

webFdp

OPERATING MANUAL

www.MGAsoftware.com

CONTENTS:

		Page
Introduction		2
PreFlight Check List	What's in the box	3
	ftp access	
	Enabling Macros	4
	Browser setting	
	Writing data	
Excel Tabs (screens)	1 webFTP screen	5
	2 Crew Register (OPS module)	
	3 Audit Report	
	4 SetUp	
webFDP screen	Editor dialog	6
	Data definitions	7
	Housekeeping drop-down	8
Audit Report screen		9
SetUp screen	Management drop-down	10
	Logo image	
	Resetting the password	11
	FTL scheme	
OPS module supplement		
Wheres my Data?	Data schematic	13
	Web Output & ActivityFile	14
Q & A		15
fdpClassic		16
Crew Register	Manage Crew overlay	17
Screen	Creating a CREW module	
Notes	Log Validity Period (LVP)	18
	Security	19

Use this manual in conjunction with:

MGA-install Installing from the installation package
MGA-XL2007 Using with Excel 2007.

This manual is correct to webFdp version 1.4

webFdp

Introduction

webFdp is a software system for editing and managing flight duty data via the internet. It works by the use of a dedicated web data connection available to crew and operations. This ground-breaking facility allows crews to write their own duty record data from wherever they are in the world via web connectivity, while company operations provide monitoring, oversight and system control.

This manual is correct to webFdp version 1.4

webFdp uses two Excel modules:

1 The **OPS module** is for the operations department, to access and manage all crew records. The **OPS module** has unrestricted access to all crew records and is able to 'lock' a block of data when for example, a certain period has been reconciled with the CAA.

2 The **CREW module** for individual crew members to edit his/her FTL records via web access. **CREW modules** are scaled down versions of the ops module with hard written password and permissions.

Note **webFdp** does NOT use Microsoft Sharepoint services but a dedicated MGA web access system.

Opening Splash screen:
(Enter the password allocated to you by Operations)



Pre-Flight CheckList

1 What's in the box

You should have the following files: (in each case the '00' = a version number)

- 1 webOps00.xls The master webFdp OPS module
- 2 aga00.xls Airports, countries and DST data file
- 3 fdpClassic00.xls fdp Classic module
- 4 shortcuts00.xls Desktop shortcut creator

Note all files should reside in the same folder (including your company Logo Image File).

2 ftp access

webFdp requires the host File Transfer Program to have access through the firewall to the internet. To enable or check the setting on your computer use the following procedure:

Start → Settings → Control Panel → Security Center → Windows Firewall → Exceptions (tab)

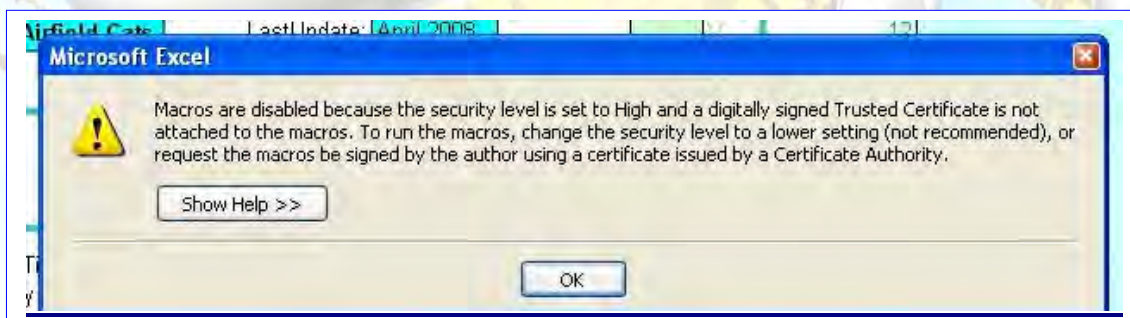
The '**File Transfer Program**' checkbox must be enabled (ticked) in order for webFdp to work..

Make sure you have internet connectivity.

3 Enabling macros on First Run of Excel

If your computer uses Excel 2007, please consult the the file MGA-XL 2007

MGA software uses program codes called 'macros'. For these to run, Excel's Security Settings require that macros be enabled (by default macros are disabled). When MGA software is first run you will get an error message if macros are not enabled. MGA software contains no harmful code and if no other factors preclude it, we recommend that security settings be reduced.



If the message above appears on start-up, go to:

Tools → Macro → Security - select **medium** or **low** security level:

Security Level settings in pre-2007 Excel

If set to **High** or **Very High**, MGA software will not run.

If set to **Medium**, a warning ('*macros can contain viruses*') will appear every time MGA software is run and you will have to click the '**Enable Macros**' option each time.

If set to **Low (recommended)**, MGA software will run without interruption.

After enabling Macros, Excel must be shut down and restarted (click the 'X' at top right)

Pre-Flight CheckList cont.

4 Browser setting

webFdp will display web files using your computer's default browser. **IE** or **Firefox** will work fine but **Chrome** is problematic. Other browsers may work but have not been tested.

To make **Internet Explorer (IE)** the default: From within **IE** go to:
Tools → **Internet Options** → **Programs**. Click 'Make Default'

To make **Mozilla Firefox** the default: From within **Firefox** go to:
Tools → **Options** → **Advanced (tab)** → **General (tab)**. Click 'Check Now' and follow on screen prompts.

5 Writing data for the first time (OPS module).

When you start a new system, it will contain some sample FDP data and Crew member data. To reset the system back to a virgin status use the following process:-

1 From the webFDP screen:

- > click **Housekeeping** > **Select Crew** > **Create New Flight Crew Member**
 - > Write data for a new crew member XXX.
 - > When done click Okay.
 - > Click OK at the the prompt: 'Now create virgin webFdp databse for XXX?'
 - > Click OK at the prompt: 'Upload this sheet of data for XXX to server
(a copy of the uploaded file will be saved in the local folder)
 - > Click OK at the prompt: 'View uploaded web page?'
- (Tip: always check uploaded web page has the same date-time stamp as the page you are working)

2 From the Crew Register screen:

- (Note the crew member you have just created - XXX - is bottom of the list)
- > Place cursor on a demo crew (ZZZ) and click **Housekeeping** > **Delete Crew**
 - > Click OK at the prompt: Last Record for ZZZ not yet 15 months old.
Are you sure you want to delete this record?
or the prompt may be: Delete Records for ZZZ ..name.. (0 Records)?
 - > Successively delete all demo crew entries the same way until you are left with just XXX.

You will now have a system with one crew member (XXX). Create as many crew as you want up to the maximum of 60. If you have a demo and are planning to purchase webFdp then there is no need to limit the volume of live data you post to the system as nothing you enter will be wasted.

(Note that Crew Register data is not stored on the web but within the local file – ie. the webOps Excel file. You should always save your webOps file before quitting otherwise changes made to Crew Register details or SetUp parameters will be lost).

On the webFDP screen write FDP data for your crew in any order (the software sorts to date-time order after editing is done). Upload the data to the web at frequent intervals, checking each time that the date-time stamp on the web page is the same as that at screen top left. A copy of the latest uploaded data is also kept on your local hard drive. The tabulated FDP data is stored in web page (.htm) format which is very robust and simple. The software parses and configures this data, rendering it in a manageable format.

