

MGA **FDP system**

**Flight Duty Periods system
FTL management tool for AOC
operations.**

MGA software.com

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Introduction

**FDP flight duty periods system.
audit, planning and record keeping system for AOC operators**

The **FDP** system is designed for editing, maintaining and managing crew duty and flight times in accordance with the company flight time limitation scheme.

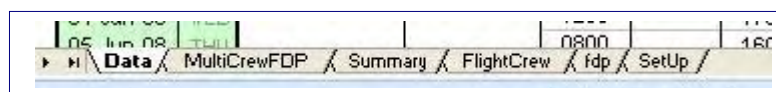
FDP produces printed audit reports to a standard accepted by the licensing authorities. The software alerts the operator via a system of coloured flags if a pilot is closing on the statutory limits or has exceeded them (the 7day, 28 day, 3 month and annual limits on duty times and flying hours). A similar alerting function is incorporated for the automatically calculated Rest times.

A forward planning facility is incorporated to allow the testing of ‘what-if’ rostering scenarios. Using the same coloured flagging system the forward planner will help operations to use aircrew resources to best effect.

A MultiCrew input facility allows the data for all Flight Crew (2 flight deck and 1 cabin) to be entered at the same time.

The main interface for inputting, editing and checking data is the module fdp-dutyXX.xls (where XX is version number).

Click the Tab at screen bottom to select the screens available:



Screens

		Page
Data	main input screen	4
MultiCrewFDP	combined flight crew entries	8
Summary	Date-block listings	9
FlightCrew	Crew list and statistics; select, manage	10
fdp	printed 28 day audit form	-
SetUp	Program parameters and user preferences.	14

Getting started

(for information on enabling macros within Excel see [MGA-install](#))

- 1 Run the program fdp-duty.xls
- 2 Go to the **FlightCrew** page (Click the Tab at screen bottom)
- 3 Click **Load Data** from the Housekeeping drop-down. Then Click **Create New Flight Crew member**
- 4 a) Enter a unique ident 2 - 4 character identifier for the pilot, and b) pilot's name.
c) Enter a starting date for records (This should be 3 months before the required record span or 28 days before the first check ride, whichever is the earlier). The program requires the date to be a MONDAY and works out a default date for you.
- 5 The 'Okay' button changes to 'Sure?'. Click to confirm.
- 6 Go to the **Data** page (click the tab at screen bottom)
The pilot you have just created will be set (confirm at screen top)
Click 'Scroll' to move today's date near page center if required.
- 7 Begin entering flight duty times. For example, on 12 Jun the pilot began duty at 0800, flight details ended at 1600 and was Off duty at 1700:
- 8 On the '12 Jun' line enter '0800' in the ON DUTY column (overwriting the OFF flag), '1600' in the FDP END column and '1700' in OFF DUTY column.
Then record total flight time for the day in the FLYING HOURS column note this input must be made with a colon separating hours and minutes eg: 3:45 for 3 Hr 45 min). Finally in the next two columns, notes sectors flown and make any pertinent notes re split duty etc.
- 9 From the Housekeeping drop-down menu click 'Save Data.'
As new records are added any limitations exceeded or closed will be flagged in the columns to the right.

Note: Be aware the column D and E are used by the optional Roster system for rostering assignments and roster stability counters respectively.

Where's my data?

The datasets for the fdp system are maintained in separate spreadsheet files (with the extension .xls) residing in the folder specified at SetUp. Every time you select a crew dataset in fdp-duty you are importing an individual spreadsheet file and every time you save from fdp-duty (whether from the data or MultiCrew FDP screens) you are saving your changes to individual dataset files. It is therefore important that you make frequent back-ups of the dataset files.

Do Not edit the individual datasets.

Use the fdp-duty editor module for all editing and data management.

Revisions

Version	Details	See page
3.3	Date matrix automatically expanded every time data is used to circumvent 'Matrix insufficient' messages.	12
3.3	Dataset files now stored as .dat instead of .xls. A small conversion file (xls2dat.bat) distributed to automate changeover	15
3.4	Internal mods to facilitate operation on Excel 2007 and circumvent file errors.	3
3.5	FlightCrew screen. Improvements to Refresh function. Data screen: Typing 'o' in ON DUTY column returns 'OFF'. All user input cells are non-tinted. DUTY HOURS column not accessible	12 4
	SetUp screen Editable Flight Time Limitations	15
3.6	<u>MultiCrewFDP screen</u> : Number of Crew members editable at one time increased to 4. A 'Clear' button is added to allow a clear down of data <u>Summary screen</u> : A 'Clear' button is provided to allow a clear down of data (useful prior to saving the module).	-
	<u>FlightCrew screen changes to refresh logic</u>	11
3.7	Max Crew increased to 60. (FlightCrew screen displays in 2 pages of 30 each)	
4.0	csv dataset files introduced (no formatting)	-
4.1	Xlspec parameter for use in Excel 2007.	15
4.2	Name becomes fdpDuty.xls	-

Excel 2007 / Vista compatibility

Version 3.4 has internal mods to make it compatible for operation on Excel 2007. Excel 2007 recognizes files created in earlier Excel versions and will automatically default to 'Compatibility Mode' (flagged at the top of the screen). You can use this mode for saving MGA files but we do not recommend it.

Version 4.1 incorporates the new parameter 'XL file spec' on the SetUp screen. This may be set to (eg) '.xlsb binary' and MGA files saved in this mode. This represents a robust solution for Excel 2007 users and circumvents any file compatibility issues.

