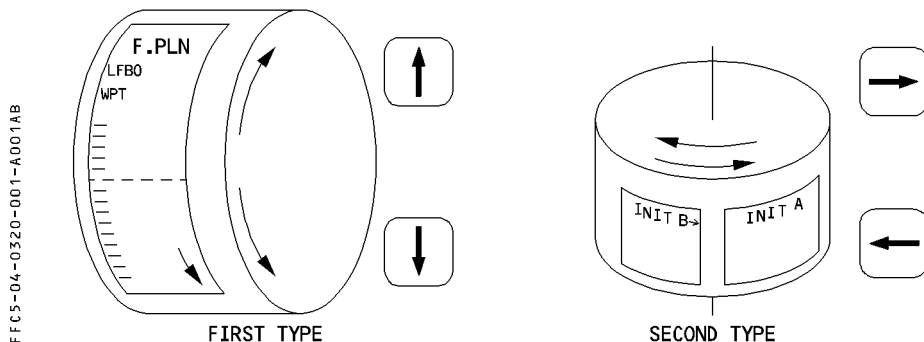


GENERAL

The FMGS (flight management guidance and envelope system) displays information on various “pages”. When a page cannot display all the information assigned, it cues the pilot to call up additional information.

There are three types of pages, and each type has its particular way of cuing the pilot to call up additional information.



First type

When this page cannot display all the information on the screen simultaneously (more information than the six pairs of lines on the screen can hold), the pilot can scroll the page up or down.

When this is the case, the screen displays a $\uparrow \downarrow$ symbol in its bottom righthand corner (F-PLN pages, secondary F-PLN page, departure/arrival pages,...).

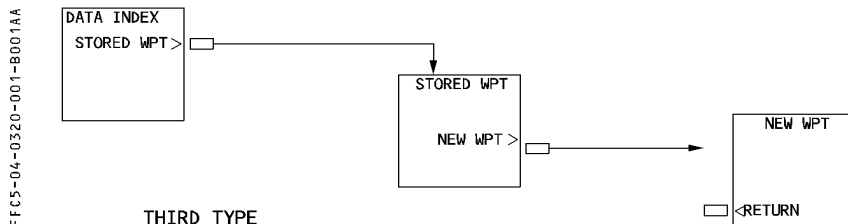
Second type

When successive pages hold the information, the pilot presses the $[\rightarrow]$ $[\leftarrow]$ keys to call up these pages sequentially.

In this case, the page displays an arrow in the top right hand corner of the screen (INIT pages).

Third type

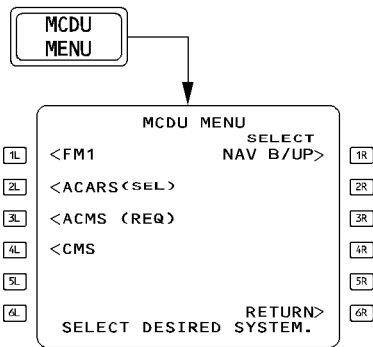
When successive pages hold different types of information, the pilot calls these up by pressing the key adjacent to the prompts $>$, $<$ or $*$.



THIRD TYPE

MCDU MENU PAGE

This page lists the various systems to which the pilot can gain access through the MCDU. It also allows activation of the navigation backup mode.



The pilot selects a system by pressing the key adjacent to the name of that system. The screen shows the name of the selected system in green, all others in white.

If the MCDU cannot establish communication with the selected system, it displays “TIME OUT”.

When a system calls for pilot attention, the MCDU displays “REQ” next to the system name, and the “MCDU MENU” annunciator lights up.

When the pilot presses the key next to the name of the system that requires attention, the “MCDU MENU” annunciator light goes out.

SELECT NAV B/UP

Pressing the [1R] key selects the NAV B/UP function and the field displays DESELECT NAV B/UP.

If the NAV B/UP is inoperative, the field is blank.

RETURN

This field is displayed when a function is active

If the MCDU attempts to communicate with a system, “SEL” is displayed next to the system name.

	PILOT INTERFACE		4.03.20	P 4
	MCDU PAGE DESCRIPTION		SEQ 001	REV 07

[2L] ALTN/CO RTE(blue)

This field is dashed until a primary destination is entered in the 1R field. If a preferred alternate is associated with the primary destination, it is displayed in this field with the company route identification. The pilot may enter an alternate and a company route manually.

If preferred alternate is not associated with the primary destination, "NONE" is displayed in this field.

When the alternate route and the primary destination do not match, the MCDU scratchpad displays "DEST/ALTN MISMATCH".

If the primary destination is changed, this field is modified accordingly.

[3L] FLT NBR

The flight number appears in this field automatically if it is stored with the company route. The pilot may modify or enter a new number here.

[4L] LAT

This field displays the latitude of the departure airport reference point.

[5L] COST INDEX

The pilot may modify it by slewing or overwriting.

This is usually stored in the data base along with the company route.

The pilot may modify it or enter a new value here. The system defaults to the last entered value if a value is not stored in the database.

[6L] CRZ FL/TEMP
(cruise flight
level and temperature)

The cruise flight level is usually stored in the database along with the company route. If not, it has to be entered manually.

If no cruise flight level is entered, the system will not furnish predictions while the aircraft is on the ground.

The pilot has to enter the temperature at cruise flight level in order to refine the predictions. Otherwise these are computed for ISA conditions. (If no sign is entered, the system uses plus).

[1R] FROM/TO

This field allows the pilot to enter a city pair (ICAO codes for city of origin and destination).

This entry automatically deletes any company route entered previously and calls up the route selection page. If one airport of the pair is not in the database, the display changes to the NEW RWY page.

FFCS-04-0320-005-A 100AA

	INIT	FROM/TO →	
[1L]	CO RTE 20441	LSGG/LGAT	[1R]
[2L]	ALTN/CO RTE LGTS/LGATLS01	INIT REQUEST*	[2R]
[3L]	FLT NBR IT5612	ALIGN IRS→	[3R]
[4L]	LAT↑↓ 4512.ON	LONG 00727.2E	[4R]
[5L]	COST INDEX 540	WIND>	[5R]
[6L]	CR2 FL/TEMP FL290 /-42	TROPO 36090	[6R]

[2R] INIT REQUEST

This prompt is displayed if the pilot did not enter an active flight plan or entered a flight number or a company route that is not in the aircraft database. Selecting this prompt sends to the ground a request for active flight plan initialization (downlink message).

When the star is not displayed, a downlink message cannot be sent.

The uplink flight plan is automatically inserted in the active flight plan prior to engine start provided an active flight plan does not exist.

After engine start, the uplink flight plan is sent to the secondary flight plan and manually inserted or rejected . (Refer to 4.04.40).

[3R] ALIGN IRS

This field displays this legend only if the LAT and LONG fields are filled in and at least one of the inertial reference systems is in ALIGN status (IRS in NAV position and alignment process not over). If the pilot presses this key when its field is displaying this legend, the present coordinates are sent to the IRSs and this completes the alignment process.

If one of three IRSs indicates an ALIGN FAULT occurrence, the prompt becomes REALIGN IRS.

[4R] LONG

This field displays the longitude of the departure airport reference point. The pilot may modify it by slewing or overwriting.

[5R] WIND >

The pilot presses this key in order to gain access to the climb wind page except if a temporary flight plan exists. In this case, the scratchpad displays TEMPORARY F-PLN EXISTS.

[6R] TROPO

The default tropopause altitude is 36090 feet. The pilot can use this field to modify it (60000 feet maximum).

ROUTE SELECTION PAGE

This page displays all the company routes stored in the data base that are associated with the inserted city pair. The pilot may call it up manually, or it may be displayed automatically.

- Manually : The pilot presses the FROM/TO or ALTN key on the INIT A page when a city pair is displayed there.
- Automatically : The system displays it when the pilot enters a city pair or defines an alternate on the INIT A page of the active or secondary flight plan, or when the flight crew enters an OTHER ALTN on the alternate page.

1L

2L

3L

4L

5L

6L

KMSP/KLGA 1 / 1 ↔

MSPLGA

DLL

J34

ETG

DIR

DJB35

MIP

BAE

J146

MIP5

ETG

PROUD

TR

2R

3R

4R

5R

6R

<RETURN

INSERT★

TITLE Identifies for the city pair inserted on the INIT A page.
If the flight crew accesses this page from an OTHER ALTN, this field displays the primary destination and the other alternate city pair.
(The numbers in the upper righthand corner are the total number of company routes from this city pair stored in the data base).

[1L] This field shows the name of the company route displayed on the page.
Line 2to Line 5 These fields display the various elements of the company route (waypoints in green large font and airways in white small font).

[6L] RETURN The pilot presses this key to return to the accessing page.

[6R] INSERT or
SELECT This prompt displays amber INSERT (blue for the secondary flight plan) if the pilot accessed the page from the INIT A (or secondary INIT A) page.
It displays SELECT (blue) if the crew accessed the page from the alternate page.
The pilot presses this key to insert the displayed company route in the respective flight plan and return the display to the accessing page.

Note : The pilot can slew the display to show the rest of the route if one page does not show it all, or to display other company routes for this city pair.

Left intentionally blank

TITLE
[1L] TRU WIND/ALTto[5L]

CLIMB WIND in white large font.
This field displays the winds entered at various climb altitudes in blue color before climb phase activation and in green color after climb phase activation.
This field may also display history winds or uplink winds.
Large blue brackets are displayed before any wind entry. Pilot entered and uplinked winds are displayed in large font, history wind data in small font.
Upon sequencing the top of climb, the climb winds are deleted.
Note : *Climb winds are not deleted when the origin airport is changed.*

[1R] HISTORY WIND

Displayed in preflight phase only. This key calls up the history wind page. This page is not modifiable (green small font) but can be inserted into the CLIMB WIND page using the 6R key and modified accordingly.

[2R] WIND REQUEST*

Pressing this key sends a request for ACARS winds. (Refer to 4.04.40). This prompt is active only on ACARS equipped aircraft.

[5R] NEXT PHASE

Pressing this key calls up the CRUISE WIND page or the DESCENT WIND page if no cruise waypoint exists.

HISTORY WIND PAGE

HISTORY WIND			
1L	050° / 020	FL 050	1R
2L	070° / 030	FL 150	2R
3L	070° / 035	FL 250	3R
4L	065° / 045	FL 350	4R
5L	065° / 045	CRZ FL 370	5R
6L	<CLIMB WIND		6R
			INSERT★

[6L] CLIMB WIND

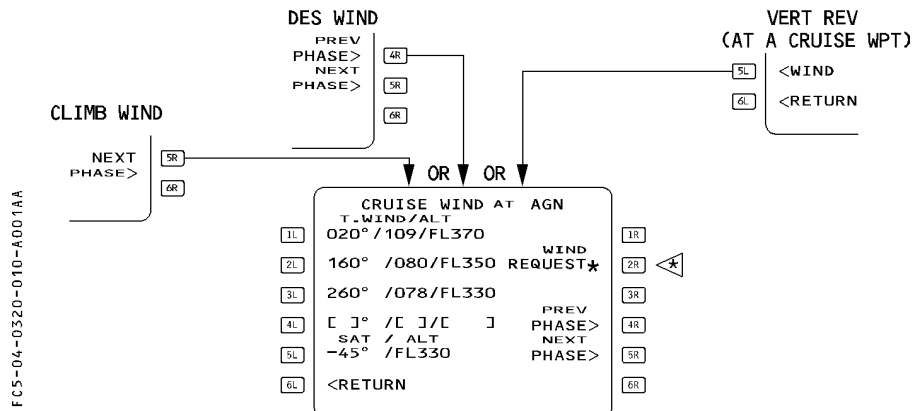
This key reverts the display to CLIMB WIND page.

[6R] INSERT

This key inserts the history wind values into the CLIMB WIND page.

CRUISE WIND PAGE

This page displays the wind (direction and velocity) for each cruise waypoint.
 Cruise wind page is accessed as following. It allows to define a temperature at a given altitude.



TITLE

[1L] T. WIND/ALTto[4L]

[5L] SAT/ALT

[2R] WIND REQUEST*

[4R] PREV PHASE

[5R] NEXT PHASE

Any new entry performed on the CRUISE WIND page is immediately inserted into the corresponding flight plan. Predictions are dashed on the F-PLN pages during the recomputation time. CRUISE WIND page reverts automatically to F-PLN page if a temporary flight plan is created or the secondary flight plan is activated.

CRUISE WIND AT in white large font.

These fields display in blue the entered wind at various altitudes.

The entered winds are propagated at the same altitude to the downpath cruise waypoints, if no other winds are entered.

The propagated wind direction and velocity are displayed in small fonts.

Both uplinked winds and pilot entered winds are displayed in blue large font. Wind data are modifiable during the cruise.

This field allows the pilot to enter a temperature at a given flight level, or displays a propagated value.

The crew must enter both temperature and altitude at the first entry.

He can then modify independantly the temperature or the altitude.

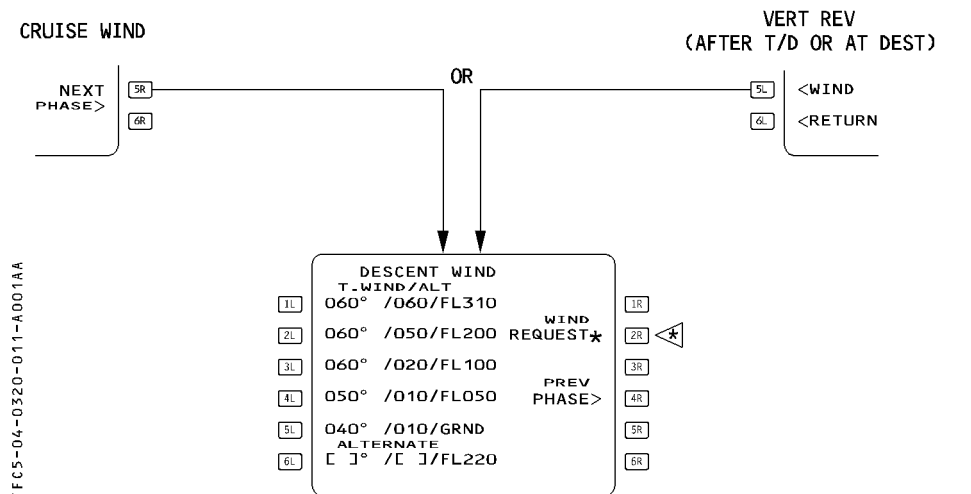
Pressing this key sends a request for ACARS winds. (Refer to 4.04.40)

This prompt is displayed in Preflight, Takeoff, Climb and Done phases. Pressing this prompt calls up the CLIMB WIND page.

Pressing this prompt calls up the DES WIND page.

DESCENT WIND PAGE

This page allows the pilot to define and display the winds used for computing the descent profile. The pilot calls it up by selecting NEXT PHASE on the CRUISE WIND page or WIND prompt on VERT REV page.



[1L] to [5L]

This field displays inserted winds or uplinked winds in large blue font prior to activating the descent phase (modifiable values) and in green after descent phase activation (non-modifiable values).

An entry of "GRND" in the "ALT" field is seen as the wind at ground level. This wind is copied on the PERF APPR page (and corrected for the magnetic variation).

A clear action on one key reverts the line to blue bracket.

This field is displayed only when an alternate is defined.

The pilot-entered value or uplinked value is displayed in large blue font. Always modifiable by the pilot.

Pressing this key sends a request for ACARS winds (Refer to 4.04.50). This prompt is active only on ACARS or ATSU equipped aircraft.

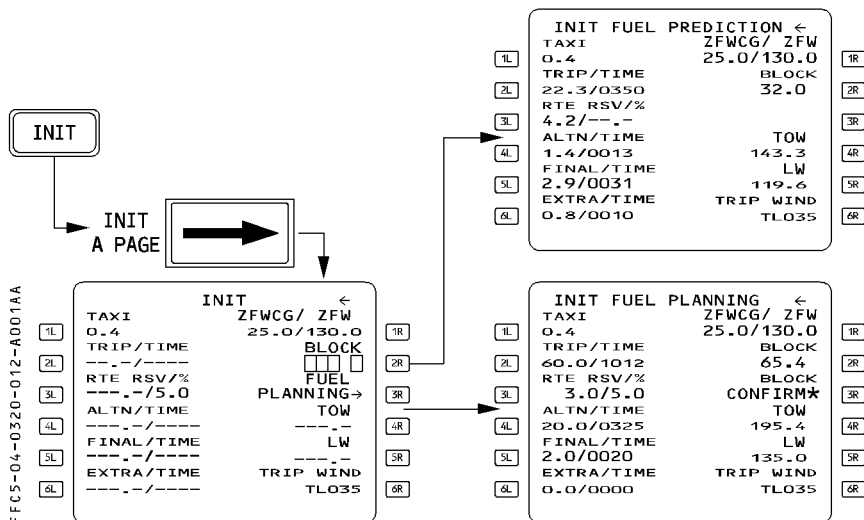
Pressing this key calls up the CRUISE WIND page. The field is erased after the top of descent has sequenced.

Note : Descent winds and alternate wind are deleted if the destination airport is changed.

INIT B PAGE

The pilot uses this page to initialize gross weight and center of gravity before starting the engines. The pilot can call it up from the INIT A page by pressing the [→] key on the MCDU console, as long as engines have not been started.

This page automatically reverts to the FUEL PRED page after the first engine is started.



[1L] TAXI

This is the taxi fuel, which defaults to a preset value, (usually 400 kilos). The pilot can change the value through this field. This field displays trip fuel and time when predictions become available.

[2L] TRIP/TIME(green)

The pilot cannot modify this data.

[3L] RTE RSV/(blue)

This field displays the reserve fuel for the route and the corresponding percentage of trip fuel. It may be blank, if such is the policy of the operator. The pilot can either enter a route reserve, or a percentage, and the system then automatically computes the nominal value.

	PILOT INTERFACE MCDU PAGE DESCRIPTION	4.03.20	P 13
		SEQ 001	REV 07

[4L] ALTN/TIME(green)	This field displays alternate trip fuel and time, assuming that Cost Index = 0 and that the aircraft flies at the default cruise flight level. This field displays its information in a small font, and the flight crew cannot modify it.
[5L] FINAL/TIME(blue)	This field displays hold fuel and time associated with continued flight to the alternate airport (or destination airport if no alternate is defined). The pilot may enter a final fuel or time (at alternate or destination) and the system will compute associated holding fuel/time available. Assumptions include a racetrack pattern 1500 feet above the alternate airport, with the aircraft in the clean configuration at green dot speed (or in accordance with airline fuel policy established in the database).
[6L] EXTRA/TIME(green)	This field displays the amount of extra fuel and the available time it represents for holding over the alternate or primary destination if the pilot did not define an alternate. $EXTRA\ FUEL = BLOCK - (TAXI + TRIP + RSV + ALTN + FINAL)$ The field displays this information in a small font, and the flight crew cannot modify it.
[1R] ZFWCG/ZFW	This field displays the location of the zero fuel weight CG. It is an optional entry that defaults to 25%. The pilot can modify this data. The zero fuel weight is a mandatory entry that allows the system to compute speed management and predictions.
[2R] BLOCK	The block fuel in this field is a mandatory entry that allows the system to predict the estimated fuel on board (EFOB). When the pilot enters a block fuel, the title of the page changes to INIT FUEL PREDICTION. The FMGC may also compute the block if the pilot selects the FUEL PLANNING function.
[3R] FUEL PLANNING(amber)	Pressing this key initiates an FMGC block fuel computation. When the pilot selects this function, FUEL PLANNING becomes green, and the BLOCK field is dashed during FMGC computation. The title of the page changes to INIT FUEL PLANNING, and BLOCK CONFIRM* replaces the FUEL PLANNING prompt when the block fuel is computed by the FMGC. If the pilot modifies the parameters used for the prediction computation before confirmation, the computation restarts automatically and FUEL PLANNING green is displayed.

	PILOT INTERFACE		4.03.20	P 14
	MCDU PAGE DESCRIPTION		SEQ 001	REV 07

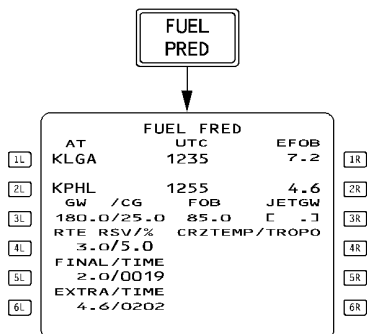
Note : *If the pilot enters a number in field 1R or 2R that exceeds the limits, the field displays "ENTRY OUT OF RANGE" and does not accept the value.*

[4R] TOW(green)	This field displays the computed takeoff weight. The pilot cannot modify it (small font).
[5R] LW(green)	This field displays the computed landing weight at the primary destination. The pilot cannot modify it (small font).
[6R] TRIP WIND	This field allows the entry of a mean wind component for the trip from the primary origin to the primary destination. Upon entry of a CO RTE or FROM/TO pair, this field defaults to HD 000 in blue small font. An entry preceeded by –, H, HD is considered as headwind, +, T, TL as tailwind. The entered velocity is displayed in blue large font. As soon as the crew inserts a wind on the CLIMB, CRUISE or DESCENT WIND page, the SYSTEM no longer considers the trip wind.

Left intentionally blank

FUEL PREDICTION PAGE

The pilot presses the FUEL PRED key on the MCDU console to display fuel prediction information at destination (DEST) and alternate (ALTN), as well as fuel management data after the engines are started. The pilot may also select a final Gross Weight value for jettison operation.



Line 1AT-UTC/TIME-EFOB

These fields display predictions of time and fuel to the primary destination. TIME is displayed before takeoff, UTC predictions after takeoff. After the pilot enters an estimated takeoff time (ETT), UTC is displayed.

Line 2AT-UTC/TIME-EFOB

These fields display predictions of time and fuel to the alternate airport. See 4.04.10 for details.

[3L] GW/CG

GW

The system updates gross weight continually during the flight. If no zero fuel weight has been entered, the screen displays amber boxes next to this key : the pilot must enter information in these boxes in order to obtain a speed profile, speed computations, and predictions. The field displays dashes as long as the system is not calculating fuel on board.

CG

The system updates center of gravity location continually along the flight.

The pilot can modify both GW and CG.

Line 3 FOB

This field displays the fuel on board, computed by the FCMC (or FE as backup).

The flight crew cannot modify this number.

[4L] RTE RSV/%

This field displays the route reserve fuel and the corresponding percentage of trip fuel. The field may be blank, depending on the fuel policy of the operating airline. The crew can enter either a RTE RSV or a RTE RSV % ; the system computes the other value automatically.

FFCS-04-0320-017-A001AA

FUEL_PRED			
AT	UTC	EFOB	
KLGA	1235	7-2	
KPHL	1255	4.6	
GW /CG	FOW	JETGW	
180.0/25.0	85.0	C J	
RTE RSV/%	CRZTEMP/TROPO		
3.0/5.0	-34	/36090	
FINAL/TIME			
2.0/0019			
EXTRA/TIME			
4.6/0202			

[5L] FINAL/TIME

This field displays hold fuel and time associated with continued flight to the alternate airport (or destination airport if no alternate is defined). The pilot may enter a final fuel or time (at alternate or destination), and the system will compute associated holding fuel/time available.

The system assumes that the holding will be in a racetrack pattern 1500 feet above the alternate airport, during 30 minutes, with the aircraft in CONF1 at maximum endurance speed (racetrack pattern, altitude and selected airport can be modified through the “airline fuel policy” of the database).

[6L] EXTRA/TIME

This field displays the amount of extra fuel and the resulting time available for holding over the primary destination.

EXTRA FUEL = BLOCK – (TAXI + TRIP + RSV + ALTN + FINAL)

The pilot cannot modify this field (displayed in green, small font).

[3R] JET GW(only for A340)

The pilot enters the jettison final gross weight in this field.

The FCMC uses this value to stop the jettison when activated.

[4R] CRZ TEMP/TROPO

This field displays the temperature at the cruise flight level and the altitude of the tropopause. The tropopause defaults to 36090 feet.

The pilot can modify both values.

The field is dashed when the aircraft sequences the top of climb.

Note : All fields except [3R], [4R], [5R] and [6R] show dashes until the flight crew starts an engine.

FLIGHT PLAN PAGES

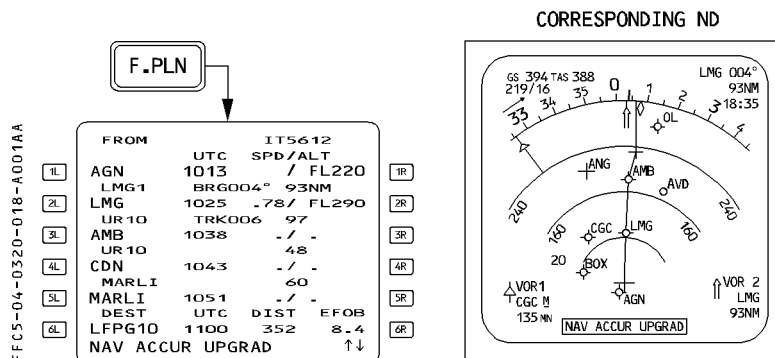
These pages display all waypoints of the active and alternate flight plans, along with associated predictions.

The pilot can make all revisions to the lateral and vertical flight plans through these pages. He presses the left key to revise the lateral flight plan and the right key to revise the vertical flight plan.

He presses the F-PLN key on the MCDU console to gain access to the A page of the active flight plan.

FLIGHT PLAN A PAGE

The A page displays time, speed, and altitude predictions for each waypoint of the active flight plan.



TITLE

FLIGHT NUMBER (blank if no flight number has been entered)

This line may display yellow TMPY if a temporary flight plan exists, white OFST, if a lateral offset is flown or yellow OFST if a lateral offset revision is pending.

Line 1 to 5WPT, UTC, SPD/ALT

These lines display consecutive waypoints along with associated predictions of time, speed or Mach and altitude for each.

TIME is displayed before takeoff and UTC after takeoff. After the pilot enters an estimated takeoff time (ETT), UTC is displayed.

The time and flight level display at the FROM waypoint (first line of the flight plan) are values that the system memorized at waypoint sequencing.

[1R] SPD ALT

The field dedicated to SPEED or MACH is blank at the FROM waypoint except at airport of departure. (V1 is displayed associated with runway elevation).

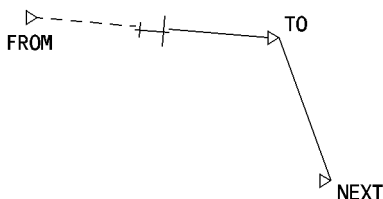
Line 6 DEST, UTC/TIME,
DIST, EFOB

DIST is the distance to the destination along the displayed flight plan.

EFOB is the estimated fuel on board at the destination.

The sixth line is permanent and is displayed in a white font once predictions are available, except when a TMPY F-PLN is displayed or when an ALT CSTR is entered (* CLB or DES*) prompt appears).

Note : The predicted altitude at a waypoint is related to the QNH below the transition altitude and is given as a flight level above the transition altitude.



The generic flight plan page displays the FROM waypoint (last waypoint to be overflowed) on the first line and the TO waypoint in white on the second line. The FROM/TO flight plan leg is called the active leg. The flight crew can use the scrolling keys to review all flight plan legs down to the last point of the alternate flight plan. The AIRPORT key serves as a fast slew key ; the pilot can press it to call up the next airport (DEST, ALTN, ORIGIN) to be displayed on the flight plan page. In order to return to the beginning of the flight plan page, the pilot presses the F-PLN key on the MCDU console.

The display shows the name of the leg between two waypoints and the distance between them on a line between the lines that identify them. During an approach, this in-between line also defines the angle of the final descent path. For example, "2-3°" indicates that the leg is two nautical miles long, and the flight path angle is -3°.

The display shows the bearing between FROM and TO waypoints as the bearing from the aircraft position to the TO waypoint. It shows track (TRK) between the waypoints shown in lines 2 and 3. This is the outbound track of the next leg.

When TRUE is selected or when entering the polar area, the degree symbol is replaced by "T".

If the data base contains a published missed-approach procedure, or if someone has inserted one manually, the display shows it in blue after the destination runway identification. It turns green when the go-around phase becomes active.

After the last waypoint of the missed approach, the display shows the alternate flight plan in NAV mode. When airborne, the flight crew can clear or modify the TO waypoint only by using the DIR key on the MCDU console.

FFC5-04-0320-019-A001AA

virgin atlantic A340-600 Flight Crew Operating Manual	PILOT INTERFACE MCDU PAGE DESCRIPTION	4.03.20 P 20	
		SEQ 001	REV 07

Predictions

The system calculates and displays predictions for all waypoints.

