

US jet turbine engine manufacturer selects Wearthcheck

AMERICAN COMPANY, Allied-Signal Aerospace, which manufactures Garrett jet turbine engines, has appointed Wearthcheck as its accredited oil analysis laboratory for Africa.

Sophisticated

This follows a recent visit by Allied-Signal's Manager of Independent Facility Administration, Richard Schuller, to approve Wearthcheck's equipment. Mr Schuller, who travels the world looking after the company's international interests, commented that he had not come across an oil analy-

sis laboratory which surpassed Wearthcheck's technological sophistication.

Technical Director Gary Brown left for Phoenix, Arizona at the end of September to undergo specialised training at Allied-Signal's offices.

"Although oil analysis methods are reasonably standard worldwide, Allied-Signal has set procedures and specifications relating to their jet engines," said Gary before he left. "I will be familiarising myself with their interpreting techniques and studying their methods of identifying debris trapped in oil filters."

In the past, oil samples for Garrett engines were sent to the USA or Germany for analysis. It will be far more convenient for Execujet, the agents for Garrett jet turbine engines in Africa, to send samples to Wearthcheck's Pinetown laboratory.

In-depth

After spending a week at Allied-Signal, Gary goes on to Predict Technologies in Cleveland, Ohio to do an in-depth evaluation of a direct-reading ferrograph with a view to purchasing the instrument for wear particle analy-



Gary Brown.

sis. He then flies to Wearthcheck Canada in Toronto, who are the approved Canadian laboratory for Allied-Signal Aerospace and who currently make use of the ferrograph technique. His last stop will be at one of the larger users of oil analysis in the USA to assess the emphasis they place on troubleshooting - an aspect of the industry which Gary believes needs more attention.

Canadian associate visits Wearthcheck

BILL QUESNEL JNR, general manager of Wearthcheck Canada, completed a fact-finding visit to Wearthcheck South Africa recently as part of the eight-member International Wearthcheck Group (IWCG) networking initiative.

Of special interest to their Canadian associate was Wearthcheck's computer system.

"We are planning a major software upgrade at Wearthcheck Canada and I have found it most valuable to see how Wearthcheck SA's system operates, particularly the LAN operation as this is a rapidly developing trend in North America."

Efficiency

How to maintain efficiency whilst taking on an increased workload was also of interest to the Canadian visitor.

"South Africa is the largest of the eight Wearthcheck companies internationally. Our lab in Toronto, which is considered large by Canadian standards, processes 350 samples per day compared with Wearthcheck SA's 1000 samples daily.

Achievement

"The fact that Wearthcheck SA is the only company worldwide to do Caterpillar's work - the organisation runs its own labs elsewhere in the world - is a real feather in their cap and regarded with envy by other members of the IWCG."

Wearthcheck Toronto is the leading oil analysis laboratory in Canada, employing 14 people and servicing the whole country. Their major clients include Komatsu and Esso, and they have been the accred-



During his recent fact-finding visit Bill Quesnel Jnr, general manager of Wearthcheck Canada (left), spent many productive hours in Wearthcheck SA's laboratory with Alistair Geach.

ited lab for Garrett jet turbines for the past three years - one of the reasons for Gary Brown's current visit to Canada. The Canadian lab has moved into areas as yet untried by Wearthcheck SA - they test fuel, coolants, brake fluids and perform analytical ferrography and, says Bill, would be happy to share this expertise with other Wearthcheck companies.

"Since the IWCG was

established two years ago with members in Australia, Belgium, Canada, Germany, South Africa, Spain, the UK and the USA, the eight Wearthcheck companies have been liaising effectively and sharing expertise. When the formal charter for the IWCG is finalised at the annual meeting in Germany next year, we expect that the network will be further strengthened to the benefit of all involved."

Infocheck upgrade means added value for customers

A MAJOR upgrade of Wearcheck's computerised Infocheck system - as yet unmatched in South Africa - means even more benefits for customers who are linked to the system.

User - friendly

The system has for many years given customers access to up-to-the minute reports and statistics on their own premises by duplicating equipment and sample data from the Wearcheck computer on to the user's own computer, eliminating paperwork completely.

Now, by rewriting the software driving the system, Wearcheck offers greater accessibility to Infocheck through DBase 4 - which is among South Africa's most popular database software - and the popular LAN system which allows multiple users.

"The system is completely menu-driven and is now more user-friendly than before,

enabling people with limited computer knowledge to use the system," says IT manager John Wasserfall.

Reports are also produced in greater detail and clients can now take advantage of a new option to receive reports for the planning of filter changes and servicing.

In the past, each of the 30 Infocheck installations had a slightly different version of the programme which made the system difficult to maintain.

Quicker

"We have now incorporated all the best features into one standard programme which will enable us to offer a quicker response and more effective service," says John. "If customers have any suggestions for modifications in the future, they may be incorporated in the next general revision of the programme."