Data screen

The Data screen is designed around a rolling calendar presentation, with each row representing a day. The calendar 'matrix' expands automatically on start-up according to the number of days specified for the 'Matrix forward' parameter (SetUp screen). Press the scroll button to position 'today' about half way down the page:

BaseDate	Ident	Name	Housekeeping			[auto]	Next Print	[auto]	Rank	D	
25-Dec-06	ZZ	Zoot Hilev	ON DUTY	FDP END	OFF DUTY	HOURS DUTY	FLYING HOURS	18-Sep-06	Cabin	50	
scroll		Scheduled								Last 7	
12-May-08	MON		0735	1005	1330	5:55	00:45	1s	JET528P and travel	19:30	37
13-May-08	TUE		0900	1500	1800	7:00	02:15	2s		18:00	36
14-May-08	WED		1000	1330	1500	5:00			JET533P plus travel		33
15-May-08	THU		OFF							14d	27
16-May-08	FRI		OFF						JET533P plus travel		22
17-May-08	SAT		1000	1735	1805	8:05	04:40		JET533P534	21:00	30
18-May-08	SUN		1800	1805	1835	2:35	02:35		JET537P	19:00	28
19-May-08	MON		0535	2100	2130	15:55	02:55	c/Fwd	JET530P split duty credit 0:50	0:00	38
20-May-08	TUE		0830	1530	1830	0:00	04:35	3	ATX 9008 Test	20:30	38
21-May-08	WED		1300	1530	1630	2:30		c/Fwd	Travel	14:00	37
22-May-08	THU		0530	1320	1350	8:20	04:45	c/Fwd	JET530P/AE 1530		45
23-May-08	FRI		OFF					c/Fwd			45
24-May-08	SAT		1545	2205	2235	6:50	01:30	c/Fwd	JET532P	17:00	44
25-May-08	SUN		1630	2200	2230	6:00	03:50	c/Fwd	JET532P/JET532	18:00	47
26-May-08	MON		1430	1850	2200	7:30	02:10	c/Fwd	JET530P/AE 1530 + travel		38
27-May-08	TUE		OFF					c/Fwd			31

The spreadsheet has been configured so that as soon as data is entered, warning flags are automatically triggered as appropriate. Within 10 hrs of a duty time limit shows an orange flag, and exceeded limits shows red. Similarly the Rest column shows orange when Rest is within 1 hour of the minimum required and red where rest minimum has been exceeded. Additionally, a red flag annotated '7d, 14d, 28d' or '3mo' is displayed when duty day limits are violated by a particular day's duty.

Because fdp limits include the last 3 month's records, the fdp program logic requires a span of records from the current date back to least 84 preceding days to be able to correctly compute limits. The program prompts when this condition is not met with (eg) 'Date Matrix for XXX insufficient to calculate FDP limits'.

Tip: This can result from the matrix not having been expanded to include the current date: Remember, the matrix is only expanded when a crew member's dataset is loaded into fdp-duty. The expanded dataset must then be Saved for the updated information to be available to the system).

Be aware that the FlightCrew screen gives statistical readout of each crew member's dataset including matrix start and end points. Any matrix end date which is more than 28 days out of date is flagged red.

fdp-duty35+ Data screen: Presentational and functional changes.

BaseDate	Ident	Name	Housekeeping			[auto]	Next Print	[auto]	Rank	Duty Period Max Hr				Flying I	
25-Dec-06	ZZ	Zoot Hilev	DUTY ON	FDP END	DUTY OFF	HOURS DUTY	HOURS FLYING	18-Sep-06		F/D	55	95	190	100	
scroll		Roster info								Rest					
										Alerts	Last 7d	Last 14d	Last 28d	Last 28d	
22-Oct-08	WED		0900		1700	8:00				20:00	25:50	46:50	73:40	26:40	
23-Oct-08	THU		1300	1755	1825	5:25	00:50	1s	Travel and JET528P	12:35	31:15	46:50	79:05	27:30	
24-Oct-08	FRI		0700	1205	1235	5:35	03:00	2s	JET528 and JET529P		29:40	46:50	84:40	30:30	
25-Oct-08	SAT		OFF								21:35	46:50	84:40	30:30	
26-Oct-08	SUN		1630	2005	2035	4:05	02:35	1s	JET529		23:05	46:50	88:45	33:05	
27-Oct-08	MON		OFF								23:05	40:55	84:55	33:05	
28-Oct-08	TUE		OFF								23:05	40:55	82:45	32:15	
29-Oct-08	WED		0900		1700	8:00			Home office	20:00	23:05	48:55	90:45	32:15	
30-Oct-08	THU		1300	1755	1825	5:25	00:50	1s	Travel and JET528P	12:35	23:05	54:20	96:10	33:05	
31-Oct-08	FRI		0700	1205	1235	5:35	03:00	2s	JET528 and JET529P	17:55	23:05	52:45	95:55	32:55	

All user input areas are non-tinted. The tinted cells contain Active Spreadsheet data. The Duty Hours column (in the centre of the user input area) is no longer accessible to the user. Typing the letter 'o' in the ON DUTY column will produce the 'OFF' legend.

Data screen cont

Here is the Ops Managers nightmare - just about everything has gone wrong!:

	M	N	Q	R	S	T
	(auto)	Rank	Duty Period Max Hr			Flying
		Cabin	60	105	210	100
	Rest		Last 7d	Last 14d	Last 28d	Last 28d
	14:30	0	40:00	69:05	159:20	37:15
	10:45	0	54:45	85:50	170:35	39:25
	19:00	0	43:15	88:20	171:50	39:25
	16:00	0	43:15	88:20	179:50	44:00
	15:00	28d	44:45	93:05	189:20	46:35
	16:00	28d	52:45	93:00	187:20	46:35
	16:00	28d	60:45	92:45	187:20	46:35
		7d	60:45	100:45	186:20	46:35
		0	44:00	98:45	177:00	40:50
		0	41:30	84:45	164:45	34:05
	16:00	0	41:30	84:45	172:45	34:05
		3mo	40:00	84:45	172:45	34:05

In column M the **Rest time** minima is violated (10:45).

