Chapter 10 Section 10

Conventional Flight Instruments

Mac/Airspeed Indicator

Chapter and Section Headers are programmed. They will automatically generate LEP's and TOC.

ก 6 1003 Ø 8 Vmo 300 M 200180 A CAPTAIN'S INSTRUMENT PANEL FIRST OFFICER'S INSTRUMENT PANEL NOTE:

1 Airspeed Cursor Mode Annunciator

auto mode: out of view.

manual mode: in view.

NOTE: 2 Vmo Pointer

Graphics are in full color, just as you would see them in the cockpit. Line drawings are used only if there is no other option.

All titles can be linked to training or

other manuals.

NOTE:

Boxes are color shaded to stand out when printing is done in color.

Indicates the maximum operating (indicated) airspeed in knots.

3 Vmo Flag

In view
indicates the Vmo pointer is inoperative. NOTE:

ু Indicates airspeed in knots.✓

5 Airspeed Cursor Control

- push in -

 - airspeed cursor is position from the AFDS FCC.
- pull out -
 - manual mode.
 - airspeed cursor is positioned by rotating the control.

NOTE: Auto Revision dates that print on LEP's.

Callout numbers are Type 1 fonts and fully vector-

able.

NOTE:

Fonts are Type 1, and fully vectorable.

NOTE:

Page Numbers are auto generated and work with Chapter and Section Headers to automatically generage LÉP's and TOC.

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6 Airspeed Cursor

- indicates target airspeed.
- positioned manually or automatically, as selected by the airspeed cursor control.

7 Airspeed markers

Positioned manually to the desired airspeed reference.

8 Mach Digital Counter

- shows Mach number, from .40 to .99 Mach, in digital form.
- masked below .40 Mach.
- digits are covered by a warning flag when the display is unreliable.

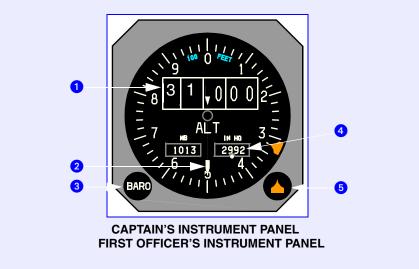
manual mode: retracted.

auto mode: in view if airspeed cursor signals, as determined by the AFDS FCC, are unreliable.

Airspeed Digital Counter

- digital display of indicated airspeed in knots.
- warning flag covers the counter when the airspeed pointer and airspeed digital counter are unreliable.

Altimeter



1 Digital Counter

Indicates current altitude in increments of thousands, hundreds and twenty feet.

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- warning flag appears whenever the ADC signal is lost or a malfunction exists.
- green flag appears in the left window when the altitude is below 10,000 feet.
- a NEG flag appears in the two left-hand windows when altitude below zero feet is displayed.

2 Altitude Pointer

makes one revolution each one thousand feet.

3 Barometric Setting Control

Rotate -

adjusts barometric settings.

4 Barometric Setting Window

Displays barometric correction (in millibars and inches of mercury) as set by the barometric setting control.

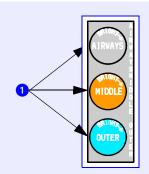
5 Reference Altitude Marker

manually positioned to the desired reference altitude using the reference altitude marker control.

6 Reference Altitude Marker Control

Use to manually set the reference altitude marker.

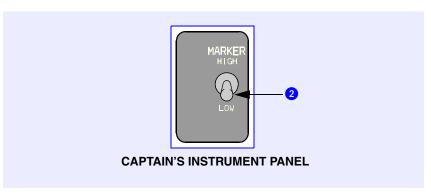
Marker Beacon



CAPTAIN'S INSTRUMENT PANEL FIRST OFFICER'S INSTRUMENT PANEL



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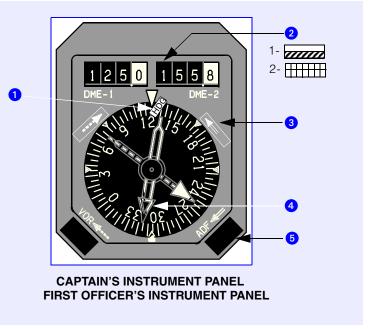
1 Marker Beacon Lights

AIRWAYS (white) - illuminates over an inner or airways marker beacon. MIDDLE (amber) - illuminates over a middle marker beacon. OUTER 9blue) - illuminates over an outer marker beacon.

2 Marker Beacon Switch

HIGH - selects high sensitivity of receiver. LOW - selects low sensitivity of receiver.

