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Cover illustration: Eizin Suzuki	

#### **Editorial Policy**

Through this report on corporate social responsibility (CSR), we in the JAL Group hope to make our stance on safety and our views on improving services and environmental activities clear and easy to understand. In compiling and editing this CSR report, we received the cooperation of numerous people from outside the company and strove to achieve objectivity in the findings presented here.

We have assumed an eco-friendly stance in producing this report, using paper certified by the Forest Stewardship Council (FSC), a nonprofit organization devoted to promoting responsible management of the world's forests, and FSC Mixed Sources, which includes recycled waste paper. To reduce the use of paper, we have posted some information on our website rather than within this report.

This CSR report essentially covers the period from April 1, 2006 to March 31, 2007, but we also include events before and after this period. The report deals with activities at the group level, though on occasion we limit our discussion to specific group units, such as Japan Airlines Corporation or this corporation together with Japan Airlines International Co., Ltd. and Japan Airlines Domestic Co., Ltd. (collectively referred to as JAL).

#### **Back Issues and Next Release**

The CSR reports for 2005 and 2006 are available on the company website:

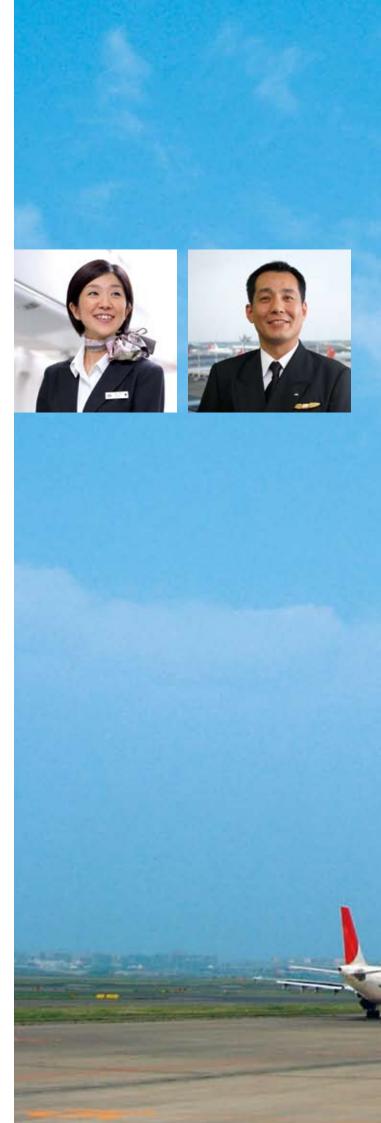
- <a href="http://www.jal.com/en/corporate/csr2005">http://www.jal.com/en/corporate/csr2005</a>
- <a href="http://www.jal.com/en/corporate/csr2006">http://www.jal.com/en/corporate/csr2006</a>

The next English CSR report is due to be published in September 2008. Published by the CSR Committee, Japan Airlines Corporation, September 2007 **To contact us:** 

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#### **Corporate Policy of the JAL Group**

The Japan Airlines Group, as an overall air-transport enterprise, will act as a bridge to bring peoples, their cultures and their hearts closer together and thus contribute to world peace and prosperity.

- 1 We will prioritize safety and quality.
- **2** We will think and act from the standpoint of the customer.
- 3 We will strive to maximize corporate value.
- 4 We will fulfill our responsibility as a corporate citizen.
- 5 We will appreciate hard work and take on a positive attitude.

#### **Corporate Social Responsibility**

The corporate social responsibility of the JAL Group can be summed up as the realization of the above corporate policy. JAL will promote activities that emphasize our relationship with all our stakeholders — our customers, shareholders, investors, business partners, employees and society — on economic, social and environmental levels that will increase our corporate value and respond to the expectations and trust placed in us by society.

#### Company Profile (as of March 31, 2007)

#### **Holding Company**

Company Name: Japan Airlines Corporation

Date of Foundation: October 2, 2002

Company Activities:

As the holding company of a group of air-transport companies and related businesses, administration of these companies' operations and support services

President & CEO: Haruka Nishimatsu

Head Office: 2-4-11 Higashi-Shinagawa, Shinagawa-ku,

Tokyo 140-8605, Japan

Paid-in Capital: ¥174,250,000,000 Shares Issued: 2,732,383,250 Number of Stockholders: 425,070

#### JAL Group

#### **Constituent Companies:**

Japan Airlines Corporation, 247 subsidiaries and 87 affiliated companies. The main 10 group companies are as follows:

Japan Airlines International Co., Ltd. Japan Asia Airways Co., Ltd.

Japan TransOcean Air Co., Ltd.

JALways Co., Ltd. JAL Express Co., Ltd.

Japan Air Commuter Co., Ltd.

AGP Corporation JALPAK Co., Ltd. JAL Tours Co., Ltd. JAL Hotels Co., Ltd.



#### Discussion

## Meeting Society's Expectations

Between President & CEO Haruka Nishimatsu and Masumi Shiraishi, Professor of Policy Studies, Kansai University

#### Maintaining Pride in Our Work

Shiraishi: For the last few years, JAL has faced a severe business environment, but thanks to the efforts made by yourself and JAL staff there has been a recent decline in safety incidents and irregular operations.

Nishimatsu: It's true that the number of incidents is on the decline. But it's my belief that we must not feel complacent with those numbers. Ideally, we want to achieve zero incidents, but in realistic terms it is impossible to achieve a zero-incident rate on all the aircraft used in the 1,200 flights we operate around the world each day. We are, however, doing everything within our power to lower the number as close to zero as possible. I also believe we have to come up with firm measures against human error. It is of course vital to make all efforts to reduce such error, but here, too, it's impossible to eradicate human error entirely. What is important is to put a mechanism in place such that even if an error does occur, it is not allowed to develop into a serious situation. To achieve that, we must create a corporate culture in which our staff immediately report instances of human error and situations where they feel danger has arisen. In the flight and maintenance divisions, we're seeing a steady improvement in the way these reports are being filed.

Shiraishi: To eliminate human error, the key elements are, I think, the mental attitude of each staff member towards safety and the pride they take in their work.

Nishimatsu: If you have no pride in your work or sense of fulfillment, that cuts into your safety awareness. I believe that society has major operational safety expectations of the JAL Group. This year, we operated a charter flight to transport a business mission led by the Nippon Keidanren (Japan Business Federation), which accompanied Prime Minister

Shinzo Abe on an official visit to the Middle East. I myself participated in that, and the mission was a great success. As a result, I felt JAL had played a role in bringing Japan and the nations of the Middle East even closer together. This was a very welcome development for us at JAL. The fact that we were able to transport senior figures from the business community safely and smoothly to countries where we don't operate regular flights helped boost the confidence of our staff. This is only a single example, of course, but to shoulder the major expectations of society and succeed in a task involving considerable responsibility helps generate pride in one's work and also leads to an increasingly high level of awareness about operational safety.

Shiraishi: Since JAL is a company that by its nature has a high social and public profile, I hope that you can meet the safety expectations of society and bring about increased customer confidence.

#### Safety and Customer Confidence

Shiraishi: In your business policy, you state that with safety as your first priority you intend to provide a higher-quality service to all your passengers as you expand your global network. But what do you plan to do in concrete terms to increase customer-satisfaction levels?

Nishimatsu: As well as being a social obligation, operational safety is fundamental to the existence of the JAL Group. However, a major task we face is boosting consumer confidence with regard to our commitment to safety. I would like to see not only the divisions directly involved with operations but also airport staff and cabin crew offer a service that customers can feel confident about.

This fiscal year, we established the Customer Satisfaction Improvement Division as a counterpart to the Corporate Safety Division. This new division is charged with achieving



high-quality services for the total satisfaction of our customers.

The next major issue is punctuality. Timely operations are vital for a public-transport organization. Once we have punctual operations, we must pursue comfort and convenience.

We will provide products and services that enhance comfort and convenience for our customers in all situations, whether when making reservations, at the airport or onboard the plane. In addition to safety and greater customer confidence in our ability to provide that safety, increasing punctuality, comfort and convenience will result in greater customer satisfaction.

Shiraishi: Earlier this year, you set up a women's team, the Artemis Project, which was tasked with improving service.

Nishimatsu: The people who most frequently use JAL are businessmen. It's perhaps not surprising therefore that some of our customers have told us there is a distinct male orientation to JAL products and services. So we set up the Artemis Project, which is composed of female staff, to review our products and services from a variety of women's viewpoints. We received the cooperation of women from outside the company in developing these services and believe our male customers will also be satisfied with the higher-quality products and services we're introducing.

#### Women in the Workplace

Shiraishi: I anticipate great things from your women's project team. The JAL Group appears to be a company where a large number of female staff can be employed in a stimulating working environment, such as experienced female cabin crew providing highly attentive service onboard. You are rehiring some of these experienced cabin-crew members, who are returning to the workplace after having taken time out to bring up their children.

Nishimatsu: If we provide an environment where staff can leave the company for family reasons in the knowledge that they can return to work once they've raised their children, that will lead to a broader array of lifestyle choices. In addition to considering the work-life balance of our employees, if we have staff who possess a wealth of experience serving our customers, it follows that customer service will also improve.

Shiraishi: I also believe cabin crew who have brought up



Haruka Nishimatsu President and CEO

their own children are best equipped to understand the needs and desires of customers accompanied by children.

**Nishimatsu:** To reply to the needs of our many different customers, we should probably also look into diversifying our staff. I believe that diversity will result in improved customer service.

Shiraishi: It's very important that companies hire and actively support women in all their activities. If such support is adequately provided, it will help combat the problem of Japan's low birthrate. It's important for society as a whole to support those who are bringing up the next generation of children.

#### JAL's Social Responsibility

Shiraishi: JAL is trying to address environmental issues. For example, you're using lighter tableware with inflight meals to reduce the overall weight of the aircraft.

Nishimatsu: The weight of the aircraft has a direct bearing on the amount of fuel consumed and thus the volume of carbon dioxide emitted. As a consequence, we're adopting all kinds of measures to reduce the weight of our payload. We use porcelain tableware in First and Business classes, but about three years ago we introduced lightweight porcelain and reduced the thickness of our forks and spoons. We will continue in our efforts to reduce CO<sub>2</sub> emissions so as to make whatever reductions we can in the burden we impose on the environment.

Shiraishi: As the CEO of a listed company, you naturally comply with relevant laws and regulations and look to make a contribution to your shareholders and customers by seeking to raise corporate value, but CSR activities are at the vanguard of those efforts. I believe the issue for JAL will be whether you, as a company, can make a contribution to society that goes beyond commercially measurable values.

Nishimatsu: As an airline, we naturally undertake initiatives to reduce CO<sub>2</sub> emissions, but we're also involved in various kinds of environmental activities. Since 1993, we've participated in a tropospheric-observation project, which analyzes air samples collected from altitudes of around 10,000 meters. Under the new tropospheric-observation project, which began in 2005, aircraft installed with CO<sub>2</sub>-measuring equipment are operating over a broader area of the globe. The data accumulated represents a major contribution to research on global warming, and we will continue our active support of such projects.

CSR on a Global Scale

Shiraishi: JAL joined the oneworld airline alliance in April, within which participating airlines serve almost 700 cities in nearly 150 countries.

**Nishimatsu:** Geographically speaking, **one**world is an extremely well-balanced alliance. We can view the alliance as a collection of airlines that prioritize quality, having bases

#### Masumi Shiraishi

Born in Osaka Prefecture in 1958, Shiraishi completed a master's degree at Kansai University Graduate School. She became a senior researcher at NLI Research Institute and associate professor in the Department of Social Economic Systems at Toyo University before becoming a professor in 2006. She assumed her present position in 2007. Specializing in the barrier-free concept along with the relationship between Japan's low birthrate, the aging of society and regional systems, Shiraishi is the author of a number of books related to these issues. She has served as an advisor to JAL since 2006, in which capacity she has made numerous proposals regarding the products and services of the JAL Group.

in North and South America, Europe, the Middle East, Asia and Oceania. Our customers can now look forward to many benefits, such as smooth transfers between participating airlines and the accumulation of mileage when traveling with **one**world-member airlines. This alliance has made round-the-world travel markedly easier.

Shiraishi: Your participating in a global alliance means that customers from all over the world will now use JAL flights. So you're no longer dealing mainly with Japanese passengers, but need to consider how best to cater your services to people from many different countries and cultures.

Nishimatsu: The airlines in the JAL Group employ flight crew based in locations outside Japan, such as Europe, Asia and South America. However, they have all studied Japanese culture and customs and provide customers with the same attentive service at which the Japanese excel. I'm convinced that people from around the world will understand and enjoy this Japanese style of service. Looking to the future, we must strive to ensure that people identify not only with our service, but also with our corporate stance and CSR activities.

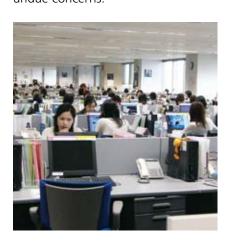
Shiraishi: I would certainly like to see you faithfully implement the ideas you've just mentioned and continue to be an airline that lives up to the trust placed in it by customers.





#### **Reservation Center**

Staff at the reservation center take seat reservations on JAL Group routes and respond to various inquiries via telephone, working to address the needs and requests of our customers. We offer support so that unaccompanied children, passengers with babies and those in wheelchairs can freely board their flights without undue concerns.



#### The Key Role of Communication

I've been with JAL for almost a year now as a call-center manager in the London Office. I look after a complement of around 55 people from different cultures, languages and backgrounds, and that feature makes my job interesting and dynamic. This is the first time for me to work in a Japanese business environment, and I'm finding it to be a great learning experience. My main goals for this year and next are to achieve the highest level of customer service on the phones and to increase the productivity of



the call center at all levels. I'm a great believer in communication being the key to success for all businesses. I will do my best to promote communication in Europe, the Middle East and Africa and to create a dynamic office where there is a willingness for change and innovation as well as respect for our customers.

#### Simonetta Di Benedetto

JAL European Call Center, London Office

#### **Fulfilling Customer Needs**

At the Reservation and Ticketing Department, we aim to provide customers with warm and considerate service that distinguishes JAL from other airlines. It is also important to provide satisfying service that fulfills customers' needs. When we deal with Japanese expatriates and businessmen in Shanghai, we pay close attention to our communication skills. This is important because through thorough understanding we're able to fully understand customers' needs and help reduce stress for



those planning to go abroad or beginning life overseas for the first time. We also propose itineraries for people planning to travel overseas and predict and circumvent problems that may occur during travel so that customers may enjoy their journeys to the fullest. We will continue to work hard at being a trusted airline chosen by customers.

#### Yang Peiyi

Reservation and Ticketing Department, Shanghai Office

#### **Ticketing Counter**

In addition to standard ticketing, staff at the ticketing counter respond to requests to reissue tickets as a result of rerouting as well as provide refunds where appropriate. Recently, more customers have taken advantage of the JAL Ticket Service, where tickets are delivered via mail or courier services, in addition to using paperless e-tickets.



#### **Airport Operations**

The airport is the cornerstone of the service, safety and maintenance involved in serving our customers, and work of the airport staff includes passenger operations and ground handling. Counter-based ticketing, boarding proceedings and assisting passengers at the boarding gate are the major tasks of passenger operations. Ground handling involves loading baggage onto the aircraft and a variety of departure and arrival operations. JAL also provides the JAL Priority Guest Support and JAL Smile Support services to support and assist elderly passengers, those with disabilities and passengers with children.