Installation of the new pro-



Lorain de Bruin (Customer Support) and IT manager John Wasserfall go over some last-minute details on the new improved Infocheck system.

gramme is now underway and John hopes to have all 30 of the current users on the new system by the end of the year.

"This new development has widened the gap between Infocheck and other computerised oil analysis packages available in South Africa," he said.

Unique system

"No other system allows clients to download information onto their own computers,

to access samples from a number of different vehicles at once or to make use of a wide range of selection criteria to generate reports."

Future plans for Infocheck include an add-on module with a full maintenance planning package. Although the main module will focus on oil analysis, the package will allow clients to combine the information with statistics from their own database to obtain a complete service.

Oil analysis is a vital part of P&M's winning maintenance management programme



Les Maker, managing engineer for P&M Plant Management.

WEARCHECK's oil analysis service is an integral part of a plant maintenance management package which has enabled P&M Plant Management to improve the availability of construction machinery for the Kwazulu Department of Works from about 35% to

65% - effectively doubling the fleet - while reducing expenditure on maintenance and repairs.

Similar results have also been obtained for a second appointment covering vehicles and offroad equipment for the Transkei Department of Works and Energy. A total of 19 preventive maintenance contracts are in operation in both Kwazulu and Transkei, with oil sampling being an integral part of the functions each contractor is required to carry out.

Computer link

"We operate a custom-designed computerised plant management information system to assist with the manage-

ment of these contracts," says Les Maker, managing engineer for P&M.

"Oil analysis reports form an important part of our database and provide us with important information which is used to plan maintenance and repair work."

Wearcheck's Infocheck system is linked via modem directly to P&M's management information system, providing access to an up-to-date database at the touch of a key.

P&M, a division of consulting engineers Uhlmann Witthaus and Prins based in Pietermaritzburg, used oil analysis from the start of the Kwazulu and Transkei contracts which currently generate about 400 samples per

month for Wearcheck.

"I believe no plant fleet should be run without oil analysis as the benefits override the costs manyfold," said Mr Maker. "It is difficult to quantify the exact cost savings in monetary terms but we have saved hundreds of thousands of rands through the early detection of problems.

Cost savings

"For example, we spent about R90 000 on oil analysis over two years in Kwazulu, an insignificant amount when one considers that a single large motor costs over R30 000 to overhaul. In my view, oil analysis is an essential tool in proactive preventive maintenance."

Flying Samples

WEARCHECK'S turnaround of samples is impressive at the best of times, but never more so than when Bell Equipment made use of their troubleshooting helicopter service recently, to fly in a sample requiring urgent analysis.

Receptionist Eileen Rollinson was the first point of contact when she was surprised by a phone call from Bell's flying technical analyst, Mike Dutton, asking the colour of the roof and whether there were any landmarks nearby which would be visible from the air.

Urgent

Minutes later the distinctive yellow Bell helicopter landed, the sample was rushed to the lab and, by the time Mike was back at his Pietermaritzburg office, the Wearcheck analysis report was on his desk.



It was all systems go when Mike Dutton (left), technical analyst for Bell Equipment, used the company's troubleshooting helicopter service to fly an urgent oil sample to Wearcheck for analysis recently. On hand to receive the sample were John Evans, Wearcheck technical advisor and Jill Brown, Wearcheck DP supervisor.

The saga began earlier in the day when Mike was inspecting a research and development articulated dump truck fitted with an ADE engine which was getting hours in the field at Corobrik near Durban North. Two oil samples had been taken from the motor which was making a strange noise and a third sample was due so that Mike could determine a trend. As a meeting had been organised for the following day to decide on what course of action to

take, the third sample was required urgently.

Solution

Wearcheck's analysis reported coarse dirt entry which, together with Bell's conclusion that there was an inter-cooler problem on the engine, indicated modifications were needed. The adjustment was made by ADE and the engine is now a standard feature of the machine. The only other way of finding the cause of this particular problem would

have been to run the engine to destruction, a costly and time-consuming exercise.

"Oil analysis is invaluable in my work," says Mike. "It helps pick up service problems and forestalls major failures. It also assists with warranty claims by isolating operator abuse and highlighting genuine faults.

"We advise all our customers to use oil analysis and we recommend Wearcheck for

* To page 4

Training courses will help oil analysis users

WEARCHECK customers will receive special discounted rates for a series of specially designed courses being run by the company in October and November to improve understanding of oil analysis.

The **practical introduction to oil analysis** is a basic morning course aimed at mechanical assistants and apprentices.

It covers the functions and basic classifications of lubricants, the value of oil analysis, sampling procedures, the completion of submission forms and different reporting formats.

The second course, **the applications of oil analysis and an introduction to troubleshooting**, is geared for workshop foremen, mechanical technicians and artisans.