Radio Distance Magnetic Indicator



1 heading Warning Flag

In view -

- · selected compass signal is invalid.
- RDMI power failure.

2 DME Indicator

Indicates DME distance from selected DME station in nautical miles (300 nautical miles maximum).

Warning Flags:

- - DME receiver powered but not receiving a DME station.

electrical power lost. invalid DME receiver. DME receiver powered but not possed of the Bearing Pointer Warning Flag



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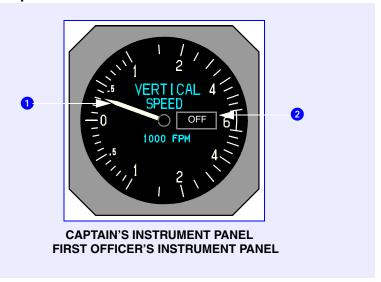
4 Bearing Pointers

- narrow pointer uses signals from the VHF NAV receiver No. 1 or ADF receiver No. 1.
- wide pointer uses signals from the VHF NAV receiver No. 2 or ADF receiver No. 2.

5 VOR/ADF Bearing Pointer Switch

ROTATE - selects related VOR or ADF for the bearing pointer.

Vertical Speed Indicator



1 Vertical Speed Pointer

- depicts rate of climb or descent from 0 to 6,000 feet per minute.
- indicates zero when IRS vertical speed is unreliable.

OFF Flag

In view -

- respective VSI and/or ADC has failed.
- selected IRS vertical speed data are unreliable.

Air Temperature

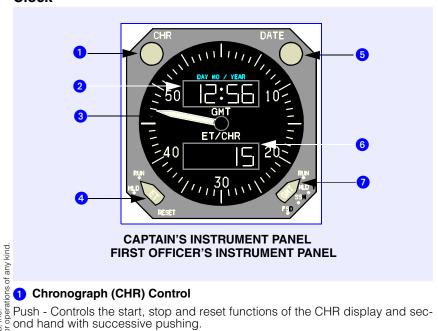


CENTER INSTRUMENT PANEL

1 Digital Display

Displays TAT (deg C) indications in digital form.

Clock



ond hand with successive pushing.

- · overrides any existing ET display.
- ond hand with successive overrides any existing
 Time/Date Window
 displays time (hours, selector.
 alternately displays date selector. • displays time (hours, minutes) when time is selected with the time/date
 - alternately displays day-month and year when date is selected with the time/ date selector.
 - 3 Chronograph Second Hand



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- indicates chronograph seconds.
- controlled by the CHR control.

4 Elapsed Time (ET) Selector (three position, rotary)

Controls the elapsed time function.

RESET - returns ET display to zero (spring loaded to HLD).

HLD (hold) - stops the elapsed time display.

RUNB - starts the elapsed time display.

Date Control

Push - displays date (day, month) alternating with year.

Push - retunes display to time.

6 Elapsed Time 9ET)/Chronograph Window

- displays elapsed time (hours, minutes) or chronograph minutes.
- the chronograph display replaces the elapsed time display.
- elapsed time continues to run in the background and displays after the chronograph is reset.

7 Time Control (four position, rotary)

Sets the time and date when the time/date selector is set to manual.

FS D (fast slew, day) -

- advances hours when time is selected with the time/date selector.
- advances days when date is selected with the time/date selector SS M (slow slew, month) -
- advances minutes when time is selected with the time/date selector.
- advances months when date is selected with the time/date selector.

HLD Y (hold, year) -

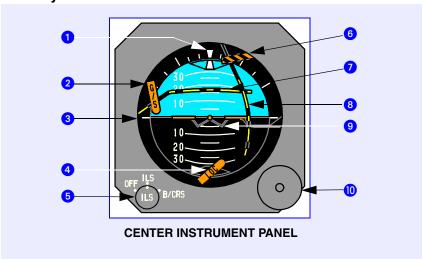
- stops the time indicator and sets the seconds to zero when time is selected with the time/date selector.
- advances years when date is selected with the time/date selector.

RUN - starts the time indicator.

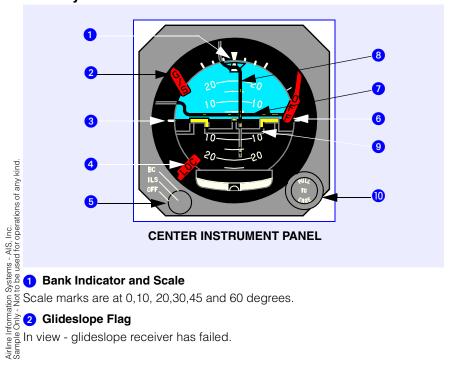
Standby Flight Instruments

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Standby Horizon -400



Standby Horizon -300





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3 Horizon Line and Pitch Angle Scale

Pitch scale is in 5 degree increments.

