

EMBRAER BRAZILIAN AVIATION CO

Form 20-F

June 30, 2003

As filed with the Securities and Exchange Commission on June 30, 2003

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, DC 20549**

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**FORM 20-F**

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**REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
OR**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended: December 31, 2002**

**OR**

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

**For the transition period from [ ] to [ ]**

**Commission file number 1-15102**

**EMBRAER-EMPRESA BRASILEIRA DE AERONÁUTICA S.A.**

(Exact name of Registrant as specified in its charter)

**EMBRAER Brazilian Aviation Company Inc.**

(Translation of Registrant's name into English)

**Federative Republic of Brazil**  
(Jurisdiction of Incorporation)

**Avenida Brigadeiro Faria Lima, 2170  
12227-901 São José dos Campos, São Paulo, Brazil**  
(Address of principal executive offices)

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**Securities registered or to be registered pursuant to Section 12(b) of the Act:**

**Title of each class:**

Preferred shares, without par value  
American Depositary Shares (as evidenced by American Depositary  
Receipts), each representing four preferred shares

**Name of each exchange on which registered:**

New York Stock Exchange\*  
New York Stock Exchange

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Not for trading purposes, but only in connection with the registration of American Depositary Shares pursuant to the requirements of the Securities and Exchange Commission.

**Securities registered or to be registered pursuant to Section 12(g) of the Act.**

None.

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**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.**

None.

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**Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:**

242,544,448 common shares, without par value

470,429,907 preferred shares, without par value

**Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.**

Yes  No

**Indicate by check mark which financial statement item the registrant has elected to follow.**

Item 17  Item 18

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## TABLE OF CONTENTS

	<u>Page</u>
<b>PART I</b>	
<b>ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS</b>	<b>1</b>
<b>ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE</b>	<b>1</b>
<b>ITEM 3. KEY INFORMATION</b>	<b>1</b>
<b>ITEM 4. INFORMATION ON THE COMPANY</b>	<b>16</b>
<b>ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS</b>	<b>34</b>
<b>ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES</b>	<b>50</b>
<b>ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS</b>	<b>57</b>
<b>ITEM 8. FINANCIAL INFORMATION</b>	<b>62</b>
<b>ITEM 9. THE OFFER AND LISTING</b>	<b>66</b>
<b>ITEM 10. ADDITIONAL INFORMATION</b>	<b>69</b>
<b>ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</b>	<b>81</b>
<b>ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES</b>	<b>84</b>
<b>PART II</b>	
<b>ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES</b>	<b>85</b>
<b>ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS</b>	<b>85</b>
<b>ITEM 15. CONTROLS AND PROCEDURES</b>	<b>85</b>
<b>ITEM 16. [Reserved]</b>	<b>85</b>
<b>PART III</b>	
<b>ITEM 17. FINANCIAL STATEMENTS</b>	<b>86</b>
<b>ITEM 18. FINANCIAL STATEMENTS</b>	<b>86</b>
<b>ITEM 19. EXHIBITS</b>	<b>86</b>

## INTRODUCTION

In this annual report, Embraer, we, us or our refer to Embraer-Empresa Brasileira de Aeronáutica S.A. and its consolidated subsidiaries (unless the context otherwise requires). All references herein to the *real*, *reais*, or R\$ are to the Brazilian *real*, the official currency of Brazil. All references to US\$, dollars, or U.S. dollars are to United States dollars.

### Presentation of Financial and Other Data

#### Financial Data

Our audited financial statements at and for the years ended December 31, 2000, 2001 and 2002 are included in this annual report and have been audited by Deloitte Touche Tohmatsu.

Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States, or U.S. GAAP. Because we export approximately 97.7% of our production and operate in an industry that uses the U.S. dollar as its currency of reference, management believes that the U.S. dollar is our functional currency and the most appropriate currency in which to present our financial statements. Accordingly, we decided to present our primary U.S. GAAP financial statements in U.S. dollars. As a result, amounts for all periods presented have been remeasured or translated into U.S. dollars in accordance with the methodology set forth in Statement of Financial Accounting Standards No. 52 ( SFAS 52 ).

Prior to 2001, we presented our financial statements in accordance with accounting principles generally accepted in Brazil, or Brazilian GAAP, stated in Brazilian *reais* and adjusted for the effects of inflation. Previously, amounts of net income and shareholders' equity under Brazilian GAAP were reconciled to those that would have been reported under U.S. GAAP. Our financial statements and financial data presented herein and prepared in accordance with U.S. GAAP do not reflect the effects of inflation.

Pursuant to SFAS 52 as it applies to us, non-monetary assets and liabilities, including inventories, property, plant and equipment, accumulated depreciation and shareholders' equity are remeasured at historical rates of exchange, while monetary assets and liabilities denominated in currencies other than U.S. dollars are remeasured at period-end rates. Export sales invoiced in currencies other than the U.S. dollar are remeasured at the respective exchange rate on the date of sale. Cost of sales and services, depreciation and other expenses relating to assets remeasured at historical exchange rates are calculated based on the U.S. dollar values of such assets, and other non-U.S. dollar statement of income accounts are remeasured at the rate prevailing on the date of the charge or credit to income.

In our 2000, 2001 and 2002 financial statements, gains or losses resulting from the remeasurement of the financial statements and from foreign currency transactions have been reported in the consolidated statement of income as single line items. See Note 2.a to our consolidated financial statements.

Effective January 1, 2002, we decided to reclassify certain costs related to information technology, support, training and education as general and administrative expenses, instead of as cost of sales and services. All amounts for prior periods presented in this annual report have been restated to give effect to this reclassification. These reclassified costs equaled US\$9.8 million in 1998, US\$11.4 million in 1999, US\$21.3 million in 2000, US\$30.5 million in 2001 and US\$32.2 million in 2002. Effective January 1, 2002, we also began netting research and development related contributions that we receive from certain of our suppliers against our research and development expense, instead of recording these contributions as other operating income. All amounts for prior periods presented in this annual report have been restated to give effect to this reclassification. These reclassified amounts equaled US\$14.1 million in 2001 and US\$1.0 million in 2002.

For certain purposes, such as providing reports to our Brazilian shareholders, filing financial statements with the Comissão de Valores Mobiliários, or CVM, the Brazilian securities commission, and determining dividend payments and other distributions and tax liabilities in Brazil, we have prepared and will continue to be required to prepare financial statements in accordance with Law No. 6,404 of December 15, 1976, as amended, or the Brazilian

Corporate Law. Our financial statements prepared in accordance with the Brazilian Corporate Law are not adjusted to account for the effects of inflation.

As a result of the remeasurement of amounts to the functional currency and other adjustments related to the differences in accounting principles between U.S. GAAP and Brazilian GAAP, the amounts of net income and shareholders' equity as reported in our consolidated financial statements presented herein differ from those included in our statutory accounting records.

#### ***Other Data***

Some of the financial data contained in this annual report reflects the effect of rounding. Aircraft ranges are indicated in nautical miles. One nautical mile is equal to approximately 1.15 ordinary or statute miles, or approximately 1.85 kilometers. Aircraft speeds are indicated in nautical miles per hour, or knots, or in Mach, which is a measure of the speed of sound. The term "regional jets" refers to narrow body jet aircraft with 20-110 passenger seats. The term "mid-capacity jets" refers to the 70-110 seat segment of regional jets.

We calculate the value of our backlog by considering all firm orders that have not yet been delivered. A firm order is a firm commitment from a customer, represented by a signed contract, customarily accompanied by a down payment, where we have reserved a place on one of our production lines. Every time we refer to our backlog in this annual report, we only make reference to firm orders, and not to options. When we refer in this annual report to the number or value of regional aircraft, we exclude one EMB 145 and two EMB 135s that were delivered to the Belgian government in 2001, one EMB 145 delivered to the Belgian government in 2002, and one EMB 135 aircraft that we delivered to the Greek government. These aircraft have been included in our defense data.

#### **Special Note Regarding Forward-Looking Statements**

This annual report includes forward-looking statements, within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the U.S. Securities Exchange Act of 1934, as amended, or the Exchange Act, principally in Items 3 through 5 of this annual report. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends affecting our business. These forward-looking statements are subject to risks, uncertainties and assumptions, including, among other things:

general economic, political and business conditions, both in Brazil and in our markets;

management's expectations and estimates concerning our future financial performance, financing plans and programs, and the effects of competition;

successful development and marketing of the EMBRAER 170/190 jet family, our line of corporate jets and our defense aircraft;

our level of debt;

anticipated trends in our industry;

our expenditure plans;

inflation and devaluation;

our ability to develop and deliver our products on a timely basis;

availability of sales financing for our existing and potential customers;

(iii)

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existing and future governmental regulation; and

other risk factors as set forth under Item 3D. Risk Factors.

The words believes, may, will, estimates, continues, anticipates, intends, expects and similar words are intended to identify forward-looking statements. We undertake no obligation to update publicly or revise any forward-looking statements because of new information, future events or other factors. In light of these risks and uncertainties, the forward-looking events and circumstances discussed in this annual report might not occur. Our actual results could differ substantially from those anticipated in our forward-looking statements.

(iv)

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**PART I**

**ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS**

Not applicable.

**ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

**ITEM 3. KEY INFORMATION**

**3A. Selected Financial Data**

The following table presents our selected financial and other data at and for each of the periods indicated. The selected financial data at and for the three years ended December 31, 2000, 2001 and 2002 are derived from our consolidated U.S. GAAP financial statements audited by Deloitte Touche Tohmatsu, independent public accountants, included elsewhere in this annual report. The selected financial data at and for the year ended December 31, 1999 has been derived from our U.S. GAAP financial statements audited by Deloitte Touche Tohmatsu, independent accountants. The selected financial data at and for the year ended December 31, 1998 has been derived from financial statements originally prepared in accordance with Brazilian GAAP and audited by Arthur Andersen S/C, independent public accountants. This 1998 financial statement data has been restated in accordance with U.S. GAAP and is unaudited.



