



Shell Care®
OIL ANALYSIS SERVICE

Serviceability Confirmed! Oil Analysis Monitors Aircraft Wear



analysis and reporting procedures are fast, accurate, and highly affordable.

As an integral part of your preventive maintenance, AeroShell Care monitors the condition of piston and turbine engines and aircraft systems. It detects abnormal and critical conditions, and lets you know about them before serious damage sets in.

AeroShell Care will:

- Detect conditions that may lead to failures
- Determine the serviceability of aircraft engine oil and lubricants in other oil-wetted aircraft systems
- Determine correct oil change intervals
- Deliver data for efficient maintenance management
- Support warranty claims and resale assessments
- Provide data for FAA-approved TBO extensions

AeroShell® Care is the oil analysis program offered by Shell that complements aircraft preventive maintenance procedures.

The program provides you with a management tool for maintenance and a thorough understanding of what's going on inside piston and turbine engines, hydraulic systems, and geared drives.

The AeroShell Care program delivers the finest quality testing and analysis of your aircraft's lubricating oils. The sampling,

First in Quality

Shell has selected Analysts, Inc. as the independent laboratory most capable and qualified to monitor the condition of Shell lubricants used in your aircraft.

Analysts, Inc. has been a pioneer in providing diagnostic services through oil analysis since 1960. The company delivers its services through state-of-the-art equipment and leading-edge technology. AeroShell Care services are performed at the company's Atlanta and Oakland laboratories, where experienced personnel analyze and report the current condition of your oils and the components which they lubricate.

Through the AeroShell Care program, you receive:

- Oil sampling kits that contain clear instructions, forms, sampling and mailing containers
- 24-hour processing turnaround for all samples
- Critical alerts that are reported immediately to you by an experienced data analyst
- Computer-generated analysis reports that are easy to understand and detail lab results, diagnostic and corrective action recommendations

- Two separate analysis packages, plus access to other lab services

First in Performance

AeroShell® Care service includes complete spectrochemical and physical properties analyses. This type of testing diagnoses equipment conditions and establishes trend line analysis for you to monitor.

In spectrochemical analysis, oil samples are tested for wear and contamination by measuring the concentration of 21 metallic elements present within your oil. Lab procedures



measure the level of microscopic particles of such elements as iron, chromium, aluminum and silicon (dirt) with part-per-million accuracy.

The AeroShell Care complement of physical properties tests measure important characteristics of your lubricant to detect chemical changes that may have taken place within your components since the last sampling.

Viscosity is measured for verification of proper grade in service. Viscosity tests also reveal the effects of fuel dilution, oxidation, or oil contamination.

The presence of water is mea-

sured in percent volume to indicate contamination from outside sources or from internal condensation.

Depending on the package you select, the oil's Total Acid Number (TAN) is determined to indicate oxidation and the timing for turbine engine oil changes.

Two Packages Available

The AeroShell Care program fits the needs of aircraft owners—large and small. It includes two test packages.

AeroShell Care Basic. This analysis package includes spectrochemical, viscosity, and water tests.

AeroShell Care Plus. This package includes spectrochemical, viscosity, water, and total acid number.

First in Maintenance Recommendations

Upon completion of the laboratory tests, expert data analysts use established guidelines to check for changes in component wear and in the rates of oil contamination.

From the analysis data and a computer database containing extensive specifications on fluids, equipment and components, these experts evaluate and prescribe specific maintenance recommendations to correct problems and rectify their causes.

When a critical condition is detected, you are contacted immediately.



For each sample tested, you'll receive a report documenting the test results, interpretation of the results, and any feedback that may be required. This information is mailed to your location.

Or, if you prefer, data can be accessed on-line through Analysts' proprietary software program, Lube Oil Analysis Management System®. **LOAMS®** is available directly through your AeroShell Care laboratories.

Additional tests and services may be optionally purchased through the AeroShell Care oil analysis program. Those tests include Direct Reading or Full Ferrographic analysis to pinpoint suspected wear severity and causes, fuel analysis and hydraulic particle count (PC) testing.

Affordable Protection

See for yourself how AeroShell Care oil analysis will contribute to your aircraft maintenance. Contact your Shell distributor, or call the AeroShell Care customer service representative at:

1-800-SHELL82
(743-5582)



Shell Care®
OIL ANALYSIS SERVICE

© Analysts, Inc. 1995-2000
SOC: 878-00

AeroShell® is a registered trademark of Shell Oil Company. LOAMS® is a registered trademark of Analysts, Inc.