

GNS 530(A)

Pilot's Guide and Reference



Aeroclube de Canela
Escola de Aviação Civil



Figure 1-1 Keys and Knobs

- | | | | |
|--------------------|-------------------|--------------------|---------------------|
| ① COM Flip-flop | ⑥ Large left knob | ⑪ ENT (enter) | ⑯ MSG (message) |
| ② COM Power/Volume | ⑦ RNG (map range) | ⑫ Small right knob | ⑰ FPL (flight plan) |
| ③ VLOC Flip-flop | ⑧ Direct-to | ⑬ Large right knob | ⑱ VNAV |
| ④ VLOC Volume | ⑨ MENU | ⑭ CDI | ⑲ PROC (procedures) |
| ⑤ Small left knob | ⑩ CLR (clear) | ⑮ OBS | |



ACTV	Active
APR	Approach
APT	Airport
AUX	Auxiliary
BRG	Bearing To
CAS	Calibrated Airspeed
CDI	Course Deviation Indicator
CLR	Clear
DEP	Departure
DIS	Distance
DME	Distance Measuring Equipment
DTK	Desired Track
ENR	Enroute
ETA	Estimated Time of Arrival
ETE	Estimated Time Enroute
FPL	Flight Plan
fpm	Feet per minute

G/S	Glide Slope
GS	Ground Speed
HDG	Heading
LOC	Localizer
MSG	Message
MSL	Mean Sea Level
NDB	Non-directional Radio Beacon
NRST	Nearest
OBS	Omnibearing Selector
PROC	Procedure(s)
RAD	Radial
TRK	Track / Ground Track
VLOC	VOR/Localizer Receiver
WPT	Waypoint
WX	Weather

1 - Selecting and Activating Standby Frequencies



1.1 - Turn the **large left knob**(06) to select the MHz, and the **small left knob**(05) to select the kHz of the desired frequency.

1.2 - Press the **COM Flip-flop Key**(01) to activate the **highlighted** frequency on the tuning cursor.

1.3 - Alternate between the **COM Window** and **VLOC Window** by pressing the **small left knob**(05) and now proceed the same way to select the **VLOC** frequency.

1.4 - Press the **NAV Flip-flop Key**(03) to activate the **highlighted** frequency on the tuning cursor.

*Quickly tuning and activating 121.500 by pressing and hold the **COM Flip-flop**(10) key for approximately two seconds.*

2 - Direct-to Navigation



A destination can be selected from any page with the **Direct-to Key**(08) by following the upcoming steps:

2.1 - Press the **Direct-to Key**(08) and the 'Select Direct-to Waypoint' Page will appear with the destination field highlighted.

2.2 - Turn the **small right knob**(12) to enter the first letter of the destination waypoint identifier. The destination waypoint may be an airport, VOR, NDB or an intersection.

2.3 - Turn the **large right knob**(13) to the right to move the cursor to the next character position and repeat that until spell out the destination waypoint.

2.4 - Press the **ENT**(11) key to confirm and the 'Activate' function will appear highlighted, then press **ENT**(11) again.

2.5 - Once a direct-to destination is selected, press and hold the **CLR Key**(10) to display the Default NAV Page

3 - Cancelling a Direct-to:



3.1 - Press the **Direct-to Key**(08) to display the 'Select Direct-to Waypoint' Page.

3.2 - Press the **MENU Key**(09) to display the 'Direct-to Page Menu' .

3.3 - With '**Cancel Direct-to NAV?**' highlighted, press the **ENT Key**(09).

If a flight plan is still active, the GNS 530 resumes navigating the flight plan along the closest leg.

4 - IFR Procedure

Once the **direct-to** or **flight plan** is confirmed, the whole range of **IFR procedures** is available by pressing the **PROC**⁽¹⁹⁾ Key and following the upcoming steps.



The steps required to select and activate an approach, departure, or arrival are identical. This section shows examples of the steps required to select an approach, the same process also applies to departures and arrivals.

4.1 - Turn the **large right knob**⁽¹³⁾ to select the desired option, **Approach**, **Departure** or **Arrival**, then press **ENT**⁽¹¹⁾ key to confirm. A small window will appear to select.

4.2 - Turn the **small right knob**⁽¹²⁾ to navigate and select the desired procedure, once again press **ENT**⁽¹¹⁾ key to confirm. Turn the **large right knob**⁽¹³⁾ to select a transition and press **ENT**⁽¹¹⁾ key. (approach exemple)

4.3 - Will appear a window to choose 'Load?' or 'Activate?' if already clear for the approach .

5 - Flight Plan

The GNS 530 allows the pilot to create up to 20 different flight plans, with up to 31 waypoints in each flight plan. The '*Flight Plan Page Group*' consists of two pages: '**Active Flight Plan**' page(fig 01) and '**Flight Plan Catalog**' Page(fig 02).



fig 01



fig 02

Creating a new Flight Plan

5.1 - Press the **FPL** Key and turn the **small right knob** to display the '**Flight Plan Catalog**' Page.

5.2 - Press the **MENU** Key to display the '**Flight Plan Catalog**' Page Menu.

5.3 - Turn the **large right knob** to highlight '**Create New Flight Plan?**' and press the **ENT** Key. (fig 03)



fig 03

5.4 - Use the **small and large right knobs** to spell the desired waypoint and press the **ENT** Key.

5.5 - Repeat step 5.4 to enter each additional flight plan waypoint .

Once all waypoints have been entered, press the **small right knob** to return to the '**Flight Plan Catalog**' Page.

6 - Editing Flight Plan

6.1 - Adding a waypoint to an existing flight plan

6.1.1 - On the desired flight plan press the **small right knob** to activate the cursor (*fig 01*).

6.1.2 - Turn the **large right knob** to select the point to **add** the **new waypoint**. The new waypoint is placed **directly in front** of the existing **highlighted waypoint** (*fig 01*).

6.1.3 - Use the **small** and **large right knobs** to enter the identifier of the new waypoint and press the **ENT** Key (*fig 02*).

6.1.4 - Once all changes have been made, press the **small right knob** to return to the '**Flight Plan Catalog Page**'.

6.1.5 - The **direct-to** mode is available to a **waypoint** by pressing the **Direct-to Key** twice to display an '**Activate Leg**' confirmation window, with the '**Activate?**' highlighted, press the **ENT** Key (*fig 03*).

fig 01



fig 02



fig 03



6.2 - Removing a waypoint/procedure from an existing flight plan

fig 01



WAYPOINT	DTK	DIS	CUN
TAY			
KDHN	294° _H	157 _m	157 _m
KPDK	023° _H	164 _m	321 _m

Approach ILS 20L

6.2.1 - With the '**Active Flight Plan**' Page displayed, press the **small right knob** to activate the cursor.

6.2.2 - Turn the **large right knob** to **highlight** the title for the **approach, departure, or arrival** that is intended to be deleted. Titles appear in **light blue** directly above the procedure's waypoints (fig 01).

6.2.3 - Press the **CLR** Key to display the confirmation window '**remove approach**' upon '**Yes?**' **highlighted**, press the **ENT** Key to confirm (fig 02).

This same process may also be used to remove individual waypoints from the active flight plan (fig 03).

fig 02



fig 03