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At and for the year ended December 31,

	1998	1999	2000	2001	2002
(in thousands, except per share /ADS data)					
<b>Income Statement Data</b>					
Net sales	US\$ 1,353,541	US\$ 1,837,277	US\$ 2,762,162	US\$ 2,926,995	US\$ 2,525,800
Cost of sales and services	(970,224)	(1,248,675)	(1,879,318)	(1,769,234)	(1,531,720)
Gross profit	383,317	588,602	882,844	1,157,761	994,080
<i>Operating expenses</i>					
Selling expenses	US\$ (99,256)	US\$ (119,234)	US\$ (193,420)	US\$ (212,057)	US\$ (211,015)
Research and development	(39,749)	(18,808)	(69,593)	(99,566)	(158,499)
General and administrative	(50,166)	(55,948)	(96,645)	(120,787)	(109,673)
Employee profit sharing	(14,703)	(20,437)	(41,770)	(43,746)	(25,222)
Stock compensation	(4,334)	(2,436)	(510)	(1,074)	
Other operating expense, net	(3,431)	(3,629)	(19,518)	(29,463)	(20,498)
Equity on income (loss) from affiliates		(142)	753	310	389
Total operating expenses	US\$ (211,639)	US\$ (220,634)	US\$ (420,703)	US\$ (506,383)	US\$ (524,518)
<i>Income from operations</i>	US\$ 171,678	US\$ 367,968	US\$ 462,141	US\$ 651,378	US\$ 469,562
<i>Non-operating income (expense)</i>					
Interest income (expense)	US\$ (17,859)	US\$ 14,779	US\$ (6,874)	US\$ 47,502	US\$ 80,456
Financial transaction loss, net	(3,536)	(65,226)	(24,637)	(148,637)	(135,647)
Other non-operating income (expense), net	3,591	(13,361)	5,955	(8,426)	(1,394)
Total non-operating income (expense)	US\$ (17,804)	US\$ (63,808)	US\$ (25,556)	US\$ (109,561)	US\$ (56,585)
<i>Income before income taxes</i>	US\$ 153,874	US\$ 304,160	US\$ 436,585	US\$ 541,817	US\$ 412,977
Provision for income taxes	US\$ (8,587)	US\$ (69,620)	US\$ (117,379)	US\$ (218,394)	US\$ (188,502)
<i>Income before minority interest</i>	US\$ 145,287	US\$ 234,540	US\$ 319,206	US\$ 323,423	US\$ 224,475
Minority interest			1,522	(423)	(1,883)
<i>Income before cumulative effect of accounting change</i>	US\$ 145,287	US\$ 234,540	US\$ 320,728	US\$ 323,000	US\$ 222,592
Cumulative effect of accounting change, net of tax				5,440	
<i>Net income</i>	US\$ 145,287	US\$ 234,540	US\$ 320,728	US\$ 328,440	US\$ 222,592
<b>Earnings per share</b>					
Common share basic (1) (3) (6)	US\$ 0.27	US\$ 0.43	US\$ 0.55	US\$ 0.48	US\$ 0.30
Preferred share basic (1) (3) (6)	0.29	0.48	0.61	0.53	0.33
ADS basic (1) (3) (6)	1.18	1.90	2.43	2.11	1.32
Common share diluted (2) (3) (6)	0.27	0.38	0.48	0.46	0.30
Preferred share diluted (2) (3) (6)	0.29	0.42	0.53	0.50	0.33
ADS diluted (2) (3) (6)	1.17	1.66	2.10	2.01	1.31
<b>Dividends per share</b>					
Common share (3) (4) (5)	US\$ 0.031635	US\$ 0.085199	US\$ 0.249700	US\$ 0.254140	US\$ 0.193490
Preferred share (3) (4) (5)	0.034799	0.093719	0.274670	0.279560	0.212830
ADS (3) (4) (5)	0.139196	0.374876	1.098680	1.118240	0.851320

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**Weighted averaged number of shares outstanding**

Common share basic (3)	242,544	242,544	242,544	242,544	242,544
Preferred share basic (3)	272,590	272,590	308,401	402,035	454,414
Common share diluted (3)	242,544	242,544	242,544	242,544	242,544
Preferred share diluted (3)	274,441	347,064	392,954	433,386	459,415

**Balance Sheet Data**

Cash and cash equivalents	US\$ 259,690	US\$ 304,085	US\$ 1,189,231	US\$ 749,302	US\$ 656,822
Other current assets	820,828	986,961	920,278	1,816,046	1,856,301
Property, plant and equipment, net	138,613	162,429	254,965	366,481	436,715
Other long-term assets	622,017	757,463	528,942	628,958	1,335,626
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
Total assets	US\$ 1,841,148	US\$ 2,210,938	US\$ 2,893,416	US\$ 3,560,787	US\$ 4,285,464
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
Short-term loans	550,730	556,272	365,043	526,550	244,526
Other current liabilities	483,471	561,897	967,283	1,161,313	1,397,407
Long-term loans	124,038	80,597	90,969	245,186	308,110
Other long-term liabilities	513,232	647,271	677,013	599,212	1,237,015
Minority interest			7,748	8,170	8,226
Shareholders equity	169,677	364,901	785,360	1,020,356	1,090,180
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
Total liabilities and shareholders equity	US\$ 1,841,148	US\$ 2,210,938	US\$ 2,893,416	US\$ 3,560,787	US\$ 4,285,464
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>

## At and for the year ended December 31,

	1998	1999	2000	2001	2002
(in thousands, except per share /ADS data)					
<b>Other Financial Data</b>					
Net cash provided by (used in) operating activities	US\$(28,442)	US\$(125,826)	US\$1,119,974	US\$(263,160)	US\$507,863
Net cash provided by (used in) financing activities	236,606	(5,632)	(130,398)	98,403	(200,790)
Net cash used in investing activities	(38,727)	(75,799)	(104,430)	(275,172)	(208,421)
Depreciation and amortization	21,046	25,076	30,596	46,417	55,602

- (1) Based on weighted average number of shares outstanding. See Note 27 to our consolidated financial statements.
- (2) Based on weighted average number of shares outstanding and the effects of potentially dilutive securities. See Note 27 to our consolidated financial statements.
- (3) Restated to give effect to the reverse stock split, on April 30, 1999, of one newly issued common or preferred share for 100 outstanding preferred shares or 100 outstanding common shares, respectively. Also restated to give effect to the issuance on March 1, 2002, in the form of a preferred share dividend, of 0.142106 new preferred share for each existing preferred or common share.
- (4) Includes interest on shareholders' equity.
- (5) Translated from nominal *reais* into U.S. dollars at the commercial selling rates in effect on the dates that distributions were declared during the period. The dividends to the ADSs were adjusted from the total amount paid to the preferred shares multiplied by four.
- (6) During 1999 and 2000, our results of operations benefited from changes we made to our valuation allowance related to deferred tax assets. Based on our assessment of future taxable income, we concluded that it was more likely than not that we would realize certain of these benefits given our improved profitability and increases in expected sales and backlog. The adjustments to the valuation allowances resulted in a decrease to income tax expense of US\$168.5 million in 1999 and US\$27.5 million in 2000. In addition, in 2001, we adopted SFAS No. 133 Accounting for Derivative Instruments and Hedging Activities, as amended. As a result, we recognized a gain of US\$5.4 million, net of related taxes, as a cumulative effect of a change in accounting. The following summarizes the earnings per share impact related to the above adjustments.

	1999	2000	2001
Effect of tax adjustments	US\$168,533	US\$27,539	
Effect of cumulative effect of change in accounting			5,440
<b>Total</b>	<b>168,533</b>	<b>27,539</b>	<b>5,440</b>
Basic earnings per common share	0.31	0.05	0.01
Basic earnings per preferred share	0.34	0.05	0.01
Basic earnings per ADS	1.37	0.21	0.04
Diluted earnings per common share	0.27	0.04	0.01
Diluted earnings per preferred share	0.30	0.05	0.01
Diluted earnings per ADS	1.20	0.19	0.04

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At and for the year ended December 31,

	1998	1999	2000	2001	2002
<b>Other Data:</b>					
Aircraft delivered during period:					
To the Regional Market					
EMB 120 Brasília	13	7		2	
ERJ 145	60	80	112	104	80
ERJ 135		16	45	27	3
ERJ 140				22	36
To the Defense Market					
EMB 120 Brasília	1				
Legacy					1
EMB 135			1	2	
EMB 145				1	1
EMB 145 AEW&C/RS/MP					5
EMB 312 Tucano	6				
AM-X	10	3	1		
To the Corporate Market					
Legacy					8
EMB 135			2	5	
To the General Aviation Market					
Light Aircraft	26	17	17	11	25
	<u>116</u>	<u>123</u>	<u>178</u>	<u>174</u>	<u>161</u>
Total delivered	116	123	178	174	161
Aircraft in backlog at the end of period:					
In the Regional Market(1)					
EMB 120 Brasília	7		2		
ERJ 145	131	176	261	159	109
ERJ 135	134	124	85	53	31
ERJ 140			133	152	116
EMBRAER 170		40	90	82	88
EMBRAER 195		30	30	30	30
In the Defense Market					
EMB 145 AEW&C/RS/MP	8	12	12	15	10
EMB 312 Tucano/EMB 314 Super Tucano				86	86
AM-X	4	1			
EMB 145			2	1	
EMB 135		1	2	1	
In the Corporate Market					
Legacy/EMB 135			29	66	58
In the General Aviation Market					
Light aircraft		2			
	<u>284</u>	<u>386</u>	<u>646</u>	<u>645</u>	<u>528</u>
Total backlog (in aircraft)	284	386	646	645	528
Total backlog (in millions)	US\$4,112	US\$6,365	US\$11,421	US\$10,693	US\$9,034

(1) Subsequent to December 31, 2002, we received 126 net additional firm orders for our EMBRAER 170/190 jet family.

**Exchange Rates**

There are two foreign exchange markets in Brazil that are subject to regulation by the Brazilian Central Bank, or the Central Bank, both of which operate at free-floating rates:

the free rate foreign exchange market, also known as the commercial market, and

the floating rate foreign exchange market.