In addition to the subjects included in the basic course, this one-day seminar also incorporates tests and their significance, methods of troubleshooting and case studies.

Engineers and technical managers would benefit from the advanced course on the **technical management of oil analysis and lubrications**.

A combination of theory and practice, this one and a half day course covers the basics before pro-

Date	Course	Venue
26/27 October	Technical management of oil analysis and lubrication	Pinetown
4 November	Practical introduction to oil analysis	Johannesburg
9 November	Applications of oil analysis, introduction to troubleshooting	Johannesburg
11/12 November	Technical management of oil analysis and lubrication	Johannesburg
16 November	Practical introduction to oil analysis	Pinetown
18 November	Applications of oil analysis, introduction to troubleshooting	Pinetown
23/24 November	Technical management of oil analysis and lubrication	Pinetown

ceeding to troubleshooting methods, contamination control, particle counting and the monthly management report.

Courses will be held at Wearcheck's offices in Pinetown and Johannesburg. For further information, phone Amalia Sehanne on (011) 455-3342 or Melanie Hynd (031) 700-5460.

STOP PRESS

The Pinetown courses are fully booked, but additional courses will be arranged in the new year.

Customer service the Wearcheck way

WEARCHECK'S customer service lies in the capable hands of Melanie Hynd, manager in Natal, and Johannesburg-based Lin Patterson.

While Melanie looks after the interests of customers in Natal, the Cape and Mauritius, Lin is responsible for the Transvaal, OFS, Swaziland, Botswana and Namibia.

Although they fulfill their duties differently - Lin spends a great deal of her time on the road while Melanie is the telephone link for clients - both ladies are committed to solving customer's problems and ensuring that they obtain maximum benefit from Wearcheck's programmes.

Lin has been customer services manager for four years, having joined Wearcheck as an office receptionist ten years ago. Her thorough knowledge



Lin Patterson.

of the company is invaluable when she visits customers to go through fleet lists, resolve specific problems or follow up on previous meetings.

"I try to see each customer every three months," says Lin. "Often a simple courtesy call develops into a worthwhile discussion which benefits both the customer and Wearcheck."

"I find it particularly helpful visiting clients in their own working environment.

Another aspect of my work that I enjoy is that, because queries often involve a number of different Wearcheck departments, teamwork is vital and it is always gratifying to see a customer's problem satisfactorily resolved."

Melanie, a former travel agent, joined Wearcheck in 1990 after a 20-year break from office work during which she raised her children.

"I didn't know what I was missing," smiles Melanie who obviously gets a great deal of satisfaction from her work.

Starting out as assistant to the sales manager, she switched to customer service which she combines with taking orders for sample kits, organising lab tours and functions, and performing secretarial work for the directors.

"I love the variety and find problem-solving a challenge,"



Melanie Hynd.

says Melanie.

"I am usually the first point of contact after the switchboard and, if I am unable to help, I channel the query to the correct person."

What are her most valuable standby's?

"Attention to detail and a sense of humour," she laughs. "It is essential to sort out any enquiries with the minimum of fuss and report back to the customer promptly."

Flying Samples

* From page 3

the service they offer. It is especially helpful to be able to discuss problems with Wearcheck's technical advisors which makes for a productive working relationship."

Wearcheck currently services over 1 100 units of Bell equipment countrywide which translates to nearly 5 000 different components.

"We have processed over 20 000 samples on Bell machines over the years," says Wearcheck technical advisor John Evans.

Technical bulletin is in demand

WEARCHECK'S first technical bulletin on Particle Counting and Contamination Analysis in Fluid Power Systems is in great demand with requests for additional copies from as far afield as the USA, Canada and Belgium. Anyone who would like extra copies of the bulletin should phone Melanie Hynd on (031) 700-5460. A second technical bulletin is planned for November.

Welcome Sasol

WEARCHECK would like to welcome aboard the Sasol group who recently signed up as a new client. Five Sasol technical representatives attended a full-day familiarisation and training course run by Wearcheck in Johannesburg during September, and the company is looking forward to a mutually profitable working relationship.

MAKE sure you receive future issues of Wearcheck Monitor. Fill in this coupon - or make a copy of it - and post it today to: Wearcheck, P O Box 731, Pinetown 3600. Please put me on the mailing list for Wearcheck Monitor.

Name.....

Position.....

Company.....

Business Address

.....Phone (.....).....Fax (.....)

Type of Business.....

I would like more information about: Wearcheck Infocheck

M6

Where to find us

TRANSVAAL

3 Bedford Plaza,
Skeen Boulevard,
Bedfordview, 2008.
P.O. Box 75416,
Gardenview 2047.
Phone: (011) 455-3342
Fax: (011) 455-4909

NATAL

9 Le Mans Place,
Westmead. P.O. Box 15108,
Westmead 3608.
Phone: (031) 700-5460
Fax: (031) 700-5471