Excel Tabs (screens) available in webFdp

1 WebFDP: The main working environment where duty records are created and managed. see Pages 3-5

ops2 ZZ: FDPdata 31-Dec-09 14:10:06

peroff Zoot Hilev Captain Edit Housekeeping OPS module FTL scheme data

26	Date	day	Locality	Time	TZ	Crew	Sx	ON	S1	S2	end	OFF	Duty	Flying	Note	Rest	Alerts	Basic	credit	Total	Fwd	Lock	Origin	Last 7d	Last 14d	Last 28d	Last 28d	FLYING
0001	15-Oct-09	THU	EHAM	1215		Multi	4	1015			2145	2230	12:15	03:30	ok test	00:00		11:45	00:00	11:45				12:15	12:15	12:15	12:15	3:3
0002	16-Oct-09	FRI	OMRK	0930		Single	3	0530			1345	1455	09:25	01:45		07:00		11:00	00:00	00:00				21:40	21:40	21:40	21:40	5:1
0003	17-Oct-09	SAT		0800		Single	2	0800			1800	1830	10:30	00:00		17:05		11:00	00:00	11:00				32:10	32:10	32:10	32:10	5:1
0004	18-Oct-09	SUN	OMRK	0930		Multi	4	0530			1430	1530	10:00	02:20		11:00		12:30	00:00	12:30				42:10	42:10	42:10	42:10	7:3
0005	21-Oct-09	WED		0830		Single	3	0830			1800	1900	10:30	02:20		17:00		11:00	00:00	11:00				52:40	52:40	52:40	52:40	9:5
0006	22-Oct-09	THU		0830		Multi	0	0830			1830	1900	10:30	00:00		18:30		00:00	00:00	00:00				50:55	63:10	63:10	63:10	9:5
0007	23-Oct-09	FRI		0830		Single	0	0830			1830	1900	10:30	00:00		18:30		00:00	00:00	00:00				52:00	73:40	73:40	73:40	9:5
0008	24-Oct-09	SAT	EGBB	0930		Multi	3	0830			1700	1730	09:00	03:15		18:30		12:30	00:00	12:30				50:30	82:40	82:40	82:40	13:1
0009	25-Oct-09	SUN		0830		Multi	0	0830			1400	1430	00:25	00:00	ok test	15:00		00:00	00:00	00:00				46:30	88:40	88:40	88:40	13:1
0010	26-Oct-09	MON	EHAM	0830		Multi	2	0730			1500	1530	08:00	01:00		17:00		13:15	00:00	13:15				54:30	96:40	96:40	96:40	14:1
0011	27-Oct-09	TUE	EHAM	0830		Multi	1	0730			1500	1530	08:00	00:00		18:00		00:00	00:00	00:00				62:30	104:40	104:40	104:40	14:1
0012	28-Oct-09	WED	EHAM	0830		Multi	2	0730			1800	1830	11:00	02:30		16:00	7d	13:15	00:00	13:15				63:00	115:40	115:40	115:40	16:4
0013	30-Oct-09	FRI	KJFK	0630	-5	Multi	2	1130			2200	2230	11:00	02:15		17:00		12:15	00:00	12:15				53:00	105:00	105:00	105:00	18:5
0014	01-Nov-09	SUN	EHAM	0630		Single	3	0530			1430	1500	09:30	03:35		07:00		10:00	00:00	10:00				47:30	94:00	94:00	94:00	22:3
0015	05-Nov-09	THU	EGBB	0930		Multi	2	0930			1730	1800	08:30	02:15		18:30		13:15	00:00	13:15				29:00	81:30	144:40	144:40	24:4
0016	09-Nov-09	MON	EGBB	0630		Single	1	0630			1500	1600	09:30	02:15		12:30		10:00	00:00	10:00				18:00	57:30	154:10	154:10	27:0

2 Crew Register: (OPS module only)

AOC Systems Demo Housekeeping

Ident	Name	Recs	1st Entry	Last Entry	Last Report	Last Session	Sync	infoDate	Last 7d	Last 14d	Last 28d	Last 28d	Last 12m	Status
01 ZZ	Zoot Hilev	28	15-Oct-09	20-Jan-10	03-Aug-09	ZZ: FDPdata 01-Feb-10 16:33:55	ok	00-Jan-00	0:00	0:00	0:00			Active
02 CC	Cindy Cline	0	30-Dec-99	30-Dec-99	12-Oct-09	CC: FDPdata 05-Jan-10 18:12:44	X	00-Jan-00	0:00	0:00	0:00			Active
03 SUT	Sutton Tuiss	46	24-Jun-09	07-Dec-09	03-Aug-09	SUT: FDPdata 16-Dec-09 10:07:36	ok	00-Jan-00	0:00	0:00	0:00			Active
04 ALT	Al Timiter	168	05-May-08	07-Dec-09	11-May-09	ALT: FDPdata 29-Dec-09 17:51:37	ok	00-Jan-00	0:00	0:00	0:00			Active

3 Audit Report: Use this screen to prepare and print Audit Reports. see Page 7

FDP Audit Report Limits: 55 95 190 100 900

Period commencing: 26-Oct-09 MON Audit Report Breakdown by week view

Crew ID ZZ Name Zoot Hilev FLYING AND DUTY RECORD FORM 26-Oct-09 to 22-Nov-09

DATE	ON DUTY	SPLIT Off	SPLIT On	FDP END	OFF DUTY	DUTY HOURS	FLYING HOURS	Sections	NOTES	Rest	Last 7d	Last 14d	Last 28d	Last 28d	Last 12m
M 26 Oct	0730			1500	1530	8:00	01:00	2		17:00	54:30	96:40	96:40	14:10	
T 27 Oct	0730			1500	1530	8:00	00:00			16:00	62:30	104:40	104:40	14:10	
W 28 Oct	0730			1800	1830	11:00	02:30	2		16:00	63:00	115:40	115:40	16:40	
T 29 Oct															
F 30 Oct	1130			2200	2230	11:00	02:15	2		17:00	92:00	126:40	126:40	18:55	
S 31 Oct															
S 01 Nov	0530			1430	1500	9:30	03:35	3		7:00	41:30	136:10	136:10	22:30	22:30
TOTAL						47:30	9:20								

4 SetUp: Program parameters and settings. see Page 8

To access a screen, click its Tab at screen bottom

webFDP screen

The webFDP screen is where you keep your duty records. To create a NEW duty day record, position the cursor anywhere below or above any existing records and click the blue 'Edit' button.



This brings up the Edit Dialog (below). The Start Date will default to today's date. If you make it a future date the 'Forward' flag will come on indicating this is a projected duty session.

Enter your duty information in the boxes provided. Time ON duty, OFF duty and the time when the Flying portion of the duty ended (FDP end). Remember there must be at least half an hour after FDP end before going OFF DUTY .

The Editor Dialog

Duty Alert appears here when Start Date is in violation of FTL scheme.



Captains can be enabled to write duty data for up to 3 other crew members.

Location:
ICAO code of start Location plus Start Date is used to resolve UTC & DST offset.

Alert strips presenting information to the user.

The editor is the front end, where the user enters data to the system. The presentation of information is the same for both OPS and CREW modules and functionality is common apart from restrictions applicable to the CREW module.

CREW modules have access to data for ONE crew member only. Data that has been 'locked' by the ops department will be available for viewing in the CREW module but not for editing. A local copy of data is available to both modules (Click 'Import Local' from the Housekeeping drop-down).

webFDP screen cont.