In 1999, the Central Bank unified the operational limits applicable to both markets. However, each market continues to have a specific regulation. Most trade and financial foreign exchange transactions, including transactions relating to the purchase or sale of preferred shares or the payment of dividends with respect to preferred shares or ADSs, are carried out on the commercial market at the applicable commercial market rate. Purchase of foreign currencies in the commercial market may be carried out only through a Brazilian bank authorized to buy and sell currency in that market. In both markets, rates are freely negotiated but may be strongly influenced by Central Bank intervention.

Between March 1995 and January 1999, the Central Bank permitted the gradual devaluation of the *real* against the U.S. dollar pursuant to an exchange rate policy that established a band within which the *real*/U.S. dollar exchange rate could fluctuate.

Responding to pressure on the *real*, on January 13, 1999, the Central Bank widened the foreign exchange band. Because the pressure did not ease, on January 15, 1999, the Central Bank allowed the *real* to float freely. The *real* reached a low of R\$1.4659 per US\$1.00 on January 15, 1999 and a high of R\$3.9552 per US\$1.00 on October 22, 2002. At June 16, 2003, the commercial market rate for purchasing U.S. dollars was R\$2.8508 to US\$1.00. We cannot assure you that the *real* will not appreciate or devalue substantially in the near future.

The following table shows the commercial selling rate for U.S. dollars for the periods and dates indicated.

<b>Exchange Rate of Reais to US\$1.00</b>				
	<b>Low</b>	<b>High</b>	<b>Average (1)</b>	<b>Period-end</b>
<b>Year ended December 31,</b>				
1998	1.1165	1.2087	1.1611	1.2087
1999	1.2078	2.1647	1.8158	1.7890
2000	1.7234	1.9847	1.8295	1.9554
2001	1.9357	2.8500	2.3532	2.3204
2002	2.2709	3.9552	2.9309	3.5333

<b>Exchange Rate of Reais to US\$1.00</b>		
	<b>Low</b>	<b>High</b>
<b>Month ended</b>		
December 31, 2002	3.4278	3.7980
January 31, 2003	3.2758	3.6623
February 28, 2003	3.4832	3.6580
March 31, 2003	3.3531	3.5637
April 30, 2003	2.8898	3.3359
May 31, 2003	2.8653	3.0277
June 30, 2003 (through June 16)	2.8504	2.9776

Source: Central Bank.

(1) Represents the daily average exchange rate during each of the relevant periods.

We will pay any cash dividends and make any other cash distributions with respect to the preferred shares in Brazilian currency. Accordingly, exchange rate fluctuations may affect the U.S. dollar amounts received by the



holders of ADSs on conversion by the depository of such distributions into U.S. dollars for payment to holders of ADSs. Fluctuations in the exchange rate between the *real* and the U.S. dollar may also affect the U.S. dollar equivalent of the *real* price of the preferred shares on the São Paulo Stock Exchange.

### 3B. Capitalization and Indebtedness

Not applicable.

### 3C. Reasons for the Offer and Use of Proceeds

Not applicable.

### 3D. Risk Factors

#### Risks Relating to Embraer

*A downturn in the regional aircraft market may reduce our sales and revenue, and consequently our profitability, in any given year.*

We expect that a substantial portion of our sales in the near future will be derived from sales of regional aircraft, particularly the ERJ 145 regional jet family and the EMBRAER 170/190 jet family. Historically, the market for regional aircraft has been cyclical due to a variety of factors that are both external and internal to the air travel industry, including general economic conditions.

The commercial aviation industry has been negatively impacted by a number of factors beginning in 2001. First, the U.S. and world economies have been experiencing an economic downturn that began in 2001 and is characterized by rapid declines in securities markets, a decline in productivity and an increase in unemployment. Second, the terrorist attacks of September 11th caused an immediate decline in airline travel and a high level of financial uncertainty among the worldwide airline industry. Many airlines faced, and continue to face, a reduction in demand, escalating insurance costs, increased security costs, increasing fuel costs and, in some cases, credit downgrades, liquidity concerns and bankruptcy. Finally, airline travel decreased significantly in 2003 as a result of both the commencement of military action by the United States and other countries in Iraq and the concerns over outbreaks of severe acute respiratory syndrome (SARS) in Asia and Canada. In response to these events, beginning in the fourth quarter of 2001 many airlines, including our largest customers, reduced their flight schedules for the long-term and announced significant lay-offs. As a result, we have agreed to modify certain delivery schedules to adjust to the changes in our customers' businesses and have reduced scheduled regional, corporate jet and government transportation aircraft deliveries in 2002 to 131 aircraft as compared to planned 2002 deliveries of 205 at August 31, 2001 and reduced 2003 scheduled deliveries to 110 aircraft from planned 2003 deliveries of 148 as of December 31, 2002. We have also re-evaluated our risk exposure related to aircraft valuations and customer credit risk, which resulted in charges to income. A further downturn in general economic conditions could result in further reduction in the passenger aircraft market and decreased orders for our regional aircraft.

We cannot, at this time, predict the magnitude or duration of the impact that the above events will have on the airline industry as a whole and on our business in particular. If one of our customers experiences a business downturn, cannot obtain financing or otherwise seeks to limit its capital expenditures, that customer could defer or cancel its purchase of our regional aircraft or change its operating requirements. Because our regional aircraft represent the majority of our net sales, sales of our other products would not be able to offset a reduction in sales of our regional aircraft. Future delays or decreases in the number of regional aircraft delivered in any year would likely reduce our sales and revenue, and consequently our profitability, for that year.

***We depend on a small number of key customers and key suppliers, the loss of any of which could harm our business.***

*Civil aircraft.* We rely on a limited number of customers for a substantial portion of our total net sales. As of June 30, 2003, our largest customers were ExpressJet, American Eagle, JetBlue Airways, US Airways, Wexford and Swiss International Airlines, Ltd., or SWISS. At the same date, 78.5% of our firm orders in backlog for the ERJ 145 were attributable to ExpressJet, 55.3% of our options for the ERJ 145 were attributable to ExpressJet and US Airways, and 81.1% of our firm orders and 55.6% of our options for the ERJ 140 were from American Eagle. In addition, at June 30, 2003, JetBlue Airways, US Airways and GE Capital Aviation Services together represented 77.9% of firm orders in backlog and 80.9% of options for the EMBRAER 170/190 jet family, and 65.5% of our firm orders in backlog and 61.0% of our options for the Legacy, our new line of corporate jets, were from Swift Aviation Services. We believe that we will continue to depend on a limited number of large customers, the loss of any of which could reduce our sales and reduce our market share. Fewer sales could reduce our profitability.

*Defense aircraft.* The Brazilian Air Force is our largest customer of defense aircraft products. Sales to the Brazilian government accounted for 31.8% of our defense sales for the year ended December 31, 2002. A decrease in defense spending by the Brazilian government due to defense spending cuts, general budgetary constraints or other factors that are out of our control could decrease our defense sales and defense research and development funding. Given past statements by the Brazilian government of its intent to reduce its overall level of spending, we cannot assure you that the Brazilian government will continue to purchase aircraft or services from us in the future at the same rate or at all.

*Key suppliers.* Our risk-sharing partners develop and manufacture significant portions of our aircraft, including the engines, hydraulic components, avionics, wings, interior and parts of the fuselage and tail. Once risk-sharing partners have been selected and program development and aircraft production have begun, it is difficult to substitute these partners. In some cases, the aircraft are designed specifically to accommodate a particular component, such as the engines, which cannot be substituted by another manufacturer without significant delays and expense. This dependence makes us susceptible to the risks of performance, product quality and financial condition of these risk-sharing partners.

We cannot assure you that we will not experience significant delays in obtaining key equipment in our manufacturing process in the future. Although we work closely with and monitor the production process of our risk-sharing partners and suppliers, the failure of our risk-sharing partners and other major suppliers to meet our performance specifications, quality standards or delivery schedules could affect our ability to deliver new aircraft to customers in a timely manner.

***Any decrease in Brazilian government-sponsored customer financing, or increase in government-sponsored financing that benefits our competitors, may decrease the cost-competitiveness of our aircraft.***

Historically, when purchasing our aircraft, our customers have benefited from export financing incentives provided by Brazilian government-sponsored export programs. The most important of these government programs is a system of interest rate adjustments called the Programa de Financiamento às Exportações, or Export Financing Program, known as the ProEx program.

In July 1998, the Canadian government initiated a proceeding at the World Trade Organization, or WTO, accusing the Brazilian government of granting prohibited export subsidies relating to sales of aircraft to foreign purchasers under the ProEx program. The Brazilian government countered, accusing the Canadian government of granting prohibited export subsidies to the Canadian aircraft industry. On April 14, 1999, the WTO declared the portions of the ProEx program relating to Brazilian aircraft financing, and some aspects of the Canadian aircraft financing programs, to be prohibited export subsidies. Following appeals, the WTO formally decided on August 20, 1999 to give Brazil until November 18, 1999 to withdraw the prohibited export subsidies or make any necessary adjustments to bring the program into compliance with WTO rules. On April 28, 2000, the WTO concluded that Brazil had failed to comply with the earlier ruling to remove prohibited subsidies by November 18, 1999. In particular, the WTO concluded that the issuance of ProEx benefits after November 18, 1999 pursuant to letters of commitment issued by the Brazilian government to our customers prior to November 18, 1999 were prohibited export subsidies. The WTO also concluded that the amended version of the ProEx program, adopted in response to



the WTO's August 1999 ruling, still decreased effective interest rates for regional aircraft to below commercial market levels and thus continued to provide a prohibited export subsidy. In July 2000, the WTO confirmed this decision after an appeal by the Brazilian government. The Brazilian government publicly announced that it would honor its contractual commitments to our customers. As a result of Brazil's continuing to provide ProEx benefits under its contractual commitments, the WTO dispute settlement body granted Canada the authority to impose up to US\$1.4 billion in trade sanctions over five to six years against Brazil. Canada has not yet imposed sanctions. We cannot predict what form, if any, these sanctions will take and whether such sanctions will adversely affect our business. The Brazilian government subsequently amended the ProEx program so that any ProEx payments would not decrease the effective interest rate below the interest rate permitted by the WTO. On August 23, 2001, the dispute settlement body of the WTO determined the revised ProEx program was in full compliance with WTO rules.

