

Safety Assigned Highest Priority

Every Employee Assures Certainty in the Operation of Every Flight

Ensuring safe flight is the basis for the very existence of the company, and is the subject that the entire JAL Group treats with the highest priority. Extremely important for this are the slow-but-steady, untiring efforts day-to-day of every employee of the Group companies, beyond those of divisions directly associated with safety such as operations, maintenance and engineering, cabin service, airport services, and cargo.

The company has experienced a major incident when damage occurred to an engine upon takeoff at Jakarta (September 2000) and another when passengers suffered injuries, some serious, when sudden action was required to avert a collision with another aircraft operated by the company (January 2001). The company has taken these incidents as warnings, and as occasions to redouble Group-wide efforts at assurance of safe flight. Measures have been taken to prevent the re-occurrence of such incidents as these.

Policies for Assurance and Improvement of Safety Quality

Accurately ascertaining problems that arise in daily operation of aircraft, and analyzing those problems followed by swiftly providing feedback of the results to the work of safety management is of utmost importance for the maintenance and improvement of safety. In addition to the self-check activities by each division at JAL, third-party oversight according to high standards is used, and efforts are being made to further strengthen the system for safety management.

In relation to capital equipment, advances are being made in improvement of the use of the Enhanced Ground Proximity Warning System (EGPWS) and Predictive Windshear System (PWS).

The following additional measures are being taken to raise the level of safety.

- Measures related to rationalization of safety regulations in accordance with revision of the Civil Aviation Law.
- Review of the maintenance and engineering system.
- Re-examination of procedures in all divisions.
- Strengthening of the control systems for prevention of hijacks, assurance of security, and management of risk.

Strengthening and Expansion of Crew Resource Management

A study of causes of airplane accidents throughout the world has suggested that in more than 70% of all instances human error on the part of the crew bore a relation to the accident. A Crew Resource Management (CRM) Training Program has been developed on the basis of that suggestion, to augment the ability of the crewmembers as

a team in carrying out their duties. This has the objective of preventing a chain of errors at the time of an accident or incident.

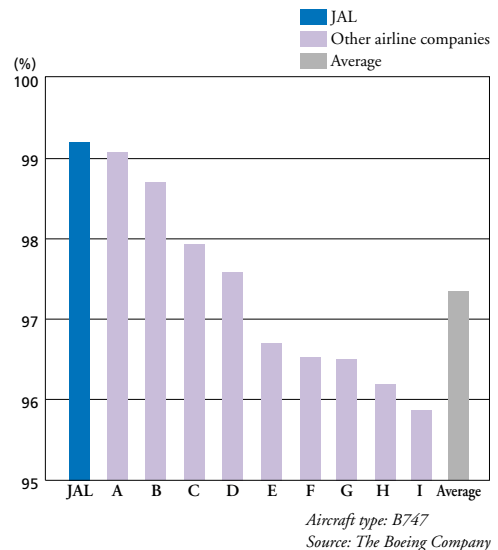
Since initiating CRM seminars, in 1986, and introducing LOFT: Line Oriented Flight Training utilizing high-performance simulators, JAL has consistently sought to strengthen its CRM and establish it more firmly in personnel management activities. In fiscal 1999, JAL identified specific CRM skills that serve as behavior parameters when CRM is implemented and at this time is giving emphasis to implementation of CRM throughout the corporate group.

In addition to flight crew, an employee category where CRM has already been carried out, DRM training was begun in May 2000 for flight operations planning personnel. In the engineering and maintenance area, MRM training for all employees of the Engineering and Maintenance Company began in April 2001, when CRM training for all cabin personnel was also started.

Role of the Engineering and Maintenance Company

An in-house company dedicated to engineering and maintenance was formed in April 2000, for the primary objectives of continuous provision of top-level confidence by maintaining safe flight operations and of improving cost competitiveness. The Engineering and Maintenance Company brings together the technical power and creative power of a staff of 5,000 persons including many from JAL Group companies. As a result, we have achieved the highest level in the world with regard to the representative indicators of the quality of engineering and maintenance, the on-time departure rate and in-flight engine stall rate.

Rate of on-schedule departures of major airlines in 1999
(a measure of the integrity and quality of aircraft and maintenance services)



Improvement of fuel tanks on 747s, and of engine thrust reversers on 747s and 747-400s has been planned for fiscal 2001. In addition, JAL is participating in the "Working Together" scheme of the Boeing company, as one of the launch customers invited to be a part of the development and design process; through this the company is assisting in regard to the safety, suitability and economics of the 777-300ER.

JAL has adopted the Multiple Similar System Maintenance method (MSSM), incorporating the rule that the no one maintenance worker is to work on both left and right engines of a plane, for example. The company has started using this method from June 2000, at first on two-engine plane, as one of the efforts being made to reduce the risk of a problem caused by human error.

Role of Flight Operations

Developing the skills of top-level professional pilots, the airline employees most directly responsible for flight safety, is the most important work done by a carrier. As a carrier operating one of the largest fleets of large aircraft in the world over an extensive route network including many international routes, JAL has been a world leader in building a system for in-house training of pilots and in training pilots of large aircraft. As one result, cockpit crew training has progressed well.

Moreover, since the first experimental flights in Japan, in 1996, experience has been accumulated steadily with regard to new air control systems, notably the Communication Navigation System and Air Traffic Management (CNS/ATM) that are being introduced in many countries. An important role is expected of full-scale application of CNS/ATM that will enable efficient operation of aircraft.

