



# GAS PATH ANALYSIS



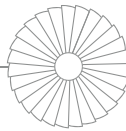


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## GAS PATH ANALYSIS BY JET-CARE®



At the forefront of engine trend monitoring services to the global aviation industry since 1981, Jet-Care's independent data analysis services evaluate and monitor the health of your gas turbine engines to ensure they are consistently operating at peak performance.

We understand the time, safety and maintenance pressures you face which is why we respond quickly and accurately to help you meet your deadlines. Our GPA service analyses core engine data to help identify significant changes in engine condition. The data generated allows the early detection of problems that may reduce engine efficiency or lead to unscheduled downtime, expensive repairs and ground running.

## THE BENEFITS OF GPA

Our services identify core engine degradation. By comparing trend data against our engine models, we can find the point at which long term wear begins to significantly decrease engine efficiency. We can also identify other performance issues such as problems with main engine instrumentation, bleed air losses from defective bleed valves and ducting and limiting turbine temperature which can restrict take-off power.



## HOW DOES GPA WORK?

From your flight data, we analyse key engine parameters including fuel flow, shaft speeds and gas temperatures.

These recordings are corrected to standard conditions and compared with our engine models. We produce trend plots using the corrected data and analyse these trends to assess any change in the condition of the engine.

Trends and associated comments are available online using webECHO™, in addition you will receive a monthly report with your latest trend status. Significant deviations prompt an alert or advisory which includes an interpretation of potential problems based on current knowledge of your aircraft engines and comparable fleets in the system.

## WHY JET-CARE?

With a proven track record and unrivalled reputation in the industry, we believe our service is second to none. Engine data is processed and evaluated within 24 hours with the flexibility to fast-track if required. An experienced team of engineers work to stringent ISO quality standards and can offer immediate support to your own teams during fault diagnosis. For all these reasons the Jet-Care GPA engine performance trending service is the only choice for complete peace of mind.



### iECHO GPA™

This unique application for iPad® allows pilots to enter data electronically rather than record it manually on paper trend sheets. Aircraft equipped with connectivity can then submit the data during the flight or on the ground for prompt analysis, saving valuable time and effort.

By recording data flight by flight, engine health can be continuously trended and monitored. Engine deterioration and faults can be detected by analysing deviations from the trend model for that aircraft/engine combination.



iECHO GPA is free to download from the App Store<sup>SM</sup>

## ENGINES CURRENTLY TRENDED ON GPA

**GENERAL ELECTRIC** CF34 | **HONEYWELL** TFE731 • ALF502 • LF507 • HTF7000 Series

**HONEYWELL/GE** CFE738 | **PRATT & WHITNEY CANADA** 100 Series • 300 Series • 500 Series • JT15D • PT6

**ROLLS-ROYCE** AE3007 • BR700 Series • Tay 611 | **WILLIAMS INTERNATIONAL** FJ44

In order to provide a comprehensive GPA service to the aviation industry Jet-Care has an ongoing development program to enhance its engine portfolio.

# REPORTING

## webECHO™

webECHO is a versatile online resource available 24/7/365 to manage your aircraft, fleet data and view your latest engine trends and reports in a single portal. The integrated system, which is password protected for complete confidentiality, provides you with access to view your download history and current trends and can run on a variety of mobile devices such as iPads® and Android tablets.



# STANDARDS



Our unrivalled expertise, quality control and integrity are supported by industry recognised accredited certification that assures compliance to procedures within our organisation. Lloyd's Register Quality Assurance (LRQA) verifies that Jet-Care comply with EN9100 and ISO9001 Quality Management Systems standards. The scope of our quality management system approval is the analysis and interpretation of flight and other data for the purposes of assessing engine condition.



"We have been providing high quality engine trending services to the global aviation industry since 1981. Our goal? To save you time and money by dealing with problems before they arise."

David Glass | Founder

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