Although this ruling confirms ProEx's compliance with WTO rules, the ProEx program or other export financing programs available to our customers may be subject to challenge in the future. If the ProEx program or another similar program is not available in the future, or if its terms are substantially reduced, our customers' financing costs could be higher and our cost-competitiveness in the regional jet market could decrease.

In 2001, the Canadian government agreed to provide up to US\$1.1 billion of low-interest financing to Air Wisconsin, an affiliate of United Airlines, to fund its purchase of Bombardier regional jets. The Brazilian government challenged these subsidies and, in January 2002, a WTO panel declared that such subsidies were illegal and required Canada to withdraw the funds. The panel also found that, since 1996, two airlines in addition to Air Wisconsin had been recipients of illegal subsidies. As a result, the dispute settlement body of the WTO authorized Brazil to apply retaliatory measures against Canada in the amount of US\$248 million. Officials of the Canadian government have indicated that they intend to continue providing support to Bombardier. Any future subsidies supporting Bombardier or any of our other major competitors may cause the cost-competitiveness of our aircraft to suffer and our sales to decline.

The Brazilian and Canadian governments have entered into negotiations regarding government support for aircraft exports. We cannot assure you that any agreement will be reached.

***Brazilian government budgetary constraints could reduce amounts available to our customers under government-sponsored financing programs.***

In addition to the ProEx program, we rely on the BNDES-*exim* program, also a government-sponsored financing program, to assist customers with financing. This program provides our customers with direct financing for Brazilian exports of goods and services. At December 31, 2002, approximately 48.0% of our backlog (in terms of value) was subject to financing by the BNDES-*exim* program. As government-sponsored programs, the ProEx program and the BNDES-*exim* program rely on funds allocated from the Brazilian national budget. Therefore, the funds available to our customers under these programs will be affected by currency fluctuations and other political and economic developments in Brazil and the international capital markets. See Risks Relating to Brazil. For example, a decrease in the amounts available under the ProEx program caused us to make other financing arrangements for affected customers. In addition, from time to time, government-sponsored financing programs such as ProEx or BNDES-*exim* can be subject to challenge. We cannot assure you that the Brazilian government will continue to sponsor and/or fund these programs or that funds under these or other similar programs will be available to our customers. The loss or significant reduction of funds available under one or either of these programs, without an adequate substitute, could lead to fewer sales and has caused and may continue to cause us to compensate our customers for their additional financing costs, resulting in lower profitability for Embraer.

***We face a number of challenges resulting from the development of new products and our expansion into new markets.***

As we continue to develop the EMBRAER 170/190 jet family, we will have to continue reallocating existing resources and coordinating with new suppliers and risk-sharing partners. We also need to recruit, retain and motivate additional highly skilled engineers and other personnel to assist us in our research and development activities, which are essential to the success of our current and future programs. There is significant competition within the aviation industry for skilled personnel in general and engineers in particular. As a result, we may be unable to recruit the necessary number of highly skilled engineers and other personnel we require. Failure to

coordinate our resources in a timely manner or to attract and retain skilled personnel could impede our development efforts and cause delays in production and deliveries of our aircraft, which would delay recognition of revenue.

Finally, we may pursue strategic growth opportunities, including joint ventures, acquisitions or other transactions, to expand our business or enhance our products and technology. We may face a number of challenges, including difficulties in identifying appropriate candidates, assimilating their operations and personnel and maintaining internal standards and controls, as well as the diversion of our management's focus from our ongoing business. We cannot assure you that we will be able to meet these challenges or that our business will not face disruptions.

***We may have to refund cash contributions after the development of the EMBRAER 170/190 jet family if certification for these aircraft is not obtained.***

Our risk-sharing partners have contributed to us a total of US\$250.6 million for the development of the EMBRAER 170/190 jet family as of December 31, 2002. If we cancel the development and production of the EMBRAER 170/190 jet family because we are unable to obtain certification or for other non-market related reasons, we may be obligated to refund all or a part of these cash contributions. If we require additional financing and we are unable to obtain it, we will not be able to develop and market our EMBRAER 170/190 jet family.

***Our aircraft sales are subject to cancellation provisions, repurchase and trade-in options and financial and residual value guarantees that may reduce our cash flow or require us to make significant cash disbursements in the future.***

A portion of our aircraft firm orders is subject to significant contingencies, both before and after delivery. Prior to delivery, some of our purchase contracts may be terminated, or all or a portion of a particular firm order may be canceled, for different reasons, including:

extended delays in delivering aircraft or failure to obtain certification of the aircraft or otherwise meet performance milestones and other requirements;

failure of the customer to receive financing, when required, with respect to any aircraft by the scheduled delivery date of such aircraft, in which case the customer could cancel the order for the particular aircraft to be financed or terminate the contract with respect to all undelivered aircraft; or

exceeding production rate limits.

Our customers may also reschedule deliveries, particularly during an economic downturn. A substantial number of cancellations or extensions of delivery schedules could reduce our sales and revenue for a given year, which in turn would reduce our cash flow.

We may also have to repurchase a number of our aircraft. Under the relevant purchase contracts, the price per aircraft of any required repurchase is less than the original purchase price of the aircraft and less than our estimate at that time of the market value of the relevant aircraft type in future years (based on third party appraisals of aircraft valuations). If we are required to repurchase all of the relevant aircraft under our repurchase obligation, which covers the period from 2003 to 2007, we could be required to pay up to approximately US\$500 million for these aircraft.

At December 31, 2002, 34 of our regional jets were subject to trade-in options and additional aircraft may become subject to trade-in options upon delivery. These options provide that the trade-in price can be applied to the price of an upgraded model or any of our other aircraft. The trade-in price is determined in the manner discussed above for regional jets and as a percentage of the original purchase price for our corporate jets. We may be required to accept trade-ins at trade-in prices that are above the then-market price of the aircraft, which would result in financial loss for us when we resell the aircraft.

We also have guaranteed the financial performance of a portion of the financing for, and the residual value of, some of our aircraft that have already been delivered. Financial guarantees are provided to financing parties to support a portion of the payment obligations of our customers under their financing arrangements to mitigate default-related issues. These guarantees are collateralized by the financed aircraft. Our residual value guarantees typically ensure that in the 15th year after delivery, the relevant aircraft will have a residual market value of 10% to 27% of the original sale price. In the event of a decrease in the market value of the underlying aircraft, we will bear the difference between the then market value of the aircraft and the guaranteed residual value.

Assuming all customers supported by financial guarantees defaulted on their aircraft financing arrangements, we were required to pay the full aggregate amount of outstanding residual value guarantees and we were not able to sell or lease any of the aircraft to offset our obligations, our maximum exposure under these guarantees (less provisions and liabilities) would have been US\$1.4 billion as of December 31, 2002. See Note 37 to our consolidated financial statements for a further discussion of these off-balance sheet arrangements. We have deposited US\$187.4 million in escrow accounts to secure a portion of our financial guarantees. Although we believe that the estimated value of the covered aircraft, on an aggregate basis, is currently sufficient to cover our exposure, we may be obligated to make substantial payments that are not recoverable through proceeds from aircraft sales or leases, particularly if the future value of the relevant aircraft is significantly lower than the guaranteed amount or financing defaults occur with respect to a significant portion of our aircraft. The value of the underlying aircraft is more likely to decrease and third parties are more likely to default during economic downturns such as we are currently experiencing.

We recorded a charge against income of US\$14.5 million in 2002, based on our risk assessment, on an individual aircraft basis, of our guarantees. We continually re-evaluate our risk under guarantees and repurchase and trade-in obligations based on a number of factors, including the estimated future market value of our aircraft based on third party appraisals, including information developed from the sale or lease of similar aircraft in the secondary market, and the credit rating of customers. Any future decrease in the market value of the aircraft covered by repurchase obligations, trade-in rights or guarantees would decrease our ability to recoup the amounts payable to satisfy our obligations and cause us to incur additional charges to income. If we are required to pay amounts related to such guarantees or repurchase obligation, we may not have sufficient cash or other financial resources available to do so and may need to seek financing to fund these payments. We cannot assure you that then-prevailing market conditions would allow us to resell or lease the underlying aircraft at its anticipated fair value or in a timely manner. Consequently, honoring our repurchase, trade-in or guarantee obligations could require us to make significant cash disbursements in a given year, which in turn would reduce our cash flow in that year.

***We face significant international competition, which may adversely affect our market share.***

The worldwide regional jet aircraft manufacturing industry is highly competitive. We are one of the leading manufacturers of commercial aircraft in the world, along with The Boeing Company, Airbus Industrie and Bombardier Inc., all of which are large international companies. These and other of our competitors have greater financial, marketing and other resources than we do. Although we have achieved a significant share of the market for our regional aircraft products, we cannot assure you that we will be able to maintain this market share. Our ability to maintain market share and remain competitive in the regional jet aircraft market over the long term requires continued technological and performance enhancements to our products. Our primary competitor in the regional jet market is Bombardier Inc., a Canadian company, which has significant technological capabilities, financial and marketing resources and benefits from government-sponsored export subsidies. In addition, other major international aircraft manufacturers, including The Boeing Company and Airbus Industrie, produce or are developing aircraft at the high end of the 81-110 seat segment, increasing the competitive pressures in that segment. These companies also have significant technological capabilities and greater financial and marketing resources.

Some of our competitors may also reach the market before we do, allowing them to establish a customer base and making our efforts to gain greater market share more difficult. For example, Bombardier recently commenced delivery of its 70-seat regional jet prior to the initial deliveries of the EMBRAER 170. As a new entrant to the corporate jet market, we also face significant competition from companies with longer operating histories and established reputations in this industry. We cannot assure you that we will be able to compete successfully in our markets in the future.

*We may have to make significant payments as a result of unfavorable outcomes of pending challenges to various taxes and social charges.*

We have challenged the constitutionality of the nature of and modifications in rates and the increase in the calculation base of certain Brazilian taxes and social charges. Interest on the total amount of these unpaid taxes and social charges accrues monthly based on the Selic rate, the key lending rate of the Central Bank, and we make an accrual as part of the interest income (expense) item of our statements of income. As of December 31, 2002, we had obtained preliminary injunctions for not paying or recovering past payments in the total amount, including interest, of US\$186.9 million, which is included as a liability on our balance sheet. We cannot assure you that we will prevail in these proceedings or that we will not have to pay significant amounts, including penalties and interest, to the Brazilian government in the future as payment for these liabilities.

