

ACF
Associates Inc.

*“Implementing
Innovation”*



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14 Hawley Court
Bath ON K0H 1G0
613.484.4124
www.acfassociates.ca

ACF is an approachable, independent consulting company specializing in providing innovative program and product support services to industry and government in support of military and commercial aerospace operations and maintenance.

Founded in 2006 to deliver Aerospace Equipment Program Management services to the Canadian Aerospace Industry, ACF's business scope has evolved to encompass a full suite of professional services in the areas of Aerospace Engineering and Maintenance Program Management, Research and Training, and Project Management, services to a broad cross-section of clients, including government, commercial and university organizations.

ACF is a virtual workplace, with all full-time and part-time employees working remotely throughout Eastern Ontario. This business model demands exacting standards of project management, focus, innovation and communication tools. ACF has excelled at this model, and translates these standards into outstanding results for clients.



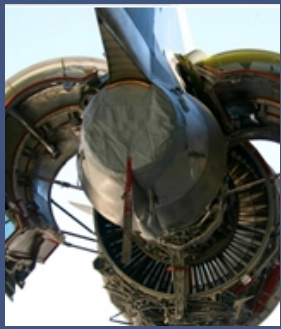
With current and comprehensive knowledge of the Canadian Air Force's Aerospace Engineering, Maintenance and Training environment, ACF provides expertise in:

- ▲ *Integrated Performance Management Systems*
- ▲ *Program Development and Support*
- ▲ *Maintenance Plan Effectiveness*
- ▲ *Life Cycle Material Management*
- ▲ *Configuration Management*
- ▲ *Airworthiness Accreditation*
- ▲ *Training Product and Program Assessment and Evaluation*
- ▲ *Technical Training and Instructional Design*
- ▲ *Professional Research*
- ▲ *Proposal Management and Writing*
- ▲ *Project Management Services*

Contact us at **613.484.4124**, or visit us at www.acfassociates.ca.

Current and Past Customers

◆ *Cascade Aerospace* ◆ *Magellan Aerospace* ◆ *Department of National Defence* ◆ *GasTOPS* ◆
◆ *Boeing Canada* ◆ *StandardAero* ◆ *L-3 Communications* ◆ *Discovery Air*



Engineering and Maintenance Program Management

ACF specializes in assessing and reviewing the effectiveness of maintenance and technical programs. Through analysis of operational concept, maintenance capacity and support systems, ACF tailors maintenance and technical support programs to reduce costs and increase efficiency and effectiveness.

From conception to implementation, ACF provides clients with program support services and solutions to ensure success.

Case Studies

Improving Maintenance Performance

Developing a program to improve the performance of preventive maintenance inspections at an organization becomes quite complex when that organization includes several geographic locations and various aircraft types. By applying highly structured problem solving techniques and industry proven operations management methodologies, ACF developed a flexible program and implementation plan that was tailored to the organization's unique requirements. The 20-40% reduction in turnaround times during the trial implementation of the program resulted in the organization fully adopting the program across the entire organization.

Supply Chain Performance Management

Establishing successful supply chain management strategies for new production lines was essential for our client's company to minimize their sustainment costs, control their production process and ultimately provide the best value to their customer. Working closely with our client, ACF assessed the company's production line, their supply chain issues, and their critical items. By applying operations and inventory management models with specific supply chain strategies, ACF developed a performance measurement tool that was integrated into the company's existing software system. The tool allowed our client to effectively manage their supply-chain by tracking their production flow and monitoring and acting upon the critical items.

Sustainability Assessment and Long-Term Planning

Our client wanted a detailed understanding of program sustainability issues in order to plan and budget for their existing aero engine overhaul program over the next ten years. ACF proposed a methodology for the sustainability assessment that met the strategic direction for the program. ACF then designed and developed the structure and content of the future aero engine support plan, conducted sustainability assessments and provided a detailed long-term plan for their customer. With this information our client was able to provide their customer operational capability at the lowest possible cost.



Aerospace Technical Services

With a thorough knowledge of DND's Technical Airworthiness, Flight and General Safety Programs, including implementation, monitoring and continuous improvement techniques, ACF Associates provides airworthiness process, policy, and procedure services and solutions to clients.