In Column N, **Duty day limits** are exceeded: 28 day, 7 day and a 3 month limit.

In column Q the **FTL** max of 60 hours in the past 7 days is exceeded twice. The orange flags show where the crew member is approaching within 10 hours of the **FTL** max.

If this is a historic record, the company is in trouble with the CAA. However, if it is a Forward Planning scenario, then the situation may corrected by editing the duty periods for the days in question (see Forward Planning, next page).

The system of coloured flags as above alerts the operations department whenever a crew member is approaching FTL scheme limits and notifies any FTL violation. Flying hours (not fully shown above) are totalled and alerted upon for the last 28 days and the last year. The in-built forward planning function allows 'what-if' rostering scenarios to be tested utilising the same coloured flag alerting system as above

Housekeeping Drop-Down options:

Print Create a 4-week FDP audit report.

Load data Load pilot data

Save data Save pilot data

Mark as Forward nominate selected days as Forward Planning dates (first highlight the rows required). Use this facility to run a tentative 'what-if' rostering scenario.

Crop 15 months Crop file (ie remove all records before) the 15 month threshold required by CAA. (Remember to back-up your data first).

fdp-Calc Go to the fdp-Calc Duty Day and Split Duty module.

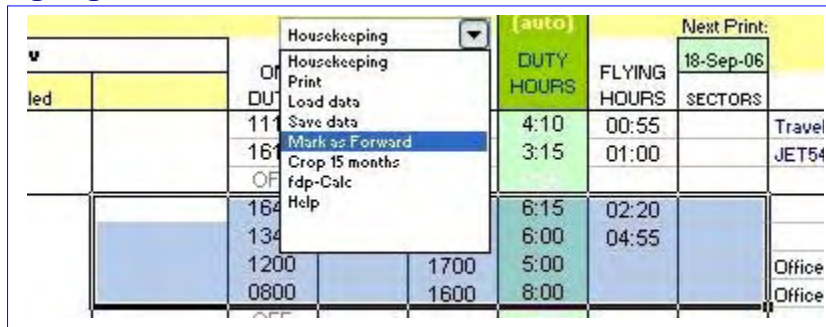
Help Open the word.doc help file specified on SetUp.

Data screen cont

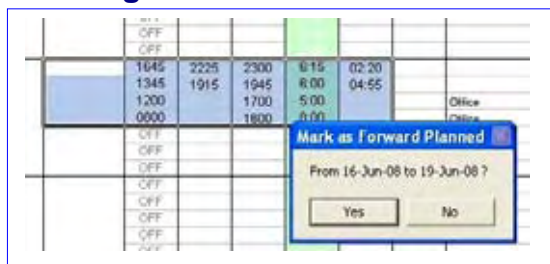
Forward Planning:

Use this facility to run tentative 'what-if' rostering scenarios. The forward planning function marks a selected block of fdp data with a '<Fwd>' flag in the sectors column and also causes the ext to be rendered in blue. The alerts and totalling functions inherent to the fdp system will work as normal with 'Fwd' data, but the operator can discriminate the real from tentative data, and later can remove either is allows

1 Highlight a block of dates and click 'Mark as Forward'.



2 Confirm the range of dates



3 A '<Fwd>' flag is placed in the Sectors column and text is coloured blue.

1645	2225	2300	6:15	02:20	<Fwd>	
1345	1915	1945	6:00	04:55	<Fwd>	
1200		1700	5:00		<Fwd>	Office
0800		1600	8:00		<Fwd>	Office
OFF						
OFF						

To clear tentative data (and convert the segment to normal data), remove the '<Fwd>' flag manually: Select the block of '<Fwd>' flags and press 'Delete'. Save the data and the next time the data is loaded it will be presented in normal coloured text.

Data screen cont

Successive Duty Periods starting on the SAME DAY.

The calendar matrix of the **fdp** system is structured to take ONE Duty Period start time PER DAY. While this suffices for the vast majority of cases, situations can arise where a crew member can legally report for a second Duty Period commencing on the SAME DAY as the preceding Duty Period.

Example:

Crew Start Duty at 0110 Hrs, ending at 0940 (an 8:30 FDP). After taking the minimum rest, crew reports back on duty at 1940 Hrs.

A suggested fix for entering this in the fdp system is:

Enter the FIRST FDP normally on the row for the target day.

Then for the following day (ie. on the row below), enter the SECOND FDP. Mark the SECOND record prominently in the Notes column to indicate its START date status eg:-

07-Dec-08	SUN			OFF							
08-Dec-08	MON			OFF							
09-Dec-08	TUE			0245	1130	8:45	02:55	2			
10-Dec-08	WED			OFF							
11-Dec-08	THU			0110	0940	8:30	01:00	1			
12-Dec-08	FRI			1940	0430	8:50	02:30	2	FDP START=11 Dec		34:00
13-Dec-08	SAT			OFF							
14-Dec-08	SUN			0240	1145	9:05	02:15	2			
15-Dec-08	MON			OFF							
16-Dec-08	TUE			0245	1055	8:15	02:15	2			
17-Dec-08	WED			OFF							
18-Dec-08	THU			OFF							

Note in the above example the SECOND FDP of the day rolls over to END on the following day.

