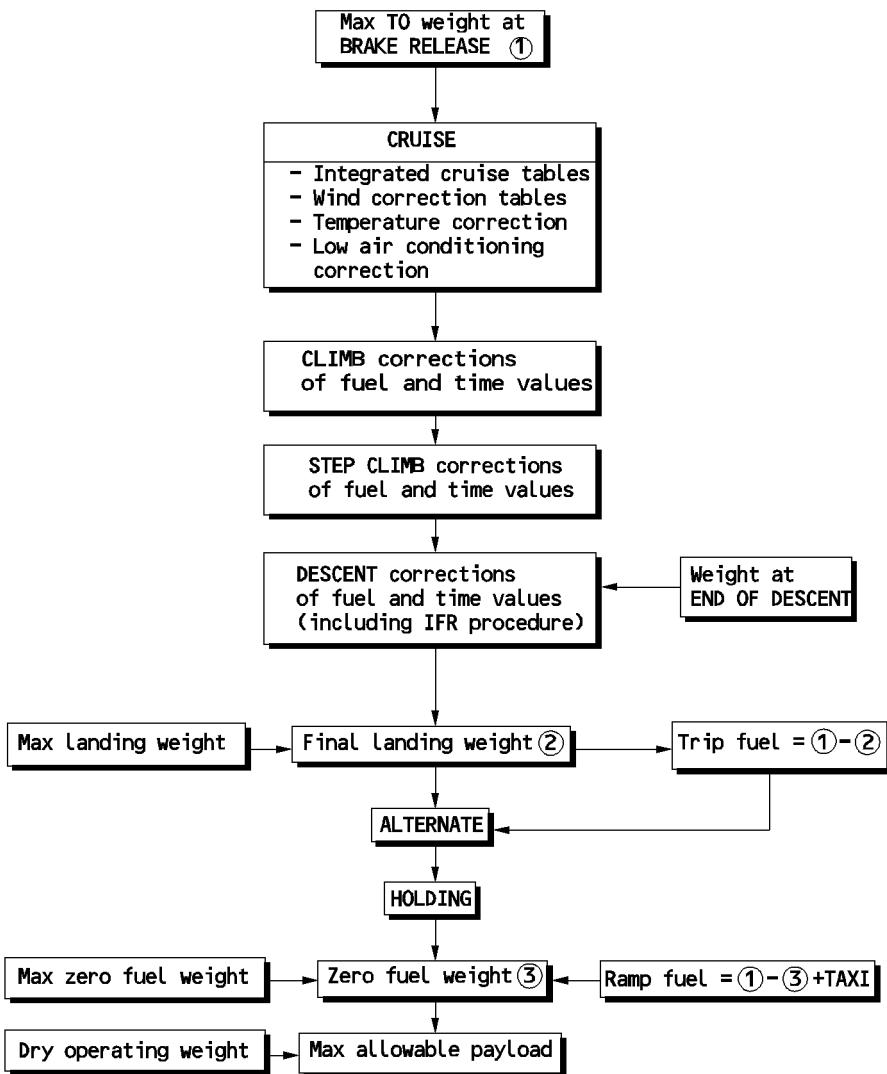


GENERAL



FFCS-02-0515-001-A001AB

	FLIGHT PLANNING CALCULATION TABLES		2.05.15	P 2
			SEQ 001	REV 10

The following tables can be used for the flight planning.

The first table allows the planner to calculate fuel and time during cruise including up to two step climbs (see p3).

The second table shows the fuel and time planning for the whole flight plan (see p4).

At the end of the section an example shows how to use both tables for a given mission.

Note : – Differences in fuel consumption during step climb sections will be taken into account in the calculation table of page 4.

- To find optimum aircraft weight to proceed to next flight level (4000 feet step) (Refer to 2.05.20 p3).
- Integrated cruise tables are established for ISA in conditions only. Corrections due to differences from ISA temperature are included in the calculation table of page 4.
- Overhead departure weight is assumed to be equal to weight at brake release.
- Overhead destination weight must be entered in the calculation table of page 4.