- the webFdp crew database sits behind and is accessible by the Editor Dialog (shown on previous page)

OPS ZZ: FDPdata 10-Dec-09 21:06:31		Edit		Housekeeping		webFDP OPS Module										Duty Period Max: Hr				Flying Max							
						FTL scheme data										55	95	190	100	90							
25	Start Date	day	Locality	Time	TZ	Crew	Sx	ON	S1	S2	end	OFF	Duty	Flying	Note	Rest	Alerts	Basic	credit	Total	Fwd	Lock	Last 7d	Last 14d	Last 28d	Last 28d	Last
0001	15-Oct-09	THU	EHAM	1215		Multi	4	1015			2145	2230	12:15	03:30	ok test	00:00	7d	11:45	00:00	11:45	Y		12:15	12:15	12:15	3:30	3:
0002	16-Oct-09	FRI	OMRK	0930		Single	3	0530			1345	1455	09:25	01:45		07:00		11:00	00:00	00:00	Y		21:40	21:40	21:40	5:15	5:
0003	17-Oct-09	SAT		0800		Single	2	0800			1800	1830	10:30	00:00		17:05		11:00	00:00	11:00	Y		32:10	32:10	32:10	5:15	5:
0004	18-Oct-09	SUN	OMRK	0930		Multi	3	0530			1430	1530	10:00	02:20		11:00		12:30	00:00	12:30	Y		42:10	42:10	42:10	7:35	7:
0005	21-Oct-09	WED		0830		Single	3	0830			1800	1900	10:30	02:20		17:00		11:00	00:00	11:00	Y		52:40	52:40	52:40	9:55	9:
0006	22-Oct-09	THU		0830		Multi		0830			1830	1900	10:30	00:00		13:30		00:00	00:00	00:00	Y		50:55	63:10	63:10	9:55	9:
0007	23-Oct-09	FRI		0830		Single		0830			1830	1900	10:30	00:00		13:30		00:00	00:00	00:00	Y		52:00	73:40	73:40	9:55	9:
0008	24-Oct-09	SAT	EGBB	0930		Multi	3	0830			1700	1730	09:00	03:15		13:30		12:30	00:00	12:30	Y		50:30	82:40	82:40	13:10	13:
0009	25-Oct-09	SUN		0830		Multi		0830			1400	1430	00:25	00:00	ok test	15:00		00:00	00:00	00:00	Y		46:30	88:30	88:40	13:10	13:
0010	26-Oct-09	FRI	EHAM	0830		Multi	2	0730			1500	1530	08:00	01:00		17:00		13:15	00:00	13:15	Y		54:30	96:40	96:40	14:10	14:
0011	27-Oct-09	TUE	EHAM	0830		Multi		0730			1500	1530	08:00	00:00		16:00		00:00	00:00	00:00	Y		62:30	104:40	104:40	14:10	14:
0012	28-Oct-09	WED	EHAM	0830		Multi	2	0730			1800	1830	11:00	02:30		16:00	7d	13:15	00:00	13:15	Y		63:00	115:40	115:40	16:40	16:
0013	30-Oct-09	FRI	KJFK	0530	-5	Multi	2	1130			2200	2230	11:00	02:15		17:00		12:15	00:00	12:15	Y		53:00	105:00	126:40	18:55	18:
0014	01-Nov-09	SUN	EHAM	0830		Single	3	0530			1430	1500	09:30	03:35		07:00		10:00	00:00	10:00	Y		47:30	93:00	136:30	22:30	22:

Data definitions - webFDP data base

item	Description
Start Date	UTC Start date. On first entry this is treated as a <u>Local</u> Date (see Note 1 below)
Locality	Icao code of duty-start location. Together with start date this is used to resolve UTC offset.
Time	Local time of start. If omitted local time is inferred from ON time.
TZ	Time Zone offset: Combination of UTC and DST offsets for location and date.
Crew	Single or multi crew operation
Sx	Number of flight sectors in duty day
ON	ON duty time (UTC). See Note 2 below
S1 & S2	Split off & on duty times.
end	Flight duty end time.
OFF	OFF duty time, (user parameter typically set to a minimum of 30 mins after flight duty end time).
Rest	Elapsed time since end of last duty period shown as (eg) '23:45' or '****' if over 240 hours.
Alerts	Shows as '7d' '14d' '28d' '3mo' if record is FTL violation.
Fwd	defines if record is projected or actual ('Y' = Projected). Records ahead of today are 'Fwd' by default.
Lock	defines if record has been closed by ops department. ('Y' = locked, edit not available to crew).
basic	FTL scheme – basic duty time available for local start time and sectors.
credit	FTL scheme – credit for any nominated split duty.
Total	FTL scheme - Total or max duty time available (= basic+credit).
Origin	Originator. The identifier of the host operator.

Note 1:

Start date is assumed to be a Local Date. Once Locality and Time is established, the logic works out if the date entered is still the same date in UTC terms. An alert notifies the user if a change is commanded. This is best illustrated by inputting a duty start date of 21 Nov at Brisbane, Australia (YBBN) at 0930 hours. This results in a prompt requesting automatic change of date to 20 Nov. The local time will remain as 0930 and the UTC time of 2330 will be presented in the ON box. (0930 hours on 21 Nov at YBBN = 2330 hours on 20 Nov in UTC time).

Note 2:

Duty Times are stored and presented as UTC values but note, they may be entered as either Local OR UTC: If a valid UTC offset has been established (by nominating Icao start location) and Duty ON time is the SAME as Local Start Time, then the duty data entered is assumed to be in local time. In this instance, the program will prompt for a confirmation before converting the entered times into UTC equivalents. Note also that the webFDP system will handle two duty times commencing on the same calendar day.

Note 3:

Records can be individually Flagged as either 'Forward' or 'Locked'. A 'Forward' flag is automatically raised if the target date is ahead of current date and the 'Locked' flag is set by the operations department (OPS module) to make a record uneditable in a CREW module.

Note 4:

Session date and time at top left should be identical to that on the header of the uploaded web page. A disparity means the page is not uploaded successfully.

webFDP screen cont.

At screen top, in the black panel, is the **Current Session** identifier.

The blue Edit button calls up the editor dialog. (The record under the current cursor position is selected or else if the cursor is outside the data range, a new record).

OPS	ZZ: FDPdata 19-Nov-09 13:52:43													
		Edit											Housekeeping	
24	Start Date	day	Locality	Time	TZ	Crew	Sx	ON	S1	S2	end	OFF	Duty	Flying
0007	23-Oct-09	FRI		0830		Single		0830			1830	1900	10:30	00:00
0008	24-Oct-09	SAT	EGBB	0930	1	Multi	3	0830			1700	1730	09:00	03:15
0009	25-Oct-09	SUN		0830		Multi		0830			1400	1430	00:25	00:00
0010	26-Oct-09	MON	EHAM	0830	1	Multi	2	0730			1500	1530	08:00	01:00
0011	27-Oct-09	TUE	EHAM	0830	1	Multi		0730			1500	1530	08:00	00:00
0012	28-Oct-09	WED	EHAM	0830	1	Multi	2	0730			1800	1830	11:00	02:30

The Housekeeping drop down provides access to the following functions:

Download from server:

Download the latest data set from the web server. For the CREW module, download is available for the preset crew member only.

Upload to server:

Upload the displayed dataset to the server, overwriting previous, and save a copy of the web page to the local folder.

Refresh Alerts & Times.

Force a manual reset of all alerts and time summaries.

Sort, Renumber, Refresh

Resort data with the option to renumber afterwards. (Note data is automatically sorted after editing, but not re-numbered)

Import Local

Import dataset from the Local folder.

Classic FDP *

Run the legacy FDP system with diarised presentation of duty data.

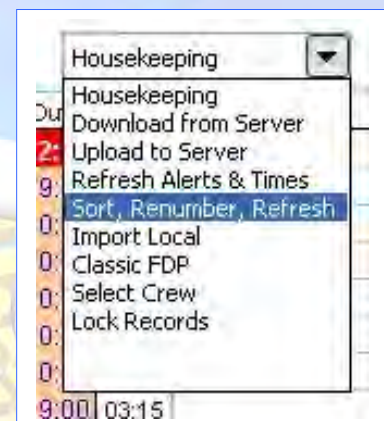
Select Crew *

Change selected crew member or create a new crew member

Lock Records *

Lock all records up to a selected date.