Constraints

The database may define an altitude constraint and speed constraint for each waypoint of the climb, descent, and approach phases, or the pilot may insert such constraints manually. (Except at origin, destination, FROM and pseudo waypoints).

The constraints are displayed in magenta as long as predictions are not completed.

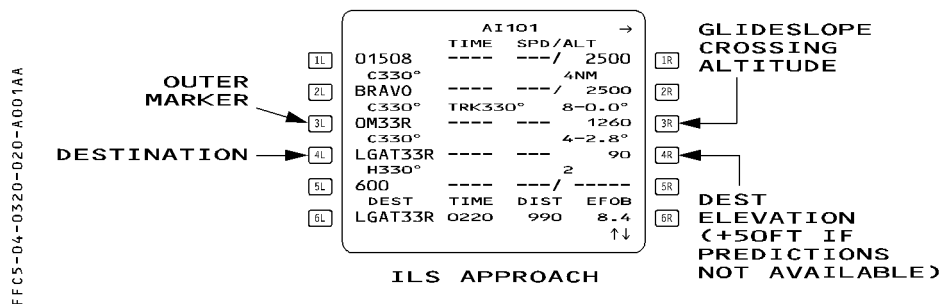
Once predictions are available, constraints are replaced by speed and altitude predictions preceded by stars. If the star is magenta the system is predicting that the aircraft will match the constraint (altitude within 250 feet, speed not more than 10 knots above the constraints). If the star is amber, the system is predicting that the aircraft will miss the constraint and the MCDU displays "SPD ERROR AT WPT" message.

Pseudo waypoints

Pseudo waypoints are computed geographical positions corresponding to an event in the vertical flight plan ; T/C (top of climb), T/D (top of descent), SPD/LIM (speed limit), DECEL (deceleration for approach) etc. The display shows them as waypoints in parentheses.

Approach display

The flight crew cannot enter an altitude constraint at the destination or MAP (Missed Approach Point).



LATERAL REVISION PAGES

These pages give the pilot a list of the lateral flight plan revisions he can use to change the flight plan beyond a selected waypoint.

The pilot calls up these pages from the flight plan pages (A or B) by pressing the left key adjacent to the selected waypoint.

Different lateral flight plan revisions are available for different waypoints.

1L	LAT REV FROM LSGG 45° 12.0N/007° 27.2E	1R
2L	<DEPARTURE	2R
3L	LL XING/INCR/NO	3R
4L	[]°/[]°/[]	4R
5L	NEXT WPT	5R
6L	ENABLE	6R
	NEW DEST	
	<ALTN	
	[]	
	<RETURN	

LAT REV AT THE ORIGIN

1L	LAT REV FROM PPOS	1R
2L	FIX INFO>	2R
3L	OFFSET	3R
4L	[]	4R
5L	<HOLD	5R
6L	<RETURN	6R

LAT REV AT THE FROM WPT

1L	LAT REV FROM LGAT 37° 53.8N/023° 43.7E	1R
2L	ARRIVAL>	2R
3L	NEXT WPT	3R
4L	[]	4R
5L	ENABLE	5R
6L	<ALTN	6R
	<RETURN	

LAT REV AT THE DESTINATION

1L	LAT REV FROM FRZ 44° 01.8N/011° 00.2E	1R
2L	LL XING/INCR/NO	2R
3L	[]°/[]°/[]	3R
4L	NEXT WPT	4R
5L	<HOLD	5R
6L	ENABLE	6R
	NEW DEST	
	<ALTN	
	[]	
	AIRWAYS>	
	<RETURN	

LAT REV AT A WPT

TITLE

The ident of the waypoint or airport selected for revision, along with its latitude and longitude.

If the selected waypoint is the FROM waypoint, the title omits the aircraft latitude and longitude, and displays PPOS (present position) instead.

This prompt gives the pilot access to the departure pages, where he can select runways, SIDs, and TRANSs and insert them.

[1L] DEPARTURE

FFCS-04-0320-022-A001AA

	PILOT INTERFACE MCDU PAGE DESCRIPTION	4.03.20	P 23
		SEQ 001	REV 07

[2L] OFFSET []	This prompt allows the pilot to enter a lateral offset, left or right, in the flight plan. The offset may be from 1 to 50 NM. When the pilot enters an offset, the OFFSET field becomes yellow and the 6L and 6R fields display ERASE and INSERT. The pilot can delete an inserted offset by pressing the CLR pushbutton, by entering a zero for the amount of the offset, or by selecting a DIR TO.
[3L] HOLD	This prompt gives the pilot access to the hold pages.
[4L] ENABLE ALTN	This prompt allows the pilot to switch to the alternate flight plan at the selected revision waypoint and use it as a new active flight plan. The system never displays this prompt at the FROM waypoint.
[5L] ALTN	This prompt gives the pilot access to alternate airport page. The system displays it only at the destination.
[6L] RETURN	This prompt returns the display to the flight plan page.
[1R] ARRIVAL	The pilot uses this prompt to call up the arrival pages, where he can select and insert RWY, APPR, STAR TRANS and VIA.
[1R] FIX INFO	FIX INFO is only displayed on the lateral revision page at the origin or at the FROM waypoint. This prompt gives the pilot access to the FIX INFO page.
[2R] LLLXING/INCR/NO	This prompt allows the pilot to create latitude/longitude crossing point. The increment (INCR) ranges from 1 to 20 degrees, and the number of crossing point (from 1 to 99).
[3R] NEXT WPT (1)	The pilot uses this prompt to enter the next waypoint. If this waypoint is a latitude/longitude, or is not in the database nor in the pilot defined elements, the display reverts to the NEW WAYPOINT PAGE.
[4R] NEW DEST (1)	The pilot uses this prompt to enter a new destination.
[5R] AIRWAYS	The pilot uses this prompt to access the AIRWAYS page.
[6R] INSERT	The system displays this prompt when the pilot has created a temporary flight plan. The pilot can use it to activate the temporary flight plan.

(1) For details, see the chapter 4.04.

TEMPORARY REVISION

When the pilot selects a lateral revision, the system creates a “Temporary F-PLN” and displays it in yellow on the MCDU and as a yellow dashed line on the ND to allow the pilot to review the data before inserting. As long as the temporary flight plan is not inserted, the previous flight plan is still active and the system guides the aircraft along it.

	FROM TMPY AI 101	→	
	(SPD)	UTC SPD/ALT	
1L	T-P	1019 FL290	1R
		103NM	
2L	FRZ	---/---	2R
	UA14	TRK 152° 95	
3L	BOL	---/---	3R
	UA14	51	
4L	PEMAR	---/---	4R
	UA14	65	
5L	TEA	---/---	5R
6L	←ERASE	INSERT★	6R
		↑↓	

TEMPORARY F-PLN A PAGE

FFCS-04-0320-024-A001AA

Left intentionally blank

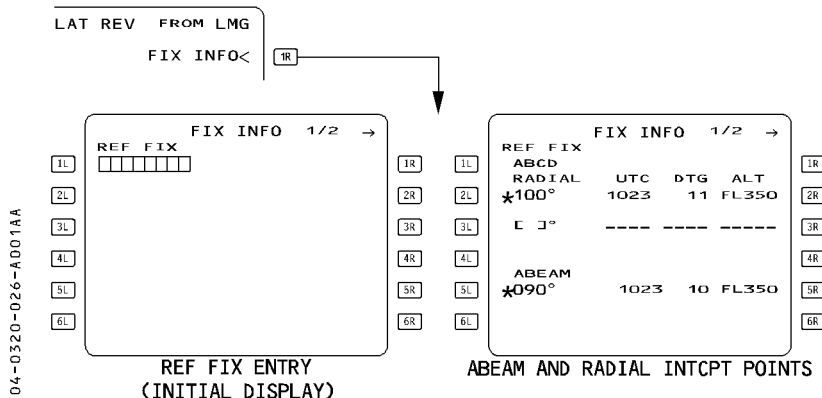
FIX INFO PAGE

This page provides access to the RADIAL intercept function.

The reference may be one or more radial bearings based on a given database fix or a pilot defined element.

If the radial intercepts the active flight plan, the intersection point can be converted to a waypoint and inserted into the flight plan. If not, the ABEAM function may be used.

The FIX INFO page may be accessed from the lateral revision page at origin or at the FROM waypoint.



	PILOT INTERFACE		4.03.20	P 27
	MCDU PAGE DESCRIPTION		SEQ 001	REV 07

[5L] - [5R] ABEAM

This function enables the pilot to create waypoints on a flight plan (primary or secondary) that are abeam a reference fix. Once computed, the page displays the radial number in green large font. Time, distance and altitude predictions are displayed in green small font.

Selecting the key adjacent to the star creates the waypoint and inserts it into the flight plan.

The waypoint is identified by AB + the REF FIX ident e.g. AB TLS.

Abeam waypoints are not stored in the pilot stored waypoint database.

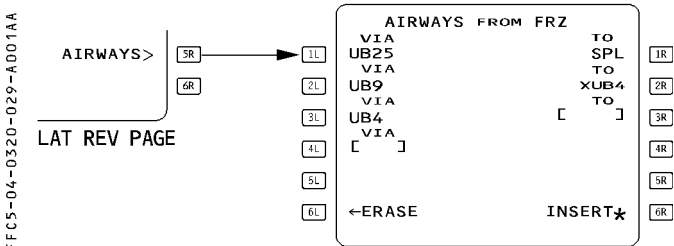
Note : Two FIX INFO pages are available, providing the capability to define two different REF FIX elements.

Left intentionally blank

AIRWAYS PAGE

This page allows the pilot to select up to five airways for stringing into the flight plan after the revise waypoint.

The pilot calls up this page by pressing the lateral revision page [5R] key.



TITLE

[1L] VIAto[5L]
[6L] ERASE orRETURN

[1R] TOto[5R]

[6R] INSERT(amber)

Revise point ident (large green font)

This field displays the airways entered by the pilot.

The flight crew presses this key to return to the lateral revision page. This field displays ERASE when a temporary flight plan is created. It allows to erase the temporary flight plan.

Displays the ending points of the corresponding airways entered on the [1L] to [5L] entries. The ending point is displayed in large blue font if manually entered, in blue small font if FMGC computed.

Allows to insert the entered VIA/TO segments into the flight plan. The display reverts to the F-PLN page.

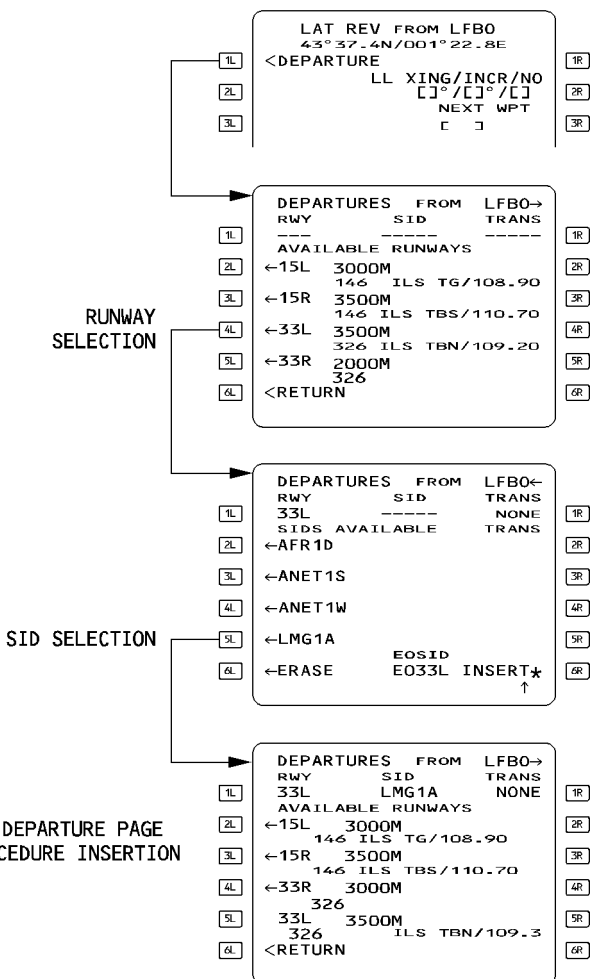
DEPARTURE PAGES

These pages allow the pilot to review departure procedures (RWY, SID, TRANS) and enter them into the active flight plan.

The pilot calls them up by pressing the 1L key when the display is showing the lateral revision page for the origin.

Three pages are available : RWY, and SIDS and TRANS (if any).

The pilot calls up each page sequentially either by selecting a data item (such as RWY) or by pressing the [→] key on the MCDU console.



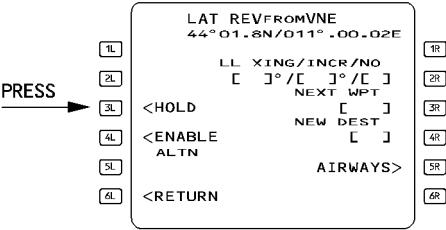
	PILOT INTERFACE MCDU PAGE DESCRIPTION	4.03.20	P 31
		SEQ 001	REV 07

Line 1 RWY, SIDTRANS	This line displays the RWY, SID, and TRANS in green after they have been inserted into the active flight plan or in yellow if selected but not yet inserted. If nothing has been selected or inserted, the line displays dashes.
[2L] RWY's/SID'sto [5L]	These fields display selectable and selected RWYs or SIDs (including EOSID and NO SID option). The pilot can slew each list. Selectable RWYs and SIDs are displayed in blue with an arrow. Once a RWY or SID is selected, the arrow disappears. A RWY or SID already inserted in the flight plan is displayed in green. The display shows the length, heading (T if true North referenced), and, if available, the ILS ident and frequency for each runway.
[6L] ERASE orRETURN	The pilot presses this key to erase a selected data item and revert to the previous selection. If the pilot erases the page, the display reverts to the active flight plan page. The display shows RETURN instead of ERASE when the pilot has not created a temporary flight plan.
[2R] TRANSto[5R]	This field displays the selectable and selected en route transitions respectively in blue and green. They are blank if there are no transitions.
[6R] INSERT or BLANK	The pilot uses this key to insert a temporary procedure into the flight plan. The page reverts to the active flight plan page when the insertion is completed.
[6M] EOSID	It is associated with RETURN (6L). Once a runway is inserted into the flight plan, this field displays any ENG OUT SID for that runway. If there is none, it displays NONE.

HOLD PAGES

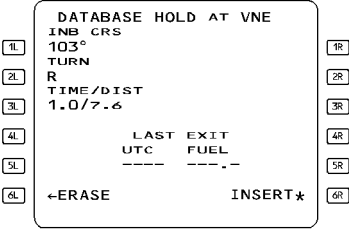
These pages allow the pilot to review and modify the holding pattern parameters at the selected revise waypoint. The holding pattern data may come from the database or may be defaulted to standard dimensions.

The pilot calls up these pages by pressing the HOLD key on the LAT REV page for the waypoint. Three different HOLD pages are available :



● **DATABASE HOLD AT...**

The database has a holding pattern for the selected revise waypoint, but has not been inserted in the flight plan yet.



● **COMPUTED HOLD AT...**

The database has no holding pattern for the selected revised waypoint.
The system proposes default holding pattern data.

FFC5-04-0320-033-A001AA

COMPUTED HOLD AT VNE	
1L INB CRS	1R
2L 125°	2R
3L TURN	3R
4L R	4R
5L TIME/DIST	5R
6L 1.5/12.0	6R
LAST EXIT	
UTC FUEL	

←ERASE	INSERT★

INB CRS = INBD TRK of the F-PLN leg leading to the revised waypoint.

TURN = Turn direction right.

TIME on outbound leg is 1.5 minute above 14 000 feet, 1 minute below 14 000 feet.

[2R] field shows “REVERT TO COMPUTED” when the pilot has modified the holding pattern.

● **HOLD AT...**

The flight plan contains a holding pattern that is defined in the database.

If the pilot has modified holding pattern data from the database, but has not inserted it in the flight plan yet, the field next to [2R] displays “REVERT TO DATABASE” or “REVERT TO COMPUTED” to allow the pilot to revert to defaulted parameters.

FFC5-04-0320-033-B001AA

HOLD AT VNE	
1L INB CRS	1R
2L 103°	2R
3L TURN	3R
4L L	4R
5L TIME/DIST	5R
6L 1.0/7.6	6R
LAST EXIT	
UTC FUEL	
1253 5.2	
<RETURN	

HOLD AT VNE	
1L INB CRS	1R
2L 100°	2R
3L TURN	3R
4L L	4R
5L TIME/DIST	5R
6L 1.0/7.6	6R
LAST EXIT	
UTC FUEL	

←ERASE	INSERT★

FFCS-04-0320-034-A001AA

COMPUTED HOLD AT VNE INB CRS 125° TURN R TIME/DIST 1.5/12.0 LAST EXIT UTC FUEL ---- -- ←ERASE INSERT*		HOLD AT VNE INB CRS 100° TURN L TIME/DIST 1.0/7.6 LAST EXIT UTC FUEL ---- -- ←ERASE INSERT*	
[1L]	[1R]	[1L]	[1R]
[2L]	[2R]	[2L]	[2R]
[3L]	[3R]	[3L]	[3R]
[4L]	[4R]	[4L]	[4R]
[5L]	[5R]	[5L]	[5R]
[6L]	[6R]	[6L]	[6R]

[1L] INB CRS

This field displays the inbound course of the holding pattern. The data may be modified.

[2L] TURN

This field shows the direction to turn in the hold (L or R). The data may be modified.

[3L] TIME/DIST

This field shows the time and distance for the outbound leg. The data may be modified.

Time and distance are dependent values that the system calculates from the predicted ground speed, which in turn depends upon the holding speed (speed for maximum endurance, ICAO speed limit, or constraint speed, whichever is lower).

[6L] ERASEorRETURN

The pilot presses this key when the field shows ERASE to erase the holding pattern.

The pilot presses this key when the field shows RETURN to return to the LAT REV page if the hold is already inserted in the flight plan.

[2R] REVERT TODATABASE
orREVERT TOCOMPUTED

The pilot presses this key to delete manual modifications to the database hold (or computed hold) and revert to database (or computed) holding data.

[6R] INSERT

The pilot presses this key to insert the hold into the active flight plan.

LAST EXITUTC FUEL

This field displays the time at which the aircraft must leave the holding pattern in order to meet fuel policy criteria (extra fuel = 0). The system also displays the estimated fuel on board at that time.

Line 3 toLine 6

[2L] ABEAM PTS

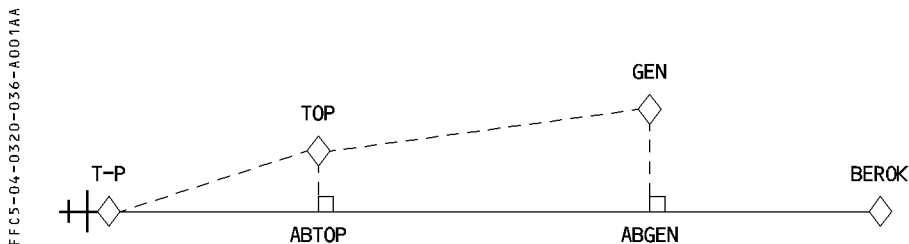
These lines display the active flight plan with time/speed/distance predictions. The display may be slewed $\uparrow \downarrow$.

Pressing any key activates the DIRECT TO function from present position to the waypoint adjacent to that key.

The flight crew presses this key to activate the DIR TO/ ABEAM

function which projects perpendicular the flight plan waypoints on the DIR TO leg :

	FROM	AI101	UTC	SPD/ALT	
1L	T-P		1025	6000	1R
		BRG013°		27NM	
2L	ABTOP		1041	78 / FL290	2R
	UB25	TRK122°		55	
3L	ABGEN		1048	43	3R
4L	BEROK		1057	25	4R
	UB25				
5L	FRZ		1113		5R
6L	DEST	UTC	DIST	EFOB	6R
	ARPT33R	1259	1200	8.4	
				$\uparrow \downarrow$	



virgin atlantic A340-600 Flight Crew Operating Manual	PILOT INTERFACE MCDU PAGE DESCRIPTION		4.03.20	P 37
			SEQ 001	REV 07

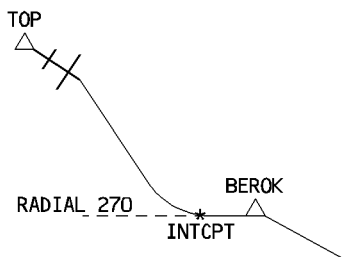
- [1R] RADIAL INand
- [2R] RADIAL OUT

The pilot fills these fields to define a QDM or a QDR associated to the waypoint defined in 1L. These keys activate respectively the DIRTO/INTERCEPT TO and DIRTO/INTERCEPT FROM functions. The pilot enters the radial in or radial out as : XXX T or XXX M, XXX being the radial, and T or M depending on the reference (true or magnetic). If T or M is not precised, the reference selected on the TRUE/MAG switch is used.

The aircraft intercepts from its current position and track the selected waypoint and QDM (or QDR) to (or from) this waypoint.

FFCS-04-0320-037-A001AA

	AI 101				
	FROM	UTC	SPD/ALT		
[1L]	IN-BND	1025	6000		[1R]
[2L]	C270°	BRG142°	42NM		[2R]
[3L]	BEROK	1037	.78 / FL290		[3R]
		TRK103°	29		
[4L]	FRZ	1041	' 31		[4R]
[5L]	UB25		' 47		[5R]
[6L]	ANC	1052	'		[6R]
	UB25		'		
	PEMAR	1104	'		
	DEST	UTC	DIST	EFO8	
	ARPT33R	1259	1200	8.4	
				↑↓	



If the DIR TO/INTCPT WPT entry is to a waypoint already in the flight plan, a defaulted RADIAL IN is displayed in small font. However no radial is displayed on ND for this default radial. No default radial is provided for the RADIAL OUT field.

Selecting the INTCPT TO (RADIAL IN [1R]) function :

- activates the intercept radial INTO the WPT
- sets the course = radial IN + 180°
- reverts the display to F-PLN A page.

Selecting the INTCPT FROM (RADIAL OUT [2R]) function :

- activates the of the intercept radial FROM the WPT
- sets the course = radial OUT
- reverts the display to F-PLN A page.

For detail refer to 4.04.

	PILOT INTERFACE		4.03.20	P 38
	MCDU PAGE DESCRIPTION		SEQ 001	REV 07

ARRIVAL PAGES

These pages allow the pilot to review arrival procedures (approaches, VIAs, STARS, TRANS) and insert them into the active flight plan.

The pilot calls them up from the LAT REV page for the destination by pressing 1R key.

Three pages, APPR, STAR, and VIA, are available, along with a fourth, TRANS, if there are any transitions.

The pilot calls up each page sequentially either by selecting a data item (such as APPR) or by pressing the [→] key on the MCDU console.

Line [1L] - [1R]

[2R] This line displays the APPR, VIA, STAR, and TRANS in green if they have been inserted in the flight plan, and in yellow, as temporary flight plan, if they have been selected but not yet inserted.

It displays dashes or NONE if nothing has been selected or inserted.

[2L] APPR VIAS The pilot presses this key to call up transitions from the last point of the STAR to first point of the approach.

[3L] to [5L] These fields list selectable and selected APPRs, STARS, and VIAs. The flight crew can slew the pages, when necessary. Selectable APPRs, STARS, and VIAs are displayed in blue with an arrow.

Once the pilot has selected an APPR, STAR, or VIA, the arrow disappears. After the APPR, STAR, or VIA is inserted into the flight plan, it is displayed in green.

For each approach the display shows runway length, heading (T if true North referenced), and the frequency and identifier of the ILS when ILS is available.

[6L] ERASE
or RETURN

The pilot presses this key to erase selected data and revert to the previous selection. The page reverts to the LAT REV page.

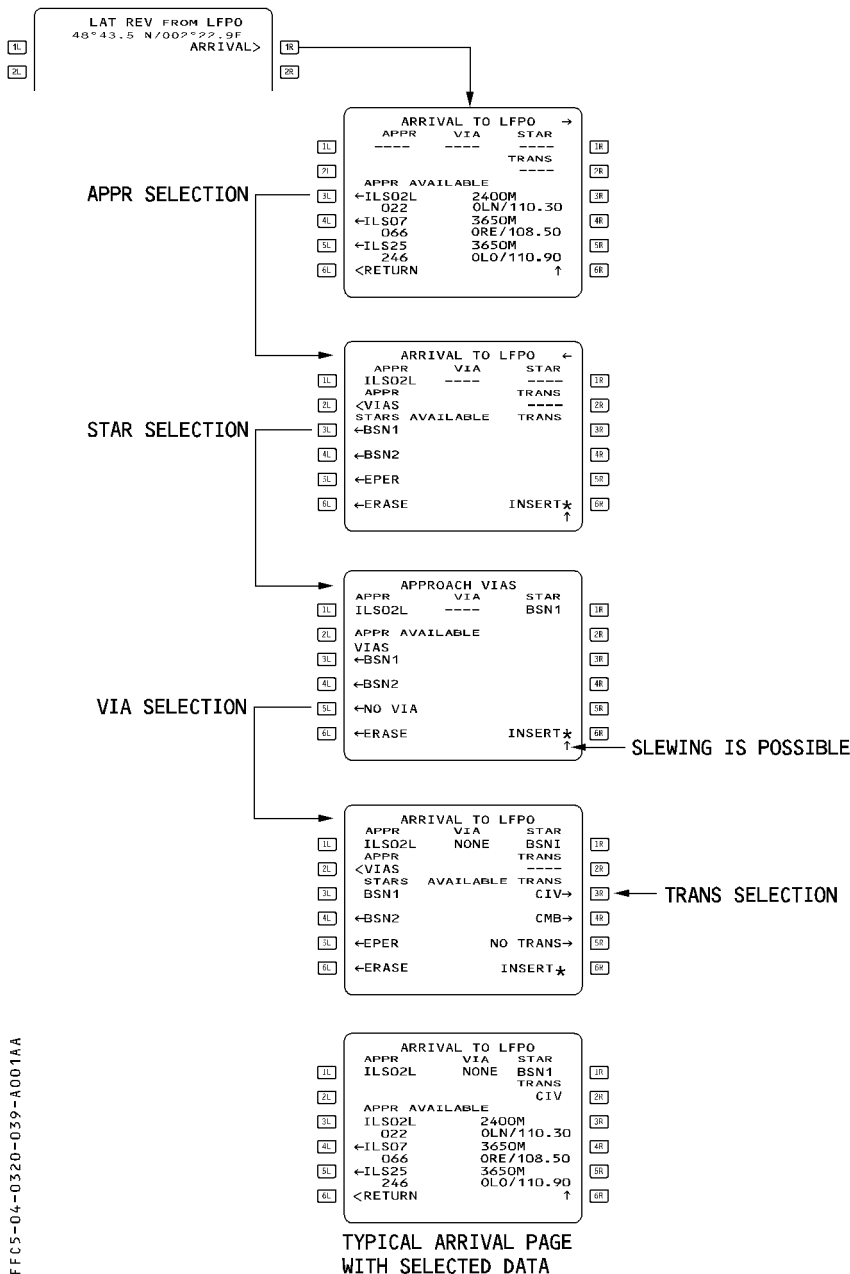
The field displays "RETURN" instead of ERASE when the flight crew has not created a temporary flight plan.

[3R] TRANSto
[5R]

These fields display selectable and selected en route transitions (if any). They are blue when selected, and become green when inserted into the active flight plan.

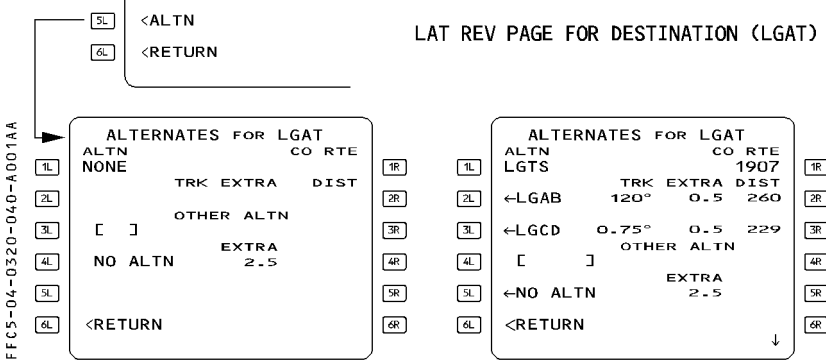
[6R] INSERT

The pilot presses this key to insert the temporary procedure into the active flight plan. The page reverts to the active flight plan page when this happens.