#### **Risks Relating to the Regional Aircraft Industry**

*Scope clause restrictions in airline pilot contracts may limit demand for regional jets in the U.S. market.*

A key limiting factor in demand for regional jets is the existence of scope clauses contained in airline pilot contracts. These scope clauses are union-negotiated restrictions on the number and/or size of regional aircraft that a particular carrier may operate. Current scope clause restrictions, which are more prevalent in the United States, include restrictions on the number of seats, weight of aircraft and number of regional jets in an airline's fleet. Most scope clauses are aimed at limiting 50-70 seat jets. As a result, our opportunities for near-term growth in the U.S. regional jet market in the 40-59 and 60-80 seat segments are limited. The continuation or further tightening of scope clauses could also lead some of our customers who have purchased options to acquire our regional jets not to exercise those options. We cannot assure you that current restrictions will be lessened, or will not be expanded, including by amending these scope clauses to cover larger-sized regional aircraft. Furthermore, although scope clauses are less prevalent outside the United States, we cannot assure you that scope clauses will not become more prevalent or restrictive, or that some other form of restriction will not take effect, in Europe or in other markets.

*We are subject to stringent certification requirements and regulation, which may delay our obtaining certification in a timely manner.*

Our products are subject to regulation in Brazil and in each jurisdiction where our customers are located. The aviation authorities in Brazil and in other countries in which our customers are located, including the Brazilian aviation authority, the FAA, the Joint Aviation Authority of Europe, the European aviation authority, and the Chinese aviation authority, must certify our aircraft before we can deliver them. A recommendation by the European aviation authority is a requirement for certification of an aircraft by the aviation authorities of most European countries. We cannot assure you that we will be able to obtain certification of our aircraft on a timely basis or at all. If we fail to obtain a required certification from an aviation authority for any of our aircraft, that aviation authority would prohibit the use of that aircraft within its jurisdiction until certification has been obtained. In addition, complying with the requirements of the certification authorities can be both expensive and time-consuming. Changes in government regulations and certification procedures could also delay our start of production as well as entry into the market. We cannot predict how future laws or changes in the interpretation, administration or enforcement of laws will affect us. We may be required to spend significantly more money to comply with these laws or to respond to these changes.

*Any catastrophic events involving our aircraft could adversely affect our reputation and future sales of our aircraft, as well as the market price of the preferred shares and the ADSs.*

We believe that our reputation and the safety record of our aircraft are important selling points for our aircraft. We design our aircraft with backup systems for major functions and appropriate safety margins for structural components. However, the safe operation of our aircraft depends to a significant degree on a number of factors largely outside our control, including our customers' proper maintenance and repair of our aircraft and pilot skill. Due to our relative position in the aircraft market and because we have focused on products in the regional aircraft segment, the occurrence of one or more catastrophic events involving one of our aircraft could adversely affect our entire regional jet family as well as our reputation and future sales.

## Risks Relating to Brazil

***Brazilian political and economic conditions have a direct impact on our business and the market price of our preferred shares and the ADSs.***

The Brazilian economy has been characterized by frequent, and occasionally drastic, intervention by the Brazilian government and by volatile economic cycles. The Brazilian government's actions to control inflation and affect other policies have involved wage and price controls, currency devaluations, capital controls and limits on imports, among other things. Our business, financial condition, results of operations and the market price of the preferred shares and the ADSs may be adversely affected by changes in policy involving tariffs, exchange controls and other matters, as well as other factors outside of our control such as:

fluctuations in exchange rates;

base interest rate fluctuations;

inflation and price instability;

liquidity of domestic capital and lending markets;

tax policy;

structural and investment deficiencies in the energy sector; and

other political, diplomatic, social and economic developments in or affecting Brazil.

Rapid changes in Brazilian political and economic conditions that have already occurred and that might continue will require continued emphasis on assessing the risks associated with our activities and adjusting our business and operating strategy. Future developments in Brazilian government policies, including changes in the current policy and incentives adopted for financing the export of Brazilian goods, or in the Brazilian economy, over which we have no control, may materially adversely affect our business, financial condition and results of operations.

Our business could be significantly affected by political instability in Brazil. In the elections in October 2002, Brazilian voters elected a new president from the Workers Party, Luís Inácio Lula da Silva, known as Lula. In the period leading up to and following his election, there was substantial uncertainty relating to the policies that the new government would pursue, including the potential implementation of macroeconomic policies that differed significantly from those of the prior administration. This uncertainty resulted in a loss of confidence in the Brazilian capital markets and the continued devaluation of the *real*. Although the new government has not yet departed in any material way from previous policies, it is premature to determine what policies might be implemented, whether these policies will be effective and how investors and the capital markets will react to them. Any substantial negative reaction to the policies of the Brazilian government could adversely affect our business, operations and the market price of our preferred shares and ADSs.

***Inflation and certain governmental measures to combat inflation may contribute significantly to economic uncertainty in Brazil and to heightened volatility in the Brazilian securities markets and, consequently, may adversely affect the market value of the preferred shares and the ADSs.***

Brazil has historically experienced extremely high rates of inflation. Inflation itself, certain governmental measures to combat inflation and public speculation about possible future measures have in the past had significant negative effects on the Brazilian economy, contributing to economic uncertainty in Brazil and to heightened volatility in the Brazilian securities markets.

Since the *real*'s introduction in July 1994 under the *Real Plan*, Brazil's inflation rate has been substantially lower than in previous periods. If Brazil experiences substantial inflation again in the future, our operating expenses

and borrowing costs may increase, our operating and net margins may decrease and, if investor confidence decreases, the price of the preferred shares and ADSs may fall.

***Exchange rate instability may result in uncertainty in the Brazilian economy and the Brazilian securities market and could lower the market value of the preferred shares and the ADSs.***

Although most of our net sales and debt are U.S. dollar-denominated, the relationship of the *real* to the value of the U.S. dollar, and the rate of devaluation of the *real* relative to the prevailing rate of inflation, may adversely affect us.

As a result of inflationary pressures, the Brazilian currency has been devalued periodically during the last four decades. Throughout this period, the Brazilian government has implemented various economic plans and utilized a number of exchange rate policies, including sudden devaluations, periodic mini-devaluations during which the frequency of adjustments has ranged from daily to monthly, floating exchange rate systems, exchange controls and dual exchange rate markets. From time to time, there have been significant fluctuations in the exchange rates between the Brazilian currency and the U.S. dollar and other currencies. More recently, the *real* devalued against the U.S. dollar by 9.3% in 2000 and 18.7% in 2001. During 2002, the *real* continued to undergo significant devaluation due in part to continued economic and political uncertainties in emerging markets and the global economic slowdown. In 2002, the depreciation of the *real* relative to the U.S. dollar totaled 52.3%. In the first five months of 2003, the *real* appreciated 16.1%.

Devaluations of the *real* relative to the U.S. dollar would reduce the U.S. dollar value of distributions and dividends on the ADSs and may also reduce the market value of the preferred shares and the ADSs. Devaluations also create additional inflationary pressures in Brazil by generally increasing the price of imported products and requiring recessionary government policies to curb aggregate demand. On the other hand, appreciation of the *real* against the U.S. dollar may lead to a deterioration of the current account and the balance of payments, as well as dampen export-driven growth. The potential impact of the floating exchange rate and of measures of the Brazilian government aimed at stabilizing the *real* is uncertain.

***Developments in other countries, particularly other emerging market countries, may adversely affect the Brazilian economy, may make it more difficult or expensive for us to obtain additional debt financing and, therefore, may affect the market price of the preferred shares and the ADSs.***

Securities of Brazilian issuers have been, to varying degrees, influenced by economic and market conditions in other countries, particularly emerging market countries. Although economic conditions differ in each country, investors' reactions to developments in one country may affect the securities of issuers in other countries, including Brazil. Since the fourth quarter of 1997, the international financial markets have experienced significant volatility, and a large number of market indices, including those in Brazil, have declined significantly. For example, the political crisis in Venezuela, the recession in Argentina, the economic difficulties of Ecuador and Turkey, the Asian economic crisis, and the 1998 Russian debt moratorium and devaluation of the Russian currency triggered market volatility in Brazil's and other emerging market countries' securities markets. See Item 5A. Operating Results Brazilian Economic Environment for a discussion of recent events. In the third week of September 2001, upon the reopening of the New York Stock Exchange after its closure for four business days following the September 11th terrorist attacks in the United States, the Dow Jones Industrial Average experienced its largest single-week decline since the 1930s. In the same period, the Ibovespa, the index of the São Paulo Stock Exchange, experienced a decline of 18.1%.

These events discouraged investment worldwide, including international investment in Brazil, and, more directly, has caused a decline in the market for our preferred shares and ADSs. In addition, the continuation of the Argentine recession and the recent devaluation of the peso could affect the Brazilian economy, as Argentina is one of South America's largest economies. Further negative developments in the international financial markets, especially in South America, may adversely affect our financial condition and our ability to obtain debt financing on acceptable terms or at all. We cannot assure you that the Brazilian securities markets will not continue to be affected negatively by events elsewhere, especially in Argentina, Venezuela and other emerging markets, or that these events will not adversely affect the market price of our preferred shares and ADSs.

**Risks Relating to the Preferred Shares and the ADSs**

***Exchange controls and restrictions on remittances abroad may adversely affect the holders of our ADSs.***

The Brazilian government may impose temporary restrictions on the conversion of Brazilian currency into foreign currencies and on the remittance to foreign investors of proceeds from their investments in Brazil. The Brazilian government imposed remittance restrictions for a number of months in 1989 and early 1990. These restrictions would hinder or prevent the conversion of dividends, distributions or the proceeds from any sale of preferred shares, as the case may be, from *reais* into U.S. dollars and the remittance of the U.S. dollars abroad. We cannot assure you that the Brazilian government will not take similar measures in the future. Holders of our ADSs could be adversely affected by delays in, or refusals to grant, any required governmental approval for conversion of *real* payments and remittances abroad in respect of the preferred shares underlying the ADSs. In such a case, the depository for the ADSs will hold the *reais* it cannot convert for the account of the ADR holders who have not been paid. The depository will not invest the *reais* and will not be liable for interest on those amounts.

