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Operations Manual Part D – Training Appendix L – Beechcraft BE20 Differences (Including Pro-Line 21)		

Appendix L – Beechcraft BE20 Differences

Each variant are quite unique and requires crews to undertake differences training and maintain recency in order to operate safely and efficiently. As an example for 90 day Recency and self-certification refer to form GAL092-BE20.

The Operator provide's conversion training through either third party suppliers or using in-house training facilities. The Flight Crew will receive specific training on the aircraft variant before operation in service

Differences

The following differences have been identified between the King Air (BE20) Proline 21, the King Air Classic, Raisbeck versions and the simulator differences. A brief description of the differences are highlighted in three separate tables and recency form, the summary sheet, Briefing differences sheet, Expanded differences sheet and 90 day recency requirement designed to act as an aide memoire to crews flying the different variants. The following are reference material to be used in conjunction with the Operators training requirements.

Refer to the following forms in Q Pulse for the details relating to the King Air :-

- AOC.TR.100 - BE20 Differences Briefing Summary Sheet
- AOC.TR.100-1a - BE20 Differences Briefing Sheet G-SASC and G-SASD
- AOC.TR.100-1b - BE20 Differences Briefing Sheet G-SASC and G-SASD – Expanded
- AOC.TR.100-2a - BE20 Differences Briefing Sheet G-PCOP
- AOC.TR.100-2b - BE20 Differences Briefing Sheet G-PCOP – Expanded
- AOC.TR.100-3a - BE20 Differences Briefing Sheet G-SYGA
- AOC.TR.100-3b - BE20 Differences Briefing Sheet G-SYGA – Expanded
- AOC.TR.100-4a - BE20 Differences Briefing Sheet Simulator
- AOC.TR.100-4b - BE20 Differences Briefing Sheet Simulator – Expanded

Pro-Line 21 Avionics MS 3000 and ESIS

All Beechcraft BE20 flight crew will receive specific training on the use of the Pro-line 21 Avionics Flight management System.

This training should be provided by an authorised third party facility or in house by the Operators appointed trainer.


For in house training a Computer Based Training CD will be provided followed by classroom and aircraft familiarisation.

On completing the conversion a certificate will be issued and filed in the individual's crew records.

The required familiarisation syllabus should include the following:

- CBT review/demo of Pro-line 21 Avionics system;
- Classroom demo of aircraft SOP's and the integration into Glass Cockpit procedures (use of FMS/Navigation displays etc);

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- Discuss the differences between the Beechcraft BE20 series:
- Demo of aircraft systems and presentation on the ground with GPU available;
- Minimum of one flight (aircraft/simulator) with the Instructor.

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KING AIR B200
COLLINS PRO LINE 21[®] AVIONICS
TRAINING SUPPLEMENT


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Avionics Preparation Guide

Automation management requires knowledge and use of basic CRM before it is successful. Without CRM it becomes another item of confusion and distraction. Appropriate use and purposeful “disuse” of the automated systems will be integrated into all areas of flight.

A basic knowledge and proficiency at display setup and flight director/autopilot use should be complete by the end of an 8-hour Pro Line 21 course. This should include being comfortable of where to look for automation status, pilot/copilot display selection options and selected automation failure/abnormal indications (the latter does not necessarily need to include system knowledge of the “why” and “how” of the malfunction indication).

Levels of Automation and Their Use (FlightSafety International policy)

Level One - No automation is employed. Autopilot, flight director and autothrottles are disconnected.

With the exception of visual approaches and deliberate decisions to maintain flying proficiency, Level One is essentially a **non-normal** mode for advanced cockpit aircraft. It is, however, appropriate for any situation in which immediate, direct control of the aircraft flight path is necessary, including:

1. Any suspicious, confusing or unexpected response from the automation or flight instrument displays
2. Wind shear recovery
3. Collision avoidance maneuvers, including a response to a TCAS RA or a ILS PRM breakout instruction
4. Aircraft upset
5. GPWS terrain warning

Level Two - Airplane is being hand-flown with basic flight director guidance. This is the primary mode used for takeoff, initial departure and landings.

Level Three - Autopilot may be engaged and autothrottles (if installed) may be in use. Flight director may be coupled to raw radio data or basic modes such as HDG or ALT. Aircraft speed and vertical/lateral flight paths are controlled through the Flight Guidance Panel (FGP). This level is appropriate when responding to ATC instructions in dynamic environments such as terminal operations, including close-in changes to the landing runway.

Level Four - Full use of automation in LNAV/VNAV operation. Flight director and autopilot are engaged.

This is the primary level of automation for non-terminal operations of advanced cockpit aircraft. FMS is used for the control of both lateral and vertical flight paths. **Great care must be taken to maintain situational awareness.**

Monitoring and mode awareness are critical. Level Four is NOT appropriate when significant changes to route or landing runway have been issued by ATC.

Use of the highest levels of automation during terminal operations must be limited to situations permitting advance preparation, review of FMS programming and complete crew briefings. In those situations, pilots should revert, at least temporarily, to lower levels of automation.



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Flight Profile Breakdown

Ground Operations (NBAA Automation Management)

1. Configuration of Flight Guidance Panel (FGP)
2. Configuration of displays
3. Initialization of FMS
 - a. Active Flight Plan programming
4. Comparison of electronic and printed procedures
5. Position sensor management
 - a. FMS or RTU tuning (to include AUTO or MAN tuning)
 - b. GPS RAIM check
6. Crew briefing
 - a. Automation plan for takeoff and departure/SID
 - b. Automation plan for runway/departure changes
 - c. Automation plan for immediate return/takeoff alternate requirements

Takeoff/Departure/Climb

1. Configuration of FGP
2. Configuration of displays
3. Modification of FMS for ATC/pilot changes

Cruise

1. Configuration of FGP
2. Configuration of displays
3. Modification of FMS for ATC/pilot changes
4. FMS aircraft performance monitoring

Descent

1. Configuration of FGP
2. Configuration of displays
3. Initialization of FMS
 - a. Selection of STAR, runway, approach
4. Comparison of electronic and printed procedures
5. Position sensor management
 - a. FMS or RTU tuning (to include AUTO or MAN tuning)
 - b. GPS RAIM check
6. Crew briefing
 - a. Automation plan for STAR
 - b. Automation plan for approach
 - c. Automation plan for missed approach
 - d. Automation plan for alternate

Approach/Landing

1. Configuration of FGP
2. Configuration of displays
3. Management of FMS
 - a. Non-Localizer based approach
 - b. Localizer based approach
 - c. RNAV (GPS)/GPS approach
 - i. LNAV/VNAV vs. LNAV vs. LPV