#### **Importance of Teamwork**

Our 65 staff assist inbound and outbound passengers on 12 flights a day. On any given day, there are countless safety issues that we may encounter. Many of these are resolved with minimal or no flight delays through the assistance of fellow JAL Group staff, subsidiary staff and management. As a relatively small department, we've developed a supportive network in which all staff work closely together to assist and support each section in the timely resolution of any issues. While we diligently comply with government safety regulations, all the while we're aware that our actions, attitudes and behavior towards each passenger will create a positive or negative impression of JAL. When faced with a flight delay, we keep passengers informed through frequent announcements, offer refreshments or meals, distribute phone cards and suggest alternative flight arrangements. With the assistance and cooperation of various sections and departments, we strive to maintain customer satisfaction.



**Dale Hatakeyama**Passenger Service Department,
JAL Hawaii

#### **Flexible Response to Different Situations**

Before each flight, we always make thorough preparations to deal with a variety of possible situations arising. But having made these preparations, we still have to respond flexibly during the flight to a wide range of cases and conditions. For example, if turbulence is reported up ahead, we immediately have to decide what to do. We could choose to prioritize passenger comfort and bypass the turbulence altogether by altering course, or we could put the emphasis on arriving on schedule and con-



tinue with our course. In such situations, we begin by checking a number of factors, including the progress of the inflight meal service and the traffic situation at the destination airport, before making the appropriate decision. I'm delighted when we arrive at the destination airport on schedule and also offer our passengers a pleasant flight.

## Hisashi Sugimoto Flight line instructor, Flight Crew Training Division

#### Work of the Flight Crew

#### Periodic Training to Maintain Flying Techniques and Reduce Human Error

Each member of the JAL flight crew is obliged to undergo periodic proficiency screening and flight training. Any crew member who fails to pass the proficiency examination, conducted



once every six months, loses the qualification to fly. JAL also uses the flight simulator in training, which is designed to help pilots cope with sudden changes in wind direction during takeoff and landing and to train them in evasion procedures at times of abnormal ground approach. Group training is conducted to ensure that the flight crew work as a team and can tackle such situations as engine trouble occurring at the same time as an onboard medical crisis. This training is designed to ensure flight safety. <a href="http://www.jal.com/en/safety/training/training2.html">http://www.jal.com/en/safety/training/training2.html</a>

#### **Aircraft-Operation Control**

Every aircraft in the JAL fleet is under centralized control 24 hours a day every day of the year by the Operation Control Center (OCC), situated at JAL's Tokyo headquarters. Dispatchers at the OCC continuously monitor the aircraft to ensure that they are flying normally. For example, in cases where an area of turbulence develops along the flight path and danger is anticipated, the dispatcher contacts the flight crew and directs them towards a safer route. When passengers hear inflight announcements regarding turbulence, these are based on information relayed from the ground. In cases where unexpected situations arise, including airport closures, the dispatcher may change the destination airport. The job of the OCC dispatchers is divided by area into long-distance international routes, short- and medium-distance international routes and domestic routes.

For more information, please see <a href="http://www.jal.com/en/safety/flight/flight2.html">http://www.jal.com/en/safety/flight/flight2.html</a>>.

#### **Relaying Advice Quickly**

The first point of contact for the flight crew in cases where the aircraft or flight equipment develops problems is the Operation Control Center. There's quite some pressure involved in relaying appropriate advice to support the flight crew within a limited amount of time. But that's also the challenge of the job. I'm constantly prepared to cope with anything that may arise while I'm on duty, and I'm happy when my shift ends without incident.



Maki Okashita
Operation Control Center

#### **Role of the Cabin Crew**

#### **Providing High-Quality Service and Safety**

In the aircraft cabin, it is the job of the cabin crew to protect the safety of our passengers so that they can pass their time pleasantly during the flight, secure in the knowledge that all is well. The cabin crew apply the expertise they have acquired in specialized training to provide a high-quality service. Because of irregular schedules and time differences, these staff need to have enough energy to carry out their duties. All members of the cabin crew meet before departure and after arrival for briefings at which they reconfirm their roles and responsibilities and also exchange opinions.



#### **Atmosphere of Safety**

Most of the measures taken by JAL staff to ensure safety on our flights remain invisible to the passenger. For that reason, I strive to display a serious and responsible attitude towards safety matters in the cabin as a first step to customer satisfaction. When I have to make a safety-related request of a customer, such as asking them



to stow their carry-on luggage, I think it's important to find a balanced, polite, yet firm approach. Once this atmosphere of safety has been established, I feel confident in providing warmhearted and friendly service, understanding each passenger as an individual. I try to stay aware of the fact that people come from different backgrounds and remain sensitive to such factors as body language and gestures in order to achieve full customer satisfaction. After all, this is what makes my duties most enjoyable to me.

#### Katharina Schnurbus

Cabin attendant, Frankfurt

#### The Mission of Our Maintenance Staff

#### **Safety and Credibility**

Maintenance of flight equipment on the parking apron and in the hangar, including which parts to maintain and in what manner to do so, is required by law, based on the number of hours an aircraft has flown, flight frequency and the number of days since the last mechanical check was conducted. Maintenance functions can be broadly divided into preflight checks, carried out before each departure, and the closer checks and repairs carried out during regular maintenance work, performed in the aircraft hangar. During preflight checks, in addition to inspecting stipulated items (such as dents in the fuselage or oil leaks) action is taken based on reports of malfunction or trouble received from the flight crew. The maintenance crew ensure that they uncover any potential problems and take appropriate action to fix everything within the limited time before the next scheduled departure. It is also the duty of the maintenance crew to perform last-minute checks to ensure that refueling and cabin cleaning, which are done at the same time as maintenance tasks, have been thoroughly and satisfactorily completed.

For more information, please see <a href="http://www.jal.com/en/safety/section/section5.html">http://www.jal.com/en/safety/section/section5.html</a>>.



#### **Cabin-Crew Training**

#### **Rescue Drills**

All JAL cabin crew are obliged to undergo rescue drills once a year. Training is carried out under a variety of simulated emergency situations, involving, for example, use of the emergency exits and the indoor training pool. Joint exercises with the flight crew are also conducted so as to confirm the role of each participant and come up



with better ways for the participants to cooperate with one another. At present, there are approximately 30 instructors (serving cabin-crew members) at the Emergency Training Center, where cabin-crew members undergo training almost every day.

For more information, please see <a href="http://www.jal.com/en/safety/training/training4.html">http://www.jal.com/en/safety/training/training4.html</a>>.



#### **Rigorous Maintenance Checks**

I joined the Shanghai Office in August 1994 and obtained First Class Qualified Engineer certification in December 2006. I'm now responsible for preflight checks of 767s. Completing a thorough maintenance check in the short period of time available to us before a flight departs is demanding work, but when we wave good-bye to passengers as the flight takes off, I feel a great sense of pride and satisfaction in a job well done. I will ensure that my team continues to work diligently to maintain passengers' trust and satisfaction in what we do.



Zhou Yong Maintenance, Shanghai Office

#### **Maintenance Outsourcing**

#### **Only Accredited and Proven Companies**

JAL outsources a portion of aircraft-maintenance duties to specialized maintenance companies based largely in Singapore and China. These companies have all been accredited by such bodies as the Japanese Ministry of Land, Infrastructure and Transport, the U.S. Federal Aviation Administration and European aviation authorities. They are commissioned with maintenance tasks by the world's major airlines and are companies with sufficient technological capabilities and proven track records. In addition



to JAL investing in SASCO in Singapore and TAECO in China, which are our major outsourcing clients, locally based JAL staff also carry out rigorous quality checks.

#### **Airport Staff**

#### **Smooth Cargo and Baggage Transfer**

At busy times, a commercial airliner may carry in excess of 20 tons of cargo. At JAL, we take the greatest care when handling cargo, which can include such items as precision equipment and artworks. We also make every effort to deliver cargo to our customers at their destination without any undue delays. Loading work requires specialized knowledge and technology, not only to protect the material being loaded but also to prevent damage to the aircraft. Staff engaged in this work have to undergo special training and obtain a proper qualification.



#### **Operations at Anchorage**

I joined JAL in 1987, and during my tenure I've experienced many changes at Anchorage. Initially, we were very busy dealing with cargo flights and exporting various fresh-seafood shipments to Japan along with handling daily passenger flights transiting between Japan and Europe. In 1991, our passenger flights between Japan and Europe became nonstop and we focused on cargo flights and the seafood-export business.

The summer of 1998 saw Anchorage handling passenger charters, beginning with JALways flights and then the return of JAL passenger charter flights. These flights have increased from summer charters at Anchorage to include charters managed by Anchorage staff at Fairbanks.

As we proceed into the future, we'll continue to make efforts to contribute with new export cargoes and the safe handling of import

cargoes and passenger charters, thereby providing the best service possible for our valued customers. We're proud to be part of JAL, and we wish the best to our colleagues worldwide.





#### JAL Mileage Bank

#### **More Uses for Mileage**

Recent years have witnessed an increase in the number and scope of opportunities to earn mileage, extending beyond air travel to include a variety of daily activities, such as shopping and dining. For greater customer satisfaction, JAL Mileage Bank (JMB) also examines ways of increasing the number of partner companies with which customers can redeem their mileage for awards. At the same time, JMB introduces convenient services and runs various attractive campaigns. In May 2007, membership in JMB topped 20 million. Since JMB keeps personal information about our customers, we have in addition to take great care with data management and protection.

#### **Ease of Use**



Rika Matsumoto Mileage Center

I work on frequent-flyer agreements with partner airlines and plan mileage services. Since JAL joined oneworld this April, JMB members have greater opportunities for earning and redeeming mileage, and the variety of award travel has increased significantly. Mileage has to be easy to earn, use and understand. We are doing our best to create a more user-friendly program so that we will be chosen by even more customers.

## **Cargo Staff**

Delivering Cargo Safely, Reliably and Rapidly

#### Reservations .....

#### Central Counter for Reserving Cargo Space and Handling Various Inquiries

At this desk, we try to give accurate advice and reply to inquiries about cargo-handling and flight scheduling from our customers. When sending cargo overseas, restrictions and procedures differ according to the country, so our staff need to be extremely knowledgeable about the various conditions.

#### Protecting the Safety of Cargo and **Operations**

We load checked cargo onto pallets and into containers. This entails a broad variety of handling requirements, depending on the type of cargo. We have to deal with such items as dangerous goods, sensitive cargo and materials that require cold storage. It is also our responsibility to control the weight of loaded materials to maintain operational safety.



Reservations



**Arriving at** the Airport

**Airport Departures** 



**Flights** 



#### ·····Inflight 😘

#### **Imports**

#### **Returning Cargo to Passengers**

We break down cargo from pallets and containers following arrival and deliver it to customers as rapidly as possible after confirming the number and status of individual pieces. Our job also involves the reporting of any discovered illegal

goods to customs officials.



#### Taking Proper Care of Cargo **During the Flight**

The needs and requests of our customers are relayed from the cargo staff to the responsible loading officer and flight crew. We sometimes transport such specialized loads as racehorses and works of art, and in some cases the client wishes to accompany the valuable object inflight. Staff maintain the inflight temperature at appropriate levels and keep close watch on the condition of the cargo throughout the journey.

## Corporate Governance

- The Corporate Safety Division and Customer Satisfaction (CS) Improvement Division, which both report directly to the president, were established to ensure operational safety and meet the expectations of our customers. These two bodies oversee operations in the following six divisions Flight Operations, Engineering & Maintenance, Cabin Attendants, Airport Operations, Cargo & Mail, and Passenger Sales & Marketing as we aim to achieve efficient and competitive organizational operations.
- The Corporate Safety Division was established in April 2006, based on proposals from the Safety Advisory Group (see page 22) for the "establishment of a central structure responsible for safety to serve as a powerful advisory group for top management." This safety division

is located in Terminal 1 at Haneda Airport.

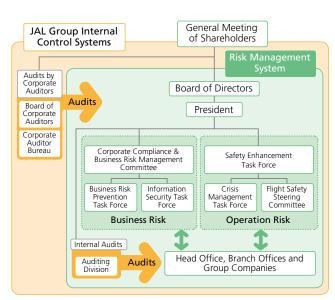
- The CS Improvement Division was established in April 2007 to reflect accurately the desires and opinions of our customers.
- The CSR Committee was established in April 2004. Since then, the JAL Group has worked in unison to promote CSR activities. Directors responsible for each business area serve as CSR Committee members, with the executive office located in the Corporate Planning Bureau. No full-time department related to CSR has been established: we have worked to spread awareness throughout the group that each individual department is responsible for CSR.



#### **Internal Control Systems**

#### **Basic Principles**

Through fair competition and by ensuring operational safety, the JAL Group fulfills the economic role of providing a good product for which it obtains profits. We also aim to be a corporate group that contributes on a broad basis to society. As a result, the company established its Basic Policy on Internal Control Systems in line with the rules laid down in Japanese corporate law to ensure the validity and effectiveness of operations, the authenticity of financial reports and compliance with related laws and regulations.



## **Risk Management System**

At JAL, we divide risk into two broad categories: risk from engaging in air transport (operation risk) and risk from other business operations (business risk).

We have established two councils made up of board members to manage risk:

- The Safety Enhancement Task Force, which establishes policies and responses to operation risk. This met on 21 occasions during fiscal 2006.
- The Corporate Compliance and Business Risk Management Committee, which establishes policies and responses to business risk. This met twice in fiscal 2006.

Information gathering related to risk management and reporting channels have been established and divided into standard and emergency situations, while precautionary measures and timely reporting systems have been set up for cases when incidents occur. The company has also laid down rules stipulating the responsibility of the company directors in cases where emergency situations arise.

## Information Security and Protection of Personal Information

#### 1. Establishing the System and Structure

In addition to basic policies and rules common to the whole group, the company has established a set of standards for information-security measures in compliance with ISO 17799. This protects JAL computer systems against data leaks and tampering, service outages and computer viruses. Each department also conducts its own checks to ensure that relevant in-house procedures conform to these standards and reports its status to an information-security subcommittee.

#### 2. Employee Education and Development

As well as implementing e-learning-based training for all JAL Group staff, the company promotes educational activities concerning data leaks as part of our risk management.

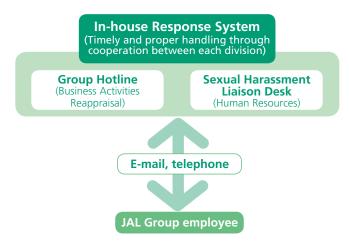
#### 3. Gaining Accreditation

JAL Group companies are actively engaged in activities aimed at acquiring various forms of accreditation, including the Privacy Mark, a Japanese certification granted

to private enterprises that adopt adequate measures in protecting personal data, and the Information Security Management System (ISMS) standard. In May 2007, placement agency JAL Business Co., Ltd. and cargo and logistics enterprise JAL Logistics Inc. were awarded the Privacy Mark.

#### Internal Whistle-Blowing

In April 2006, JAL established a system for internal whistle-blowing in line with the enforcement of the Whistleblower Protection Act. In addition to widely publicizing this system throughout the JAL Group, we take steps to respond in a timely and appropriate manner to protect the privacy of the informant where such information has been brought forward. The company has also established liaison desks relating to human rights and sexual harassment for the purposes of receiving inquiries and listening to complaints and grievances of group employees.



#### **Employee-Data Leaks**

In March 2007, it was discovered that company-held employee data had been leaked to one of the labor unions. Following detailed analysis of this incident, the company decided to strengthen control of employee data and make all efforts to prevent a recurrence of this incident via such measures as raising awareness of personal-data protection, explicitly specifying the reason for acquiring personal data when it is collected and clarifying the scope of authority of those engaged in handling such data.