***If holders of ADSs exchange the ADSs for preferred shares, they risk losing the ability to remit foreign currency abroad and Brazilian tax advantages.***

The Brazilian custodian for the preferred shares has obtained an electronic certificate of registration from the Central Bank permitting it to remit foreign currency abroad for payments of dividends and other distributions relating to the preferred shares or upon the disposition of the preferred shares. If holders of ADSs decide to exchange their ADSs for the underlying preferred shares, they will be entitled to continue to rely on the custodian's electronic certificate of registration for five business days from the date of exchange. Thereafter, such holders of ADSs may not be able to obtain and remit foreign currency abroad upon the disposition of, or distributions relating to, the preferred shares unless they obtain their own electronic certificate of registration or register their investment in the preferred shares pursuant to Resolution No. 2,689, which entitles certain foreign investors to buy and sell securities on the São Paulo Stock Exchange. Holders who do not qualify under Resolution No. 2,689 will generally be subject to less favorable tax treatment on gains with respect to the preferred shares. If holders of ADSs attempt to obtain their own electronic certificate of registration, they may incur expenses or suffer delays in the application process, which could delay their ability to receive dividends or distributions relating to the preferred shares or the return of their capital in a timely manner. We cannot assure you that the custodian's electronic certificate of registration or any certificate of foreign capital registration obtained by a holder of ADSs will not be affected by future legislative or other regulatory changes, or that additional restrictions applicable to such holder, the disposition of the underlying preferred shares or the repatriation of the proceeds from disposition will not be imposed in the future.

***The relative volatility and illiquidity of the Brazilian securities markets may substantially limit the ability of holders of our preferred shares or ADSs to sell the preferred shares underlying the ADSs at the price and time they desire.***

Investing in securities, such as the preferred shares or the ADSs, of issuers from emerging market countries, including Brazil, involves greater risk than investing in securities of issuers from more developed countries, and such investments are generally considered speculative in nature.

The Brazilian securities markets are substantially smaller, less liquid, more concentrated and more volatile than major securities markets in the United States and other jurisdictions, and are not as highly regulated or supervised as some of these other markets. The relatively small market capitalization and illiquidity of the Brazilian equity markets may substantially limit the ability of holders of our preferred shares or ADSs to sell the preferred shares underlying the ADSs at the price and time desired. See Item 9C. Markets Trading on the São Paulo Stock Exchange.

***Because we are subject to different corporate rules and regulations as a Brazilian company, holders of our ADSs have fewer and less well-defined shareholders' rights.***

Our corporate affairs are governed by our bylaws and the Brazilian Corporate Law, which differ from the legal principles that would apply if we were incorporated in a jurisdiction in the United States, such as Delaware or New York, or in other jurisdictions outside Brazil. As a result, the holders of the ADSs or the holders of our preferred shares may have fewer and less well-defined rights under Brazilian Corporate Law with which to protect their interests against actions by our board of directors and our principal shareholders than under the laws of those jurisdictions outside Brazil.

Although the Brazilian Corporate Law imposes restrictions on insider trading and price manipulation, the Brazilian securities markets are not as highly regulated and supervised as the U.S. securities markets or markets in other jurisdictions. In addition, rules and policies against self-dealing and regarding the preservation of minority shareholder interests may be less well-defined and enforced in Brazil than in the United States, putting holders of the preferred shares and ADSs at a potential disadvantage. Corporate disclosures may be less complete or informative than what may be expected of a U.S. public company. Specifically, among other differences when compared to, for example, Delaware general corporation law, Brazilian Corporate Law and practice has less detailed and well-established rules and judicial precedents relating to the review of management decisions against duty of care and duty of loyalty standards in the context of corporate restructurings, transactions with related parties and sale-of-business transactions. In addition, the Brazilian Corporate Law provides that shareholders must hold 5% of the outstanding share capital of a corporation to have standing to bring shareholders' derivative suits, and shareholders ordinarily do not have standing to bring a class action.

Also, in accordance with Brazilian Corporate Law, holders of our preferred shares, and therefore our ADSs, are not entitled to vote at meetings of our shareholders except in limited circumstances. See Item 10B. Memorandum and Articles of Incorporation Description of Capital Stock Voting Rights of the Preferred Shares.

Changes to the Brazilian Corporate Law were approved by the Brazilian Congress and became effective as of March 2002. Such changes may adversely affect the rights of holders of our ADSs. See Item 10B. Memorandum and Articles of Association Changes to the Brazilian Corporate Law.

***The Brazilian government has veto power over major corporate actions; our controlling shareholders act in concert to control Embraer.***

The Brazilian government holds one special class of our common stock, called a "golden share," which carries veto power over, among other things, change of control, change of corporate purpose and creation and alteration of defense programs (whether or not the Brazilian government participates in such programs). In addition, under the terms of a shareholders' agreement, our controlling shareholders Cia. Bozano, Caixa de Previdência dos Funcionários do Banco do Brasil PREVI, also known as PREVI, and Fundação SISTEL de Seguridade Social, also known as SISTEL, act in concert to vote 60% of the outstanding shares of our common stock, allowing them to elect a majority of the members of our board of directors and to determine the outcome of any actions requiring shareholder approval, including corporate reorganizations and the timing and payment of future dividends.

***The sale of a substantial number of preferred shares, or the belief that this may occur, could decrease the trading price of the preferred shares and the ADSs; holders of our preferred shares and/or ADSs may not be able to sell their securities at or above the price they paid for them.***

Sales of a substantial number of preferred shares, or the belief that this may occur, could decrease the trading price of our preferred shares and our ADSs. As of December 31, 2002, we had 470,429,907 preferred shares outstanding. Of this amount, holders of exchangeable notes that were issued in June 2001 by Banco Nacional de Desenvolvimento Econômico e Social BNDES, the Brazilian National and Social Development Bank, also known as BNDES, have the right to acquire, at any time prior to the maturity of the notes, an aggregate of 7,279,200 ADSs, representing 29,116,800 preferred shares currently owned by BNDES Participações S.A. BNDESPAR, also known as BNDESPAR, a wholly owned subsidiary of BNDES, subject to adjustment. As a consequence of the issuance of preferred shares or sales by existing shareholders, the market price of the preferred shares and, by



extension, the ADSs may decrease significantly. As a result, the holders of our ADSs and/or preferred shares may not be able to sell their securities at or above the price they paid for them.

***Our share price may be affected by potential dilution of our preferred shares and the ADSs.***

The issuance of preferred shares pursuant to our stock option plan could substantially dilute the preferred shares. Under the terms of our stock plan, we were authorized to grant options to purchase up to 25,000,000 preferred shares over the five-year period from the date of the first grant of options pursuant to the plan. As of the end of this five-year period, we had granted options for an aggregate of 19,665,000 preferred shares. The options granted to each employee generally vest as follows: 30% after three years from the date granted, an additional 30% after four years and the remaining 40% after five years. Employees may exercise their options for up to seven years from the date they are granted. As of December 31, 2002, options representing 7,196,313 preferred shares have already been exercised and options representing 4,757,218 preferred shares are exercisable in 2003.

***Holders of our ADSs might be unable to exercise preemptive rights with respect to the preferred shares.***

Holders of our ADSs may not be able to exercise the preemptive rights relating to the preferred shares underlying their ADSs unless a registration statement under the Securities Act is effective with respect to those rights or an exemption from the registration requirements of the Securities Act is available. We are not obligated to file a registration statement with respect to the shares or other securities relating to these preemptive rights and we cannot assure holders of our ADSs that we will file any such registration statement. Unless we file a registration statement or an exemption from registration applies, holders of our ADSs may receive only the net proceeds from the sale of their preemptive rights by the depositary or, if the preemptive rights cannot be sold, the rights will be allowed to lapse.

**ITEM 4. INFORMATION ON THE COMPANY**

**4A. History and Development of the Company**

**General**

Embraer-Empresa Brasileira de Aeronáutica S.A. is a joint stock company duly incorporated under the laws of Brazil with an indefinite term of duration. Originally formed in 1969 by the Brazilian government, we were privatized by the Brazilian government in 1994. In connection with our privatization, we were transformed into a publicly held corporation and we operate under the Brazilian Corporate Law. Our principal executive offices are located at Avenida Brigadeiro Faria Lima, 2170, 12227-901 São José dos Campos, São Paulo, Brazil. Our telephone number is 55-12-3927-1216. Our agent for service of process in the United States is our subsidiary, Embraer Aircraft Holding, Inc., with offices at 276 S.W. 34th Street, Ft. Lauderdale, Florida 33315.

We have grown from a government-controlled company established to develop and produce aircraft for the Brazilian Air Force into a public company that produces aircraft for commercial, corporate and defense purposes. Through our evolution, we have obtained, developed and enhanced our engineering and technological capabilities through our own development of products for the Brazilian Air Force and through joint product development with foreign companies on specific projects. We have applied these capabilities that we gained from our defense business to develop our regional aircraft business.

Our first major regional aircraft was the Bandeirante, a 19-passenger twin engine non-pressurized turboprop aircraft initially designed to service the transport needs of the Brazilian Air Force. The Bandeirante was followed by the development of the EMB 120 Brasília, a high performance, pressurized turboprop commercial aircraft seating up to 30 passengers and designed to serve the longer routes and higher passenger traffic of the growing regional aircraft market. Drawing upon the design of the EMB 120 Brasília and the jet technology acquired in our development of the AM-X, a defense aircraft for the Brazilian Air Force, we developed the ERJ 145 regional jet family, our first jet product for commercial use. We are expanding our jet product line with the development of the EMBRAER 170/190 jet family, designed to serve the aircraft market's trend towards larger, higher volume and longer range jets. We are also marketing and selling the Legacy, a line of corporate jets based on our ERJ 135

regional jet, with several improvements including longer range. For the Defense market, we also offer a line of Intelligence, Surveillance and Reconnaissance aircraft based on the ERJ 145 regional jet.