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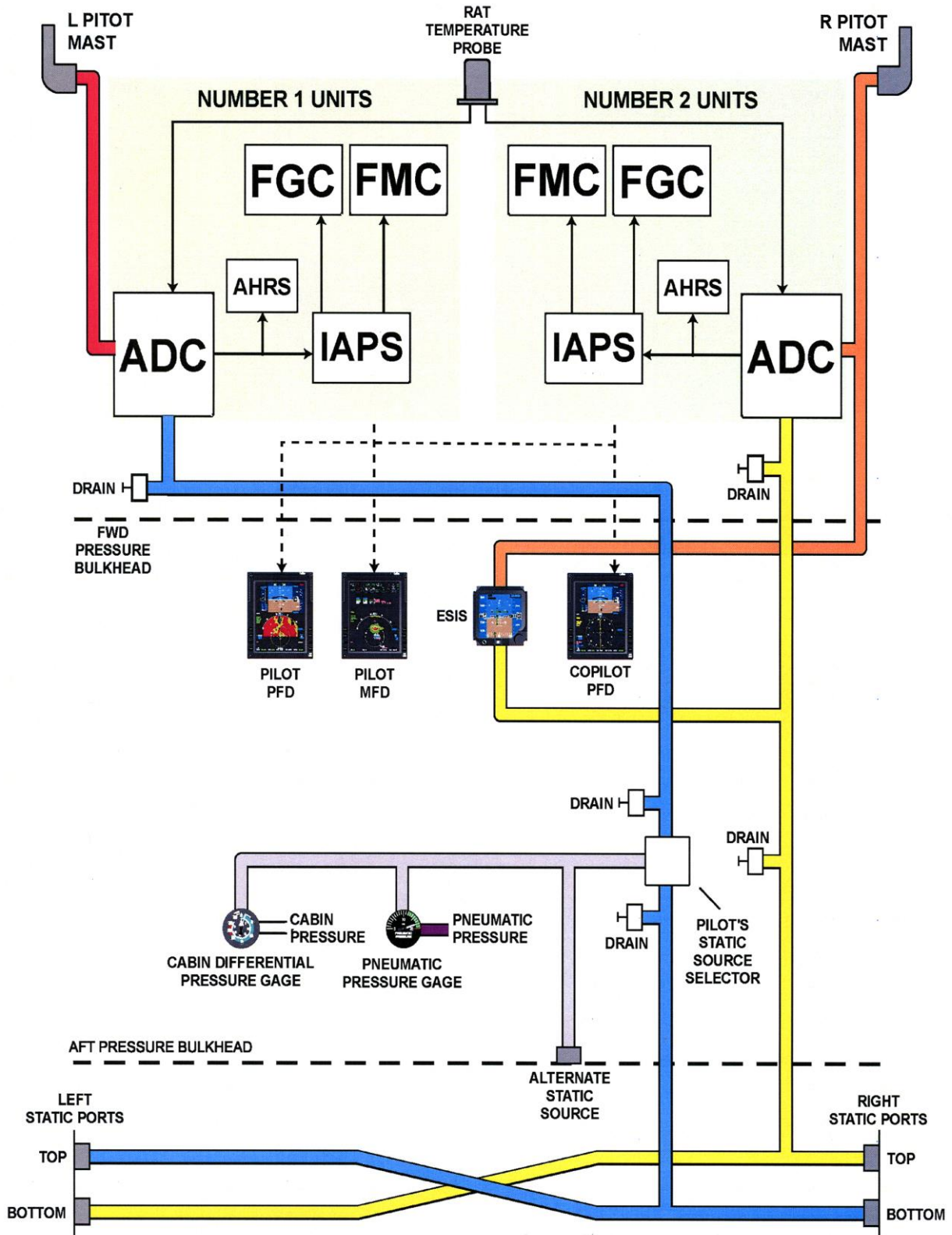
Missed Approach/Alternate Destination

1. Configuration of FGP
2. Configuration of displays
3. Management of FMS during missed approach
 - a. Non-Localizer based approach
 - b. Localizer based approach
 - c. RNAV (GPS)/GPS approach
4. Management of FMS for alternate
 - a. Setup for new airport
 - b. Setup for new STAR/approach

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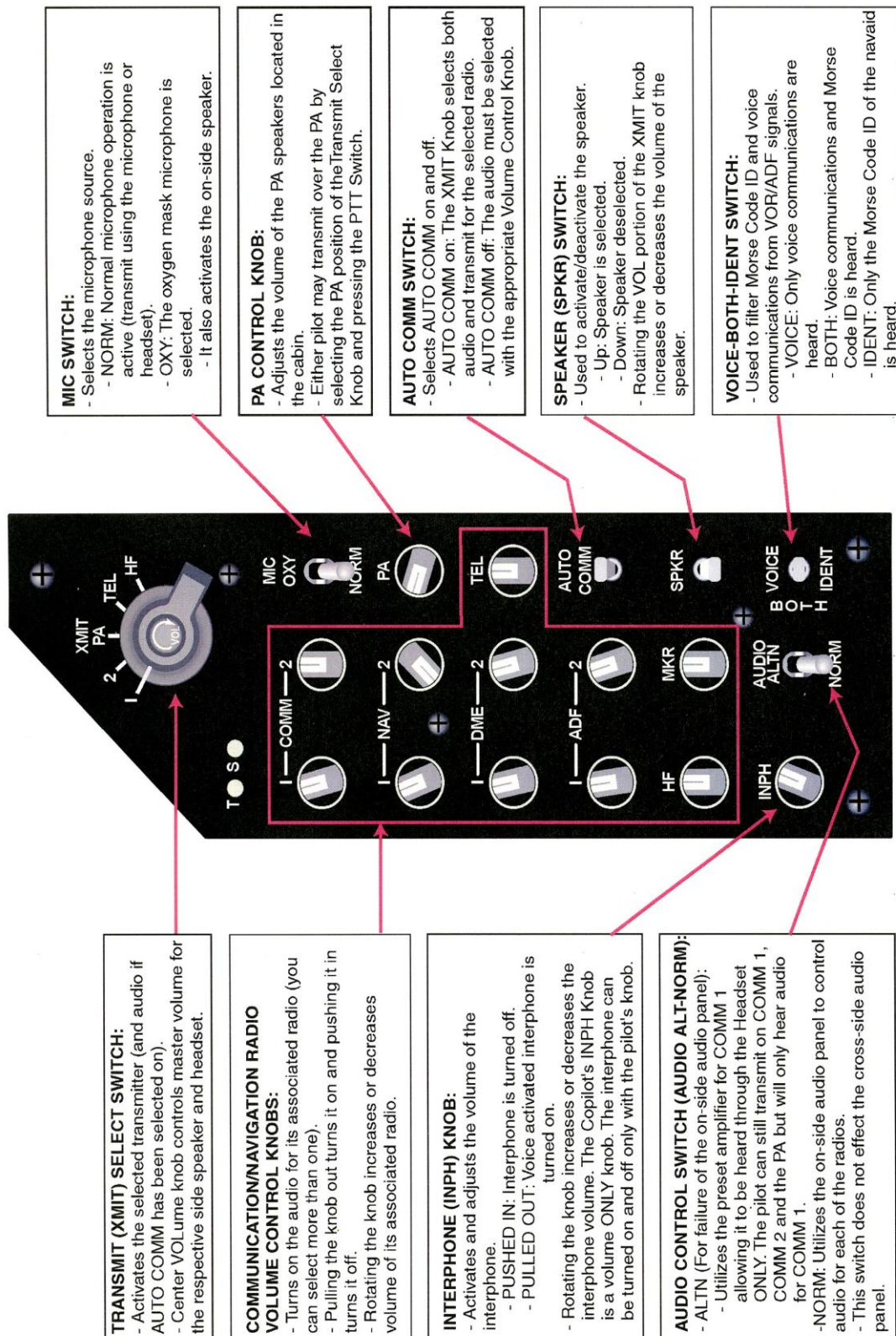
SYSTEM INTEGRATION