(* = option available in the OPS module only)



Before saving a duty day record, scanning logic examines logged times to check if there are no overlaps with other duty times on the database.

Note that duty records can be entered in any order. The software automatically sorts the database to chronological order after editing is complete.

Audit Reports screen

The printed FDP audit report shows 28 days of data from a nominated date. Where there are two duty periods commencing the same day, these are listed on separate rows (as in the sample below – see the entries for 10 Nov. FDP Audit Reports are available for any 28 day within the span of records.

Breakdown by week view:

FDP Audit Report											Limits: 55 95 190 100 900									
Period commencing: 26-Oct-09 MON											Audit Report					Breakdown by week view				
Crew ID		Name		FLYING AND DUTY RECORD FORM							26-Oct-09 to 22-Nov-09									
ZZ		Zoot Hiley																		
DATE	ON DUTY	SPLIT Off	SPLIT On	FDP END	OFF DUTY	DUTY HOURS	FLYING HOURS	Sectors	NOTES	DUTY			FLYING							
										Rest	Last 7d	Last 14d	Last 28d	Last 28d	Last 12m					
M 26 Oct	0730			1500	1530	8:00	01:00	2		17:00	96:30	96:40	96:40	14:10						
T 27 Oct	0730			1500	1530	8:00	00:00			16:00	62:30	64:40	104:40	14:10						
W 28 Oct	0730			1800	1830	11:00	02:30	2		16:00	63:00	65:40	115:40	16:40						
T 29 Oct																				
F 30 Oct	1130			2200	2230	11:00	02:15	2		17:00	53:00	65:00	126:40	18:55						
S 31 Oct																				
S 01 Nov	0530			1430	1500	9:30	03:35	3		7:00	67:00	68:00	136:10	22:30	22:30					
TOTAL						47:30	9:20													
M 02 Nov																				
T 03 Nov																				
W 04 Nov																				
T 05 Nov	0930			1730	1800	8:30	02:15	2		18:30	29:00	81:30	144:40	24:45						
F 06 Nov																				
S 07 Nov																				
S 08 Nov																				
TOTAL						8:30	2:15													
M 09 Nov	0630			1500	1600	9:30	02:15	1		18:30	18:00	57:30	154:10	27:00						
T 10 Nov	0330			0630	0700	3:30	02:15	1		11:30	21:30	53:00	157:40	29:15						
→ 10 Nov	1700			2300	2330	6:30	02:15	2		16:00	28:00	59:30	164:10	31:30						
W 11 Nov																				

Continuous view:

FDP Audit Report											Limits: 55 95 190 100 900									
Period commencing: 26-Oct-09 MON											Audit Report					Continuous view				
Crew ID		Name		FLYING AND DUTY RECORD FORM							26-Oct-09 to 22-Nov-09									
ZZ		Zoot Hiley																		
DATE	ON DUTY	SPLIT Off	SPLIT On	FDP END	OFF DUTY	DUTY HOURS	FLYING HOURS	Sectors	NOTES	DUTY			FLYING							
										Rest	Last 7d	Last 14d	Last 28d	Last 28d	Last 12m					
M 26 Oct	0730			1500	1530	8:00	01:00	2		17:00	96:30	96:40	96:40	14:10						
T 27 Oct	0730			1500	1530	8:00	00:00			16:00	62:30	64:40	104:40	14:10						
W 28 Oct	0730			1800	1830	11:00	02:30	2		16:00	63:00	65:40	115:40	16:40						
T 29 Oct																				
F 30 Oct	1130			2200	2230	11:00	02:15	2		17:00	53:00	65:00	126:40	18:55						
S 31 Oct																				
S 01 Nov	0530			1430	1500	9:30	03:35	3		7:00	67:00	68:00	136:10	22:30	22:30					
M 02 Nov																				
T 03 Nov																				
W 04 Nov																				
T 05 Nov	0930			1730	1800	8:30	02:15	2		18:30	29:00	81:30	144:40	24:45						
F 06 Nov																				
S 07 Nov																				
S 08 Nov																				
M 09 Nov	0630			1500	1600	9:30	02:15	1		18:30	18:00	57:30	154:10	27:00						
T 10 Nov	0330			0630	0700	3:30	02:15	1		11:30	21:30	53:00	157:40	29:15						
→ 10 Nov	1700			2300	2330	6:30	02:15	2		16:00	28:00	59:30	164:10	31:30						
W 11 Nov																				
T 12 Nov	1430			2130	2200	7:30	03:30	2		16:00	27:00	56:00	159:25	31:30						

SetUp screen

SetUp webFDP **OPS module**

MGA **AOC Systems Demo**

Program parameters

userID: **OPS** Management

Log Validity Period: **60** mins lvp

Duplicated Report Day Flag: **[Red Arrow]** (FDP report screen)

AutoSort after edit: **1** (0/1) srx

Splash Screen at start: **1** (0/1) spri

Server Time Out in secs: **5** (0-60) tog

Set StartUp folder as default: **1** (0/1) tdir

Headers on webFDP page: **1** (0/1) lide

Default Crew: **Multi** tmsl

Excel file Spec: **.xls** XL pre-2007 XLF

LogoImageFile: **mga2007.gif**

airportsFile: **aga32**

pilotsFile: **pilots33** pt

FdpClassic: **fdpClassic13** **Open**

Local data Path: **[Yellow Box]**

LocalFolder: **C:\Documents and Settings\David.Scott-Morgan\My Documents\techlog**

Current status:

crewID: **ZZ** Zoot Hilev

Version: **4.9** session: **ZZ: FDPdata 19-Jan-10 13:26:50**

20-Jan-10 htmFile: **webFdp-ZZ.htm**

FTL minima

Over any period of:	Min days off
8 days	1
14 days	2*
28 days	7
84 days	24

(* = consecutive)

Max Duty & Flying Times

Flight Crew

Duty Period Max Hr		Flying Max Hr	
Last 7d	Last 14d	Last 28d	Last 12m
55	95	190	900

Cabin Crew

Duty Period Max Hr		
Last 7d	Last 14d	Last 28d
60	105	210

Cells shaded yellow are available for editing.

'Local data path' contains copies of web files (.htm) that have been uploaded to the server from within the webFdp system. (A copy of the latest data file is created at upload time).

Management drop-down options:

FTL scheme

Reset Password

Click to reset your management password. (Factory default = 'mga')

ReStart

Restart the program again. In the CREW module, this provides a means to Log On again and recommence the LVP.

Classic FDP *

Run the legacy FDP system with diarised presentation of duty data.

Import Data *

Not yet implemented, this is an update device to load in your preferences from a previous version.

View Activity Log *

View, edit, clean and/or print the Activity Log of all web transactions made by the Company OPS and CREW modules.

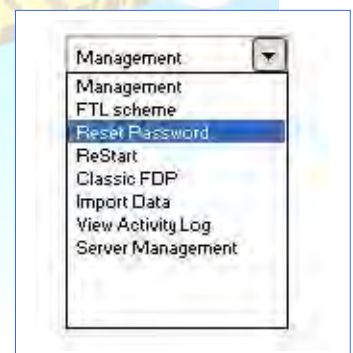
Server Management *

Check server details.

(* = option available in the OPS module only)

Logo image:

The Logo Image file is a parameter defined on the SetUp screen. The image may be loaded or reset by selecting 'Preview' from the Audit Report drop-down.



SetUp screen cont.