### **Strategic Alliance and Growth Opportunities**

#### ***Strategic Alliance with European Aerospace and Defense Group***

On November 5, 1999, a group consisting of Aerospatiale Matra, currently known as European Aeronautic, Defense and Space Company N.V., or EADS, Dassault Aviation, Thomson-CSF, currently referred to by its trade name Thales, and Société Nationale d'Étude et de Construction de Moteurs d'Aviation, or SNECMA, which we refer to collectively as the European Aerospace and Defense Group, purchased as a single investor 20% of the outstanding common stock of Embraer from our existing common shareholders, a majority of which was from our controlling shareholders. We believe that this alliance will continue to assist us in the development of new defense products and enable us to expand our defense markets. For example, we integrated Thales mission systems and electronic equipment in some of our EMB 145 AEW&C/RS/MP aircraft.

#### ***Joint Ventures and Acquisitions***

In 2000, we entered into a joint venture with Liebherr International AG to develop and manufacture landing gear and high precision hydraulic equipment and provide related services for Embraer and other clients around the world. In connection with this joint venture, we formed a new subsidiary, ELEB - Embraer Liebherr Equipamentos do Brasil S.A.

In March 2002, we acquired the operating assets of Celsius Aerotech Inc. in Nashville, Tennessee from Reliance Aerotech Inc. in order to provide full service maintenance and repair services for our regional and corporate aircraft in the United States.

In December 2002, we entered into a joint venture with Harbin Aircraft Industry (Group) Co., Ltd. and Hafai Aviation Industry Co., Ltd., subsidiaries of China Aviation Industry Corp. II, or AVIC II, to provide for the manufacture, sale and after-sale support of the ERJ 145 regional jet family. We own 51% of the equity of the joint venture company, Harbin Embraer Aircraft Industry Company Ltd.

### **Research and Development Costs and Capital Expenditures**

Research and development costs, including the development of the new EMBRAER 170/190 jet family, were US\$69.6 million in 2000, US\$99.6 million in 2001 and US\$158.5 million in 2002. Research and development costs as a percentage of our net sales were 2.5% in 2000, 3.4% in 2001 and 6.3% in 2002. The increases in research and development costs as a percentage of our net sales in 2001 and 2002 reflect principally the costs related to the EMBRAER 170/190 jet family.

Our investments in property, plant and equipment totaled US\$114.2 million in 2000, US\$143.8 million in 2001 and US\$127.7 million in 2002. The investments in 2001 and 2002 related to construction of facilities, improvements to our plant and production facilities and modifications for the production of new aircraft models.

We expect our future research and development costs to increase as a result of the continued development of the EMBRAER 170/190 jet family. In 2003, we expect research and development costs to total approximately US\$167.0 million and we expect investments in property, plant and equipment to total approximately US\$58.0 million, which will primarily be related to improvements to and expansion of our facilities, in particular for the production of the EMBRAER 170/190 jet family, as well as our defense aircraft and corporate jets.

### **4B. Business Overview**

We are one of the leading manufacturers of commercial aircraft in the world, based on 2002 net sales of commercial aircraft, with a global customer base. We focus primarily on manufacturing regional aircraft, which accounted for 83.6% of our net sales in 2002. We are the leading supplier of defense aircraft for the Brazilian Air

Force based on number of aircraft sold, and we have also sold aircraft to military forces in Europe and Latin America. In addition, we have developed a new line of corporate jets based on one of our regional jets. For the year ended December 31, 2002, we generated net sales of US\$2,525.8 million, of which approximately 97.7% was U.S. dollar-denominated. At June 30, 2003, we had a total backlog in orders of US\$10.3 billion, including 450 regional jets.

## **Our Strengths**

We believe that our primary strengths are:

*Leading Regional Jet Manufacturer with a Global Customer Base.* We are a leading manufacturer of regional and mid-capacity jets with a strong global customer base. We have sold our regional jets to 31 customers in 20 countries. Our customers include some of the largest regional airlines in the world.

*Aircraft Design; Cost and Operating Efficiency.* We produce aircraft to provide our customers with reduced operating, maintenance and training costs due to the similarity and efficiency in design and the commonality of parts among jets within a family. These similarities enable us to significantly reduce our design, development and production costs and pass these savings along to our customers in our sales price. These similarities also reduce the development time of our aircraft. The flexibility of our regional jet families also enables us to cost-effectively develop new aircraft to meet specific customer needs and to target new markets.

*Strategic Risk-Sharing Partners.* With our regional and mid-capacity jet families, we developed strategic relationships with key risk-sharing partners. These risk-sharing partners develop and manufacture significant portions of the systems and components of our aircraft and contributed their own funds to research and develop these systems and components, thereby reducing our development costs. These risk-sharing partners also funded a portion of our development costs through direct contributions of cash or materials. We believe that these strategic relationships enable us to lower our development costs and risks, improve our operating efficiency, enhance the quality of our products and reduce the number of our suppliers.

*Benefits of Funded Development of Defense Technology.* Research and development costs related to defense aircraft historically have been funded in large part by the Brazilian government. We are able to apply the technological developments we acquire from our defense technology to applications in our commercial business. For example, we developed our regional jet family based on the AM-X program developed for the Brazilian Air Force. In addition, we sell proven defense products developed for the Brazilian Air Force to other military forces.

*Flexibility of Production to Meet Market Demands.* We believe the flexibility of our production processes and our operating structure, including our risk-sharing partnerships that are designed to minimize fixed costs, allow us to increase or decrease our production in response to market demand without significantly impacting our margins.

*Experienced and Highly Skilled Workforce.* Our employees are experienced and highly skilled. Over 23% of our workforce is comprised of engineers. Due to the high level of knowledge and skill possessed by our employees, we are able to efficiently pursue new programs and provide our customers with additional technical expertise and guidance.

## **Business Strategies**

*Aggressively Market Our Mid-capacity Jet Family.* We are aggressively marketing our mid-capacity platform, the EMBRAER 170/190 jet family. We believe a significant market opportunity exists for the EMBRAER 170/190 jet family with regional airlines that are expanding their fleet, increasing their penetration into higher density markets and adding longer routes, and also with other airlines that are optimizing their fleet in order to adjust capacity to meet demand in less dense routes. Additionally, we believe that our new mid-capacity jet family will provide us with significant opportunities to increase our competitiveness by offering our customers a full range of regional aircraft.

*Develop Our Strategic Alliance with European Aerospace and Defense Group.* We believe our strategic alliance with the European Aerospace and Defense Group will enhance our defense business. We intend to enhance our technological capabilities and increase our production and marketing of innovative defense products. We also intend to increase our international marketing presence for our defense products through joint marketing efforts with members of the European Aerospace and Defense Group.

*Increase Focus on Customer Support.* Providing high quality customer support is critical to our ability to maintain long-term relationships with our customers. As the number of our aircraft in operation continues to grow, we have increased our commitment to providing our customers with an appropriate level of after-sale support, including technical assistance, pilot and maintenance training and spare parts, as demonstrated by our 2002 acquisition of a Nashville, Tennessee aircraft service center. We intend to continue to focus on providing our customers with high quality customer support.

*Expand Risk-Sharing Arrangements.* We intend to maintain or expand the role of risk-sharing partners in the production process for our aircraft in order to reduce production costs and streamline the management of our suppliers. Having fewer suppliers enables us to minimize our production costs while allocating additional risk for the production of integrated systems to our risk-sharing partners.

*Diversify Revenues.* We intend to diversify our revenues through our corporate jet segment and our defense segment.

*Increase Penetration into the Defense Market.* We plan to develop and market additional defense products and thereby increase sales in this segment of our business. We intend to increase our participation in the international defense market by actively marketing our existing products initially developed for the Brazilian Air Force, including the EMB 145 AEW&C, the EMB 145 RS, the EMB 145 MP and the Super Tucano (ALX).

*Cost-Effectively Develop a Line of Corporate Jets.* We have developed the Legacy, a new line of corporate jets based on the ERJ 135 regional jet, to provide to businesses, including fractional ownership companies, a cost-effective alternative to commercial airline travel. In developing the Legacy, we used the same design and risk-sharing arrangements of our ERJ 135 regional jet. As a result, we were able to develop the Legacy without the substantial financial investment normally associated with a new product launch.

*Pursue Strategic Growth Opportunities.* We intend to pursue strategic growth opportunities, which may include joint ventures, acquisitions and other strategic transactions. For example, we intend to expand our presence in China through our joint venture with AVIC II. We believe that the market for regional aircraft in China is strong and currently underserved. We believe this market will create incremental growth for our future revenues.

## **Regional Aircraft Business**

We design, develop and manufacture a range of regional aircraft. Our regional aircraft business is our primary business, accounting for 83.6% of our net sales for the year ended December 31, 2002.

### **Products**

We developed the ERJ 145, a 50-passenger twin turboprop-powered regional jet, introduced in 1996, to address the growing demand among regional airlines for medium-range jet-powered aircraft. After less than two years of development, the ERJ 135, a 37-passenger regional jet based on the ERJ 145, was introduced in July 1999. In addition, we developed the 44-seat ERJ 140 as part of the ERJ 145 regional jet family, which we began delivering in the second half of 2001. We believe that the ERJ 145 regional jet family provides the comfort, range and speed of a jet at costs comparable to turboprop aircraft. We are currently developing our 70-108 seat platform, the EMBRAER 170/190 jet family, to serve the trend in the regional aircraft market toward larger, faster and longer range jets and to further diversify our strength in the jet market. We continue to analyze new aircraft demand in the jet market to determine potentially successful modifications to aircraft we already produce.

***ERJ 145 Regional Jet Family***

The ERJ 145 is a twin turbofan-powered regional jet accommodating up to 50 passengers. This jet was developed in response to the increasing demand from the regional airline industry for an aircraft that offered more speed, comfort and capacity than a turboprop. The ERJ 145 was certified by the Brazilian aviation authority in November 1996, the FAA in December 1996, the European aviation authority in May 1997 and the Australian aviation authority in June 1998. We began delivering the ERJ 145 in December 1996.

