



2004 Annual  
Report



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# Embraer in Perspective



The origin of Empresa Brasileira de Aeronáutica S.A. dates back to the 1940s, when the Brazilian Federal Government kicked off a long-term strategic project to develop the country's aircraft manufacturing capabilities.

The project concept emerged from the need to set up a solid technical base capable of replacing Brazil's dependence on the technology of more advanced countries, and to implement an aeronautical industry in Brazil by initially establishing a high level engineering school, together with the creation of an institute dedicated to research and development, both located at a technical center with a suitable infrastructure.

This is how the Aeronautical Technical Center, now known as Aerospace Technical Center (Centro Técnico Aeroespacial – CTA), was established in 1946 in the city of São José dos Campos, followed in 1950 by the Aeronautic Technological Institute (Instituto Tecnológico de Aeronáutica – ITA). The next step of the project was the creation in 1953 of the Research and Development Institute (Instituto de Pesquisa e Desenvolvimento – IPD).

Beginning in the 1950s, a number of experimental aircraft development programs were conducted at the CTA, including the Convertiplano, the Beija-flor helicopter, and the Bandeirante turboprop. Started in 1965 under the name of IPD-6504 program, work on the Bandeirante project led to the establishment of Embraer on August 19, 1969. Supported by the Brazilian Government, the new company would transform science and technology pioneered by the CTA into engineering and industrial capacity.

In addition to the Bandeirante, which was entirely redesigned in order to be produced in series as the EMB 110, the Brazilian Government commissioned Embraer to manufacture, under a license agreement with the Italian company Aermacchi, an advanced training and ground attack fighter – the EMB 326 Xavante.



Other achievements that marked Embraer's initial efforts were the high performance glider EMB 400 Urupema and the EMB 200 Ipanema crop duster airplane.

Embraer started to penetrate the international market in 1974 by exporting the EMB 110 Bandeirante and EMB 200 Ipanema airplanes. The EMB 121 Xingu, the Company's first pressurized aircraft design, was launched in 1976.

In the late 1970s, the development of new products, such as the EMB 312 Tucano, the EMB 120 Brasília, and the AMX program in association with Aeritalia (today Alenia) and Aermacchi enabled the Company to reach a new technological and industrial threshold.

However, a widespread financial crisis in the early 1990s led the Company to considerably reduce its workforce, abandon the CBA 123 Vector project, and delay the development of the ERJ 145, actions culminating with the privatization of the Company in 1994.

Privatization for Embraer meant a deep cultural transformation process in which the former engineering and industrially oriented culture predominating in the state-owned years was merged with a new entrepreneurial and administratively oriented culture brought by the new controlling shareholders.

As a result, the Company not only was able to completely recover, but embark on a new expansion process, primarily driven by the ERJ 145 family project. In the following years, by launching the EMBRAER 170/190 family and the Legacy executive airplane, as well as Intelligence, Surveillance and Reconnaissance (ISR) products and the ALX Super Tucano project, Embraer significantly increased its presence in the market, resulting in growing revenues in diversified marketplaces.

Since 1995, the year following its privatization, Embraer has exported US\$ 17 billion in products and services, having been the largest Brazilian exporter from 1999 to 2001. During this 10-year period, the Company accounted for US\$ 6.6 billion of the country's trade balance. Today, Embraer is the leading producer of aircraft in the commercial jet segment up to 110 seats.

In 2004, a number of important events occurred that consolidated the company's prosperous and sustainable economic and social development such as the entry into service of the EMBRAER 170, first member of the new EMBRAER 170/190 family of four commercial jets, a program that required US\$ 1 billion in investments; the selection of the ERJ 145 platform for the Aerial Common Sensor (ACS) program of the U.S. Army; and the launch of the new ethanol-fueled Ipanema, the world's first serial-production aircraft certified to use ethanol as fuel.

Consistent with the requirements and characteristics of the sophisticated aviation business, Embraer's management is based on five cornerstones – high technology, qualified personnel, global presence, cash intensiveness and flexibility – geared to permanent and complete customer satisfaction on which the Company continually invests. Customer satisfaction is the source of Embraer's results, enabling the accomplishment of its main goal: generate value for its shareholders.

Based in the city of São José dos Campos, state of São Paulo, nearly 60 miles from the city of São Paulo, Embraer has five plants in Brazil in three different locations of the state of São Paulo, employing approximately 13,500 people. Abroad, the Company has some 1,000 employees and provides services through subsidiaries, offices, technical assistance and supply parts distribution centers in China, Singapore, USA, and France. In 2003, Embraer started operations at its facility in Harbin in northeast China, its first plant outside Brazil. The recent acquisition of OGMA – Indústria Aeronáutica de Portugal, has meant the addition of approximately 1,600 employees to Embraer's workforce in 2005.

Today, Embraer aircraft fly in the skies of the world, serving operators in 63 countries on five continents. The Company contributes to the world's integration through aviation by shortening distances between nations and providing aircraft featuring state-of-the-art technology, versatility and passenger comfort.





# Embraer Profile



## Business Definition

The business of Embraer is to achieve the full satisfaction of its Customers in the commercial and defense aerospace markets with competitive and innovative high-technology solutions, fully satisfying their needs, maximizing shareholder returns, and fostering the development of the Company's employees and the communities where it operates.

## Aeronautical Industry Characteristics

Few world industries face such a daunting combination of challenges as the aeronautical industry - from the simultaneous application of multiple state-of-the-art technologies and the need to employ highly qualified workers to meet the requirements of a truly global industry, to the necessary flexibility to respond to sudden and unexpected changes in scenario and to the high amounts of capital required.

As a result of stringent operational requirements, extreme environmental variations, and weight and volume restrictions, the aeronautical industry is known as a veritable laboratory for the development of new technologies that later find their way into other productive segments and activities. Complex and sophisticated technologies are present not only in the products, but also in the development and manufacturing methods and processes.

In order to effectively and productively put these groundbreaking technologies into practice, counting on highly qualified personnel at all company levels becomes of crucial importance.

Owing to low production volumes and hefty costs, the aeronautical industry is, by definition, an exporting and global activity reflected not only in its customer base, but also in its industrial partner and supplier bases, including the financial institutions that make the industry viable.



Sudden scenario changes affecting the economy and the global geopolitical order are immediately reflected in the aeronautical industry. Flexibility to adapt to these changes with minimum loss of efficiency and costs is a crucial asset in ensuring its continuity and preservation.

Finally, all these characteristics, together with the long cycles required in developing and testing its products, ultimately force this industry to heavily depend on large capital amounts.

## Competitive Edge

Embraer's competitive advantage results from a combination of characteristics that the Company has pursued and improved throughout the years, and eventually incorporated into the company culture:

- Pursuing customer satisfaction – a major and common converging focus of the efforts of all Embraer organizations and its teams, the constant pursuit of customer satisfaction has been rewarded with stable and loyal customer relationships, essential for the continuity and growth of our business. Customer satisfaction is our goal in creating a new product, in the high quality of design and manufacture, and in our promptness in meeting customers' requirements;
- Respect for shareholders – a characteristically open and transparent relationship based on good corporate governance practices, it has earned the Company the support and commitment of its shareholders in decisive moments of its business ventures;
- People – focused, united around the Company and its objectives, supported by transparent and truthful communications, Embraer's employees have consistently faced and overcome the challenges of the aeronautical industry;
- Technical competence – resulting from many years of continued investments, the technical competence of the Company's workforce, particularly in Engineering, has a highly positive impact on the quality, costs, and development cycles of Embraer's products;

- Industrial partnerships – Embraer's partnerships, established globally with leading companies in their respective market niches, are geared to flexible schemes and oriented to the sharing of risks and business results. The continuous development and strengthening of its industrial relationships has been essential for the success of Embraer's programs.

## Embraer's Vision

Embraer will continue to grow to become one of the leading global forces in the aeronautical and defense markets, the leader in its segments, and renowned for the excellence of its entrepreneurial activities.

## Strategy

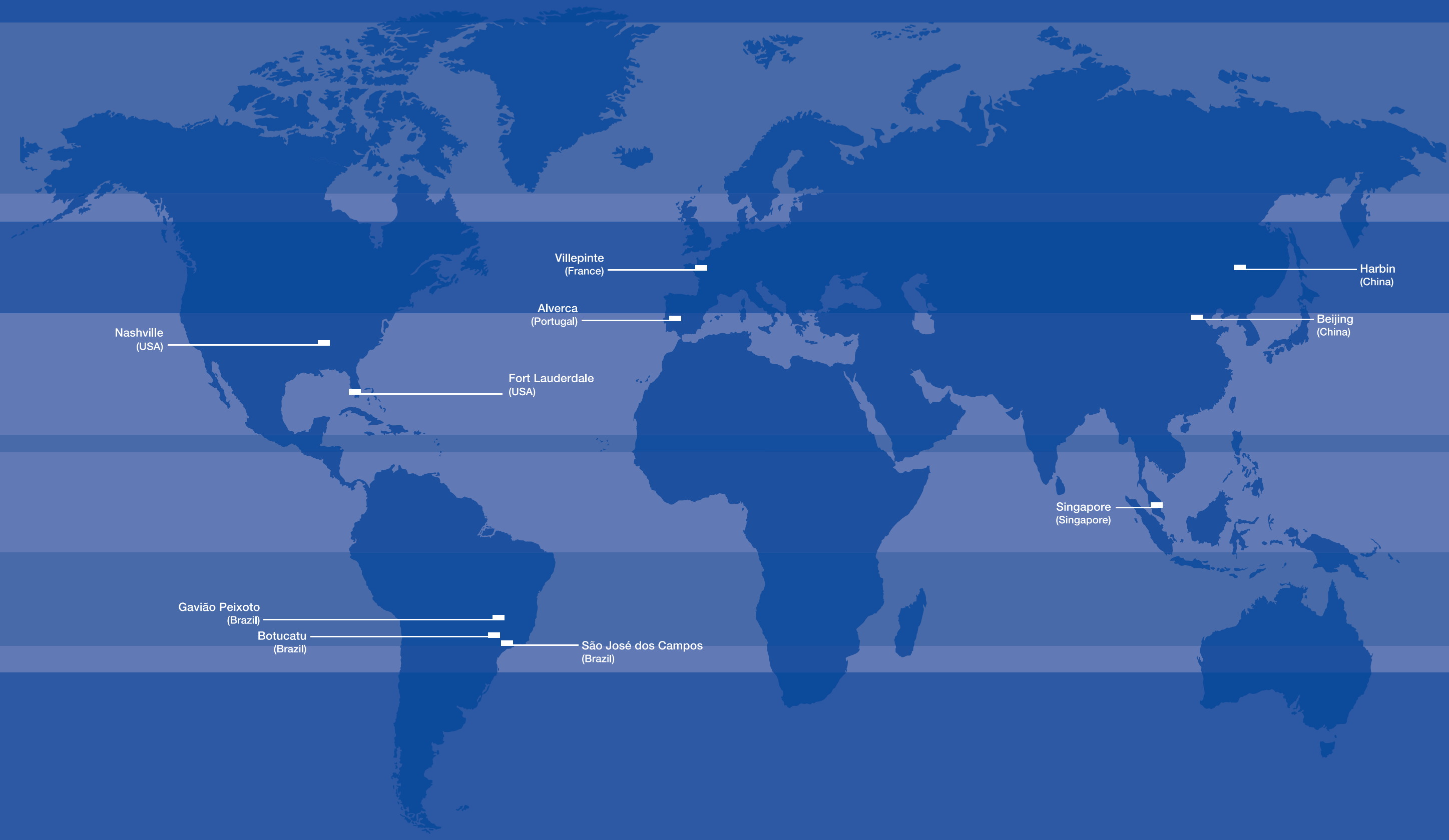
The pursuit of Embraer's growth through the launch of new products and the expansion of its presence in the market segments where it actuates result always from careful analysis of market opportunities and return on investments.

Well aware that the penetration in new markets, an essential condition for the Company's growth and consolidation, will not be effective if not accompanied by its presence in these markets by establishing local industrial units or after-sale and customer support services, Embraer has adopted increasingly globalized operations as a strategic objective to be pursued.

Far from meaning a loss of its Brazilian identity and a breaking away from its origins, Embraer's globalization efforts will ensure new businesses, the consolidation of our brand, and the creation of more highly-qualified jobs in Brazil and in the Company's subsidiaries and controlled companies in other areas of the world.



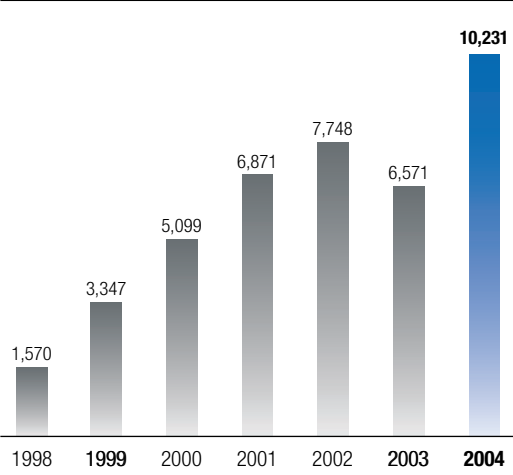
# Embraer in the World



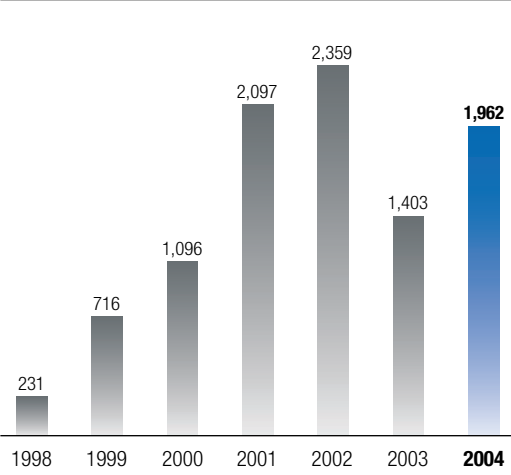


# Financial Highlights

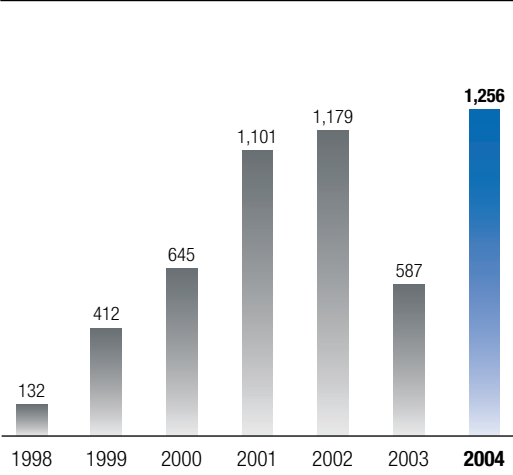
Gross Revenue (R\$ million)