4 LOC Flag

In view - Localizer receiver has failed.

5 Approach Mode Selector

OFF - glideslope and localizer pointers retracted from view.

ILS - glideslope and localizer pointers in view; ILS signals provided by the No. 1 ILS receiver.

B/CRS - reverses sensing for localizer pointer during back course approaches; glideslope pointer not displayed.

6 GYRO Flag

In view -

• attitude is unreliable.

7 Glideslope Pointer and Deviation Scale

- pointer indicates glideslope position.
- pointer is not displayed when:
 - · approach selector is off.
 - no computed data exists
 - glideslope receiver has failed
- scale indicates deviation.

8 Localizer Pointer and Deviation Scale

- pointer indicates localizer position.
- pointer is not displayed when:
 - · approach selector is off.
 - no computed data exists.
 - localizer receiver has failed.
- scald indicates deviation.

9 Airplane Symbol

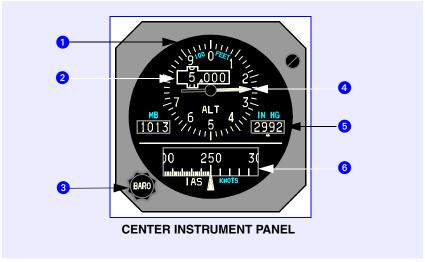
Caging Control

Pull - provides fast erection (caging) of the gyro.

Release - control retracts.

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Standby Altimeter/Airspeed Indicator



Standby Altimeter

Indicates current altitude in feet.

2 Digital Counter

Indicates thousands of feet

- a green flag appears in the left window when altitude is less than 10,000 feet.
- a striped flag appears in the left window when altitude is less than zero feet.

3 Barometric Setting Control

Rotate -

adjusts the barometric correction in both barometric windows.

4 Altitude Pointer

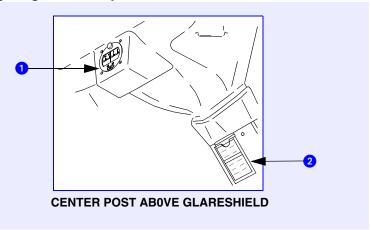
Indicates hundreds of feet.

Barometric Setting Windows

Supply Displays barometric correction in no barometric setting control. Displays barometric correction in millibars and inches of mercury as set by the

Samble Only - Not to be need Indicator Samble Only - Not to be need Indicator Indicates current airspeed in knots.

Standby Magnetic Compass



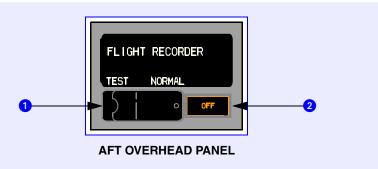
1 Standby Magnetic Compass

Displays magnetic heading.

2 Standby magnetic Compass Correction Card

provides appropriate heading corrections.

Flight Recorder



1 Flight Recorder Test Switch

NORMAL (guarded position) -

- in flight the recorder operates anytime electrical power is available
- on the ground either engine must also be operating.

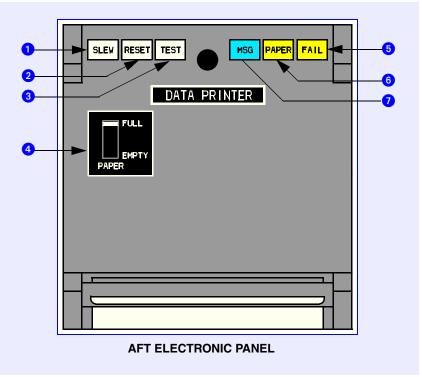
TEST - bypasses the engine oil pressure switches and the air ground switch to power the flight recorder on the ground.

OFF Light

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Illuminated (amber) - indicates the recorder is not operating or the test is invalid. may indicate power failure, loss of input data, or electronic malfunction.

Aircraft Condition Monitoring System (ACMs) Printer -300



1 SLEW Switch

ions of any kind. Advances paper feed.

ខ្មត្ត<mark>ិ 2 TEST Switch</mark>

Initiates self-test to print character list.

RESET Switch
Resets Printer.

4 PAPER Indicator ੇ ਨ Indicates paper level.

FAIL Light



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Indicates paper supply is exhausted.

6 PAPER Light

Indicates paper supply is exhausted.

Message (MSG) Light

Indicates message pending on printer.