Be aware that in this instance the logic is unable to correctly calculate Rest time and the value displayed in the Rest column will be 24 hours MORE than actual (eg in the above example, 34:00 rest time is actually 10:00).

In operational experience, the incidence of successive Duty Periods starting on the Same day is exceptional.

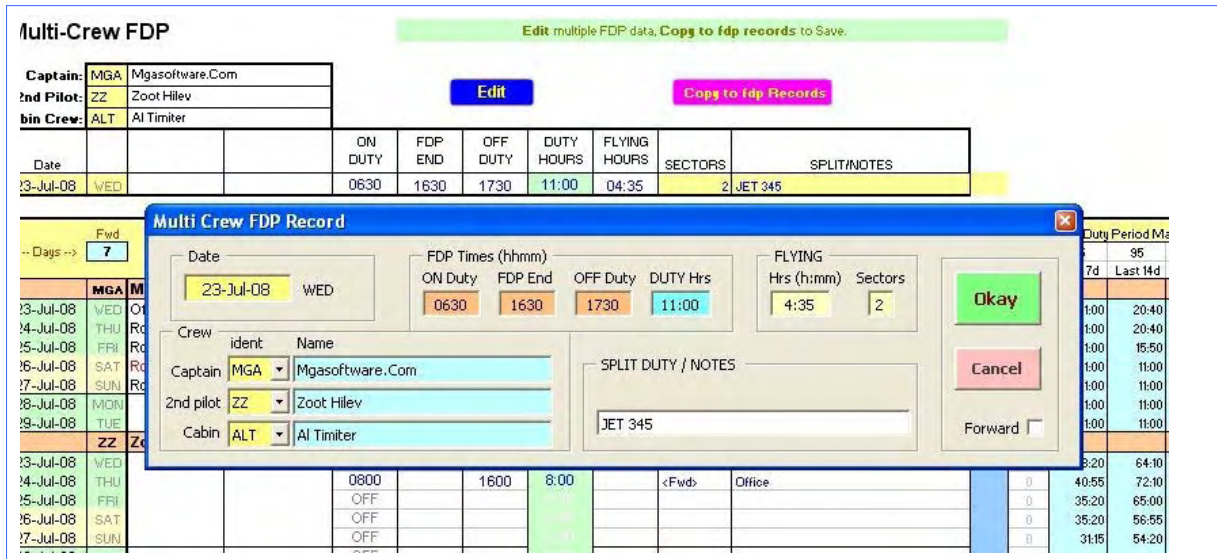
If out of sync FDP START day persists on the subsequent day, be sure to flag each affected record with suitable text in the notes column.

Note most authorities require FDP times to be in UTC.

MultiCrewFDP screen

This screen allows duty period data to be entered for up to three crew members at once (two flight deck crew and one cabin crew). Click the Blue 'Edit' button to access the Edit dialog. (Tip: use the Enter key to cycle through input fields, the Esc key to exit the dialogue without saving).

The **MultiCrewFDP** screen with edit dialogue invoked:



Be aware that the FLYING time input accepts time as (eg) '345' or '3.45' (decimal between hours and minutes) and formats it appropriately as '3:45'

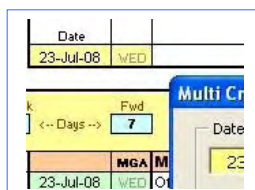
Important

After data has been edited, the information must then be saved to the individual crew datasets. Before doing this the program will prompt you with:



You can also perform this function manually by clicking the purple **Copy to fdp Records** button. A **Copied** flag appears beside each crew members' name confirming that data has been successfully saved. If not, the program will prompt to that effect and the **Copied** flag will not appear.

At save time, the program will also create a summary of fdp data for each of the selected crew. The top of each crew members' listing commences at the edit date and each extends for the number of 'Fwd' days selected:-



Summary screen

Base Date: 16-May-07		Days: 7		Summary For: Captains		100%		Hourkeeping		Duty Period Mat			
ON DUTY	FDP END	OFF DUTY	DUTY HOURS	FLYING HOURS	SECTORS	SPLITNOTES		50h	50h	50h			
								Lam 7d	Lam 14d	Lam 28d	Lam		
01		Actual	Captain					0					
16-May-07	0900	1535	1645	0:45	03:45		JET 3005 Test	24:40	56:40	150:10			
17-May-07	OFF		1700	17:00				30:40	65:40	159:55			
18-May-07	0900		1800	9:00				41:50	68:40	167:55			
19-May-07	1000	1050	1920	9:20	05:45	2s		45:30	78:00	179:55			
20-May-07	1000	2145	2215	12:15	06:45	3s		56:30	88:30	173:30			
21-May-07	OFF							56:30	80:55	165:30			
22-May-07	OFF							56:30	72:55	157:20			

The summary screen is used to obtain a snapshot listing of fdp data for each crew member belonging to a selected category, forward from a selected date for a nominated number of days.

To use this feature select:

'Base Date' (starting date for the listing),

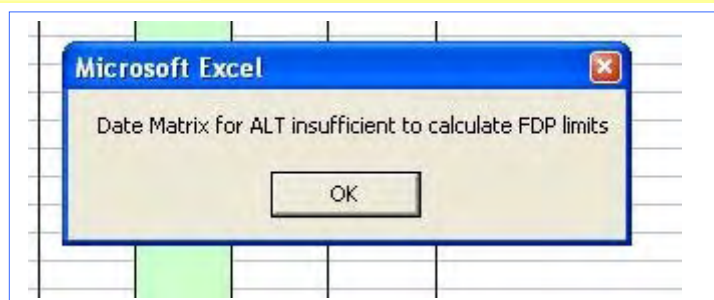
'Days' (number of days forward of starting date)

and, from the drop-down, choose:

'Captains, 1st Officers, ALL Flt.Deck' or 'Cabin Crew' as required.