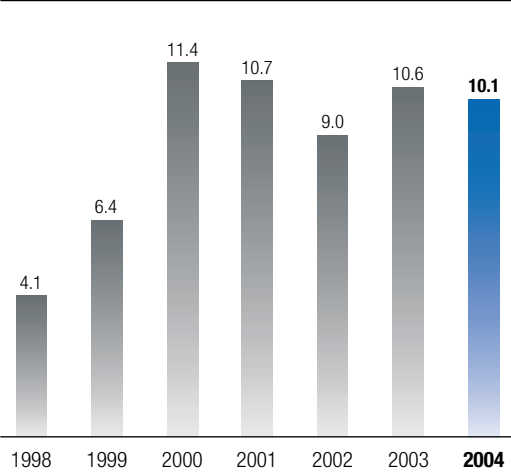
EBITDA (R\$ million)



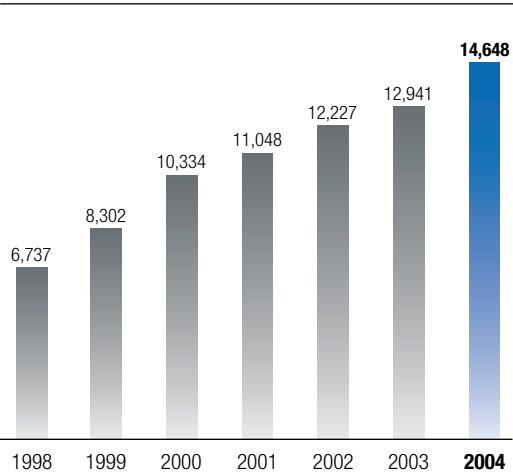
Net Income (R\$ million)



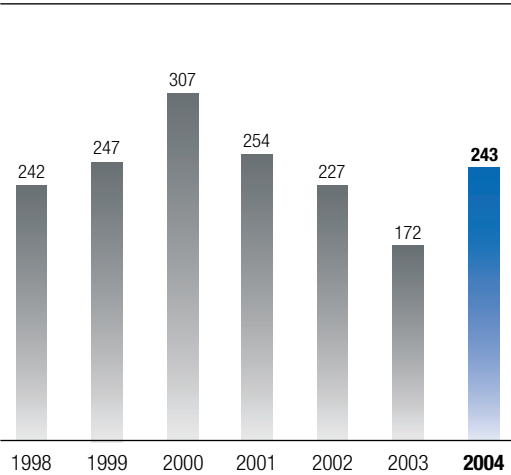
Firm Orders Backlog (US\$ billion)



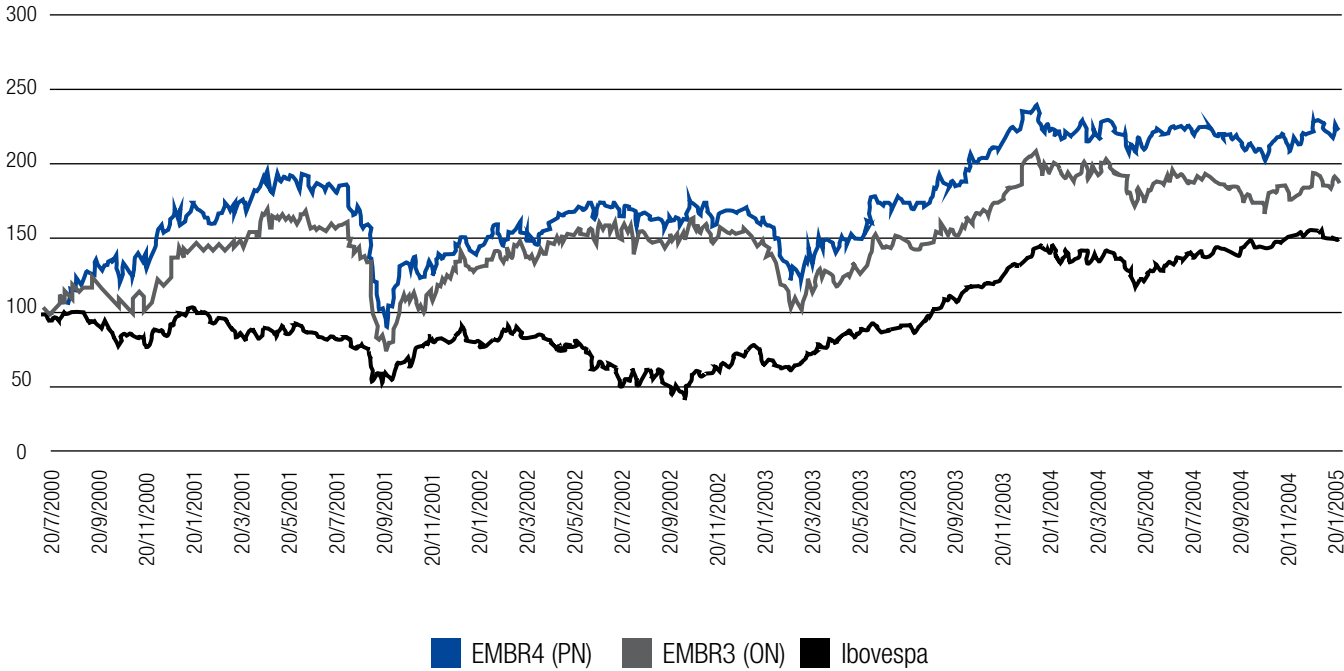
Number of Employees



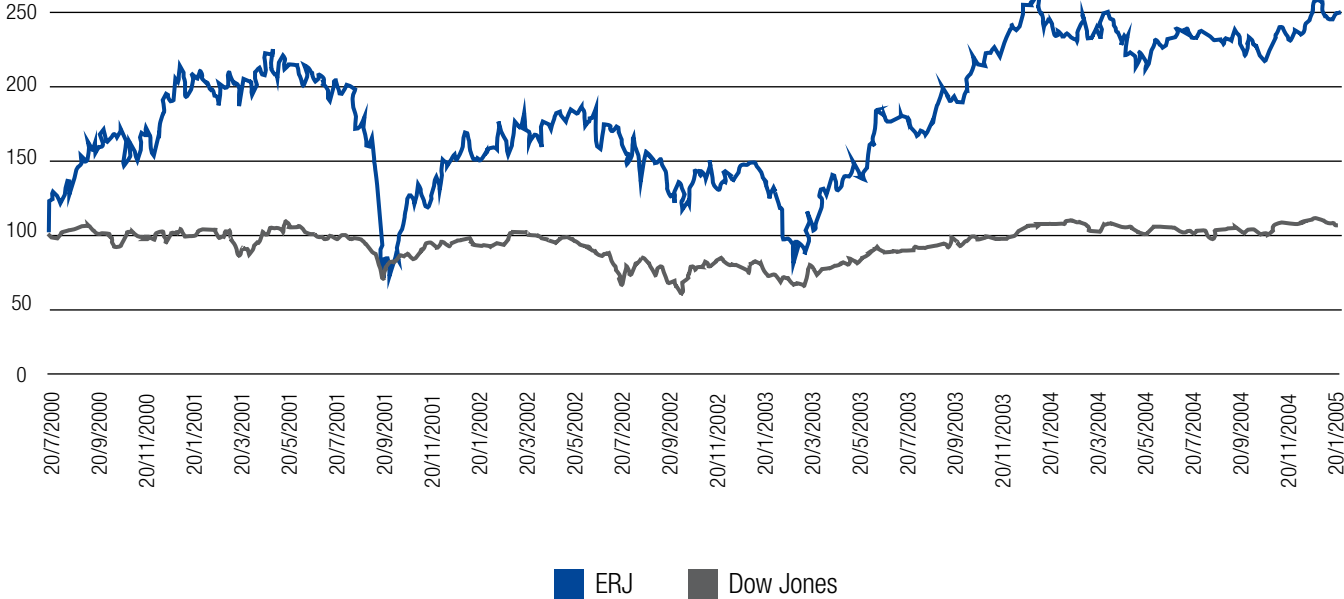
Revenue per Employee (US\$ thousand)



ON and PN Ibovespa Performance  
7/21/2000 = 100



ADS and Dow Jones Performance  
7/21/2000 = 100





# Message from the President



In spite of the difficulties experienced by the air transport industry worldwide, still unable to completely recover from an adverse scenario that has prevailed since the first half of 2001 and with several airlines, including some Embraer customers, fighting on a daily basis for survival, 2004, in which the Company celebrated its 35th anniversary, has been frankly positive for Embraer. The number of aircraft deliveries increased by 47%, totaling 148 commercial and executive aircraft, with a significantly positive impact on our revenues and profits.

In 2004, our net sales reached R\$ 10.231 billion, whereas the EBITDA was R\$ 1.962 billion, and net income was R\$ 1.256 billion, representing increases of 55.7%, 39.8%, and 114.0% respectively, compared to the corresponding amounts for 2003. The net sales and net income are the best results ever achieved by the Company.

At the same time, it is important to remark that in addition to our significantly higher revenues, we managed to maintain the excellent level of Embraer's orderbook, which means US\$ 10.1 billion worth of firm orders that, added to the options, totals US\$ 27.6 billion, a strong indication of the Company's growth potential.

This positive and vigorous trend was largely made possible by the entry into service of the EMBRAER 170, the first member of the new family of commercial jets that has been successfully operating in the United States and Europe since March 2004. We should also highlight the Company's manufacturing progress in implementing the ambitious 2004 delivery plan for this aircraft.

In February, we rolled out the EMBRAER 190, the third member of the EMBRAER 170/190 family, at a ceremony attended by His Excellency, the President of Brazil, Mr. Luiz Inácio Lula da Silva, other government officials, as well as shareholders, investors, special guests, and media representatives.



Two important events were held in December: the first flight of the EMBRAER 195, the fourth and last member of the EMBRAER 170/190 family; and the EMBRAER 175 certification, as planned and publicly announced.

These facts and other achievements show that the EMBRAER 170/190 family has all the required features to consolidate its competitive edge in global markets. The family's share of the Company's firm deliveries is expected to grow in the coming years, accounting already in 2005 for over half the planned jet deliveries, keeping Embraer on its continuous growth path.

There were two important events involving the ERJ 145 family. Harbin Embraer Aircraft Industry (HEAI), our Chinese subsidiary, delivered the first five jets to its launch customer China Southern Airlines, China's largest airline. In addition, we celebrated in Brazil the delivery of the 800<sup>th</sup> jet of this family, confirming its widespread and continuous market acceptance, as well as absolute fulfillment of aviation market requirements for commercial airplanes of up to 50 seats.

In the Corporate Aviation Market, while the Legacy consolidated its position in global markets, we prepared to define the course the Company will follow in this business segment.

New significant improvements were introduced to the Legacy Executive in terms of its operational characteristics, passenger comfort, and the structure set up for its maintenance services, resulting in a major reduction in its operational costs. In addition, the Legacy was granted authorization to operate at London City Airport (LCY), located in downtown London, a permit extended to only a very few aircraft due to this popular airport's limited operational conditions, providing a true benefit to our clients.

The year of 2004 will be marked in the history of Embraer's Defense area. The selection of Embraer, in association with a group of companies led by Lockheed Martin Corporation, to supply a new battlefield control system to the United States Army and Navy opened vast possibilities for the Company in the world's largest defense market. Winning this program also resulted in the creation of a new U.S. industrial unit to be built in Jacksonville, Florida.

Our goal is to continually expand our customer service area, not only in terms of ensuring our excellent level of aircraft dispatchability, but also of providing our customers with other services such as aircraft maintenance and repair, and guaranteeing their satisfaction, which is essential in generating our results and expanding our operations. To this end, and as we celebrated our 25-year presence in the United States in 2004, we decided to further expand Embraer Aircraft Maintenance Services (EAMS) facilities in Nashville, Tennessee. We are doing the same in Europe by announcing in December 2004 the purchase of OGMA – Indústria Aeronáutica de Portugal, based in Alverca, Portugal, and we continue to expand our services in Brazil.

In October 2004, Indústria Aeronáutica Neiva, a wholly-owned Embraer subsidiary based in the city of Botucatu, State of São Paulo, received certification of the Ipanema crop duster aircraft with an ethanol-powered engine, the first airplane to leave the factory with a certification for this type of fuel. The development of Brazilian agriculture has been driving Ipanema's considerable increase in sales, buoyed by the aircraft's reduced costs provided by using less expensive and more readily available ethanol as fuel compared with traditional aviation gasoline powered aircraft.

The construction of our future is associated to three essential factors:

- People development – This is a fundamental growth factor, in which Embraer invested more than R\$ 60 million in 2004 for training programs, student grants, and for the Specialization Program in Engineering (SPE), dubbed our “Embraer University.” Since the beginning of this program in 2001, Embraer University has graduated at a Masters degree level, 462 Aeronautic Engineering specialists;
- Respect for shareholders – Fully aware of our responsibilities towards those who believed in and supported our vision by investing their resources in the Company, we continue to pursue the establishment of truthful and transparent communication with our shareholders while adopting corporate governance best practices;

- Social responsibility – We have implemented far-reaching initiatives oriented to sustainable growth based on environmental protection, health care, and quality of life issues for our employees and their families, and for the development of the communities where we operate.

During 2004, we maintained planned investments both in the development of our civil and military products, in improving the Company's industrial capacity, in increasing productivity, and in training and developing people. Our investments totaled more than R\$ 627 million, which well reflects our full commitment to our future.

As far as corporate social responsibility is concerned, 2004 was the year in which the first phase of a major project was successfully completed - the graduation of the first class of 198 students of the Eng. Juarez Wanderley High School, conceived, implemented and sponsored by Embraer. This is an important mark in the history of the Embraer Institute of Education and Research (Instituto Embraer de Educação e Pesquisa), created in 2001 to carry out Embraer's social efforts, particularly in the educational field. 2004 saw the successful completion of the Integrated Management System (Sistema de Gestão Integrada – SGI), a program implemented in association with the São José dos Campos Municipal Education Department that positively affected the lives of 38,000 primary school children.

To encourage Company employees interest and engagement in social initiatives, the Embraer Education and Research Institute has launched a Social Partnership Program (Programa Parceria Social – PPS) aimed at supporting social projects submitted by our employees, and maximizing the benefits provided to the communities in which we operate.

Ten years after Embraer was privatized, we are pleased to see that we have been able to understand the requirements of the different markets in which we operate and provide our customers with products that offer the quality, performance and cost-effectiveness they look for. Our organization is fully aware that customer satisfaction is the source of our results and the basis for our expansion.



Driven by this same attitude, we have established solid relations with our industrial and financial partners, shareholders, and investors based on objective and transparent communication that further consolidates our mutual confidence.

Therefore, our totally motivated and integrated team of over 15,000 people represents an added guarantee that we will continue on our path of continuous, steadfast growth.