#### **Audits**

#### Corporate Auditor of the Board

Each year, the corporate auditors attend meetings with the JAL Board of Directors. In addition, along with staff of the Bureau of Corporate Auditors, they audit approximately 100 corporation departments, operational branch offices and group companies and report the results to the president. They also exchange information with internal-control divisions and auditing companies, and hold meetings three times a year with full-time auditors at JAL subsidiaries to share information with the aim of enhancing and improving corporate auditing.

The JAL Group is moving to enhance its overall auditing system, including that at Japan Airlines International Co., Ltd., where in addition to two auditing-operations officers assisting the auditors, the company has appointed five group auditors to audit 26 of our subsidiaries that contract operations from Japan Airlines International.

#### Internal Audits

To tighten internal controls and checks, the JAL Group implements the following audits. Yearly assessments and reviews of areas subject to audits and audit methods are conducted.

#### Operational Audits — Departmental

We audit general operations at the department and office levels, focusing on their overall area of operations.

#### Operational Audits — Specified Areas

We select a subject area and audit across companies and organizations with respect to group policies, systems and management. Fiscal 2006 saw audits carried out of risk management in sales activities and information-securityresponse status.

#### **Accounting Audits**

We conduct audits at the divisional level (each operational base) to ensure that procedures for complying with accounting regulations and standards are being followed.

#### **Group Audits**

We audit each group company to promote business operations based on group management practice and the operational mission given to each company. This is also performed to improve each company's internal controls, compliance and risk-management functions.

#### **Environmental Audits**

We audit the entire group with the objective of promoting business operations based on compliance with environmental laws and ordinances in addition to group policies, rules and regulations related to environmental issues.

#### **Safety Audits**

Please see page 21.

## **Compliance**

At the JAL Group, we view compliance as an important function of our internal-control systems and at the same time position compliance as fundamental to CSR. The company interprets compliance to mean not just adherence to laws and ordinances but conformity with internal rules, social norms and agreements decided in contract (or amongst ourselves), and through this to comply with social needs and demands and increase corporate value.



#### The JAL Group Code of Conduct

The JAL Group has established a code of conduct entitled "Commitment to Society" so as to ensure the execution of its Corporate Policy. Part of this policy reads, "The

Japan Airlines Group, as an overall air-transport enterprise, will act as a bridge to bring peoples, their cultures and their hearts closer together and thus contribute to world peace and prosperity."

In addition to all our employees fulfilling their responsibilities, we promise that we will constantly



Our Commitment to Society

act as an organization that fulfills its responsibilities as a good corporate citizen.

For the full text of the JAL Group Code of Conduct, see <a href="http://www.jal.com/en/corporate/action.html">http://www.jal.com/en/corporate/action.html</a>.

#### **Compliance Promotion**

The JAL Group established the Corporate Compliance and Business Risk Management Committee to set down common concepts related to compliance for the entire group and to disseminate these throughout the group via various training and educational activities.

#### **Training Courses**

In addition to implementing training courses for new employees and newly appointed managers, the company has introduced the Compliance Brush-Up Program (CBP), employing e-learning techniques and a system for loaning teaching materials to increase employee awareness of compliance. To educate employees about compliance and risk management on a regular basis through infor-

mation exchange among planning and field divisions, the company has begun publishing *Monthly Compass*, which introduces concrete case studies and activities carried out at each work site.

#### **Compliance Month**

Every year, the company designates a JAL Group Compliance Month to increase the awareness of group employees, promote compliance and ensure thorough implementation of the JAL Group Code of Conduct. Activities during this period include group employees completing self-evaluation check sheets, along with compliance-awareness surveys for each division and compliance meetings and seminars conducted by lecturers brought in from outside the company.

#### **Compliance Network**

Involving approximately 100 domestic group companies, the JAL Group Compliance Network shares compliance information, raises awareness and establishes and reinforces compliance-promotion structures. Activities covered by the network include replying to questions and requests for advice put forward by each company, providing teaching materials and engaging in educational activities.

## Compliance and Sincerity

At the JAL Group, the term "compliance" means activities in the pursuit of a sincere company stance. For example, the company holds seminars on antitrust laws for branches both in Japan and overseas, while observing the different antitrust laws around the world. These seminars

are conducted not just from the stance of what is legally permissible, but serve to implant the desire throughout the company to implement activities that are thoroughly above board. This stance on antitrust is vital for the JAL Group in its activities on the global stage. Throughout the group, we have established an advertising-control system and created concrete guidelines to ensure that our advertising is easy for our customers to understand. Here at the Legal Division, we work with the company lawyers to support that system, while also offering advice to the entire group.

Shuei Nishizawa Legal Affairs

## Maintaining Flight Safety

In dealing with our customers, we will adopt an empathic position that combines personal (first-person) and family (second-person) perspectives with the need to make detached, professional (third-person) judgments. This is what we call the "second-to-third-person perspective," whereby we work towards the establishment of a culture of safety in which we constantly reflect on our activities.

The JAL View

Applying the second-to-third-person perspective in our day-to-day operations and always reflecting on our conduct will help establish a culture of safety.



Toshihiko Sakamoto
Corporate Safety Division

While there has been a reduction in safety incidents of late, when it comes to safety there are no absolutes. I believe that committing ourselves to ensuring the safety of each flight is absolutely of the highest importance. We have thoroughly instilled among all employees the need to be constantly aware of the customer's standpoint and prioritize safety in all our operations.

In line with the 2005 recommendations of the Safety Advisory Group, we are attempting in our operations to assume the second-to-third-person perspective. This is not as complicated as it sounds — it simply means adopting an empathic position combining personal and family considerations with the need to make detached, professional judgments.

In applying this second-to-third-person perspective, we encourage the practice of carrying out unequivocal verbal communication, which helps both parties in an information exchange confirm that they have understood the true intent of the message being conveyed. I believe that applying the second-to-third-person perspective in our day-to-day operations and establishing a culture of safety will, in the final analysis, help us meet our customers' hopes and expectations.

(For more information about unequivocal verbal communication and the second-to-third-person perspective, see page 23.)

# For the JAL Group, safety is our most important social responsibility. JAL Group employees will unite in the pursuit of flight safety.







## My Hopes and Expectations for JAL

#### All employees need to ask themselves "How should I act?"

The company has created and thoroughly implemented the use of case studies of unequivocal verbal communication as one means of reducing human error. I think this is a wonderful move. At the same time, however, it is also necessary to evaluate the effect achieved as a result of that move. This does not necessarily mean putting the information into a graph or drawing up a separate report. It is enough to be able to feel that the atmosphere of the office has changed. But we have to be careful not to allow these developments to become mere rituals, and for that reason it is necessary to monitor these programs constantly.

Many companies create safety charters or corporate charters after accidents or safety incidents have occurred. While these are important, there is no meaning in merely memorizing a safety charter and being able to repeat it on demand. It is vital that staff continually ask themselves what they should be doing. That means all JAL Group employees should engage in "action cycles," wherein they establish their own targets, attempt to achieve them

and later reflect upon the results. It is my hope and expectation that by putting into practice such action cycles and expanding their use throughout the entire company that they will become the norm and part of the corporate culture of the JAL Group.

#### Akinori Komatsubara

Born in Tokyo in 1957, Komatsubara is a professor in the Department of Industrial and Management Systems Engineering in the Graduate School of Science and Engineering at Waseda University. His main areas of research are related to design technology to make products easier to use and technology designed to prevent human error. Komatsubara has been a member of the JAL Safety Advisory Group since 2005.



## Safety-Management System

In response to the Safety Advisory Group Recommendations of December 2005 (see page 22), the JAL Group aims to take further steps to improve safety such that our customers will feel a greater level of confidence in our ability to ensure safe, secure flights.



The JAL Group drew up a medium-term revival plan in February 2007 based on two core safety measures — the building of a safety-management system and activities to prevent accidents arising from human error.

A safety-management system is a structured scheme aimed at maintaining and improving safety. Specifically, management pledges to follow a policy of making safety the foremost priority, studying the causes of accidents and incidents as they arise and taking preventive measures to ensure they do not recur. This includes detecting, analyzing and assessing all unsafe elements that could cause accidents and taking effective countermeasures. To prevent accidents resulting through human error, the company is implementing a variety of measures.

#### Risk Management

Risk management is the core element of the safety-management system, and the JAL Group has put the following risk-management measures into operation.

#### 1 Safety-Information Database

To analyze trends and pool data relating to safety incidents, the company has since April 2006 maintained a database of safety-related information reported from the Flight Operations, Engineering & Maintenance, Cabin Attendants, Airport Operations and Cargo & Mail divisions. Since fiscal 2007, JAL has also engaged in the analysis and assessment of safety incidents that have occurred within the JAL Group, made periodic reports of the results to various in-house committees and instigated measures to prevent recurrence.

#### 2 Flight-Data Analysis

The company records and studies flight data to increase the safety and quality of operations and maintenance. From this data, we discover potential risks, develop measures to reduce such risks and monitor changes once those measures have been taken. This program is implemented for each model of aircraft, with the data being fed back to flight crews and used in the planning of safety measures.

#### 3 Interview-Methodology Training

For accurate analysis of safety reports, it is important to obtain a highly detailed set of information from those who originally filed the report relating to the incident. Also, to ensure that the officers responsible for conducting the



interviews are equipped with the necessary knowledge and skills, the company has adopted training methods based on those developed by Boeing.

#### 4 Research into Analysis Methods

To analyze the large volume of data from safety-related employee interviews and flight recorders, the company is engaged in joint research with Fujitsu Laboratories and the University of Tokyo into technology for detecting all areas at risk. This research is based on the statistical processing of key-word combinations from text data.

#### Safety Audits

The in-house safety auditors verify safety-related operational procedures from an independent third-party stance. Apart from operations in the cockpit and passenger cabin, all safety-linked operations from ground handling at the airport to operations at JAL headquarters are subject to these audits. If problems are found, timely corrective measures are taken and a report is submitted to top management. Audits of 22 domestic branches, 17 overseas branches and 24 headquarter divisions were implemented in fiscal 2006.

#### **Accident Prevention**

#### Reducing Human Error

In October 2006, the JAL Group launched a project aimed at reducing human error. Staff members responsible for safety management in the Flight Operations, Engineering & Maintenance, Cabin Attendants, Airport Operations and Cargo & Mail divisions are central to this project and work on developing countermeasures. At present, project members are engaged in improving education and training so as to reduce the possibility of human error as well as producing a user-friendly manual.

#### 2 LOSA

Line Operations Safety Audit (LOSA) is a safety program designed to identify the background problems and causes of human error. The International Civil Aviation Organization (ICAO) encourages the adoption of the LOSA program among member airlines, and an increasing number of North American and Asian airlines are implementing it. To improve the safety level of all flights, JAL carried out a monitoring program of 435 international and domestic flights — the largest in the world — between April and July 2007.

#### Policies

More than 70% of airline accidents over the past decade have been caused by human error. Since it is impossible to eradicate human error completely, measures must be introduced to reduce the number of occurrences and measures established to stop events developing into fatal situations. Where human error results in a safety incident, but JAL believes the error was not the result of negligence, the incidents are not liable to the punishment stipulated in the company rules. We have thus created an environment in which employees responsible for errors can readily report what has happened. The cause of the incident can then be investigated and measures devised to prevent recurrence.



LOSA poster

#### **LOSA-Implementation Procedures**

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A specially trained flight-crew member boards the plane as an observer and monitors flight conditions from the cockpit.



The observer assesses potential inflight problems and errors, collects the relevant data and forwards it to The LOSA Collaborative (TLC), an independent body.



TLC analyzes the data from various perspectives, including comparisons with other airlines, and reports back to JAL.



Based on the contents of this report, JAL investigates and implements response measures.

## **Objective Assessments**



IOSA accreditation



IOSA audit at maintenance headquarters



#### Safety Advisory Group Members

**Kunio Yanagida** (chairman) Nonfiction writer (specialty: accident and disaster crisis management)

#### Yotaro Hatamura

Professor, Kogakuin University; professor emeritus, Tokyo University (specialties: creative engineering, failure studies)

#### Shin'ichi Kamata

Professor, National Defense Academy (specialty: organizational theory)

#### Shigeru Haga

Professor, Rikkyo University (specialty: transport psychology)

#### Akinori Komatsubara

Professor, Waseda University (specialty: human life engineering)

In performing ongoing reviews of safety-management systems and planning further safety improvements, the JAL Group receives assessments and recommendations from a variety of external organizations.

#### **IOSA**

The International Air Transport Association (IATA) Operational Safety Audit (IOSA) is a global audit program with rigorous safety standards that assesses safety-management systems among member airlines. Following audits carried out in December 2004, JAL underwent an updated audit of 744 items in eight operational areas (organizational systems, flight, operational management, maintenance, passenger cabin, airport and ground handling, cargo and security) in October 2006 and passed on all items.

#### **Government Assessment**

Established in October 2006, Transport Safety Management Assessments are carried out by the Ministry of Land, Infrastructure and Transport to assess the status of safety-management systems among all transport operators. Areas that require improvement are identified and advice is offered. JAL underwent inspection in November 2006 and received the following evaluation:

- Top management is positively engaged in activities that prioritize safety, including dialogue between management and employees and the establishment of the Corporate Safety Division with a director appointed as general manager.
- Safety information is reported in a timely and appropriate manner by employees to management.
- The Safety Promotion Center is actively used.
- Preliminary accident and incident systems are in place.
- Work-site opinions are reflected in business planning.

We also received the following advice:

- Confirm to what extent safety-policy measures have been achieved.
- Establish greater communication between upper and mid-level management.
- Create a mechanism for confirming whether safety training is being adequately carried out.
- Conduct internal audits of top management and the safety-control managers of each division.

## **Safety Advisory Group Recommendations**

The JAL Group established a five-person Safety Advisory Group, under the chairmanship of well-known writer Kunio Yanagida, tasked with creating a corporate culture with a higher level of safety. On December 26, 2005, the Safety Advisory Group presented the company with a set of proposals that ran to 125 pages. Listed below is JAL's response to the advisory group's

recommendations. The JAL Group reports to the Safety Advisory Group on a twice-yearly basis regarding activities and the status of the progress made on the proposals received, and in turn it receives comments from an expert perspective. See <a href="http://www.jal.com/en/safety/advisory/adv

#### 1 Central Organization Responsible for Safety

On April 1, 2006, the JAL Group established the Corporate Safety Division and appointed full-time staff with extensive knowledge and experience of safety-related tasks. These staff report directly to the division's general manager.

#### 2 Learning from Accidents

The company opened the Safety Promotion Center on April 24, 2006, with the major goal of improving safety awareness among JAL Group staff through educational activities with an emphasis on learning from past safety incidents (see pages 24–25).

#### Accident Case Studies

Since December 2006, the company has displayed wreckage at the Narita and Haneda Maintenance centers to accompany the information presented in accident case studies and help prevent the recurrence of such incidents.

#### 4 Sharing Safety Data

In cases where a safety incident occurs at a specific division, the relevant facts and measures to prevent recurrence are shared among other divisions and the group.

#### 5 Preventing Human Error

In April 2006, the company distributed a collection of case studies of unequivocal verbal communication (see right) to some 40,000 group staff and followed this up by distributing English copies to approximately 4,000 non-Japanese crew members and overseas staff.

#### 6 Cultivating a Culture of Safety

The company has implemented group-wide educational activities related to staff adopting a "second-to-third-person perspective" (see right) when dealing with customers. Education concerning human error has also been conducted for heads of organizations directly related to safety.