ALTERNATE PAGE

This page allows the pilot to review the alternate airports in the NAV data base that are paired with the destination, and also permits the pilot to define additional alternates, if needed. (Alternate airports are linked to the destination). The pilot calls up this page with the ALTN prompt from the lateral revision page for the destination.



TITLE
[1L] ALTN

Line 2to line 5

Destination airport (large green font)

This field displays the selected alternate - in green if it is active, yellow if it is temporary. NONE is displayed if NO ALTN option is selected or if the destination has no alternate.

These lines display the identifications of alternates (up to 6), the extra fuel required to get to them, and the great-circle track and distances to them from the destination.

If the database contains a company route between the destination and the alternate, the distance shown is an airway distance (not a great-circle distance).

When the database defines a preferred alternate, Line 2 displays it (if no slewing has been performed).

[4L] OTHER ALTN

The pilot can enter an airport identifier in the brackets (Line 3). If that airport is not stored in the database, the NEW RUNWAY page appears for the pilot to use in defining it.

If it is stored in the database, the ROUTE SELECTION page appears, and the pilot can use it to select the best route.

The pilot may enter a distance in the DIST field of the OTHER ALTN prompt in order to get preliminary fuel predictions. However, once he has selected the alternate airfield as a temporary alternate and then inserted it, the ALTN distance reverts either to the airway distance if he has selected a company route, or otherwise to the direct distance to the alternate.

The pilot can use OTHER ALTN to overwrite and replace the previous OTHER ALTN.

NO ALTN

The pilot uses this key to select the NO ALTN option.

[6L] RETURNorERASE

The pilot presses this key to make the display revert to the LAT REV page.

[1R] CO RTE

Pressing this key erases the temporary selection.

The pilot presses this key to display the active company route between the destination and the selected alternate.

[6R] INSERT

Pressing this key activates the temporary selection.

ROUTE SELECTION PAGE FOR ALTERNATE

This page allows the pilot to review the company route between the destination and the alternate, and select a different route, if that seems appropriate.

This page comes up automatically when the flight crew enters an ident in the OTHER ALTN field.

See "Route Selection", page for a description of this page.

LGAT / ABCD 1 / 3 ← →

1L	AF7654				1R
2L	RWY	24R	DIR	EFG	2R
	DIR	XYZ	U33	UVW	
3L					3R
4L					4R
5L					5R
6L	<RETURN			SELECT→	6R

[6R] SELECT

When the pilot presses this key the display reverts to the alternate page. (The distance between the destination and the alternate is then the airway distance).

VERTICAL REVISION PAGES

These pages contain the menu of available vertical flight plan revisions that can be applied at a selected waypoint.

The pilot calls up these pages from the flight plan A or B pages by pressing the right hand key next to the selected revised waypoint.

The pilot may make several different vertical revisions (although some may not be available at all waypoints) : speed limit, speed constraint, altitude constraint, time constraint, wind page and STEP ALTS page.

VERT REV AT LFB015R EF0B=13.2 EXTRA=2.3	
1L	1R
2L	2R
3L	3R
4L	4R
5L	5R
6L	6R

CLB SPD LIM RTA>
250/FL100

<WIND STEP ALTS>
<RETURN

VERT REV AT ORIGIN

VERT REV AT MIP EF0B=12.4 EXTRA=0.8	
1L	1R
2L	2R
3L	3R
4L	4R
5L	5R
6L	6R

CLB SPD LIM RTA>
250/10000

SPD CSTR ALT CSTR
[] []
MACH/START WPT
*[]/MIP

<WIND STEP ALTS>
<RETURN

VERT REV AT CRUISE WPT

VERT REV AT SBJ EF0B=14.5 EXTRA=0.8	
1L	1R
2L	2R
3L	3R
4L	4R
5L	5R
6L	6R

CLB SPD LIM RTA>
210/ 7000

SPD CSTR ALT CSTR
*[] 5000
MACH/START WPT ALT ERROR
*[]/SBJ -500

<WIND STEP ALTS>
<RETURN

VERT REV AT WPT IN CLIMB.
(ALT CSTR ENTERED AND
PREDICTED MISSED)

VERT REV AT KLGA EF0B=8.4 EXTRA=0.8	
1L	1R
2L	2R
3L	3R
4L	4R
5L	5R
6L	6R

CLB SPD LIM RTA>
250/10000

 G/S INTCR
 2000

GNH
[] [] [] []

<WIND STEP ALTS>
<RETURN

VERT REV AT DEST

VERT REV AT CXR EF0B=--- EXTRA=---	
1L	1R
2L	2R
3L	3R
4L	4R
5L	5R
6L	6R

CLB SPD LIM RTA>
250/10000

SPD CSTR ALT CSTR
*[] -FL310
MACH/START WPT
*[]/CXR

<WIND STEP ALTS>
CLB OR DES

VERT REV AT WPT
(PREDICTIONS NOT AVAILABLE)

VERT REV AT PEMAR EF0B=12.4 EXTRA=0.8	
1L	1R
2L	2R
3L	3R
4L	4R
5L	5R
6L	6R

CLB SPD LIM RTA>
250/10000

SPD CSTR ALT CSTR
[] []
MACH/START WPT END WPT
.81/N47E005 N47W009

<WIND STEP ALTS>
<RETURN

VERT REV WITH CONSTANT MACH SEGMENT
DEFINED BETWEEN N47E005 AND N47W009
(BOTH WAYPOINTS ARE IN CRZ PHASE)

	PILOT INTERFACE		4.03.20	P 43
	MCDU PAGE DESCRIPTION		SEQ 100	REV 10

TITLE(white)	"VERT REV AT [location]" (Second line shows remaining fuel and extra fuel at the revise waypoint.
[1L] "TOO STEEP PATH BEYOND"(amber)	This message is displayed if the waypoint is part of a leg with too steep a descent path.
[2L] CLB/DES SPD LIM(magenta)	This field displays the speed limit applicable to the climb or descent phase. It displays it in a large font when data has been inserted manually and in a small font when data comes from the database.
[3L] SPD CSTR(magenta)	This field displays any speed constraint assigned to the revised waypoint. It is in a large font when inserted manually, and in a small font when it comes from the database. It is not displayed at the origin airport, a FROM waypoint, a speed limit pseudo waypoint, or the destination airport.
[4L] QNH	This field functions only when the revised waypoint is the primary destination. It allows the pilot to enter the sea-level atmospheric pressure.
[4L] MACH/START WPT(blue)	This field is identical to the QHN field of the PERF APPR page. This prompt allows the pilot to enter or modify the start point of a constant Mach segment, and its associated Mach. This prompt is not displayed at primary destination and alternate flight plan waypoints. (Refer to 4.04.20)
[5L] WIND(blue)	The pilot presses this key to access to the wind pages. The first wind page that is displayed, corresponds to the selected waypoint e.g. climb page if the selected waypoint is a climb phase waypoint.
[6L] RETURNorCLB	A CLR action reverts it to brackets. The pilot presses this key to return to the last displayed flight plan page. When displayed pressing this key assigns the constraint to CLB phase and inserts it into the vertical flight plan. The page reverts to the flight plan page.
[2R] RTA prompt	This prompt gives access to the RTA page. It is not displayed when the VERT REV page is accessed from the alternate F-PLN.

	PILOT INTERFACE		4.03.20	P 44
	MCDU PAGE DESCRIPTION		SEQ 100	REV 10

[3R] ALT CSTR(magenta)	This field displays the altitude constraint assigned to this revised waypoint. It uses a large font when the constraint is entered manually, a small font when it is from the database. A CLR action reverts it to brackets. The constraint may be : • “At”, entered as XXXXX (FL180, for example) • “At or above”, entered as + XXXXX or XXXXX + (+ FL310, for example) • “At or below”, entered as – XXXXX or XXXXX – (– 5000, for example) • A “window” constraint. The altitude window consists of two altitudes between which the aircraft should fly. The crew cannot manually enter a “window” constraint.
G/S INTCP(green)	This field displays the glide intercept altitude for an ILS approach on the vertical revision page at destination.
[4R] ALT ERROR(green)	When the aircraft misses a predicted altitude constraint, this field displays the difference between the altitude constraint and the predicted altitude. If, for example, “– 500” appears in this field in green, the aircraft will reach the waypoint at an altitude 500 feet below the constraint altitude. This applies only to waypoints in the climb and descent phases.
[4R] END WPT(blue)	This prompt allows the pilot to enter or modify the endpoint of a constant Mach segment. It is displayed when a pair Mach/start exists in 4L field. This prompt is not displayed on the destination VERT REV page. (Refer to 4.04.20).
[5R] STEP ALTS(white)	This legend appears for any waypoint once a cruise altitude has been entered. It is not available in engine-out, descent, approach and go-around phases.
[6R] DES	This gives the pilot access to the step altitudes page. When this field displays “DES”, pressing this key assigns the constraints to the descent phase and inserts them into the vertical flight plan. The page reverts to the F-PLN page. (See Note, below).

Note : *Altitude and speed constraints may apply to climb, descent or approach phase, but never to cruise phase. Fields 6L/6R display “CLB/DES” when the revised waypoint is a cruise phase waypoint and the FMGS needs to know if the new constraint is to be applied in climb or descent phase. The FMGS will modify the cruise phase accordingly. These 2 prompts also display “CLB/DES” when the predictions are not computed. (top of climb and top of descent not yet defined).*

Left intentionally blank

STEP ALTS PAGE

This page allows the pilot to insert up to four geographic step points and one optimal step point into the flight plan. This page also displays the cost savings associated with the optional step.

The pilot calls it up either from the vertical revision page, or from the performance cruise page.

FFCS-04-0320-046-A001AA

1L

2L

3L

4L

5L

6L

1R

2R

3R

4R

5R

6R

STEP ALTS FROM FL290

STEP AT DIST/TIME ALT

[] ----/----- []

FUEL TIME

---- - ----

<RETURN

1L

2L

3L

4L

5L

6L

1R

2R

3R

4R

5R

6R

STEP ALTS FL290

STEP AT DIST/TIME ALT

(OPT) 113/0845 FL330

N45W014 455/0921 FL390

BANCS 1627/1157 FL350

[] J/C []

TO OPT PT FUEL TIME

420NM/0915 -1.2 -003

SAVINGS

<RETURN INSERT*

PAGE FILLED WITH GEOGRAPHIC
AND OPTIMAL STEPS

TITLE STEP ALTS followed by the current cruise altitude
Line 1 The pilot can enter in this field either a geographic step or an altitude for an optimal step.

Line 2 to line 4 STEP AT (blue large font)
The pilot can enter in these fields only geographic steps.
Displays the point at which the active step begins. It may be either an active (or secondary) flight plan waypoint or an inserted optimal point (OPT).

DIST / TIME (UTC)
(green small font)
Displays the distance to go and time from the present aircraft position along the flight plan to the step point.

ALT
Displays the altitude to step to and allows entry of the optimal step format : FL or ALT.

Note : The following messages may be displayed in the DIST / TIME field :

- ABOVE MAX if the step altitude exceeds the Max Max altitude.
- IGNORED if the start step point is less than 50 NM from the top of descent.
- STEP NOW if the start step point has been reached.
- NO OPTIMAL if an inserted optimal step falls in a discontinuity due to a flight plan change, or if a time constraint exists in the flight plan.

	PILOT INTERFACE MCDU PAGE DESCRIPTION	4.03.20	P 47
		SEQ 001	REV 07

[5L] TO OPT PT
(green small font)

This field displays the distance and time to a non inserted optimal step point if one exists.

[6L] RETURN

The flight crew presses this key to return the display to the previous page.

Note : *On any flight plan change, an inserted optimal step remains in the flight plan at a fixed distance to destination.*

[5R] SAVINGS

This field displays the fuel and time savings before insertion of the optimal step point.

Fuel savings are displayed in thousand of kilograms (or pounds) (maxi 99.9). The value is preceded by :

“–” in case of fuel saving,

“+” in case of additional fuel cost.

Time savings are displayed in hours and minutes.

The value is preceded by

“–” in case of time saving,

“+” in case of additional time cost.

Note : *If no optimal step point exists for the altitude displayed in [1R], the “NO OPTIMAL” message is displayed in the FUEL / TIME field. This message is also displayed if the optimal step falls into a discontinuity.*

[6R] INSERT (amber)

This field displays INSERT when an optimal step point exists but is not yet inserted. When INSERT is selected :

– the optimal step point is inserted into the flight plan.

– OPT is displayed in line 1L.

– optimal step distance and time are deleted in line 5L.

– the * UPDATE blue prompt replaces the INSERT prompt.

UPDATE

This prompt allows to compute another optimal step point.

The UPDATE prompt is then replaced by the *INSERT prompt.

DATA INDEX PAGES

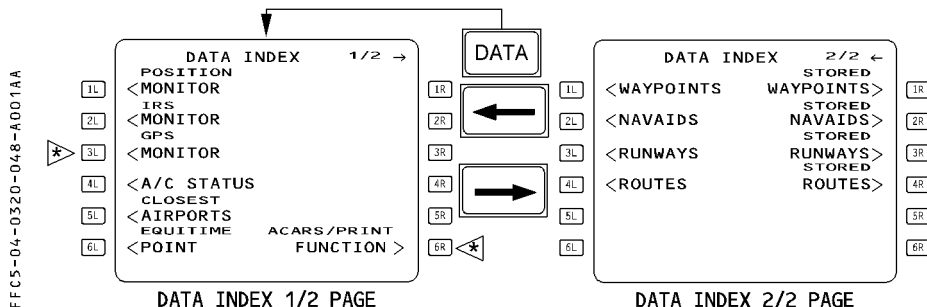
There are two INDEX pages :

The DATA INDEX 1/2 page gives access to various pages devoted to navigation.

The DATA INDEX 2/2 page lists the navigation data entered in the FMGS.

The pilot enters those items labeled "stored" and can modify them. The pilot can call up the others, but cannot modify them.

The pilot calls up these pages by pressing the DATA key on the MCDU console :



DATA INDEX 1/2 PAGE

[1L] POSITION MONITOR -

[3L] GPS MONITOR ◀

[4L] A/C STATUS

[5L] CLOSEST AIRPORTS.

[6L] EQUITIME POINT

[6R] ACARS/PRINT ◀

[2L] IRS MONITOR

When the flight crew presses these keys, the display shows all essential navigation data.

This key calls up the GPS MONITOR page.

This key calls up the aircraft status page.

This key calls up the closest airports page.

This key calls up the equitime point page.

This key calls up the PRINT function pages and the ACARS function pages.

DATA INDEX 2/2 PAGE

[1L] WAYPOINTS - [2L]

NAVAIDS - [3L] RUNWAYS - [4L] ROUTES

These keys call up descriptions of waypoints, nav aids, runways, and routes stored in the database so that the pilot can review it.

[1R] STORED WAYPOINTS -	[2R] STORED NAVAIDS - [3R] STORED RUNWAYS - [4R] STORED ROUTES
	These keys call up waypoints, nav aids, runways, and routes that the pilot has stored, allowing the pilot to review them and to store them in or delete them from the database.
	They are erased automatically in the done phase when a specific pin program is activated.

	PILOT INTERFACE MCDU PAGE DESCRIPTION	4.03.20	P 51
		SEQ 001	REV 07

WAYPOINT PAGE

- The pilot can call up this page by pressing the 1L key when the data index page is on display. The display then shows waypoint information associated with the identifier the flight crew inserts in the [1L] field.
- It is possible to call up by this page any waypoint not stored in the stored waypoint list if they belong to the active, temporary or secondary flight plan.

STORED WAYPOINT PAGE

The pilot calls up this page by pressing the 1R key when the data index page is on display. This page displays waypoints that the pilot has defined and stored. It lists each stored waypoint along with a number that shows the relative order in which it was inserted in the database. This number is displayed in the upper righthand corner of the page. For example, "1/20" indicates that the waypoint was the first of 20 stored.

Note : *Lat/long crossing points and Abeam/Radial Intercept points are never included in the stored waypoint list.*

[1L] IDENT	To delete a waypoint, the pilot clears the 1L ident display.
[3L]	PLACE/BEARING/DISTANCE and
[4L]	PLACE-BEARING/PLACE-BEARING
[5R] NEW WAYPOINT	The pilot presses this key to call up the NEW WAYPOINT page.
[6R] DELETE ALL	The pilot presses this key and the label changes to amber CONFIRM DELETE ALL. Pressing a second time this key deletes all the waypoints stored by the flight crew except those currently in use in the active or secondary flight plan. ("F-PLN ELEMENT RETAINED" appears on the MCDU).

NEW WAYPOINT PAGE

- The pilot calls up this page by pressing the 5R key when the STORED WAYPOINT page is on display.
- The pilot can use this page to define and store up to 20 waypoints. Entering an additional waypoint deletes the first one.

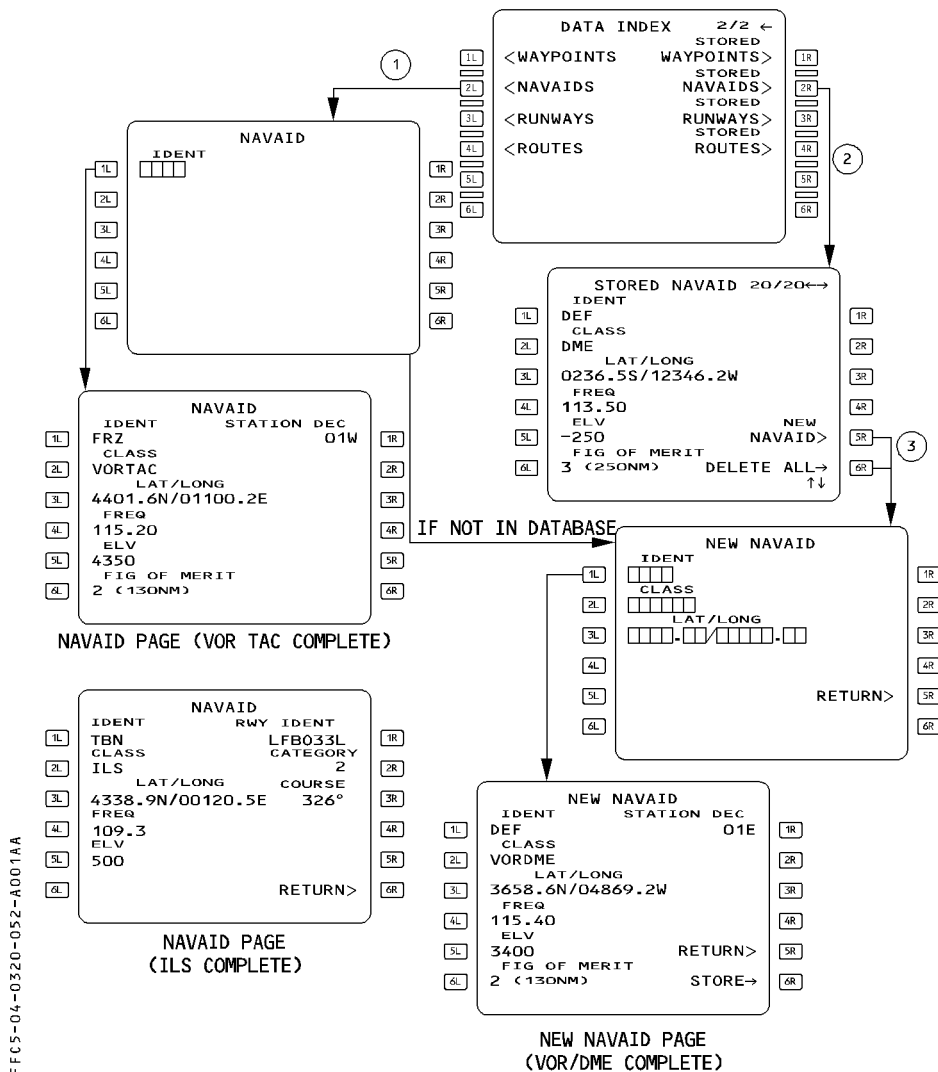
The pilot defines a waypoint by entering its ident in the data field next to 1L, then entering its position in the amber boxes.

A "T" may be added if the bearing has been defined using the true North reference e.g. N42E002/015°T/120.0 or WPT 01. 030°T/WPT02-125°T.

The STORE prompt appears next to 6R when the boxes are filled, and the pilot presses the key to store the waypoint in the database.

If the pilot enters the waypoint's position as place/bearing/distance or place-bearing/place-bearing, the FMGC computes its latitude and longitude.

NAVAID/STORED NAVAID/NEW NAVAID PAGES



NAVAID PAGE

The pilot calls up this page by pressing the 2L key on the data index page.
This page displays navaid information associated with the identifier the pilot inserts in the [1L] field.

FFCS-04-0320-053-A001AA

NAVAID	
IDENT	RWY IDENT
[1L] TBN	LFBO33L
[2L] CLASS	CATEGORY 2
[3L] ILS	
[4L] LAT/LONG	COURSE
4338.9N/00120.5E	326°
[5L] FREQ	
109.3	
[6L] ELV	
500	
RETURN>	

NAVAID PAGE
(ILS)

NAVAID	
IDENT	STATION DEC
[1L] FRZ	01W
[2L] CLASS	
VORTAC	
[3L] LAT/LONG	
4401.6N/01100.2E	
[4L] FREQ	
115.20	
[5L] ELV	
4350	
[6L] FIG OF MERIT	
2 (130NM)	

NAVAID PAGE (VOR TAC)

- [2L] CLASS This field identifies the navaid as VOR, DME, VOR DME, VORTAC, NDB, LOC, ILS, MLS, ILS/DME, MLS/DME, ILS/TAC or TACAN. The field displays NON COLLOCATED if the navaid is non collocated.
- [4L] FREQ or CHAN CHAN is displayed if the class of the navaid is an MLS or an MLS DME.
- [5L] ELV This field gives the elevation of the navaid in feet above sea level. It is not displayed for VOR or NDB.
- [6L] FIG OF MERIT This field shows how far out the FMGS can autotune a VOR, VOR/DME, VORTAC, or DME for display or for computing position.
0 : up to 40 NM
1 : up to 70 NM
2 : up to 130 NM
3 : up to 250 NM
- [1R] STATION DEC or RWY IDENT This is the magnetic declination in the navaid area (used only for VOR, VOR/DME, and VORTAC).
The field displays RWY IDENT if the navaid is a LOC, ILS, MLS, ILS/DME, MLS/DME or ILS/TAC.
- [2R] CATEGORY This field shows the navaid's category if it is an ILS, ILS/DME, MLS, MLS/DME or ILS/TAC. A LOC DME has a category = 0.
- [3R] COURSE This is the localizer course if the navaid is an ILS or a LOC. A "T" is added if the course is true referenced.
- [6R] RETURN This prompt is displayed if the page has been accessed from the SELECTED NAVAID page. The pilot presses this key to return to the SELECTED NAVAID page.

STORED NAVAID PAGE

The pilot calls up this page by pressing the 2R key on the data index page.
 He uses this page to display or delete navaids he has defined and stored.

FFC5-04-0320-054-A001AA

1L

2L

3L

4L

5L

6L

STORED NAVAID 20/20

IDENT

DEF

CLASS

DME

LAT/LONG

0236.5S/12346.2W

FREQ

113.50

ELV

-250

FIG OF MERIT

3 <250NM>

NEW NAVAID>

DELETE ALL→

↑↓

1R

2R

3R

4R

5R

6R

A number in the upper right hand corner of the screen shows the relative order in which the navaids were stored. (For example, 3/7 means third out of seven stored).
 Slew keys give the pilot access to the different stored navaids.

- [1L] IDENT

The pilot deletes a stored navaid by entering its ident in this field, then pressing the CLR key at the bottom of the MCDU control panel.
- [6R] DELETE ALL and

CONFIRM DELETE ALL

The pilot presses this key to erase all the stored navaids except those currently in use in the active or secondary flight plan. (The MCDU displays “F-PLN ELEMENT RETAINED.”).

NEW NAVAID PAGE

The pilot calls up this page by pressing the 5R key on the stored navaid page.

NEW NAVAID	
1L	IDENT [][][][]
2L	CLASS [][][][]
3L	LAT/LONG [][][][]-[][][][][]
4L	
5L	
6L	
1R	
2R	
3R	
4R	
5R	RETURN>
6R	

EMPTY NEW NAVAID PAGE

NEW NAVAID	
1L	IDENT
2L	DEF
3L	CLASS
4L	VORDME
5L	LAT/LONG
6L	3658.6N/04869.2W
1R	STATION DEC
2R	01E
3R	
4R	
5R	
6R	
1L	FREQ
2L	115.40
3L	ELV
4L	3400
5L	FIG OF MERIT
6L	2 <130NM
1R	RETURN>
2R	STORE→
3R	
4R	
5R	
6R	

NEW NAVAID PAGE
(VOR/DME)

The pilot can use it to define and store up to 20 navaids. He must enter the navaid elements in two steps :

1. Enter the data in the lines of amber boxes.
2. Enter frequency, elevation, figure of merit, and station declination or ILS category and course, if applicable.

Note : The pilot cannot create an ILS/DME, MLS/DME or a non-colocated navaid.

If the runway associated with the ILS or MLS has been entered through the new runway page, the course, ident, and runway ident are already displayed on the new navaid page when it comes up (copied from the new runway page). See the discussion of the new runway page, below, for details.

[1R] STATION DEC

The pilot must enter the magnetic declination if the prompt is displayed. This prompt is displayed only for VOR, VORTAC or VOR/DME.

[3R] COURSE

For a true referenced station, (polar area), enter OT or TO.
If the navaid is an ILS, MLS, LOC, enter the course. Add a "T" for true reference e.g. 120°T.

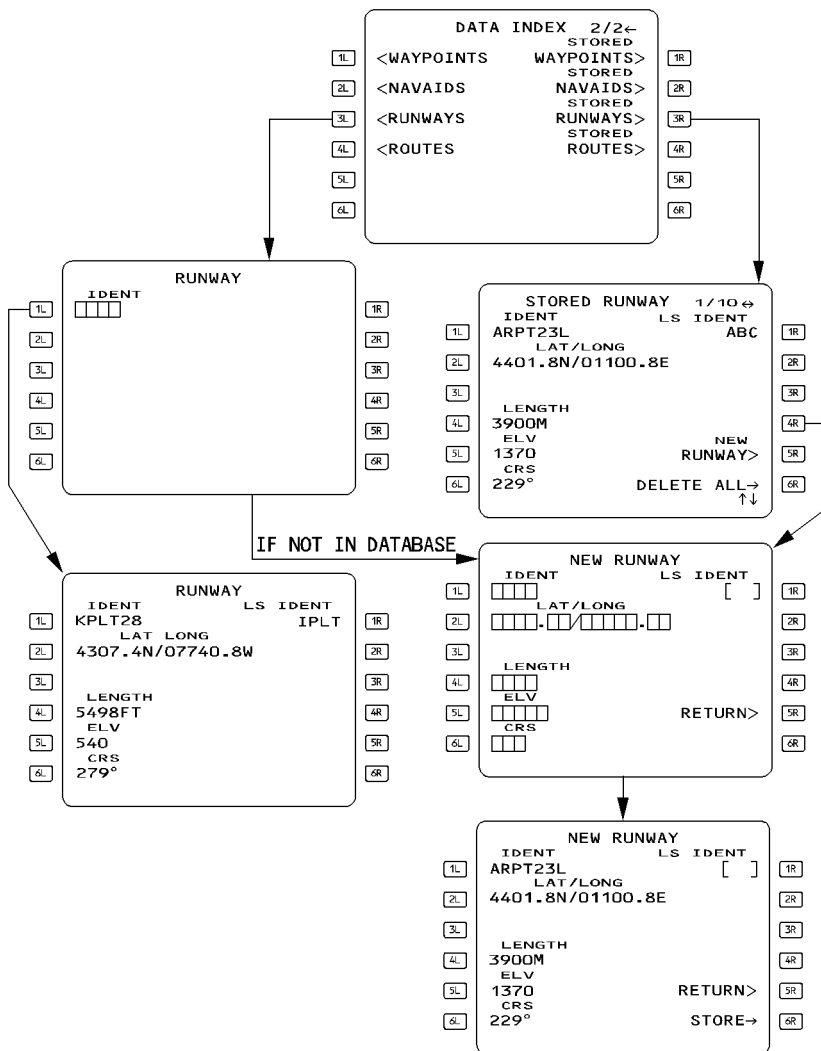
[6R] STORE

This prompt appears when all the amber boxes are filled. The pilot presses the key to store the navaid.

A stored navaid is never used for position computation.

