



PERSPECTIVE

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Earlier this year, the air transport industry completed the most comprehensive study ever undertaken into the effects of aging on aircraft systems,

with a primary focus on electrical systems.

From that study, recommendations are being developed to further enhance the safety of air transportation. For operators of Boeing airplanes, I'm pleased to report that The Boeing Company has already done a considerable amount of upfront work to enable those recommendations to be readily integrated into airline practices and procedures.

The landmark two-year study was conducted by the Aging Transport Systems Rulemaking Advisory Committee, which was established by the U.S. Federal Aviation Administration (FAA) in January 1999.

Committee members were drawn from the airframe manufacturer, supplier, airline, and regulatory sides of the aviation industry. The committee focused on jetliners 20 or more years old, which include about 3,700 Boeing- and Douglas-designed airplanes worldwide. Five key tasks were undertaken: inspection of electrical systems of almost 100 older jetliners of various makes and models, review of electrical systems fleet history in light of service bulletins and airworthiness directives, evaluation of maintenance criteria to identify and correct any aging systems issues, review and updating of standard wiring practices, and review of training programs to ensure that they address aging electrical systems.

The committee uncovered no immediate fleet-safety-related issues, nor did it find any conditions in the wiring or other systems that were not already known by the industry. This is a strong validation of existing processes that call for regulators, manufacturers, and airlines to work together and share information for the benefit of aviation safety.

But the committee did not simply endorse the status quo. Instead, it took the key learnings from this exercise and developed a set of recommendations to enhance wiring installation, maintenance,

and design; improve training programs; and provide better documentation. The FAA has asked the aging systems committee to continue working with the agency to develop implementation plans that will further refine the industry's approach to the maintenance of electrical systems in older aircraft.

Boeing already has taken a number of steps that will make it easier for our customers to integrate the recommendations into their maintenance practices. For example, our engineers applied the latest Maintenance Steering Group Level 3 (MSG-3) analytical process to the development of new maintenance plans for older jetliners, with more emphasis on wiring systems. In addition, Boeing has developed the industry's first complete five-day course focused on maintenance and installation of wiring through FlightSafetyBoeing Training International. We've also disseminated airline best practices in electrical systems maintenance; improved the reporting of wiring concerns; and improved the documentation of wiring design, installation, and inspection criteria. We've also undertaken aggressive research and development, such as arc fault circuit breakers for incorporation into current and future designs, new wire testing methods, and further studies into the effects of aging on wiring.

These and other initiatives are a direct result of our long-standing commitment to fleet safety. We at Boeing are fully supportive of industry task forces such as the aging systems committee. Such industrywide cooperative efforts are in the best interests of the entire air transport system and the traveling public.