#### **7** Links with Administrative Authorities

In fiscal 2006, the company hosted a series of sessions for JAL staff and air-traffic controllers to meet and engage in informal talks. In all, 46 sessions were held — approximately four times as many as in fiscal 2005. The company also invited the air-traffic controllers to tour company facilities and experience flight simulators in an attempt to promote a mutual understanding with regard to operational safety.

#### 8 Spontaneous Thinking and Action

#### Middle-Management Meeting

Since February 2006, middle-management staff from departments throughout the company have gotten together for a general meeting once a month for a free exchange of ideas, transcending company and work-site affiliations, about matters relating to the JAL Group.

#### **Unification Project**

Thanks to the efforts of these middle-management staff, communication channels among departments and divisions have expanded and improved since September 2006.

#### **Bottom-up Management**

To promote the filing of improvement proposals and other spontaneous activities from field divisions, the company has created a system for interdepartmental problem solving.

#### Personnel Exchanges

Since April 2006, junior staff with approximately three to six years' experience have participated in joint training sessions to provide an understanding of the content of one another's work and how their responsibilities fit in with those of the overall group so as to boost a sense of teamwork.



## Unequivocal Verbal Communication

By ensuring that both parties in a routine business conversation understand the message each is trying to convey, unequivocal verbal communication helps prevent human error.



## The Second-to-Third-Person Perspective

If you are a passenger experiencing the operations of an airline, you adopt a first-person perspective. Where a family member is the passenger, this becomes the second-person perspective. Airline staff carrying out their duties without properly considering the position of the passenger constitutes a third-person perspective. JAL staff have to adopt an empathic position that combines personal and family perspectives with the need to make detached, professional (third-person) judgments. This we term the "second-to-third-person perspective."



Middle-Management Meeting

## Learning from the Past



Staff personally involved with flight 123 at Mount Osutaka relate their experience of the disaster.

The JAL Group is using the tragedy of flight 123, which crashed into Mount Osutaka on August 12, 1985, and the lessons that can be learned from this disaster to raise group-wide staff awareness of the importance of safety through a range of activities. These include tours of the Safety Promotion Center and seminars featuring presentations by staff members who were directly involved in the accident.

## **Employee Education**

In July 2002, the JAL Group implemented the education and training of staff to support those who have lost family members in group-related accidents — a move that took place against the backdrop of global trends relating to family assistance in postaccident situations (see below). This project has its origins in the educational program for facilitators tasked with supporting families of victims of disasters such as the flight 123 accident, and it has now developed into a program for training personnel in the Accident Prevention Division. We are also conducting educational activities that emphasize learning from the past. These activities are directed at staff throughout the entire group

and include sessions where employees can listen to the recollections of veteran staff who were personally involved in postaccident support after flight 123.

## Value of Firsthand Accounts

The facilitator training program, which commenced in 2003, was originally a training program using accident-related materials. There are limitations, however, to what can be achieved with such sessions. To learn more about the reality of air disasters, it is necessary to hear the words of those who have experienced such events. It was while gathering this girl of parrative material that I realized we should not use it just

kind of narrative material that I realized we should not use it just in training specialist personnel but should share it with all staff.

I learned a lot while meeting people at various work sites, including former employees, and in listening to their stories. It is over 20 years since the accident on Mount Osutaka, and many people who were involved with the accident then are no longer with the company. One way for the JAL Group to take this negative legacy and use it in a positive manner is to pass on the lessons of the horror of aircraft disasters as well as the pain suffered by the victims' families and those connected with the accident, both inside and outside the company.

Akemi Hamazaki Aviation Security and Risk Management Group, Corporate Safety Division Sessions for junior employees to hear the stories of these veteran staff have been held on four occasions since fiscal 2005, and 694 people have participated so

far. Through these sessions, JAL Group employees can come to understand the grief of the victims' families and the suffering of those who were connected with the accident, while also becoming aware that this is not some past event without direct relevance to the present. We believe it vital that staff emerge from these sessions with a renewed sense of safety awareness and a determination to do everything to prevent such accidents from happening again.

#### **Family Assistance**

In 1997, the United States passed the Foreign Air Carrier Family Support Act, which applies to all airlines serving the U.S. This act makes stipulations for the provision of systematic support for the victims of air disasters and their families. In response, airlines around the world have established family-assistance guidelines.

## **Safety Promotion Center**

Following recommendations of the Safety Advisory Group and families of the victims to exhibit the wreckage of JAL flight 123 so that such a terrible accident should never recur, the JAL Group established the Safety Promotion Center in April 2006.

In addition to the aft pressure bulkhead, vertical stabilizer and aft fuselage, recovered from the crash site, the center exhibits records of the flight route as well as materials related to aircraft disasters in Japan and overseas. In June 2006, the center added messages written by passengers on flight 123 just before the crash and aircraft parts collected by members of the bereaved families who climbed to the crash site on Mount Osutaka.

The center is used as a research facility so that the sign lessons learned from the accident will never be forgotten, to increase safety awareness among our employees and so that each member of the JAL Group can understand the importance of flight safety. The center is open to anyone with an interest in aviation safety as well as to people engaged in safety-related jobs, and it can be visited by appointment. Over 20,000 people, both from within and outside the company, visited the center in the year following its opening. The JAL Group intends to continue using this facility as a foundation for safety.

# The Weight of Responsibility

By making a tour of the Safety Promotion Center, I was able to rethink a number of things, including my daily work, the tasks I fail to carry out sufficiently well and my personal attitude. As someone who comes into direct contact with aircraft, I ask myself whether I'm making sufficient efforts in my work or if I'm fully aware of all aspects of it. I felt I truly understood the horror of the flight 123 disaster from the photographs of the survivors being rescued by helicopter and from the wreckage itself. And I was struck by the feelings of bitterness and anger from members of the victims' families as expressed in the exhibits. When I reflect on that, I become keenly aware of the tremendous responsibility that my job carries. In future, I will take the opportunity to revisit the center whenever I feel that I'm losing sight of my responsibilities.

#### Takuya Nomura

JAL Aircraft Maintenance Narita, Flight Check Maintenance Division



Vertical stabilizer exhibited at the center

#### Lessons for Future Generations



The majority of JAL Group employees have no direct connection with flight 123, and many staff now in their 20s were only children when the accident occurred. The significance of this center is in communicating to this younger generation the reality of the disaster, not just through words and photos but through the flight wreckage, and having all staff ask themselves what they can do to prevent disasters like this from being repeated. Visitors are appalled when they look at the seat plan and realize how many people lost their lives. It's important that visitors leave the exhibits with such feelings. Sharing the pain that was suffered then and passing on the lessons of that accident to future generations lie at the very core of safety awareness.

Yutaka Kanasaki Safety Promotion Center chief, Corporate Safety Division

#### **Guide to Safety Promotion Center**

**2**03-3747-4491 **3**03-3747-4493 **3**03-3747-4493

Address: Daini Sogo Building 2F, 1-7-1 Haneda Kuko, Ota-ku, Tokyo 144-0041

Access: Five minutes' walk from Seibijo Station on the Tokyo Monorail

Open: Monday to Friday (closed holidays and during the year-end holiday period)

Tours: Conducted five times a day at 10:00, 11:00, 13:00, 14:00 and 15:00. Each tour takes approximately one hour. Tours conducted by appointment only

## Safety Incidents in Fiscal 2006



As can be seen from the table below, the number of serious incidents and flight irregularities underwent a major decrease in fiscal 2006 compared with the previous year. We believe this was a result of group staff uniting to engage in a variety of measures designed to improve safety. Unfortunately, there was one accident (see opposite page). The number of safety incidents that arose throughout the year, details of the major incidents and follow-up measures are presented in the following section.

#### Safety Incidents in Fiscal 2006

Type of incident	Fiscal 2004	Fiscal 2005	Fiscal 2006
Aircraft accidents	2	0	1
Serious incidents	1	5	0
Flight irregularities	113	131	99

#### Incident Rate per 1,000 Flights

Type of incident	Fiscal 2004	Fiscal 2005	Fiscal 2006
Aircraft accidents	0.005	0	0.002
Serious incidents	0.002	0.012	0
Flight irregularities	0.267	0.313	0.235
Total no. flights	422,955	417,453	421,833

#### **Aircraft Accidents**

The Ministry of Land, Infrastructure and Transport defines aircraft accidents as an aircraft being involved in a crash, collision or fire, or death or serious injury to persons arising as a result of aircraft operations.

#### **Serious Incidents**

The transport ministry defines serious incidents as cases that, though not in themselves aircraft accidents, are recognized as having the potential to develop into accidents, e.g., veering off the runway, the use of emergency exits, onboard fires and smoke, irregular declines in cabin pressure and also when the aircraft encounters erratic meteorological conditions.

#### Flight Irregularities

While not developing into situations that immediately affect flight safety, flight irregularities are cases where it becomes necessary to modify scheduled destinations or return to the point of departure as a result of equipment trouble. Flight irregularities also include special situations, such as those that require the air-traffic controller to issue a directive to change the flight path.

## **Safety Incidents and Countermeasures in Fiscal 2006**

## Flight-Crew Member on Restricted Medicines

A flight-crew member diagnosed with a benign tumor of the parotid gland underwent an operation to have the tumor removed in May 2006 while on leave but failed to inform the company doctor of the situation. After the operation, he took four types of medication and was on duty on seven flights from June to July — a total of 9 hours, 50 minutes. These medicines did not make him drowsy, but possible side effects included hypersensitivity, stomach and bowel irritation and headaches. Flight crew are prohibited from serving onboard within 24 hours after taking such medication.

#### Countermeasures

We made a public announcement of this event and confirmed that no other cases had occurred in the period to July 27, 2006. As a health-management response, we prepared comprehensive guidelines about such health matters, distributed these to all flight crew, updated in-house regulations and implemented an education program.

## Passenger Injured owing to Turbulence on Flight 3514

On July 4, 2006, JAL flight 3514 encountered unexpected turbulence while en route from Sapporo to Fukuoka, and a male passenger towards the rear of the passenger cabin, who was not in his seat at the time, injured his right ankle. The passenger reported this to the company two days later, when it was revealed that he had suffered a fracture to the right fibula. As a result, this incident was ruled to be an aircraft accident by the Ministry of Land, Infrastructure and Transport.

#### **Causes and Countermeasures**

According to the accident report of the Aircraft and Railways Accidents Investigation Committee, the aircraft was shaken as a result of the impact of localized disturbances in air currents owing to cumulonimbus clouds at the fore of a warm weather front, the seat-belt sign was off and it is presumed that the passenger lost his balance while walking in the aisle

The flight crew and ground staff will collaborate to the best of their abilities to prevent injuries arising as a result of turbulence.

#### Flight 2620 Makes Emergency Landing

On February 17, 2007, JAL flight 2620 (MD-90), from Hanamaki Airport to Kansai International Airport, made an emergency landing. The flight crew followed appropriate fire-control procedures on the flight deck in response to a flashing warning light indicating an outbreak of fire in the cargo bay while the aircraft was making its descent before landing. The aircraft's engines were shut down on the taxiway, and passengers alighted via two doors, located fore and aft. Checks were carried out after landing, but no traces of fire could be found, and there were no injuries to passengers or crew.

#### **Causes and Countermeasures**

The duct used for conveying warm air from the engine to prevent the wings icing had become separated from the connector (on the left wall of the cargo bay), and dust was whipped up by air leaking from that section. It is presumed that the fire detector was set off after this dust was identified as smoke. The reason for the loose duct was a rupture at the point where the duct was welded to the wall, and this presumably allowed the connector to slide back and forth.

JAL implemented emergency checks on all 42 MD-90 and similar-model MD-81/87 aircraft and completed parts replacement and/or repairs to nine aircraft (including the aircraft in question) where cracks were found in the aforementioned duct welding. We implemented new requirements concerning periodic detailed inspections of this section.

## **Universal Design**

## JAL's Philosophy

A core value shared by the entire JAL Group is that we consider our work from the stance of our customers. This is the starting point for our implementation of universal design.



Jun Furuhata
Passenger Experience Planning

Many passengers experience nervousness and stress when reserving and buying tickets, checking in, boarding, collecting luggage and carrying out numerous other procedures connected with air travel. We consider it vital to do whatever we can to reduce that stress and help our passengers enjoy a pleasant flight. We impress upon all our employees the need to put themselves in the position of our customers, remain sensitive to any possible sources of inconvenience, consider how to solve such problems and thus provide a better service.

To help spread this philosophy throughout our company, we have promoted the concept of universal design. One example of this is making a people-friendly airport. By listening to the views of ground staff, conducting repeated customer-satisfaction surveys and redesigning signs, we aim to maximize convenience for our customers, irrespective of age, language or physical ability. This undertaking is not limited to airport facilities, but is applied to everything that our customers see and use.

There is a tendency to consider design as signifying simply the design of visible objects, but there is more to the concept. In order to offer all our customers a pleasant flight, it is essential that our staff achieve complete empathy with customers and thereby acquire the knowledge they need to attend to them. All these activities together constitute universal design at JAL.

We value dialogue with all our customers. By putting ourselves in their place, we can act accordingly and build a trusting relationship.







## My Expectations of JAL

It is my hope that JAL will implement universal design throughout its global operations.

Universal design promotes an agenda of equality, an inclusivity, for all people of all ages and abilities. For the design community, this charge is one that embraces every individual and their unique wants and wishes as a vital concern in the creative pursuits by which we conceive, build and manufacture all places and products.

For me, it is both a professional and personal joy to work with a company that goes beyond merely understanding the needs of their customers, but rather embraces each consumer and their individual concerns. JAL exemplifies this corporate culture. By enhancing the education of its employees, the JAL "family" represents the highest level of training available. It has been my great pleasure and honor to serve JAL in this capacity. All great design begins with knowledge. And when knowledge is combined with empathy for those we serve, by design, then the result is extraordinary.

With the dedicated effort JAL has initiated for the most universal aircraft and support services, we are in a position to make

an impact on the entire industry of air travel and mass transit. This attitude and potential extends to the environment of the terminal, host communities and all related personnel. Such a consortium approach benefits not only JAL, but every participating business and citizen. It is thrilling to recognize the extent and power of universality in design. I have every confidence that because JAL's commitment to this goal starts with the CEO and filters through every level of management, our future efforts will demonstrate, on a global level, the power of universal design.

#### Patricia Moore

At the age of 26, industrial designer Patricia Moore began to have doubts as to whether she was really producing designs that were easy for everyone to use. In a three-year undercover investigation, she disguised herself as an elderly person so as to experience the world from such a person's perspective. She later set up her company, Moore Design Associates, which today receives a large number of commissions from both public and private institutions and is involved in developing environments, products and services based on the principles of universal design.



#### **Together with Our Customers**

## Assuring All Passengers a Pleasant Flight

#### •••

#### **Universal Design Coordinator**

Universal Design Coordinator is a qualification sponsored and accredited by the Institute of Advanced Studies in Universal Design, a nonprofit organization (NPO) certified by the Cabinet Office in Japan. The qualification attests that the holder has specialized knowledge of areas including social welfare and medicine, understands universal design theory and can utilize this in products and services.

#### **Care-Fitters**

The notion of being a "care-fitter" is one that originated in Japan and is directed at acquiring particular skills by those who frequently deal with senior citizens and people with disabilities. To this end, a care-fitter qualification is awarded by the Nippon Care-Fit Service Association, an

NPO. JAL Group employees with the qualification wear identifying badges so that customers requiring their assistance may easily recognize them.





Automatic check-in terminals with easy-to-understand signs

## **Universal Design as a Guiding Principle**

The customers of the JAL Group represent a broad cross section of society and as such have a diverse range of needs based on such factors as age, how frequently they fly, language, cultural background and physical ability. We are implementing universal design as a guiding principle to provide secure and pleasant travel for all our customers.

