SPECTRO® JET-CARE®

webECHO™

User Guide for Jet-Care GPA Customers
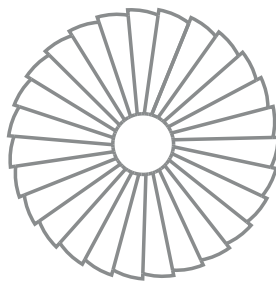
WELCOME TO webECHO™

GETTING STARTED

To access webECHO visit our website and go to the Log In area on the toolbar in the top right hand corner of the home page or use:

webecho.jet-care.com

Use the Welcome Page to log in using your allocated username and password OR if you are a new user to request a username and password.

MANAGE | REVIEW | ANALYSE

This guide outlines the main screens and functionality to enable you to manage, review and analyse your results for our Jet-Care GPA engine trend monitoring programs, as well as any Spectro Laboratory Analysis services you may use.

NEW FUNCTIONALITY

We are always looking for ways to improve the system and our 'New Features' button helps to keep you up to date with the latest updates, some of which are listed below:

- Additional functions within the statistics and distributions facilities

- Export raw data to produce your own graphs and distributions

- Create a downloadable PDF report of the current GPA trend plots.

- View historic GPA comments

ANALYSIS SUMMARY

After logging in to webECHO the **Analysis Summary** appears, providing you with a breakdown of all the analysis that has been carried out, that is applicable to your log in.

If you prefer a different screen on log in you can use the 'My Account' section to change this setting.

By using the tabs at the top of the **Analysis Summary** you can access the **Dashboard** of the chosen analysis type to review results, information and manage data.

QUICK FILTER LINKS

| #	Operator ▲▼	Registration ▲▼	Contract # ▲▼	Aircraft/Engine Type ▲▼	Serial ▲▼	Engine Type ▲▼	Age of Data (days) ▲▼	Last Trend ▲▼	Other Analysis?	Status ▲▼	Last Comment ▲▼	Create Report
1	WEB-DEMO7 (Palace International (TFE731))	DEMO-004	Expires: 30/04/2014	Hawker 800XP	DEMO-004	TFE731-5BR-1H	21	2018-01-01		🔴	-	Create Aircraft Report
2	WEB-DEMO7 (Palace International (TFE731))	DEMO-061	Expires: 31/05/2014	Citation III	DEMO-061	TFE731-3C-100S	81	2017-11-02		🟡	-	Create Aircraft Report
3	WEB-DEMO6 (Palace International (HTF7000))	DEMO-076	Expires: 29/02/2016	Challenger 300	DEMO-076	HTF7000	546	2016-07-25		🟡	-	Create Aircraft Report

Throughout the system data is displayed with an underline. For example, the headings of tables and data within tables. Click these links to access further information.

DASHBOARD

The Dashboard provides an overview of the current status of all aircraft and includes a number of different functions that allow you to view data, records, reports and manage your fleet.

STATUS
Summary of status of aircraft in the selected analysis type e.g. Gas Path Analysis. Use the grey arrow on the **Aircraft Navigator** to open a drop-down list of Aircraft available for quick access to the latest PDF reports, as well as produce trend graphs for your data.

FIND
Use the **Aircraft i**con to gain access to the full list of all aircraft. The drop down sections allow filtering to any available field and by selecting one from the list will display that record in detail. **OR** use the blue tabs at the top of the dashboard to access lists of records.

SEARCH
Use keywords to **Search** within the current area and view **Recent** saved searches.

LINKS Use quick link icons to view **Latest** and **Unread** results of equipment. **Faults & Events** can be used to go straight to the faults, events and exceedances page.

If there are any active **Comments** against the trends, this will be highlighted by a red circle containing the number of active comments.

Also **Categorise** aircraft by current analysis status.

OPERATORS

View the list of operators for the selected analysis type by choosing the **Operator** tab or using the **Operator** icon on the **Dashboard.**

The list indicates the quantity of records applicable to each operator and shows the current status and number of aircraft applicable to each operator.

AIRCRAFT

View the list of **Aircraft** by choosing the appropriate tab or using the **Aircraft** icon on the **Dashboard.** Use the **Status** icons, which feature throughout webECHO, to filter aircraft according to status, e.g. Red for Advanced, Yellow for Early, Green for Normal and White for Undefined.

INDIVIDUAL AIRCRAFT RECORD

You can use the individual record to change the information we hold on an aircraft. Once amended click the **Submit Change(s)** button for the data to be sent to Jet-Care for review and confirmation.

To submit an engine change please amend the respective engine serial number(s), click **Submit Change(s)** and enter the installation date in the Comments Box.

