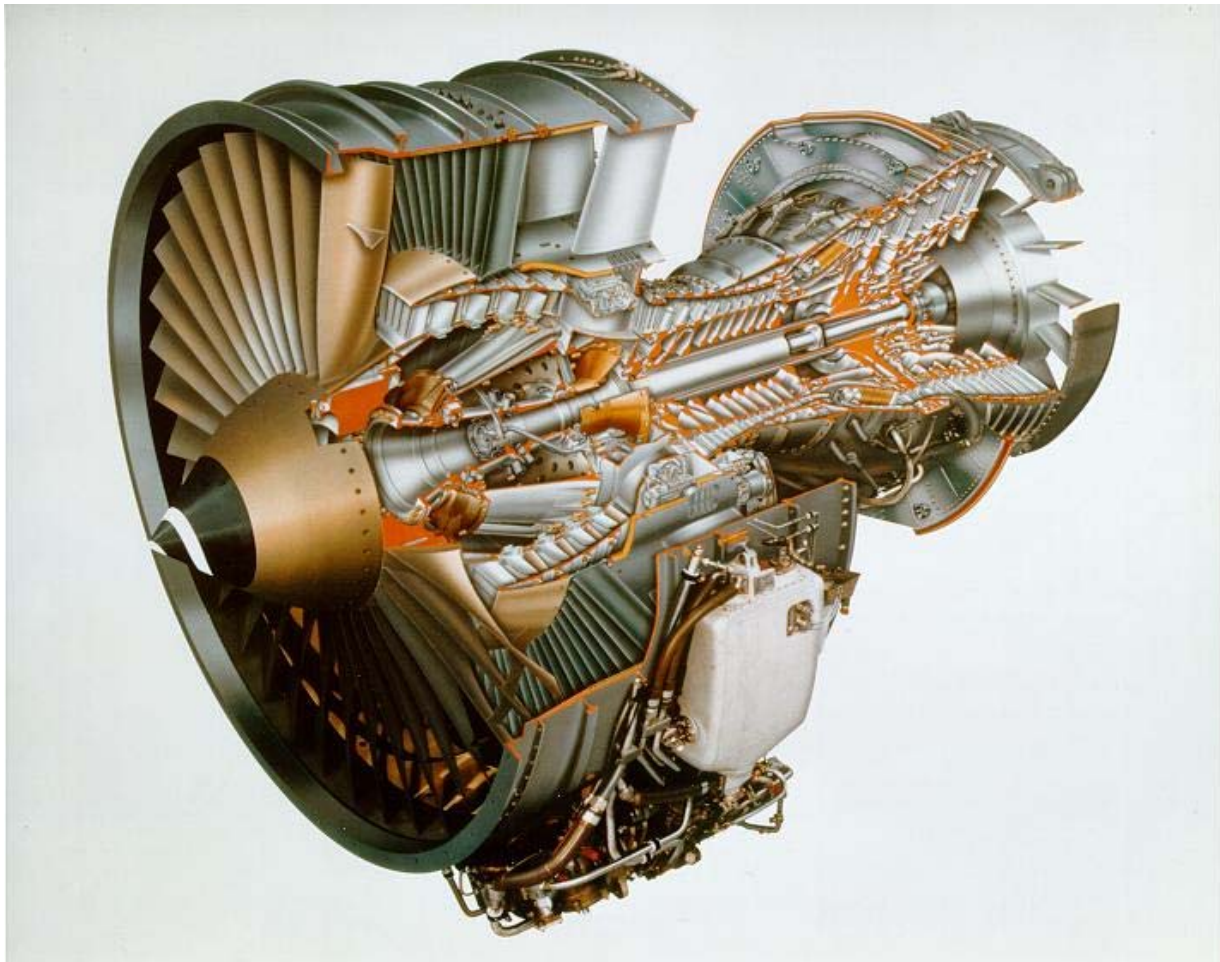


# Advanced Engine Maintenance Planning Systems

including

Software – Installation – Training – Support

[www.aemps.com](http://www.aemps.com)



**CA Advisors**

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**Planning in an increasingly cost-conscious environment**

In today's environment, air transport operators must be exceptionally efficient and cost-conscious to survive. Success requires meticulous planning and management of resources, particularly with critical big-budget items such as powerplant maintenance.

CA Advisors offers a complete package of advanced engine maintenance planning systems designed to optimize your use of resources and help you reduce costs.

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**A powerful solution that's easy to use**

Our engine maintenance planning solution consists of four, fully-integrated systems: Engine Reliability System (ERS), Engine Removal Forecast (ERF), Engine Life Optimizer (ELO), and Spare Engine Planning System (SEPS).

Designed after substantial research, testing, and validation in real-world applications, these powerful systems incorporate advanced analytical methodologies and applied statistical principles. This gives you the highly reliable, timely information needed for better decisions in the face of the considerable uncertainty and variability inherent in powerplant maintenance.

A key objective in designing our solution was to ensure compatibility with existing or planned information systems. CA Advisors' advanced engine maintenance planning solution can be easily networked with a variety of systems. Further, it offers options for directly reading input and sharing output with your other information systems, as well as with four linked, yet independent systems that comprise our total solution.

The result is a fully automated process, leading to more accurate information and additional savings in time and money.

Finally, the PC platform guarantees that you'll be able to use our solution right away, with a minimum of training. User-friendly panels offer easy data entry. All systems are menu driven and highly intuitive, with online help readily available to guide users at every step. What's more, a default structure is built in so that users need no remember where specific data resides. This convenient feature eliminates the time-consuming confusion that can occur when searching for different sources of data.