Our universal design philosophy goes beyond increasing the legibility of airport signs or modifying facilities to make them easier to use. By being sensitive to any inconvenience or stress to our customers, we endeavor to find ways that will help put them ever more at ease.

#### **Universal Design Training**

Since fiscal 2005, 205 of our employees have obtained the grade of Class 2 Universal Design Coordinator (see left). They are putting universal design into practice in the development and improvement of products and services. In fiscal 2007, we set up an e-learning course on the company's intranet, enabling still more of our employees to understand the philosophy of universal design.

In addition, to be of service to our elderly and disabled customers, we have assigned 300 employees with Class 2 care-fitter (see left) qualifications to our 42 domestic airports.

#### More Than Just Equipment

Towards our goal of a people-friendly airport, we are taking a fresh look at the activities of passengers from the moment they arrive at the airport to when they board their plane. In line with this, we are making changes to our airport signs in terms of overall style and the use of imagery, coloring and lettering so as to make them easier to understand. In March 2007, we changed the signs on automatic check-in machines and around our check-in counters at Haneda Airport. From fiscal 2007 onwards, we will extend these improvements to Narita and other airports. We have also introduced knives for our inflight meals that are easier to use. In future, we plan to study how to offer meals that are easier for all our customers to eat, based on universal design.



#### **Equipment Upgrade**

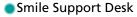
Since fiscal 2005, we have been conducting surveys on the usability of our aircraft in active service. We have made repeated checks on the ease with which customers can use our equipment and whether the aircraft are work-friendly environments for cabin crew. With the introduction of new Boeing 737-800 aircraft, we have made toilet door handles more user-friendly and increased the legibility of the "occupied" signs. With the planned introduction of newly designed seats, we will change to personal-monitor controllers and seat-reclining buttons that are simpler to operate.



Easy-to-understand instructions for the seat and footrest

## **JAL Smile Support**

For domestic flights, the JAL Group has established the Smile Support Desk to help passengers with special needs, such as passengers with children up to three years old, expectant mothers, children traveling alone and passengers over the age of 65. At this desk, we offer support to ensure a safe and comfortable journey. Full details are listed in our timetable, on our website and in pamphlets at airports.



0120-25-0001 (available daily from 06:30 to 22:00)



# Services for expectant mothers and passengers with young children





- Priority seating
- Mama & Baby Odekake Guide (in Japanese)
- Loan of strollers
- Priority boarding

# Support for children traveling alone and passengers over the age of 65





- Priority seating
- Guidance to the arrivals lounge upon landing
- Original JAL toys for children

## **Priority Guest Support**

In the JAL Group, we refer to passengers with disabilities and those with illness or injury as priority guests and give them precedence over our other customers. Established in 1994, the JAL Priority Guest Center responds flexibly to a variety of conditions, such as passengers suffering from panic syndrome, autism or kidney disease, or those fitted with pacemakers or artificial anuses. The Priority Guest Center is staffed by experienced employees who respond attentively to customer inquiries.

On international routes, the JAL Group provides special meals, such as for diabetics and for people on low-calorie diets. We also offer inflight explanations in Braille (Japanese language), boards for written communication, stretchers, onboard wheelchairs and toilets adapted for those using wheelchairs. Guide, service and hearing dogs may be taken on all flights.

120-747-606 (reservations and information for those with hearing and speech disabilities)

Priority Guest Center

<a href="http://www.jal.co.jp/en/jalpri">http://www.jal.co.jp/en/jalpri></a>

0120-747-707 (available daily from 09:00 to 17:00)

## Responding to Customer Comments

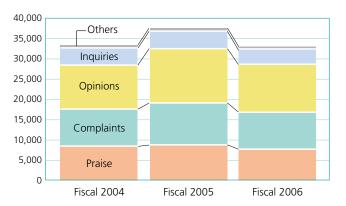


At our Customer Support Center, we endeavor to provide maximum satisfaction for our customers through sincere responses to the comments we receive and improved service.

In fiscal 2006, we received 32,263 customer comments via our toll-free comment line, e-mail, onboard comment cards and post. Each comment is treated as a vital asset for our business and a means to improve services and develop new products.

#### **Breakdown of Customer Comments**

Of the comments we received in fiscal 2006, 36% were general opinions, 27% complaints and 25% praise. The number of comments received was 88% that of the preceding year.



#### **Examples of Customer Requests and Subsequent Improvements**



#### Request

Please install wireless LAN Internet connections in your domesticterminal lounges.



## **Improvement**

Starting with our main domestic terminals (Haneda, Osaka, Sapporo and Fukuoka), we have launched a free wireless LAN service.



#### Request

Please introduce Class J on your small aircraft.



#### **Improvement**

We have introduced Class J on our 737-400 and MD-90 aircraft.



#### Request

Our family would like to be able to share the air miles that we have collected.



#### **Improvement**

We have created the JAL Card Family Program to enable family members to share their air miles.

Customer comments can be sent to us here: <a href="http://www.jal.co.jp/en/information/index2.html">http://www.jal.co.jp/en/information/index2.html</a>.

## **Striving for Greater Customer Satisfaction**

To understand our customers' needs more thoroughly and improve the quality of our products and services, we set up the Customer Satisfaction (CS) Improvement Division, which is under the direct supervision of JAL's president.

#### Service Improvement

The customer comments we receive are collected and analyzed at our Customer Support Center. This information is then shared with relevant departments and used to improve our services.

Comments and inquiries concerning any of our services should be directed to this number:

0120-25-8600 (available weekdays from 09:00 to 17:00, except public holidays) Comment cards are also available onboard.

#### Service Improvements Led by Female Staff

To achieve a more balanced orientation of our work towards all customers, female JAL staff in February 2007 began working with individuals from outside the company to examine group products and services from a women's perspective (see box below).

# CS | Corporate | Safety Division | Passenger Experience | Planning | Customer Support Center

Service Improvement



# Taking a Fresh Look at Products and Services

We recently set up the Artemis Project to think about how we can best take advantage of female perspectives to improve our products and services. Artemis was the Greek goddess of hunting and childbirth, and we chose to name our project after a symbol of womanhood. We intend to take a fresh look at all our products and services from a female perspective and do our best to find ways to improve them.



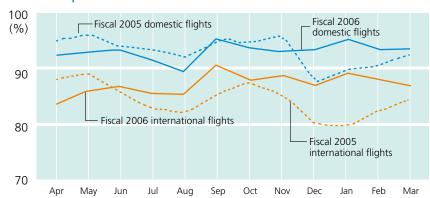
Chieko Nagasaka Passenger Experience Planning

## Making Safe and Relaxed Travel a Reality



In fiscal 2006, JAL's on-time departure rate (the percentage of planes that left within 15 minutes of their scheduled departure time) was 93.1% for domestic flights and 87.1% for international flights. While still keeping safety our top priority, we will do our very best to improve this rate.

#### **On-Time Departure Rates**



## **Timely Departures**

The JAL Group considers flight on-time performance a key indicator of service quality. Though there may sometimes be unavoidable reasons for delays, such as bad weather, punctuality is likely to be an important consideration for customers when selecting an airline.

Cooperation Improving Punctuality

In 2006, we set up the On-Time Performance
Improvement Committee to enable airport
staff to meet and exchange thoughts and perspectives on how to improve punctuality. The
committee came up with many ideas, including
changing the order of cabin-cleaning tasks

upon arrival, making sure that cleaning begins earlier and working to provide more precise instructions so that passengers can board their planes smoothly. We intend to strengthen cooperation among the relevant departments and further improve customer satisfaction through on-time departures.

Kei Hideshima JAL Sky Sapporo To improve our punctuality and help ensure customer satisfaction, we have established the On-time Performance Improvement Project so that the relevant divisions in our headquarters can work together, study the factors that impede punctuality and come up with solutions. In practice, this means sharing information between headquarters and onsite airport staff, adjusting flight schedules and ship routing to prevent delays, and improving the efficiency of baggage handling and customer assistance. Throughout this process, we conduct regular checks to ensure staff members always treat safety as their top priority.

# **Better Guidance for Arrivals and Departures**

While there may at times be unavoidable reasons for flight delays, cancellations and route changes, at the JAL Group we do our best to convey accurate information to our customers as soon as possible.

During fiscal 2006, we redesigned the arrivals and departures section of our website to ensure it promptly displays the same information as our airport arrivals and departures boards. We also began a service for our domestic routes that allows JAL Mileage Bank members to receive rapid notification of delays and cancellations by e-mail. For our international routes, we introduced Sky Navigation, a 24-hour automatic telephone service providing arrivals and departures information.

In fiscal 2007, we plan to extend our e-mail information services. At the same time, we will increase the number of information displays around check-in counters and boarding gates at our main domestic airports. We will improve our facilities to give customers access to prompt and regular information on their flights.



## **Improving Passenger Announcements**

Until recently, passenger announcements by our flight crew consisted mainly of greetings or were to inform passengers about flight routes. In 2004, JAL reviewed the content of passenger announcements, and since then we have endeavored to provide detailed information concerning flight operations. Specialized information is provided by our flight crew at times when passengers may feel uneasy, such as in periods of turbulence and with unusual occurrences during the flight.

We used to receive sengers saying they uneasy during period though, we have receive though, we have received.

In 2006, we analyzed passenger opinions about our inflight announcements and shared this data among flight crews to improve the quality of these announcements.

We will continuously try to improve the quality of our announcements so that our passengers can feel more secure and relaxed on our flights.

## Reassuring Announcements

We used to receive comments from passengers saying they had been scared or felt uneasy during periods of turbulence. Recently though, we have received positive comments from our passengers, indicating that because of the inflight announcements they felt reassured. But we will never end our efforts to improve the quality of our passenger announcements and through these announcements will always try to decrease any sense of unease among our passengers.

Takeshi Koshiishi
A300-600 captain



#### Together with our Shareholders and Investors

## **Rapid Information Release**

#### **Disclosure and Communication**

The JAL Group actively communicates with individual shareholders and institutional investors, providing them with information on our operations in a speedy and impartial fashion. The group will continue such activities, thereby putting shareholders and investors in a position where they fully understand JAL and are able to make responsible investment decisions.

JAL takes comments and proposals from shareholders and investors seriously and makes efforts to see that these ideas are reflected in management decisions. The company provides timely disclosure of information for the benefit of all shareholders and investors, including the prompt posting of updated information on the JAL website. Please see <a href="http://www.jal.com/en/ir/index2.html">http://www.jal.com/en/ir/index2.html</a>.

Along with reports of financial results, JAL also issues *Community JAL* business reports mainly for individual shareholders (two editions a year are

sent in print form to all shareholders, and two are available on our website). Once a year, JAL also issues an annual report in English and Japanese to all our shareholders and investors. The English edition is in print form and the Japanese edition is posted on our website.





Community JAL

#### **Regular Briefing Sessions**

The JAL Group hosts briefing sessions for domestic institutional investors and analysts to coincide with quarterly results and the announcement of the medium-term business plan, which is usually updated annually. Recent financial results and future business plans are explained at these meetings by our management. For those unable to attend, materials used in the briefings and videos of presentations are made available on our website. Also, we periodically visit our main overseas institutional investors to explain the current business situation, medium-term business plans and other announcements.

Finally, since we value the two-way communication with our shareholders and investors achieved through direct dialogue, we also hold official briefings for individual shareholders.

These materials are all available on our website. Please see <a href="http://www.jal.com/en/ir/management/setsumeikai.html">http://www.jal.com/en/ir/management/setsumeikai.html</a>.

#### **Shareholder Activities**

#### **Benefit Program**

So that shareholders can better understand and support the JAL Group, we operate the Shareholders Benefit Program and invite them to use group products and services at a discount.

#### **Shareholders Desk**

For matters relating to the Shareholders Benefit Program and stocks, the group operates an inquiry counter known as the Shareholders Desk, which handles telephone calls, letters and e-mails from our shareholders.

#### **General Meeting**

Since our June 2006 shareholders meeting, we have made it easier for our shareholders and investors to vote by giving them access to our online Institutional Investor Voting Platform.

We have also worked to provide the increasing number of individual shareholders with easy-to-understand explanations of the JAL Group's operations. For example, at our regular general meeting of shareholders, our business report was in the form of a video presentation. We will continue to take suggestions and inquiries from our shareholders seriously and do our best to provide appropriate responses.

## **Shareholder Events in Fiscal 2006**

As part of the Shareholders Benefit Program, JAL holds a variety of events so that our shareholders become better acquainted with the JAL Group and our business. In August and October 2006, JAL was pleased to show shareholders around our maintenance facility at Haneda Airport. With the cooperation of Kansai International Airport and Central Japan International Airport (known as Centrair), we also hosted a lecture presentation titled "Sky Tales." At Kansai International Airport, attendees had an opportunity to see the site of the new second runway, which opened in August 2007. At Centrair, investors got a close-up view of aircraft taking off and landing from the Centrair Sky Deck against the backdrop of Ise Bay.



Showing shareholders around our maintenance facility at Haneda Airport



One of our pilots giving a "Sky Tales" presentation at Centrair

#### Socially Responsible Investment Index

The CSR activities of the JAL Group have been acknowledged and in March 2007 were included in Japan's Morningstar Socially Responsible Investment Index (MS-SRI) and the FTSE4Good Index Series.





#### **Together with Our Employees**

## A Comfortable Workplace

## **Balancing Personal and Professional Life**

A good work-life balance is created by promoting personal development, fulfilling leisure time and a healthy lifestyle. In encouraging each employee to achieve his or her full potential, we can at the same time strengthen the personnel and organizational resources of our company. The JAL Group aims to provide facilities and policies to create an environment where management and staff can cooperate to spread the concept of a healthy work-life balance, and where employees can actively pursue personal development.

#### Work-Life Balance Campaign

This project aims to promote efficiency in everyday work, maintenance of reasonable working hours and the taking of annual leave. Through this project, it is hoped that staff will become more aware of the need for a healthy work-life balance.

#### Flexible Working Hours

So that our ground staff can enjoy leisure time and the chance for a diversity of lifestyles, in addition to our standard starting time of 8:45 a.m. we have established five other times to choose from: 8:00, 8:15, 8:30, 9:30 and 10:00.

#### Work-Life Balance Day

Each week, a representative from a different department at the JAL Head Office makes a special announcement, encouraging employees to leave at the end of standard working hours.

#### Work-Life Balance Communication

This educational publication includes information on the use of leisure time and articles based on the personal experiences of staff.

#### Vacations

We encourage staff to take long holidays.

## Support Programs

#### Maternity and Child-Care Leave

This is a policy aimed at supporting our employees and as well the next generation of the nation's youth. The JAL Group allows employees to take child-care leave up until the end of the month of their child's third birthday. This system compares favorably with the legal requirement for a single year of leave, extendible by six months in certain cases. Almost 60% of those who use the system take the full period offered.

#### **Caregiving Leave**

The JAL Group also provides a system for extended leave of absence to care for elderly parents and close relatives for up to 18 months. This too compares favorably with the legally mandated 93 days. In all, 118 employees took advantage of this and our shortened-working-hours system in fiscal 2006.

## Staff Taking Maternity and Child-Care Leave

(number of employees on leave at fiscal year end)

Fiscal 2004	771
Fiscal 2005	782
Fiscal 2006	823

#### **Maternity Leave**

This system aims to protect the welfare of pregnant employees by allowing them to take time off work in the period before they give birth. The system is in accordance with the legal requirement for six weeks' leave before birth and eight after. In fiscal 2006, 307 of our employees took maternity leave.