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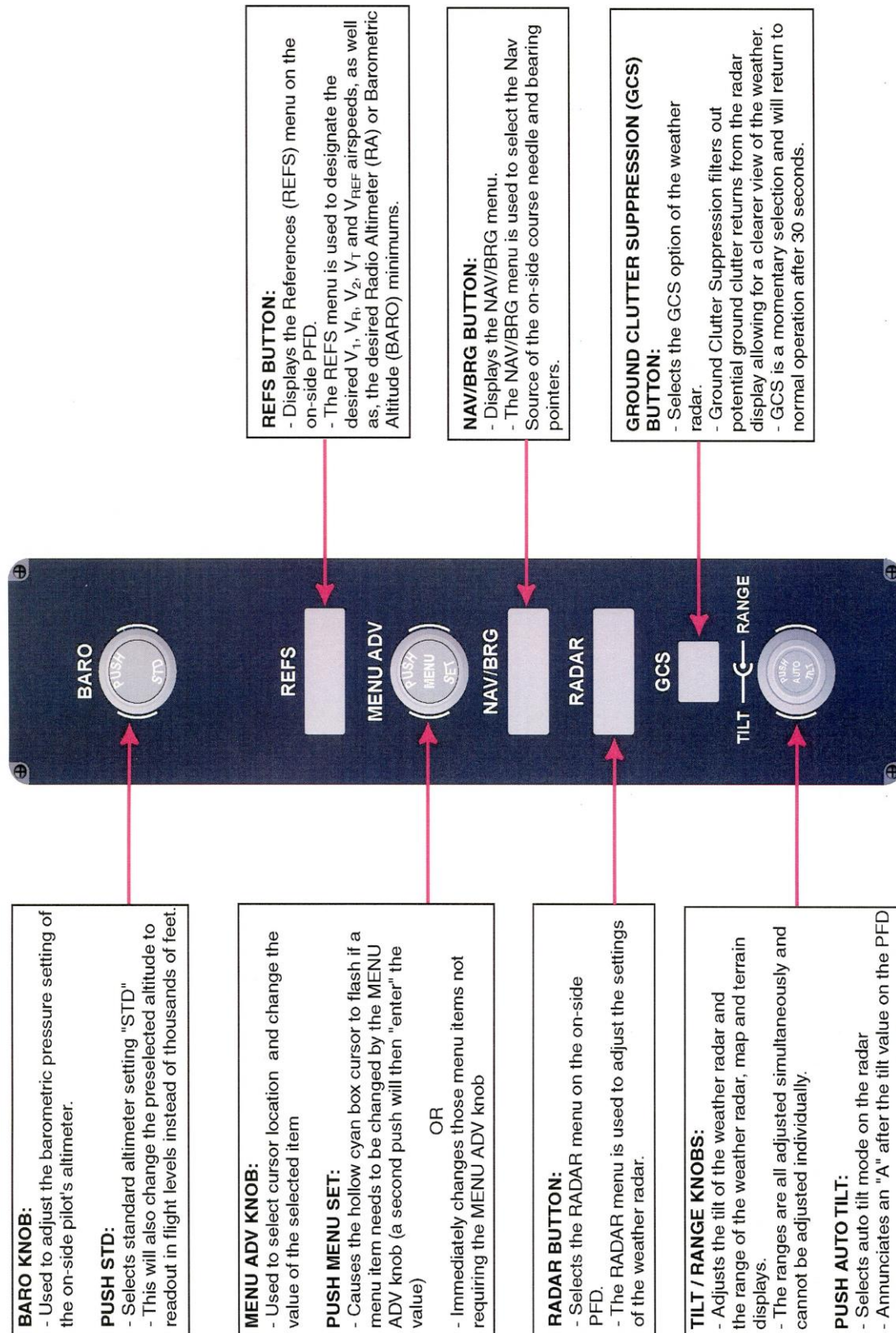
AUDIO PANEL



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DISPLAY CONTROL PANEL



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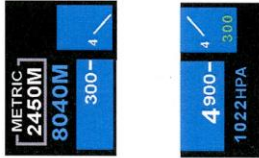
BARO Knobs/Switches



BARO KNOB:

- Rotating knob
- Adjusts altimeter setting displayed below altitude tape
- Pressing PUSH STD
- Changes altimeter setting to read STD (standard)
- Changes preselected altitude to "FL ___"
- Rotating the knob will eliminate STD mode

Note: A yellow line under the altimeter setting indicates there is a difference (more than 2/100") between the two primary altimeters (pilot and copilot). Verify altimeter setting and adjust as required on both sides.



BARO ALT Switch (Overhead Panel):

FT (feet) - Altitude and PreSelected Altitude are displayed in feet.
M (meters) - Altitude and PreSelected Altitude are displayed in meters at the top of the Altitude Tape (the Altitude Tape itself stays in feet). [see picture at right]

BARO Switch (Overhead Panel):

IN (inches) - Displays the altimeter setting in Inches of Mercury.
hPa (hectopascals) - Displays the altimeter setting in Hectopascals. [see picture at right]

FL180 Switch (Overhead Panel):

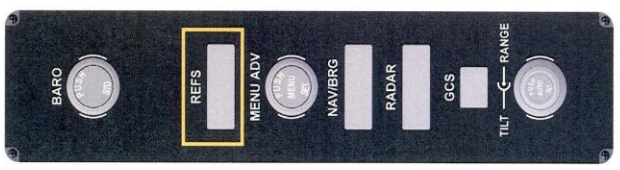
ENABLE - Enables FL180 alerting. Causes the altimeter setting to flash when passing through 18000' or FL180.
DISABLE - Disables FL180 alerting. Prevents the altimeter setting from flashing when passing through 18000' or FL180. This should be used when flying in a region that uses a different Transition Altitude/Level.



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REFS BUTTON

1. PRESS THE REFS BUTTON
- 2a. Press line select keys next to the REFERENCES to get the cursor flashing
- OR
- 2b. Twist the MENU ADV knob on DCP to move the blue box cursor to desired source, then press PUSH MENU SET to get the cursor flashing.
3. Rotate the MENU ADV knob to set the desired value at the flashing cursor
4. Press the same or another line select key or press PUSH MENU SET to stop the flashing cursor
5. Press REFS again or let the menu automatically return to main display.



MENU DISPLAY

Both RA MIN and BARO MIN can be set, however only the last one changed will be displayed. (This will trigger the MINIMUMS flag and minimums call out)

If any reference is not desired then the line select key or the PUSH MENU SET can be pressed and held while the cursor is on that item to change the number back to white.

Press to activate/deactivate the flashing cursor (when flashing, change with MENU ADV knob)

CYAN reference will display on PFD

WHITE reference will not display on PFD

RA MIN SELECTED

Rectangle length will equal RA MIN number.

Example shows a 200' long indicator

Will show when radio altitude is within 2500' AGL

BARO MIN SELECTED

Altitude preselector can be set to BARO MIN setting for exact MDA.

Reference indicator located at BARO MIN setting.

Will show when indicated altitude is within 2500' MSL of reference

AIRSPEED REFERENCES

These references will scroll with the airspeed tape.

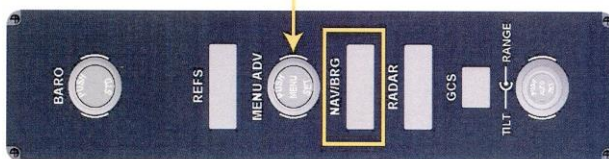
Each V speed will appear only if activated on above display

(See the "Cues and Bugs" handout for inflight imagery on the airspeed tape)

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NAV/BRG BUTTON

1. PRESS THE NAV/BRG BUTTON
 OR
 2a. Press the line select keys on the NAV or BRG SOURCE you want to change
 2b. Twist the MENU ADV knob on DCP to move the blue box cursor to desired source, then press PUSH MENU SET to choose source.
 3. Press NAV/BRG again or let the menu automatically return to main display.



MENU DISPLAY

Each press of this key will *immediately* cycle active NAV SOURCE
 Blue box cursor that can be directly controlled by the MENU ADV knob on the DCP



Each press of this key will cycle #1 BEARING SOURCE options
 Each press of this key will cycle #2 BEARING SOURCE options

MAIN DISPLAY

Bearing pointers can show these options (no bearing data will show if active NAV source is equal to bearing pointer source):
 V = VOR
 L = Localizer (no pointer or info; select VOR frequency on RTU or CDU)
 F = FMS
 A = ADF

Magenta = #1 FMS/Nav Source(s)
 Cyan = #2 FMS/Nav Source(s)



Bearing pointer data field (see bottom left of display)

- 1. V pointers: display DME if there is a valid DME signal and VOR frequency (this will eventually turn into ID if the DME is being decoded and DME hold is not selected - e.g. "SNX")
- 2. F pointers: display distance to the active FMS waypoint

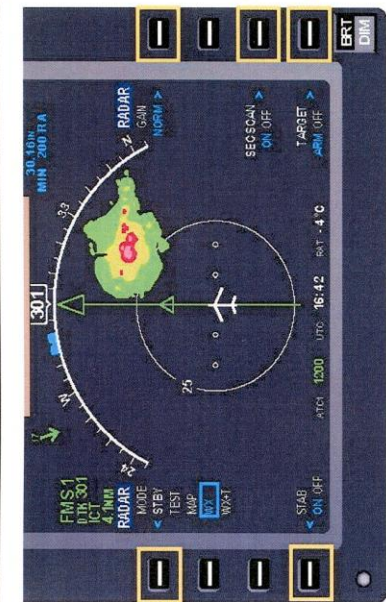
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RADAR BUTTON

- 1. PRESS THE RADAR BUTTON**
 2a. Press the line select keys on the PFD to change the item (GAIN - adjust with the MENU ADV knob once cursor is flashing)
 OR
 2b. Twist the MENU ADV knob on DCP to move the blue box cursor to desired item, then press PUSH MENU SET to select/change item (GAIN - adjust with the MENU ADV knob once cursor is flashing).
 3. Press RADAR again or let the menu automatically return to main display.

