

Engine Compressor Wash Program



With the rising prices of fuel, Cargojet's challenge is to operate their fleet of Pratt & Whitney JT8D series turbine engines at optimum efficiency.

Compressor performance degrades during normal operation due to pollutants in the air bonding firmly on the blades. This so-called compressor fouling has a detrimental effect on the compressor efficiency. A heavily fouled compressor can have up to an 8% reduction in performance.

Over time, dirt accumulation on the compressor airfoils reduces engine compressor efficiency. Engine core washes are recommended to remove this dirt. Contamination levels depend on the aircraft's operations and environment, so wash frequency must be optimized by the operator. Periodic engine washes also have a positive effect on the exhaust gas temperature margin and consequently on engine life.

Reduced fuel consumption means more payload-range.

Cargojet has adapted for 2007 a compressor wash program developed by a company called Engine Cleaning Technologies Inc. (ECT) utilizing R-MC cleaning fluid. This fluid is approved by Pratt & Whitney for use on all the JT8D series turbine engines. This fluid is Non-Toxic, Non-Flammable, Biodegradable & has no harmful effects on the engine components. The wash is accomplished with the engine running, which is more efficient than other wash methods.

The R-MC program is used by major airlines including American, Continental and Delta on their fleet of JT8D engines. They have experienced an average of 1% - 3% increase in fuel efficiency. Cargojet is looking forward to similar results on our fleet.

Paul Rinaldi
Director Technical Operations

Safety Management System



Commitment, Cognizance and Competence

The organizational structures and activities that make up a Safety Management System are found throughout an organization. Every employee contributes to the safety health of the organization. The system must be integrated into "the way things are done" throughout the establishment. This is achieved by the implementation and continuing support of our Safety Policy and Procedures.

Safety Management starts with management philosophy recognizing that threats to safety exist, setting the organization's standards and confirming that safety is everyone's responsibility.

Our Safety Policy specifies how safety will be achieved. It is our clear statement of responsibility, authority and accountability. The development of our organizational processes and structures incorporating safety goals into

every aspect of the operation and the development of the skills and knowledge necessary to do the job.

Our Safety Procedures are a clear direction to all staff on how to execute our safety policy, providing a means for planning, organizing, controlling, and for monitoring and assessing safety status and processes.

Our Safety Practices follow well-designed, effective procedures, avoiding the shortcuts that can detract from safety and taking appropriate action when a safety concern is identified.

What is most important in the final analysis is that each component of our system be effective, not just in place, and that the system becomes a way of doing business at every level at Cargojet.

Angela Campbell
Director SMS & Security