## Alternative Work for Pregnant Cabin Crew

This is a voluntary alternative to maternity leave, under which pregnant cabin crew elect to work as ground staff in the period prior to birth. In fiscal 2006, 150 of our cabin crew took advantage of this system.

#### **Paternity Leave**

JAL has introduced this system to encourage fathers to participate in the child-rearing process. Male employees can take paternity leave in the first 10 weeks after their baby's birth. In 2005 (the first year of the scheme), seven employees took paternity leave, and 12 did so in 2006.

#### A Worker and a Mother

I've used JAL's maternity-leave system three times now. The first was in 1997, and each time I've taken one year off work. The first two times, I returned to work at JAL's check-in counters, while the third time I returned to my present job in general affairs at JAL Sky Sapporo. Returning to employment after leave, I did have concerns about whether I'd be able to work in the same way as before, but each time my colleagues were very welcoming and I was able to make a smooth transition back. If I had resigned each time, it would have been very difficult to look for a new job and difficult too to get used to the new work. Thanks to this system, I've been able to raise my young children with peace of mind.

> Mieko Yoshii General Affairs, JAL Sky Sapporo



#### Working Arrangements to Suit Lifestyles

#### **Discretionary Employment**

This is a voluntary work system for cabin crew. If they meet certain conditions, employees can apply to work just 10 days a month, which is half the full-time workload.

#### Cabin-Crew Reemployment

JAL, JALways and Japan Asia Airways have introduced a system enabling reemployment of former cabin crew, from within the group or outside, on a part-time basis. This system allows us to tap the experience of these workers, while also allowing them to find work to match their lifestyles, families, child-rearing responsibilities and personal interests. In January 2007, we established the online Experienced Cabin-Crew Registration Bank so that potential staff can promptly obtain information on employment opportunities.

#### Retired Staff Reemployment System

JAL has a system to provide reemployment opportunities to all staff who reach official retirement age but wish to continue working. Retired staff desiring reemployment are rehired by the JAL Group Senior Center and posted to a variety of positions.

## Getting back in the Air

Nearly 20 years ago, I quit my job as a cabin attendant to have a baby, but I always thought that I would like to go back to

work if I had the chance. Although I originally worked for a different airline, my husband is a JAL captain and I learned about the system through JAL's company newsletter. I applied and began work at Japan Asia Airways in 2005. I think the scheme is an excellent chance for anyone who leaves the work-

place but later wants to return to cabin-crew employment. When I went back, it had been a long time since I'd last worked on an aircraft, so there were lots of challenges. On the other hand, the difficulties were more than compensated for by the pleasure of flying. I'm so glad I went back to work.

Mihoko Hino Cabin attendant, Japan Asia Airways

# Human-Resources Development Cycle Education, training "Taking notice" Advice from senior colleagues and superiors "Putting into practice" Self-development "Learning" "Learning"

In fiscal 2006, the JAL Group conducted 235 in-house group-education and/or training sessions, with 4,663 employees taking part.

#### **Education and Training**

The daily work of JAL Group staff demands a high level of specialist expertise in various fields, and extensive training is required to acquire that knowledge. At our Human Resources Development Center, as well as such specialist training we provide education and training in JAL Group philosophy and goals. At the center, we help employees acquire the knowledge and skills that are needed in all roles within the JAL Group. Although training generally takes place on the job, in cases where that is not possible the Human Resources Development Center provides supplementary training and gives participants a chance to meet and exchange ideas.

The diagram on the left shows the human-resources-development cycle within the JAL Group. Through this process, we aim to create a working environment where employees can grow to reach their full potential.

#### Safety in the Workplace

To help our employees work securely and to their full ability, the JAL Group has set up a system called Total Health Promotion. This scheme aims to create a pleasant workplace and to foster mental and physical health. Specialist staff safeguard the health of our employees through mental-health initiatives, back-pain-prevention measures, nutritional advice and strategies to deal with metabolic syndrome.

#### Staff with Disabilities

In 1995, we established JAL Sunlight to promote the employment of individuals with disabilities and create an environment where they can work effectively. JAL Sunlight was accredited as a special subsidiary under a law related to the promotion of employment for the physically disabled, and a large number of such staff are actively engaged, working mainly in business-service operations. In fiscal 2007, we initiated a scheme to employ staff with intellectual disabilities at our uniform-management operations at Haneda Airport. At present, physically disabled staff make up 1.57% of the JAL workforce (March 2007 combined figure for JAL, JAL International and JAL Sunlight), and although this is below the legally mandated figure of 1.8% we will endeavor to raise the ratio further.

#### Pledge on Promoting Human Rights

The JAL Group does not discriminate based on gender, age, nationality, race, ethnicity, religion, social station or physical disability — a position that is part of the JAL Group Code of Conduct. The company promotes human rights at various in-house training venues as it attempts to further the awareness of respecting human rights among its employees. Please see <a href="http://www.jal.com/en/corporate/action.html">http://www.jal.com/en/corporate/action.html</a>.

#### **Interstaff Communication**

Good communication among staff and between management and employees is essential to the sound development of our business. Japan Airlines International conducts various meetings and discussions with the company's unions to build mutual trust and understanding. In this way, we can strive together to achieve the JAL Group's mission within society.

#### Female and Locally Hired Staff

Approximately half the staff at the JAL Group (including consolidated domestic affiliates) are women, and these employees are active in a broad array of work settings. In fiscal 2007, JAL hired 98 people as general office workers, of whom 21 were women. Around 90% of staff at our overseas offices are locally recruited, and their knowledge is crucial to the JAL Group's overseas operations.

When new staff are employed by the JAL Group, such issues as gender and nationality are irrelevant: of far greater importance are hard work and the capacity to accept challenges. While striving to recruit personnel with ambition and ability, JAL aims to provide an extensive support system to create a positive working environment for both women and locally recruited staff.

#### **Dream Skyward Award**

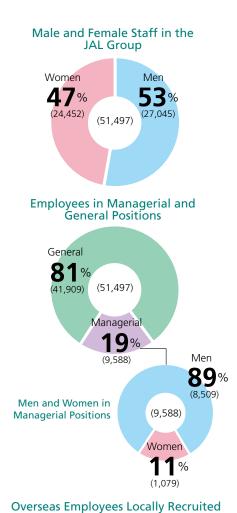
The Dream Skyward Award was established to recognize achievements made by JAL and group companies in furthering an understanding of the JAL corporate philosophy, increasing organizational vitality and helping shape a dynamic corporate culture. In fiscal 2006, the award's third year, 44 Annual Prizes were awarded to workplaces and individuals at group companies, overseas offices and subcontractors.

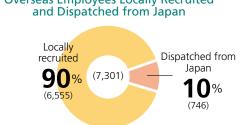
## A Bridge Between Departments

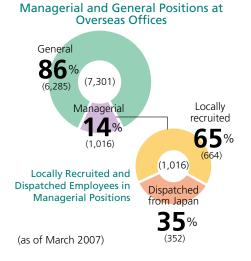
When I was offered a job as an executive officer, I'd spent 30 years as a cabin attendant and was unsure whether or not I should accept. Still, I decided that the position would be a fresh chance to gain an overview of the Cabin Attendants Division's work and to facilitate the exchange of opinions between divisions. Cabin crew spend more time in direct contact with customers than any other JAL employees and consequently receive a variety of comments and suggestions for improvement. Since I became an executive officer, the amount of time I spend communicating with other divisions has increased dramatically. In future, I'd like to expand channels of communication between divisions and use my position as a member of the Cabin Attendants Division to facilitate the transfer of comments and take immediate action on suggestions for improvement.



Yoriko Nagata
Executive officer and deputy
general manager,
Cabin Attendants Division







#### **Together with Society**

## Air Transport as a Bridge to Society

## Wings of Love

With the JAL Group's Wings of Love program, students from children's homes across Japan are invited for a three-day trip to Tokyo. The program started in 1988, and to date about 1,900 children have participated. For the program's 20th anniversary this spring, 29 elementary school pupils from six regions of Japan came to Tokyo. Originally devised by our employees, Wings of Love is funded by staff contributions and run by volunteers among our staff. The JAL Group manages the overall project, offers support and provides free air tickets.

#### The Importance of Friends

Our original intention with Wings of Love was simply for the children to enjoy themselves through such activities as visiting theme parks. Later, we decided it would be better to develop the program to offer lasting benefit to the children as opposed to simply letting them have fun for three days. To this end, in 2004 we began putting children from different homes into small groups so that they could go sightseeing together in Tokyo and make new friends. Volunteer JAL staff accompanied the children and looked after them as they got to know each other. The theme of Wings of Love 2007 (March 25–27, 2007) was "Making New Friends from Faraway."



## A Rewarding Experience

I learned about the Wings of Love program through our company newsletter and decided to participate as a volunteer. During the program, staff from different sections of the JAL Group spent three days together with a group of

children. It was an extremely rewarding experience to work together as a team playing games, taking part in quizzes and having fun through new challenges. I think the adult participants learned a lot from meeting the children and hearing their thoughts.

Rika Suwa Cabin attendant, Hokkaido Air System

#### Wings of Love 2007 Main Events

#### **Day 1 Welcome Party**

The children were split into groups for games and quizzes and to get to know each other. For the second half of the party, the children enjoyed traditional comic storytelling and paper-silhouette-cutting performances.



#### **Day 2 Tokyo Adventure Trail**

The students followed an adventure trail around Tokyo using clue cards provided by staff. They split into six groups and explored two Tokyo sightseeing spots.

## Making Souvenir Scrapbooks

The children filled scrapbooks with photos from group activities, pamphlets and souvenirs from sightseeing spots.



#### **Day 3 Haneda Tour**

The students took part in a study tour of the maintenance facilities at Haneda Airport.

#### Keeping in Contact with Children's Homes

To begin with, when we invited children to take part in the Wings of Love program, we chose participants from several different children's homes in each selected JAL region. More recently, however, regional offices have selected a single institution from their area and invited all the Grade 6 students from the children's home as a group. In this way, the children are less nervous about taking part in the activities since they already live together, and they can later share their memories of the program as friends. When we choose the areas, we give priority to regions further away from Tokyo. It is also a prerequisite that JAL staff from that area visit the children's home throughout the year and build a relationship of trust with the institution. In the Hiroshima and Nagasaki regions, for example, our staff took part in Christmas parties at the children's homes and helped strengthen the ties between the institutions and the JAL Group.

#### Learning More about Children's Homes

In running this program, we are well aware of the need to further our understanding of both the children we invite and the homes where they live. Since the 2005 Wings of Love program, we have held preparatory training sessions for volunteers before each year's activities. The annual training typically involves inviting staff from the children's homes and hearing from them about the children's daily lives and how best to interact with them. In recent years, an increasing number of children have been admitted to such institutions because of child abuse. The training sessions are an opportunity for participants to learn about the background and scale of such social problems.

## Volunteer Work to Meet Changing Times

Many of the children participating in the program have never been on a plane or visited Tokyo. To provide them with a variety of new experiences, we have in recent years been accepting invitations from the JAL Hiroshima Office to take part in the Wings of Love program.

We believe that the children can broaden their horizons through activities they wouldn't normally experience and by making friends with children from institutions outside the prefecture. Of the children who have taken part in the program so far, many have become more talkative and lively as a result. Many of our younger children tell us how they're looking forward to taking part.



**Tetsuo Kamikuri** Director, Hiroshima Shinsei Gakuen (social welfare nonprofit organization)

#### Information Gathering and Rigorous Preparation

Every January, two employees from the JAL Group are selected to have responsibility for running the Wings of Love program office. They spend around three months in the Public Relations Division at our headquarters, where they learn about the ideas behind the program, its aims and how to plan safe and practical activities for the children.

The program also provides support to children with special health needs. Prior to the activities, the program's office contacts children's homes to collect information on any special health needs and informs volunteers as necessary. Lastly, during the program itself, nursing staff are available to provide help and advice on health issues.

Every year, it is necessary for us to rethink the contents of the Wings of Love program to keep pace with social changes. Our aim is not just to provide a fun time for the children: we are continually working to create a program that will both be useful in the children's futures and a source of personal growth for employees who volunteer to take part.

## Corporate Citizenship Activities in Fiscal 2006

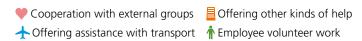


Pacific Music Festiva

The JAL Group will fulfill its responsibilities as a corporate citizen as outlined in the Code of Conduct. Through active participation in social activities by each employee, JAL aims to deepen its relationship of trust with society.

#### Social Conduct Guidelines

- As a corporate citizen, the group will support activities to aid children and young people, who are the key to all our futures. We will also help those with financial or physical difficulties and support activities that show respect for nature.
- The JAL Group will use its position as an air-transport business with a network uniting Japan and the world to encourage both human interaction and cultural activities.
- The group will actively plan and participate in various social activities, including those at the local level.



#### International Exchange among Young People

#### Children's Haiku Camp 💚 🛧

Winners of the World Children's Haiku Contest, organized by the JAL Foundation, were invited to the World Children's Haiku Camp 2006 in Matsuyama, Ehime Prefecture, for haiku appreciation and international exchange.



#### JAL Scholarship Program ♥★■

Students from a number of other countries in Asia and Oceania were invited to take part in summer schools in Tokyo, Kanazawa and other locations in a joint project with the JAL Foundation.

#### Art and Cultural Activities

#### Assistance with Social and Cultural Events ♥★

The JAL Group provided support for the 2006 World Heritage Hagi Symposium and a museum conference.

#### JAL Otobutai Concerts ♥★↑

In 2006, the JAL Group supported the Otobutai concerts, as it has done since this series of performances by Japanese and overseas artists at historic sites in Kyoto and Nara started in 1989.

Supporting New National Theatre and Mori Art Museum ♥★

#### Pacific Music Festival \*

In partnership with the city of Sapporo, the JAL Group in 2006 supported this program, which started in 1990, to assist the next generation of young musicians from around the world.

#### Assistance with Art Transport ♥★

The JAL Group assisted in the transport of foreign artworks for exhibitions across Japan, and Japanese artworks for exhibitions in various locations overseas.

#### **Environment-Conservation Activities** —

#### **Field Trip to Hokkaido for Employees**

**JAL Miles for Eco ♥** (see page 49)

Preventing Desertification in Inner Mongolia, JAL Sky Eco China ♥★ (see page 49)

Flight-Crew Project to Help Reduce CO₂ Emissions (see pages 46, 51)

**Tropospheric Observation** ■ (see page 48)

Support for the World Wide Fund for Nature (WWF) and the Earthwatch Institute ♥★■

Support for the 17th International Conference on Bear Research and Management ♥★

Volunteer Tree Planting in Hokkaido ↑ (see page 48)

JAL Global Environmental Seminar 

□

#### Education and Welfare of Young People

#### Emergency Humanitarian Aid ♥★ 🗐 🕆

Following the May 2006 Java earthquake, the JAL Group provided free transport for 32 NGO staff and 19 tons of emergency aid from the Japanese Red Cross Society, the Korean Red Cross and regional organizations. We also raised ¥1,520,000 through donations from employees and a charity concert for staff.

#### Miles for Special Olympics ♥ **■**↑

We support the Japan Committee of the Special Olympics through volunteer work, dispatching staff to the committee office and by encouraging JAL Mileage Bank (JMB) members to make donations using their air miles.

#### Miles for Children's Vaccines >

We support the Japan Committee Vaccines for the World's Children by encouraging JMB members to make donations using their miles.