Finally click the purple 'GO' button to produce a snapshot of records for the category selected.

Note



The **matrix** (or rolling calendar background) for each crew record gets automatically extended whenever data is loaded to the **fdp-duty** module (by the amount of days specified at 'Matrix Forward' on the SetUp screen). The fdp system requires at least 84 days (approx 3 months) prior to a selected target date in order to calculate FDP limits. A date selected on the MultiCrewFDP or Summary screens which is outside these minimum or maximum values will produce the error message above. Check the date selected and re try. If you persistently get this or any other error message, there may be a fault; Please contact MGA.

FlightCrew screen

MGA software.com		23-Jul-08	Housekeeping	Duty Periods			Flying		Status	Rank	OpTypes				
Ident	Name	BaseDate	MatrixTo	Days	1stEntry	LastEntry	NextPrint	Last 7d	Last 14d	Last 28d	Last 28d	Last 12m	Status	Rank	OpTypes
1 MGA	Mgasoftware.Com	10-Dec-07	23-Nov-08	350	21-Jan-08	23-Jul-08	05-May-08	0:00	9:40	18:40	7:40	93:00	Active	Captain	Citation
2 ALT	Al Timiter	04-Feb-08	10-Aug-08	189	05-May-08	20-May-08	04-Feb-08	0:00	0:00	0:00	0:00	0:00	Active	Captain	Citation
3 ZZ	Zoot Hilev	25-Dec-06	23-Nov-08	700	26-Dec-06	24-Jul-08	18-Sep-06	35:20	53:10	95:00	39:30	493:05	Active	1st Officer	Citation
4 GLO	Gerry Lopenz												<-New-->	1st Officer	ALL

This screen presents tabulated statistics for each crew member on file. The data is refreshed by clicking the Housekeeping **Refresh** option. Note that crew member Name is presented as 'UPPER' or 'Proper' (first letter capitalised) as per 'nameFormat' on the **SetUp** page.

The 'MatrixTo' end points reported on this screen reflect those when Refresh was last exercised. Loading a dataset into fdp-duty automatically expands the matrix which can then be saved back to the dataset,

Create New Flight Crew Member (Housekeeping/Load Data option)

Specify Ident, Name and Base Date for starting records. This creates a blank datasheet commencing at the date specified. Base Date must be a Monday and the program will alert you if this is not so. The edit dialog includes drop-down options for Status and Rank. Base Date defaults to a Monday 84+ days BEFORE the current date. Print Date is not separately specified and defaults to BaseDate initially.

FlightCrew screen cont

'Parked' Data

MGA software.com		18-Jul-08	Housekeeping				Duty Periods			Flying		Status	Rank	
Ident	Name	BaseDate	MatrixTo	Dayz	1st Entry	LastEntry	NextPrint	Last 7d	Last 14d	Last 28d	Last 28d	Last 12m		
MGA	Mgasoftware.Com	10-Dec-07	31-Aug-08	266	04-Mar-08	22-Apr-08	05-May-08	0:00	0:00	0:00	0:00	9:10	Active	Captain
ALT	Al Timiter	04-Feb-08	12-Oct-08	252	05-May-08	20-May-08	04-Feb-08	0:00	0:00	0:00	0:00	0:00	Captain	
ZZ	Zoot Hilev	25-Dec-06	21-Sep-08	637	26-Dec-06	19-Jun-08	18-Sep-06	0:00	0:00	8:00	0:00	440:55	Active	1st Office
GLO	Gerry Lopez												<-New->	1st Office

The *FlightCrew* screen may include crew members who are not currently in the fdp system but have been copied across from the pilots module (eg 'GLO' above). This 'parked' data is presented grayed out with the temporary Status of '<-New->'

Whenever a Refresh is commanded (from the 'Housekeeping' drop-down), the user will be reminded of any parked data which has not been resolved:



Be aware that parked ident's are included on the drop-down options when Load data is selected (but selection is not allowed). When a parked ident is entered in the New Crew Member dialog, name and Rank data are automatically copied in, facilitating the creation of a valid fdp record base.

When 'Refresh' is commanded (and also on startup), the fdp-duty module checks the files available in the nominated folder (as specified on the SetUp screen) and re-populates the FlightCrew list accordingly. This process will not disturb any 'parked' entries (ie. crew members created by the Pilots module but not yet incorporated into the fdp system).

'Refresh' gives the option to refresh the Crew dataset for the current line or for ALL data as appropriate (v3.6).

Total Crew on file is shown at top left of the Flight Crew listing. (v3.6)

FlightCrew screen cont

'Matrix To' showing red (Matrix end point out of date)

Be aware that if a red flag shows in the 'Matrix To' column of the FlightCrew screen, then you may get the error message: '[ident] - [date] out of range of Matrix' when saving data for that crew member on the MultiCrewFDP screen (depending on the date being edited).

The solution is as follows: Cycle the affected crew member once through Load and Save.
- The 'Load data' procedure extends the matrix within the fdp-duty module and 'Save data' copies the extended structure to disk.