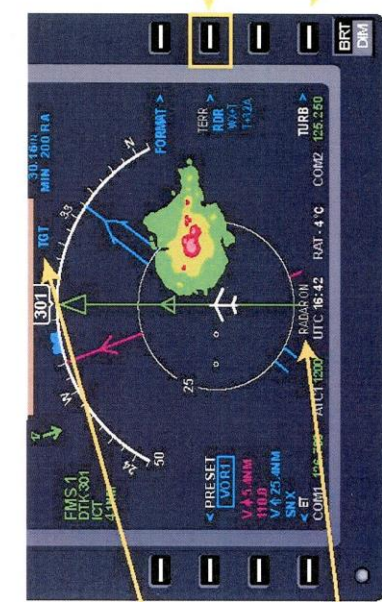


Each press of this key will activate/deactivate the flashing cursor (change as described above)
 Each press of this key will turn SECTOR SCAN ON (30° each side) or OFF (60° each side)
 Each press of this key will choose TARGET mode as ARM or OFF. Will show TGT on PFD when ARMED.



MENU DISPLAY
 Each press of this key will cycle RADAR MODE (not recommended method - use MENU ADV knob instead)
 Each press of this key will cycle STABILIZATION ON or OFF (should not be chosen unless AHRS attitude is inop)

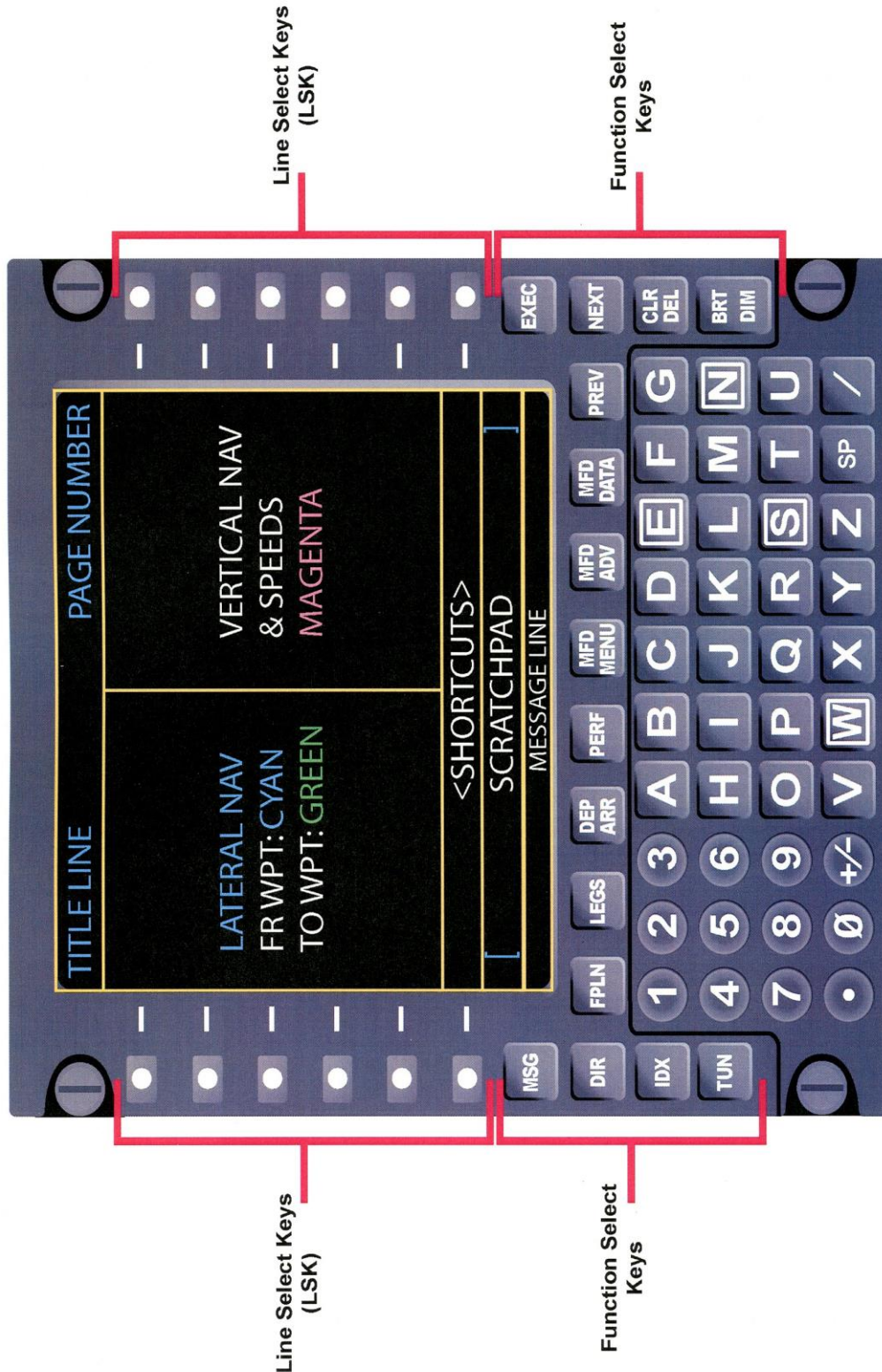
Radar information display (examples)
 WX+T - only works at 50nm or less (will show magenta areas for precipitation induced turbulence)
 USTB - attitude input is not being used to stabilize radar antenna
 GCS - Ground Clutter Suppression has been pushed on the DCP
 T+3.2A - Tilt angle ("A" indicates auto tilt selected by pressing PUSH AUTO TILT on DCP range knob)
 Exists only when WX+T is active. Allows imagery of only magenta turbulence areas for 30 seconds.



MAIN DISPLAY
 Target mode provides an alert to the pilot when a radar target is detected and all outside radar displays have been deselected.
 Searches a +/- 15° sector at a 7-200nm range regardless of current range or sector settings. Will turn yellow if a target is detected.
 Will show only when on the ground and the radar antenna is not in STBY or TEST. (60 seconds after landing the radar will automatically go to STBY).

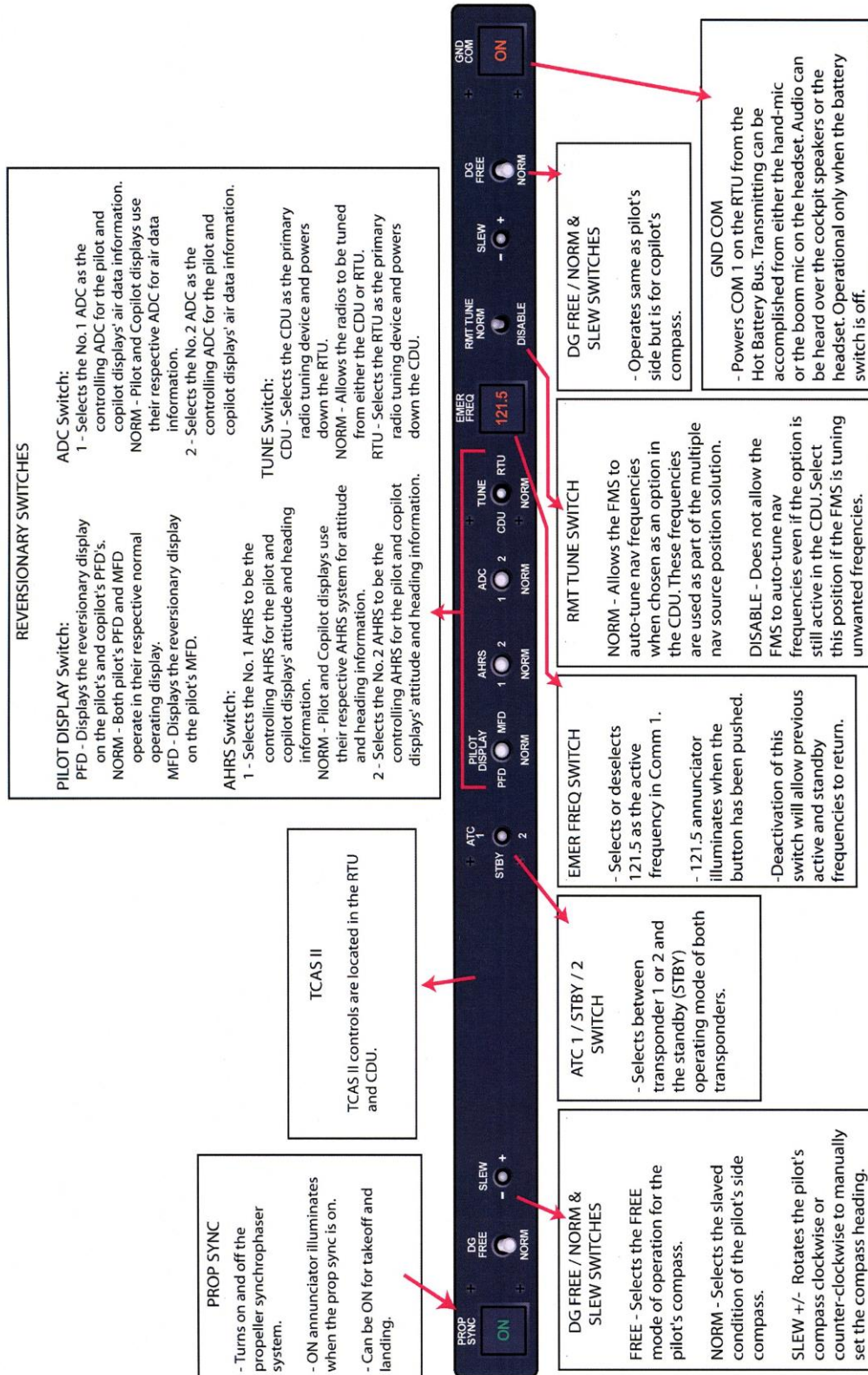
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FMS-3000 ORIENTATION