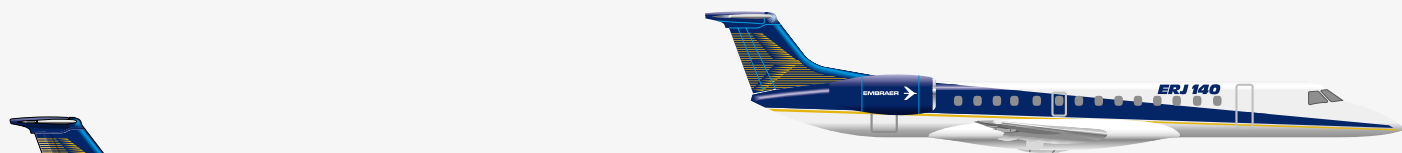
Let's Move Ahead!

Maurício Botelho  
President and CEO

# Commercial Aviation Market



**ERJ 135**  
Capacity: 37 seats  
Range: 1,750 nautical miles (3,241km)



**ERJ 140**  
Capacity: 44 seats  
Range: 1,650 nautical miles (3,056 km)



**ERJ 145**  
Capacity: 50 seats  
Range: 1,550 nautical miles (2,871 km)



**EMBRAER 170**  
Capacity: 70 to 78 seats  
Range: 2,000 nautical miles (3,704 km)



**ERJ 145 XR**  
Capacity: 50 seats  
Range: 2,000 nautical miles (3,704 km)



**EMBRAER 175**  
Capacity: 78 to 86 seats  
Range: 1,800 nautical miles (3,334 km)



**EMBRAER 190**  
Capacity: 98 to 106 seats  
Range: 2,300 nautical miles (4,260 km)



**EMBRAER 195**  
Capacity: 108 to 118 seats  
Range: 2,100 nautical miles (3,889 km)

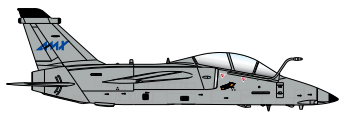
# Defense Market



**ALX SUPER TUCANO**  
Mission: Advanced Training and Light Attack



**EMB 145 AEW&C**  
Mission: Airborne Early Warning and Control



**AMX**  
Mission: Ground Attack Fighter and Advanced Training

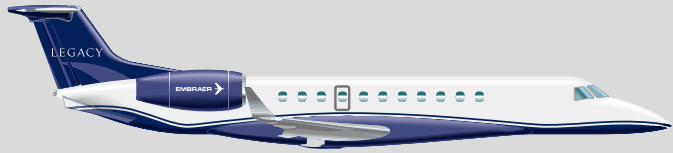


**P-99**  
Mission: Maritime Patrol and Anti-Submarine Warfare



**EMB 145 RS/AGS**  
Mission: Remote Sensing, Air-to-Ground Surveillance

# Corporate Aviation Market



**LEGACY EXECUTIVE**  
Category: Super Mid-Size  
Capacity: 10 to 16 seats  
Range: 3,250 nautical miles (6,019 km)

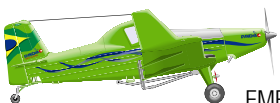


**LEGACY SHUTTLE**  
Capacity: 16 to 19 seats  
Range: 1,840 nautical miles (3,241 km)



**LEGACY SHUTTLE HC**  
Capacity: 22 to 37 seats  
Range: 1,840 nautical miles (3,241 km)

# Agricultural Aviation Market



**EMB 202 IPANEMA**  
Fuel: Ethanol  
Hopper's Capacity: 251 gallons (950 liters)



# The Year Month-by-Month



## January

- The EMBRAER 170 Scheduled Maintenance Plan is approved by the Aerospace Technical Center (Centro Técnico Aeroespacial – CTA), Federal Aviation Administration (FAA), and the Joint Aviation Authorities (JAA), certifying authorities from Brazil, the United States, and the European Union respectively;
- The European Commission dismisses an inquiry into the Brazilian Government export-financing program (Programa de Financiamento às Exportações – PROEX), started in 1999, thus ratifying the program's total compliance with international standards;
- Embraer delivers the third ERJ 145 jet to Colombian airline Satena.

## February

- Harbin Embraer Aircraft Industry (HEAI), a joint venture between Embraer and Aviation Industries of China II (AVIC II), based in Harbin, China, announces the first firm order for six ERJ 145s placed by China Southern Airlines;
- The EMBRAER 190 is officially presented at Embraer's headquarters at a ceremony attended by the President of Brazil, Luiz Inácio Lula da Silva, marking a new phase in the development of the EMBRAER 170/190 family;
- During the EMBRAER 190 rollout ceremony Embraer announces its financial contributions to the Zero Hunger (Fome Zero) social program implemented by the Brazilian Government, in an estimated total amount exceeding R\$ 1.5 million;
- The EMBRAER 170 is displayed for the first time in Asia at the Asian Aerospace 2004 in Singapore, the world's third largest industry event, and starts an official demonstration tour of 12 countries, 26 cities and 41 airlines in Asia;



- Embraer holds the fifth Heavy Maintenance Forum (HMF) in Aberdeen, Scotland, to discuss improvements in the ERJ 145 family maintenance process;
- The EMBRAER 170 is approved for revenue service by CTA, FAA, and the European Aviation Safety Agency (EASA), the new European Union certifying authority;
- Eng. Juarez Wanderley High School (Colégio Eng. Juarez Wanderley), a São José dos Campos secondary school built and sponsored by Embraer for needy students, marks its second anniversary.

### March

- LOT Polish Airlines, Poland’s flag airline belonging to the Star Alliance group and that already operates 14 ERJ 145s, takes delivery of its first EMBRAER 170 jet and becomes the first airline in the world to operate this airplane;

- American airline US Airways takes delivery of its first two EMBRAER 170 jets from a total of 85 firm orders and 50 options and becomes the first airline in the United States to operate this airplane;
- Italian airline Alitalia takes delivery of its first EMBRAER 170 jet from a total of six aircraft and six options;
- The EMBRAER 190, the third member of the EMBRAER 170/190, makes its first flight in São José dos Campos;
- American company Republic Airways Holdings, parent company of Chautauqua Airlines, places an order for 16 ERJ 145s in a deal valued in US\$ 320 million at list price;
- Embraer and Republic Airways Holdings announce an agreement regarding a firm order of 13 EMBRAER 170s plus 37 options for the same model. The total value of the firm order at list price is US\$ 325 million, with a potential value of US\$ 1.25 billion if all options are converted.

### April

- ELEB, a joint venture partnership between Embraer and Liebherr International, based in São José dos Campos, is the first Brazilian company to receive the NBR 15100 aerospace quality certificate issued by the Industrial Fostering Institute (Instituto de Fomento e Coordenação Industrial – IFI), a CTA agency in São José dos Campos;
- The Legacy is a major highlight of the Latin American Business Aviation Conference And Exhibition (LABACE), the largest corporate aviation show in Latin America;
- One of Embraer’s most successful defense product lines, the Intelligence, Surveillance & Reconnaissance (ISR) family, is displayed at the 9<sup>th</sup> Defense Services Asia (DSA) show taking place in Kuala Lumpur, Malaysia;
- Embraer introduces the new interior of the Legacy Executive, offering its customers different options and improving space perception and customer comfort;

- A new Legacy Maintenance Plan revision is approved by the CTA, allowing an 18% reduction in the number of maintenance hours;
- During the Regional Airlines Association (RAA) annual convention taking place in Saint Louis, Embraer celebrates its 25<sup>th</sup> year in the United States, playing a major role in the growth of the American regional aviation market, providing high quality aircraft and services, supporting more than 900 aircraft operating for a customer base that includes the top airlines of the world’s biggest and most important market.

### May

- Embraer delivers the 800<sup>th</sup> jet of the ERJ 145 family to the American customer Chautauqua Airlines, which will fly the aircraft in the colors of Delta Connection;
- New Legacy Executive interior is presented at the European Business Aviation Conference and Exhibition (EBACE), held in Geneva, Switzerland;







- The Embraer Education and Research Institute (Instituto Embraer de Educação e Pesquisa) launches the Social Partnership Program (Programa Parceria Social – PPS) aimed at supporting social projects conducted by private non-profit entities with the active participation of Embraer employees;
- The Mexican Air Force takes delivery of two EMB 145 MP coastal patrol aircraft, a derivative of the maritime patrol and anti-submarine warfare P-99 Embraer ISR family aircraft.

## June

- Aerolitoral, Mexico's largest regional airline, takes delivery of the first three ERJ 145s from a total order of five aircraft, plus 25 options of this model, thus becoming the first Mexican carrier to operate the ERJ 145 regional jet;
- Harbin Embraer Aircraft Industry (HEAI) delivers the first two ERJ 145s from a total of six aircraft to China Southern, the largest airline in China;

- Embraer holds the ERJ 145 and the EMBRAER 170/190 Operators Conferences in Rome, bringing together 21 operators and 385 participants;
- Embraer announces the eight winners of the 2004 Best Supplier of the Year Award during the sixth edition of the Embraer Partners and Suppliers Conference (ESC), held in Campinas, state of São Paulo, Brazil;
- Finnish airline Finnair signs a contract worth US\$ 306 million at list price for the purchase of 12 EMBRAER 170 jets, plus eight options of the same model convertible into EMBRAER 175 or EMBRAER 190 models.

## July

- Embraer takes part in the traditional Farnborough Air Show in the United Kingdom and displays the EMBRAER 170 (painted in the colors of Alitalia Express), EMBRAER 190, and Legacy Executive jets;

- Trans States, the sixth largest U.S. regional airline, changes seven ERJ 145 options into firm orders: the jets will fly under the colors of United Express;
- Luxembourg airline Luxair converts two ERJ 135 options into firm orders and includes one more purchase option for the same model. The airplanes will operate to/from London City Airport (LCY);
- Republic Airways Holdings confirms two additional EMBRAER 170 purchase options, raising to 18 the total number of units of this model purchased by the company. These are the first EMBRAER 170s to be configured in a two-class arrangement;

- American airline JetBlue will equip its EMBRAER 190 jets with a double Head-up Guidance System (HGS), the first time this equipment will be used in this configuration in commercial aviation;
- Embraer and Avions de Transport Regional (ATR) sign a cooperation agreement relating to both companies' e-business initiatives;

- Embraer makes delivery of an EMB 145 AEW&C to the Mexican Air Force. This is the third ISR family jet ordered by the Mexican Government.

## August

- The ERJ 145 platform is selected, as part of a consortium led by Lockheed Martin Corporation, for the United States Army and Navy Aerial Common Sensor (ACS) program, a modern battlefield aerial surveillance system whose contract has a potential to reach US\$ 7 billion in 20 years;
- Republic Airways Holdings converts another four EMBRAER 170 options into firm orders, thus reaching 22 firm orders and 28 options of this model;
- Embraer celebrates 35 years of experience in the design, development, manufacture, sale and after-sale support of aircraft destined for the global commercial, corporate and defense markets;

- Construction started on an Embraer factory in Jacksonville, Florida to be totally dedicated to the U.S. defense programs, starting with the ACS program.

## September

- Embraer holds the fourth Maintenance Cost Workshop (MCW) in São José dos Campos, a demonstration of its commitment and continuous effort to improve after-sale support of the Company's fleet;
- New ERJ 145 family improved maintenance plan is approved by CTA, FAA and EASA, increasing by 25% Check C inspection intervals;
- Republic Airways Holdings takes delivery of its first EMBRAER 170 jet, which will fly under the colors of United Express;
- Embraer participates in the European Regions Airline Association (ERA) annual convention in Vienna, Austria;

- Air Canada signs a purchase agreement worth US\$ 1.35 billion for 45 EMBRAER 190s plus 45 options, thus confirming a commercial proposal signed in December of 2003.

## October

- Embraer Collaborative Inventory Planning (ECIP), the Company's new customer integrated spare part management system, is implemented by ExpressJet Airlines;
- Embraer takes part in the 13<sup>th</sup> Defendory International, one of the world's most important defense systems exhibitions, held in Athens, Greece;
- Republic Airways Holdings converts one more EMBRAER 170 option into a firm order, raising to 23 the total number of aircraft ordered by this customer, plus 27 options;
- The first Legacy Executive jet for the Asian market is delivered to Legend Development Co. Ltd.;
- The Legacy maintenance program incorporates improvements that enhance the flexibility and availability of aircraft and reduce maintenance costs by 5%;



- A new Legacy interior offers enhanced customer comfort and environment customization, such as new pleated shades and illumination system;

- The Legacy Executive receives authorization to operate to/from London City Airport (LCY), located in London's city center and a favorite of business travelers, and becomes the airplane with the largest cabin to operate at the LCY;

- Harrods Aviation is appointed as authorized corporate aviation sales representative for the United Kingdom and Ireland;

- As of the second quarter of 2005, the Legacy will offer high-speed global connection through the wireless fidelity (Wi-Fi) technology;

- The Legacy goes through its final test phase to increase its operational ceiling to 41,000 feet, expected to be completed by the first quarter of 2005;

- The Legacy Executive is shown at the 57<sup>th</sup> Annual Meeting and Convention of the National Business Aviation Association (NBAA), the industry's largest global event, held in Las Vegas;

- Panama's based carrier Copa Airlines confirms the purchase of ten EMBRAER 190s, plus options for another 20 aircraft of the same model;

- Indústria Aeronáutica Neiva celebrates its 50<sup>th</sup> anniversary with over 3,800 airplanes delivered, including the Ipanema, a crop-duster that has been continuously produced for over 30 years and accounts for 80% of Brazil's fleet of agricultural aircraft;

- The ethanol-powered Ipanema, produced by Neiva, receives its type certificate from CTA and becomes the first serially produced aircraft in the world to leave the factory already certified for this type of fuel;

- Embraer and the Defense Research and Development Organization (DRDO) of the Indian Government sign a memorandum of understanding in support of the development of a new AEW&C system of the Indian Air Force to be initially installed on three ERJ 145 platforms.

## November

- Embraer participates in the fifth China Air Show in Zhuhai, China;

- Hawker Pacific signs an exclusive distribution and logistics agreement with Embraer for the supply of spare parts for the EMB 110 Bandeirante and EMB 120 Brasília operating in Australia and the Pacific region;

- Air Canada adds 15 EMBRAER 175s to its original order signed in September 2004, plus 15 options of this model, and becomes the launch customer for this aircraft;

- Ecuadorian airline TAME Línea Aérea del Ecuador signs a letter of intent for the purchase of two EMBRAER 170s and one EMBRAER 190, and another four EMBRAER 170/190 purchase options;



- Embraer's EMB 145 AEW&C surveillance aircraft, named R-99A by the Brazilian Air Force (Força Aérea Brasileira – FAB), take part in the Cruzeiro do Sul (CRUZEX) operation together with the French, Argentine, and Venezuelan air forces, showing outstanding performance and reliability in all missions;

- Embraer announces its long-term outlook for the commercial and corporate markets and confirms estimated deliveries of 145 airplanes in 2004 and the same number in 2005.