FFCS-04-0320-055-A001AA

RUNWAYS/STORED RUNWAYS/NEW RUNWAY PAGES



**NEW RUNWAY PAGE
(MANUALLY COMPLETED)**

	PILOT INTERFACE MCDU PAGE DESCRIPTION	4.03.20	P 57
		SEQ 001	REV 07

RUNWAY PAGE

This page displays the following information

[1L] IDENT	The runway ident, which comprises the airport identification and the runway direction uses six or seven digits (CYYZ 24L and LFRJ 08, for example).
[2L] LAT/LONG	The latitude and longitude of the runway threshold.
[4L] LENGTH	The runway length in meters (M) or feet (ft), in four digits (9999 ft).
[5L] ELV	The elevation of the threshold in feet above sea level.
[6L] CRS	The runway course (degrees magnetic). T is displayed if true North referenced.
[1R] LS IDENT	The LOC, ILS or MLS identifier.

STORED RUNWAY PAGE

The pilot uses this page to display or delete runways defined and stored by the flight crew. The stored runways are listed and numbered in the order in which they were inserted. The number is displayed in the upper righthand corner of the page. (For example, 2/4 means the runway is the second of four stored runways).

The pilot can delete any stored runway from the data base by displaying its ident in 1L field, then pressing the CLR key on the MCDU control panel.

[5R] DELETE ALL and	CONFIRM DELETE ALL
	The pilot presses this key to erase all the stored runways except those in use in the active or secondary flight plan. (The MCDU displays "F-PLN ELEMENT RETAINED").
[1L] to [6L]	These fields are similar to RUNWAY page fields.

Note : *When 10 runways are stored, entering a new stored runway deletes the first one of the list (1/10).*

NEW RUNWAY PAGE

The pilot can use this page to define and store up to 10 runways.

When the pilot enters an ILS/LOC ident in the [1R] field, the new navaid page comes up. When the pilot has entered the necessary data in the new navaid page and stored it, the new runway page reappears. The new runway page and the new navaid page (ILS/LOC) are not independent :

- When the flight crew defines the ILS/LOC first (on the new navaid page), the new runway page, when called up, already displays the RWY course, RWY ident, and ILS ident (copied from the new navaid page).
- When the flight crew defines the runway first (on the new runway page) the new navaid page, when called up, already displays the ILS course, ILS ident, and runway ident.

The pilot must enter the two directions of a runway on two different new runway pages (LFRJ 08 and LFRJ 26, for example) to allow a flight plan to select either one.

	PILOT INTERFACE		4.03.20	P 58
	MCDU PAGE DESCRIPTION		SEQ 001	REV 08

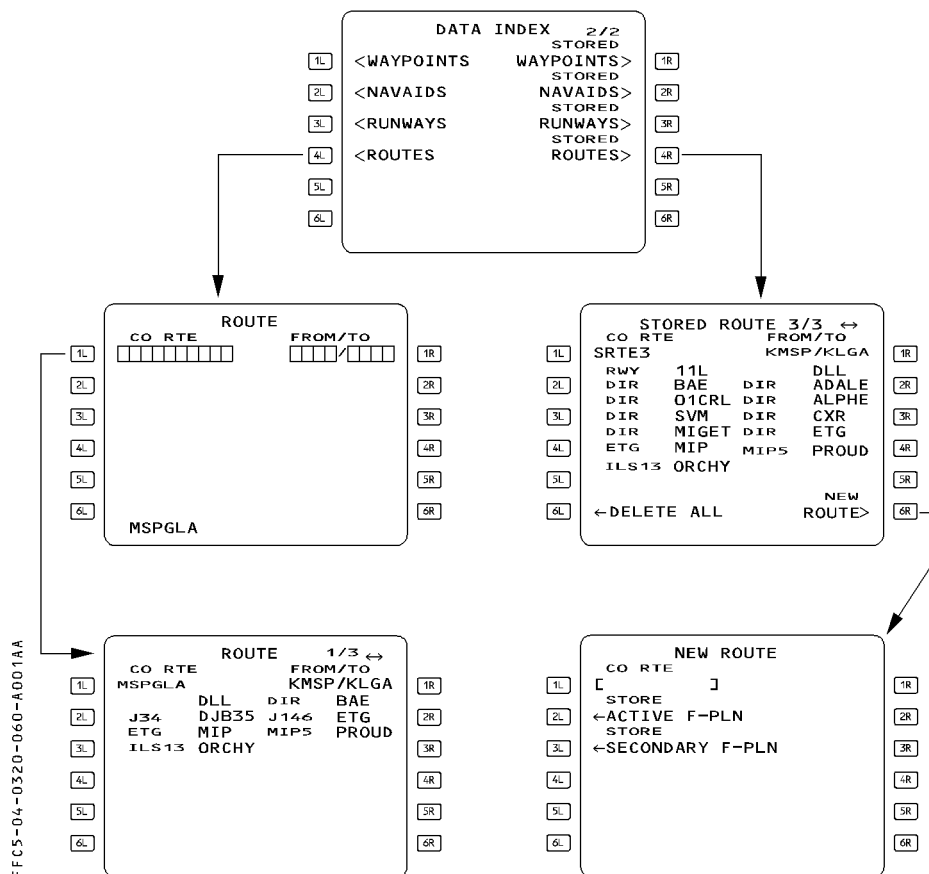
[1L] to [6L]	Enter information about the new runway.
[1R] LS IDENT	Enter the ILS/MLS/LOC ident. The NEW NAVAID page comes up.
[5R] RETURN	When displayed, pressing this key return to NEW NAVAID page.
[6R] STORE	This prompt appears only when all the amber boxes have been filled.

Note : – *NEW RUNWAY entry : A new runway cannot be added to an airport defined in the database. This has been done to comply with regulations requiring no manual database modification.*

- *The NEW RUNWAY may be used as departure or destination but no SID or STAR can be associated or stored with this runway. Therefore the pilot will use it as an “independent” airport. A new runway is identified by the 4 letter ICAO airport identifier although all six or seven digits must be entered.*

Left intentionally blank

ROUTE/STORED ROUTE/NEW ROUTE PAGES



ROUTE PAGES

(Not-modifiable)

[1L] CO RTE

Line 2 to Line 6

Any company route ident entered in this field causes all the elements of the route to be displayed.

These lines display the various elements of the route, including waypoints and airways.

This field is automatically filled when the pilot enters the ident for a company route. When the pilot enters a city pair manually, the MCDU displays “NOT IN DATA BASE” if the city pair is not in the navigation database. If the city pair is in the database, the CO RTE field displays the first route stored (small font, blue). If more than one route is stored, the pilot can slew to see the different routes.

FFC5-04-0320-061-A001AA

Note : When 5 routes are already stored, the pilot cannot insert a new stored route. The message "STORED ROUTE FULL" is displayed and the pilot must manually delete a route to store a new one.

NEW ROUTE PAGE

The pilot calls up this page by pressing the NEW ROUTE key on the stored route page. It can be used to store up to three new routes that have already been defined in the active or secondary flight plan.

FFCS-04-0320-062-A100AA

NEW ROUTE		NEW ROUTE	
[1L]	CO RTE	[1R]	CO RTE
[2L]	[STORE]	[2R]	[STORE]
[3L]	←ACTIVE F-PLN	[3R]	←ACTIVE F-PLN
[4L]	STORE	[4R]	STORE
[5L]	←SECONDARY F-PLN	[5R]	←SECONDARY F-PLN
[6L]		[6R]	

[1L] CO RTE

This field allows the pilot to enter a new company route ident. If that ident has already been assigned, the entry is rejected. (blue)

[2L] STORE ACTIVE F-PLN

Pressing this key stores parameters of the active flight plan as the new route.

The display shows this prompt, when the system contains a FROM/TO, but only during preflight.

[3L] STORE SECONDARY F

-PLN (blue)

Pressing this key stores parameters of the secondary flight plan as the new route.

The display shows this prompt when the system contains a FROM/TO and the secondary flight plan has not yet been sequenced.

Note : – If it has not already been named, a stored route is named automatically when stored : SRTE 1 to SRTE 5.

Several elements of the flight plan are not retained when the route is stored :

- Pilot-entered holds
- Offset
- Pilot-entered constraints
- Modifications to terminal procedures
- Pseudo-waypoints
- Step at optimum.
- Pilot-entered Constant Mach Segment

The MCDU then displays "REVISIONS NOT STORED".

Left intentionally blank

AIRCRAFT STATUS PAGE

The system automatically displays this page at power up, but the pilot may also call it up by pressing the DATA key on the MCDU console.

FFCS-04-0320-064-A 100AA

A340-300	
ENG	
CFM56-5-C2	
ACTIVE NAV DATA BASE	
28 NOV-25DEC AB49012001	
SECOND NAV DATA BASE	
←26DEC-22JAN	
	STORED
CHG CODE	Q2RTES OORWYS
C J	11WPTS OONAVS
IDLE/PERF	DELETE ALL->
+0.0/+0.0	SOFTWARE
	STATUS/XLOAD>

- | | |
|--|--|
| TITLE | AIRCRAFT TYPE |
| [1L] ENGINE TYPE | The system uses this to calculate predictions. |
| Note : When the same performance database is used for different aircraft configurations, the aircraft or engine type displayed in the [1L] field may differ from the actual aircraft. | |
| [2L] ACTIVE DATABASE | The display shows the validity period and part number in large font. |
| [3L] SECOND DATABASE | The display shows the validity period and part number in small font. The pilot can press the 3L key to switch to the second database as the active database. |

CAUTION

Cycling the database erases the primary and secondary flight plans, as well as stored data. The flight crew must never do this in flight.

- | | |
|-------------------|---|
| [5L] CHG CODE | The maintenance crew can modify the IDLE/PERF factor displayed in [6L].
This field is displayed in the PREFLIGHT and DONE phases. The label is displayed in small white font. The brackets, or the entered value, is displayed in large blue font. |
| [6L] IDLE/PERF. | These factors can only be modified while the aircraft is on ground. If no value has been entered, the databases' default value is displayed in small font.
Some aircraft require that the IDLE/PERF factor, be adjusted. To do so, the crew may use the following procedure : <ul style="list-style-type: none">– Enter “ARM” in the CHG CODE line's [5L] brackets.– Write the new IDLE/PERF factor in the scratchpad.– Enter this new factor in line [6L]. The entered factor is displayed in large green font.
The airline may change the ARM code by modifying the NAV DATABASE policy file. |

[4R] STORED

This field displays pilot-stored data in a large green font. The field is blank if no data is stored. (The airline can choose to have this data automatically erased at the done phase).

[5R] DELETE ALL

Pressing this key changes the label to amber CONFIRM DELETE ALL. Pressing this key a second time deletes all pilot-stored data, except data that is part of the active and secondary flight plans.

[6R] STATUS/XLOAD

This prompt gives access to the P/N STATUS and P/N XLOAD pages.

P/N XLOAD PAGE

This page allows the crossloading of all the databases or the configuration files' part numbers which are different between both sides. Crossloading from this page avoids reviewing each individual P/N STATUS pages.

FFCS-04-0320-065A-A100AA

P/N XLOAD 1/7	
[1L] FMS1 UPDATE	[1R]
[2L]	[2R]
[3L]	[3R]
[4L] ←START XLOAD	[4R]
[5L] FM1 TO FM2	[5R]
[6L] <A/C STATUS	[6R]
[6L] <PREV PAGE	[6R] NEXT PAGE>

TITLE

[1L].

P/N XLOAD

FMS1 UPDATE : FMS1 can be loaded on the right side MCDU
FMS2 UPDATE : FMS2 can be loaded on the left side MCDU
START XLOAD : This blue prompt is displayed, only if the system detects a difference between both side part numbers.
FMS1/FMS2 IDENTICAL : Displayed in green, when there is no difference between both side part numbers.

Line 5.

FM1 TO FM2 or FM2 TO FM1 : Indicates the crossloading direction. This line is not displayed when there is no difference between both side part numbers.

[5L].

A/C STATUS : This white prompt is displayed when there is no crossloading in process. It gives access to the A/C STATUS page. MM : SS MIN REMAINING : Indicates the time remaining for crossload completion, when a crossload is in process.

[6L] PREV PAGE.

The pilot presses this key to return to the A/C STATUS page.

[6R] NEXT PAGE.

The pilot presses this key to callup the next P/N XLOAD page.

P/N STATUS PAGES

These pages allow reviewing and crossloading the following databases and configuration files between both FMS :

- | | |
|----------|--------------------------------|
| — page 2 | FMS SOFTWARE part numbers |
| — page 3 | NAV DATA BASE part numbers |
| — page 4 | FM AIRLINE CONFIG part numbers |
| — page 5 | FM OPTIONS CONFIG part numbers |
| — page 6 | PERF DATA BASE part numbers |
| — page 7 | FLIGHT TEST DATA BASE |

P/N STATUS 3 / 7	
ELEMENT	
1L	NAV DATA BASE
FMS1 P/N	
2L	PS1234567-123
FMS2 P/N	
3L	PS1231565-123
←START XLOAD	
FM1 TO FM2	
5L	<A/C STATUS
6L	<PREV PAGE NEXT PAGE>

P/N STATUS 3 / 7	
ELEMENT	
NAV DATA BASE	
FMS1 P/N	
2L	PS1234567-123
FMS2 P/N	
3L	PS1234564-123
NEED FM1/FM2 SOFTWARE	
IDENTICAL TO XLOAD	
5L	<A/C STATUS
6L	<PREV PAGE NEXT PAGE>

CROSSLOAD NOT POSSIBLE

P/N STATUS 3 / 7	
ELEMENT	
NAV DATA BASE	
FMS1 P/N	
2L	PS1234567-123
FMS2 P/N	
3L	PS1231565-123
XLOAD	
FM1 TO FM2	
6L	←ABORT CONFIRM*

AFTER CROSSLOAD SELECTION

P/N STATUS 3 / 7	
ELEMENT	
NAV DATA BASE	
FMS1 P/N	
2L	PS1234567-123
FMS2 P/N	
3L	ACCEPTING XLOAD
XLOAD IN PROCESS	
FM1 TO FM2	
5L	1:25 MIN REMAINING
6L	

DURING CROSSLOAD

TITLE

Line 1 ELEMENT

P/N STATUS

Indicate the name of the database or configuration file that can be crossloaded :

- FMS SOFTWARE on page 2
- NAV DATA BASE on page 3
- FM AIRLINE CONFIG on page 4
- FM OPTIONS CONFIG on page 5
- PERF DATA BASE on page 6
- FLIGHT TEST DATABASE on page 7.

	PILOT INTERFACE MCDU PAGE DESCRIPTION	4.03.20	P 66a
		SEQ 100	REV 10

Line 2 FMS1 P/N

Line 3 FMS2 P/N

These fields display the part numbers of the database or configuration file stated on line 1, that are installed on FMS 1 and FMS 2.

Identical part numbers are displayed in green, different ones in amber.

During crossload, the updated part number is replaced by the amber "ACCEPTING XLOAD" message.

Line 4

This line is empty when the active flight phase is not Preflight or Done.

XLOAD FMx TO FMy or START XLOAD FMx TO FMy : This blue prompt is displayed when the database or configuration file stated on line 1 can be crossloaded.

XLOAD ARMED : Displayed in blue on the receiving FM when the crossload has been requested, but not yet confirmed.

XLOAD IN PROCESS : Displayed in white when the crossload is ongoing.

XLOAD NOT SUPPORTED : Crossloading is unavailable for this element.

NO P/N TO XLOAD : The element is missing.

NEED FG1/FG2 IDENTICAL TO XLOAD : The FG software of the receiving side is incompatible with the FG software to be crossloaded.

NEED FM1/FM2 SOFTWARE IDENTICAL TO XLOAD : The crossloaded element is incompatible with the receiving side FM software.

[5L] A/C STATUS

This prompt is available when no crossload is in process. This gives the pilot access to the aircraft status page.

MM : SS MIN REMAINING : Displays the time remaining to complete the crossload, when a crossload is in process.

[6L] PREV PAGEABORT

This key calls up the previous P/N STATUS page.

This amber prompt is displayed when a crossload is in process. The pilot uses it to stop the crossload.

[6R] NEXT PAGECONFIRM*

This key calls up the next P/N STATUS page.

This amber prompt is displayed when a crossload has been armed. The pilot presses it to start the crossload.

DUPLICATE NAMES PAGE

This page, which appears automatically, allows the pilot to select a specific waypoint, airport, or navaid when the database holds more than one under the same identifier.

FFCS-04-0320-067-A 100AA

1L

15NM

★ ECHO

46N/015E

1R

2L

85NM

★ ECHO

48N/010W

2R

3L

360NM

★ ECHO

49N/012W

3R

4L

9999NM

★ ECHO

48N/005E

4R

5L

5R

6L

< RETURN

6R

1L

15NM

★ ENO

40N/064W

114.80

1R

2L

417NM

★ ENO

44N/101E

112.40

2R

3L

836NM

★ ENO

50N/070W

116.60

3R

4L

4R

5L

5R

6L

< RETURN

6R

The pilot presses the key adjacent to a waypoint, navaid, or airport to select it as the one to be entered. When the pilot has finished, the page automatically reverts to the previously displayed page.

Distance

The direct distance to the aircraft is displayed in green above each name. If this distance is greater than 9999 NM, 9999 NM is displayed.

LAT/LONG column

This column lists the rounded off latitudes and longitudes, of the different points using the same identifier.

FREQ/CHAN column

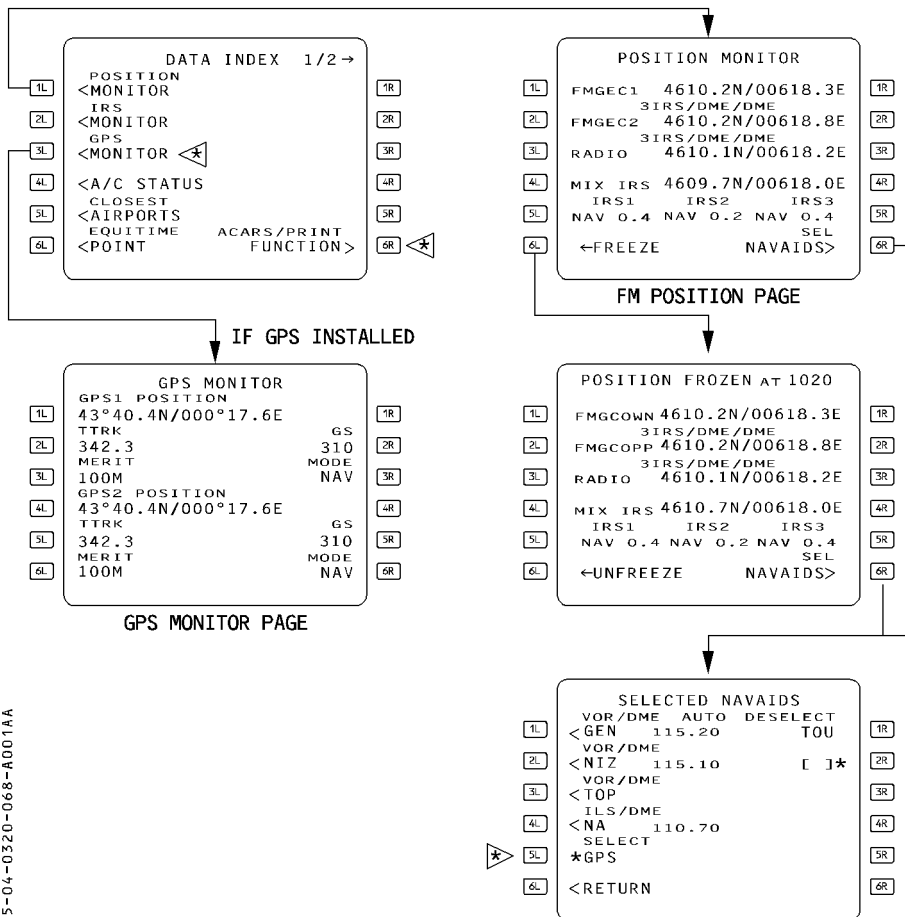
This column lists the nav aids frequencies, if any. It displays CHAN for an MLS.

- Note :**
- The DUPLICATE NAMES page is not displayed when 2 waypoints with the same ident belong to the same airway. The system selects the first waypoint found in the database.
 - The waypoints or nav aids are ranked by their distance from the aircraft position.
 - When a waypoint is named using ICAO phonetic alpha characters, a minus sign and the ICAO code of the country where the waypoint is located, are displayed. e.g. Alpha in France becomes A-LF ; Bravo in England becomes B-EG.

POSITION MONITOR PAGE

This page displays all the different positions that the FMGC has computed with the different methods of navigation available. It also shows which method obtained each position. (The positions should be almost identical).

The pilot calls up this page by pressing the 1L key on the data index page.



 A340-600 Flight Crew Operating Manual	PILOT INTERFACE		4.03.20	P 69
	MCDU PAGE DESCRIPTION		SEQ 110	REV 09

POSITION MONITOR AND POSITION FROZEN PAGE

Line 1 FMGEC 1	This line shows the latitude and longitude as calculated by the onside FMGC, and the method of navigation the FMGC used for that calculation (for example, "3IRS/DME/DME").
Line 2 FMGEC 2	This line shows the latitude and longitude as calculated by the opposite FMGC, and the method of navigation used.
Line 3 RADIOor GPS or GPIRS	This line shows the latitude and longitude the onside FMGC calculated from selected radio navaids (for example, DME/DME, VOR/DME, or LOC) or from GPS or GPIRS.
Line 4 MIX IRS	This line shows the latitude and longitude of the weighted mean inertial reference system (IRS) that the onside FMGC calculated from the available IRSs.
Line 5 IRS 1,2,3	This line shows the deviation in nautical miles of each IRS position from the onside FMGC position. It also displays the IRS mode, which can be INVAL, ALIGN, NAV or ATT. <u>Note :</u> <i>INVAL is displayed when an ADIRS has failed or the IRS position is not refreshed.</i>
[6L] FREEZE/UNFREEZE	The pilot presses this key to freeze (or unfreeze) all the data displayed on the page. When the data are frozen, the title of the page specifies the time at which they were frozen.
[6R] SEL NAVAIDS	The pilot presses this key to gain access to the selected navaids page.

SELECTED NAVAIDS PAGE

MODIFIABLE ONLY FOR DESELECTION

Line 1	This field displays the navaid tuned for display purposes, and the tuning mode (AUTO, MAN, or RMP).
Line 2 and 3	These fields display the navaids, if any, tuned for the calculation of radio position by the FMGEC.
[4L]	This field displays the tuned ILS (or MLS), if any.

	PILOT INTERFACE		4.03.20	P 70
	MCDU PAGE DESCRIPTION		SEQ 110	REV 09

[5L] DESELECT/SELECTGPS

The crew presses this key to manually select or deselect the GPS for position computation. Upon transition to DONE phase the prompt returns to DESELECT status.

If the pilot deselects the GPS, "GPS IS DESELECTED" is displayed when the aircraft is at less than 80 NM from the top of descent, or in approach phase.

[6L] RETURN

The pilot presses this key to return to the position monitor page.

[1R] DESELECTto[6R]

The pilot deselects a navaid by entering its identifier in one of these six fields. Once deselected in this way, the navaid can no longer be tuned manually through the entry of its ident, nor can it be autotuned for display or determination of the position for the rest of the flight.

The deselection is cleared

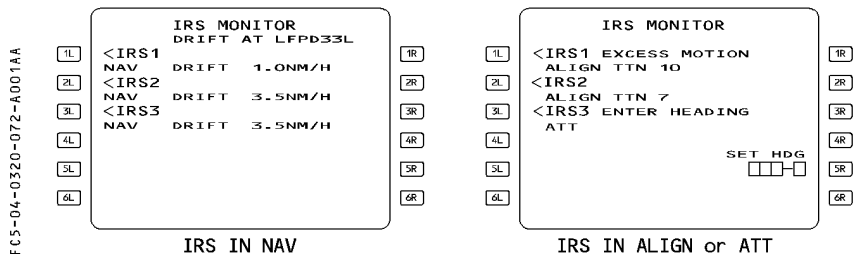
- manually by a CLR action into this field, or
- automatically upon transition to the done or preflight phase, or upon activation of the second database.

The pilot may deselect as many as six stations.

Left intentionally blank

IRS MONITOR PAGE

This page displays the IRS data. The crew calls up this page by pressing the IRS monitor prompt of the DATA INDEX page.



TITLE DRIFT AT XXXX(amber)

[1L] to [3L] IRS 1(2) (3)

[1R]to[3R]

[5R] SET HDG(white)

Displays "DRIFT AT" runway identifier if at least one IRS average drift is displayed. (white)

These prompts allow access to the associated IRS pages. Each label line displays the mode (NAV, ALIGN, ATT or INVAL) the average drift (upon transition to DONE phase) the Time To Nav (if IRS in align) for each IRS.

Displays the status message of the associated IRS in green small font.

List of available messages :

IR FAULT	CHECK C/B
DELAYED MAINT	CDU FAULT
ENTER PPOS	ENTER HEADING
SELECT ATT	REENTER PPOS
EXCESS MOTION	SYS BELOW – 15°
SWITCH ADR	

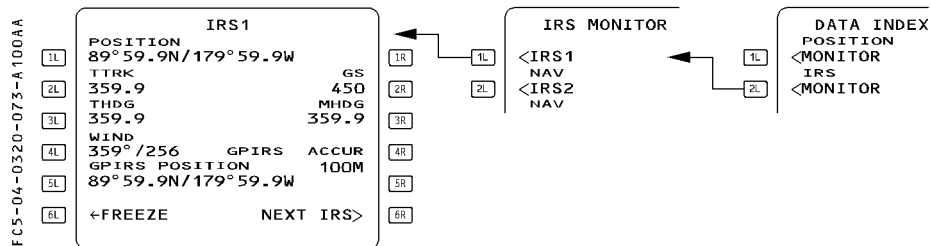
This field is displayed if at least one IRS is in ATT mode.

This function allows initialization of a heading for IRS in ATT mode.

- If a heading has been entered in this field or on the ADIRS panel the value is displayed in blue.
- If not, amber boxes are displayed.

IRS 1 (2)(3) PAGE

This page displays the IRS parameters, and GPS/IRS hybrid parameters, if GPS is installed. This page is accessed either by pressing the 1L key from the IRS MONITOR page, or the NEXT IRS prompt on another IRS page (closed loop).



TITLE

[1L] POSITION

[2L] TTRK

[3L] THDG

[4L] WIND

[5L] GPIRS

[6L] FREEZE/UNFREEZE

[2R] GS

[3R] MHDG

[4R] GPIRS ACCUR

[6R] NEXT IRS

Displays the selected IRS in large white font.

When data is frozen, IRS is replaced by "IRS FROZEN AT", followed by the time at which the pilot has frozen the display.

Displays the latitude/longitude given by the selected IRS.

True track

True heading

True wind direction/velocity

GPS/IRS hybrid position of the IRS

Allows the crew to freeze or unfreeze all data displayed on all three IRS pages. When the data is frozen, the title of the page specifies the time at which it was frozen. It is automatically unfrozen when the page is exited.

Ground speed

Magnetic heading

GPS/IRS Figure of Merit (meters or feet)

This prompt enables the display of another IRS page (closed loop IRS 1 → 2 → 3 → 1)

GPS MONITOR PAGE ◀

This page displays the GPS data. The pilot calls up this page by pressing the GPS MONITOR prompt of the DATA INDEX page.

FFCS-04-0320-074-A102AA

1L

2L

3L

4L

5L

6L

GPS MONITOR

GPS1 POSITION

89°59.9N/179°59.9W

TTRK UTC GS

359.9 10:37:42 450

MERIT GPS ALT MODE/SAT

100M 32000 NAV/6

GPS2 POSITION

89°59.9N/179°59.9W

TTRK UTC GS

359.9 10:37:42 450

MERIT GPS ALT MODE/SAT

100M 32000 NAV/6

1R

2R

3R

4R

5R

6R

- Line 1 and 4

GPS 1,2

POSITION
- [2L] and [5L]

TTRK

GPS 1, 2 true track
- [3L] and [6L]

MERIT

GPS 1, 2 figure of merit (meters or feet)
- [2R] and [5R]

GS

GPS 1, 2 ground speed
- [3R] and [6R]

MODE/SAT

GPS 1, 2 mode : (INIT, ACQ, NAV, TEST, FAULT, AIDED or ALTAID) and number of satellites tracked.
- INIT

:

System initialization
- ACQ

:

Satellite acquisition
- NAV

:

Normal mode
- TEST

:

System test
- FAULT

:

Invalid system
- ALTAID/AIDED

:

Degraded modes. GPS uses aircraft inputs for computation purposes.
- [2] and [5]

UTC

GPS 1, 2 UTC
- [3] and [6]

GPS ALT

GPS altitude is displayed for information purposes. It is not used by the FMGS.