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REVERSIONARY SWITCH PANEL – TCAS II INSTALLATION

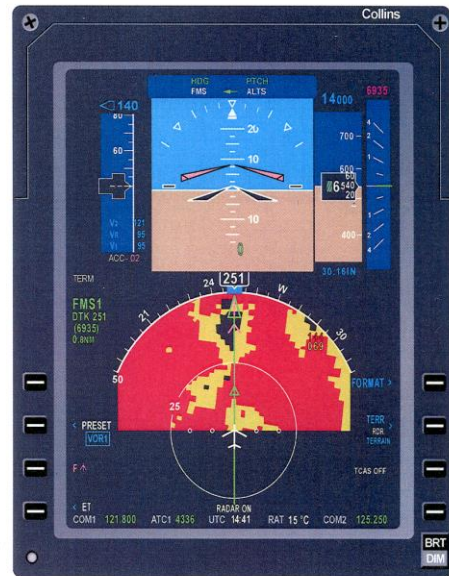


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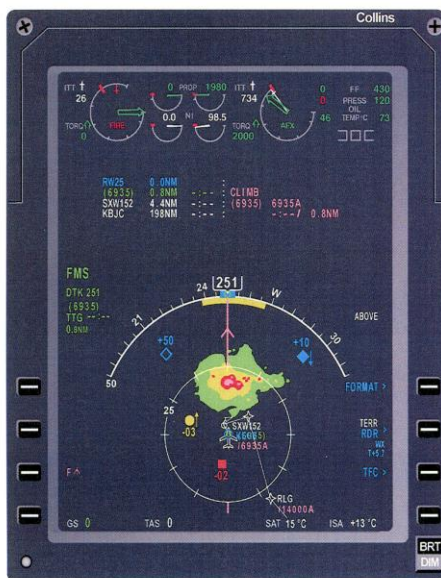
HSI FORMAT



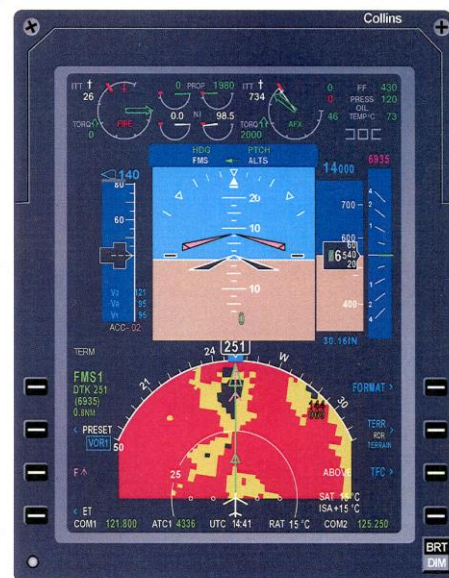
ARC FORMAT



**PRESENT POSITION (PPOS)
 MAP FORMAT
 (shown on MFD)**



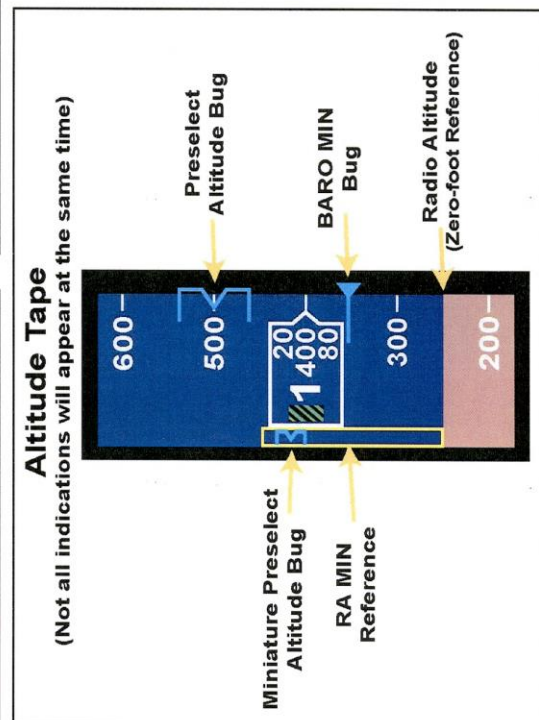
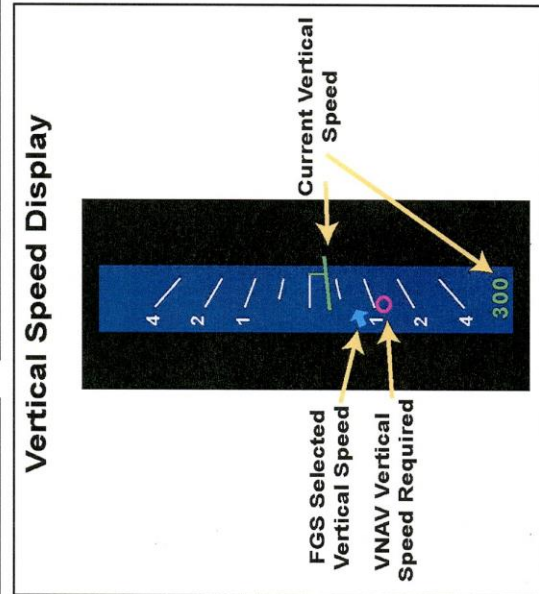
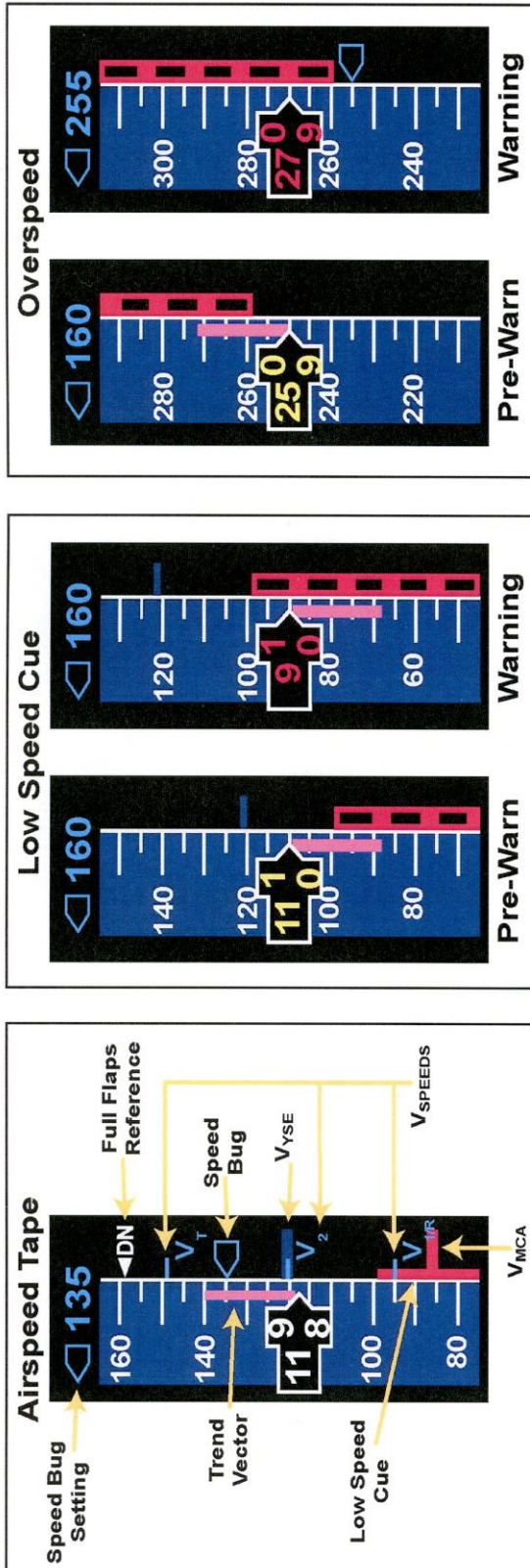
**REVERSIONARY (COMPOSITE)
 DISPLAY**