#### Support for UNICEF ♥★ ■ ↑

The JAL Group supports UNICEF through assistance to the Japan branch of the organization. Since November 2006, we have extended onboard fund-raising from three of our U.S. and European routes to



all our international flights. Other support includes painting the UNICEF symbol on our aircraft, helping with charity events, selling UNICEF cards onboard, placing collection boxes in our Narita and Kansai airport lounges and transporting coins collected for the UNICEF Change for Good campaign.

#### JAL Group Young Green Squad

Junior staff from the JAL Group are engaged in a number of volunteer activities. In fiscal 2006, 50 employees from 42 group companies divided into four groups and participated in volunteer work at kindergartens, nursery schools, free schools and farms. A group of 100 employees, mostly past participants in the program, also took part in a project to clean the banks of the Ara River in Tokyo.

#### Essay Contest ♥★

The group supports the children's essay contest run by the Japan Association of the United Nations World Food Programme.

#### Support for NPOs and NGOs ♥★

Transport support for the Japan NGO Network for Education, Japan Association for Refugees, the Japan branch of Amnesty International and various other NPO and NGO projects

## Sponsoring sports classes taught by members of JAL Rabbits (women's basketball) and JAL Wings (rugby)



#### Wheelchairs with Wings ♥★

Waiving surplus cabin-baggage charges for wheelchairs repaired by Japanese high school students and sent abroad

#### Charity Event Assistance ♥★

The JAL Group supports charity activities, such as Care Wave — a musical charity event — social development events and a concert organized by the Japan International Volunteer Center.

#### Pink Ribbon Campaign



Since 2004, JAL has supported the Pink Ribbon campaign, which serves to highlight the importance of early detection and treatment of breast cancer. On two of our domestic routes, we initiated Pink Scarf Flights, on which Pink Ribbon

badges and cards are distributed to passengers. A total of 678 Pink Ribbon brooches were also sold to staff last year and part of the proceeds donated to Breast Cancer Network Japan.

#### Support for Local Educational Projects ♥■

JAL staff from our head office in Tokyo's Shinagawa Ward gave talks at local middle schools about their experiences working at JAL. We also assisted with job-training programs at our Kobe Office and airport facilities.

#### Extracurricular Lessons \*\*

We advertised throughout Japan for elementary schoolchildren and their parents to take part in study trips to our maintenance facilities. We also made efforts to increase interaction with local areas through conducting classes around the nation, explaining our work to schoolchildren.

## International Cooperation Volunteer Activities \*\*

Volunteers among our staff made picture books to send to children in Laos and Cambodia. They also made cloth toys for children in Cambodia.



#### Fair-Trade Learning Activities for Employees ♥ ■ ↑

Santa Claus on the Airplane ↑ (a volunteer project by Narita staff)

**Love-Wing**  $\hat{\mathbf{m}}$  (a volunteer project by Kansai Airport regional staff)

Please see JAL's website for further information on these activities. The JAL Foundation's website also contains information on its joint programs with the JAL Group.

<a href="http://www.jal.com/en/society"><a href="http://www.jal.com/en/society">http://www.jal.com/en/society</a><a href="http://www.jal.com/en/soci

## Our Responsibilities

## The JAL View

As a member of the flight crew, I am constantly trying to think up and put into practice new ways to reduce our impact on the environment as much as we can.



Koji Matsunami 747 captain

In early 1990, flight-crew members set up a fuel-efficiency committee to explore ways of flying in an eco-friendly fashion. This committee has since been reorganized as Operations Division Team –6%. We meet every two months and discuss how we can avoid using excess fuel and communicate the results of these discussions to our fellow flight crews.

The efforts of Operations Division Team –6% are seen in various ways. Auxiliary engines provide electricity for onboard air-conditioning and lighting while the aircraft is on the ground with the main engines disengaged. Since the auxiliary engines consume between 600 and 700 liters of fuel per hour, however, we try not to start up these engines until shortly before takeoff and rely on ground services for electricity and air-conditioning. We also attempt to conserve as much fuel as possible during ascent and recommend efficient cruising speeds to our fellow flight crews. For example, if we're flying with a strong tailwind, we can reduce speed and still reach the destination on schedule, which means we can fly in an eco-friendly manner while maintaining punctuality.

Team members discuss various measures, such as taxiing to the arrival gate on three rather than four engines and making aircraft lighter by offloading unnecessary personal effects, even if this reduces the overall weight by just a couple of kilos.

As an airline, JAL exerts an impact on the environment. We will try to understand the nature of this impact and work to reduce it.







## My Hopes and Expectations for JAL

It is certainly valuable to make every effort to reduce the weight of large aircraft even by a couple of kilos. Small though the difference may be, it will still help in conserving energy.

I've had many opportunities to discuss energy conservation at a variety of venues, including examples of how manufacturers of household electrical appliances and cars devise very subtle measures for saving energy. Before the birth of the hybrid car, which cut fuel consumption by as much as 40%, automakers were working on reducing vehicle-body weights in units of just 50 to 100 grams so as to improve fuel efficiency.

Aircraft design will probably follow a similar course in the future. When all unnecessary elements have been removed from the plane and energy-saving efforts seem to have come as far as they can go, new technologies that radically reduce energy consumption are certain to arise. That has been the pattern of equipment improvement and energy-conservation technologies in the past. But such breakthroughs cannot be achieved without a constant, low-profile dedication to detail. Once aircraft makers hear how JAL is using its ingenuity to reduce weight by even a couple of kilos on every plane, positive changes in aircraft design could well result.

As one possible service option, I believe it's worth recognizing that reaching the destination as quickly as possible is not the sole mission of air transport. Indeed, if it becomes possible to fly the aircraft at somewhat lower speeds — and thereby conserve fuel — there's a chance that we could see the birth of new energy-conservation initiatives.



#### Itaru Yasui

Born in Tokyo in 1945, Yasui is the vice rector of the United Nations University in Tokyo, a role he assumed in 2003 following positions as professor of the Institute of Industrial Science and head of the Center for Collaborative Research, both at the University of Tokyo. His specialties are inorganic chemistry, environmental science and research collaboration between industry and academia. He makes many broadbased proposals touching on a variety of environmental issues on his website and is the author of numerous books.

## Contributing to Environmental Conservation

Continuous CO<sub>2</sub>-measuring equipment

## **Tropospheric Observation**

To investigate the mechanism of atmospheric variations connected with global warming, the JAL Group has since 1993 conducted a tropospheric-observation project. In this, we collect samples from the atmosphere on scheduled international routes. We originally installed dedicated monitoring equipment on two aircraft flying between Japan and Australia, collecting samples from the atmosphere at an altitude of around 10,000 meters approximately twice a month. Those samples were brought back to Japan and presented to the Meteorological Research Institute of the Japan Meteorological Agency for analysis of the concentration of greenhouse gases, especially carbon dioxide and methane.

In 2003, the JAL Foundation and National Institute for Environmental Studies developed continuous CO<sub>2</sub>-measuring equipment (CME), which has now been installed on five aircraft and is monitoring CO<sub>2</sub> concentrations on routes around the globe.

Please see the JAL Foundation website for more information: <a href="http://www.jal-foundation.or.jp/indexe.htm">http://www.jal-foundation.or.jp/indexe.htm</a>.

## Supporting CO<sub>2</sub> Research

There are various causes of global warming, but more than half are related to the impact of carbon dioxide. It's believed that around half the CO<sub>2</sub> produced from the burning of fossil fuels has found its way into the atmosphere. But we don't know precisely where the rest has gone. Part has been absorbed by the oceans and part has been absorbed by terrestrial plants. Further, it's not certain whether CO<sub>2</sub> will continue to be absorbed in the same manner in the future. That's why we're using aircraft to help us understand

where and how CO2 is being absorbed.

Monitoring was carried out at various terrestrial locations before JAL began tropospheric sampling, but the number of sites was insufficient and there was a lack of aerial data. If we can increase the amount of data gathered at various locations by aircraft, we'll be able to develop a more detailed concept about CO<sub>2</sub> absorption rates around the globe. Once we've accumulated more data, it's my hope that we'll be in a position to make a significant contribution to CO<sub>2</sub> research.



Toshinobu Machida
Center for Global Environmental
Research, National Institute for
Environmental Studies



## **Volunteer Tree Planting in Hokkaido**

Some 160 JAL Group employees from Hokkaido and their families participated in a project called Seven-Eleven Midorino Kikin as volunteer tree planters. Midorino Kikin is a fund designed to restore forest areas around Lake Shikotsu in southwestern Hokkaido after they were uprooted by a typhoon in 2004. The volunteers planted 1,080 spruce and fir saplings on the 1-ha site for which the JAL Group was responsible, and we look forward to the day when these trees will once again become an integral part of the local ecosystem.

## **Siberian Wildfire Reporting**

Forests absorb CO<sub>2</sub> emitted from the combustion of fossil fuels, and many believe this absorption helps to mitigate global warming. The Siberian taiga is the world's largest area of forest, but it has recently been releasing large amounts of CO<sub>2</sub> owing to the outbreak of numerous fires. This problem is exacerbated by the thawing of the region's permafrost, which has released into the atmosphere large amounts of methane — a greenhouse gas with 21 times the global-warming impact of CO<sub>2</sub>.

In an effort to keep the damage to the Siberian taiga to an absolute minimum, Hokkaido University, the University of Alaska and the Russian Academy of Sciences have collaborated on a project to detect and help prevent the spread of wildfires. JAL is also cooperating with these efforts. JAL flight crew on European routes over Siberia report any wildfires they observe. Fiscal 2006 was the fourth year that JAL flight crew have been involved in these activities, and the result was the filing of 138 fire reports — the most to date.



Siberian Wildfire Reports

Periods	Reports
June–July 2003	101
May–July 2004	77
June-August 2005	30
June-August 2006	138



Masami Fukuda Institute of Low Temperature Science, Hokkaido University

#### **Civil-Aviation Monitoring**

Over the course of a year when a large number of wildfires break out in Siberia, some 200,000 km $^2$  — a land area equivalent to more than half the size of Japan — can be lost to fire. In addition to the obvious burning of trees, there is also the burning of organic matter in and directly above the soil. The amount of  $CO_2$  emitted by the burning of this kind of organic matter is in fact five times higher than that released by the burning trees.

To prevent the spread of wildfires, it's necessary to contain the burning area, but the Siberian taiga comprises a land area 20 times the size of Japan with largely undeveloped road systems. This makes it near

impossible for land-based searches to locate the source of fires.

The most effective method of containing wildfires is to use satellites for detection, but false identification does occur on occasion and it's possible for satellites to miss instances of fire outbreaks. Aircraft monitoring is extremely useful in increasing the precision of our data gathering. From an altitude of 10,000 meters, the flight crew can survey a broad expanse of territory with the naked eye. By gaining the cooperation of aircraft on scheduled flights, there's the benefit of obtaining large amounts of data from specific routes over an extended period of time.

## **Preventing Desertification in Inner Mongolia**

In June 2006, the JAL Group launched the JAL Sky Eco China initiative in support of the Organization for Industrial, Spiritual and Cultural Advancement (OISCA) International, which is running a project to counter desertification in Inner Mongolia. This project conducts research into afforestation techniques and is looking to create a green belt to prevent desertification and the damage caused by clouds of yellow sand blown out from this area. As part of JAL Sky Eco China efforts, JAL Mileage Bank members worldwide were able to participate in the JAL Miles for Eco fund-raising program in June and July 2006.



#### **Environmental Action Program**

# A Symbiotic Relationship with the Global Environment



The JAL Group has established a Basic Environmental Policy along with its Environmental Action Guidelines. We have also created a set of priority items and action plans related to environmental protection while promoting environmental activities. The company has introduced an environment-management system and environmental audits. We promote environmental activities in such ways as establishing an environmental subcommittee, project teams and task forces made up of group affiliates — all organized under the CSR committee.

#### **Basic Environmental Policy**

(adopted October 2002)

In its capacity as a public-transport organization, the JAL Group exerts an impact on the environment in such ways as consuming fossil fuels and emitting noise. We recognize that dealing with the environment is a vital management issue, and our aim is one of symbiosis with the global environment while striving to reduce the environmental burden in all our business activities.

#### **Environmental Action Guidelines**

(adopted October 2002)

- 1 We will comply with environmental laws and regulations and engage in environment-protection activities.
- **2** We will promote the efficient use of various energy sources and resources.
- **3** We will promote waste reduction and proper waste disposal and recycling.
- 4 We will select environment-friendly products and materials, including aircraft.
- 5 We will enhance environmental awareness and make social contributions.

## **Sky Eco [2010]**

In October 2002, the JAL Group implemented Sky Eco [2010], a medium-to long-term action plan aimed at reducing the direct and indirect impact of JAL business activities on the environment and setting specific goals to be reached by the year 2010. Based on this, we created an annual priority plan and engage in environmental activities.

For further information about Sky Eco [2010], please see <a href="http://www.jal.com/en/environment">http://www.jal.com/en/environment</a>>.

## **Fiscal 2006 Environmental Account**

JAL has been conducting environmental accounting since fiscal 1999 as a quantitative evaluation tool to assess our environmental activities. Our environmental cost and environmental conservation figures in fiscal 2006 were as follows:

**Environmental Cost** 

Investment amount: ¥886 million Expenses: ¥13,518 million

Environmental Conservation Reduction of CO<sub>2</sub>: 1.42 million tons Reduction of nitrogen oxides (NOx): 642 tons

#### **Activities in Fiscal 2006**

#### Introducing New Equipment

In fiscal 2006, the company retired 13 aging Boeing 747 and A300 aircraft and introduced nine new 737-800s and 777s. In fiscal 2007, we



Newly introduced Boeing 737-800 aircraft

will continue to retire older 747s and MD-87s, introduce new models similar to those introduced in 2006 and continue to pursue more efficient fuel consumption.

#### Operations Division Team –6%

In fiscal 2006, the company established Operations Division Team –6%, which communicates directly with all flight-crew members to promote activities to fight against global warming.

#### **Environmental Logo**

In support of the Ministry of the Environment's Team -6% campaign to counter global warming, in fiscal 2006 we unveiled an aircraft with a logo on the fuselage saying "Let's get together to stop global warming."

# **Applying Environment- Management Systems**

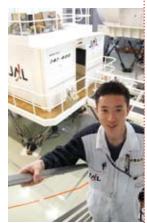
The JAL Group is working towards acquiring ISO 14001 accreditation, an International Organization for Standardization qualification related to the quality of environment-management systems, mainly in field operations with a relatively high environmental impact. JAL is also promoting the introduction of Ecostage (an evaluation and support system for environment management) to company divisions and group companies that have relatively light impact on the environment.

In the boxes on the right, we introduce JAL Simulator Engineering, which attained Ecostage 1 accreditation, and the Narita Cargo Office, which acquired ISO 14001 accreditation.

#### **Energy-Conservation Measures**

I maintain the flight simulators that flight crew use in their ground-based pilot training. Simulator training does not consume as many resources as training in the aircraft themselves. Since the resulting CO<sub>2</sub> emissions are lower, this amounts to a major energy saving. The simulators, though, are large machines and thus consume a substantial amount of electricity. If problems arise during training and the simulator is active for long periods of time, electricity consumption rises. To minimize such problems, we ensure that our machines are properly maintained: regular maintenance is the

first step in conserving energy. Conventional simulators produce substantial vertical and lateral movements, which are controlled by hydraulic oil pressure. To ensure that our simulators operate in an ecofriendly fashion, we've introduced all-electric simulators, which result in no oil waste.