## December

- Hong Kong Express (HKE) will operate four EMBRAER 170s leased from GECAS and will be the EMBRAER 170 launch customer in Asia;

- The 110-seat commercial jet EMBRAER 195, the largest aircraft manufactured by Embraer ever, makes its first flight in São José dos Campos;

- Founded only three years ago and already a benchmark for secondary schools in the São José dos Campos region, the Eng. Juarez Wanderley High School graduates its first class of 198 students;

- Embraer announces that measurements have shown that the EMBRAER 170 fuel consumption is 2% lower than previously estimated and, consequently, the aircraft payload is raised to 19,842 lb (9,000 kg);

- Three units of Jet Aviation Holdings Inc. are approved as Legacy service centers;

- Cirrus Airlines, a German company that operates in a code-share agreement with Lufthansa, takes delivery of its first EMBRAER 170;

- The EMBRAER 175 receives type certification from CTA and expects EASA and Transport Canada Civil Aviation (TCCA) certification to be completed in the first half of 2005;

- A consortium led by Embraer, including European Aeronautic Defense and Space Company (EADS), acquires 65% of the share capital of OGMA - Indústria Aeronáutica de Portugal, a leading European aircraft maintenance company whose 2003 sales reached € 107 million;

- Embraer confirms advanced negotiations with Republic Airlines for the purchase of 16 new EMBRAER 170s, an operation based on the replacement of an existing order for eight ERJ 145s.



# Commercial Aviation Market

## Market Overview

The air transport industry is still going through a period of difficulties and changes, with continuous average airfare reduction, the growth of low-cost carriers (LCCs), and increased fuel prices, a hefty factor in operational costs. The industry recovery, particularly the one of American network carriers, has yet to take place in spite of the rise in the number of passengers and cost reduction efforts conducted by airlines worldwide.

The present leading airlines' financial exposure results in reduced credit availability in capital markets and commercial banks for new aircraft sales financing. Because of this, export credit agencies (ECAs) have played an important role in financing the airline industry.

The ongoing search for improved efficiency and competitiveness has been an essential condition for surviving in this market. The business models of regional airlines and LCCs have proven to be more adaptable to today's market conditions, resulting in higher market shares and profits for these companies.

In the American marketplace, traditional airlines are using regional airlines in their efforts to improve operational efficiency by optimizing the seat capacity-demand relation. The transfer of large jet routes to regional jets has been an important driving force of the growth experienced by regional airlines, and has made it possible for major airlines to maintain suitable service offers in medium and low demand markets.

To continue improving their operational capabilities, leading American network carriers have signed flexible labor agreements with their employees' unions and, thus, have been able to reduce costs and increase their competitiveness. Furthermore, flexible labor relations in terms of the maximum size of the aircraft to be operated by affiliated airlines and regional partners have made it



possible to achieve a balance among the aircraft in the system. Currently, 70-seat jets are being used to match seat capacity with route demand, i.e., transferring unprofitable routes served by large jets and high-demand routes operated by 50-seat regional jets.

European network carriers have gone through a restructuring process aimed at reducing costs and increasing their competitiveness to face the ongoing expansion of low-cost carriers. European regional airlines typically operate larger airplanes than those operated by their American counterparts due to high airport absence navigation fees, more congestion at the main airports, and lack of labor restrictions that could artificially hinder the use of higher capacity regional jets. Major network carriers have incorporated regional jets into their systems, increasingly improving their ability to match seat capacity with passenger demand.

The Chinese air transport system has been slowly beginning to take on a western style by implementing policies for the development of three main hubs and six secondary hubs. Wider system deregulation in the medium term would enable service improvement and fleet rightsizing. Nevertheless the Central Government strategy of fostering the development of regional aviation has not fully gotten off the ground, as current airfare policies still call for higher flexibility so that regional jet operational conditions can be improved.

In Asia and the Pacific, there has been a gradual deregulation of intra regional bilateral agreements and the emergence of new companies based on the low-cost, low-fare model.

Embraer

In 2004 Embraer achieved significant results in product development and sales.

The development of the EMBRAER 170/190 program and the beginning of deliveries of the first family model, the EMBRAER 170, have been followed by new orders. For the year, the Company

received 41 new firm orders for the EMBRAER 170 and won two new customers for this model - Finnish airline Finnair and Hong Kong Express (HKE). Air Canada became the launch customer for the EMBRAER 175 with an order for 15 firm and 15 option aircraft, while confirming its previous order, announced in December 2003, for 45 firm and 45 option EMBRAER 190s. The first Latin American customer of the new family of jets is COPA airlines, from Panama, which will operate ten EMBRAER 190s.

Embraer produced the 800<sup>th</sup> ERJ 145 jet, which was delivered to the American customer Chautauqua Airlines during a ceremony that marked the history of one of the most successful products in all commercial aviation.

In 2004, 31 new firm orders for ERJ 145 family members have been added to Embraer's backlog. Harbin Embraer Aircraft Industry (HEAI), a joint venture between Embraer and Chinese company AVIC II, was a special highlight after delivering the first five airplanes sold to China Southern Airlines. Another year highlight was Luxembourg's Luxair, which ordered two ERJ 135 jets. These jets will be incorporated into the company's fleet of eight ERJ 145s and will operate at London City Airport (LCY), having received the required authorization in the second half of 2004. Mexican airline Aerolitoral took delivery of five ERJ 145s and became the first airline in that country to operate Embraer jets.

Embraer celebrated its 35<sup>th</sup> anniversary in 2004, having become the only world-class aircraft manufacturer to offer a complete line of commercial jets in the 30- to 120-seat segment, combining passenger comfort, cost-efficiency and high performance in meeting the most demanding requirements of the commercial air transport industry.





In 2004, Embraer assumed the leadership of the global 70-110-seat jet market with a 34% market share.

The Company's commercial aircraft backlog totaled 400 units in 2004, according to the table below.

Embraer's Aircraft Backlog

	Firm Orders	Options	Delivered Aircraft	Backlog
ERJ 145 Family	901	336	798	103
EMBRAER 170/190 Family	343	427	46	297
Comercial Aviation	1,244	763	844	400





# Clients

## ERJ 145 FAMILY



## EMBRAER 170/190 FAMILY





# Corporate Aviation Market



## Market Overview

The Corporate Aviation Market is dominated by manufacturers that have been around for decades, have renowned brand names and developed a wide family of products. These factors allow them to cater to a larger number of customers and facilitate customer loyalty.

The expansion of this market is directly influenced by global economic growth, which, after a few years of stagnation resulting from a deep global recession, has shown timid signs of recovery through the second half of 2004. The United States marketplace, which accounts for about 80% of world sales, has been the driving force behind this growth. In addition, the introduction of new models may further increase sales.

Most marketing estimates point to significant growth rates in the next ten years and Embraer is investing to increase its market share in this segment.

## Embraer

The year of 2004 was characterized by a strong turnaround towards the end of the year, resulting in 13 Legacy deliveries. Although this figure is the same as that of 2003, it means higher revenues for the Company because of the higher price of some models sold.

Continuing the Legacy marketing promotion and image building program, demonstrations were made at trade shows and industry events in Europe, Latin America, and in the United States.

The evolution of the Legacy was a major highlight of the Latin American Business Aviation Conference And Exhibition (LABACE), the largest corporate aviation show in Latin America, held in April in São Paulo.





The Legacy Executive was also shown at the European Business Aviation Conference & Exhibition (EBACE) in Geneva, Switzerland. After this event, the Legacy embarked on a demonstration tour through several European countries, ending in July at the traditional Farnborough show in England.

As its last major 2004 event, the Legacy was displayed at the annual convention of the National Business Aviation Association (NBAA), the world's largest industry event, held in Las Vegas in October.

Some of the new advanced features incorporated during 2004 in the Legacy, a super mid-size jet that entered service in 2002, include expansion of the operational envelope for high altitude airports (up to 8,500 feet above sea level), a new interior configuration, and a revised maintenance plan that reduced by 18% the number of required maintenance hours, as well as a



5% reduction in maintenance costs. In addition, the Legacy was granted authorization to operate at London City Airport (LCY), located in downtown London. High-speed global connection will be incorporated in 2005 by means of wireless fidelity (Wi-Fi) technology. In addition, it will be able to reach an operational ceiling of 41,000 feet.

From an operational point of view, the Legacy offers more flight availability than any other corporate airplane, reaching up to 130 hours per month at Flight Options, a fractional ownership company. Furthermore, its operational cost is 30% lower than that of similar aircraft, a considerable advantage in the corporate aviation market.

In October, the Company announced that Harrods Aviation would act as a Legacy family authorized sales representative in the United Kingdom and Ireland, aiming to increase the reach of our customer-prospecting network.

Always committed to providing its costumers with the best service, Embraer has expanded its authorized service center network by including another three Jet Aviation units in the United States: Teterboro, New Jersey; Bedford, Massachusetts; and Dallas, Texas. Now, Jet Aviation has a total of six units authorized to render Legacy maintenance services.



# Defense Market



## Market Overview

Defense and security expenditures, particularly in the United States, increased in 2004, continuing a trend started in 2001. The United States defense budget reached about US\$ 400 billion, about a third of which was set aside for the purchase of research and development products and services, helping its military industrial complex to resume the growth started in the second half of 2003.

Escalation of the war in Iraq, even after the war had officially ended in 2003, showed the need for changes in the structure of the armed forces and its use in a context marked by disproportion and the ongoing fight against terrorism. The fight against terrorism definitely assumed global proportions.

The control of oil production areas and transport routes continues to be a source of tension worldwide, specially in certain regions. Several factors have contributed to sharp increases in oil prices, such as attacks against oil plants, the growing mismatch between oil production and consumption in some key countries, and the possibility of reaching the world's refining limit. As a result, measures aiming at preserving oil sources, production centers, and distribution routes become of strategic value.

The growth of illegal activities, especially drug smuggling, is still one of the biggest problems governments have to face, demanding increased effort and heavy investments in security and defense systems.

Depletion of natural resources expected in many regions of the world, high demographic growth - sometimes an explosive growth in the most needy regions - and worldwide regional conflicts are additional factors contributing to the growing need for, and interest in Intelligence, Surveillance, and Reconnaissance



(ISR) systems, usually associated to other systems, dedicated the implementation of adequate military actions.

## Embraer

Embraer's expertise and range of defense products uniquely fulfill global market needs and give the Company a privileged position by combining high technological content and operational efficiency with very competitive prices and low maintenance costs. The ISR family consolidates the Company's presence in this market segment by offering distinguishing features that make it possible even for developing countries to implement national security policies and strategies. In 2004, Embraer showed that it has entered the global defense market to win.

The Company's main achievement of 2004 was in the United States, one of the most demanding defense markets in the world. On August 2, a group of companies including Embraer and led by Lockheed Martin was selected to develop the U.S. Army's Aerial Common Sensor (ACS) program based on the ERJ 145 platform. A total of 38 aircraft will be supplied to the Army, to be added by another 19 to the Navy to replace the EP-3s now in operation, a project with a potential to reach US\$ 7 billion in the next 20 years.

Three weeks after the ACS announcement, Embraer started the construction of a manufacturing unit in Jacksonville, Florida, to be completed in 2005. This unit will be entirely dedicated to the U.S. defense and security programs.

Regarding transportation aircraft, in January 2004 Embraer delivered the third ERJ 145 to Colombian airline Satena, which has been operating this model since 2002. In November, Ecuador's TAME signed a Letter of Intent for the purchase of two EMBRAER 170s and one EMBRAER 190, in addition to an option for another four EMBRAER 170/190 jets.

The ISR airplanes operated by the Brazilian Air Force (Força Aérea Brasileira – FAB) on the Amazon Surveillance System (Sistema de Vigilância da Amazônia – SIVAM) – five aerial

surveillance R-99A (EMB 145 SA or AEW&C – Airborne Early Warning and Control) and three R-99B (EMB 145 RS – Remote Sensing) – have been put through intensive operations throughout the year. A highlight was the use of R-99As in an operation called Cruzeiro do Sul (CRUZEX), held in November 2004. This operation was the largest air exercise ever carried out by FAB, with the participation of Argentina, France and Venezuela, employing 70 aircraft of different types. During the exercise, FAB's advanced R-99A airborne early warning aircraft, manufactured by Embraer, operated in missions along with the French airborne warning and control E-3F (AWACS) aircraft.

The ISR family of jets also includes the P-99 maritime patrol and anti-submarine warfare version. Two of these aircraft, in a coastal patrol configuration (EMB 145 MP), were delivered to the Mexican Air Force in May 2004 and are now in operation. In July, the Mexican Air Force in took delivery of another ISR aircraft, an EMB 145 AEW&C, completing the deliveries of its first order. It shall be also remarked the arrival in Greece of the first of four EMB 145 AEW&C aircraft ordered by the Greek Air Force.

In October, Embraer and the Indian Defense Research and Development Organization (DRDO) signed a Memorandum Of Understanding (MOU) to support the Indian Air Force new Airborne Early Warning & Control (AEW&C) system development based on an ERJ 145 platform. An initial order for three aircraft was placed. Embraer's experience in similar projects was a key factor in the DRDO's selection.







Embraer's defense products were promoted at major events in 2004, such as the 9<sup>th</sup> Defense Services Asia (DSA) in Kuala Lumpur, Malaysia, the 13<sup>th</sup> Defendory International show in Athens, Greece, as well as the traditional Farnborough Air Show, which took place in July in the United Kingdom.

On the domestic front, three major programs commissioned by FAB got under way: production of the A-29 (ALX Super Tucano), modernization of F-5 fighters, and the modernization of A-1 (AMX) fighters.

The ALX Super Tucano, a light attack airplane that operates in severe environments, entered initial production in 2004 and several units have been delivered to FAB and started their operational life, obtaining extremely positive evaluation marks during this initial phase. The negotiations for converting 23 options into firm orders are nearing completion, which would raise the total order from FAB to 99 airplanes. Embraer sees great opportunities in international markets for this product, which combines technological innovation, low price and operational costs, and high mission effectiveness.

In the beginning of 2005, the Aeronautic Command (Comando da Aeronáutica) informed the cancellation of the international bidding process for its FX-BR Program, where Embraer was leading the Mirage 2000 BR Consortium, together with French companies Dassault Aviation, Thales, and Snecma.

Modernization work on 46 FAB F-5 E/F supersonic fighters progressed at a rapid pace, with 12 units on the assembly line at the end of 2004, in addition to two pre-serial units for flight test. The first modernized F-5BR will be delivered in the beginning of 2005, equipped with state-of-the-art mission systems and capable of providing a better technical-operational performance.

Modernization of the AMX jets has progressed successfully, based on a high level of equipment commonality and the same man-machine interface philosophy applied on the modernized F-5s and the new ALX Super Tucano.

Thus, Embraer consolidates its role as the technological and industrial provider of FAB, a relationship that dates back to the foundation of the Company and that has been essential in furthering its penetration and presence into global markets.





# Customer Services



In 2004, Embraer completed an organizational restructuring begun in 2003 and expanded its aircraft operational support and service activities worldwide.

The integration of customer services carried out by the units in different countries by using processes and tools developed at the São José dos Campos headquarters resulted in increased efficiency in meeting customers' needs.

The Customer Order Desk, a 24x7 service operated by trained personnel speaking different languages, centralizes the reception of spare part orders, allowing the use of standardized service procedures that have brought significant operational and financial benefits.