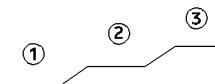
FLIGHT PLANNING CALCULATION TABLES

2.05.15 P 3
SEQ 001 REV 10

CALCULATION TABLE

MACHNUMBER	
INITIAL FLIGHT LEVEL:	
GROUND DISTANCE:	
WIND ('-' HEAD/'+' TAIL):	
AIR DISTANCE:	

FLIGHT PROFILE



FL:

OVERHEAD DEPARTURE
WEIGHT:
DISTANCE:
TIME:

START OF FIRST STEP CLIMB
WEIGHT:
DISTANCE:
TIME:

1
FUEL:
DISTANCE:
TIME:
REMAINING DISTANCE:

FL:

BEGIN OF SECOND CRUISE SEGMENT
WEIGHT:
DISTANCE:
TIME:

START OF SECOND STEP CLIMB
WEIGHT:
DISTANCE:
TIME:

2
FUEL:
DISTANCE:
TIME:
REMAINING DISTANCE:

FL:

BEGIN OF FINAL CRUISE SEGMENT
WEIGHT:
DISTANCE:
TIME:

OVERHEAD DESTINATION
WEIGHT:
DISTANCE:
TIME:

3
FUEL:
DISTANCE:
TIME:
REMAINING DISTANCE = 0 NM

REMAINING DISTANCE:

TOTAL VALUES	
WEIGHT OVERHEAD DEPARTURE:	
WEIGHT OVERHEAD DESTINATION:	
FUEL:	
TIME:	

FFCS-02-0515-003-A001AA

	FLIGHT PLANNING CALCULATION TABLES				2.05.15	P 4
					SEQ 001	REV 10

1	(1) Max TO Weight at BRAKE RELEASE	▶					•	
2	WEIGHT Overhead Destination	▶					•	
3	– Temperature Correction for CRUISE	–					•	
4	+ Correction for Air Conditioning (+ for LO, – for HI)	+					•	
5	– CLIMB correction	–					•	
6	+ TO Altitude correction	+					•	
7	– STEP CLIMB correction	–					•	
8	= Corrected Weight Overhead Destination	=					•	
9	+ DESCENT correction (including 6 min IFR)	+					•	
10	(2) Landing Weight at Destination	=					•	
11	– ALTERNATE Fuel	–					•	
12	= ALTERNATE Landing Weight	=					•	
13	– HOLDING	–					•	
14	= Weight at END OF HOLDING	=					•	
15	TRIP FUEL (1) – (2)						•	
16	– "En Route" Reserve	–					•	
17	(3) ZERO FUEL WEIGHT	=					•	
18	– OPERATING WEIGHT EMPTY	–					•	
19	= Max Allowable Payload	=					•	
BLOCK FUEL CALCULATION								
20	Required Fuel (1) – (3)	▶					•	
21	+ Taxi	+					•	
22	= Block Fuel	=					•	
FLIGHT TIME CALCULATION (H. MIN)								
23	Time from Integrated Cruise Tables	▶					•	
24	+ CLIMB Correction	+					•	
25	+ DESCENT Correction (including 6 min IFR)	+					•	
26	= Flight Time	=					•	

Note : Line 3 : temperature correction :
 $0.015 \text{ (kg/}^{\circ}\text{C/NM)} \times \Delta\text{ISA (}^{\circ}\text{C)} \times \text{air distance (NM)}$ or
 $0.033 \text{ (lb/}^{\circ}\text{C/NM)} \times \Delta\text{ISA (}^{\circ}\text{C)} \times \text{air distance (NM)}$

Line 6 : TO altitude correction :
 $0.5 \text{ (kg/1000 kg/1000 ft)} \times \text{TOW (1000 kg)} \times \text{airport elevation (1000 ft)}$
or
 $0.5 \text{ (lb/1000 lb/1000 ft)} \times \text{TOW (1000 lb)} \times \text{airport elevation (1000 ft)}$

Line 10 : Check that landing weight at destination is lower than maximum landing weight.

Line 17 : Check that the zero fuel weight is lower than maximum zero fuel weight.

Line 22 : Check that the block fuel value is lower than maximum tank capacity.

Example

To be issued later

Example (Cont'd)

To be issued later

Example (Cont'd)

To be issued later

Example (Cont'd)

To be issued later

Example (Cont'd)

To be issued later