Resetting the Password

To reset your management Password, select 'Reset Password' at the Management drop-down on SetUp.

1. Enter the current Password

Note the default Password is factory set to 'mga'

2. Enter and confirm the new Password.



FTL scheme

Flight Time Limitations scheme (accessed from the SetUp screen)

The FTL schemes screen is accessible from the Management drop-down (SetUp screen) and lists details of the two schemes in operation – The UK (CAP371) scheme and the EU (Subpart Q) scheme.

Flight Time Limitation Schemes

1 UK (CAP371) Basic FDP against Local Time of Start, sectors flown.

Single CREW

Local Time of Start	Sectors							
	1	2	3	4	5	6	7	8+
0600 0659	10:00	10:00	10:00	10:00	9:15	8:30	8:00	8:00
0700 1259	11:00	11:00	11:00	11:00	10:15	9:30	8:45	8:00
1300 1759	10:00	10:00	10:00	10:00	9:15	8:30	8:00	8:00
1800 2159	9:00	9:00	9:00	9:00	8:15	8:00	8:00	8:00
2200 0559	8:00	8:00	8:00	8:00	8:00	8:00	8:00	8:00

Multi CREW

Local Time of Start	Sectors							
	1	2	3	4	5	6	7	8+
0600 0659	13:00	12:15	11:30	10:45	10:00	9:30	9:00	9:00
0700 1259	14:00	13:15	12:30	11:45	11:00	10:30	10:00	9:20
1300 1759	13:00	12:15	11:30	10:45	10:00	9:30	9:00	9:00
1800 2159	12:00	11:15	10:30	9:45	9:00	9:00	9:00	9:00
2200 0559	11:00	10:15	9:30	9:00	9:00	9:00	9:00	9:00

Minimum Rest = 12:00 or preceding duty period.

2 EU (subpart Q) Allowable Flight Duty Period

Window of Circadian Low (WOCL) = 0200 - 0559 Local Time

Local Time of Start	End Time	No. of sectors				
		1-2	3	4	5	6+
within WOCL		11:00	10:30	10:00	9:30	9:00
		Plus 1 min. for each min. past 0400				
All other times		13:00	12:30	12:00	11:30	11:00

End Time within WOCL: 13:00, 12:30, 12:00, 11:30, 11:00
Less 2 min. for each min. past 0200

Extension: 1 Hr allowed (maximum of 2 within any 7 days)

Maximum sectors available with an extension:

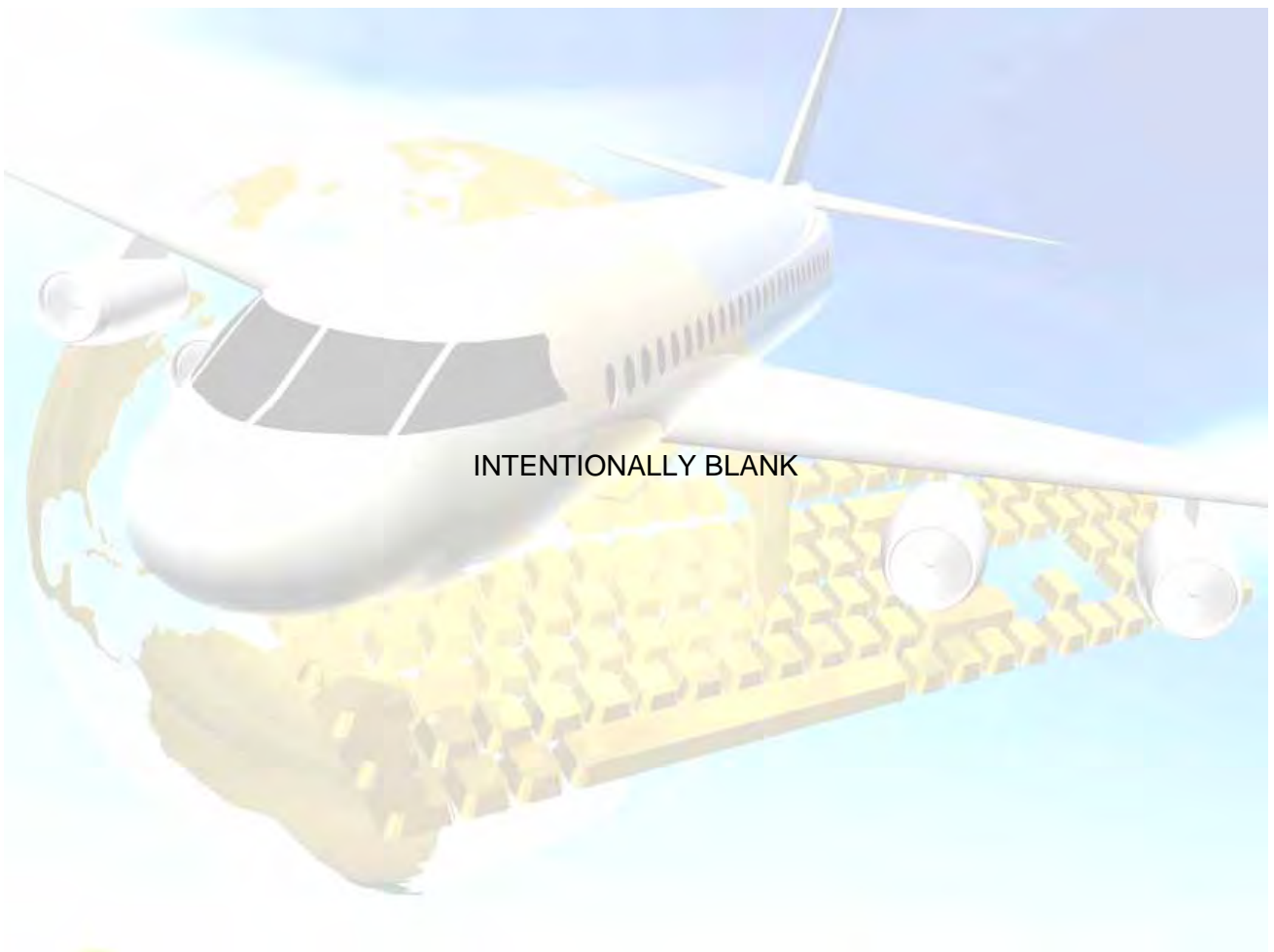
Start / End involves WOCL by:	more than 2 hrs up to 2hr	2
Start / End at all other times		4
(NB if Local start time 2200-0159, Max FDP = 11:45)		6

Minimum Rest = 12:00 or preceding duty period (Home base), 10:00 or preceding duty period away from home base.

This module is internally configured to operate under the UK FTL scheme. Contact MGA to re-configure.