So as to continually identify the needs of Embraer aircraft operators, the Company organized and took part in a number of important industry events throughout the year, always sharing with the customers its efforts to implement optimized maintenance practices, thus reducing costs and improving fleet performance.

One such event was the fifth Heavy Maintenance Forum (HMF), held in February in Aberdeen, Scotland, where a team of engineers supported the efforts of representatives from 11 airlines towards improving maintenance processes that benefit the entire ERJ 145 jet fleet in operation around the world.

In addition, Embraer held a June conference in Rome with operators of ERJ 145 and EMBRAER 170/190 family aircraft.

Finally, Embraer organized the fourth Maintenance Cost Workshop (MCW) in September in São José dos Campos, where competing customers had a chance to meet and share their experiences in reducing maintenance costs.





Embraer's involvement in these events reflects its endeavors to continually improve after-sales service, and reinforces the Company's commitment to the success of its customers, resulting in a positive influence on aircraft design.

At its customers' request, Embraer has streamlined the access to its portal AEROChain® by improving several functions, and also signed a cooperation agreement with Avions de Transport Regional (ATR) for the development of both companies' e-business activities, thus consolidating this important initiative as an e-marketplace that serves as a benchmark for the aerospace market and is a starting point for future projects to be exploited in 2005.

Embraer Collaborative Inventory Planning (ECIP), the Company's new spare parts management system that optimizes maintenance inventory use, reducing spare parts supply times and maintenance costs, is another important tool made available by Embraer in 2004, launched with an October contract with the American company Express Jet Airlines.

Owing to the need to reduce costs and investments, airlines have increased their demand for a wider range of after-sales support services, including parts pools, exchange programs, and Total Support Packages (TSPs).

Responding to this trend, Total Support Package (TSP), a complete support service for the EMBRAER 170/190 jets, was implemented simultaneously with the EMBRAER 170 entry into service in the U.S. market. TSP will be extended to other customers who have shown an interest in this innovative service.

To enhance customer service and relations, Embraer has created the Embraer Fleet Technical Center (EFTC), a call center with specialized teams to provide each customer with exclusive operational and maintenance assistance.

The same standard customer service is provided to all Embraer serial programs, including out-of-production aircraft such as turboprops.

To further facilitate Embraer's aircraft maintenance and operation, the Company continued investing in the development and maintenance of its state-of-the-art technical publications, now entirely inserted in a virtual environment with integrated and easy-to-access characteristics.

Expanding its support to Australian and Pacific region operators, Embraer signed a cooperation agreement with Hawker Pacific in November, whereby this company will take over the logistic support for the EMB 110 Bandeirante and EMB 120 Brasília airplanes operating in the region. This measure allowed the Company to close its Melbourne subsidiary, providing savings of over US\$ 700,000 per year.

Focusing on its maintenance business, Embraer expanded its European service network by entering into a partnership with European Aeronautic Defense and Space Company (EADS) for the purchase of OGMA – Indústria Aeronáutica de Portugal, an important European aeronautic maintenance and production company founded in 1918.

As a result of its intense internal and external work, Embraer saw important achievements in its fleet maintenance service worldwide, such as the approvals of a Legacy revised maintenance plan and a new improved ERJ 145 family maintenance plan that increased by 25% C Check inspection intervals. Moreover, the Company is continuously working to guarantee its customers continued satisfaction with the products they have purchased.





# Technological and Industrial Management

A close-up photograph of a male worker in a factory environment. He is wearing safety glasses, a white respirator mask covering his nose and mouth, and white work gloves. He is focused on his work, using a power tool (possibly a drill or screwdriver) on a large, complex metal component that appears to be part of an aircraft fuselage. The component has several large, oval-shaped cutouts. The background is slightly blurred, showing industrial shelving and equipment.

The most significant technological and industrial management advancements achieved by Embraer in 2004 resulted from the evolution of consistent and continuous long-term planning carried out in previous years that directly affects the development of products, new technologies and production.

## Product Development

The year of 2004 was a very important one in the development of the EMBRAER 170/190 family products.

The approval, in February, of the EMBRAER 170, the first aircraft of the family, by the world's main aeronautical authorities - the Aerospace Technical Center (Centro Técnico Aeroespacial – CTA), Federal Aviation Administration (FAA), and European Aviation Safety Agency (EASA), aviation regulatory agencies from Brazil, the U.S., and the European Union respectively – allowed entry into service of this aircraft, initially with Alitalia, LOT Polish, Republic Airways (under the colors of United Express), and US Airways. High levels of performance, product maturity, and fleet operation reliability marked the entry into service of the EMBRAER 170.

Analyses of the aircraft performance and design improvements along the year have confirmed a 2% fuel consumption reduction to go along with a 19,842 lb (9,000 kg) increase in payload, as announced in December.

The EMBRAER 175, the second member of the family, received its final type certificate from CTA in December. Certifications from EASA and the Transport Canada Civil Aviation (TCCA), the certifying authority from Canada where the EMBRAER 175 will first enter service, are due in the first half of 2005.

The development of the EMBRAER 190 also made headway in 2004. The aircraft made its first flight in March; was displayed at



the traditional Farnborough Air Show in England in July; and its test campaign remained on track to obtain certification prior to entry into service in the third quarter of 2005.

The EMBRAER 195, the Company's largest airplane, is the newest member of this family of jets, having made its first flight in December. Its test campaign is expected to be completed by the second half of 2006, when it will receive the final type certificate and enter into revenue service.

Thus, the EMBRAER 170/190 program achieved an important goal in December of 2004: the roll out of the four family members in a shorter period of time than that of similar programs from other manufacturers.

Surveys and analyses of aviation market trends and needs have guided the pursuit of new opportunities and creation of new products that meet market demands.

Embraer's product development activities achieved significant results not only in the commercial aircraft sector, but also in the corporate, defense, and agricultural markets. By improving existing products or developing new aircraft, Embraer looks for new business opportunities, offering daring performance characteristics that meet the specific needs of these markets.

## New Technologies Development

For the future, the actions of airlines and certifying authorities show a trend towards developments geared to flight safety and air traffic, security in case of hostile action, environmental protection, and, most of all, cost efficiency and competitiveness focused on operational efficiency.

These trends are incorporated into Embraer's research projects involving the use of new materials and the mastering of new processes covering the preliminary design, development, certification, and manufacturing stages.

The different designs underway have made significant progress, continuing the work started in previous years.

Under the Computational Fluid Dynamics (CFD) application development project conducted through an association with the Foundation for the Support to Research of the State of São Paulo (Fundação de Amparo à Pesquisa do Estado de São Paulo – FAPESP), new computers were added to a network based on a dedicated server, connecting Embraer and educational and research institutions throughout Brazil. The development of specific software for this type of application has been completed and some tools have been successfully put into use, enabling the integration of applications of different disciplines. The project will proceed with the development of more specific applications.

The construction of a new wind tunnel research and test facility in Brazil has been completed. Control and measurement instruments are now being installed. The next stage is the development of a testing methodology.

An important research front, focused on the development of metallic or composite material airframes, includes projects about buckling of machine parts, new aluminum part joining processes, new materials and composite material part manufacturing processes, among others.

A pioneer highlight was the CTA certification of an aeronautical ethanol-powered engine developed by Indústria Aeronáutica Neiva with the support of its partners and research institutions. Ethanol has been used as an alternative fuel in a technologically advanced engine approved for aeronautical purposes and applied on the EMB 202 Ipanema, the hugely successful crop duster airplane, offering significant reduction on operational costs. Serial aircraft fitted with the new engine will be launched in March 2005, while Ipanemas currently in operation may be converted to operate with ethanol fuel, the same one used by the cars in Brazil.

## Production Development

The fast pace of production of the EMBRAER 170 during the first half of the year was the focal point of the production chain and guaranteed the deliveries scheduled throughout the year. At the

same time, the first EMBRAER 190 and the first EMBRAER 195 to be used in development activities and tests were produced.

While the EMBRAER 170 entered into service, robust and efficient processes were implemented to ensure airworthiness of the aircraft produced by the Company. Product quality support aimed at assuring product integrity was an integral part of the production process. Conformity of parts and activities was monitored during the entire production process.

On the other side of the world, Harbin Embraer Aircraft Industry (HEAI), a joint venture between Embraer and the Chinese company AVIC II, stepped up production of the ERJ 145. The first ERJ 145 produced outside Brazil entered into service in July with China Southern, the largest airline in China, followed by another four ERJ 145s delivered in 2004.

Industrial operations involving defense aircraft at the Gavião Peixoto industrial site were intensified during 2004 with the ALX Super Tucano manufacture and the F-5BR modernization programs, which continue at a high rate.

Continuous efforts to improve productivity levels and reduce costs and cycles throughout the entire production chain have brought significant results.

The EMBRAER 170 program management, by focusing on the convergence of the production chain on the assembly docks, achieved a significant reduction of cycles and an increase in the productivity of assembly teams due to an aggressive learning curve.

The opening of a support unit in the city of Guarujá, located near the port of Santos in the state of São Paulo, had a direct impact in reducing inventory levels and cycles. The Guarujá unit is totally dedicated to streamlining the logistics of taking delivery of large structural segments and forwarding them directly to the production line.

The Company has opened independent units specializing in activities defined in the industrial master plan. Another project in the pipeline is the construction of a panel production center in the city of Botucatu, also in the state of São Paulo.

The efforts to perform in Brazil a larger number of activities carried out by partners and suppliers in other countries, in addition to engaging local contractors, have resulted in an increase of the national content of Embraer's products, as well as in a reduction of supply cycles and costs.

Optimizing production processes through certifications recognized by the market helps reduce production costs, increase occupational safety, and improve the quality of the products and processes developed by Embraer, its partners and suppliers, and shows Embraer's commitment to providing its customers with the best products and services. ELEB, a joint venture between Embraer and Swiss company Liebherr International, became the first Brazilian company to obtain the NBR 15100 airspace quality certificate in April.

Improving supply chain and production processes and management is an ongoing concern for Embraer. These topics and projects are constantly discussed with partners and suppliers during a meeting which takes place on an annual basis, called the Embraer Partners and Suppliers Conference (ESC). The sixth edition of ESC, held in July, focused on improving the response of the chain to demand fluctuations. A more intense use of electronic communication based on specialized systems was an important result of this edition of the event.

During the ESC, Embraer awarded eight companies for their performance, recognizing the dedicated work carried out by the supply chain in improving the quality of the support given to its commercial aircraft operators.

All those initiatives are part of the inventory management strategy that has allowed a controlled growth in volume adapted to the fast increase in cadence resulting from the start of the production of the new EMBRAER 170/190 jets.



# Economic and Financial Analysis



## Comments on Economic and Financial Performance

### Financial Statements (Brazilian GAAP)

The year of 2004 will be recorded in Embraer's 35-year history as a year of record revenues and profits, driven by the first deliveries of the EMBRAER 170 aircraft, a larger number of total aircraft delivered, and the good performance of the Defense, Commercial and Corporate Aviation, and Customer Service segments.

Embraer recorded a net income of R\$ 1,255.8 million in 2004, more than twice that of 2003 and 6.5% above the previous record level in 2002 of R\$ 1,179.2 million. Net revenue rose to R\$ 10,231.2 million, exceeding the previous year's R\$ 6,570.6 million revenue by 55.7%.



Embraer’s exports totaled US\$ 3,347.8 million, once more providing a record mark and confirming the Company as the second largest Brazilian exporter, contributing 4% to the Country’s trade balance.

Selected Financial Data (In R\$ million, except % and Earnings Per Share)

	2002	2003	2004
Gross Revenue	7,836.9	6,599.1	10,252.7
Sales Deduction	88.7	28.5	21.5
Net Revenue	7,748.2	6,570.6	10,231.2
Cost of Products Sold	4,293.7	4,219.8	6,822.8
Gross Profit	3,454.5	2,350.8	3,408.4
Gross Margin	44.6%	35.8%	33.3%
Operating Expenses and Profit Sharing	1,287.1	1,108.0	1,668.1
Earnings Before Interest & Income taxes (EBIT)	2,167.4	1,242.8	1,740.3
EBIT Margin	28.0%	18.9%	17.0%
Depreciation & Amortization	191.3	160.5	221.6
EBITDA	2,358.7	1,403.3	1,961.9
EBITDA Margin	30.4%	21.4%	19.2%
Net Income	1,179.2	587.0	1,255.8
Net Margin	15.2%	8.9%	12.3%
Earnings Per Share	1.65	0.82	1.75
Number of Shares at Year End	712,974,355	716,045,583	718,341,868

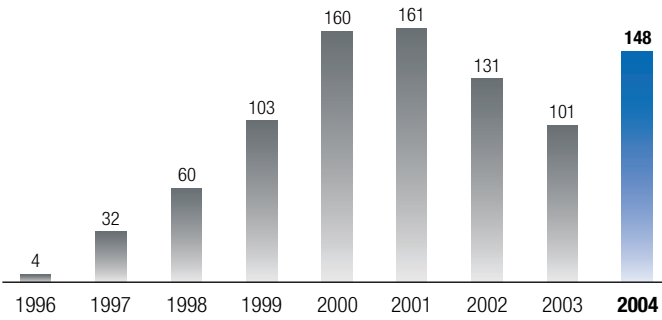
During 2004 148 jets were delivered - 134 to the Commercial Aviation market, 13 for Corporate Aviation, and one for the Defense market for government authority transportation.

In addition, three Embraer ISR family aircraft were delivered to the Mexican Air Force and another one was delivered to the Greek Air Force, all of which were customized and configured according to each country’s military requirements.

Aircraft Deliveries per Segment

	2002	2003	2004
<b>Commercial Aviation</b>	<b>121</b>	<b>87</b>	<b>134</b>
ERJ 135	3	14	1
ERJ 140	36	16	-
ERJ 145	82	57	87
EMBRAER 170	-	-	46
<b>Corporate Aviation</b>	<b>9</b>	<b>13</b>	<b>13</b>
Legacy	9	13	13
<b>Official Transport</b>	<b>1</b>	<b>1</b>	<b>1</b>
EMB 145	1	1	1
<b>TOTAL</b>	<b>131</b>	<b>101</b>	<b>148</b>

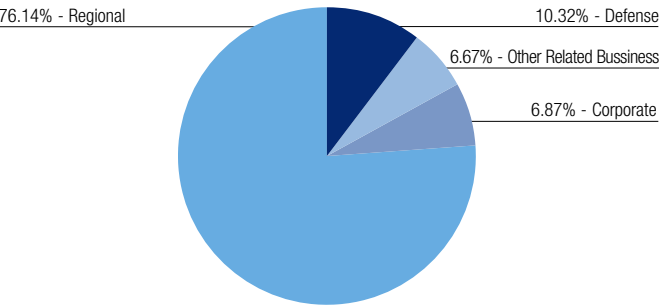
The bar chart depicts the history of jets delivered since the ERJ 145 launching and shows the beginning of a recovery in deliveries following the aftermath of September 11, 2001.



