

KNOW YOUR ENGINE FROM THE **INSIDE OUT**

INTRODUCING
P&WC'S NEW OIL ANALYSIS
TECHNOLOGY



Pratt & Whitney Canada

A United Technologies Company

YOU ARE INVITED TO PARTICIPATE IN P&WC'S OIL ANALYSIS TECHNOLOGY PROGRAM

P&WC is always looking for new ways to make your maintenance environment more predictable and improve aircraft availability.

P&WC's new Oil Analysis Technology has reached maturity on several P&WC engine models and we are enrolling operators at no charge in the program until 2018. We continue to seek early adopters interested in participating in the trial of this technology for the remaining engine models.

To find out more, contact oil.technology@pwc.ca

P&WC'S OIL ANALYSIS TECHNOLOGY

This cutting-edge technology detects minute metal traces within engine oil enabling us to identify the deterioration of specific components well before a potential event occurs.

HIGH PRECISION

This new technology is demonstrating its potential to far exceed the efficacy of other oil debris monitoring technologies.

POTENTIAL ENABLER FOR EXTENDED TIME ON WING



MAKE UNSCHEDULED EVENTS SCHEDULED



SCHEDULE YOUR MAINTENANCE EARLY



**TO PARTICIPATE:
VISIT OUR WEBSITE AT PWC.CA**

or contact us at oil.technology@pwc.ca

PRATT & WHITNEY CANADA'S OIL ANALYSIS TECHNOLOGY

Pratt & Whitney Canada's oil analysis technology is a new way to effectively monitor the oil system of an aircraft engine. This innovative technology has the potential to detect specific engine conditions by identifying the wear patterns of oil-wetted components through analyzing particles found in the oil.

The technology has demonstrated a new, accurate and simple on-wing diagnostics and prognostics capability which has the potential to significantly reduce costs and maintenance workload.

STATE-OF-THE-ART OIL ANALYSIS TECHNOLOGY

- More sensitive than traditional oil methods.
- Each particle analyzed individually.
- Broad particle size spectrum analysis.

GREATER INSIGHT FROM OIL DEBRIS ANALYSIS

- Detects the source of debris earlier and more accurately than any existing oil-debris monitoring technology available today.
- Monitors the health of oil-wetted engine components including bearings, carbon seals and gears.

POTENTIAL BENEFITS

- Know early.
- Locate where it is happening.
- Create a planned environment.

SENSITIVITY: KNOW EARLIER

Time to plan for an event

Engine operating hours

**P&WC's Oil
Analysis Technology**

HUNDREDS OF HOURS

Traditional Oil Analysis

Vibe Monitoring

Chip Detector

SPECIFICITY: WHERE IS IT HAPPENING?

DETECTION CAPABILITY:	Traditional Oil Analysis	P&WC's Oil Analysis Technology
Chemical elements concentration	✓	✓
Alloy concentration	—	✓
Particles characteristics	—	✓
Interaction behavior	—	✓
Isolate & identify specific parts	—	✓

According to development and field tests

PRATT & WHITNEY CANADA'S

DIAGNOSTICS, PROGNOSTICS & HEALTH MANAGEMENT

BY THE NUMBERS

TWO DECADES

of diagnostics & prognostics
experience

6,500

diagnostics & prognostics
solutions delivered

Moving customers toward

100%

planned maintenance
environment

HIGH VISIBILITY

into the health and operation
of the engine without intrusive
inspections

More than **1,200 FAST™*** systems delivered

* Flight Acquisition Storage & Transmission

For any questions or comments, please contact us at

oil.technology@pwc.ca

WWW.PWC.CA



GO BEYOND



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