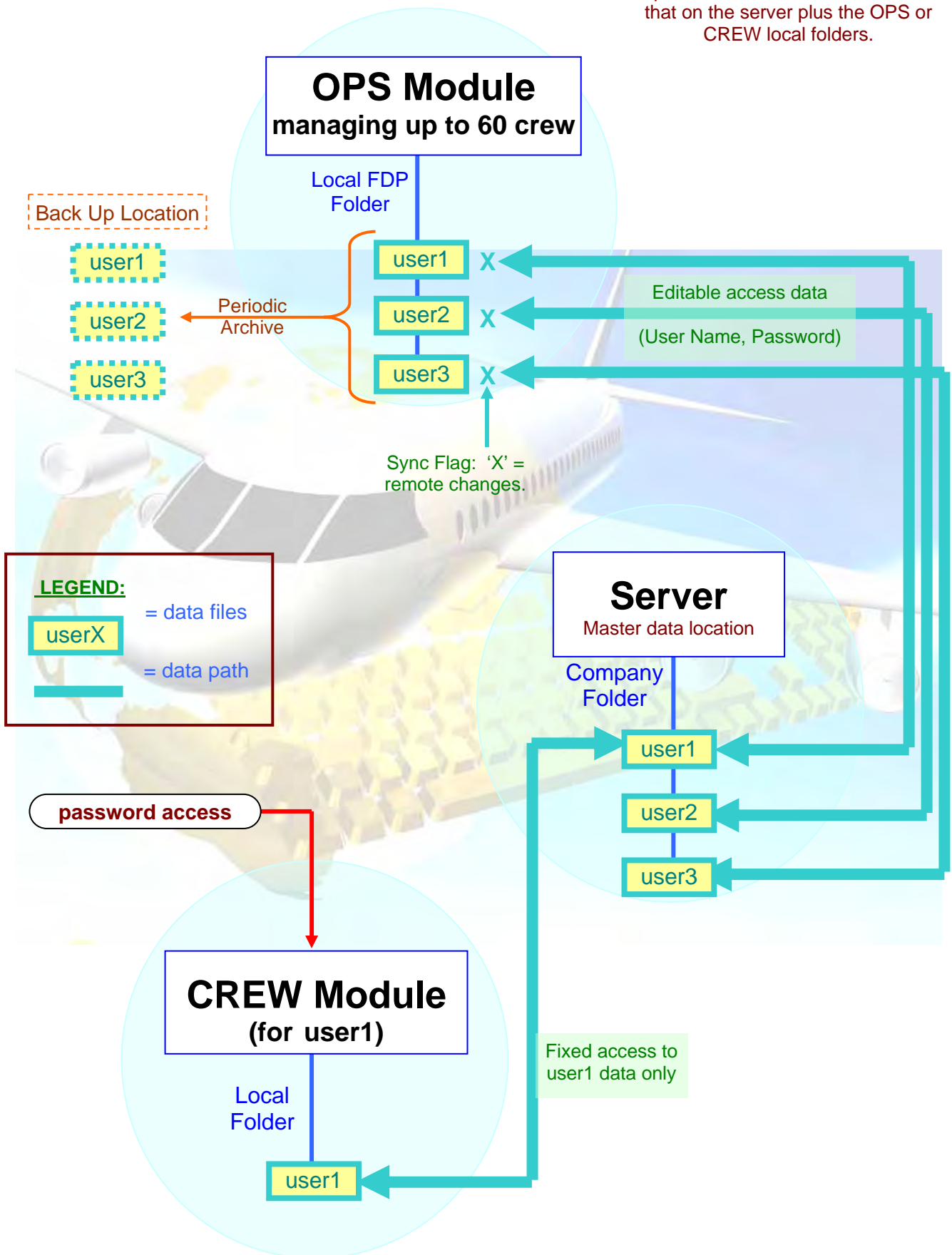
Pre-post Minima: Preflight: 1:00, Postflight: 0:30, PreSplit: 0:15, PostSplit: 0:15

Note that webFDP is internally configured to employ one or the other scheme, and cannot be changed by the user.



webFDP where's my data?

Data for user1 can exist in up to 4 separate locations. The latest data is that on the server plus the OPS or CREW local folders.



web output

1 Data file

Output of sample records for ZZ.

ZZ: FDPdata

ZZ: FDPdata 04-Nov-09 15:00:11

No	Ident	copy	Start Date	day	Locality	Time	UTC	Crw	Sx	ON	S1	S2	end	OFF	Duty	Flying	Note	Last	Alerts	Basi
0001	ZZ		29-Sep-09	TUE		0800	0	Single		0800	1200	1500	1800	1830	10:30	00:00		****		00:00
0002	ZZ	ALT	06-Oct-09	TUE	EHAM	1215	2	Multi	4	1015			2145	2230	12:15	01:30	ok test	15:45		11:45
0003	ZZ	ALT	07-Oct-09	WED	EHAM	1215	2	Multi	4	1015			2145	2230	12:15	04:35	ok test	11:45		11:45
0004	ZZ		08-Oct-09	THU	OMRK	0930	0	Multi	3	0530			1345	1455	09:25	02:15		07:00		12:30
0004	ZZ		09-Oct-09	FRI	OMRK	0930	0	Multi	3	0530			1345	1455	09:25	00:00		14:35		12:30
0006	ZZ		10-Oct-09	SAT		0800	0	Single	2	0800			1800	1830	10:30	02:30		17:05		11:00
0005	ZZ		12-Oct-09	MON	OMRK	0930	4	Multi	3	0530			1430	1530	10:00	00:00		11:00		12:30
0006	ZZ		13-Oct-09	TUE	OMRK	0930	4	Multi	3	0530			1430	1530	10:00	02:20		14:00		12:30
0007	ZZ	ALT	15-Oct-09	THU	EHAM	1215	2	Multi	4	1015			2145	2230	12:15	03:30	ok test	18:45		11:45
0008	ZZ		16-Oct-09	FRI	OMRK	0930	4	Single	3	0530			1345	1455	09:25	01:45		07:00		11:00
0016	ZZ		17-Oct-09	SAT		0800	0	Single	2	0800			1800	1830	10:30	00:00		17:05		11:00
0009	ZZ		18-Oct-09	SUN	OMRK	0930	4	Multi	3	0530			1430	1530	10:00	02:20		11:00		12:30
0010	ZZ		21-Oct-09	WED		0830	0	Single	3	0830			1800	1900	10:30	02:20		17:00		11:00

Activity Log file (accessible in Ops module only)

MGAsoftware.com: webFDP Activity Log

Activity records are created when crew data is Uploaded or downloaded from the company web server.

Serial	userID	Transaction date-time	Operation	Session Details	Flag	Note
0048	OPS	19-Nov-09 16:28:08	Upload	CC: FDPdata 19-Nov-09 16:28:07	ok	
0049	OPS	19-Nov-09 16:28:39	Download	ACE: FDPdata 19-Nov-09 12:23:27	ok	
0050	OPS	19-Nov-09 16:49:24	Download	ZZ: FDPdata 19-Nov-09 13:52:43	ok	
0051	OPS	19-Nov-09 17:17:48	Download		21	
0052	OPS	19-Nov-09 17:18:35	Download	ZZ: FDPdata 19-Nov-09 13:52:43	ok	
0053	OPS	19-Nov-09 17:18:51	Download	CC: FDPdata 19-Nov-09 16:28:07	ok	
0054	OPS	19-Nov-09 17:19:18	Download	ZZ: FDPdata 19-Nov-09 13:52:43	ok	
0055	OPS	20-Nov-09 16:12:06	Download	ZZ: FDPdata 19-Nov-09 13:52:43	ok	
0056	OPS	25-Nov-09 19:42:11	Download	ZZ: FDPdata 19-Nov-09 13:52:43	ok	
0057	OPS	25-Nov-09 19:42:20	Upload	ZZ: FDPdata 25-Nov-09 19:42:17	ok	
0058	OPS	27-Nov-09 12:46:13	Upload	ZZ: FDPdata 27-Nov-09 12:46:09	ok	
0059	OPS	27-Nov-09 12:51:55	Download	ZZ: FDPdata 25-Nov-09 19:42:17	ok	
0060	OPS	27-Nov-09 18:23:53	Download	ZZ: FDPdata 25-Nov-09 19:42:17	ok	
0061	OPS	27-Nov-09 18:24:46	Upload	HAM: FDPdata 27-Nov-09 18:24:45	ok	
0062	OPS	27-Nov-09 18:26:57	Download	ZZ: FDPdata 25-Nov-09 19:42:17	ok	
0063	OPS	27-Nov-09 18:27:49	Upload	BIFO: FDPdata 27-Nov-09 18:27:47	ok	
0064	OPS	27-Nov-09 18:29:17	Download	ZZ: FDPdata 25-Nov-09 19:42:17	ok	
0065	OPS	28-Nov-09 09:36:02	Download		21	
0066	OPS	28-Nov-09 09:36:30	Download	ZZ: FDPdata 27-Nov-09 20:09:19	ok	
0067	OPS	30-Nov-09 16:00:33	Upload	ZZ: FDPdata 30-Nov-09 16:00:29	ok	
0068	OPS	30-Nov-09 19:53:26	Upload	ZZ: FDPdata 30-Nov-09 19:53:22	ok	
0069	OPS	30-Nov-09 19:54:26	Upload	ZZ: FDPdata 30-Nov-09 19:54:22	ok	
0070	OPS	30-Nov-09 20:01:16	Upload	ZZ: FDPdata 30-Nov-09 20:01:14	ok	
0071	OPS	30-Nov-09 20:22:09	Upload	ZZ: FDPdata 30-Nov-09 20:22:05	ok	