#### Takashi Ito

No. 1 Maintenance Division, JAL Simulator Engineering

## **Recycling Packaging Material**

While transporting our customers' cargo, we use plastic sheeting to offer protection against water and dust. This plastic is used only once. Since we generate large amounts of such scrap material, at one time we disposed of it as industrial waste. In line with the recent surge in crude-oil prices, however, waste plastic has acquired a market value, and as a result it has become possible since 2006 to sell it to traders for recycling. Using high-pressure compression techniques, we reduce the volume



of waste material before handing it over to traders. If waste is not properly sorted, impurities can become mixed with the plastic, making recycling difficult. So we take great care in sorting and managing the plastic sheeting.

Hiroshi Katori
JAL Cargo Handling,
Import Service Division

#### **Environmental Conservation**

## Reducing Our Impact on the Environment

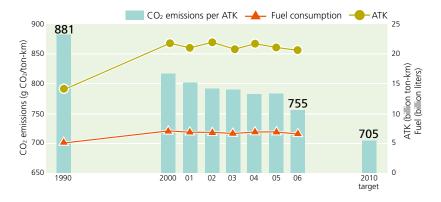


## **Air Transport and Global Warming**

Aircraft engines run on fossil fuels, which generate carbon dioxide.  $CO_2$  is the most prominent of the greenhouse gases, which are believed to be the cause of global warming. The amount of  $CO_2$  emitted is approximately proportionate to the amount of fuel consumed. The JAL Group is targeting fuel-consumption cuts of 20% of the transported capacity by 2010 compared with 1990 levels. In line with this, we are adopting various measures to reduce fuel consumption.

The following graph shows changes in estimated emissions per available ton-kilometer (ATK) for the commercial operation of JAL Group aircraft. Total  $CO_2$  emissions in fiscal 2006 were 15.8 million tons, down 6.5% from the previous fiscal year. This reduction of 1.09 million tons is the equivalent to the  $CO_2$  annually absorbed by 77.9 million Japanese cedars.

#### CO<sub>2</sub> Emissions per ATK



#### **Fuel Consumption**

It is possible to reduce fuel consumption, and by extension  $CO_2$  emissions, by lightening the overall weight of the aircraft. For example, by reducing the weight of each aircraft by 1 kg it is possible to cut  $CO_2$  emissions throughout the entire JAL Group by approximately 76 tons per year. That is the equivalent of the annual amount of  $CO_2$  absorbed by 5,400 Japanese cedars. The JAL Group is also engaged in the following measures to reduce fuel consumption.



#### **Lighter Tableware**

In 2004, the company introduced lightweight porcelain tableware, which is approximately 20% lighter, for the meal service in First and Business classes. Also, by streamlining our spoons and forks we have managed to reduce weight by 2 grams per unit. We intend to increase our use of lightweight porcelain.

#### Cargo-Container Weight

JAL cargo containers have hitherto all been made of aluminum alloy, but in fiscal 2007 we started using Twintex — a new material made of glass and polypropylene fibers — in the side panels of the containers. As a result, we have achieved weight reductions of 26 kg per unit. We plan to steadily update our multipurpose containers on international routes with this material.

#### **Onboard Drinking Water**

The water tank in the cargo compartment used to be topped up before each flight. However, checks revealed that most flights arrive at their destination with a substantial amount of water still onboard. Consequently, we have adjusted the amount of water loaded on each aircraft to more appropriate levels. As a result, we have achieved weight savings of up to 400 kg on 747-400s and 300 kg on 777s.

#### AKE44279 JL AKE442

New lightweight containers

#### **Fuel Measures**

To work towards greater fuel efficiency, the amount of fuel onboard has to be accurately measured. At one time, fuel was loaded onto JAL planes in units of 1,000 pounds (around 450 kg), but we decided to modify this to 100-pound units. As a result, more precise measures of the amount of fuel required for safe arrival at each destination have allowed us to achieve weight savings of up to 900 pounds (approximately 400 kg) per flight.

#### Aircraft Center of Gravity

Passenger seating and the positioning of loaded cargo affect the aircraft's center of gravity. Failure to maintain passenger and cargo positions within appropriate ranges can lead to a loss of balance and cause problems with flight operations. As a result, specialized staff are employed at each airport to calculate the center of gravity for every flight and determine the optimum positioning of cargo in the compartment. Generally speaking, within the permissible range allowed, the further back in the aircraft the center of gravity, the lower the drag on the horizontal stabilizer and the greater the fuel efficiency. When deciding on cargo positioning, JAL Group airport staff go to great lengths to ensure that fuel efficiency is maximized for each flight.

787 aircraft

#### New Engines on 787s

The JAL Group will introduce 787s to its fleet in fiscal 2008. These aircraft use next-generation GEnx engines (developed by General Electric), which employ composite materials to reduce weight. In addition to superior fuel efficiency and lower noise levels, GEnx engines also feature an environment-friendly design that allows for major reductions in CO<sub>2</sub> and NOx emissions. By updating our medium-sized aircraft with 787s running GEnx engines, we expect to see CO<sub>2</sub> emissions reduced by 2,500 tons per aircraft per annum.



#### **Air and Water Pollution**

#### Managing Chemical Usage

The JAL Group uses over 2,400 chemicals in aircraft materials, paints and hydraulic oil. We are cooperating with aircraft manufacturers and maintenance contractors in an effort to shift to alternative, environment-friendly products. Aircraft used by the JAL Group are repainted approximately every five and a half years. To remove old paint from aircraft, we have introduced stripping agents that do not contain methylene chloride or volatile organic solvents and permit relatively easy disposal. The company is introducing chrome-free primer and uses top-coat paint with a low volatile-solvent content. In addition, by using a technology known as electrostatic spray painting, it has become possible to paint an aircraft using 20% to 30% less paint than before.

#### Anti-ice and De-icing Fluid

The amount of anti-ice and de-icing fluid (principal ingredient, propylene glycol) used to free aircraft of snow and ice in winter varies with the climate and amount of snow. Propylene glycol is also used as a food additive and thickening agent, and there are fears it may be a factor in causing an overabundance of nutrients when released into lakes and rivers. The JAL Group is introducing more efficient equipment that reduces the amount of fluid used in anti-ice and de-icing operations.

#### Use of Anti-ice and De-icing Fluid

(Unit: kl)

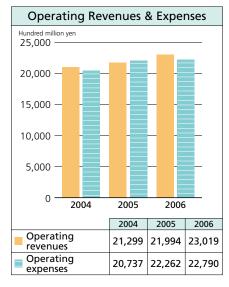
Airport	Fiscal 2005	Fiscal 2006
New Chitose	727	495
Aomori	359	244
Other airports	1,363	423
Total	2,449	1,162

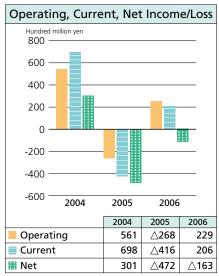


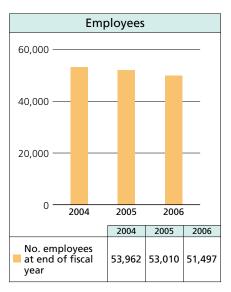
## **Other Environment-Conservation Activities**

Information related to other activities, including waste materials and noise control, is posted on our website. Please see <a href="http://www.jal.com/en/environment">http://www.jal.com/en/environment</a>>.

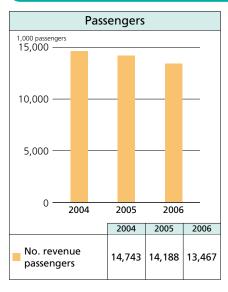
## **Operating Results and Traffic Statistics**

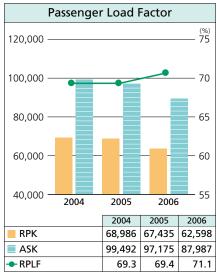


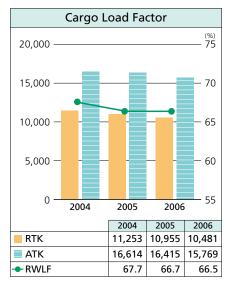




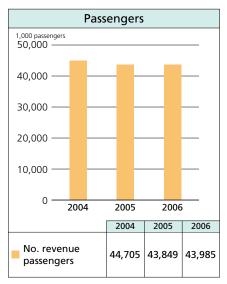
#### International Traffic Statistics

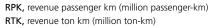


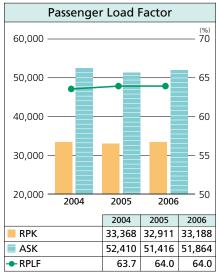




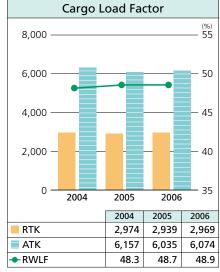
#### Domestic Traffic Statistics







ASK, available seat km (million seat-km) ATK, available ton km (million ton-km)



RPLF, revenue passenger-load factor (%) RWLF, revenue weight-load factor (%)

## **Third-Party Opinion**

This opinion has been compiled based on interviews with the officers responsible for the contents published in this report and environmental, safety and personnel issues at JAL.

This report presents the JAL promotional systems that sup-

port the company's safety, environmental and social activities along with the views of its employees in a multifaceted, comprehensive manner. It is a report that represents the proactive stance and practices of the company towards CSR.

#### **Commendable Points**

- Flight-data analysis is fed back to flight crew in order to improve operational safety and reduce fuel consumption (page 20). I hope to see even more active efforts, including managing performance on an aircraft-model and/or individual basis, and recognizing and rewarding cases of excellence.
- The weight of cargo containers has been reduced significantly.
- As last year, detailed reports on safety incidents are included. The company is actively engaged in the analysis and prevention of human error on a daily basis, including implementing the Line Operations Safety Audit (LOSA) program and preparing case studies of unequivocal verbal communication (pages 20–23, 26–27). I would like to request that the company move to actively disclose examples of improve-

ments based on those efforts.

- The company has commenced the training of facilitators who will play a major role in offering family assistance if and when accidents occur (page 24). I would like to request that the company develop a system so that the know-how and mechanisms applied to family assistance can also be applied in cases of major flight cancellations or delays.
- In an ongoing trend, a large number of staff are returning to work following maternity/paternity leave and leave taken for child care. The fact that many people utilize these opportunities means that within the company conditions exist whereby it is easy to take leave, and this should be highly commended. The company also has a well-developed system supporting a variety of employment needs, such as part-time work and reemployment.

#### More Effort Required

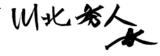
- The company should call on passengers to support more actively JAL's efforts to reduce its environmental impact. It is vital to gain the cooperation of passengers in efforts to decrease the burden on the environment, and I would like to request that the company present concrete proposals and the results of follow-up efforts in its inflight magazine and on its website.
- The company points out that it is active in employing staff with disabilities (page 40). However, JAL has yet to fulfill legally stipulated employment levels, and I would like to see the company learn from the example of other firms that were pioneers in this area and move to diversify job classifications further.

#### Room for Improvement

- I would like to see JAL take more of an environment-friendly stance with regard to occupational safety and health, human rights and its procurement standards for plant, facilities and consumer goods, including inflight meals and novelty items.
- At JAL, there is a tendency to believe that quantifying performance levels and setting individual targets would lead to overly rigid management control. But this way of thinking is something I would like to see corrected. When questioned about implementing individual performance targets related to fuel consumption and specifying targets and performance

levels related to safety efforts on a work-site basis for each fiscal year, the company responded that such measures could not be implemented as they would lead to excessive workforce control on the part of management. Not only does that demonstrate an inadequate grasp of the issue, but it means that JAL is not capable of effective management. The company should not hesitate to undertake positive action simply because it cannot gain the full understanding of its employees: it needs to present a rational basis for its arguments, and I would hope to see JAL take prompt corrective measures to create a company culture that actively tackles problem-solving issues.

Hideto "DeDe" Kawakita, representative, International Institute for Human, Organization and the Earth (IIHOE)



IIHOE was established in 1994 with the objective of promoting progress that is harmonious with all life on the planet. It supports NPOs and company management that is oriented towards social responsibility.

#### Hideto "DeDe" Kawakita

After graduating from university in 1987, Kawakita joined Recruit, which he left in 1991, serving as representative of an NGO promoting international youth exchanges and as political secretary of a Japanese member of parliament before founding IIHOE in 1994.



## Response to the Third-Party Opinion in the 2006 CSR Report

Here are some of the actions that JAL has taken in response to the third-party opinion by Hideto Kawakita in JAL's 2006 CSR report.

#### Proposal 1

#### Set safety targets at each work site.

The Corporate Safety Division presents company-wide safety targets each fiscal year and stipulates concrete priority measures for each division and group company so that these targets can be achieved. Progress is monitored and results are reported at the end of the fiscal year.

#### Proposal 2

# Present concrete examples of the causes of incidents and consider adopting an employee-evaluation system that rewards positive and penalizes negative actions.

The company used interviewing methods developed by Boeing to ascertain the cause of problems and errors (page 20). We established policies for dealing with human error and are building trust-based relationships between labor and management. We created an environment conducive to the active reporting of errors and established a mechanism for the accurate and timely transmission of information (page 21).

To achieve our corporate philosophy of pursuing safety and quality, Japan Airlines International has disclosed the job requirements for all positions. In fiscal 2005, the company introduced a personnel-evaluation system, which includes an assessment of the extent to which each of the above aims has been put into practice.

#### Proposal 3

## Rapidly attain legally stipulated levels for the employment of staff with disabilities.

In furthering the hiring of disabled staff within the group, JAL Sunlight has expanded its general operations to provide staff with disabilities a broader base on which they can be actively employed. The company is trying to create new employment opportunities while learning from the examples of other companies that have made considerable efforts in this area. In January 2006, the company obtained the cooperation of a school for the blind in hiring visually impaired staff for a new massage service. We also cooperated with an NPO in May 2007 in setting up operations for printing and used-uniform disposal, employing staff with intellectual disabilities.

#### Proposal 4

## Promote fuel efficiency and reward efforts made in this area.

A mechanism already exists for the automatic recording of data relating to the operation and performance of JAL flights. This data is used to maintain safe flight operations, but we also plan to apply it in our environment-conservation activities. As a first step, we are analyzing data from four-engine aircraft that shut down one engine for taxiing to the terminal after landing, and in future we will extend the use of such kinds of data to other conservation measures.

Regarding recognition and awards for merit, the existing Dream Skyward Award (page 41) includes Good Corporate Citizen and Global Environment Activities divisions, and we will make use of this system in appropriate areas.

#### Proposal 5

## Call on users to cooperate in efforts to reduce the environmental burden.

We have included proposals to call actively upon passengers to cooperate with reducing the burden on the environment as one of the aims of the group's Sky Eco [2010] action plan, and we have defined this as a fundamental policy of the JAL Group. We aim to bring about early implementation of these proposals.

#### 2006 Report Appraisal

In October 2006, the company hosted an informal discussion session on the 2006 CSR report at JAL headquarters, with Hideto Kawakita, provider of the third-party opinion, as coordinator. Twelve JAL Group staff from a variety of depart-



ments throughout the company had a lively discussion and referred to CSR reports from other companies. Among suggestions put forward were inclusion of more comments from figures outside the company and more coverage of low-key activities that are undertaken on a consistent basis. These ideas are embodied in the 2007 report.

#### Participation in the UN Global Compact

The Global Compact proposed by the UN calls for businesses around the world to implement 10 principles in the areas of human rights, labor, the environment and anticorruption. The JAL Group has participated in the Global Compact since December

2004, and we have taken steps to implement our responsibilities thoroughly as a corporate citizen in our operations.



The JAL Group aims to contribute to the peace and prosperity of Japan and the world through the people, cultures and corporate activities that bring them together and by firmly putting the 10 principles of the Global Compact into practice.

President & CEO



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Haruka Nishimatsu