The Refresh function (Housekeeping drop-down option)

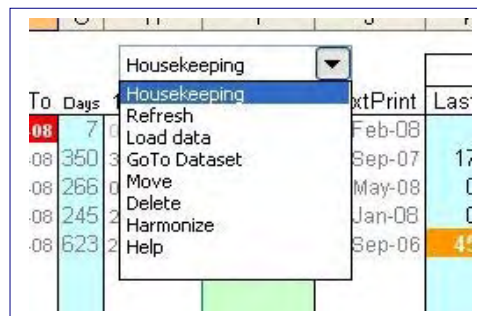
When 'Refresh' is commanded (and also on startup), the fdp-duty module checks the files available in the nominated folder (as specified on the SetUp screen) and re-populates the FlightCrew list accordingly. This brings crew records up to date by counting duty and flight times. At the same time it places a timestamp on the dataset file, which gets removed when the file is re-saved. A full refresh (re-calculating the duty period time totals to current date) is triggered when the timestamp has changed OR current date has changed, but a repeated 'refresh' on the same day follows an abbreviated process (Changes to Status, Rank, opType or name are updated only). To force a full re-calculation of ONE dataset, place the cursor on that record and clicking 'Refresh'. The Refresh procedure will not disturb any 'parked' entries (ie. crew members created by the Pilots module but not yet incorporated into the fdp system).

The Refresh function will return the prompt: Refresh FlightCrew before proceeding if the number of crew on the FlightCrew list is not equal the number of dataset files in the nominated fdp folder.

The Date Matrix

When Crew data is loaded into fdp-duty for editing on the Data screen, the date matrix is automatically expanded. fdp-duty33+ extends this process to the MultiCrewFDP and Summary screens. This is to circumvent the error message 'Date Matrix for XXX insufficient to calculate FDP limits' appearing unnecessarily. Be aware that the automatic matrix expansion does not change the start date for the dataset, and that the expanded matrix is not automatically saved back to disk. Crew data is only saved when 'Save Data' is commanded from the Housekeeping drop-down on the 'Data' screen.

FlightCrew screen cont

**Housekeeping drop-down options:****Refresh**

Communicates with each crew members' dataset and:

- copies any changes made to Name, Status, Rank or Op Types;
- updates and repaints the data grid with the latest information.

Load Data

The Load Crew Member dialog appears:

Select from the drop-down options (note placing the cursor on a crew member line before clicking **Load Data**, defaults to that entry), or else click 'Create New Flight Crew member' to initialise a new dataset:

View dataset (*'Goto dataset' prior to version 35*)

Go to the dataset module for the selected crew member.

Move

Allows you order the list to suit your preference. At the dialog enter the new position required for the selected records.

Delete

Delete the dataset file for the selected crew member (only available if the last record is more than 15 months old)

Harmonise

Harmonize with **pilots.xls** file. Check each dataset record against **pilots.xls** and report any anomalies in Name, Status, Rank or OpTypes, with the option to make changes. If a record exists in **pilots** but not in the **fdp** system, the user is prompted with (eg): '**XXX not listed. If required, Create in fdp-duty.**'

Help

View the Word help file. (MGA-fdp.doc)

FlightCrew screen Tips

All yellow cells are editable.

To save changes to Status /Rank/opType, use 'Refresh'.

SetUp screen

The parameters User Name, Company ident are set by MGA:

fdp-duty Set Up

User Name **AOC Systems Demo**

Company Ident **MGA**

Logo Image File **mga2007.gif** Valid until: 20-Mar-10

FDP records folder: **fdp** (change activated on Refresh or next boot)
folderSpec= C:\Documents and Settings\David Scott-Morgan\My Documents\techlog\demo\fdp


Help Filename: **MGA-fdp.doc**

Min post-flight time: **30** mins
 Matrix Forward: **120** days

Report Size on save: **0** (0/1)
 introSplash: **0** (0/1)
 Set StartUp folder as default: **1** (0/1)
 Headers on MultiCrew & Summary: **1** (0/1)
 Dataset file extension: **.csv**
 Excel file Spec: **.xls** XL pre-2007

Linked files

pilots File: **pilots33**
 roster File: **roster38**
 fdpCalc File: **fdpCalc27**



version: 4.2
11-Feb-10

opTypes

Citation opTypes
 Gulfstream V available for
 ALL selection in
 FlightCrew

nameFormat

Proper

ranks		Last 7d	14d	28d
Captain	Capt	55	95	190
1st Officer	F/O	55	95	190
CabinCrew	Cabin	60	105	210

Program Parameters

Logo Image File
FDP records folder

The filespec for the image for printing to documents *. Location of fdp datasets. Specify as relative to the current folder. Full path is automatically presented below.

Help filename

The filespec for the Microsoft Word (.doc) help file *.

NameFormat

Select Proper or UPPER to display crew names as (eg) Michael or MICHAEL

MinPostFlight

Select the minimum time allowed between FDP End and OFF Duty (in minutes). the number of days forward of current date to extend the matrix. This happens when the program starts and whenever a crew dataset is loaded.

Matrix Forward

the number of days forward of current date to extend the matrix. This happens when the program starts and whenever a crew dataset is loaded.

introSplash

Show FDP splash screen on boot-up.

Set StartUp folder as default

Reset Excel's default folder location to the folder containing this file.