In addition to the number of jets delivered, net revenue accounts for sales of spare parts and services, and sales to the Defense Market by the Company and its subsidiaries in Brazil and abroad.

All of Embraer's business activities grew during 2004 in comparison to 2003. The commercial aviation segment's net revenues totaled R\$ 7,790.3 million, reflecting a 63.5% increase in relation to the previous year, boosted by the first EMBRAER 170 deliveries and a larger number of aircraft delivered during the period. Revenues by the Defense, Customer Service, and Corporate Aviation segments displayed growth rates of 41.5%, 27.9%, and 33.7%, respectively.

Revenues Composition – Segment



In 2004, gross sales margin was impacted by the first deliveries of EMBRAER 170 aircraft and the appreciation of the Brazilian Real in relation to the US Dollar, totaling 33.3%, compared to 35.8% in the previous year.

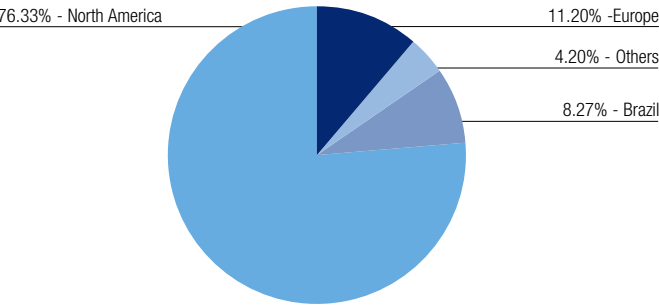
Due to the beginning of the EMBRAER 170 production and the resulting “learning curve” associated to a new product line, production costs tend to rise. Moreover, the introduction of a new product in the market benefits launch customers and have an impact on average sales prices.

Operating expenses (including employee profit-sharing) totaled R\$ 1,668.1 million, reflecting an increase of 50.6% as compared to the previous year.

Earnings before interest and taxes (EBIT) for 2004 totaled R\$ 1,740.3 million, exceeding the R\$ 1,242.8 million recorded in the previous year. Hence, bearing in mind Embraer's sales growth during the period, operating expenses in net revenues remained stable at 16.3%.

The main growth items in operating expenses were sales expenses, increasing 66.3% as a consequence of the larger volume of deliveries, and employee profit-sharing, which rose to R\$ 175.6 million due to better net income results.

Revenues Distribution – Region



In percentage terms, sales expenses remained stable at 9.7% for the years under comparison.

On the other hand, administrative expenses declined significantly when compared to Embraer's rise in revenues from 2003 to 2004. Administrative expenses for 2004 totaled R\$ 387.0 million, equivalent to 3.8% of Embraer's revenues, while in 2003 these represented 5.1%.

In contrast, other net operating expenses remained practically stable at R\$ 112.9 million during the year. The larger portion of these expenses is related to technology development, employee technical training, and preliminary project analysis.

As a consequence of the benefits arising from the boost in net revenues, operating profits before financial revenues and expenses totaled R\$ 1,740.2 million, 40.0% greater than the R\$ 1,242.8 million recorded in 2003. In addition, the EBIT margin was 17.0%, slightly below the 18.9% mark recorded in 2003 and mainly due to a decline in gross margin for the period.



Consequently, operating cash generation according to EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) criteria reached R\$ 1,961.9 million, in excess of the R\$ 1,403.3 recorded during the previous year. The EBITDA net revenue margin of 19.2% stood out as one of the industry's highest marks and underscores Embraer's ability to convert revenues into operating profits that generate adequate returns on investments.

The 8.1% devaluation of the US Dollar in relation to the Brazilian Real in 2004 gave rise to charges to monetary and foreign exchange variations that were substantially lower than those recorded in 2003, during which the US dollar weakened by 18.2%. Net charges to monetary and foreign exchange variations during 2004 totaled R\$ 57.0 million, which represents R\$ 255.1 million decline in relation to 2003.

Also during 2004, Embraer posted R\$ 85.2 million in net interest expenses, compared to net interest expenses of R\$ 45.4 million recorded in 2003. This increase is basically a result of a decline in cash and cash equivalent in conjunction with higher long-term loans.

Hence, favored by a larger number of aircraft delivered and an improved product mix, coupled with a greater stability of the Brazilian Real in relation to the US Dollar, Embraer's net profit for 2004 rose to R\$ 1,255.8 million, the largest in its history. When compared to 2003, the increase stands out at 113.7% or R\$ 668.1 million in absolute terms. Similarly, the Company's net increased to 12.3%, above the 2003 margin of 8.9%.

Balance Sheet Highlights

The following are Embraer's comparative key balance sheet indicators over the last three years.

Consolidated Balance Sheet Highlights (In R\$ million)	2002	2003	2004
Cash and Cash Equivalents	2,320.7	3,658.6	3,587.8
Accounts Receivable	2,453.2	1,040.2	1,752.3
Inventories	2,837.8	3,346.1	4,069.6
Property, Plant & Equipament, net	929.7	1,177.6	1,094.8
Accounts Payable to Suppliers	1,141.6	1,167.5	1,486.4
Short-term Loans	911.3	1,493.9	1,362.5
Long-term Loans	1,088.6	1,522.5	2,191.2
Shareholder's Equity	3,327.2	3,731.8	4,417.7

Due to a re-scheduling of aircraft deliveries in 2004, inventories increased by R\$ 723.5 million over fiscal year 2003. Because of US Airways' inventory levels were also impacted by the suspension of deliveries to US Airways since its filing for Chapter 11, therefore the Company ended the year with four EMBRAER 170 aircraft painted to US Airways.

The increase in inventories was partially offset by a R\$ 318.9 million rise in accounts payable to suppliers during 2004.

From December 2003 to the end of 2004, accounts payable rose from R\$ 1,040.2 million to R\$ 1,752.3 million, of which R\$ 1,477.9 million refers to aircraft delivered for which sales financing arrangements are under final structuring process.

By September 2004, US Airways had received 22 aircraft. Of these deliveries, 15 were financed by GECAS. The remaining seven aircraft have been accounted for as trade accounts receivable and comprise 19.0% of Embraer's total accounts receivable.

As a result of the increase in inventories and accounts receivable, Embraer ended the year with R\$ 3,587.8 million in cash and short term investments, R\$ 70.8 million lower than recorded in the previous year.

At year-end, Embraer 's indebtedness totaled R\$ 3,553.7 million, higher than the R\$ 3,016.4 million recorded in the previous year. This growth in indebtedness can be explained by the need to temporarily fund accounts receivable and inventories.

The Company's increased funding requirements were covered by long-term credit lines at costs extremely compatible with our needs. Roughly 38% of total debt is short-term, compared to approximately 50% in 2003. As over 90% of Embraer's revenues are dollar-denominated, the composition of debt currency also proves

to be adequate considering that R\$ 2,291.6 million refers to dollar-denominated credit lines, while the remaining 35.6% are denominated in Brazilian Reais and other currencies.

Following a rise in current assets, essentially inventories and accounts receivable in conjunction with a lengthening of Embraer's debt profile in 2004, the Company's working capital increased by R\$ 1,665.1 million in relation to 2003. Thus, Embraer ended the year with a R\$ 34.2 million net cash position, below the R\$ 642.2 million available in December of the previous year.

Financial Indicators

	2002	2003	2004
Net Cash (Debt, in R\$ million)	320.8	642.2	34.2
Working Capital (R\$ million)	2,993.5	3,242.9	4,908.0
Current Ratio	1.5	1.5	1.9
Quick Ratio	1.0	1.0	1.2
Inventory Turnover	1.6	1.4	1.8
Total Assets Turnover Ratio	0.7	0.5	0.7
ROA	12.4%	4.9%	9.3%
ROE	40.8%	16.6%	30.8%

The Company's financial indicators reflect stability, with 1.0 quick ratio in 2003 which increased to 1.2 in 2004, and the current ratio increasing from 1.5 in 2003 to 1.9 in 2004.

In spite of the increase in inventories during 2004, inventory turnover grew from 1.4 in 2003 to 1.8 this year, strongly influenced by higher deliveries during the period.

The return on assets (ROA) indicator of 9.3% and the 30.8% return on equity (ROE) were substantially greater in 2004 than in 2003. This growth was basically a result of improved operating income and net income for the year.

Economic Value Added (EVA)

The higher operating result obtained in 2004, combined with a greater economic stability, made Embraer's Economic Value Added (EVA) significantly higher when compared to the 2003 result.



Economic Value Added (In R\$ million, except %)

	2001	2002	2003	2004
Total Assets	7,726	11,290	12,831	14,185
Self-Financed Liabilities	3,477	5,963	6,083	6,214
<b>Liabilities</b>	<b>4,249</b>	<b>5,327</b>	<b>6,748</b>	<b>7,971</b>
Third Party Capital	1,792	2,000	3,016	3,554
Shareholders' Equity	2,457	3,327	3,732	4,417
<b>Total Investments</b>	<b>4,249</b>	<b>5,327</b>	<b>6,748</b>	<b>7,971</b>
Net Operating Revenue	6,891	7,748	6,571	10,231
Operating Expenses	(4,984)	(5,238)	(5,370)	(8,548)
<b>Operating Result</b>	<b>1,907</b>	<b>2,510</b>	<b>1,201</b>	<b>1,683</b>
Income Tax and Social Contribution	(487)	(430)	(250)	(333)
Cost of Third Party Capital	(277)	(889)	(315)	(476)
<b>Net Result</b>	<b>1,143</b>	<b>1,191</b>	<b>636</b>	<b>874</b>
Cost of Sharedholders' Equity	(393)	(532)	(597)	(707)
<b>Economic Value Added</b>	<b>750</b>	<b>659</b>	<b>39</b>	<b>167</b>
<b>EVA / Total Investments</b>	<b>18%</b>	<b>12%</b>	<b>1%</b>	<b>2%</b>

Distribution of the Controlling Company's Profits

The Controlling Company's net profits of R\$ 1,278.1 million recorded for fiscal year ended on December 31, 2004 were distributed as follows:

- Ratification of the sum of R\$ 585.2 million paid out as interest on shareholder's equity during the preceding quarters;
- Constitution of a legal reserve of R\$ 63.9 million equal to 5% of net profits announced, pursuant to article 93 of Law 6404/76;

- Credit of the balance to an Investments and Working Capital Reserve account, pursuant to the By-Laws.

US GAAP Consolidated Financial Statements (unaudited)

Embraer shares are traded in the New York Stock Exchange (NYSE) as American Depositary Shares (ADS's) and as a result, the company reports its consolidated financial statements according to the US Generally Accepted Accounting Principles (US GAAP). A summary of the key financial statements in US GAAP is presented below.

Condensed Consolidated Balance Sheets - USGAAP As of December 31 (In Thousand of U. S. Dollars)

ASSETS	2003	2004
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	1,265,820	1,314,038
Trade accounts receivable, net	356,401	566,127
Inventories	1,158,060	1,408,608
Deferred income taxes	115,395	104,417
Others	451,190	482,319
	<u>3,346,866</u>	<u>3,875,509</u>
<b>NON-CURRENT ASSETS</b>		
Trade accounts receivable	-	119,678
Inventories	14,770	19,674
Deferred income taxes	207,659	262,403
Other accounts receivable	2,071,763	1,375,603
Property, plant and equipament, net	402,663	381,265
Investments	36,814	48,267
	<u>2,733,669</u>	<u>2,206,890</u>
<b>TOTAL ASSETS</b>	<u><b>6,080,535</b></u>	<u><b>6,082,399</b></u>

Condensed Consolidated Balance Sheets - USGAAP As of December 31 (In Thousand of U. S. Dollars)

LIABILITIES AND SHAREHOLDERS' EQUITY	2003	2004
<b>CURRENT LIABILITIES</b>		
Loans	517,014	513,281
Accounts payable to suppliers	404,065	556,492
Customer advances	448,648	375,548
Contingencies	301,906	89,589
Deferred income taxes	12,532	14,997
Other accounts payable and accrued liabilities	<u>762,030</u>	<u>766,194</u>
	<u><b>2,446,195</b></u>	<u><b>2,316,101</b></u>
<b>LONG-TERM LIABILITIES</b>		
Loans	526,728	825,448
Customer advances	110,539	103,615
Contribution from suppliers	234,958	140,037
Contingencies	26,461	386,096
Deferred income taxes	112,005	157,817
Other accounts payable and accrued liabilities	<u>1,441,813</u>	<u>777,974</u>
	<u><b>2,452,504</b></u>	<u><b>2,390,987</b></u>
<b>MINORITY INTEREREST</b>	<b>12,611</b>	<b>21,433</b>
<b>SHAREHOLDERS' EQUITY</b>	<u><b>1,169,225</b></u>	<u><b>1,353,868</b></u>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<u><b>6,080,535</b></u>	<u><b>6,082,399</b></u>

Condensed Consolidated Statement of Income For the yers ended December 31, 2003 and 2004 (In Thousand of U.S. Dollars)

	2003	2004
<b>Net Sales</b>	<b>2,143,460</b>	<b>3,440,533</b>
Cost of sales and services	<u>(1,335,032)</u>	<u>(2,267,330)</u>
<b>GROSS PROFIT</b>	<u><b>808,428</b></u>	<u><b>1,173,203</b></u>
<b>OPERATING EXPENSES</b>		
General and administrative	(114,743)	(139,357)
Selling expenses	(206,246)	(342,883)
Research and development	(173,216)	(44,506)
Profit sharing	(20,399)	(61,199)
Other operating expenses, net	<u>(29,009)</u>	<u>(41,272)</u>
<b>INCOME FROM OPERATIONS</b>	<u><b>264,815</b></u>	<u><b>543,986</b></u>
Interest income (expense), net	(140,755)	(38,000)
Foreign exchange gain (loss), net	(16,500)	(12,218)
Other non-operating (expense), net	711	(117)
<b>INCOME BEFORE INCOME TAXES</b>	<u><b>108,271</b></u>	<u><b>493,651</b></u>
Icome tax benefit (expense)	27,990	(112,139)
Minority interest	(217)	(1,306)
<b>NET INCOME</b>	<u><b>136,044</b></u>	<u><b>380,206</b></u>



Condensed Consolidated do Staments of Cash Flow For the yers ended December 31, 2003 and 2004 (In Thousand of U. S. Dollars)

	2003	2004
OPERATING ACTIVITIES:		
Net income	136,044	380,206
Adjustments to reconcile net income to net cash provided by (used in) opearting activities:		
Depreciation	58,877	59,685
Allowance for doubtful accounts	4,531	908
Provision for inventory obsolescence	(18,042)	32,085
Loss on permanent asset disposals	1,113	178
Deffered income and social contribution tax	(35,676)	4,511
Interest accrued in excess of interst paid (paid in excess of accrued)	15,504	(30,276)
Equity in unconsolidated subsidiary	(51)	-
Minority interests	217	1,306
Foreign exchange loss, net	16,500	12,218
Others	10,624	(3,508)
Changes in assets and liabilities:	49,993	(454,012)
Net cash provided by (used in) operating activities	239,634	3,301
INVESTING ACTIVITIES		
Additions to property, plant and equipment	(64,765)	(50,075)
Net additions to investments	(10,297)	(45,702)
Others	2,395	(15,254)
Net cash used in investing activities	(72,667)	(111,031)
FINANCING ACTIVITIES		
Repayment of loans	(427,246)	(1,295,315)
Proceeds from borrowings	902,955	1,587,504
Dividends and/or interest on capital paid	(67,483)	(185,537)
Others	(4,435)	(1,432)
Net cash provided by (used in) financing activities	403,791	105,220
Effect of exchange rate changes on cash	38,240	50,728
Net increase (decrease) in cash and equivalents	608,998	48,218
Cash and cash equivalents, begining of period	656,822	1,265,820
Cash and cash equivalents, end of period	1,265,820	1,314,038

Sales Financing

The aircraft sales financing market continue to be limited.