71 Records

Double-Click to edit an Activity Log Note.

Q & A

What if a file is deleted from the server?

Fix: Reconstitute the file from the local folder of the OPS module.

From the webFDP screen:

- 1 → Housekeeping → [select Crew]
- 2 → Housekeeping → Import Local
- 3 Edit as req.
- 4 → Housekeeping → Upload to server (copied to Local folder also)..

What if a file is deleted from the local folder?

Fix: Reconstitute the file from the server copy.

From the webFDP screen:

- 1 → Housekeeping → [select Crew]
- 2 → Housekeeping → Download from server
- 3 → Housekeeping → Upload to server (copied to Local folder also).

How do I know what files are on the server?

From the SetUp screen:

- 1 → Management → Server management → List Files
- To view a particular file , select it, and click the 'View File' button.

My crew member has forgotten his access password. Can I retrieve it for him?

The password is hard written to the crew module. Provided you know the admin password to the OPS module, you can decode a crew password in the OPS module from the Crew Register screen:

- 1 Position the cursor on required crew member:
- 2 → Housekeeping → Manage Crew →
- 3 Click the 'eye' next to password
- 4 Enter the OPS module password

The Crew module password reverts to plain language until the 'eye' is clicked again.

My internet is down. Can I carry on working?

Yes, whenever you use the option 'Upload to server' the system writes a copy to the local folder. When the internet is working again, load in the data you have edited and save it to the server.

From the webFDP screen:

- 1 → Housekeeping → [select Crew]
- 2 → Housekeeping → Import Local
- 3 → Housekeeping → Upload to server.

Somehow 'ZZZ' has been deleted from the Crew Register. I can see there is still a file for 'ZZZ' on the server (from using Server Management). How can I recover this?

You must create a new crew with the ident 'ZZZ'. Once created, simply download from the server.

The program says 'Import FDP data from web file on Local folder. Where is my Local Folder?

The location of the 'Local Folder' is listed on the SetUp screen

FdpClassic

webFdp comes with a sister file (FdpClassic) enabling communication with the legacy MGA system. FdpClassic differs from webFdp in that it is based upon a rolling diarised layout. FdpClassic has a similar presentation as the fdp-duty module except for two additional columns labelled SPLIT Off and on. Using FdpClassic allows webFdp datasets to be imported, viewed and integrated with other elements of the MGA AOC system (eg: 'Roster' and 'Schedule' software management tools).

The rolling diary layout employs One Row for each Day's Duty data. Consequently it cannot properly display a situation where Two Duties commence on the same calendar day (as the webFdp system can).

When importing data from webFdp, if the logic encounters two duty periods in one day it will use the Split Off-On columns to render the details of the two duties. The program will mark the record and write the text '2 DUTIES' in

BaseDate:	Ident:	Name:	DUTY		SPLIT		FDP	DUTY	HOURS	HOURS	Housekeeping	Rest	Alerts	Duty Period Max Hr		
12-Oct-09	ZZ	Zoot Hilev	ON	Off	On	END	OFF	DUTY	FLYING	Sx	NOTES	Rest	Alerts	Last 7d	Last 14d	Last 28d
29-Oct-09	THU		OFF											52.30	103.25	
30-Oct-09	FRI		1130			2200	2230	11:00	02:15	2				63.00	105.00	
31-Oct-09	SAT		OFF											44.00	94.30	
01-Nov-09	SUN		0530			1430	1500	9:30	03:35	3				47.30	94.00	
02-Nov-09	MON		OFF											39.30	94.00	
03-Nov-09	TUE		OFF											31.30	94.00	
04-Nov-09	WED		OFF											20.30	83.30	
05-Nov-09	THU		0930			1730	1800	8:30	02:15	2				29.00	81.30	
06-Nov-09	FRI		OFF											18.00	71.00	
07-Nov-09	SAT		OFF											18.00	62.00	
08-Nov-09	SUN		OFF											8.30	56.00	
09-Nov-09	MON		0630			1500	1600	9:30	02:15	1				18.00	57.30	154.00
10-Nov-09	TUE		0330	0700	1700	2300	2330	10:00	04:30	3	2 DUTIES			28.00	59.30	164.00
11-Nov-09	WED		OFF											28.00	48.30	164.00
12-Nov-09	THU		1430			2130	2200	7:30	03:30	2				27.00	56.00	159.00
13-Nov-09	FRI		1430			2130	2200	7:30	02:45	3				34.30	52.30	157.00
14-Nov-09	SAT		1230			2200	2230	10:00	03:45	3				44.30	62.30	157.00
15-Nov-09	SUN		1430			2200	2300	8:30	03:30	3				53.00	61.30	155.00
16-Nov-09	MON		0630			1530	1600	9:30	01:45	2				54.00	71.00	165.00

the notes column (as in the example below at 10 Nov):

Rest column

Note that the Rest column in fdpClassic works different to that in fdp-duty|: The value presented is the Rest period PRIOR to the current detail. This is the same criteria as in webFDP. (in fdp-duty the value is for the Rest AFTER the current detail)

Data

FdpClassic does not itself communicate with the web server, but instead reads and saves to copy web files (.htm) stored locally, along with reading data files (.csv) created by the legacy fdp-duty system.

Housekeeping drop-down

Functions available from the Housekeeping drop-down are:

- Import webFDP Choose crew member from list and Import webFDP data from local folder.
- Export webFDP Export and convert classic format to webFDP format. Print
- Print Hard Copy of rolling calendar display.
- Optimize ClearDown display to optimize memory (eg before saving)
- Load Data Choose crew member from list and load Classic FDP data (csv files)

Note that FdpClassic is available to the ops department only as a supplementary management tool

To migrate fdp records from Classic to webFdp:

For each crew member follow this process (eg crew ident XXX):

- In the Classic module - 1 click 'Load Data' and select crew member XXX.
 2 Click 'Export webFDP'

- In the webFdp module - 1 Click 'Manage Crew' (Crew Register screen) and create a webFdp crew member with a matching Ident (XXX).
 At the prompt: 'Now create virgin webFdp database for XXX' click Yes.
 At the prompt: 'Upload this sheet of data to the server' click Cancel (NOT Yes!).
 2. From the webFDP screen click 'Import Local' to import converted data.
 3. Click 'Upload to server' to save the converted data to the web server.

Crew Register screen (ops module only)

This screen is used to manage, select, add or delete data for up to 60 crew members. An editor overlay allows the operations department to edit and set individual crew data and permissions.