Headers on MultiCrew & Summary

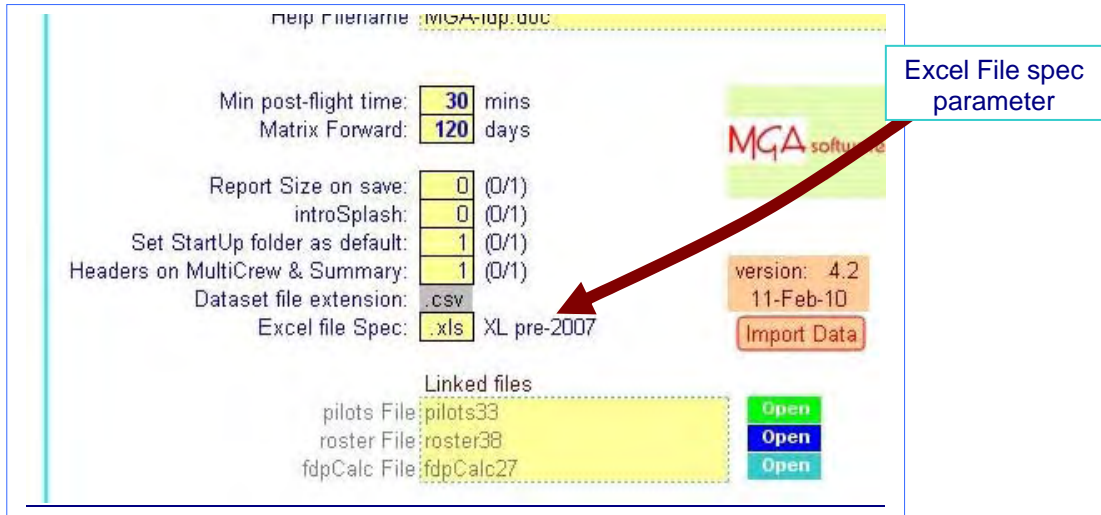
Show or hide Row and Column headers on MultiCrew & Summary screens.

* Logo file and help file must reside in the same folder as the parent program. Changes to introSplash and Set StartUp folder as default will be activated on the next boot.

SetUp screen

Dataset file extension (.csv)

The dataset file extension parameter is not editable and is retained on the SetUp screen for information only. From **fdpDuty** version 4.0 dataset files are stored in .csv format.



Excel 2007

MGA files are normally issued in Excel 2003 (.xls) format which runs in Excel 2007 but is not as reliable as other formats.

To use in Excel 2007, MGA recommends that you change the 'Excel file Spec' parameter on the SetUp screen and then, save the module in the same format (ie: if the selected file Spec is '.xlsb', save as a Binary Worksheet). Excel file Spec is selected by drop-down between 3 file formats :-

Option	Description	Notes
.xls	pre-XL 2007	Not recommended for use in XL2007.
.xlsm	XL 2007 macro-enabled	
.xlsb	XL2007 binary (+macros)	.xlsb files are more compact than .xlsm equivalent.

You can use MGA modules in Excel 2007 as either Macro-enabled '.xlsm' files or Binary format '.xlsb' files, but not in the standard '.xlsx' format as this does not allow the use of macros. (Note the selected file Spec must be common across all the MGA modules in your installation).

Flight Time Limitations data is displayed in a grid on the Set-Up screen (version 3.5+).

The values for the Last 7, 14 and 28 days set here are presented at the top of the data screen. Edit these values as and when your company FTL scheme warrants it.

ranks		Last 7d	14d	28d
Captain	Capt	55	95	190
1st Officer	F/O	55	95	190
CabinCrew	Cabin	60	105	210

Print

Duty Record Form

Commanded from Data screen, Housekeeping drop-down, Print option.



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FLYING AND DUTY RECORD FORM

30-Mar-09 to 26-Apr-09		Zoot Hilev						DUTY			FLYING		
DATE	ON DUTY	FDP END	OFF DUTY	DUTY HOURS	FLYING HOURS	Sx	SPLIT/NOTES	Rest	Last 7d	Last 14d	Last 28d	Last 28d	Last 12m
M 30 Mar	OFF			0:00					0:00	0:00	0:00	0:00	
T 31 Mar	OFF			0:00					0:00	0:00	0:00	0:00	
W 01 Apr	0900		1700	8:00			Home office	20:00	8:00	8:00	8:00	0:00	245:4
T 02 Apr	1300	1755	1825	5:25	00:50	1s	Travel and JET528P	12:35	13:25	13:25	13:25	0:50	
F 03 Apr	0700	1205	1235	5:35	03:00	2s	JET528 and JET529P		19:00	19:00	19:00	3:50	
S 04 Apr	OFF			0:00					19:00	19:00	19:00	3:50	
S 05 Apr	1630	2005	2035	4:05	02:35	1s	JET529		23:05	23:05	23:05	6:25	
TOTAL				23:05	6:25								
M 06 Apr	OFF			0:00					23:05	23:05	23:05	6:25	
T 07 Apr	OFF			0:00					23:05	23:05	23:05	6:25	
W 08 Apr	0900		1700	8:00			Home office	20:00	23:05	31:05	31:05	6:25	
T 09 Apr	1300	1755	1825	5:25	00:50	1s	Travel and JET528P	12:35	23:05	36:30	36:30	7:15	
F 10 Apr	0700	1205	1235	5:35	03:00	2s	JET528 and JET529P	17:55	23:05	42:05	42:05	10:15	
S 11 Apr	0630	1400	1445	8:15	02:15	2s		25:45	31:20	50:20	50:20	12:30	
S 12 Apr	1630	2005	2035	4:05	02:35	1s	JET529	10:25	31:20	54:25	54:25	15:05	
TOTAL				31:20	8:40								
M 13 Apr	0700	1005	1330	6:30	00:45	1s	JET529P and travel		37:50	60:55	60:55	15:50	
T 14 Apr	OFF			0:00					37:50	60:55	60:55	15:50	
W 15 Apr	OFF			0:00					29:50	52:55	60:55	15:50	
T 16 Apr	OFF			0:00					24:25	47:30	60:55	15:50	
F 17 Apr	1200	1840	1910	7:10	04:40	1s	JET533P plus travel	14:50	26:00	49:05	68:05	20:30	
S 18 Apr	1000	1735	1805	8:05	04:40	2s	JET533/534	21:55	25:50	57:10	76:10	25:10	
S 19 Apr	1600	1805	1835	2:35	02:35	1s	JET537P		24:20	55:40	78:45	27:45	
TOTAL				24:20	12:40								
M 20 Apr	OFF			0:00					17:50	55:40	78:45	27:45	
T 21 Apr	OFF			0:00					17:50	55:40	78:45	27:45	
W 22 Apr	OFF			0:00					17:50	47:40	78:45	27:45	
T 23 Apr	0630	1435	1515	8:45	03:45	3			26:35	51:00	87:30	31:30	
F 24 Apr	OFF			0:00					19:25	45:25	87:30	31:30	
S 25 Apr	0730	1540	1630	9:00					20:20	46:10	96:30	31:30	
S 26 Apr	OFF			0:00					17:45	42:05	96:30	31:30	
TOTAL				17:45	3:45								
28 DAY TOTALS				96:30	31:30								