From the individual aircraft record page you can also send your engine data to Jet-Care by using the **Submit Manual Data** and **Upload Electronic Data** buttons. You can also view the **Faults and Events** obtained from electronic download files.
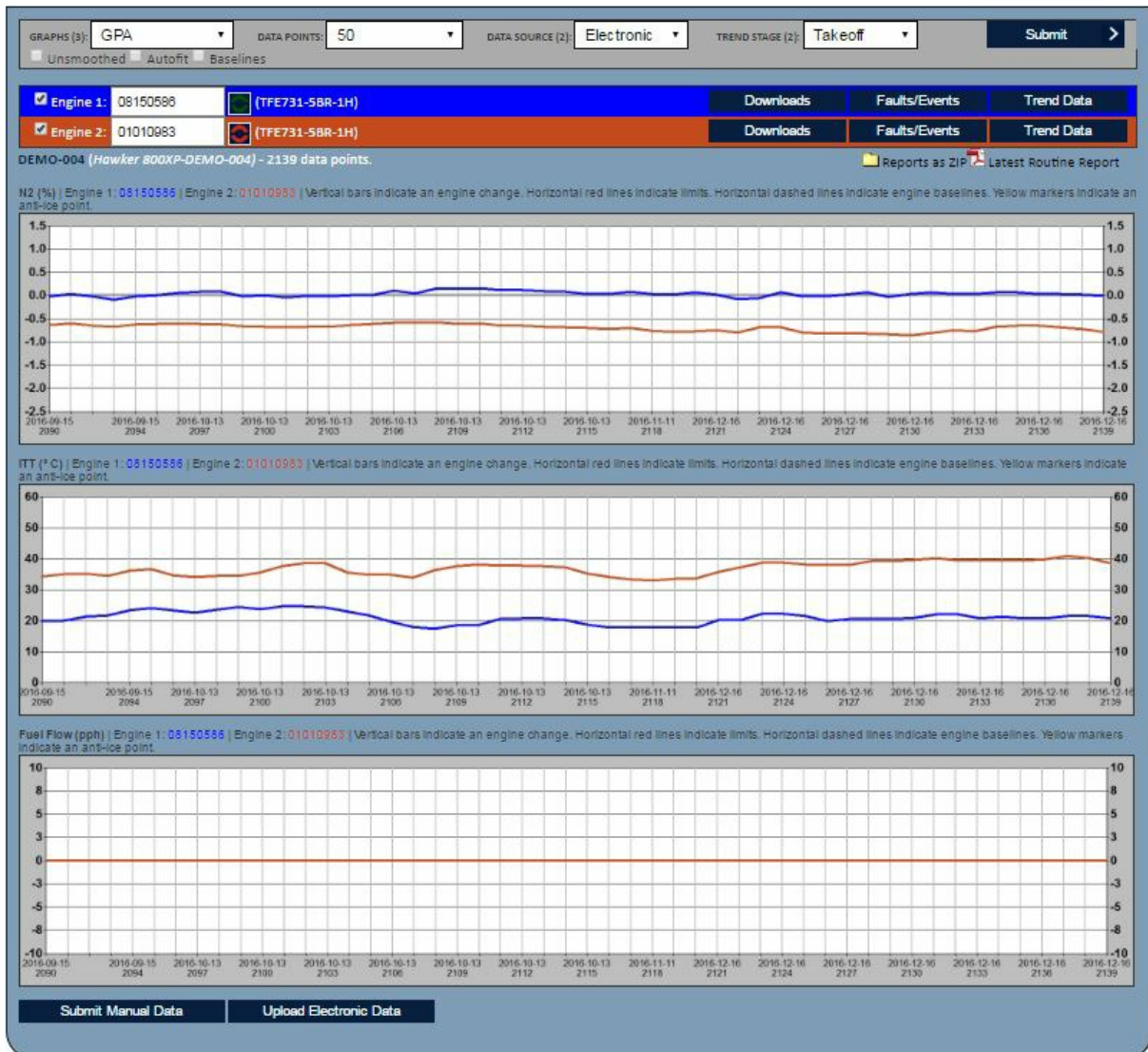
GPA TREND GRAPH

The **trend graph** shows the **engines** attached to the **current aircraft** and allows the trend stage and data source to be selected enabling the relevant trend plots to be shown.

View the **oil**, **vibration, rolldown** and any other applicable plots by selecting the appropriate drop down from the graphs drop down.

The status of each engine will be shown alongside its colour and serial number.

Press the **Submit** button to refresh/update the graphs. Quick links for **Engine Downloads, Faults** and **Data** are also available as well as a link to download the latest routine GPA report.

NB: The engines are shown on the plots in the same colour as its details above the graph. Engine changes will be shown for the respective engines.