Case Studies

Airworthiness Accreditation

Although obtaining DND Technical Airworthiness Accreditation (TAA) provided our client with new growth opportunities, the time and effort required to manage the accreditation process very much strained the company's capabilities. On their behalf, ACF interpreted the airworthiness requirements, analyzed their capabilities and drafted a customized Engineering Process Manual and new company procedures that met all the DND airworthiness rules and regulations. ACF continued supporting the company throughout the accreditation process by providing airworthiness training to company personnel, developing a plan to initially grant personnel authorizations, and assisting the company when responding to TAA regulatory staff concerns.

Life Cycle Material Management

Transitioning Life Cycle Material Management (LCMM) responsibilities from DND necessitated that a company develop and implement a new internal program that met all the DND LCMM regulatory requirements. They called upon ACF's expertise in these areas to manage the entire program design, development and implementation. Working with the company, ACF matched the program parameters to the company's capabilities and clarified the required business arrangements with their outside support agencies and DND. Well within the project timelines, ACF delivered a documented LCMM program, an implementation plan, and new compliant processes and procedures that were trialed and ready for implementation.

Designing a Maintenance Management Model

ACF collaborated with a partner to design and develop a tool that would assist maintenance managers in executing their responsibilities in a manner that would maximize operational capabilities. ACF's role was to develop models of interrelationships for inputs and output of the process, conduct on-site visits to model processing logic, assist in model calibration, analyze the historical maintenance data, and identify benchmark performance. The resulting working model provided a means for the maintenance managers to simulate the effect of changes to the operating parameters, such as changes to their maintenance plan and structure, on operational capability.



Research Evaluation and Training

Using research-based, quantitative and qualitative methods, ACF provides reliable and objective product and program assessment and evaluation services.

With expertise in the area of technician training and problem-based learning, ACF provides consultative services to companies requiring assistance in the area of technician training, troubleshooting, diagnostic skill development, as well as program and/or product design, review, and implementation.

Case Studies

Assessment of New Technology

Assessing the training value, or Return on Investment (ROI), of new technology when introduced into an existing program is often difficult. However, using rigorous and sound research methods and theory, ACF planned, developed and executed the required research for the client and successfully provided them with objective results. These results ultimately led to the adoption of appropriate advanced technical features that improve aircraft technician training, maintenance operations, and reduce incidents of no fault found.

Maintenance Manager Training

An organization required a maintenance manager's training package that would bridge the gap between their current preventive maintenance management methods and the new concepts and practices of a newly developed program. Following a detailed needs analysis ACF developed, trialed and facilitated a five day training course that explained the new program methodologies yet still recognized and acknowledged the successful aspects of the current organizational culture. Using innovative training techniques that provided each participant with hands-on practical experience, the ACF course enabled the maintenance managers to immediately implement the new program elements upon return to their workplace.

Airworthiness Training

As part of the support provided to a company undergoing the DND Technical Airworthiness Accreditation process, ACF was asked to design, develop and provide airworthiness training to company personnel. ACF researched the requirements and provided the company with two training packages, the Initial Airworthiness training and the Engineering Process Manual training, that met the regulatory standards. Training was provided by an ACF facilitator in accordance with the suggested implementation plan and resulted in 100% of the applicable personnel successfully completing the courses.



Other Research and Development Services

Under ACF leadership and strategic direction, clients are provided with bid winning proposal management and writing services. ACF provides clients with thorough and rigorous research and development services.

ACF uses established, disciplined, and proven Project Management principles in all of its work, effectively managing the constraints to achieve outstanding results. These project management capabilities are sought as stand-alone services by our clients to lead and direct projects and assist in achieving client objectives within scope, on time, and on budget.

Case Studies

Proposal Management and Writing Services

Winning key bids is often necessary for the survival of companies. ACF was contracted to manage the writing and submission of a critical and significant proposal involving a new aircraft in service support contract. Under ACF Associates leadership, a bid writing team was brought together to produce a winning proposal. The result of this proposal has been a multi-million dollar, long-term contract for the client.

Business Option Simulation

Depending on the approach used, finding the most economical way to manage the maintenance and overhaul cost for an aero engine over the life of the engine can have a number of solutions. ACF developed a tool for an aero engine overhaul company that simulated various business options and their results. ACF also included a formal proposal that analyzed the options and presented alternatives and recommendations in a format that the company could use when presenting the options to their end-customer.