AOC Systems Demo										Housekeeping		Duty Periods					Flying		Status
Ident	Name	Recs	1st Entry	Last Entry	Last Report	Last Session	Sync	infoDate	Last 7d	Last 14d	Last 28d	Last 28d	Last 12m	Status					
01	ZZ Zoot Hilev	28	15-Oct-09	20-Jan-10	03-Aug-09	ZZ: FDPdata 01-Feb-10 16:33:55	ok	00-Jan-00	0:00	0:00	0:00			Active					
02	CC Cindy Cline	0	30-Dec-99	30-Dec-99	12-Oct-09	CC: FDPdata 05-Jan-10 18:12:44	X	00-Jan-00	0:00	0:00	0:00			Active					
03	SUT Sutton Tuiss	46	24-Jun-09	07-Dec-09	03-Aug-09	SUT: FDPdata 16-Dec-09 10:07:36	ok	00-Jan-00	0:00	0:00	0:00			Active					
04	ALT Al Timiter	168	05-May-08	07-Dec-09	11-May-09	ALT: FDPdata 29-Dec-09 17:51:37	ok	00-Jan-00	0:00	0:00	0:00			Active					

Sync Flags:

The 'Last Session' details displayed on the Crew Register is the most recent data transaction made from the OPS module. The version held on the server is the master version and this will either be data originated from the OPS module (Sync Flag = 'ok') or else data originated in a remote CREW module (Sync Flag = 'X').

To Check:

Sync Flags are refreshed by clicking 'Refresh' from the Housekeeping drop-down.

The OPS module scans the server files and sets the sync flag to 'X' for any crew member where the server data is different to that in the Local FDP folder. By definition, this means that data has been written from a source other than the OPS module. Where a sync flag shows 'X', harmonisation is required for that dataset.

To Harmonise:

Download the data for the affected Crew Member. Make a visual check of the contents as required, noting the number of records and the Last Entry date. (Be aware that the Crew Register screen will continue to report the statistics of the previously loaded dataset - including the number of records and Last Entry date - UNTIL the new dataset is Uploaded to the server). From inspection, you would expect to see some additional duty information and/or the crew ID in the 'Origin' column, if the downloaded dataset has been edited by the crew member. Note that in tracing any anomaly, the Activity Log will show the transaction history for all datasets.

The Manage Crew editing overlay

webFDP: Manage Crew Data

Ident: <input type="text" value="ALT"/> * Name: <input type="text" value="Al Timiter"/>	Permissions & Status
Status: <input type="text" value="Active"/> Rank: <input type="text" value="Captain"/> OpTypes: <input type="text" value="ALL"/> Home Base: <input type="text"/>	User Name: <input type="text"/>
Maximum Duty Times (Hrs): 7d: <input type="text" value="55"/> 14d: <input type="text" value="95"/> 28d: <input type="text" value="190"/>	User Password: <input type="password" value="*****"/>
	Log Validity Period: <input type="text" value="60"/> mins Allow Multi-Write: <input type="text" value="N"/> Y/N Distribution Date: <input type="text"/>
	<input type="button" value="MAKE CREW MODULE"/>
	<input type="button" value="Okay"/> <input type="button" value="Cancel"/> <input type="checkbox"/> New Rec

Accessed from the Housekeeping drop-down, this allows the ops department to set crew data and permissions.

This overlay is available for creating or editing crew member data. A maximum of 60 crew is provided for. The password set becomes log on requirement and the Log Validity Period controls the window of exclusivity that the crew member has over editing his/her data. 'Allow Multi-Write' defaults to ON for Captains – this is to permit a Captain's CREW module to copy duty data to up to 3 other crew members.

Creating a CREW Module

Click the [Make Crew Module](#) button to create a Crew Module for the first time or to make a new distribution (eg after a change of password).



Enter the management Password (note this is NOT the same as the Crew members' password)

Confirm Yes at the next prompt.

Module creation is automatic from there on.



The New CREW Module

The name of the new file is 'webFdp-ZZZ.xls' where 'ZZ' is the user ident.

Once it has been created the CREW module can be distributed to the relevant Crew member for use on his/her computer. Note that it will only work for the ONE crew member. (user ident is not selectable within the program as it is within the OPS module).

The password specified on the Manage Crew dialog is required to starting the CREW Module (ie. to Log on). The CREW module is identified by a green banner at the head of FDP columns on the webFDP screen. Note that there are less options on the Housekeeping drop-downs of both the webFDP screen and the SetUp screen, compared with the OPS module.

Crew modules created from an OPS module have cloned web communication protocols (server access names and passwords). Each CREW module is identified by the crew member's unique user ident appended to the filename. From this module the crew member can access and edit his/her duty data ONLY on the webFDP server. The crew member must Log on using a password before the program will start. Password setting is managed and controlled by the ops department and the Log In function serves as a signal the ops department that the crew member is editing records.

The crew member needs a computer running a version of Microsoft Excel (97 or later), loaded with his/her **webFdp** CREW module, and of course a web access facility. A copy of the Airports database (aga.xls) is also needed on first issue.

Crew module names: **webFdp-XXX.xls** (where 'XXX' is a unique ident)
 User idents: 2-4 character alpha-numeric (A-Z,0-9) unique code.
 User password: Dedicated password enabling access to the webFdp system.
 webFDP access point: MGA can maintain a web data service on the clients behalf, or else the clients own web space may be used to hold the webFdp data and activity Log files

Note the extension '.xls' is a software option together with 'xlsm' and 'xlsb' when used in Excel2007.

Tip: Along with the CREW module, distribute a copy of the complimentary **shortcuts** program together with your company icon to the crew member. This will enable him/her to create a desktop icon for easy access.

Notes**Log Validity Period (LVP)**

The priority for a web transaction is arranged according a crew member's 'Log Validity Period' (LVP). The Crew module has priority while the LVP is current. The value for LVP is individually set by ops (between 10-180 mins) and impacts the process in the following way:

For the OPS module: No Log ON is required when starting the OPS module.

At Upload time, the logic checks if the remote LVP (for that Crew member) is active. If it is, the message is:

'LVP for XXX is still active. Upload not recommended. Continue with Upload ?'

- Click Yes to Continue or No to exit. (Be aware that continuing may cause conflicts)

cFor the CREW module: The user must Log ON at start time. This starts the LVP counting.

At Upload time, the logic checks if the LVP is still active.

If it has expired the message is: 'Cannot Save. LVP has expired'

Security

The master data location is your dedicated web server containing your most recent information.

Q: If this is on the web can this be accessed by anybody?

A: The data is held on a web page at a private web address, not accessible to search engines, but viewable by someone who knows the discrete address. However, it cannot be edited or changed without the use of a discrete user name and password. For all intents and purposes, your data is available to you and the ops administrator only. In other words, it is as secure as it can be. Note that **no personal data is kept on the web**. The crewID is the only connection to the crew member. If you use MGA server, then your data will be placed on an unindexed directory that will not be available to search engines. If you use your own web server, MGA can assist you to do the same thing.

Functions inoperative:

The following features are not yet implemented in the current release of webFDP:

- 1 Multi-Write capability
- 2 Updated times after editing out of sequence (use Refresh alerts and times)
- 3 Import Data (update utility accessible from SetUp management drop-down)
- 4 FTL scheme support for subpartQ (UK CAP371 supported only)

For the Future:

The duty day dialog above provides the natural starting point from which functionality can be extended to include tech-log and pilot log books. The webFDP principle forms the basis for an an homogenous single point of entry for operational data

webFdp is marketed by MGA with optional support and upgrade service plus web server management. For more details please contact: webFdp@MGASoftware.com.

www.MGASoftware.com