ANSETT AUSTRALIA

FleetOil helps keep planes on schedule

Ansett Australia operates a diverse fleet of 71 aircraft including 22 Boeing 737's, 20 Airbus A320's, 13 BAe146's, 2 Boeing 747's and 10 Boeing 767's. Flying around 500 segments every day, Ansett carries more than 11 million passengers every year to destinations in 6 countries. A staff of over 11,000 including a maintenance team of 2,500 operating from 6 major bases around Australia keeps the airline running. The company spends roughly 22% of it's operating budget or in excess of $A350 Million annually to maintain its fleet.

The Challenge of Maintaining a Reliable Service

A modern airline runs to a tight schedule. Any unplanned downtime means planes don't leave on time and customers don't get to where they want to be on time. It also means rearranging the flight schedule, the maintenance schedule and a host of other linked activities.

Ansett takes regular oil samples from 104 Starter Motors and 86 Integrated Drive Generator components on their aircraft. Aviation lubricants are required to operate over an extreme temperature range – down to - 40 C (-40 F) for cold starting and up to more than 250 C (482 F) for maximum bearing temperatures.

The samples are taken regularly by maintenance technicians at ports throughout Australia.

The samples are then analyzed in a laboratory operated by Ansett's oil supplier MOBIL, in a program known as SOAP (Spectrometric Oil Analysis Program). The large number of samples meant that the logistics of managing the data was difficult.

Maintenance staff had to manually check each sample's data against limits, log and record that data, and sort and file the reports. "This was a major clerical task, being done by valuable technical resources" says Paul Bithavas, Fleet Technical Engineer for Ansett's Fleet Maintenance headquarters at Melbourne's Tullamarine Airport. "Quality and timeliness of the SOAP program was affected. Increased delays on analysis leads to higher failure cost due to the fact that a failure is far more expensive than one that's prevented through early detection."

"If a starter motor fails in Darwin and there is no spare, the aircraft could be out of action for most of the day. This could mean three cancelled flights, lost revenue, disgruntled passengers, lost credibility, and reduced schedule integrity. If you can catch one of those, you're ahead." says Paul.

The Solution

Ansett searched for a solution and learned of Dingo's FleetOil Professional for Windows through their oil supplier. In early 1996 Ansett installed the software, and a modem module which enables them to receive their results electronically. Dingo also provided software to convert all of their historical sample information into the database, providing baseline data.

Ansett then used manufacturers recommendations and their own experience to establish alert limits within the FleetOil software. "We've built two level alerts; a cautionary alert followed by a

higher level red alert that requires immediate action if triggered" says Paul. "We're only interested in those results that exceed our criteria and become exceptions; they're the only ones I want to know about."

The Results

"We no longer look at every result and now totally rely on the alert system. We review each alert and in seconds can decide on action. We can graphically view the history and trends of the component, and consider the possible consequences. At one extreme we will straight out replace the unit, or we may call up temporary additional inspections of magnetic chip detectors. It is far easier to schedule a change and pull the component apart in the workshop. The workshops prefer to check and find nothing than allow a component failure, which can cause a major operational disruption and condemn the unit."

"Starter motors for aircraft cost around $38,000 dollars which is insignificant compared to delay costs which major airline manufacturers estimate at several thousand dollars per hour."

"For the IDG's we use FleetOil to monitor oil quality rather than just detect failures. This way we can ensure the condition of the oil is good in mechanically critical equipment. We change the oil before acidity reaches a critical point."

"IDGs are a couple of hundred thousand dollars each so it only takes one starter per year or one IDG every few years to pay for the whole program."

The benefits of FleetOil to the airline? "Peace of mind – knowing that the results come in reliably. You can hit a button and get the software to process the data. The system effectively monitors and alerts you only of the exceptions. Exceptions can be set low enough to ensure everything of interest is being captured. It takes a minute to review the exceptions and act on them very rapidly. When you do have an exception, the fact that you can click on a couple of buttons, bring up the history and make positive decisions is a great benefit. The bottom line is we are more effective in a fraction of the time than it took before. It is so simple to manage our program with FleetOil. If it's easy to use, you use it more."

Ansett has been using advanced software from Dingo to "Run with Intelligence" since 1996.

Dingo - North America
6551 South Revere Parkway
Suite #210
Englewood, CO 80111

Phone: 303 662 9103
Fax: 303 662 9269

Dingo - Asia Pacific
Level 2
9 Sherwood Road
Toowong QLD 4066

Phone: 07 3115 9000
Fax: 07 3115 9010

www.dingo.com
info@dingo.com

FleetOil™ FOR WINDOWS™

Dingo
run with intelligence