Left intentionally blank

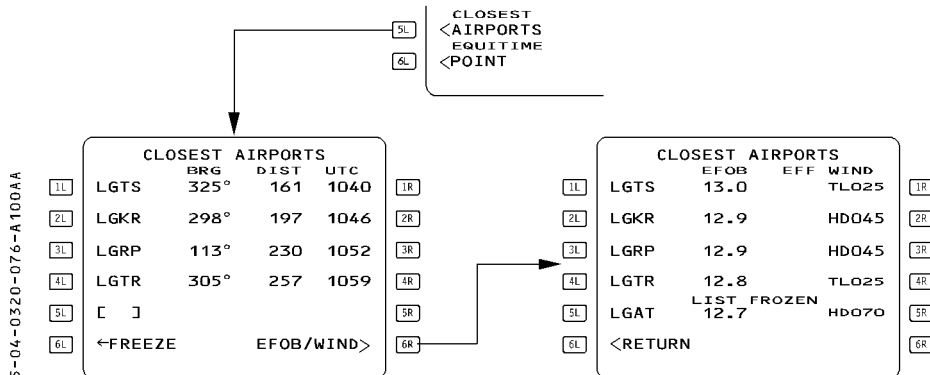
CLOSEST AIRPORTS PAGES

The system selects automatically the 4 closest airports from the current aircraft position and displays them on these pages. A fifth one can be selected by the pilot.

The page 1 displays the bearing, distance and time to go to each airport, the page 2 displays the EFOB and allows the crew to enter an effective wind to be flown to each airport.

The flight crew accesses the CLOSEST AIRPORTS page 1 by depressing 5L key from DATA INDEX A page, the CLOSEST AIRPORTS page 2 by pressing the EFOB/WIND prompt (6R key) on the page 1.

DATA INDEX PAGE



CLOSEST AIRPORTS 1

[1L] - [1R]to[4L] - [4R]

CLOSEST AIRPORTS 2

The four closest airports are extracted from the database, and ranked by distance from the aircraft position.

BRG displays the current bearing from the aircraft position to the airport. T is added if true reference is selected.

DIST displays the current great circle distance from the aircraft position to the airport.

TIME or UTC displays the predicted time to the airport computed using the current wind or a wind vector entered on the page 2 and the speed according to current mode (managed or selected). The time is only computed in cruise phase.

[5L]

The crew may enter a fifth airport here using the 4 letter code. The entry may be modified at any moment even when the "LIST FROZEN" is displayed.

	PILOT INTERFACE		4.03.20	P 77
	MCDU PAGE DESCRIPTION		SEQ 102	REV 12

If the pilot enters an airport that is not in the database, then "NOT IN DATABASE" appears in the scratchpad.

[1L] - [1R] EFOB to

[5L] - [5R] EFF WIND

Displays the EFOB at each airport. EFOB is only computed in cruise phase.

The pilot may enter here an anticipated headwind or tailwind along the bearing to the airport. If the entry is preceded by +, T, TL a tail wind is assumed.

If the entry is preceded by -, H, HD a head wind is assumed. Before the pilot entry, a default value may be displayed, based on the current wind.

The effective wind is used to compute the EFOB and time to the airport.

[6L] FREEZE/UNFREEZE

This prompt allows the pilot to freeze and unfreeze the list of four airports.

The list is automatically frozen upon accessing the page 2. It will remain frozen upon returning to page 1.

The "LIST FROZEN" message is always displayed on page 2.

RETURN

Returns to the page 1

[6R] EFOB/WIND

Gives access to the page 2.

Pressing this prompt automatically freezes the list of four closest airports.

Note : – If the aircraft position becomes invalid, all fields are dashed, FREEZE/UNFREEZE and EFOB/WIND prompts are removed, LIST FROZEN is displayed and the A/C POSITION INVALID message is displayed in the scratchpad. Page 2 may not be accessed.

– Predictions (EFOB, TIME) displayed on the page assume :

- ECON CRZ speed (managed) or current selected speed (selected) ;
- CI (for managed speed only) and CRZ FL from primary F-PLN are kept ;
- Constant wind value ;
- In case of engine out, the aircraft altitude is the minimum of (CRZ FL, EO MAX ALT) ;
- Downpath steps are not considered ;
- Descent fuel burn is a conservative value which only depends on the difference between current CRZ ALT and destination altitude.

EQUI-TIME POINT PAGE

The pilot will use this page to require an equitime point computation between two different points (airport, navaid runway or waypoint). This pseudo-waypoint is displayed on the navigation display along the F-PLN. The EQUI-TIME POINT page is accessed by pressing the 6L key from the DATA INDEX page :

DATA INDEX PAGE 1

EQUITIME
<POINT

6L

EQUI-TIME POINT				
A/C	TO	BRG	DIST	UTC
[1L]	[]	---	---	---
[2L]				
[3L]	[]	---	---	---
[4L]				
[5L]				
[6L]				
			DIST	UTC
			---	---

EQUI-TIME PAGE
NO DEFAULTED REF

[1L] A/C TO (blue)[3L] A/C TO (blue)

EQUI-TIME POINT				
A/C	TO	BRG	DIST	UTC
[1R]	LFBO	176°	45	10.14
[2R]	TRU WIND	ETP TO LFBO		
[3R]	270° /035	171°	277	11.18
[4R]	EGLL	007°	497	11.18
[5R]	TRU WIND	ETP TO EGLL		
[6R]	110° /025	006°	265	11.18
		ETP LOCATION		
		N52W025 /	-25.2	
	A/C TO		DIST	UTC
	(ETP)		382	0908

COMPUTED EQUI-TIME POINT

Displays reference waypoint 1.
Displays reference waypoint 2.

Note : Origin and destination airports are used by default for respective reference points 1 and 2 until a pilot entry is made.

[1R] BRG/DIST/UTC and

(TIME)

This field displays the bearing, distance, time from the aircraft's current position to the reference waypoint 1.

[3R] (green)

Idem for the reference waypoint 2.

BRG :

Displays the current great circle bearing from the aircraft's position to the reference waypoint. T is added, if TRUE reference is selected.

DIST :

Displays the current great circle distance from the aircraft's position to the reference waypoint.

TIME :

Displays the predicted time to the reference waypoint (computed using the current wind or a wind vector entered by the crew).

Time is only computed in cruise phase, otherwise it is dashed.

	PILOT INTERFACE MCDU PAGE DESCRIPTION	4.03.20 P 79	
		SEQ 100	REV 11

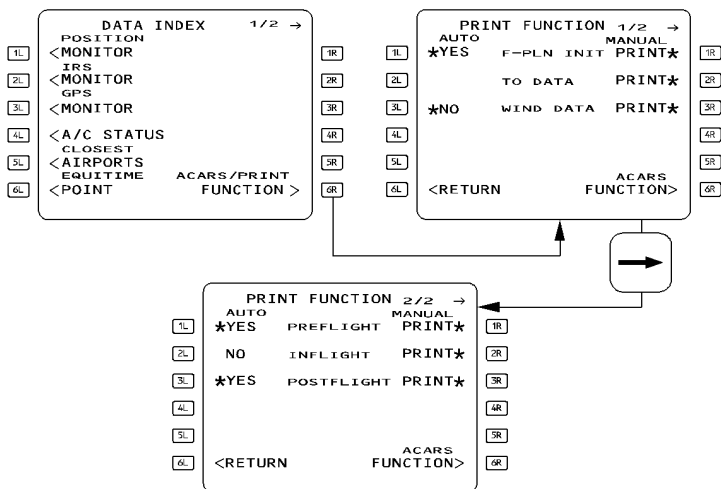
[2L] and [4L] TRU	WIND and (blue) The pilot may enter the wind (direction/velocity) at the reference waypoint and CRZ FL : This wind is used to compute the time from the aircraft position to the reference waypoint and to locate the equitime point itself.
[2R] and [4R] EPT	If no entry is made, the wind/velocity field will read zero. TO XXX and (green) This field displays the bearing distance and time from the equitime point (ETP) position to the reference waypoint.
[5R] ETP LOCATIO	N This field displays the ident of the next waypoint following the equitime point. The distance along the flight plan from the equitime point to the indicated waypoint is provided.
[6L] - [6R] A/C TO	(ETP) DIST/UTC (green) This field displays the distance and time from the current aircraft position to the equitime point along the flight plan. If at least one reference waypoint exists but no equitime point exists, the field is blank and NO ETP is displayed in 6L.

Note : *The assumptions for the equitime point computation include the cost index, speed managed (with SPD LIM), and winds.*

In case of engine-out, the EO LRC speed is considered.

PRINT FUNCTION PAGES

The PRINT FUNCTION pages enable the pilot to print the active data relative to the current flight. The "PRINT FUNCTION" prompt is displayed on the DATA INDEX 1/2 page [6R] key, and gives access to the PRINT FUNCTION page 1 and 2.



FFCS-04-0320-080-A100AA

PRINT FUNCTION PAGE 1/2

The page displays the manual printing capabilities for the active flight plan data (line 1), the active takeoff data (line 2), the wind data (line 3).

Left column

AUTO (white)

* YES (blue).

Line 1. : . the uplinked flight plan INIT data are automatically printed when received.

Line 2. : . the uplinked takeoff data are automatically printed at uplink reception.

Line 3. : . the active wind data are automatically printed at uplink reception.

* NO (blue).

The report displayed on the line is not automatically printed. The pilot can reactivate the function by pressing the left key of the line.

Blank.

The report displayed on the line is not automatically printed. The pilot cannot reactivate the function, but you can still print manually using the right hand key.

	PILOT INTERFACE MCDU PAGE DESCRIPTION	4.03.20	P 81
		SEQ 100	REV 07

Right column

MANUAL (white)	Displays the status of the manual printing capability of the active data (and not the ACARS uplink data)
PRINT * (amber)	Pressing the right keys prints the following active data : Line 1 : active flight plan init data. Line 2 : active takeoff data. Line 3 : active wind data. If the star is not displayed, the printing is not possible. When the key has been pressed, the star is removed until the data are printed.
[6L] RETURN	Pressing this key reverts the display to the DATA INDEX page.
[6R] ACARS FUNCTION	Pressing this key reverts the display to the ACARS FUNCTION page.

PRINT FUNCTION PAGE 2/2

This page describes the printing capabilities of the reports displayed on line 1 to 3.

Left column

AUTO (white)	
* YES (blue)	Line 1 : the PREFLIGHT report is automatically printed at engine start. Line 2 : the INFLIGHT report is automatically printed at takeoff. Line 3 : the POSTFLIGHT report is automatically printed at engine shutdown.
* NO (blue)	The report displayed on the line is not automatically printed. The pilot can reactivate the function by pressing the left key of the line.
NO (without a star)	The automatic printing is deactivated internally for the report. The pilot cannot reactivate it.

Right column

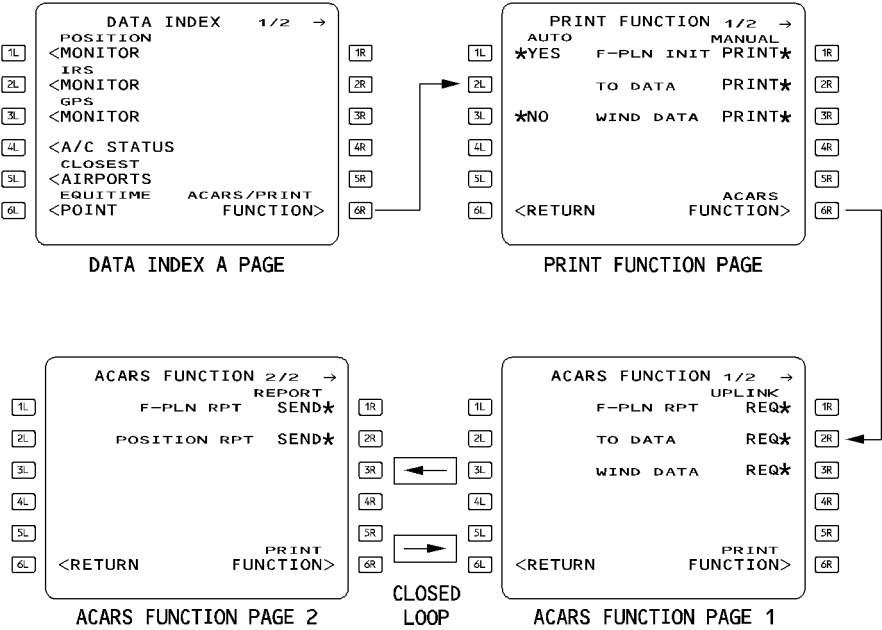
MANUAL	Pressing a right key prints the report displayed on the line.
PRINT *	If the star is not displayed, the printing is not possible. When the key is pressed, the star is removed until the report is printed.
[6R] ACARS FUNCTION	The crew presses this key to revert to the ACARS FUNCTION page.

ACARS FUNCTION PAGE

The ACARS FUNCTION pages display the functions that enable the pilot to send manual requests or reports to the ground.

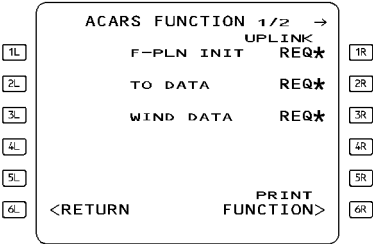
All functions displayed on page 1 and 2 may be inhibited through a pin program of the navigation database policy file.

ACARS/PRINT FUNCTION prompt is displayed on the DATA INDEX page 1/2. Pressing this key displays the PRINT FUNCTION page from which the ACARS FUNCTION page can be accessed.



ACARS FUNCTION PAGE 1

FFCS-04-0320-083-A100AA



TITLE

Line 1 F-PLN INIT REQ*

Line 2 TO DATA REQ*

Line 3 WIND DATA REQ*

ACARS FUNCTION 1/2 in white

Pressing this key sends a request for flight plan to the ground (downlink message).

INIT REQUEST prompt of the INIT A page provides the same function.

Pressing this key sends a request for takeoff data.

Displayed in DONE and PREFLIGHT phases.

TO DATA REQUEST prompt of the UPLINK TO DATA REQ page provides the same function.

Pressing this key sends a request for wind data.

WIND REQUEST prompt of the CLIMB, CRUISE and DESCENT WIND pages provides the same function.

Note : If “REQ” is not followed by a star, the request cannot be sent (downlink message).

When a function (line 1 or 2 or 3) is deactivated using the navigation database policy file, the corresponding line is blank.

[6L] RETURN

[6L] PRINT FUNCTION

The pilot presses this key to make the display revert to the DATA INDEX page.

The pilot presses this key to access the PRINT FUNCTION page. (Refer to PRINT FUNCTION page).

UPLINK TO DATA REQ PAGES

This page allows the pilot to send a request for takeoff data for up to 2 runways. There is one page for each runway. The page is accessed from the PERF TAKEOFF page, or from the UPLINK XXX (MAX or FLX or DRT) TO DATA page, by pressing the UPLINK TO DATA prompt.

FFCS-04-0320-084-A100AA

[1L]	UPLINK TO DATA REQ 1/2 →	[1R]
[2L]	TOW /TOCG SHIFT/ RWY	[2R]
[3L]	-----/----- []	[3R]
[4L]	TEMP/QNH TO LIMIT	[4R]
[5L]	-----/-----	[5R]
[6L]	MAG WIND FLAPS/THS	[6R]
	-----/-----	
	CONTAM FLEX TO TEMP	
	----- °	
	RECEIVED TO DATA	
	<TO DATA REQUEST*	

NO RUNWAY DEFINED

[1L]	UPLINK TO DATA REQ 1/2 →	[1R]
[2L]	TOW /TOCG SHIFT/ RWY	[2R]
[3L]	152.4/25.7 FT []/33L	[3R]
[4L]	TEMP/QNH TO LIMIT	[4R]
[5L]	+27°/998 FT []	[5R]
[6L]	MAG WIND FLAPS/THS	[6R]
	000°/000 []/[]	
	CONTAM↑↓ FLEX TO TEMP	
	DRY [] °	
	RECEIVED TO DATA	
	<TO DATA REQUEST*	

RUNWAY DEFINED, DEFAULT VALUES DISPLAYED.

TITLE

[1L] TOW/TOCG(green)

[2L] TEMP/QNH or QFE(green/blue)

[3L] MAG WIND(blue)

[4L] CONTAM(blue)

[6L] RECEIVED TO DATA

The title appears in white.

This field is dashed, until a runway is defined in the [1R] field. The TOW/TOCG are the values of the INIT B and FUEL PRED pages. If not available, dashes are displayed. They cannot be modified by the pilot.

This field is dashed until a runway is defined in the [1R] field : TEMP = Defaulted to SAT ; cannot be modified by the crew. QNH or QFE = Defaulted to FCU selection, and can be modified by the pilot.

This field is dashed, until a runway is defined in the [1R] field, and displays the wind at the origin. It can be modified by the pilot.

This field is dashed, until a runway is defined in the [1R] field. The display is defaulted to DRY.

The slew keys allow the pilot to modify the runway contamination :

DRY, WET, 1/4 WATER, 1/2 WATER, 1/4 SLUSH, 1/2 SLUSH, COMP SNOW.

This prompt calls up the UPLINK MAX (or FLX or DRT) TO DATA page that displays the data received by ACARS.

FC5-04-0320-085-A100A

UPLINK TO DATA REQ 1/2 →	
1L TOW /TOCG	SHIFT / RWY
152.4/25.7	FT[]/33L
2L TEMP/QNH	TO LIMIT
+27°/1013	FT[]
3L MAG WIND	FLAPS/THS
000°/000	3/UP2.4
4L CONTAM↑	FLEX TO TEMP
DRY	+35°
5L RECEIVED	TO DATA
6L <TO DATA	REQUEST
	4R
	2R
	3R
	4R
	5R
	6R

- [1R] SHIFT/RWY(blue)

This field is dashed until a runway is defined in the F-PLN. If a runway is defined in the F-PLN, it is automatically filled:
SHIFT = value from PERF TO page or blue bracket if no value defined.
RWY = F-PLN departure runway
This field is modifiable by the pilot.
- [2R] TO LIMIT(blue)

It is dashed until a runway is defined in [1R] field.
It displays blue brackets [] when a runway is defined.
The pilot may enter a length considering obstacles on the runway.
- [3R] FLAPS/THS(blue)

This field is dashed until a runway is defined in [1R] field; then defaulted to values from PERF TO page. Blue brackets are displayed if PERF TO page has no defined values.
- [4R] FLEX TO TEMP(blue)

This field is dashed until a runway is defined in [1R] field; then it is defaulted to values from the PERF TO page. Blue brackets are displayed if PERF TO page has no defined values.
This field is modifiable by the pilot. The pilot may enter a FLEX TO temperature (FXX)
- [6R] TO DATA REQUEST*(amber)

Pressing the key sends the takeoff data request message to the ground.
The star disappears when the request is sent. The star is displayed again when data are available.

Page 2/2 is a page used for requesting a second runway data.

Note : – If the UPLINK TO DATA REQ page 2 is accessed (page 1 being filled), the fields of page 2 are filled with default values after entry of a runway in [1R]. QNH or QFE and wind are common with page 1.

UPLINK MAX TO DATA PAGES

FFCS-04-0320-086-A100AA

1L

2L

3L

4L

5L

6L

UPLINK MAX TO DATA 1/4 →
TOW /TOCG SHIFT/ RWY
-----FT-----
TEMP/QNH V1 TO LIMIT
+25° /1023 110 FT7200
MAG WIND VR FLAPS/THS
310° /015 125 3/UP2.4
CONTAM V2
----- FLEX TO>
THR RED/ACC ENG OUT ACC

UPLINK
<TO DATA

1R

2R

3R

4R

5R

6R

1L

2L

3L

4L

5L

6L

UPLINK MAX TO DATA 1/4 →
TOW /TOCG SHIFT/ RWY
152.4/24.6 RTC V33L
TEMP/QFE V1 TO LIMIT
+25° /1023 110 FT7200
MAG WIND VR FLAPS/THS
310° /015 125 3/UP2.4
CONTAM V2
----- FLEX TO>
THR RED/ACC ENG OUT ACC

UPLINK
<TO DATA

1R

2R

3R

4R

5R

6R

REQUEST IS PENDING

This page is accessed from the UPLINK TO DATA REQ page by pressing the RECEIVED TO DATA key. There is a set of 2 pages (MAX TO DATA and FLEX DRT TO DATA) for each of the 4 uplinked runway data. Uplinked data are displayed in green (not modifiable by the pilot).

- | | |
|--|--|
| <div>[1L] TOW/TOCG</div> <div>[2L] TEMP/QNH (or QFE)</div> <div>[3L] MAG (TRUE) WIND</div> <div>[4L] CONTAM</div> <div>[5L] THR RED/ACC</div> <div>[6L] UPLINK TO DATAV1, VR, V2</div> <div>[1R] SHIFT/RWY</div> <div>[2R] TO LIMIT</div> <div>[3R] FLAPS/THS</div> <div>[4R] FLEX TO</div> <div>[5R] ENG OUT ACC</div> <div>[6R] INSERT UPLINK*</div> | <div>Uplinked reference takeoff gross weight and takeoff center of gravity.</div> <div>Uplinked temperature and baro setting.</div> <div>Uplinked takeoff runway wind. MAG or TRUE depending on the reference of the runway.</div> <div>Uplinked takeoff runway contamination.</div> <div>Uplinked thrust reduction and acceleration altitudes.</div> <div>Pressing the key calls up the UPLINK TO DATA REQ page.</div> <div>Uplinked takeoff speeds.</div> <div>Uplinked TO runway ident, runway intersection and position shift.</div> <div>Uplinked runway length remaining</div> <div>Uplinked FLAPS/SLATS CONF and TRIM position.</div> <div>Pressing the key calls up the UPLINK FLEX (or DRT if derated takeoff option is installed) TO DATA pages.</div> <div>Uplinked engine out acceleration altitude</div> <div>Uplinked takeoff data are available for insertion.</div> <div>Selecting this prompt inserts into the FM the following data:</div> <ul style="list-style-type: none"> – V1, V2, V2 – THR RED/ACC, ENG OUT ACC altitudes – MAG WIND – FLAPS/THS – SHIFT – FLEX or DRT |
|--|--|

The display reverts to the PERF TO page, the star disappears. This field is not displayed if the runway does not match the active runway.

Note : All previous received data are replaced by the new uplinked data.

UPLINK FLX (OR DRT) TO DATA PAGES

FFCS-04-0320-087-A 100AA

UPLINK FLX TO DATA

1L

TOW /TOCG

152.4/24.6

SHIFT/ RWY

33LX1

1R

2L

FLX/QNH

V1

TO LIMIT

45°/1014

110

FT7200

2R

3L

MAG WIND

VR

FLAPS/THS

310°/015

125

3/UP2.4

3R

4L

CONTAM

V2

MAX TO>

4R

5L

DRY

140

THR RED/ACC

ENG OUT ACC

5200

5R

6L

UPLINK

INSERT

<TO DATA

UPLINK★

6R

TITLE

UPLINK FLX TO DATA or UPLINK DRT TO DATA if the derated takeoff function is installed, and if the pilot selected a derated takeoff.

[2L]

FLX (or DRT)/QNH (or QFE)

When the UPLINK FLEX TO DATA page is selected, it displays uplink assumed Flex Temperature and baro setting (QNH or QFE). When the UPLINK DRT TO DATA page is selected, this field displays DRT/BARO. If so, it displays the thrust rating and baro setting (QNH or QFE).

[4R] MAX TO

Pressing this key calls up the MAX TO DATA page.

For all other fields, refer to MAX TO DATA page.

ACARS FUNCTIONS PAGE 2

FFCS-04-0320-088-A100AA

ACARS FUNCTION 2/2 →	
	REPORT
1L F-PLN RPT	SEND*
2L	
3L POSITION RPT	SEND*
4L	
5L	
6L	
<RETURN	PRINT FUNCTION>

ACARS FUNCTION PAGE 2

Line 1 F-PLN RPT SEND This key, when pressed, sends the flight plan report to the ground.

Line 2 POSITION RPT SEND This key, when pressed, sends a Position Report to the ground.

Note : – No report can be sent if “SEND” is not followed by a star
 – When a function (line 1 or 2) is deactivated through the navigation database policy file, the corresponding line is blank.

[6L] RETURN The pilot presses this key to make the display revert to the DATA INDEX page.

[6R] PRINT FUNCTION The pilot presses this key to access the PRINT FUNCTION page.

Left intentionally blank

PERF PAGES

The flight plan is divided into several phases :

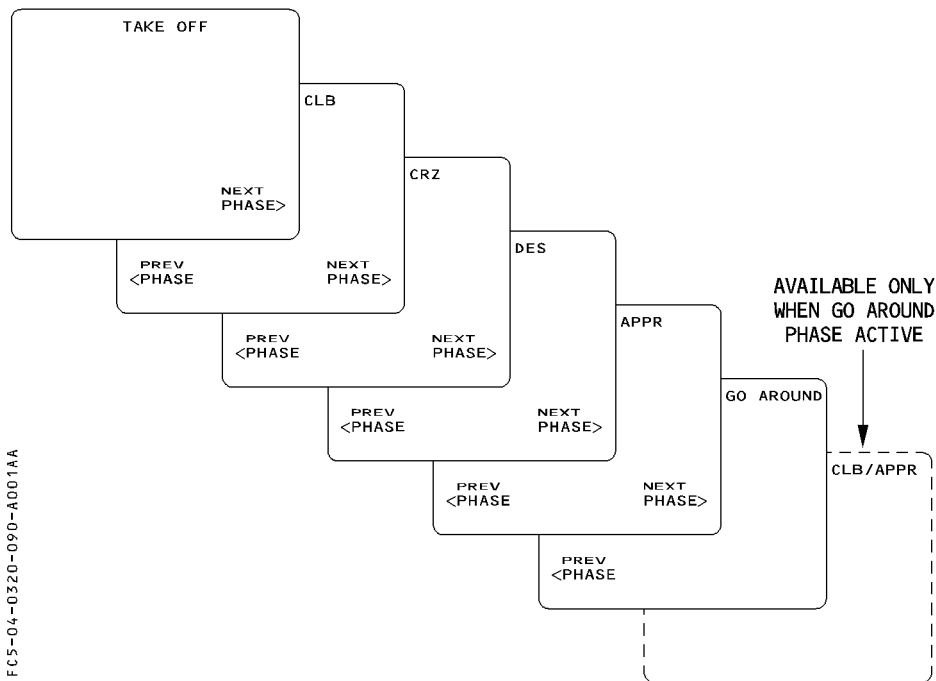
PREFLIGHT - TAKEOFF - CLIMB - CRUISE - DESCENT - APPROACH - GO-AROUND - DONE

Each phase except the preflight and done phases has a performance (PERF) page. The PERF pages display performance data, speeds related to the various phases, and predictions.

Pressing the PERF key on the MCDU console calls up the performance page for the current active phase. Performance pages relating to phases already flown are not available.

In the preflight and done phases, pressing the PERF key brings up the takeoff performance page.

Pressing the PERF key in the done phase makes the phase transition to the preflight phase.



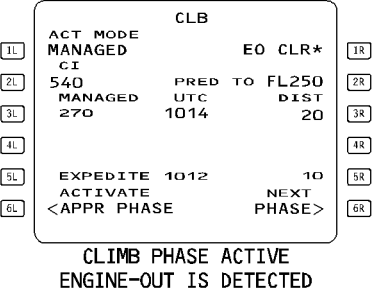
The FMGS flight phase are not related to the FWC phases.

FFCS-04-0320-090-A001AA

- Line 6
- [6L] PREV PHASE Fields may display two different prompts, depending upon whether the phase is active or not.
To review the performance page for the previous phase.
Prompt not available on the takeoff performance page. Also not available for phases already flown.
- [6L] ACTIVATE APPR PHASE To activate then confirm the APPR phase. Available only on the page corresponding to the active phase.
- [6R] NEXT PHASE To review the performance page for the next phase.

Note : Engine-out condition

- When the FMGS detects an engine-out condition, the system automatically calls up the performance page for the current flight phase (except when this occurs before the diversion point during takeoff or no EOSID exists in the flight plan) and displays “EO CLR*” in the [1R] field and “EO LRC” (engine-out long range cruise) in the [2L] field.
On the CLB, CRZ and DES (when the descent phase is not active) PERF pages, the pilot can enter a cost index value and overwrite to “EO LRC”.
Clearing the cost index reverts to EO LRC.
If the pilot presses the [1R] key, the system reverts to the normal processing (with no engine failed) and suppresses the EO information. (Refer to 4.04.10).
- If the engine-out condition is detected before the diversion point at takeoff, a temporary flight plan is created.