As a result, export credit agencies such as the Brazil’s National

Economic and Social Development Bank (Banco Nacional de

Desenvolvimento Econômico e Social - BNDES) have been

playing an important role in providing aircraft financing to airlines.

Though the environment is still far from favorable, 2004 has

witnessed some disposition by financial institutions and investors

to participate in financing structures under the airline’s credit

risk, holding aircraft as collateral. Success in putting together

a financial transaction through the capital markets in the

United States involving Continental Airlines receivables, and

securing aircraft mortgage loans for several customers, provides

some evidence of an improvement and gradual return of investors

to this market. On the other hand, US Airways’ financial condition

and the tenuous situation of other airlines are preventing the

aircraft financing market from responding in a more vigorous manner.

It is expected that during 2005, the aircraft financing market will

continue to show steady improvement with a gradual return of

the financial agents that have remained absent from the market

during recent years.

Asset Management and Financial Guarantees

In order to provide better financial support to sales and reduce

some of the financial risks related to the sale of aircraft, Embraer

created in 2002 its subsidiaries ECC Leasing Co. Ltd. and

ECC-Insurance & Financial Co. Ltd.

The mission of ECC Leasing Co. Ltd. is the management and

sales of aircraft, which by virtue of contractual obligations, may

be acquired by Embraer in trade-in or repurchase transactions.

The company also provides resale services to third parties related

to the sales effort.

On the other hand, ECC Insurance & Financial Co. Ltd. was

created as an in-house insurance company that processes

payments of likely contingencies related to the financial

guarantees covering some of the sales loans.



# Capital Markets

## Embraer Shares as an Investment

Embraer’s relationship with the market and investors is based on disclosure of transparent and quality information, marked by a deep respect for legal and ethical principles, striving to consolidate and maintain an image of leadership and innovation by the company before the capital markets. Its shares have been listed in Bolsa de Valores de São Paulo (Bovespa) since 1986. Embraer has maintained American Depositary Receipts (ADR) level III at the New York Stock Exchange (NYSE) since 2000.

As the aerospace industry continues to face a challenging environment, including some of our customers who were adversely impacted in 2004, Embraer’s share price depreciated in 2004.

Embraer’s common (EMBR3) and preferred (EMBR4) shares traded in the Bovespa Stock Exchange recorded a 13.6% and 18.1% decline, ending the year at R\$ 15.80 and R\$ 22.20, respectively. The Bovespa index appreciated by 17.8%.

Similarly, the Company’s American Depositary Shares listed on the NYSE (ERJ) were traded at US\$ 33.44 on the year’s last business day, a 5.5% decline during 2004.

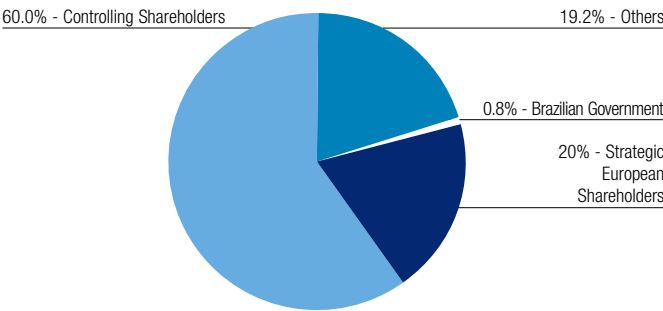
### Embraer Stock Performance

	2001		2002		2003		2004	
	Quote	%Year	Quote	%Year	Quote	%Year	Quote	%Year
R\$								
EMBR3	10.73	1.3%	12.80	19.3%	19.30	50.8%	15.80	-18.1%
EMBR4	11.32	-27.5%	14.00	23.6%	25.70	83.6%	22.20	-13.6%
Ibovespa	13,577	-11.0%	11,268	-17.0%	22,236	97.3%	26,196	17.8%
US\$								
ERJ (ADS)	18.99	-44.3%	15.90	-16.3%	35.39	122.6%	33.44	-5.5%
Dow Jones	10,022	-7.1%	8,342	-16.8%	10,425	25.3%	10,783	3.4%
SP 500	1,148.08	-13.0%	879.82	-23.4%	1,111.92	26.4%	1,211.92	9.0%
R\$ (per US\$ 1)	2.3204	18.7%	3.5333	52.3%	2.8892	-18.2%	2.6544	-8.1%

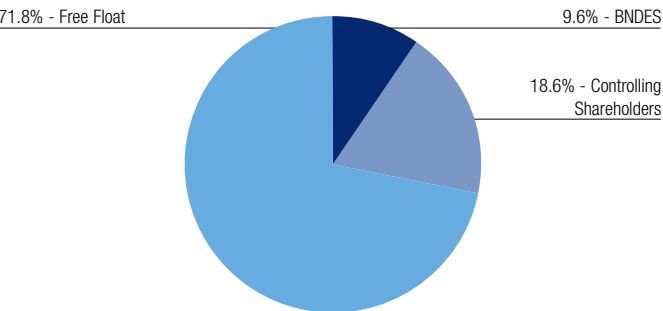
On December 31, 2004 Embraer had 718,341,868 shares outstanding, of which 242,544,448 were common shares (ON) and 475,797,420 were preferred shares (PN). Of the common shares, 60% is owned by Embraer’s controlling shareholders, namely Cia. Bozano, Previ, and Sistel, each holding 20%.

Another 20% belongs to strategic European shareholders comprised of Dassault, EADS, Thales, and SNECMA. The Brazilian Government holds 0.75% of the common shares and a golden share. The remaining 19.25% is traded at Bovespa. As for the preferred shares, 18.6% belongs to the controlling shareholders, 9.6% to BNDES, 1.5% to strategic shareholders, and the remaining 70.3% are available in the local and international markets (free floating).

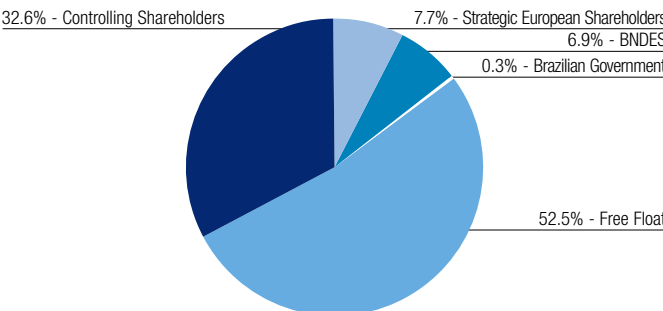
Common Shares



Preferred Shares



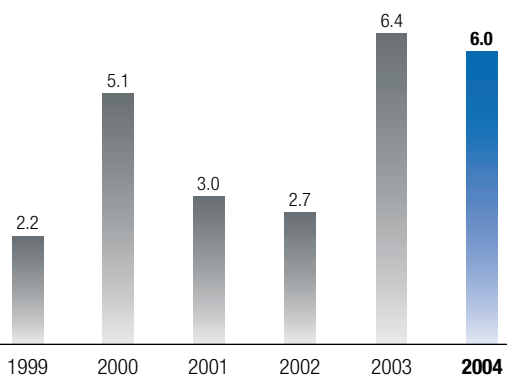
Total Capital



In 2004 part of the preferred shares’ liquidity was transferred to the US market and as a result, the volume of ADSs traded at the NYSE rose by 22% as compared to the previous year. An average of 547,000 ADSs were traded daily at the NYSE, equal to a US\$ 15.5 million average daily volume. In the Brazilian Market preferred and common shares comprised an average trading volume of roughly 523,000 and 222,000 shares, involving R\$ 10.9 million and R\$ 3.5 million, respectively. Average daily trading volume in 2003 had been approximately 962,000 preferred shares, equal to R\$ 13.4 million, with common shares accounting for a volume of 246,000, equal to R\$ 2.8 million.

Embraer’s market capitalization was US\$ 6.0 billion at year-end 2004, compared to US\$ 6.4 billion recorded on the previous year.

Market Capitalization - (US\$ billion)





Investor Relations

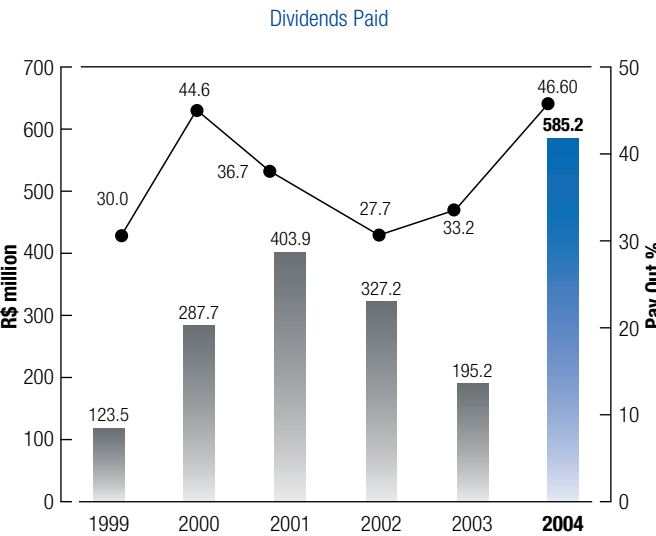
Embraer is committed to a transparent management model that assures shareholder satisfaction with rapid and efficient disclosure of information, in answer to the Company's profound respect for legal and ethical principles and ensuring respect for shareholders' rights. The amount of information disclosed simultaneously to every shareholder and financial market agent proves that transparency and fair treatment are crucial to the Company's management model.

Embraer is aware of the importance of maintaining good relations with the capital markets agents, and through its Investor Relations department has held hundreds of meetings during the course of the year, and participated in a number of conferences and events. For the fifth consecutive year the Annual Analysts and Investors Meeting was held at Embraer's head office and once more in 2004 broke the attendance record with the presence of almost 120 Brazilian and overseas investors. The event lasted two days and included presentations by company executives and a visit to the Embraer facility in Gavião Peixoto.

As part of market acknowledgement for transparency and its investor relations policy, Embraer was elected for the sixth consecutive year, having been awarded first prize in 2000, one of ten finalists for the Financial Statements Transparency 2003 Award, sponsored by Associação Nacional dos Executivos de Finanças, Administração e Contabilidade (ANEFAC). Financial statements of the 500 largest Brazilian corporations are examined for the purposes of this award.

Shareholder Compensation

Based on its consolidated net income of R\$ 1,255.8 million in 2004, Embraer paid out to its shareholders interest on capital of R\$ 585.2 million, equivalent to R\$ 0.84 per preferred share, and R\$ 0.76 per common share. Payment of interest on shareholders equity was approved each quarter by the Board of Directors and paid out in April, July, and October 2004, and January 2005. The pay-out ratio this year represented 46.6% of the Company's consolidated net income, thus honoring its policy of compensating its shareholders above the minimum Brazilian Corporate law requirement of 25%.



Corporate Governance

Embraer's model of corporate governance embodies a clear distinction of responsibilities among the Executive Officers, the Board of Directors, and the Audit Board ("Conselho Fiscal"). The Board of Directors is responsible for approving and keeping track of Company strategy as well as annual budgets and investment programs, established in the Action plan prepared by the Executive Officers.

The Board of Directors' term of office is three years. It meets normally every three months, and is composed of thirteen members. Six directors are appointed by the controlling shareholders. As for the remainder, two are appointed jointly by the shareholders Dassault Aviation, Thales, EADS, and SNECMA, two members are appointed by the Federal Government, and another two are appointed by the employees. The Company's CEO has the remaining position.

The Audit Board's main responsibility is to supervise acts of the administration and examine financial statements, complying with transparency and good corporate governance policies. Hence, Embraer has a permanent board as provided for in article 29 of the By-Laws, which meets at least once every three months. In view of the requirements placed on foreign corporations listed in US markets by the 2004 Sarbanes-Oxley Act, Embraer implemented several changes in its Audit Board with a view

to endow it with the function of an Audit Committee. Such adaptations included: i) changes in its composition with the addition of a member acting as Financial Specialist; and ii) changes in the Internal Regulations in order to distribute responsibilities as well as provide a broader scope in assessments and analysis undertaken by its members.

The Audit Committee's duties were delegated to the Audit Board by the Company's Board of Directors on March 12, 2004 and the new Audit Board Members were elected on April 26 of the same year, under their new structure and duties.

Thus, Embraer's Audit Board is composed of five sitting members, of which one is a financial specialist, and all of them with an annual term of office and acting as an Audit Committee. This new Audit Board held its first meeting on May 11, 2004, and its Internal Regulations were approved on the 20<sup>th</sup> day of the same month, with all the required adaptations in compliance with the U.S. Securities and Exchange Commission's (SEC) prerequisites.



# Risk Management

As anticipation of current regulatory requirements, Embraer has, since 2002, been implementing a structured risk management process at corporate level.

Based on a General Risk Analysis, a number of projects were developed and implemented with a view to reducing risks in corporate processes and in the Company's key information systems.

The general control environment was also reviewed, bringing about several improvement actions in the internal controls corporate structure, allowing Embraer to comply with the prerequisites in order to obtain the certifications prescribed by Sarbanes-Oxley.