GPA TREND DATA

ANALYSIS SUMMARY | **OIL ANALYSIS** | **DEBRIS & FILTER ANALYSIS** | **HYDRAULIC FLUID ANALYSIS** | **FUEL ANALYSIS** | **COOLANT ANALYSIS** | **TRANSFORMER ANALYSIS** | **GAS PATH ANALYSIS**

DASHBOARD | **OPERATOR** | **AIRCRAFT** | **REPORTING CONTACTS**

Last 50 Data Points for Engine: 08150586 - Electronic/Takeoff

Record	2139	2138	2137	2136	2135	2134	2133	2132	2131	2130	2129	2128	2127	2126	2125	2124	2123
Date	2017-08-16	2017-08-16	2017-08-16	2017-08-16	2017-08-16	2017-08-16	2017-08-16	2017-08-16	2017-08-16	2017-08-16	2017-08-16	2017-08-16	2017-08-16	2017-08-16	2017-08-16	2017-08-16	20
Time	5112:07:18	5109:24:07	5106:04:19	5105:24:28	5096:43:20	5092:57:46	5090:16:27	5087:03:57	5084:37:30	5081:58:29	5081:14:53	5078:39:57	5076:05:13	5074:36:04	5073:46:42	5069:42:19	5065:52:59 50
N1 (%)	91.3	96.3	91.3	91.3	95.7	90.5	95.7	90.1	95.2	94.0	93.4	94.9	92.6	92.5	92.7	96.2	92.2
N2 (%)	93.3	97.8	93.6	93.4	98.0	92.6	97.5	92.0	97.0	95.3	94.9	96.7	94.6	94.3	94.4	97.8	94.3
ITT (°C)	849	953	857	854	955	831	947	819	939	901	886	929	879	872	878	952	873
Fuel Flow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Altitude (feet)	-1014	-713	-936	-352	-464	-594	-719	-189	-690	460	-417	-711	-471	-313	33	-618	-223
IAS (knots)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mach	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19
Air Temp (°C)	-3.1	26.0	-0.8	-2.9	28.4	-9.4	24.5	-13.6	21.5	6.1	6.8	17.3	4.5	2.7	2.8	25.1	2.5
Temp Type	RAT	RAT	RAT	RAT	RAT	RAT	RAT	RAT	RAT	RAT	RAT	RAT	RAT	RAT	RAT	RAT	RAT
LP Vibration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HP Vibration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil Temp (°C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil Pressure (psi)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Torque	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rotor Speed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cycles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Flight Mode Setting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Create PDF | **Operator** | **Equipment**

When viewing an **individual aircraft record** click the **Data** button to view the tabular raw data supplied either in the download or manually submitted data.

GPA COMMENTS

#	Operator ▲▼	Registration ▲▼	Aircraft Type ▲▼	Serial ▲▼	Engine Type ▲▼	Age of Data (days) ▲▼	Last Trend ▲▼	Other Analysis?	Status ▲▼	Last Comment ▲▼	Report
1	WEB-DEMO7	DEMO-004	Hawker 800XP	DEMO-004	TFE731-5BR-1H	17	2017-01-31		🔴	-	
2	WEB-DEMO7	DEMO-061	Citation III	DEMO-061	TFE731-3C-100S	17	2017-01-31		🟡	-	
3	WEB-DEMO6	DEMO-076	Challenger 300	DEMO-076	HTF7000	207	2016-07-25		🟡	-	
4	WEB-DEMO6	DEMO-097	Gulfstream 280	DEMO-097	HTF7250	17	2017-01-31		🟢	-	
5	WEB-DEMO2										
6	WEB-DEMO4	DEMO-075	C90B	DEMO-075	PT6A-21	185	2016-08-16		🟢	-	

08444368 - Engine 1 Comment:

Concerning the previous reported intermittent spikes in N2, TGT and fuel flow on 10th, 11th and 13th Jan 2017.

Feedback received: (J Lahart email dated 26th January) - ' T/Shoot carried out, lower L/H Thermocouple found broken and replaced, T/couple harness replaced.
Feedback received: (P Carolan email dated 30th January) - EGR carried out following a report of an EGT close to limit at take off power, a negative margin of -15°C was identified and the #1 engine HMA was replaced (+2°C margin obtained).

We will await further data to confirm trend stability and to re-access the trends following the above maintenance actions (data currently to 24th January) (31 January 2017)

Feedback | **Close**

To view the comments on the aircraft page, click on the date in the last comment column. NB: There will only be a date in this column if there is an active comment against this aircraft.

The comment should appear on screen. To hide the comment, click on the toggle box again.

REPORTING CONTACTS

Use this section to view and change the details held for each Contact receiving reports.
The search toolbar can be used to search for Contacts directly.

Use the **List/Detailed View** icon to change from list view to individual contact view. This function is available throughout webECHO.

FEEDBACK

If you would like to provide feedback or send us a message select the **Feedback** button, complete the necessary information and click **Submit**.

The **Comment/Feedback** button is found at the bottom of the individual Aircraft record pages.

MY ACCOUNT

Manage your password for webECHO as well as change your home page view and download offline programs.

If you have any further questions about webECHO please do not hesitate to contact us at:

webECHO@jet-care.com

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