



CIRCULAR 4-2013

HARMONISATION OF THE F4 TRAFFIC FLOW DATA AND F2 AIRCRAFT MOVEMENT AND FLYING HOURS

In accordance with various conclusions reached at ICAO APIRG meetings it is essential for AFI States to support the ARMA in submitting the various required Forms for Collision Risk Assessments conducted annually to ensure RVSM safety in the AFI Region. One of the most important forms is Form F4 traffic flow data. On receipt of these forms ARMA performs calculations on the F4 data to produce the F2 Form. States that wish to do the calculations before dispatching to the ARMA are encouraged to do so by referring to the under mentioned guidelines that are easily followed.

Table 1. below is an F4 example that should be in Excel format as per the ARMA requirement that makes it easier for the ARMA to manipulate data.

F4 EXAMPLE

DATE	ROUTE	FLT.No	TYPE	ICAO CODE	FROM	TO	EQPT	Entry POSITION	Entry TIME	FLIGHT LEVEL	Exit POSITION	EXIT TIME	FLIGHT LEVEL
01/02/13	UG565	ARM001	A388	ARM	FAOR	FACT	W/C	ASAMBE	06:00	FL380	EKHAYA	07:00	FL380
02/02/13	UZ5	NQA002	GLEX	NQA	GOOY	DNAA	W/C	LAPAD	12:15	FL350	GLOBE	13:00	FL350
03/02/13	QU75	KEV003	F900	KEV	FBGR	FNLU	W/C	VITAL	22:55	FL340	CLEPT	23:35	FL340
04/02/13	TN434	LAP005	LJ45	LAP	FMMI	FIMP	W/C	TREND	10:05	FL310	TWITTER	11:55	FL310
05/02/13	AZ32	TKO006	A346	TKO	FALE	HECA	W/C	INTEL	18:00	FL370	WESTY	20:00	FL370
06/02/13	ER44	NDE007	B787	NDE	VHHH	HRYR	W/C	ETIKA	15:55	FL380	NBV	16:50	FL380
07/02/13	UQ23	BSL008	CL60	BSL	FALA	FYOA	W/C	ORNAD	10:00	FL390	GGV	11:30	FL390

Table 1

- Once the F4 Traffic flow data Form has been completed, an F2 form can be compiled. The F2 Form calculation of "Total IFR Movements for the Month" that took place in a particular FIR/ACC is the sum of RVSM flights as calculated in "Total Monthly Movements in the Band FL290 FL410" plus records of all other IFR flights above and below RVSM airspace. (this figure can be omitted if not readily available as it is not absolutely vital)
- The total number of RVSM flights should be calculated from the total amount of rows that have been filled in. Clicking on the first row and pulling the cursor down to the last row will provide the sum. The sum is then entered into Form F2 "Total Monthly Movements in the Band FL290 FL410".
- The F2 Form also records the average amount of time an aircraft spends in a particular FIR/ACC cruising at an RVSM level from an Entry point to an Exit Point as calculated from the F4 form. Refer to the red font.
- The F2 Form, "Average Time Per Movement in the Level Band FL290 FL410", is calculated by the elapsed time between the **Entry Time** on the F4 form and the **Exit time**. Excel will provide the answers for you

provided you calculate as follows. Place the cursor on the first row in the **Entry Time** and drag down to the last row then press and hold in control (ctrl) while placing the cursor on the first row of the last **Exit time** and drag to the last row. Release control (ctrl) and at the bottom record the first figure presented as average and divide by the number of days in the month under review. This then will give you the figure to place in “Average Time Per Movement in the Level Band FL290 FL410”.

- The inserted answer for “Average Time Per Movement in the Level Band FL290 FL410” provides the average time per aircraft.
- Lastly the F2 Form is used to calculate the amount of time an aircraft spends in the RVSM airspace Climbing or Descending. This is easily averaged out and usually 7 minutes climbing and 7 minutes descending calculated by a short period of observation resulting in a repetitive figure every month.

ARMA is confident that this circular will assist you and your team to accomplish this task.

If you have any queries please do not hesitate to make contact with ARMA on Afirma@atns.co.za or armad@atns.co.za

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