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AIRSPEED/ALTITUDE/VERTICAL SPEED CUES & BUGS



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FLIGHT GUIDANCE PANEL (FGP)

Flight Level Change (FLC)

Will capture actual IAS when:
 - FLC button pressed
 - AP engaged with FLC already selected
 - SYNC button with FLC already selected

Rotation of the SPEED Knob slews the IAS reference to the desired speed.

Pressing the center of the speed knob changes the reference speed from Knots to Mach and vice versa.

VERTICAL SPEED MODE

Will capture actual VS when:
 - VS button initially pressed
 - AP engaged with VS already selected
 - SYNC button with VS already selected (AP not engaged)

Rotation of the UP/DOWN thumb wheel adjusts the VS reference.

UP/DOWN Thumb Wheel

Controls Pitch and VS modes.
 PTCH mode = 0.5° per "click" in the direction of rotation.
 VS mode = 100 Ft/Min per "click" in the direction of rotation.

CRST Knob

When the active navigation source is VOR or LOC, the pilot may manually change the navigation course by rotating the CRS Knob. If VOR is active, you can select the direct course to the station by pushing the CRS Knob.

FD Button

The FD button selects or deselects the command bars

VNAV Button

The VNAV Button selects/deselects the VNAV mode.
 When VNAV is active (enabled) the FMS or the pilot is able to command various vertical modes to reach the active FMS Flight Plan Target Altitudes (FPTAs). This allows climb or descent altitude restrictions to be met by the FMS without repeated use of the Altitude Presselector.
 VALTV: VNAV has captured an FMS altitude
 VALTS: VNAV has captured the presselected altitude
 VALT: VNAV has captured the present pressure altitude
 VFCL: VNAV and FLC have been selected to capture the requested IAS and the active FPTA (This is the default climb mode for VNAV)
 VVS: VNAV and VS have been selected to capture the requested vertical speed and FPTA
 VPATH: VNAV has captured a computed descent profile (This is the default descent mode for VNAV)
 VGP: VNAV has captured the RNAV/GPS approach glidepath (APPR must be selected)

CPL Button

Transfer of flight guidance from Pilot to Copilot and vice versa.
 Coupled side drives both flight directors and the autopilot.
 NOTE: When CPL is pushed, the lateral mode of navigation changes to ROLL and the vertical mode changes to PTCH. Every time CPL is pushed, the lateral and vertical modes will have to be reset.
 NOTE ARROWHEAD ON THE IMAGES TO THE RIGHT POINTING TO THE COUPLED SIDE.

FD & CRS2 The FD and CRS2 Knob will work on the copilot's side like they work on the pilot's side.

YD/AP DISC Lowering the YD/AP DISC bar will disengage both the yaw damper and the autopilot.

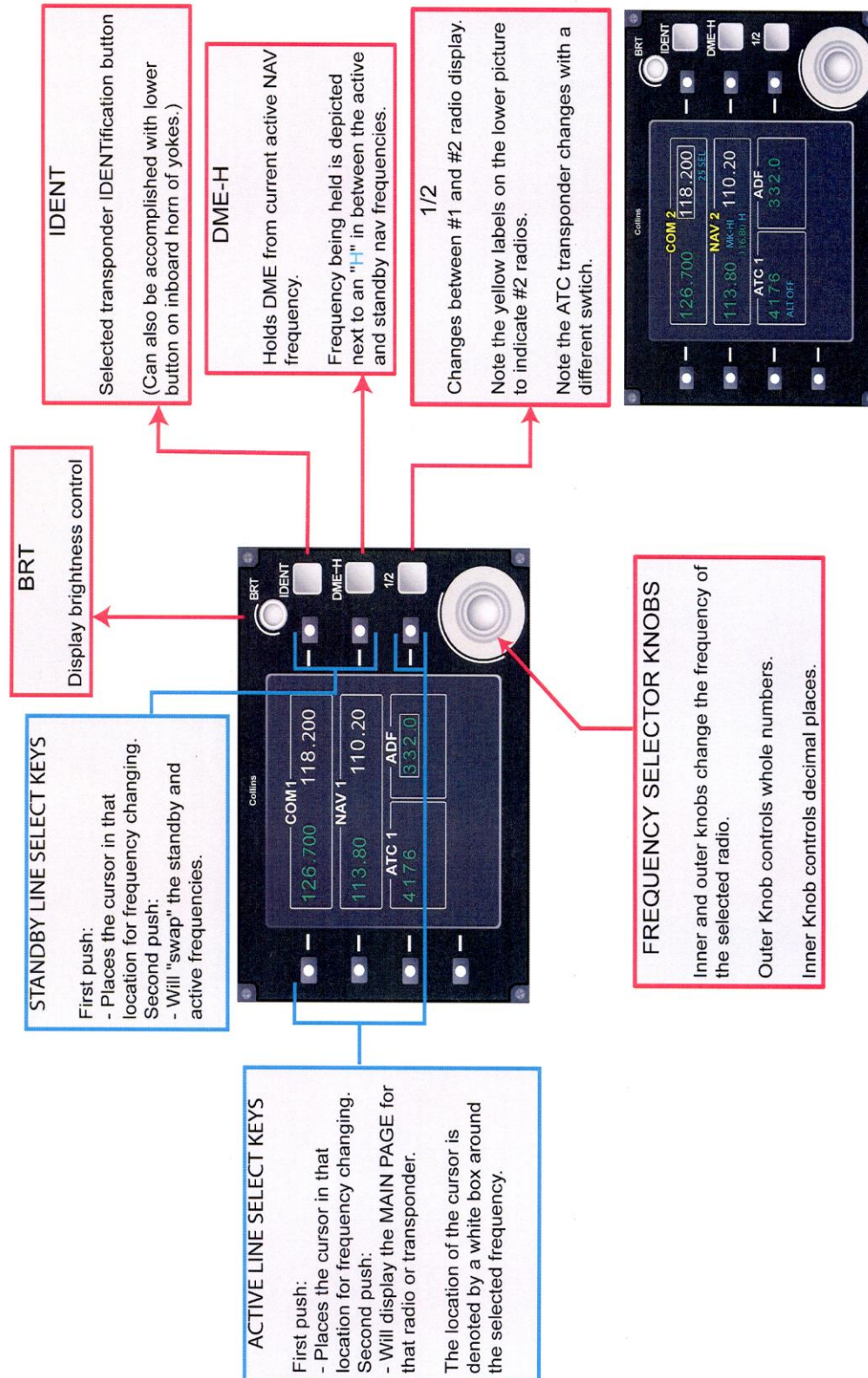
PTCH

Roll and Pitch control bars.