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**A helping hand from our system experts**

Our advanced engine maintenance planning systems are exceptionally portable and can be installed quickly on your network. CA Advisors experts will work with you during installation, and will train your staff to operate the systems.

In addition, we will see to it that our solution is fully integrated with your existing systems. Our goal is to ensure that you streamline your engine maintenance operations to meet the challenges of an increasingly demanding environment. We will work with you to achieve that goal.

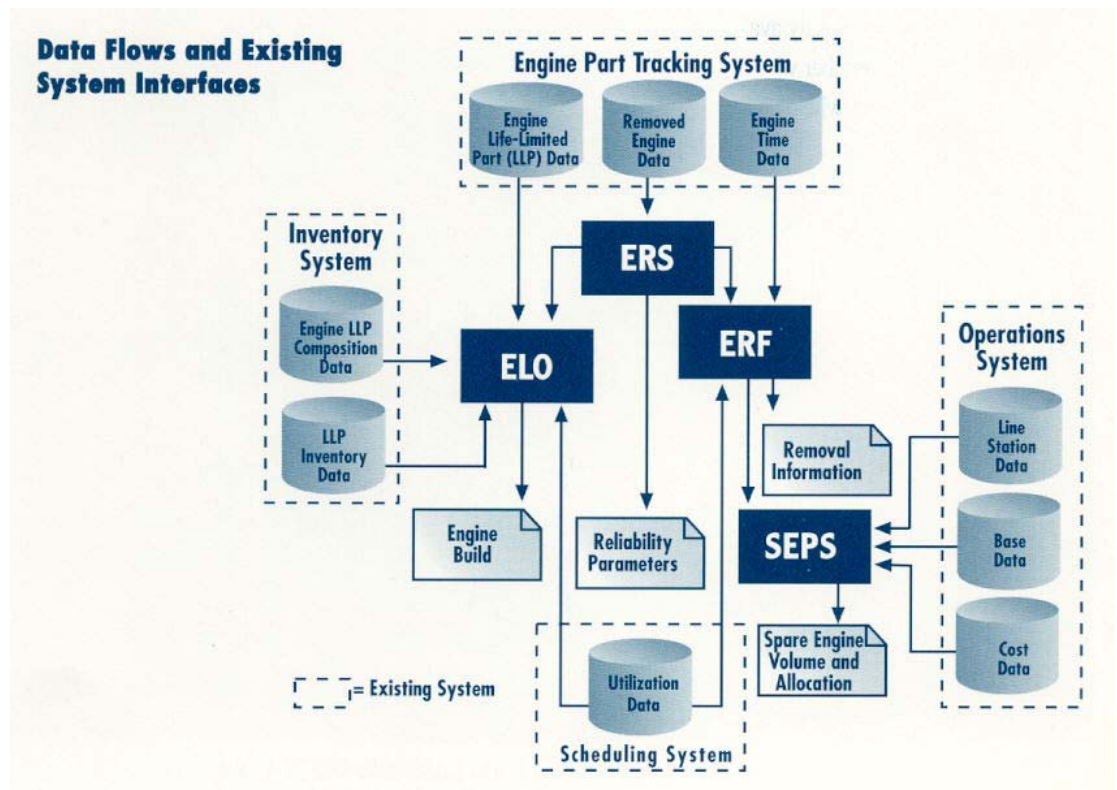
**Four integrated,  
yet independent  
systems provide a  
complete solution**

The **Engine Reliability System (ERS)** determines reliability parameters by engine type. The system evaluates the premature removal rate (PRR) of engines in a given fleet, as well as other critical performance indicators, such as Weibull slope and characteristic life. Because requirements for engine maintenance resources are dictated by these parameters, more accurate and timely information will lead to better decisions.

The **Engine Removal Forecast (ERF)** determines the removal volume of any engine-type fleet for a specific time period. In addition, the system calculates other removal characteristic indicators – such as probability of survival until the next scheduled removal and expected flying time until the next removal. Precise forecasts are essential for allocating resources and optimizing your maintenance operations.

The **Engine Life Optimizer (ELO)** specifies the most cost-effective life-limited parts replacement policy for your engines. Replacement decisions for life-limited parts, such as discs, are vital to engine maintenance planning because selection practices directly influence engine lifetime. With ELO, you can reduce engine maintenance cost per flying hour by optimizing engine lifetimes. ELO also includes a built-in inventory control system to track the availability of life-limited parts.

The **Spare Engine Planning System (SEPS)** not only determines the number of spare engines needed to support your air operations, but also specifies the proper allocation of engines throughout your operation network. In addition, you can use SEPS to decide how many engines to stock at the base and maintenance stations for a given number of spares, and what protection levels and fill rates can be expected at different stations for various allocation scenarios.



## About CA Advisors

CA Advisors is a leading consulting firm that specializes in applying quantitative techniques to help clients improve their decision making and gain a competitive advantage. Throughout many years of professional work, we have combined state-of-the-art analytical methods with practical experience to consult on projects in a wide variety of areas, ranging from operations management and planning to decision analysis and R&D. To enhance the results, CA Advisors collaborates closely with clients, communicates clearly about problems and solutions, and provides scientifically-based tools that are easy to use.

CA Advisors has a core expertise in air transportation with a focus on powerplant maintenance. Our consulting services consist of a unique blend of academic expertise and practical hands-on experience in engine maintenance planning.

## ***CA Advisors***

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