PERF TAKEOFF PAGE

During the preflight phase, the pilot presses the PERF key to call up the takeoff performance page.

FFCS-04-0320-092-A001AB

TAKE OFF			
1L	V1	FLP RETR	RWY 33R
		F=163	
2L	VR	SLT RETR	TO SHIFT
		S=196	[M] []
3L	V2	CLEAN	FLAPS/THS
		0=236	[]/[]
4L	TRANS ALT DRT TO-FLX TO		
	4800		
5L	THR RED/ACC	ENG OUT	ACC
	2000/3000		2265
6L	UPLINK	NEXT	
	<TO DATA	PHASE>	

TAKE OFF			
1R	V1	FLP RETR	RWY 33R
		F=163	
2R	VR	SLT RETR	TO SHIFT
		S=196	[M] [] 900
3R	V2	CLEAN	FLAPS/THS
		0=236	2/UP 3.4
4R	TRANS ALT FLEX TO TEMP		
	4800 35°		
5R	THR RED/ACC	ENG OUT	ACC
	2000/3000		2865
6R	UPLINK	NEXT	
	<TO DATA	PHASE>	

FLAPS SLATS RETRACTION SPEEDS
AND GREEN DOT SPEEDS PROVIDED BY
THE FMGC, ONCE AIRCRAFT GROSS
WEIGHT HAS BEEN INSERTED

TITLE

[1L] V1 [2L] VR [3L] V2

TAKE OFF is in large white font when the takeoff phase is not active, and in large green font when it is.

The boxes are amber, as long as the pilot does not make entries in them.

The pilot can modify any entry, as long as the takeoff phase is not active.

Note : • If the pilot does not enter V2, the SRS mode will not be available at takeoff.

- If the crew has entered V1, V2 or VR and the takeoff runway is changed, the MCDU scratchpad displays CHECK TAKEOFF DATA, and V1, V2 and VR fields revert to amber boxes.

[4L] TRANS ALT
(transion altitude)

The pilot calls this up from the database after the origin airfield is defined. The crew can modify it.

[5L] THR RED
(thrust reduction altitude)

This is the altitude at which the pilot should reduce the thrust from TOGA/FLX to MAX CLIMB (CL detent) with all engines operative.

- The default thrust reduction is 1500 feet above the runway elevation.
- The pilot can modify this altitude : The minimum is 400 feet above the runway elevation.

	PILOT INTERFACE		4.03.20	P 93
	MCDU PAGE DESCRIPTION		SEQ 001	REV 12

ACC. (Acceleration altitude).

This is the altitude at which the climb phase is triggered.

- The target speed jumps to the initial climb speed.
- The default value is 1500 feet above runway elevation.
- The flight crew can modify the value. The minimum value is 400 feet above runway elevation, though it is always higher than or equal to thrust reduction altitude.

Note : – A clearing action reverts both values to the defaulted ones.

- When the crew selects an altitude on the FCU that is :
 - Below ACC, it brings the ACC down to this altitude.
 - Below THR RED, it brings THR RED and ACC down to this altitude. (The 400 feet minimum still applies).

[6L] UPLINK TO DATA .



Pressing this key accesses the UPLINK TO DATA REQ page. This prompt is only displayed in the PREFLIGHT and DONE phases, when ACARS is installed.

[1R] RWY.

This field shows the takeoff runway selected on the active flight plan.

The flight crew cannot make an entry through this field. The field shows dashes, if no runway has been inserted into the flight plan.

[2R] TO SHIFT.

This field shows the distance in meters or feet between the aircraft's takeoff position and the runway threshold. The flight crew uses it to update the FMGC navigation computation. (Its values are limited to the length of the runway).

[3R] FLAPS/THS.

This is an optional pilot entry for the positions of the flaps and the trimmable horizontal stabilizer (THS) at takeoff.

It is for information only (no action). The flight crew can modify it until takeoff by entering "UP X.X" or "X.X UP", or "DN X.X" or "X.X DN" for the THS.

[4R] FLX TO TEMP or .
DRT TO-FLX TO  .

The pilot inserts the FLX TO temperature for FLX takeoff setting purposes, or a derated level (if installed). It can only be entered during preflight.

The system sends it to the FADEC and displays it on the upper ECAM display.

[5R] ENG OUT ACC.

The TEMP value is always entered in degrees Celsius.

This field displays the engine-out ACC altitude, as defined in the database, or is manually entered by the flight crew. This is for display only, as a reminder. It cannot be cleared.

The above ACC altitude rules of [5L], apply to this field.

[6R] NEXT PAGE.

This key calls up the climb performance page.

PERF CLIMB PAGE

FFCS-04-0320-094-A100AA

	ACT MODE	CLB	DRT CLB	
[1L]	MANAGED		[]	[1R] <★
[2L]	540	PRED TO FL250		[2R]
[3L]	MANAGED	UTC	DIST	[3R]
	250	1014	66	
[4L]	PRESEL			[4R]
	*[]			
[5L]	EXPEDITE 1006	28		[5R]
	PREV	NEXT		
[6L]	<PHASE	PHASE>		[6R]

CLIMB PHASE NOT ACTIVE

	ACT MODE	CLB	DRT CLB	
[1L]	SELECTED		D2	[1R] <★
[2L]	540	PRED TO FL250		[2R]
[3L]	MANAGED	UTC	DIST	[3R]
	300/.82			
[4L]	SELECTED	1014	20	[4R]
	270/.80			
[5L]	EXPEDITE 1012	10		[5R]
	ACTIVATE	NEXT		
[6L]	<APPR PHASE	PHASE>		[6R]

CLIMB PHASE ACTIVE
(speed manually selected 270)

TITLE

[1L] ACT MODE

[2L] CI(Cost Index)

[3L] MANAGED

CLB is displayed in large white fonts when the climb phase is inactive, and in large green fonts if it is active.

This field displays the preselected active speed mode : SELECTED or MANAGED.

The pilot cannot modify it from this field.

This field displays the cost index, as initialized on the INIT A or defaulted from the database, or inserted in this field by the pilot.

Note : In case of engine-out EO LRC (engine-out long range cruise) replaces the CI field.

You can enter a cost index and overwrite EO LRC. In this case, clearing the cost index reverts to EO LRC.

This field displays the FMGS-computed ECON speed/Mach (refer to 4.02.20).

Before CLIMB phase is active, if the preselected speed mode is SELECTED, a star is displayed next to the MANAGED speed. Pressing the 3L key in this case preselects MANAGED speed, and 4L field reverts to brackets.

	PILOT INTERFACE		4.03.20	P 95
	MCDU PAGE DESCRIPTION		SEQ 001	REV 13

[4L] PRESELor SELECTED	<u>If the climb phase is not active :</u> This field displays PRESEL, as long as the climb phase is not active. The pilot can only enter a preselected speed. <u>If the climb phase is active :</u> The title of this field becomes SELECTED. This field displays the selected (or preselected) SPD or MACH target. The pilot cannot directly modify it this field, but can adjust it with the SPD/MACH selection knob on the FCU. If the pilot pushes in the FCU SPD/MACH selection knob to revert to managed speed, the system selects (or reselects) ECON SPD/MACH, and [4L] is blank.
[5L] Blank orEXPEDITE	This field is blank, as long as the climb phase is not active. This field displays this legend when the climb phase is active. It indicates the time and distance required to reach the altitude displayed in the 2R field, in case of a climb at green dot.
[6L] PREV PHAS	E This field displays this legend, if the climb phase is not active. The pilot presses this key to call up the takeoff page.
[6L] ACTIVATE	APPR PHASE The field displays this legend, if the climb phase is active. Pressing this key once displays “CONFIRM APPR PHASE**”. Pressing it again activates the approach phase.
[1R] EO CLR or	DRT CLB  The system displays the EO CLR prompt, in case of an engine-out in climb, or DRT CLB when the crew selected a derated climb.
[2R] PRED TO...	This field displays the target altitude for the predictions shown in 3R, 4R, or 5R. It defaults to the FCU altitude, but the pilot can modify it to any altitude below CRZ FL.
[3R] or [4R]or	These fields show target altitude predictions selected in the [2R] field for the current vertical mode and target speed. [3R] field : Predictions for ECON speed (managed) [4R] field : Predictions for SPD manually selected
[5R]	[5R] field : Predictions for climb at green dot (EXPEDITE speed). These fields are only displayed while the takeoff, or climb phase is active.
[6R] NEXT PHASE	The pilot presses this key to call up the PERF CRZ page.

PERF CRUISE PAGE

1L 2L 3L 4L 5L 6L ACT MODE MANAGED 540 MANAGED 80 PRESEL *CJ PREV <PHASE CRZ UTC 1220 DEST EF0B 8.4 DES CABIN RATE -350FT/MN STEP ALTS> NEXT PHASE>		1R 2R 3R 4R 5R 6R ACT MODE SELECTED 540 MANAGED .82 DES CABIN RATE -350FT/MN STEP ALTS> ACTIVATE <APPR PHASE CRZ UTC 1114 DEST EF0B 8.4 CI MANAGED .82 DES CABIN RATE -350FT/MN STEP ALTS> ACTIVATE <APPR PHASE		1R 2R 3R 4R 5R 6R ACT MODE SELECTED 540 MANAGED .82 DES CABIN RATE -350FT/MN STEP ALTS> ACTIVATE <APPR PHASE CRZ UTC 1114 DEST EF0B 8.4 CI MANAGED .82 DES CABIN RATE -350FT/MN STEP ALTS> ACTIVATE <APPR PHASE	
CRZ PHASE NOT ACTIVE		CRZ PHASE ACTIVE			
1L 2L 3L 4L 5L 6L ACT MODE SELECTED EO LRC MANAGED .82 1100 DES CABIN RATE -350FT/MN ACTIVATE <APPR PHASE CRZ UTC 1114 DEST EO CLR* DRIFT DOWN TO FL250 DIST 150 DES CABIN RATE -350FT/MN NEXT PHASE>		1R 2R 3R 4R 5R 6R ACT MODE SELECTED 540 MANAGED .82 1100 DES CABIN RATE -350FT/MN PREV <PHASE CRZ UTC 1220 DEST EO CLR* DRIFT DOWN TO FL250 DIST 150 DES CABIN RATE -350FT/MN STEP ALTS> PREV <PHASE		1R 2R 3R 4R 5R 6R ACT MODE SELECTED 540 MANAGED .82 1100 DES CABIN RATE -350FT/MN PREV <PHASE CRZ UTC 1220 DEST EO CLR* DRIFT DOWN TO FL250 DIST 150 DES CABIN RATE -350FT/MN STEP ALTS> PREV <PHASE	
PERF CRZ PAGE IN EO CONDITION		PERF CRUISE PAGE WITH PREPLANNED STEP			

: FCS-04-Q320-096-A001AA

TITLE

[1L] ACT MODE

[2L] CI

[3L] MANAGED

[4L] PRESEL or

CRZ in white large font, when cruise phase is not active, in green large font, when it is.

This field shows the active speed/Mach target : SELECTED or MANAGED (ECON).

The pilot cannot modify it through this field.

This field shows the cost index as initialized on the init A page or defaulted from the database, or as inserted in this field by the crew.

EO LRC replaces automatically the cost index value in case of engine out.

When the speed target is managed, the FMGS computes the ECON speed.

This field displays the ECON speed/Mach :

ECON is the optimum speed or Mach, in terms of time and fuel cost ratio, related to the active flight plan, weather, cruise flight level, and gross weight.

SELECTED

If cruise phase is not active :

The pilot can enter a preselected speed or Mach number.

If cruise phase is active :

This field is blank.

	PILOT INTERFACE MCDU PAGE DESCRIPTION	4.03.20	P 97
		SEQ 001	REV 12

Note : When the cruise phase is not yet active, a * symbol appears next to the selectable speed (or Mach).

[6L] PREV PHASE or

The pilot can press this key to call up the climb page, if the cruise phase is not yet active.

[6L] ACTIVATEAPPR PHASE

This field displays this legend if the cruise phase is active. The flight crew presses the key once to change the legend to "CONFIRM APPR PHASE*".

A second press activates the approach phase.

Note : If the pilot inadvertently activates the approach phase, it can reselect the cruise flight level into the progress page to reactivate the cruise phase.

[1R] TIME/UTCDES EFOB

Before takeoff, this field displays the flight time to destination and the predicted remaining fuel on board. If the crew enters an estimated takeoff time, the field automatically displays the predicted arrival time (UTC) at destination. After takeoff, it displays the predicted arrival time at destination (UTC) and the remaining fuel on board. EO CLR is displayed when an engine-out is detected.

[2R] STEP TO FL XX DRIFT
DOWN TO FLXX, or TO T/D

This field, in combination with 3R, displays the predictions for the step point and the step altitude, the drift down altitude, or the Top of Descent.

[3R] TIME/UTC and DIST

This field displays the time and distance to go to the various points identified in 2R.

[4R] DES CABIN RATE

This field displays Max (computed DES cabin rate, maximum descent cabin rate). The pilot may modify the value : The FM then recomputes the top of descent, in order to match this value. If the FM cannot match the pilot entry, the FM-computed value overwrites the pilot entry.

A clear action reverts to the default value (- 350 feet per minute). As DES CAB RATE is a negative value, "minus" is not a necessary entry.

[5R] STEP ALTS

This key calls up the STEP ALTS page (see vertical revision).

[6R] NEXT PHASE

This key calls up the DES page.

PERF DESCENT PAGE

FFCS-04-0320-098-A001AA

1L

2L

3L

4L

5L

6L

ACT MODE	DES UTC DEST EFOB
MANAGED	1215 8.4
CI	
540	
MANAGED	
.78/340	
PREV NEXT	
← PHASE	PHASE >

1R

2R

3R

4R

5R

6R

DES PHASE NOT ACTIVE WITH
MANAGED SPEED/MACH SELECTION

1L

2L

3L

4L

5L

6L

ACT MODE	DES UTC DEST EFOB
SELECTED	1215 8.4
CI	
540	
MANAGED	PRED TO FL200
.81/340	UTC DIST
SELECTED	
.78/280	1200 20
EXPEDITE	1155 15
ACTIVATE	NEXT
← APPR PHASE	PHASE >

1R

2R

3R

4R

5R

6R

DES PHASE ACTIVE WITH
SELECTED SPEED/MACH

TITLE

DES in a white large font when the descent phase is not active and in a green large font, when it is active.

[1L] ACT MODE

This field displays the active speed target (MANAGED or SELECTED). The flight crew cannot modify it through this field.

[2L] CI

This field displays the cost index, as initialized on the INIT A page or defaulted from the database, or inserted in this field by the flight crew. The flight crew cannot modify it when the descent phase is active.

[3L] MANAGED

If the descent phase is not active :
Before the flight crew makes any entry. This field displays MANAGED in white, with the associated ECON descent Mach or speed in blue. The crew may overwrite the ECON descent Mach or speed by entering a Mach number or a speed in this field. The system uses the pilot entry to compute the descent profile. The descent may be flown in managed using this new pilot entry.
The entry is modifiable. It can be cleared to revert to ECON speed/Mach

If the descent phase is active :
The flight crew cannot make an entry in this field.
The field displays the ECON speed/Mach or the speed/Mach value previously entered by the pilot.

virgin atlantic  A340-600 Flight Crew Operating Manual	PILOT INTERFACE	4.03.20	P 99
	MCDU PAGE DESCRIPTION	SEQ 001	REV 07

[4L] blank or [4L] MACH/SPD

If the descent phase is not active, this field is blank.

If the descent phase is active :

The field displays the speed or Mach target manually selected by the pilot. "SELECTED" is displayed in the [1L] field.

To modify the field value, the pilot will use the SPD/MACH selector knob of the FCU. [4L] field and FCU window will display the same value.

Pushing in the FCU speed selector knob activates the managed SPD/MACH target displayed in the [3L] field.

[5L] Blank or [5L] EXPEDITE

If the descent phase is not active this field is blank.

Displays this legend if the descent phase is active.

It indicates the time and distance required to reach the altitude displayed in the 2R field at MMO/VMO speed.

[6L] PREV PHASE or

ACTIVATE APPR PHASE

This key calls up the cruise phase page if the descent phase is not yet active.

Displays if the descent phase is active. First press causes "CONFIRM APPR PHASE" to be displayed. Second press activates the approach phase.

[1R] TIME/UTC

DEST EFOB

Before takeoff, this field displays the flight time to destination and the predicted remaining fuel on board. If the crew enters an estimated takeoff time, the field displays automatically the predicted arrival time (UTC) at destination.

After takeoff, it displays the predicted arrival time at destination (UTC) and the remaining fuel on board.

[2R] PRED TO...

This field displays the target altitude for the predictions in [3R] [4R], or [5R].

The display defaults to the altitude selected on the FCU. The flight crew can modify it to any altitude lower than present altitude.

[3R]

These fields display altitude predictions down to the target altitude selected in [2R], computed for the current vertical mode (DES or OP DES) and the indicated target speed.

[3R] field : shows predictions for the "MANAGED" SPD/MACH profile.

[4R]

[4R] field : displays predictions for a SPD/MACH.

[5R]

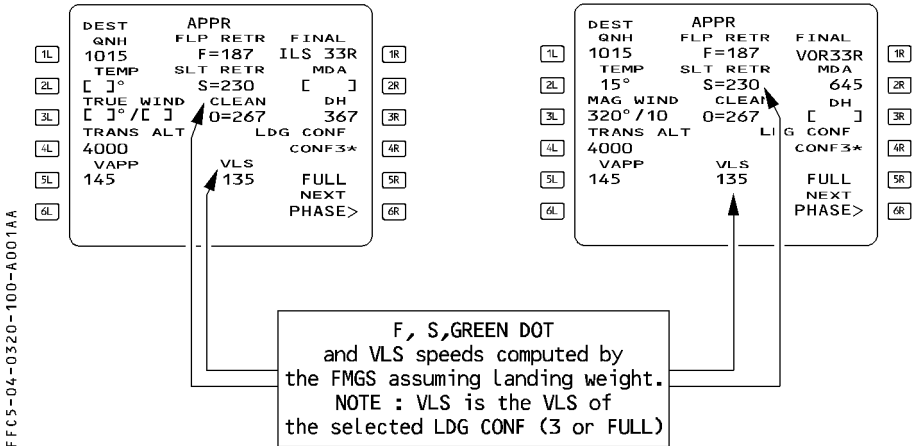
[5R] field : displays predictions for a descent at MMO/VMO (EXPEDITE).

Fields [3R] [4R] [5R] are displayed only when DES phase is active.

[6R] NEXT PHASE

The pilot presses this key to call up the PERF APPR page.

PERF APPR PAGE



TITLE

APPR in a white large font if the approach phase is not active,
in a green large font if it is.

[1L] QNH

This field displays brackets when the aircraft is more than 180
NM from the destination. Inside 180 NM, a mandatory amber
box appears. The pilot must enter the QRH, either in hPa
(three or four digits) or in inches of mercury (two digits, decimal
point, and two more digits).

The system interprets :

1003 as 1003 hPa

29.92 as 29.92 inches of mercury

The pilot can modify this entry at any time.

The system uses QNH to compute the cabin repressurization
segment.

[2L] TEMP

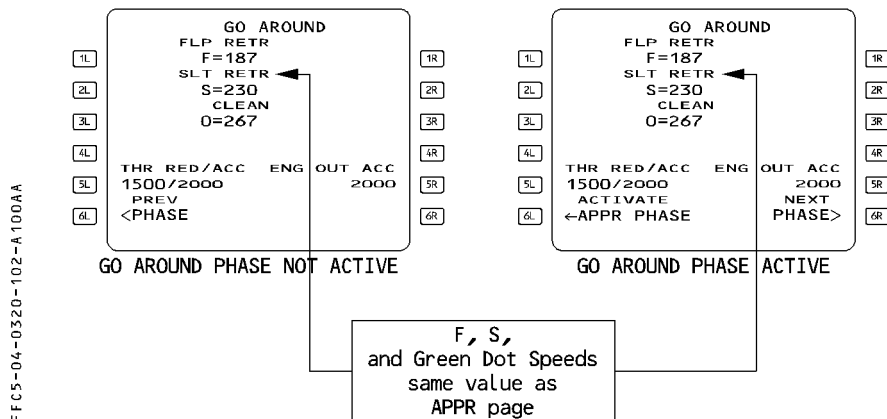
This field displays the temperature at destination. Until the
pilot enters the temperature, the field displays brackets. The
pilot can modify this figure.

The system uses this temperature to refine its computation of
the descent profile (ISA model).

	PILOT INTERFACE MCDU PAGE DESCRIPTION	4.03.20	P 101
		SEQ 001	REV 07

[3L] MAG WIND orTRUE WIND	The pilot enters the wind speed in knots at the destination in this field. The reference of the wind entry is magnetic or true, depending on the airport's reference. The system transmits any entry made in this field to the descent wind page (which displays wind direction as true, not magnetic, whatever the airport's reference is).
[4L] TRANS ALT	This field displays the transition altitude taken from the data base (small font) or entered by the flight crew (large font). The pilot can modify it at any time.
[5L] VAPP	The FMGC computes this approach speed, using the formula: $VAPP = VLS + 1/3$ of the headwind component (1/3 of the headwind component is limited to 5 knots as a minimum and 15 knots as a maximum). The pilot can modify VAPP. A clear action reverts VAPP to the computed value. <u>Note :</u> <i>VLS = 1.23 VS1G of the selected landing configuration (full or 3).</i>
[6L] PREV PAGE	This field displays this legend if the approach phase is not active. Pressing this key calls up the descent performance page.
[1R] FINAL	This field displays the approach specified in the flight plan. The pilot cannot modify it through this field.
[2R] MDA or MDH	This field displays the minimum descent altitude (or minimum descent height if the QFE pin program is activated), with associated brackets. The pilot inserts the value, which it can modify at any time. If the flight crew makes an entry in [3R] or changes the approach, it clears this figure.
[3R] DH	If the flight plan includes an ILS approach, this field displays "DH" and empty brackets. The pilot inserts the decision height. The system will accept an entry of "NO". If the flight crew inserts an MDA or an MDH, this erases the decision height, and this field reverts to brackets. The DH range is 0 to 700 feet.
[4R] LDG CONFCNF 3	The pilot can select configuration 3 by pressing the 4R key. This moves the * down to the [5R] field, which is displaying "FULL".
[5R] FULL	The pilot can use this key to select configuration FULL when necessary. Configuration FULL is the default landing configuration.
[6R] NEXT PHASE	Depressing this key calls up the go-around performance page.

PERF GO AROUND PAGE



TITLE

[5L] THR REDACC

GO AROUND is in large white font, if the go-around phase is not active ; it is in large green font, if it is.

This field displays the thrust reduction altitude and the acceleration altitude.

Thrust reduction altitude

- Altitude at which thrust must be reduced from takeoff/go-around thrust to maximum climb thrust.
- LVR CLB flashing on flight mode annunciator.
- Defaults to 1500 feet above destination runway elevation, or to the altitude set by the airline.
- Can be modified by the crew (minimum 400 feet above destination runway elevation).

Acceleration altitude

- Altitude at which target speed jumps to green-dot speed (see the note below).
- Defaults to 1500 feet above destination runway elevation, or to the altitude set by the airline
- Can be modified by the crew but always equal to or higher than thrust reduction altitude.

	PILOT INTERFACE		4.03.20	P 103
	MCDU PAGE DESCRIPTION		SEQ 001	REV 13

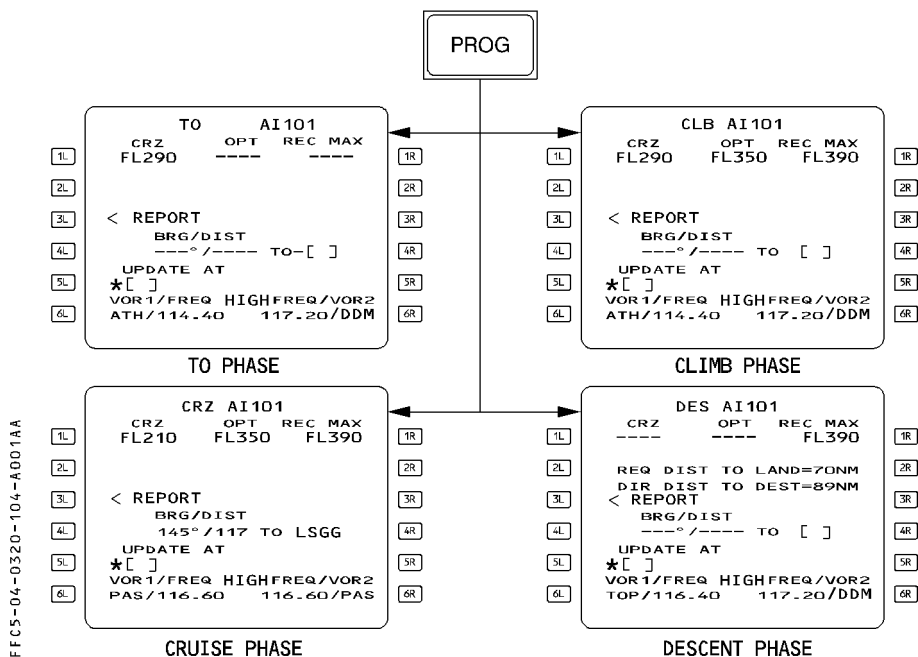
[6L] PREV PHASEor	This field displays this legend, if the go-around phase is not active.
ACTIVATE APPR PHASE	Pressing the key calls up the PERF APPR page. This field displays this legend, if the go-around phase is active. Pressing it once makes "CONFIRM APPR" appear. A second press activates the approach phase.
[5R] ENG OUT ACC	This display has the same characteristics as the display beside the 5R key on the takeoff page. It is for display only, and the pilot can modify it.
[6R] NEXT PHASE	Pressing this key calls up the PERF APPR page.
[1R] Blank or EO CLR*	This field is normally blank. EO CLR* is displayed when GO AROUND is the active phase and an engine-out condition is detected.

Note : *When the go-around phase is active, if the pilot enables ALTN, or if the pilot inserts a new destination in the active flight plan and a new cruise flight level on the progress page, the go-around phase automatically shifts to the climb phase. (The target speed jumps from green dot speed to initial climb speed).*

PROG PAGES

The progress page is a multifunction page that allows the pilot :

- to select a new cruise flight level
- to cross-check the navigation accuracy of the flight management (FM) system and validate it
- to update the FM position
- to monitor the descent



TITLE

Line 1 CRZ(blue)

Different for each flight phase (see illustrations above).
Vertical phase in large green font. Flight number in white large font. EO in amber large font if the engine out condition is detected.

This line shows in blue the cruise flight level inserted on the INIT A page or directly in this field. If the flight crew uses the FCU to select an altitude that is higher than that displayed in this field, the system changes the number displayed here to agree.

The flight crew cannot insert here a flight level that is lower than the FCU selected altitude.

This field shows dashes when the descent or approach phase is active.

OPT

This field shows in green the optimum flight level, computed as a function of present gross weight, cost index, temperature, winds and a minimum estimated cruising of 15 minutes.

It displays dashes :

- in cruise, when the aircraft is less than 15 NM from top of descent
- in the descent and approach phases
- when an engine-out is detected

REC MAX

This field shows in magenta the recommended maximum altitude, computed as a function of present gross weight and temperature. It gives the aircraft a 0.3 g buffet margin, a minimum rate of climb at MAX CL thrust, and level flight at MAX CRZ thrust. It is limited to FL 410.

With one or two (for A340) engine out it shows the recommended maximum EO altitude, computed for long-range cruise speed, anti-icing off.

[2L] REPORT
[2R] V DEV

This key calls up the report page.

This field is displayed during descent and approach when NAV mode is engaged. It shows the vertical deviation between present altitude and the altitude at which the aircraft would be if it were on the descent path.