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RADIO TUNING UNIT (RTU) – CONTROLS



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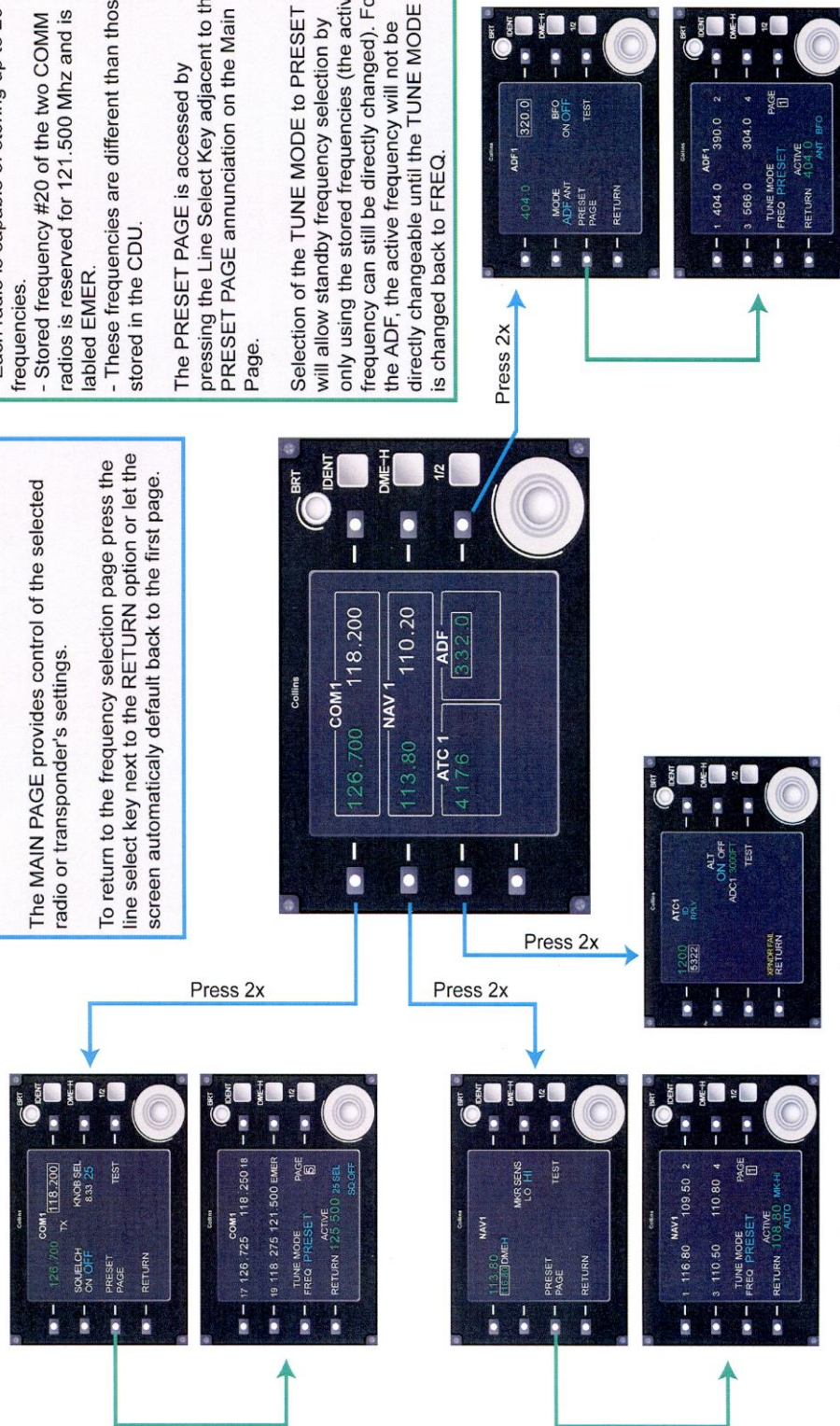
RADIO TUNING UNIT (RTU) – SUBPAGES

PRESET PAGE ACCESS

- The PRESET PAGE provides access to the stored frequencies of each radio.
 - Each radio is capable of storing up to 20 frequencies.
 - Stored frequency #20 of the two COMM radios is reserved for 121.500 Mhz and is labeled EMER.
 - These frequencies are different than those stored in the CDU.
- The PRESET PAGE is accessed by pressing the Line Select Key adjacent to the PRESET PAGE annunciation on the Main Page.
- Selection of the TUNE MODE to PRESET will allow standby frequency selection by only using the stored frequencies (the active frequency can still be directly changed). For the ADF, the active frequency will not be directly changeable until the TUNE MODE is changed back to FREQ.

MAIN PAGE ACCESS

The MAIN PAGE provides control of the selected radio or transponder's settings.
 To return to the frequency selection page press the line select key next to the RETURN option or let the screen automatically default back to the first page.



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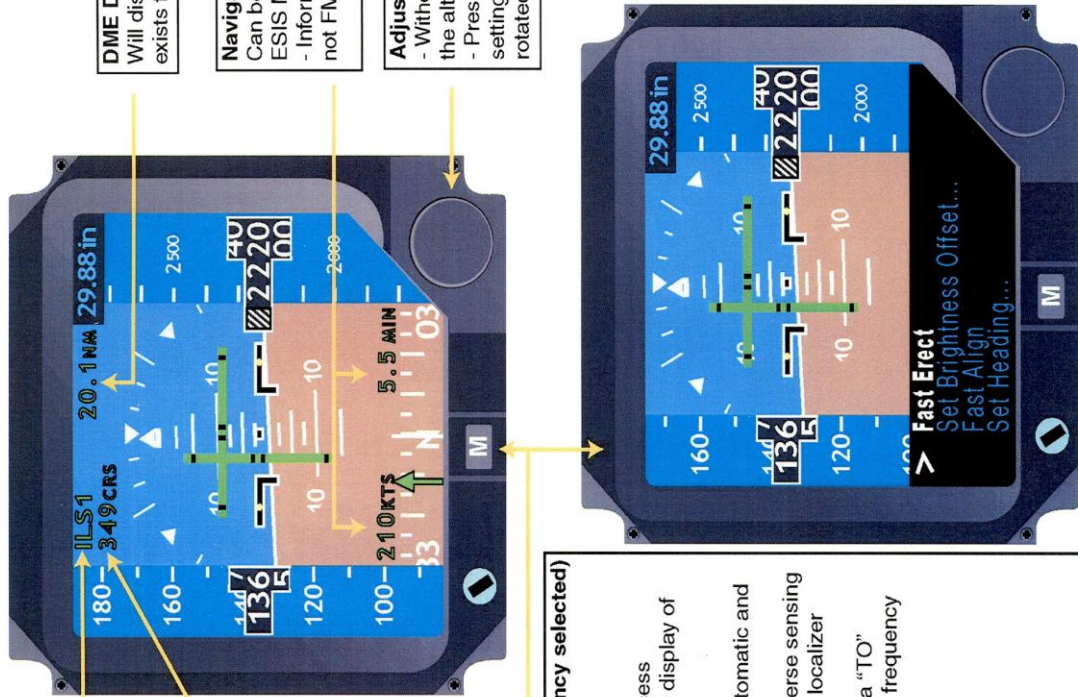
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ELECTRONIC STANDBY INSTRUMENT SYSTEM (ESIS)

DME Distance:
Will display if a valid DME signal exists from NAV1 only.

Navigation Display Options:
Can be selected ON or OFF with ESIS Menu.
- Information developed from DME not FMS/GPS

Adjustment Knob:
- Without the Menu showing, adjusts the altimeter setting.
- Press knob to change altimeter setting to "STD". (Knob must be rotated to eliminate STD mode.)