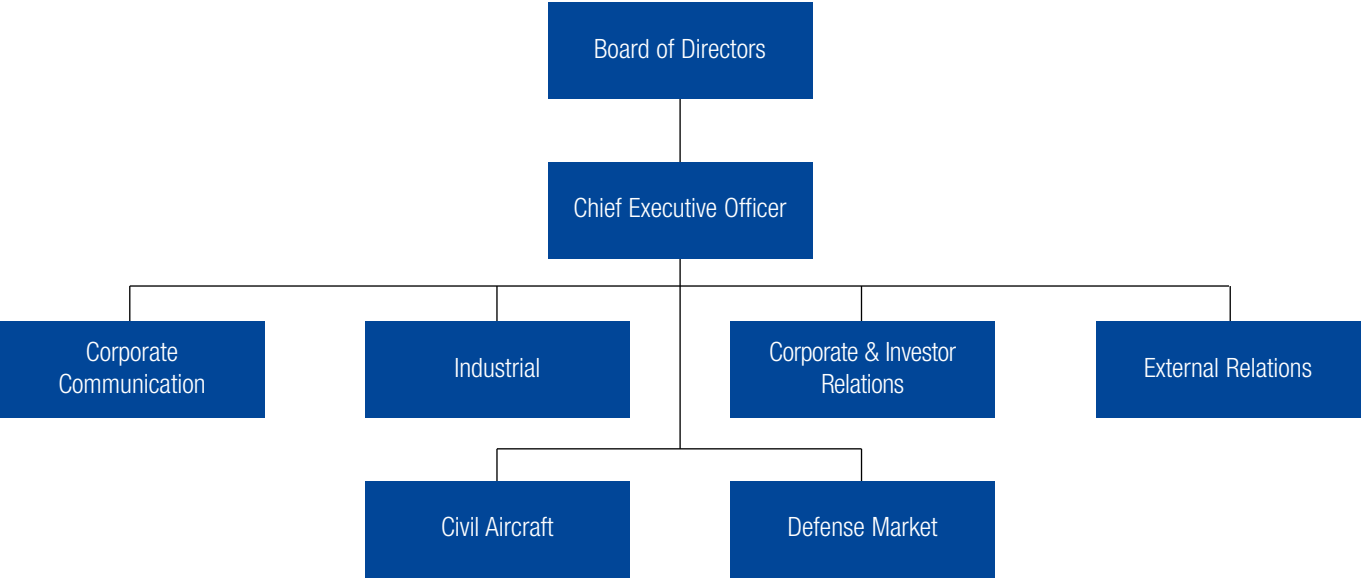
To comply with the Sarbanes-Oxley - section 404, the controls structure for the processes relevant to the financial statements is being documented and tested in accordance with the Public Companies Audit Oversight Board (PCAOB) requirements, employing methodologies and criteria accepted worldwide. A project was also started intended to merge monitoring of key business risks with the Management Information System, in order to ensure swift reactions to scenario changes.

• Operating Risks  
Embraer follows a policy of contracting insurance at adequate levels with a view to protecting itself against risks inherent to its business. Hence, it is able to undergo events likely to cause damages to the Company, employees, Company assets, and to its profit generating capacity. In a similar manner, it covers its liabilities arising from its aircraft sales agreements.

• Financial Risks  
Financial risk management tries to detect and deal with the occasional effects in the Company's cash flow caused by foreign exchange mismatching and interest rate variations. In mitigation of these risks, Embraer is active in the derivatives market, locally and overseas. Following this management, all of its assets and liabilities resulting from these transactions are monitored and assessed by means of value at risk and stress test models. In mitigation of the credit risk in its short-term investments, the Company abides by its credit policy specifications, which are based mainly on data disclosed by the rating agencies. As for transactions involving derivative instruments, the Company acts in conjunction with first-class financial institutions.

## Management Model & Information Systems

Embraer's Executive Officers prepare an annual Action Plan with a five-year projection, and follow a strategic planning model that considers markets, competitors, the Company's competencies, and opportunities and risks. This Plan embodies the pivotal instrument for business guidance, alignment and commitment of



all employees with the goals and results that were planned. Management by Processes is considered one of the keystones of corporate excellence. Embraer has strived to improve its organization and information systems through ongoing improvements in its productive and administrative processes. These processes are plotted and integrated in one database only, providing a complete vision of the Value Chain, creating a cooperative environment for documenting and analyzing processes focused on results based on customer satisfaction.

In 2004, Embraer continued to invest in Web-based cooperative environments that are fundamental in reducing the product development cycle and for system integration by the Company to customers' and suppliers' systems. At the same time the Company has invested in information safety systems, with a view to protecting its intellectual capital.

Migration from the Enterprise Resource Program (ERP) business management system version 4.0 to version 4.7 supplied by SAP is estimated to be over by 2005. This new phase will bring about the increased use of new modules, providing a safe integration of development, engineering, manufacturing, post sales support, and financial processes, considerably expanding coverage and functions under the same systems base.



## Relations with Independent Auditors

Embraer's policy with its independent auditors regarding service provision not related to external auditing is founded on principles safeguarding the auditors' independence. These principles are based on the assumption that auditors should not audit their own work or occupy managerial offices, or even serve as attorneys for their customers.

During 2004 Embraer compensated these auditors for other work not directly involved with auditing of the financial statements, valued at approximately R\$ 440,000 and accounting for 8.4% of all fees regarding external auditors' services provided to all of the group companies throughout the world.

Embraer's policies include submission to the Board of Directors and approval by this body of all of the services provided by our independent auditors and not related to external auditing.

The tasks in question are related mainly to change management involving the Company's Human Resources, and do not affect the independence and objectiveness required in the performance of our independent auditors.

Independence by these auditors is assured under the foundation that the tasks at issue were developed by an independent team, as opposed to the group in charge of external auditing tasks. Decision-making regarding the procedures adopted was established by Management and approved by the Board of Directors.

## Stock Trading Policy

With a view to realizing improved corporate governance and at the same time ensuring transparency in business management to the benefit of every shareholder and investor, Embraer prepared a stock Trading Policy applicable to everybody related to the Company (executives and employees) and with access to relevant information. This Trading Policy's purpose is to establish rules and procedures which should be complied with by these related parties when trading securities, defining periods in which they should abstain from trading shares in order to avoid questioning on undue use of relevant information not disclosed to the public.

At the same time, the existing Disclosure Policy on relevant facts defines the criteria, the occasion, and the person in charge of disclosing such information to investors, thus ensuring a transparent, ample, and consistent disclosure of information by Embraer to the market.





# Management

## Board of Directors

LUIZ CARLOS SIQUEIRA AGUIAR  
Chairman of the Board of Directors

VITOR SARQUIS HALLACK  
Vice-Chairman of the Board of Directors

CARLOS ALBERTO CARDOSO MOREIRA

CARLYLE WILSON  
Chairman of the Board of Directors (1)

CHRISTIAN PAUL MAURICE GRAS

CLAUDEMIR MARQUES DE ALMEIDA

DIETRICH RUSSELL (2)

FERNANDO ANTONIO PIMENTEL DE MELO (2)

HENRIQUE PIZZOLATO

ISAAC MARCEL DE PICCIOTTO

JUAREZ MARTINHO QUADROS DO NASCIMENTO (2)

LUIZ FELIPE PEREIRA LAMPREIA (2)

MARIO HIPÓLITO SILVA (2)

MAURÍCIO NOVIS BOTELHO

NEIMAR DIEGUEZ BARREIRO

NÉLIO HENRIQUES LIMA (2)

PAULO CESAR DE SOUZA LUCAS

RUBENS ANTONIO BARBOSA

WILSON CARLOS DUARTE DELFINO

Note: (1) Chairman of the Board until April 2004  
(2) Board member until April 2004

## Executive Officers

MAURÍCIO NOVIS BOTELHO  
President and CEO

ANTONIO LUIZ PIZARRO MANSO  
Executive Vice-President – Corporate and CFO

FREDERICO PINHEIRO FLEURY CURADO  
Executive Vice-President – Civil Aircraft

HORACIO ARAGONÉS FORJAZ  
Executive Vice-President – Corporate Communication

ROMUALDO MONTEIRO DE BARROS  
Executive Vice-President – Defense Market

SATOSHI YOKOTA  
Executive Vice-President – Development and Industry

CARLOS ROCHA VILLELA  
Vice-President – Legal Counsel

## Officers

ANTÔNIO PIRES MONTEIRO  
Senior Vice-President – Corporate Aviation Market

ARTUR APARECIDO VALÉRIO COUTINHO  
Senior Vice-President – USA, Canada and the Caribbean –  
Civil Aviation Market

FLÁVIO RIMOLI  
Senior Vice-President – Commercial Aviation Market

HENRIQUE COSTA RZEZINSKI  
Senior Vice-President – External Relations

IRAJÁ BUCH RIBAS  
Senior Vice-President – Product Support –  
Civil Aviation Market

LADISLAU CID  
Senior Vice-President – Corporate Quality and Organization

LUÍS CARLOS AFFONSO  
Senior Vice-President – Engineering and New Product Development

LUIZ FERNANDO FUCHS  
Senior Vice-President – Europe, Africa and Middle East Markets –  
Civil Aviation Market

PAULO CÉSAR DE SOUZA E SILVA  
Senior Vice-President – Sales Financing and Asset Management

ROGÉRIO TEPERMAN  
Senior Vice-President – Procurement and Industrial Operations





Directors of Subsidiary or Affiliated Companies, and Representatives of Embraer Abroad

ACIR LUIZ DE ALMEIDA PADILHA JUNIOR  
Managing Director – Indústria Aeronáutica Neiva S.A.

BRUCE PEDDLE  
Director – Asia and Pacific – Civil Aviation Market

GARY JOHN SPULAK  
President – Embraer Aircraft Holding (EAH)

GUAN DONG YUAN  
Director – China – Civil Aviation Market

LUIZ CLÁUDIO SIGAUD FERRAZ  
President – ELEB - Embraer Liebherr Equipamentos do Brasil S.A.

ROBERTO ROSSI DE SOUZA  
Managing Director – Harbin Embraer Aircraft Industry (HEAI)

Directors

ADELINO GOMES CARDOSO  
Director – National Business – Defense Market

ALMIR MIGUEL BORGES  
Director – Procurement and Partnership Management

ANDERSON MARKIEWICZ  
Director – Latin America – Civil Aviation Market

ANTONIO CARLOS VIEIRA VICTORAZZO  
Director – Product and Quality Integrity

ANTONIO JÚLIO FRANCO  
Director – Human Resources

ANTONIO MARTINI NETO  
Director – Fleet Support

CLÁUDIO AUGUSTO JOAQUIM MOREIRA  
Director – Strategic Relations – Defense Market

CYNTHIA MARCONDES FERREIRA BENEDETTO  
Director – Financial Management

DAVID SCOTT KALISTER  
Director – Corporate Aviation – USA, Canada and Caribbean Markets

EDSON CARLOS MALLACO  
Director – Customer Services – USA, Canada and Caribbean Markets

EDUARDO BONINI SANTOS PINTO  
Director – Programs – Commercial Aviation Market

EDUARDO MUNHÓS DE CAMPOS  
Director – International Business – Defense Market

EMÍLIO KAZUNOLI MATSUO  
Director – Engineering

ERNEST SALVATORE FINO  
Director – External Relations – USA

FERNANDO RANIERI  
Director – Serial Product Engineering and Technical Support

FRANCISCO HORÁCIO BENTO DE MELLO  
Director – Institutional Relations – Brazil

GRACILIANO CAMPOS  
Director – Promotional Marketing

HERMANN PONTE E SILVA  
Director – Corporate Planning

JOHN R. DOYLE  
Director – Sales & Marketing – Belgium, Ireland, United Kingdom, Turkey and Switzerland – Commercial Aviation Market

JOSÉ LUIS D'AVILA MOLINA  
Director – Contracts – Commercial Aviation Market

JOSÉ RENATO OLIVEIRA MELO  
Director – Advanced Projects

LUIS ANTONIO HERNANDEZ GONZALEZ  
Director – ACS Program – Defense Market

LUIZ ANTONIO LOPES DE OLIVEIRA  
Director – Manufacturing

LUIZ SÉRGIO CARDOSO DE OLIVEIRA  
Director – Social Development

MARCELO BOTELHO RODRIGUES  
Director – Controller

MARCELO RAMON FERRONI  
Director – Planning of Operations

MARK PAUL HALE  
Director – Sales & Marketing – USA, Canada and the Caribbean – Commercial Aviation Market

MAURÍCIO RODRIGUES AVEIRO  
Director – Customer Services – Europe, Africa and Middle East

MAURO KERN JÚNIOR  
Director – EMBRAER 170/190 Program

ORLANDO JOSÉ FERREIRA NETO  
Director – Market Intelligence – Commercial Aviation Market

OTÁVIO ERNESTO  
Director – Logistics Support

PAULO ESTEVÃO DE CARVALHO TULLIO  
Director – Asset Management

PAULO MARCHIOTO  
Director – Logistics

PAULO URBANAVICIUS  
Director – Gavião Peixoto Unit

RICARDO MARCELO BESTER  
Director – Customer and Product Support – Defense Market

ROBERT ADAIR DAVIS  
Director – Maintenance Services

ROBERTO RIBEIRO SANTOS  
Director – Infrastructure

ROSANA DIAS  
Director – Communication

SÉRGIO GONÇALVES HORTA  
Director – Defense Programs – Defense Market

SÉRGIO MAURO DE MORAES REGO COSTA  
Director – Test Programs

WAGNER LAPA PINHEIRO  
Director – Information Technology

Audit Board (1)

JOSÉ MAURO LAXE VILELA  
Chairman of the Audit Board

CARLOS ALBERTO DE CASTRO MONTEIRO  
Chairman of the Audit Board (2)

CELENE CARVALHO DE JESUS

GERALDO HUMBERTO DE ARAUJO

JORGE KHALIL MISKI

LUIZ TACCA JÚNIOR (2)

PAULO OSCAR FRANÇA (2)

TAIKI HIRASHIMA

Notes: (1) As of April 2004, the Audit Board became also responsible for the duties of the Audit Committee.  
(2) Until April 2004



# Shareholder Information

Shareholder Information		
Type	Number of Shares	% of Shareholder Equity
Common	242,544,448	33.76%
Preferred	475,797,420	66.24%
Total	718,341,868	100.00%

Shares Traded	
in Brazil	in the United States of America
Embraer shares are listed on the São Paulo Stock Exchange (Bolsa de Valores de São Paulo – BOVESPA) under the name EMBR3 (commom shares) and EMBR4 (preferred shares).	Embraer is listed on the New York Stock Exchange (NYSE) in the ADR Level III Program under code ERJ. Each Embraer ADS is equivalent to four preferred shares.

Depository Banks	
in Brazil	in the United States of America
Banco Itaú S.A. Rua Boa Vista, 185 – 2º andar 01014-001 – São Paulo – SP Brazil Tel.: +55 11 3247 3138 / 3247 3139 Fax: +55 11 3247 3141	JP Morgan 60 Wall Street, 36 <sup>th</sup> floor 10260-006 – New York – NY USA Tel.: +1 212 623 0875 Fax: +1 212 623 0079

Independent Auditors	
Deloitte Touche Tohmatsu Rua Alexandre Dumas, 1.981 – Chácara Santo Antonio 04717-906 – São Paulo – SP Brazil Tel.: +55 11 5185 2444 Fax: +55 11 5181 2911	

Investor Relations Departament	
Av. Brigadeiro Faria Lima, 2.170 – 12227-901 – São José dos Campos – SP – Brazil Tel.: +55 12 3927 1216 – Fax: +55 12 3922 6070 – <a href="mailto:investor.relations@embraer.com.br">investor.relations@embraer.com.br</a> Contacts: Anna Cecília Bettencourt, Andrea Bottcher and Paulo Ferreira	

Publications and Information	
Quarterly reports, press releases and annual reports are available at our Investor Relations Department and on our website <a href="http://www.embraer.com.br">www.embraer.com.br</a>	

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**Indústria Aeronáutica Neiva Ltda.**  
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