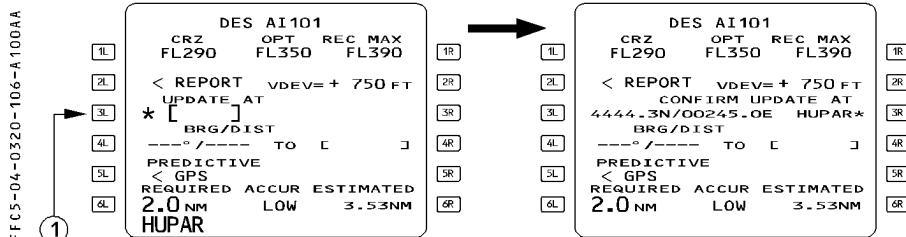
	ECON DES AF5612	
	CRZ OPT REC MAX	
[1L]	-----	[1R]
		FL390
[2L]		[2R]
	VDEV=+750FT	

FFCS-04-0320-105-A100AA

virgin atlantic A340-600 Flight Crew Operating Manual	PILOT INTERFACE		4.03.20	P 106
	MCDU PAGE DESCRIPTION		SEQ 100	REV 07

Line 3 UPDATE AT

The pilot can update the FMGC position through this field by entering here the ident for a waypoint, a navaid, or an airport, or a latitude and longitude (L/L), a place/bearing/distance (PBD), or a place-bearing/place-bearing (PBX).



CONFIRM UPDATE AT

When the field has received this data, it changes its format to: CONFIRM UPDATE AT followed by the latitude, longitude and ident of the inserted position with a star.

Note : If no ident has been inserted, the field displays "ENTRY" instead of an ident.

Line 4 BRG/DIST

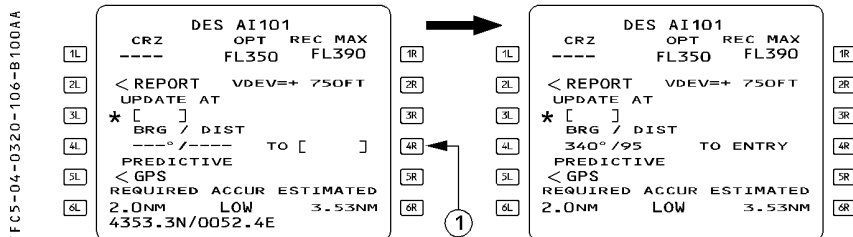
When the aircraft overflies the location, the flight crew presses the right hand key adjacent to the star to confirm the update. On this line the pilot can enter an airport, a waypoint, a navaid, or a runway. The pilot may enter each as an ident, a latitude/longitude (L/L), a place/bearing/distance (PBD), or a place-bearing/place-bearing (PBX). The field then shows the FMGC computed bearing and distance of this site from the aircraft's present position. If it does not have an ident, the point is called "ENTRY".

Example :

BRG/DIST

340°/95.4 to ENTRY

The line displays a T if the true reference is selected (NORTH REF pushbutton switch).



[5L] PREDICTIVE GPS 
[5R] GPS PRIMARY 

This prompt gives access to the PREDICTIVE GPS page.
This prompt is displayed when the FMGS navigation mode is GPS PRIMARY. When GPS PRIMARY is not available or navigation mode is not GPS/IRS, this field is blank.
The scratchpad displays the relevant message "GPS PRIMARY" when this prompt appears and "GPS PRIMARY LOST" when the field turns to blank.

[6L] REQUIRED

This field displays the default value for the required navigation accuracy level. The pilot can modify it. Provided no pilot entry has been made, the default value changes according to the actual flight area (Refer to 1.22.20).

ACCURHIGH/LOW

The field shows the flight management system's estimate of the navigational accuracy. "HIGH" indicates that the FMGS estimates that the navigational accuracy matches the accuracy criteria of the area currently flown. "LOW" indicates that the criteria are not matched.

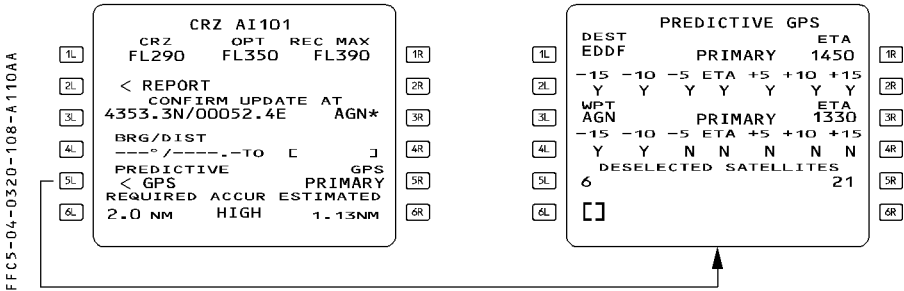
[6R] ESTIMATED

This field displays the current estimated navigation accuracy value (EPE) as computed by the FMGS.

PREDICTIVE GPS PAGE

Note : This page is only operative with GPS Honeywell. All fields are dashed with GPS Litton.

The pilot accesses this page by pressing the PREDICTIVE GPS prompt of the PROG page.
This page displays information relative to predictive availability of GPS PRIMARY at destination and at any waypoint selected by the crew.



[1L] DEST

Destination airport as currently selected in active flight plan. Not modifiable. This field shows dashes when no destination airport exists.

[1R] ETA

This field is defaulted to the estimated arrival time as computed by the FMS (blue small font). The pilot may enter a value in this field (blue large font). Amber boxes are displayed when no prediction exist or crew entry has been cleared.

Line 2 PRIMARY Y/N

Predicted primary status at destination airport at the following times :

estimated time of arrival $\pm 5, 10, 15$ minutes.

Availability of GPS PRIMARY at corresponding time is indicated by Y when PRIMARY is predicted to be available and by N when GPS PRIMARY is not predicted to be available.

These fields are blanked when destination [1L] or time [1R] is not defined.

	PILOT INTERFACE		4.03.20	P 109
	MCDU PAGE DESCRIPTION		SEQ 110	REV 09

[3L] WPT	The pilot may enter a reference waypoint in this field. Blue brackets are displayed when no entry has been made.
[3R] ETA	When a reference waypoint has been entered in [3L], amber boxes are displayed. The crew is requested to enter a reference time in this field.
Line 4 PRIMARY Y/N	Equivalent information to [2L] / [2R] displayed for any pilot selected waypoint. Corresponding time of arrival is also displayed.
Line 5 DESELECTEDSATELLITES and Line 6 SATELLITES	Allow the pilot to deselect up to four satellites by inserting the corresponding satellite number, the number is then displayed in blue large font. When deactivated, the satellites are not considered for predictive GPS availability at destination or at selected waypoint. The deselection is cancelled when the entry is cleared (blue brackets are displayed) or the field is overwritten by a different satellite number.

REPORT PAGE

The pilot calls this page by pressing the [2L] key on the PROG page :

[2L] <REPORT
[3L] UPDATE AT
[4L] * []
[5L] BRG/DIST
[6L] ---° / --- TO
PREDICTIVE
<GPS
REQUIRED ACCUR
0.36NM HIGH

FFCS-04-Q320-110-A100AA

REPORT AI101				
OVHD	UTC	ALT		
[1L] TO			[1R]	
[2L] AGN	1028	5000	[2R]	
[3L] NEXT			[3R]	
[4L] AUCH	1036	FL145	[4R]	
[5L] SAT	T-WIND	FOB	[5R]	
[6L] ---°	---° / ---	---	[6R]	
DEST	UTC	DIST	EFOB	
LFBZ	1110	396	27.0	

REPORT PAGE IN
PREFLIGHT PHASE

REPORT AI101				
OVHD	UTC	ALT		
[1L] LMG	1013	FL380	[1R]	
[2L] TO	1028	FL380	[2R]	
[3L] NEXT			[3R]	
[4L] AUCH	1036	FL380	[4R]	
[5L] SAT	T-WIND	FOB	[5R]	
[6L] -42°	145° / 063	32.0	[6R]	
AT FL380	1055	302	SEND*	[5R] <A
DEST	UTC	DIST	EFOB	
LFBZ	1110	396	27.0	[6R]

REPORT PAGE
IN FLIGHT

This page displays information relative to the FROM, TO, NEXT and DEST waypoints as well as the current wind, temperature, distance and time to the next cruise profile change.

TITLE (White)

Displays the flight number. This line displays EO amber in case of engine out detection.

[1L] OVHD (green)

Displays the last sequenced waypoint. This field never displays the pseudo waypoints and F-PLN markers (T-P, PPOS, IN-BND, OUT-BND).

[1R] UTC/TIME ALT (green)

This field displays the time and altitude recorded at the time of sequence.

[2L]-[2R] TO (green)

This field displays the active waypoint, predicted time of arrival and predicted altitude at this waypoint.

Note : Time and altitude values are identical to those values on F-PLN pages.

[3L]-[3R] NEXT (green)

Same information for the next waypoint.

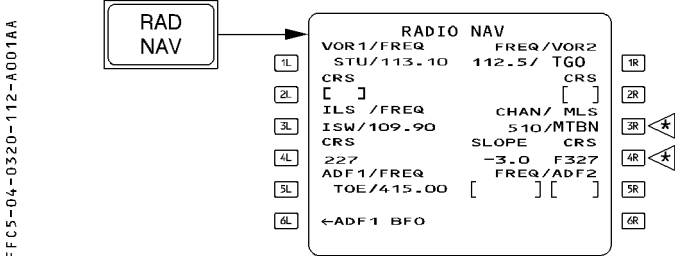
	PILOT INTERFACE		4.03.20	P 111
	MCDU PAGE DESCRIPTION		SEQ 001	REV 07

[4L] [4R] SAT/T.WIND/FOB (green)	This field displays the static air temperature, the wind direction and velocity, and the FOB recorded at waypoint sequencing.
[5L] T/D/UTC/DIST (green)	This field displays the estimated time and the distance to go to the next change of the cruise profile (T/D, S/C, S/D). These data are only displayed when the cruise phase is active.
[5R] SEND*  (blue)	The crew uses this prompt to downlink a position report. This field may be blanked depending on airline policy, and on ACARS installation.
Line 6 DEST/UTC/DIST/EFOB	This field displays the estimated time of arrival, the distance along the F-PLN and estimated fuel on board at destination. This display is identical to the information of the F-PLN pages.

Note : No data can be inserted or modified on the *REPORT* page.

RADIO NAV PAGE

This page allows the pilot to select or verify the radio nav aids tuned for display purposes only. Among these nav aids are VOR, VOR/DME, TAC, VORTAC, ILS, and ADF. If either RMP is set on NAV, this page is blanked on both MCDUs.



Line 1VOR1/FREQ FREQ/VOR2

This line displays the identifiers and frequencies of VOR1 and VOR2, whether they are autotuned or tuned manually.

Line 2 CRS

To tune one VOR manually, the pilot inserts the ident or frequency. If the ident is not in the database, the new nav aid page comes up. A “clear” action reverts the selection to the autotuned nav aid.

[3L] ILS/FREQ

This line displays courses for the nav aids in Line 1. The pilot can enter the courses manually through these fields. Displays T if a tuned VOR is true North referenced.

[4L] CRS

This field displays the ident and frequency of an ILS. It is autotuned if the ILS is associated with the departure runway, or if the flight plan shows an ILS approach selected for the destination. The ILS may also be entered manually. When the manually entered ILS differs from the ILS that would be autotuned,

RWY-ILS MISMATCH appears.

This field displays the course associated with the ILS in line 3. It comes up automatically when an ILS is autotuned or if an ILS has been manually tuned via its ident. Otherwise the course must be entered manually.

The course may be backbeam (Bxxx) or front beam (Fxxx).

	PILOT INTERFACE		4.03.20	P 113
	MCDU PAGE DESCRIPTION		SEQ 001	REV 07

[3R] CHAN/MLS 

The pilot tunes manually an MLS by its ident or its channel.
The system tunes automatically the associated course and slope.

Note : *If an MLS is tuned while an ILS was tuned, the ILS is deselected.*

[4R] SLOPE CRS 

The pilots enters in this field the slope and the course of the MLS.

The course may be backbeam (Bxxx) or frontbeam (Fxxx).
The field displays T if the MLS is true North referenced.

Line 5ADF1/FREQ FREQ/ADF2

This line displays the identifiers and frequencies of ADFs 1 and 2.

The pilot can use the ident or the frequency to tune the ADF manually.

Line 6ADF1/BFO BFO/ADF2

When an ADF is selected, these fields display an ADF/BFO prompt. The flight crew presses the key once to erase the arrow and put the ADF in BFO mode. A clear action brings the arrow back and cancels BFO.

Note : – *The autotune function works only for nav aids stored in the database.*

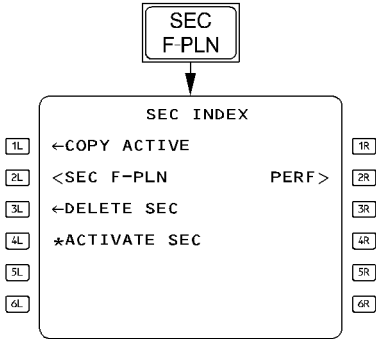
- *When tuning manually, the operator should use the ident rather than the frequency unless the nav aid is not in the database.*
- *Manually tuned frequencies are displayed in a large font.*

SECONDARY PAGES

The SEC F-PLN key on the MCDU console allows the pilot to call up the secondary index page and the secondary flight plan page. The secondary flight plan is generally for a diversion, for predictable runway changes for takeoff or landing, or for training.

There are two types of secondary index pages. The type selected depends on the presence of a secondary flight plan.

SECONDARY INDEX PAGE
A SECONDARY FLIGHT PLAN IS ALREADY DEFINED



- [1L] COPY ACTIVE

(blue)

The pilot presses this key to copy the active flight plan into the secondary flight plan and erase the previous secondary plan.
- [2L] SEC F-PLN

(white)

The pilot presses this key to call up the secondary flight plan pages.
- [3L] DELETE SEC

(blue)

The pilot presses this key to delete the current secondary flight plan.
- [4L] ACTIVATE SEC

(amber)

The pilot presses this key to activate the secondary flight plan as the active flight plan.

Note : “ACTIVATE SEC” appears routinely if the HDG/TRK mode is active. If the NAV mode is active, “ACTIVATE SEC” appears only if the active and secondary flight plans have a common active leg.

- [1R] INIT

This field displays this prompt when the secondary flight plan is not defined as a copy of the active flight plan. Pressing this key calls up the secondary INIT page.

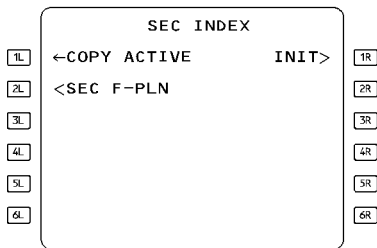
	PILOT INTERFACE MCDU PAGE DESCRIPTION	4.03.20 P 115	
		SEQ 001	REV 07

[2R] PERF

(white)
The pilot presses this key to call up the performance pages for the secondary flight plan.
When the active flight plan has been copied, the field displays this prompt only if the first lateral leg of the secondary flight plan is identical to the active leg of the primary flight plan.

A SECONDARY FLIGHT PLAN IS NOT DEFINED

FFC5-04-0320-115-A001A



[1L] COPY ACTIVE

(blue)
The pilot presses this key to copy the active flight plan into the secondary flight plan.

[2L] SEC F-PLN

(white)
The pilot presses this key to call up the secondary flight plan pages.

[1R] INIT

(white)
The pilot presses this key to call up the secondary INIT page.
It is similar to the active INIT page, but blue brackets replace all the amber boxes.

SECONDARY FLIGHT PLAN PAGES

The secondary flight plan A and B pages are sequenced automatically only when the secondary is copied from the primary and their active legs are identical.

Pages for the active and secondary flight plans differ from each other as follows :

Secondary lateral revision pages :

- ERASE and INSERT are not displayed.
- OFFSET and FIX INFO are not available.
- A lateral revision of the secondary flight plan does not create a temporary flight plan : all revisions are directly applied to the secondary flight plan.

Secondary vertical revision pages :

- A vertical revision on the secondary flight plan does not create a temporary flight plan.

	PILOT INTERFACE		4.03.20	P 116
	MCDU PAGE DESCRIPTION		SEQ 001	REV 07

Secondary step altitude pages

- These pages operate as the primary STEP ALTS page, except that optimal step, savings are not available.

Secondary INIT A and B pages :

- They use blue brackets instead of amber boxes.
- They have no align or realign prompt.
- They do not provide for slewing or entering data in the 4L-4R fields (airport reference)

Secondary wind pages :

- They have no history wind page.

Secondary performance pages :

- All boxes are replaced by blue brackets
- They have no engine out mode, no engine out long range cruise cost index.
- They have no expedite predictions
- They have no ACTIVATE/CONFIRM APPROACH PHASE prompt
- They have no PRED TO ALTN predictions on the PERF CLB and PERF DES pages.
- They have no derated climb thrust  selection on the PERF CLB page
- They have no engine out drift down, no top of descent, no cabin descent rate information on the PERF CRZ page.

The secondary flight plan has no FUEL PRED page.

The secondary INIT A page is also used to request or display an uplink INIT message received after engine start.

This uplink INIT message can be cleared or inserted as SECONDARY INIT data.

1L

2L

3L

4L

5L

6L

SEC INIT

→

CO RTE

RLTN/CO RTE

FLT NBR

LRT

COST INDEX

CRZ FL/TEMP

FROM/TO

INIT

REQUEST*

LONG

WIND>

TROPO

36090

1R

2R

3R

4R

5R

6R

1L

2L

3L

SEC INIT

→

CO RTE

RLTN/CO RTE

FLT NBR

FROM/TO

INSERT

UPLINK*

1R

2R

3R

[2R] INIT REQUEST*
[2R] INSERT UPLINK*

Enable to request INIT data from the ground or,
A downlink message has been received following a request.
The message can be cleared or entered in the SEC INIT page.

1L

2L

3L

4L

5L

6L

SEC INIT

→

CO RTE

RLTN/CO RTE

FLT NBR

LAT

COST INDEX

CRZ FL/TEMP

LSGG/LGAT

INIT

REQUEST*

LONG

WIND>

TROPO

36090

1R

2R

3R

4R

5R

6R

SECONDARY INIT A PAGE
AFTER UPLINK MESSAGE
INSERTION.

FFCS-04-0320-117-A100AA

FFCS-04-0320-117-B100AA

	PILOT INTERFACE		4.03.20	P 118
	MCDU PAGE DESCRIPTION		SEQ 001	REV 07

BACK UP NAV PAGES

The MCDU features a back up navigation function which provides simplified IRS based navigation in case of a dual FM failure.

BACK UP NAV pages display the data related to the BACK UP NAV function.

During FM normal operation, the F-PLN is continuously downloaded in the MCDU memory: the BACK UP NAV function links the MCDU of the failed FM to its onside IRS.

All navigation data related to the MCDU F-PLN are displayed on the associated ND.

BACK UP NAV function is activated on the MCDU MENU page by depressing the NAV B/UP prompt.

The MCDU back-up F-PLN may accept a maximum of 150 waypoints. It displays only point to point F-PLN (radial, pattern, heading leg... cannot be part of the MCDU F-PLN).

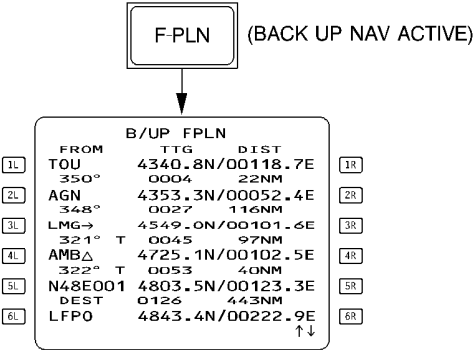
No secondary or temporary F-PLN exists.

These are five pages available while BACK UP NAV is active :

- B/UP F-PLN
- B/UP F-PLN for DIRECT TO
- B/UP PROG
- B/UP IRS for onside IRS (1 or 2)
- B/UP IRS3

B/UP F-PLN PAGE

The B/UP F-PLN page displays the MCDU F-PLN data. The pilot calls up this page by pressing the F-PLN key while B/UP NAV is active.



TITLE
line 1. to. line 5.

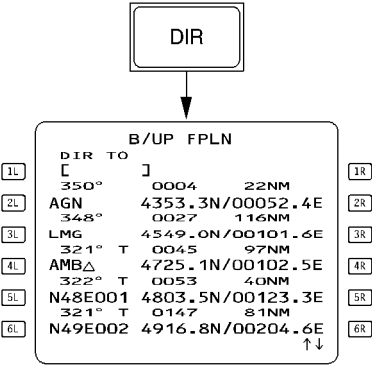
B/UP F-PLN is displayed in a white large font
Display consecutive waypoints with their associated latitude/longitude.
If a waypoint is to be overflowed, an overfly symbol (Δ) is displayed after the identifier.
If a turn is specified into the next leg, a large font arrow is displayed after the identifier.
Label lines contain the bearing, time to go and distance to the next waypoint displayed in small font.
white. bearing
green. time to go and distance
BRG. Between FROM and TO waypoints : True or Mag depending on the TRUE pushbutton position. T is displayed when the bearing is true referenced.
Between other waypoints : out bound true track of the great circle joining the 2 related waypoints, independant of TRUE pushbutton switch.
TTG. HHMM limited to 9959. Time between the 2 related waypoints.
DIST. NM limited to 9999.

line 6 DEST

DEST airport identifier and associated latitude/longitude.
DIST to destination is computed as the direct distance from the aircraft to the active waypoint plus the along flight plan distances.
time to go to destination is computed as distance to destination divided by ground speed.
TTG and DEST are dashed if aircraft position is unavailable.

B/UP F-PLN (DIR TO) PAGE

The pilot calls up this page using the DIR key on MCDU while BACK UP NAV is active and aircraft position is valid.



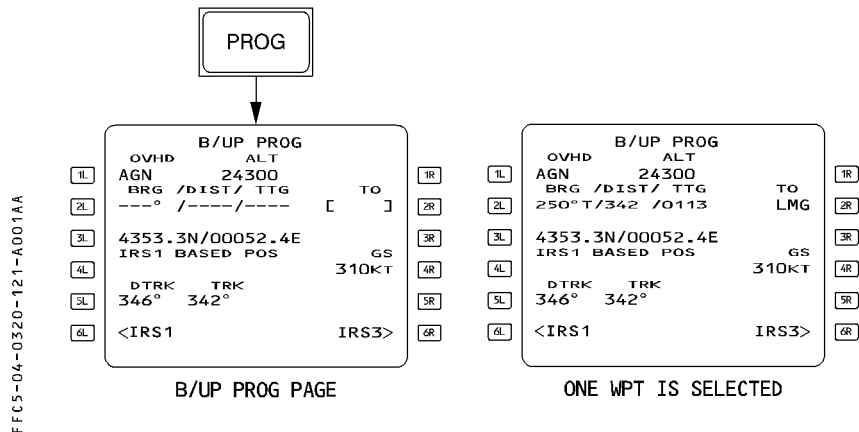
TITLE
[1L] DIR TO

line 2 to line 6

B/UP F-PLN is displayed in a white large font.
Allows DIRECT TO selection to the desired waypoint.
This waypoint can be selected from the F-PLN or manually entered through the scratchpad (IDENT/LAT/LONG or LAT/LONG)
Display consecutive waypoints of the F-PLN.
Same as the B/UP F-PLN page.
The TO WAYPOINT is displayed in [2L].
Vertical slewing function is available.

B/UP PROG PAGE

It displays flight parameters relative to the F-PLN or a selected waypoint.
The pilot calls up this page by pressing the PROG key on MCDU when BACK UP NAV is active.



	PILOT INTERFACE		4.03.20	P 122
	MCDU PAGE DESCRIPTION		SEQ 001	REV 07

[4L] IRS 1 (2 or 3) BASED POS (green)

Current aircraft position provided by the selected IRS :

IRS 1 (or 3 if IRS 1 failed) on MCDU 1

IRS 2 (or 3 if IRS 2 failed) on MCDU 2

[4R] GS (green)

Current ground speed from the selected IRS.

[5L] DTRK/TRK (green)

Desired track of the MCDU F-PLN active leg and current aircraft track from the selected IRS (True or Mag).

These tracks are true or magnetic depending on TRUE pushbutton position.

[6L] IRS 1 (2)

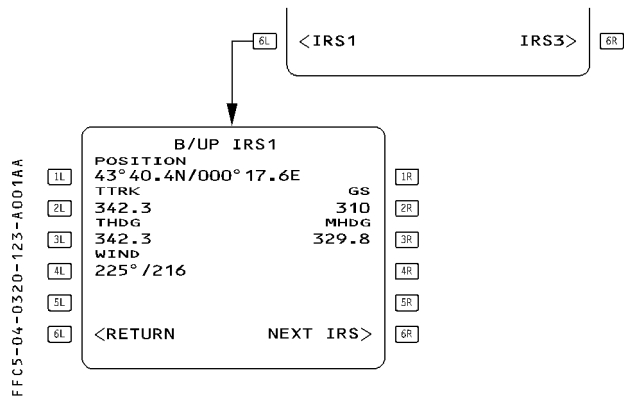
Gives access to onside B/UP IRS (1 or 2) page

[6R] IRS 3

Gives access to B/UP IRS 3 page.

B/UP IRS 1 or 2 or 3 PAGE

Display IRS 1, 2, 3 navigation data.
 The pilot calls up this page from B/UP PROG page, by pressing the corresponding prompt.



- | | |
|---------------|---|
| TITLE | B/UP IRS 1, 2, 3 displayed in a white large font. |
| [1L] POSITION | Current aircraft position from selected IRS |
| [2L] T TRK | True track |
| [2R] GS | Ground speed |
| [3L] T HDG | True heading |
| [3R] M HDG | Magnetic heading |
| | Dashed when in polar area. |
| [4L] WIND | Wind direction and velocity |
| | Wind direction is always true referenced. |
| [6L] RETURN | Gives access to B/UP PROG page |
| [6R] NEXT IRS | Gives access to the next IRS page. |
| | (Closed loop 1 → 2 → 3 → 1) |

This page is not modifiable by the crew.

RTA PAGE

The Required Time of Arrival (RTA) page allows the entry and display of a waypoint identifier with associated time constraints. The page also displays the entered or computed Estimated Takeoff Time (ETT) as well as the following data :

- Predicted ETA at the time-constrained waypoint ;
- Performance adjusted SPD target ;
- Time error ;
- Distance to time constrained waypoint ;
- Active speed mode ;

The pilot calls up this page with the RTA prompt from the vertical revision page.

FFC5-04-0320-124-A100AA

		RTA			
1L	AT		1R	AT	RTA
2L	[	MANAGED	2R	PUMAL	DIST 620 -11:45:00
3L	250/0.82		3R	MANAGED	ETA
4L	ACT MODE		4R	230	11:48:12
5L	MANAGED		5R	ACT MODE	RTA ERROR
6L	<RETURN	ETT	6R	SELECTED/320	+03:12
		[]*			
					UTC
				<RETURN	10:15:30

TITLE
line 1

RTA (large white font)
This line displays AT and blue brackets, if no time constraints exist, or AT, DIST and RTA when a time constraint has been defined.
The waypoint identifier is displayed in large blue font.
If only the waypoint identifier has been defined, blue brackets and a blue star are displayed facing the 1R prompt.
The pilot enters the time constraint as "HHMMSS", preceeded by :
– for at or before ;
+ for at or after ;
no sign for at.
This field displays the FMGS-computed ECON speed/Mach (refer to 4.02.20)

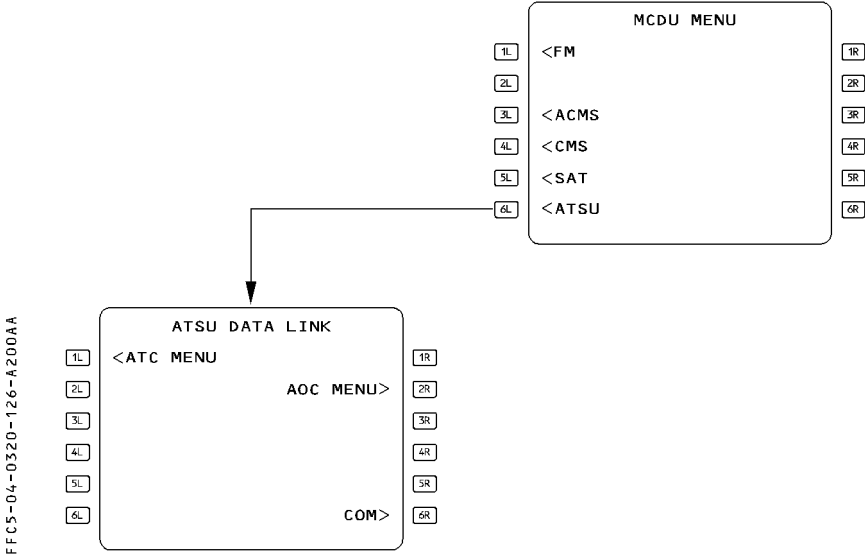
[2L] MANAGED

	PILOT INTERFACE		4.03.20	P 125
	MCDU PAGE DESCRIPTION		SEQ 100	REV 12

[3L] ACT MODE	This field displays the active speed mode : MANAGED or SELECTED/NNN (NNN is the target speed). The pilot cannot modify it through this field.
[6L] RETURN	The pilot presses this key to revert the display to the VERT REV page.
[2R] ETA	When a required time at arrival has been defined, the 2R field displays the estimated time of arrival as “HHMMSS”.
[3R] RTA ERROR	This field is blank when the RTA is predicted as made. If the RTA is predicted as missed, “RTA ERROR” is displayed in small white font, and the time error between ETA and RTA is displayed in small amber font.
[6R] ETT	The Estimated Takeoff Time (ETT) field is available in the preflight phase. If no ETT is available, the 6R field displays blue brackets and a blue star. Once available, the ETT is displayed in magenta.
UTC	Universal time is displayed in green for takeoff, climb, cruise, descent and approach phases.

