather than "Basic"

Position----"MIA" or "JAX" for sectional

ENTER

Display Current Position

NAV to navigation screen

OK- until GPS position is displayed

Save Current Position as a User Waypoint

NAV to navigation screen

DB to database screen

OK to create user waypoint by Lat/Long

ENTER

Mark a SAR position

MAP to moving map screen

OK-to select SAR map (has PAT soft key)

MRK- present GPS position as Lat/Long and identifies it

ENTER-to save waypoint and return to SAR map

Create a User Waypoint by US Grid

Allows flying directly to corner of a grid

Enter sectional identifier in the SAR Map Setup page before this step

Format for entering grid is grid number--quadrant letter--corner number

NAV to nav screen

DB display database screens

OK- to create user waypoint by US grid

ENTER-to enter US grid identifier

SEL

OK and IK -select individual characters at flashing cursor

ENTER- accept changes and save waypoint

Track Line Search

NAV

DB

OK and IK—to create user waypoint or access database for origination of search

ENTER

OK and IK—to create user waypoint or access database for destination of search

ENTER

FLP

OK—to create new flight plan page

SEL—to enter new flight plan name

OK and IK-- to identify new flight plan name

ENTER

OK and IK --to insert origination waypoint for flightplan

SEL- to edit the waypoint

ENTER

ENTER

OK and IK- to identify destination waypoint

SEL- to edit the waypoint

ENTER- to select destination waypoint

SEL- to cease editing Flightplan

FPL

OK- to select Flightplan recently created

SEL

ENTER- to activate Flightplan

NAV

OK-ccw to Parallel Track

SEL

OK and IK—to obtain:

Offset--- Use

Left --- 1.0 nm std as "S" offset

ENTER (screen will read "offset in use")

MAP

IK-to adjust scale

(Note heading required to fly bearing)

Creeping Line Search Pattern

Ensure SAR mode setup is in place

MAP- to start on the map screen

OK --Turn OK ccw to SAR map page (has PAT softkey)

PAT-search page setup

IK-select creeping line

ENTER to grid setup

SEL

ENTER -- to select waypoint

OK and IK -select type and name of waypoint

ENTER-to select waypoint for origination of pattern

OK and IK -to obtain

Start----- xxxxx name of waypoint

Spacing---- 1.0 nm (2 to 9.9 nm available)

Direction-----xxx direction of travel (0 to 359)

ENTER-note diamond on lower right of screen

IK- (next page) to leg length and start turn

SEL

IK- to bring up follow-on page

SEL

OK and IK to obtain:

Leg Length----- 3.0 nm std (1.0 to 9.9 nm avail)

Start----- right or left side for first turn

ENTER- to save information

ENTER again to activate search pattern

IK-to select scale

GRD to view grid lines

PAT- When you desire to abort search pattern

Parallel Line Search Pattern

Ensure SAR mode setup is in place

MAP- to start on the map screen

OK- Turn OK ccw to SAR map page

PAT-search page setup

IK-select parallel line

ENTER-

SEL

OK and IK to obtain:

Grid--(US) Number letter number (e.g. 27A1) for grid

Spacing---- 1.0 is the standard for track spacing (2.2-9.9)

Direction--- N/S or E/W

ENTER to save information

ENTER to activate the search pattern

IK-to select scale

GRD- to view grid lines

PAT- When you desire to abort search pattern

Expanding Square Search Pattern

Ensure SAR mode setup is in place

MAP- to start on the map screen

OK--Turn OK ccw to SAR map page

PAT-search page setup

IK-select expanding square

ENTER

SEL

ENTER

OK and IK -to obtain the type and name of waypoint

ENTER

OK and IK to obtain:

Start:-----waypoint of origination

Spacing---1.0 nm std track spacing (0.2 to 9.9 nm avail)

Direction—xxx Direction of travel (0-359 degrees avail)

ENTER- to save information

ENTER again to activate search pattern

IK-to select scale

GRD to view grid lines

PAT- When you desire to abort search pattern

Sector Search

NAV

DB

OK-to create user waypoint by Lat/Long

OK and IK to establish waypoint for center of sector to fly "direct to"

ENTER

DIRECT TO

OK and IK-to select the waypoint just established to fly "direct to"

ENTER

MAP- monitor bearing & distance to fly to waypoint on a bearing divisible by 45

Begin Search at distance of "S" from waypoint

Fly distance "S" past waypoint on same heading

(At waypoint passage, bearing will become the reciprocal by 180 degrees

Turn right 110 degrees and fly until new bearing = old bearing + 45 degrees

Turn right 110 degrees to new bearing

Repeat steps to complete coverage