Navigation Mode Indicator:
Can show these options (dependent on frequency selected in NAV1 in RTU or CDU)
-ILS1, ILS1 BC, VOR1

Course:
Set in ESIS Menu as displayed on lower picture

Menu Button:
Each press will activate or deactivate the lower menu screen

Menu Options (some options depend on NAV frequency selected)
Fast Erect - Realigns the attitude display
Set Brightness Offset... - Allows fine tuning of display
Fast Align - Reboots unit and enters the alignment process
Set Heading... - Allows crew to set heading if the AHRs display of heading is inaccurate
Nav [ON or OFF] - Toggles display of NAV information
Set Crs - allows the NAV course to be set (this is not automatic and must be set if using the ESIS)
ILS [BC or Normal] - Allows selection of Normal or Reverse sensing as appropriate. Only available if a localizer frequency is active
Crs Auto Center - Auto-centers the course needle with a "TO" indication. Only available with a VOR frequency active
NAV DISPLAYS... -Allows selection of DME information
DME Groundspeed [On or Off]
DME Time [On or Off]
Baro Type... - Allows selection between:
HPA
MB
IN HG

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FLIGHT GUIDANCE MODE ANNUNCIATIONS

MODE (FGP Mode Button)	PFD ANNUNCIATION		DEFINITION
	ARMED	ACTIVE	
LATERAL MODES			
Roll Hold FD	N/A	ROLL	Holds bank angle present at the time it is selected or holds existing heading (with a 5° bank limit) if the bank angle is 5° or less without reference to the heading bug . Default mode for the flight director if no other modes are selected, if flight guidance is transferred or if current lateral mode is deselected.
Heading Hold HDG	N/A	HDG	Holds the heading as selected by the Heading Bug. HDG is automatically selected when no other lateral mode is active and any other lateral or vertical mode is selected.
FMS Lateral Navigation NAV	FMS FMS1, FMS2	FMS FMS1, FMS2	Tracks the active course generated by the selected FMS. A single-FMS installation annunciates FMS. A dual-FMS installation annunciates FMS1 or FMS2, as appropriate.
VOR Lateral Navigation NAV	VOR1, VOR2	VOR1, VOR2	Tracks the selected VOR course from the selected NAV radio with a VOR frequency tuned. Annunciates VOR1 or VOR2 as appropriate to the selected radio.
Localizer Lateral Navigation NAV	LOC1, LOC2	LOC1, LOC2	Tracks the selected Localizer course from the selected NAV radio with a localizer frequency tuned. Annunciates LOC1 or LOC2 as appropriate to the selected radio.
FMS Approach APPR	APPR FMS, APPR FMS1, APPR FMS2	APPR FMS, APPR FMS1, APPR FMS2	Tracks the active course generated by the selected FMS. A single-FMS installation annunciates FMS. A dual-FMS installation annunciates FMS1 or FMS2, as appropriate.
VOR Approach APPR	APPR VOR1, APPR VOR2	APPR VOR1, APPR VOR2	Tracks the selected VOR course from the selected NAV radio with a VOR frequency tuned. Annunciates VOR1 or VOR2 as appropriate to the selected radio.
Localizer Approach APPR	APPR LOC1, APPR LOC2	APPR LOC1, APPR LOC2	Tracks the selected Localizer course from the selected NAV radio with a localizer frequency tuned and enables GS mode. Annunciates LOC1 or LOC2 as appropriate to the selected radio.
Go Around	N/A	GA	Go Around button on the left power lever pressed. Maintains the existing heading with a 5° bank limit. Does not reference the heading bug.

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MODE (FGP Mode Button)	PFD ANNUNCIATION		DEFINITION
	ARMED	ACTIVE	
VERTICAL MODES			
Pitch Hold FD	N/A	PTCH	Maintains the pitch present at the time the mode is selected. Default mode for the flight director if no other modes are selected, if flight guidance is transferred, or if current vertical mode is deselected. Can be adjusted with the UP/DN Wheel or the SYNC button.
Vertical Speed Hold VS	N/A	VS 1500↓	Maintains the vertical speed present at the time the mode is selected. Can be adjusted with the UP/DN Wheel or the SYNC button. Selected vertical speed is annunciated adjacent to VS.
Flight Level Change FLC	N/A	FLC 160	Maintains the Indicated Airspeed at the time the mode is selected. Can be adjusted with the SPEED Knob or the SYNC button. Selected speed is annunciated adjacent to FLC.
Altitude Hold ALT	N/A	ALT	Maintaining an altitude other than the Preselected or VNAV altitude. Maintains the altitude present at the time the mode is selected. Can be adjusted with the SYNC button.
Preselect Altitude Hold	ALTS	ALTS	Preselected altitude is being maintained or will be maintained (if armed).
Glide Slope APPR	GS	GS	The APPR LOC mode has been selected and the flight director will, or has, intercepted the localizer glide slope. This mode will not recognize any Preselected or FMS generated altitudes.
Go Around	N/A	GA	Commands a +7° pitch attitude. Selected with the Go Around button on the left power lever.
VNAV MODES			
VNAV – Pitch Hold VNAV	PTCH	VPTCH	Pitch Hold Mode has been selected with VNAV enabled. Can be adjusted with the SYNC button.
VNAV – Vertical Speed Hold VS + VNAV	N/A	VVS 1500↓	Vertical Speed Hold Mode has been selected with VNAV enabled. Selected vertical speed is annunciated adjacent to VVS. Can be adjusted with the UP/DN Wheel or the SYNC button.
VNAV – Flight Level Change FLC + VNAV	FLC	VFLC 160	Flight Level Change Mode has been selected (or armed by the FMS during a VNAV climb) with VNAV enabled. Selected speed is annunciated adjacent to VFLC. Can be adjusted with the SPEED Knob or the SYNC button.
VNAV – Altitude Hold ALT + VNAV	N/A	VALT	Maintaining an altitude other than the Preselected or VNAV altitude. Maintains the altitude present at the time the mode is selected. Can be adjusted with the SYNC button.
VNAV – Preselected Altitude Hold VNAV	ALTS	VALTS	Preselected altitude is being maintained or will be maintained (if armed) with VNAV enabled.
VNAV – FMS VNAV Altitude Hold VNAV	ALTV	VALTV	FMS VNAV altitude is being maintained with the altitude preselector set at a different altitude.
VNAV – PATH VNAV	PATH	VPATH	FMS has captured the manually or automatically generated descent angle to the next waypoint. Aircraft must stay within lateral deviation limits (cross-track error or track angle error) to remain active.
VNAV – Glide Path APPR + VNAV	GP	VGP	The APPR Mode has been selected and the FMS generated VNAV Glide Path is, or will be, captured. Ignores the Preselected altitude or FMS altitudes.

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AVIONICS ACRONYMS

A

ACP	Audio Control Panel
ADC	Air Data Computer
ADF	Automatic Direction Finder
ADI	Attitude Direction Indicator
AFD	Adaptive Flight Display
AFCS	Automatic Flight Control System
AHC	Attitude Heading Computer
AHRS	Attitude and Heading Reference System
AHS	Attitude Heading System
AM	Amplitude Modulation
AP	Autopilot

B

BFO Beat Frequency Oscillator

C

CCW	Counterclockwise
CDU	Control Display Unit
CPL	Couple
CVR	Cockpit Voice Recorder
CW	Clockwise

D

DBU	Database Unit
DCP	Display Control Panel
DCU	Data Concentrator Unit

E

EDC	Engine Data Concentrator
EFIS	Electronic Flight Instrument System
EGPWS	Enhanced Ground Proximity Warning System
EIS	Engine Indicating System
ESIS	Electronic Standby Instrument System

F

FD	Flight Director
FGC	Flight Guidance Computer
FGP	Flight Guidance Panel
FGS	Flight Guidance System
FMC	Flight Management Computer
FMS	Flight Management System

G

GCS	Ground Clutter Suppression
GPS	Global Positioning System
GPWS	Ground Proximity Warning System

H

HF High Frequency Radio

I

IAPS	Integrated Avionics Processor System
IEC	IAPS Environmental Controller
IMU	Inertial Measurement Unit
IND	Indicators
IOC	Input / Output Concentrator

J

K

L

LCD	Liquid Crystal Display
LSC/ISS	Low Speed Cue/Impending Stall Speed
LSK	Line Select Keys
LV	Lower Sideband Voice

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M

MCDU Maintenance Control Display Unit
MDC Maintenance Diagnostic Computer
MFD(1) Multifunction Display
MFD(2) Multi-Function Display
MFD(3) Multifunctional Flight Display

I

TA Traffic Advisory
TAWS Terrain Awareness and Warning System
TCAS Traffic Alert Collision Avoidance System
TFC Traffic

N

NDB Non-Directional Beacon

U

USTB Unstabilized (Weather Radar)
UV Upper Sideband Voice

O**V****P****W**

PA Passenger Address
PFD Primary Flight Display
PTT Press-to-Talk

X**Q****Y****R****Z**

RA Resolution Advisory
RAT Ram Air Temperature
RCCB Remote Control Circuit Breaker
RSS Radio Sensor System
RTU Radio Tuning Unit

S

SAT Static Air Temperature
SELCAL Selective Call