Ops use only: The above has been checked and verified correct.

Name: _____ Date: _____ Signed: _____

Notes: FDP END = the end of the last Flying Detail. FLYING HOURS is chock to chock time.
 OFF DUTY must be at least 30 mins later than FDP END. (Apr 2006)
 ALL TIMES ARE RECORDED AS UTC TIME (Jan 2007)

Appendix 1

Notes

The **FDP system** requires 84 days (approx. 3 months) of previous data in order to check Duty Period data against FTL limits:

- After 7 working days, the next day must be an OFF day.
- In any 14 day period, 2 consecutive days must be OFF days.
- In any 28 day period, a minimum of 7 days must be OFF
- In any 3 month period an average of 24 days must be OFF.

- **Loading Data**

When crew data is loaded to fdp-duty.xls, the matrix (the date grid against which data is presented) is automatically checked and expanded or contracted so that it extends beyond the current date.

- **fdp-duty** has a dummy sheet named '000' containing one week's matrix with formatting and embedded formulas. This sheet is not accessible and '000' is not available as an ident, along with 'MGA' which is the MGA demonstration file.

- The **12 Month** flying total is displayed on the first day of each month and shows the total flying hours up to the end of the previous month (as CAA regs require). Where records are less than 12 months old, the value shown is the total **Date Matrix**:

When data is saved from fdp-duty, the current matrix is saved also. The process optimises file space usage as all records saved have no more than set advanced matrix.

- **fdp-duty** will retain the previous dataset on the Data screen until it is overwritten by a new selection. The data on MultiCrewFDP and Summary screens may be cleared down to conserve memory.

- **Company logo** is printed to the header of 28 day audit reports. If commanded from **fdp** screen, the printout cycles via Print Preview. To initiate the logo on the audit report printout, click 'Print Duty Record' on the **fdp** screen.

- The **working folder** of Excel is reset on boot-up. This allows access to linked files if fdp-duty has been called up directly from a Windows file dialog or desktop link.

- **Crew datasets** are imported or exported by moving their files IN to, or OUT of, the nominated fdp records folder using Windows Explorer.

- The **Rank** flag sets the 7, 14 and 28 day duty limits. eg: the Flight Deck default of 55, 95 and 190 hours, or Cabin Crew default of 60,105 and 210 hours. The limits are presented at the head of the relevant columns and command the automatic alerts for 10 hour closing (amber) and a violation (red).

- Flying hours may be entered in H24 format (version 3.1), the program will represent it as HH:mm format (eg enter '130' for '01:30')so far.

- The fdp-duty module has no onboard user data apart from custom parameter settings on the SetUp screen. Crew data is stored in external files with the name fdp-XXX.dat (where 'XXX' is crew ident)

Versions & upgrades

MGAsoftware.com will alert you whenever a substantive revision of your software is available for release.

To implement an upgrade:

1. Make a safety back up of your existing file using Windows Explorer.
2. Copy your downloaded or emailed software into your MGA folder.
3. Run the updated software and from the SetUp screen, check/reset linked files; check/reset fdp folder.
4. Go to FlightCrew screen and click 'Refresh' (housekeeping drop-down) to re-establish crew list.

Appendix 2

Excel Folders

When Microsoft Excel is started it refers to its default folder location for any files. Typically this might be for example 'My Documents' in Windows XP. When an Excel file is called up by double clicking on its name in Windows Explorer, or by clicking on a desktop icon, the new instance of Excel invoked by this process does not refer to the folder containing the file called up, but to its default folder location. This can stop MGA files from obtaining information from other files on boot-up resulting in the following message:



If you see this message, check that the folder you are working by going to File | Open and using the dialog to navigate to your MGA folder. Click Cancel to exit the dialog. The folder change is registered in Excel whether or not a file is actually opened at the dialog box and the change will last for the current Excel session.

fdp-duty has a SetUp parameter which provides the option to change the working folder of Excel on boot-up in order to circumvent the above problem.

Be aware also that the full path to linked files can be specified on the SetUp screens of MGA modules

Disclaimer: Some MGA modules may be distributed with time-related validities (details will be published on the SetUp page). If the validity of your software is time related, MGA Software is not responsible for any consequences arising from the use of its software after expiry date.

If you have any requirements for software be aware we are happy to investigate the feasibility of bespoke software to your specifics. If it's possible for the job to be automated then we can do it!

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