ATSU DATALINK PAGE

The pilot calls up this page by pressing the ATSU prompt on the MCDU MENU page.



This page displays information concerning the following datalink applications.

- [1L] ATC MENU
- [2R] AOC MENU
- [6R] COM

The pilot presses this key to access ATC MENU page.
The pilot presses this key to access AOC MENU page.
The pilot presses this key to access COM page.

ATC MENU PAGE

The pilot calls up this page by pressing the ATC prompt on the ATSU DATALINK page or by pressing the ATC COMM key on the MCDU keyboard.

The pilot uses the ATC menu page to access the different functions for the ATC applications: Controller Pilot Data Link Communication (CPDLC) and Automatic Dependant Surveillance (ADS)

ATC MENU			
[1L]	<LAT REQ	VERT REQ>	[1R]
[2L]	<WHEN CAN WE	OTHER REQ>	[2R]
[3L]	TEXT>		[3R]
[4L]	<MSG LOG	REPORTS>	[4R]
[5L]	<NOTIFICATION	CONNECTION STATUS>	[5R]
[6L]	<RETURN	EMERGENCY>	[6R]

[1L] LAT REQ

[2L] WHEN CAN WE

[4L] MSG LOG

[5L] NOTIFICATION

[6L] ATSU DLK RETURN

[1R] VERT REQ

[2R] OTHER REQ

[3R] TEXT

[4R] REPORTS

[5R] CONNECTION STATUS

[6R] EMERGENCY

This key calls up the ATC LAT REQ page.

This key calls up the WHEN CAN WE EXPECT page

This key calls up the MSG LOG page.

This key calls up the NOTIFICATION page.

This key calls up the ATSU DATALINK page.

This key calls up the ATC VERT REQ page.

This key calls up the ATC OTHER REQ page.

This key calls up the TEXT page.

This key calls up the ATC REPORTS page.

This key calls up the CONNECTION STATUS page.

This key calls up the EMERGENCY page.

ATC LAT REQ PAGE

The pilot uses this page to prepare messages requesting a lateral flight plan modification, to be sent to the ATC.

FFCS-04-0320-128-A200AA

1L

2L

3L

4L

5L

6L

ATC LAT REQ

DIR TO WX DEV UP TO

[]

SID OFFSET/START AT

[]

HEADING GROUND TRK

[]° []°

WHEN CAN WE EXPECT

BACK ON ROUTE→

INPUTS

ERASE ADD TEXT

ATC MENU ATC

<RETURN REQ DISPL

1R

2R

3R

4R

5R

6R

- [1L] DIR TO

[2L] SID or STAR

[2L] HEADING

[5L] INPUTS ERASE

[6L] ATC MENU RETURN

[1R] WX DEV UP TO

[2R] OFFSET/START AT

[3R] GROUND TRK

[4R] WHEN CAN WE EXPECTBACK ON ROUTE

[5R] ADD TEXT

[6R] ATC REQ DISPL
- The pilot uses this field to prepare a request to go from the present position to a selected waypoint.

The pilot uses this field to enter a request for a departure or arrival procedure according to the current flight phase. Departure procedure can only be proposed before takeoff. Arrival procedure can only be proposed after takeoff.

The pilot uses this field to prepare a heading change request.

This key erases all the data entered on the page as well as the data entered on the other associated pages.

This key calls up the ATC MENU page.

The pilot uses this field to prepare a request for an offset from the initial route due to a weather condition.

The pilot uses this field to enter an offset from the initial route. The START AT field is optional and can be filled with either a position or a time.

The pilot uses this field to prepare a track change request.

The pilot uses this field to prepare a negotiation request to return to the initial route. The same request can be performed on the WHEN CAN WE EXPECT page [4R] key.

This key calls up the TEXT page. It is active while a message is being created.

This key displays the prepared message on the DCDU screen.

ATC VERT REQ PAGE 1

The pilot uses this page to prepare messages requesting a vertical flight plan modification, to be sent to the ATC.

FF 05-04-0320-129-A200AA

	ATC VERT REQ 1/2 →		
[1L]	CLB TO/START AT	[ALT]	[1R]
	FL350/DINTY []		
[2L]	DES TO/START AT	[SPD]	[2R]
	[]/[] []		
[3L]	...WHEN CAN WE EXPECT...		[3R]
	←HIGHER ALT LOWER ALT→		
[4L]	WHEN CAN SPD		[4R]
	[]		
	INPUTS		
[5L]	★ERASE	ADD TEXT>	[5R]
	ATC MENU	ATC	
[6L]	<RETURN	REQ DISPL★	[6R]

[1L] CLB TO/START AT

The pilot uses this field to prepare a request to climb to a new altitude. The START AT field is optional and can be filled in, with either a position or a time.

[2L] DES TO/START AT

If the request is deferred, the START AT field should be filled in with the starting climb waypoint.

The pilot uses this field to prepare a request to descend to a new altitude. If the request is deferred, the START AT field should be filled in with the starting descent waypoint.

[3L] WHEN CAN WE
EXPECT HIGHER ALT

The pilot uses this field to prepare a negotiation request to climb to a higher altitude.

If a lower altitude has already been selected, setting a higher altitude deselects the lower altitude.

The same request can be performed on the WHEN CAN WE EXPECT page [4R] key.

[5L] ERASE INPUTS

This key erases all the data entered on the page, as well as the data entered on the other associated pages.

[6L] ATC MENU RETURN [1R] ALT

This key calls up the ATC MENU page.

[2R] SPD

The pilot uses this field to prepare a request for a new altitude.

The pilot uses this field to prepare a request for a new speed.

	PILOT INTERFACE		4.03.20	P 130
	MCDU PAGE DESCRIPTION		SEQ 200	REV 11

[3R] WHEN CAN WE
EXPECT LOWER ALT

The pilot uses this field to prepare a negotiation request to descend to a lower altitude.

If a higher altitude has already been selected, setting a lower altitude deselects the higher altitude.

The same request can be performed on the WHEN CAN WE EXPECT page [4R] key.

[4R] WHEN CAN SPD

The pilot uses this field to prepare a negotiation request for a new speed deferred clearance.

The same request can be performed on the WHEN CAN WE EXPECT page [4R] key.

[5R] ADD TEXT

This key calls up the TEXT page. It is active while a message is being created.

[6R] ATC REQ DISPL

This key displays the prepared message on the DCDU screen.

REC5-04-0320-131-A200AB

	ATC VERT REQ 2/2 ←	
1L	BLOCK ALT VMC	1R
	[J/C] DESCENT→	
2L	CRZ CLB TO SPD RANGE	2R
	[] [J/C]	
3L	---WHEN CAN WE EXPECT---	3R
	CRZ CLB TO SPD RANGE	
4L	[] [J/C]	4R
	INPUTS	
5L	ERASE ADD TEXT	5R
	ATC MENU ATC	
6L	<RETURN REQ DISPL	6R

The pilot uses this field to prepare a request to operate within an altitude interval of (e.g. FL370/FL410).

The pilot uses this field to prepare a request for a cruise climb segment up to the entered cruise altitude.

The pilot uses this field to prepare a negotiation request for a cruise climb segment up to the entered cruise altitude. The same request can be performed on the WHEN CAN WE EXPECT page [4R] key.

This key erases all the data entered on the page as well as the data entered on the other associated pages.

This key calls up the ATC MENU page.

The pilot uses this field to prepare a request for a Visual Monitoring Condition (VMC) descent.

The pilot uses this field to prepare a request to operate within a speed range.

The pilot uses this field to prepare a negotiation request to operate within a speed range.

The same request can be performed on the WHEN CAN WE EXPECT page [4R] key.

This key calls up the TEXT page. It is active while a message is being created.

This key displays the prepared message on the DCDU screen.

WHEN CAN WE EXPECT PAGE

The pilot uses this page to prepare message elements for “WHEN CAN WE EXPECT” negotiation requests with the ATC.
Negotiation requests that are prepared from the ATC LAT REQ or ATC VERT REQ pages automatically update the WHEN CAN WE EXPECT fields and vice-versa.

1L

2L

3L

4L

5L

6L

WHEN CAN WE
EXPECT

←HIGHER ALT LOWER ALT→

CRZ CLB TO SPEED

[] []

SPEED RANGE

[] / []

BACK ON ROUTE→

INPUTS

ERASE ADD TEXT

ATC MENU ATC

<RETURN REQ DISPL

1R

2R

3R

4R

5R

6R

[1L] HIGHER ALT

The pilot uses this field to prepare a negotiation request to climb to a higher altitude.

[2L] CRZ CLB TO

If a lower altitude has already been selected, selecting a higher altitude deselects the lower altitude.

[5L] ERASE

The pilot uses this field to prepare a negotiation request to climb to a higher altitude.

This key erases all the data entered on the page as well as the data entered on the other associated pages.

[6L] ATC MENU RETURN

This key calls up the ATC MENU page.

[1R] LOWER ALT

The pilot uses this field to prepare a negotiation request to descend to a lower altitude. If a higher altitude has already been selected, setting a lower altitude deselects the higher altitude.

[2R] SPEED

The pilot uses this field to prepare a negotiation request for a new speed clearance.

[3R] SPEED RANGE

The pilot uses this field to prepare a negotiation request to operate within a speed range.

[4R] BACK ON ROUTE

The pilot uses this field to prepare a negotiation request to return to the initial route.

[5R] ADD TEXT

The key calls up the TEXT page. It is active while a message is being created.

[6R] ATC REQ DISPL

This key displays the prepared message on the DCDU screen.

FFCS-04-0320-132-A200AA

ATC OTHER REQ PAGE

The pilot uses this page to prepare miscellaneous request elements that cannot be generated with LAT, VERT and WHEN CAN WE EXPECT pages.

FF 65-04-0320-133-A200AA

ATC OTHER REQ	
VOICE	FREQ
[1L] ←CONTACT----	]
[2L] ←OWN SEPARATION & VMC	[2R]
[3L] ←CLEARANCE	[3R]
[4L]	[4R]
[5L] INPUTS	
ERASE	ADD TEXT
ATC MENU	ATC
[6L] <RETURN	REQ DISPL [6R]

- | | |
|---------------------------|--|
| [1L] VOICE CONTACT | The pilot uses this field to request a voice contact with the ATC center. |
| [2L] OWN SEPARATION & VMC | The pilot uses this field to prepare a request for Visual Monitoring Conditions (VMC) procedure and request to be allowed to maintain separations on his initiative. |
| [3L] CLEARANCE | The pilot uses this field to prepare a request for clearance. |
| [5L] INPUTS ERASE | This key erases all the data entered on the page, as well as the data entered on the other associated pages. |
| [6L] ATC MENU RETURN | This key calls up the ATC MENU page. |
| [1R] FREQ | The pilot uses this field to enter the voice frequency, requested for voice contact with the ATC |
| [5R] ADD TEXT | This key calls up the TEXT page. It is active while a message is being created. |
| [6R] ATC REQ DISPL | This key displays the prepared message on the DCDU screen. |

TEXT PAGE 1

The pilot uses this page to prepare justifications (due to aircraft performance, due to weather... etc) and/or free text message elements.

FFCS-04-0320-134-A200AA

	TEXT	1/2 ↔	
[1L]	DUE TO	DUE TO	[1R]
	←A/C PERFORM	MEDICAL→	
[2L]	DUE TO	DUE TO	[2R]
	←WEATHER	TECHNICAL→	
[3L]	DUE TO	AT PILOTS	[3R]
	←TURBULENCE	DISCRETION→	
[4L]	----- FREE TEXT -----		[4R]
	[		
[5L]	INPUTS		[5R]
	ERASE		
[6L]	ATC MENU	ATC	[6R]
	<RETURN	TEXT DISPL	

[1L] DUE TO A/C PERFORM

The pilot uses this field when justification is due to aircraft performance.

[2L] DUE TO WEATHER

The pilot uses this field when justification is due to weather conditions.

Note : When the pilot reports an offset, due to a weather problem, the DCDU will not display the direction of the offset.

[3L] DUE TO TURBULENCE

The pilot uses this field when justification is due to turbulence conditions.

[4L] FREE TEXT

The pilot uses this field to add free text to any request.

If more than one line is necessary, go to page 2

[5L] INPUTS ERASE

This key erases all the data entered on the page, as well as the data entered on the other associated pages.

[6L] ATC MENU RETURN

This key calls up the ATC MENU page.

[1R] DUE TO MEDICAL

The pilot uses this field to when justification is due to a medical reason.

[2R] DUE TO TECHNICAL

The pilot uses this field when justification is due to a technical reason.

[3R] AT PILOT DISCRETION

The pilot uses this field to request authorization to freely execute clearance.

[6R] ATC XXX DISPL

This key displays the prepared message on the DCDU screen. XXX refers to the page associated with the free text :

- TEXT (no page associated)
- REQ (request pages)
- EMERG (emergency pages)
- REP (position report pages)
- MODIF (modify page)

TEXT PAGE 2

FFCS-04-0320-135-A200AB

TEXT2 / 2 ←

1L

2L

3L

4L

5L

6L

C

C

C

C

INPUTS
ERASE
ATC MENU
<RETURN

1R

2R

3R

4R

5R

6R

ATC

TEXT DISPL

Line 1 to line 4

[5L] INPUTS ERASE

[6L] ATC MENU RETURN

[6R] ATC TEXT DISPL

The pilot uses these lines to add free text to any request. If text has been written on the fourth line of page 1, this line reappears on the first line of page 2.

This key erases all the data entered on the page, as well as the data entered on the other associated pages.

This key calls up the ATC MENU page.

This key displays the prepared message on the DCDU screen.

NOTIFICATION PAGE

The pilot uses this page to notify the ATC of aircraft datalink capability.

FFCS-04-0320-136-4200AA

1L	NOTIFICATION ATC FLT NBR ITF1011 ATC CENTER NTTT-----NOTIFY* -----KSFO: NOTIFIED-----	1R
2L		2R
3L		3R
4L		4R
5L		5R
6L	ATC MENU <RETURN	6R CONNECTION STATUS>

[1L] ATC FLT NBR

This field displays the flight number that comes from the FMGS. It cannot be modified via this page.

Line 2 ATC CENTER

This line displays the logon status in front of the "ATC CENTER". The status is either "NOTIFYING" in small white font or "NOTIF FAILED" in small amber font :

- NOTIFYING indicates that the logon is in progress ;
- NOTIF FAILED indicates that the logon has failed.

The logon status disappears when the logon notification is completed.

[2L] ATC CENTER

The pilot uses this field to enter the ATC's ICAO code for notification. The entered ATC is displayed in large cyan font.

Note : At initialization, a default code is displayed in small cyan font and corresponds to :

- Last active ATC for which an active CPDLC (Controller Pilot Datalink Communication) connection was previously established, or
- Last manually-entered ATC code,
- Otherwise : 4 amber boxes appear.

Line 3 to line 5

These lines display the ATC centers for which a successful logon notification has been performed. When a CPDLC connection is established with an ATC center displayed in the list, this center is erased from the list.

Note : NOTIFICATION UNAVAILABLE is displayed in line 5 if the communication means, the aircraft position, or the flight number are unavailable.

[2R] NOTIFY	This key sends a notification to the ATC. It is not active during a notification process, or if the communication means, the aircraft position, or flight number are unavailable.
[6L] ATC MENU RETURN	This key calls up the ATC MENU page.
[6R] CONNECTION STATUS	This key calls up the CONNECTION STATUS page.

CONNECTION STATUS PAGE

The page displays the status of CPDLC connections and allows the crew to activate and deactivate the ADS function.

FFCS-04-0320-138-A200AA

1L

2L

3L

4L

5L

6L

CONNECTION STATUS

ACTIVE ATC

KZAK----- DISCONNECT*

NEXT ATC

NTTT

----- ADS: ON -----

*SET OFF

ATC MENU

<RETURN NOTIFICATION>

1R

2R

3R

4R

5R

6R

- [1L] ACTIVE ATC

This field displays the currently active ATC for CPDLC connection.
- [2L] NEXT ATC

This field displays the next ATC for CPDLC connection.
- Line 4

This line displays the status of the ADS function. Per default, ADS is selected ON.
- [4L] SET OFF or SET ON

When the ADS (Automatic Dependent Surveillance) is OFF (respectively ON), this key activates (respectively deactivates) the ADS function.
- [6L] ATC MENU RETURN

This key calls up the ATC MENU page.
- [1R] DISCONNECT

This key disconnects all established CPDLC connections.
- [6R] NOTIFICATION

This key calls up the NOTIFICATION page.

MSG LOG PAGE

The MSG LOG pages (up to 6) display messages recorded from the DCDU.

FFCS-04-0320-139-A200AB

	MSG LOG	1/6	→
1L	1755Z TO KZAK CT WILCO		1R
	<REQUEST CLB TO FL330		
2L	1730Z FROM KZAK ROGER		2R
	<EXPECT CLB TO FL250		
3L	1709Z FROM KZAK WILCO		3R
	<PROCEED DIR TO ALCOA		
4L	1655Z TO KZAK ROGER		4R
	<REQUEST CLB TO FL250		
5L	MSG LOG		5R
	*ERASE		
6L	ATC MENU	MSG LOG	6R
	<RETURN	PRINT*	

Line 1 to line 4

These lines display a summary of each recorded message with the time, the ATC, and the message status. The most recently recorded message is displayed on the first line. The left or right key adjacent to the message title displays the contents of the recorded message.

[5L] MSG LOG ERASE

This key clears of the message log contents.
On Line 5 : ERASE MSG LOG replaces the MSG LOG, and CONFIRM replaces ERASE. This key then clears the page contents.

[6L] ATC MENU RETURN

This key calls up the ATC MENU page.

[6R] MSG LOG PRINT

This key prints the MSG LOG page contents.

EMERGENCY PAGES

EMERGENCY pages allow the crew to prepare emergency messages.

FFCS-04-0320-140-A200AB

EMERGENCY 1/2 →		EMERGENCY 2/2 ←		
[1L] ←MAYDAY	EMERG ADS:OFF	[1L] []	CLBING TO OFFSETTING	
[2L] ←PANPAN	DESCENDING TO []	[2L] []	SOULS ENDURANCE	[1R]
[3L] VOICE	DIVERTING/VIA []/[]	[3L] EMERGENCY	←CANCEL	[2R]
[4L] ←CONTACT	FREQ []	[4L]		[3R]
[5L] INPUTS	ADD TEXT	[5L]	INPUTS	[4R]
[6L] ERASE	ATC MENU	[6L]	ERASE	[5R]
[6L] <RETURN	EMERG DISPL		ATC MENU	[6R]
			<RETURN	
			EMERG DISPL	

EMERGENCY PAGE 1/2

[1L] MAYDAY

This key generates a downlink message to indicate a critical failure on board.

[2L] PANPAN

This key generates a downlink message to indicate a major failure on board.

[4L] VOICE CONTACT

The pilot uses this field to request voice contact with the ATC. The default frequency is 121.5 MHz.

[5L] INPUTS ERASE

This key erases all the data entered on the page, as well as the data entered on the other associated pages.

[6L] ATC MENU RETURN

This key calls up the ATC MENU page.

[1R] SET OFF or SET ON

This key activates or deactivates the ADS EMERGENCY mode.

The title line displays the mode status :

. EMERG ADS : ON when the mode is activated ;

. EMERG ADS : OFF when the mode is not activated.

[2R] DESCENDING TO

This field displays the FCU-selected altitude for aircraft descent. The altitude is either entered by the crew, or is automatically filled in by the FMGS.

[3R] DIVERTING/VIA

The pilot uses this field to enter the route or airport to which the aircraft is diverting.

[4R] FREQ

The pilot uses this field to enter the requested voice frequency for voice contact with the ATC.

[5R] ADD TEXT

This key calls up the TEXT page. It is active while a message is being created.

[6R] ATC EMERG DISPL

This key displays the prepared message on the DCDU screen.

	PILOT INTERFACE		4.03.20	P 141
	MCDU PAGE DESCRIPTION		SEQ 200	REV 11

EMERGENCY PAGE 2/2

[1L] CLBING TO This field displays the FCU-selected altitude for aircraft climb. It is automatically filled in by the FMGS.

[2L] SOULS The pilot uses this field to enter the number of PAX on board.

Note : *SOULS and ENDURANCE fields are linked :*

- *Clearing one field automatically clears the other ;*
- *Filling in one field automatically fills in the other. If it was empty, it is filled in with a default value (999 for SOULS and 0h00 for ENDURANCE).*

[3L] EMERGENCY CANCEL This key cancels the previous emergency message. It deselects, if selected, the PANPAN or MAYDAY items and deactivates the ADS emergency mode.

[5L] INPUTS ERASE This key erases all the data entered on the page, as well as the data entered on the other associated pages.

[6L] ATC MENU RETURN This key calls up the ATC MENU page.

[1R] OFFSETTING This field displays the offset value from the flight plan. The offset is either entered by the crew, or is automatically filled in by the FMGS.

[2R] ENDURANCE The pilot uses this field to enter the maximum remaining flight time limited by fuel autonomy.

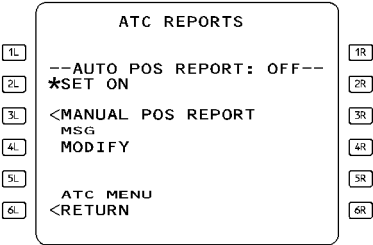
[5R] ADD TEXT This key calls up the TEXT page. It is active while a message is being created.

[6R] ATC EMERG DISPL This key displays the prepared message on the DCDU screen.

ATC REPORTS PAGE

The ATC REPORTS page allows the crew to prepare position reports to the ATC. Positions are either manually entered by the pilot on the POSITION REPORT page, or automatically filled in by the FMGS.

FFCS-04-0320-142-A200AB



- Line 1

This line displays the status of the AUTO POS REPORT function.
- [2L] SET OFF or SET ON

This key activates (respectively deactivates) the automatic position report function.
- [2L] MANUAL POS REPORT

This key calls up the POSITION REPORT page.
- [4L] MSG MODIFY

This key calls up the MSG MODIFY page.
- [6L] ATC MENU RETURN

This key calls up the ATC MENU page.

POSITION REPORT PAGES

The POSITION REPORT pages allow the crew to prepare position reports.

POSITION REPORT 1/3 →		
1L	OVHD-----UTC/ALT	1R
	WOODY 1336ZFL390	
2L	PPOS-----UTC/ALT	2R
	0502.4S/16803.8W 1358ZFL390	
3L	TO-----UTC	3R
	AKENO 1354	
4L	NEXT	4R
	LASOK	
5L	INPUTS	5R
	★ERASE ADD TEXT>	
6L	ATC REPORTS ATC	6R
	<RETURN REP DISPL★	

POSITION REPORT 2/3↔		
1L	WIND SAT	1R
	100°/034 -54C	
2L	ICING (TLMS)TURB (LMS)	2R
	[] []	
3L	ETA ENDURANCE	3R
	1848Z []	
4L	INPUTS	4R
	★ERASE ADD TEXT>	
5L	ATC REPORTS ATC	5R
	<RETURN REP DISPL★	6R

POSITION REPORT 3/3←		
1L	SPEED GROUND SPD	1R
	M.82 465KT	
2L	VERT SPEED	2R
	150FT/MN	
3L	HEADING TRACK ANGLE	3R
	215° T 217° T	
4L	INPUTS	4R
	★ERASE ADD TEXT>	
5L	ATC REPORTS ATC	5R
	<RETURN REP DISPL★	6R

On each POSITION REPORT page :

[5L] INPUTS ERASE

This key erases all the data entered on the page, as well as the data entered on the other associated pages.

[6L] ATC REPORTS RETURN

This key calls up the ATC REPORTS page.

[5R] ADD TEXT

This key calls up the TEXT page. It is active while a message is being created.

[6R] ATC REP DISPL

This key displays the prepared message on the DCDU screen.

POSITION REPORT PAGE 1/3

All data fields are automatically filled in via data issued from the FMGS. They can be overwritten by the pilot.

[1L] OVHD

This field displays, the last reported waypoint. It corresponds to the last sequenced waypoint.

[2L] PPOS

This field displays the aircraft is present position.

[3L] TO

This field displays the "TO" waypoint of the flight plan.

[4L] NEXT

This field displays the "NEXT" waypoint of the flight plan.

[1R] UTC/ALT

This field displays the time and altitude at the last reported waypoint.

[2R] UTC/ALT

This field displays the time and altitude at the aircraft is present position.

[3R] UTC

This field displays the predicted time of arrival at the following waypoint.

	PILOT INTERFACE		4.03.20	P 144
	MCDU PAGE DESCRIPTION		SEQ 200	REV 11

POSITION REPORT PAGE 2/3

Wind, ETA, and SAT fields are automatically filled in via data issued from the FMGS. They can be overwritten by the pilot.

[1L] WIND	This field displays the current wind (speed and direction).
[2L] ICING (TLMS)	This pilot uses this field to enter the level of icing : • “T” for Trace icing • “L” for Light icing • “M” for Medium icing • “S” for Severe Icing
[3L] ETA	This field displays the Estimated Time at Arrival
[1R] SAT	This field displays the Static Air Temperature (SAT).
[2R] TURB (LMS)	The pilot uses this field to enter the level of turbulence : • “L” for Light turbulence • “M” for Medium turbulence • “S” for Severe turbulence
[3R] ENDURANCE	The pilot uses this field to enter the remaining fuel and the corresponding flight time.

POSITION REPORT PAGE 3/3

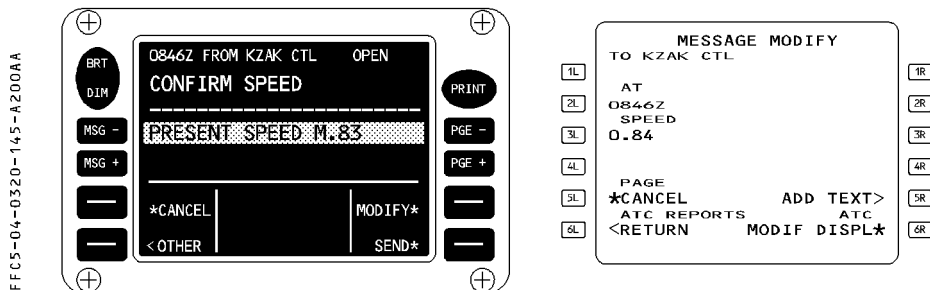
All data fields are automatically filled in by data issued via the FMGS. They can be overwritten by the pilot.

[1L] SPEED	This field displays the current speed.
[2L] VERT SPEED	This field displays the current vertical speed.
[3L] HEADING	This field displays the current true heading.
[1R] GROUND SPD	This field displays the current ground speed.
[3R] TRACK ANGLE	This field displays the current track angle.

MESSAGE MODIFY PAGE

The MESSAGE MODIFY page allows the crew to modify a downlink message, displayed on the DCDU, prior to sending it to the ground.

This page is created with the MODIFY prompt on the MCDU, or via a dedicated key on an ATC page.



Example : ATC KZAK sends a message requesting speed confirmation. On the DCDU, the FMGS's proposed answer is M.83. The pilot modifies the speed by entering M.84.

- | | |
|-------------------------|---|
| Line 1 | This line displays the name of the current ATC. |
| Line 2 and line 3 | These lines display the label and parameters to be modified. |
| [5L] PAGE CANCEL | This key calls up the ATC MENU page. |
| [6L] ATC REPORTS RETURN | This key calls up the ATC REPORTS page. |
| [5R] ADD TEXT | This key calls up the TEXT page. It is active while a message is being created. |
| [6R] ATC MODIFY DISPL | This key displays the prepared message on the DCDU screen. |