The development of the ERJ 145 aircraft was partially based on the EMB 120 Brasília and has approximately 30% commonality in terms of parts and components with that aircraft, including the nose section and cabin. The ERJ 145 has a maximum cruising speed of Mach .78, or 450 knots, and a maximum fully loaded range of 1,060 nautical miles in its standard version. The ERJ 145 is equipped with engines built by Rolls-Royce Allison. These engines are designed to operate 10,000 flight hours between major overhauls and operate at a low fuel cost. In addition, the ERJ 145 is equipped with sophisticated flight instruments, such as engine-indication instruments, crew-alert systems and digital flight control systems, produced by Honeywell.

The ERJ 145 is also available in a long-range, or LR, version, and, in response to customer requests, we have developed an extra-long-range, or XR, version of the aircraft. The ERJ 145 LR features a larger fuel tank, more powerful engines and greater range than the standard version. The ERJ 145 LR, which was certified by the Brazilian aviation authority, the FAA and the European aviation authority in 1998, and by the Chinese aviation authority in November 2000, uses engines that deliver 15% more thrust, allowing the fully loaded aircraft to operate on routes of up to 1,550 nautical miles. The ERJ 145 XR features a new and updated turbofan engine, increased capacity fuel tanks and winglets. The ERJ 145 XR, which was certified by the Brazilian aviation authority in August 2002 and by the FAA in October 2002, offers reduced fuel consumption, a maximum fully loaded range of 2,000 nautical miles and enhanced operational capabilities for hot weather and at high altitudes. Deliveries of the ERJ 145 LR began in February 1998, and deliveries of the ERJ 145 XR began in October 2002.

The ERJ 135 is a 37-seat regional jet based on the same design as the ERJ 145 and is manufactured on the same production line. The ERJ 135 has approximately 96% commonality in terms of parts and components with the ERJ 145, resulting in reduced spare parts requirements and permitting the utilization of the same ground support equipment for customers that use both aircraft. The ERJ 145 regional jet family also allows for standardized pilot certification and maintenance procedures. The ERJ 135 was certified by the Brazilian aviation authority in June 1999, by the FAA in July 1999 and by the European aviation authority in October 1999. Deliveries of the ERJ 135 began in July 1999.

The ERJ 135 has a maximum operating speed of Mach .78, or 450 knots, and a maximum fully loaded range of 1,330 nautical miles in its standard version. The ERJ 135 uses the same engines, sophisticated flight instruments, digital flight control systems and body design as the ERJ 145. The ERJ 135's fuselage is 11.6 feet shorter than the ERJ 145's. The ERJ 135 is also available in a long-range, or LR, version, which features a larger fuel tank, more powerful engines and significantly greater maximum fully loaded range (1,700 nautical miles) than the standard version. The LR version received certification simultaneously with the standard version and began deliveries in August 1999.

We developed the ERJ 140 in response to customer requests. The ERJ 140 is a 44-seat regional jet based on the same design as the ERJ 135 and is manufactured on the same production line as the ERJ 145 and ERJ 135. The ERJ 140 has approximately 96% commonality with the ERJ 145 and ERJ 135, providing our customers with significant maintenance and operational benefits. The ERJ 140 was certified by the Brazilian aviation authority in June 2001 and by the FAA in July 2001. The ERJ 140 has a maximum fully loaded range of 1,230 nautical miles in its standard version. The ERJ 140 is available in a long-range, or LR, version, which features a larger fuel tank, more powerful engines and significantly greater maximum fully loaded range (1,630 nautical miles) than the standard version. We began delivering the ERJ 140 in July 2001.

***EMBRAER 170/190 Jet Family***

The EMBRAER 170/190 jet family provides our customers with a choice of four aircraft in the mid-capacity passenger range. The EMBRAER 170 will be a 70-passenger jet, and the EMBRAER 175 will be a 78-passenger jet, while the EMBRAER 190 series will include the 98-passenger EMBRAER 190 and the 108-passenger EMBRAER 195.

We expect to receive certification of the EMBRAER 170 in 2003, the EMBRAER 175 in 2004, the EMBRAER 190 in 2005 and the EMBRAER 195 in 2006. The EMBRAER 170 made its maiden flight on February 19, 2002 and, as of June 2003, has flown more than 2000 hours as part of its flight test program. We have completed the joint design definition phase and are currently producing the first prototypes of the EMBRAER 175 and EMBRAER 195. The EMBRAER 175 made its maiden flight on June 14, 2003. We are currently in the preliminary development phase of the EMBRAER 190.

We designed the EMBRAER 170/190 jet family to maximize the benefits of commonality, with aircraft in the family sharing approximately 89% of the same components. The high level of commonality in this new jet family lowered our development costs and shortened our development period. We anticipate that this commonality will lead to significant savings to our customers in the form of easier training, less expensive parts and maintenance and lower operational costs. Due to differences in size and weight, the EMBRAER 170/190 jet family will not share the same wing design. This new regional jet family will have engines fixed under its main wings a design intended to enhance power, improve fuel economy and minimize turnaround times. All of the aircraft models will be powered by engines manufactured by General Electric and will contain state-of-the-art avionics manufactured by Honeywell.

The EMBRAER 170/190 jet family's principal features are:

*Performance.* All four jets in the EMBRAER 170/190 jet family will have a maximum cruising speed of Mach .8, or 470 knots. The EMBRAER 170 and the EMBRAER 175 will have maximum fully loaded ranges of 1,800 and 1,600 nautical miles, respectively, and will be available in long-range, or LR, versions, with maximum fully loaded ranges of 2,100 and 1,900 nautical miles, respectively. The EMBRAER 190 and EMBRAER 195 will have maximum fully loaded ranges of 1,800 and 1,400 nautical miles, respectively, and will also be available in LR versions with maximum fully loaded ranges of 2,300 and 1,800 nautical miles, respectively. The LR versions of all four jets in the EMBRAER 170/190 jet family will feature larger fuel tanks and more powerful engines than the standard versions of these aircraft.

*Ground servicing.* The under-wing engine design and the existence of four doors, two in the front and two in the back, provide for enhanced accessibility and efficiency of ground services.

*Cabin and cargo space.* We have enhanced passenger safety and comfort in the EMBRAER 170/190 jet family. The aircraft's double-bubble design will enable a four-abreast cabin, a wide aisle, greater interior space and headroom and a larger baggage floor compartment than the existing mid-capacity jets of our competitors, as well as those mid-capacity jets that are in the development stage.

***EMB 120 Brasília***

The EMB 120 Brasília is a pressurized twin wing-mounted turboprop aircraft that accommodates up to 30 passengers. The EMB 120 Brasília was developed in response to the regional aircraft industry's demand for a high-speed and fuel-efficient 30-seat regional aircraft. The EMB 120 Brasília was certified by the FAA in May 1985 and by the Brazilian aviation authority in July 1985. Since its introduction in 1985 and through December 31, 2002, we have delivered 347 EMB 120 Brasília's for the regional market and five EMB 120 Brasília's for the defense market. We currently manufacture the EMB 120 Brasília only upon customer request.

### ***Customers***

While we have focused our efforts on the U.S. and European markets to date, we have achieved a diverse, global customer base for our aircraft, principally in the regional jet market. Our major customers of regional aircraft include some of the largest regional airlines in the world. As of June 30, 2003, our largest customers are ExpressJet, American Eagle, JetBlue Airways, US Airways, Wexford and SWISS. For a discussion of these significant customer relationships, see Item 3D. Risk Factors Risks Relating to Embraer We depend on a small number of key customers and key suppliers, the loss of any of which could harm our business.

We generally sell our regional aircraft pursuant to contracts with our customers on a fixed-price basis, adjusted by an escalation formula that reflects, in part, inflation in the United States. These contracts generally include an option for our customers to purchase additional aircraft for a fixed option price, subject to adjustment based on the same escalation formula. In addition, our contracts provide for after-sales spare parts and services, as well as warranties of our aircraft and spare parts. Other provisions for specific aircraft performance and design requirements are negotiated with our customers. Finally, some of our contracts contain cancellation provisions, repurchase and trade-in options and financial and residual value guarantees. See Item 3D. Risk Factors Risks Relating to Embraer Our aircraft sales are subject to cancellation provisions, repurchase and trade-in options and financial and residual value guarantees that may reduce our cash flow or require us to make significant cash disbursements in the future for a more detailed discussion of these provisions.

### ***Sales and Marketing***

Our current marketing strategy is based upon our assessment of the worldwide regional airline market and our assessment of the current and future needs of our customers. We actively market our aircraft to regional airlines and regional affiliates of major airlines through our regional offices in the United States, Europe and Asia. Our success depends to a significant extent on our ability to discern our customers' needs, including needs for customer service and product support, and to fill those needs in a timely and efficient manner while maintaining the high quality of our products. Our market and airline analysts focus on the long-term vision of the market, competitive analysis, product enhancement planning and airline analysis. In terms of direct marketing to our customers, we rely heavily on addressing the media, as well as participating in air shows and other cost-effective events that enhance customer awareness and brand recognition. We have regional sales offices in Le Bourget, France; Melbourne, Australia; Ft. Lauderdale, Florida, USA; Beijing, China; and Singapore. We will sell our ERJ 145 regional jet family in the Chinese market exclusively through our joint venture in China.

### ***Production, New Orders and Options***

Prior to starting production or development of a new project, we secure letters of intent representing future orders for a significant number of aircraft. We typically begin taking orders and building backlog two years before we begin producing a new aircraft model, aiming to receive a significant number of orders before we deliver the initial aircraft. Once an order is taken, we reserve a place for that order on the production line, ensuring that we will maintain production sufficient to meet demand. Once a place is reserved on the production line, we are able to give customers delivery dates for their orders.

We include an order in backlog once we have received a firm commitment, represented by a signed contract. Our backlog excludes options and letters of intent for which definitive contracts have not been executed. For the sales of our regional aircraft, we customarily receive a deposit upon signing of the purchase agreement and progress payments in the amount of 5% of the sales price of the aircraft 18 months before scheduled delivery, another 5% twelve months before scheduled delivery and another 5% six months before scheduled delivery. For the EMBRAER 170/190 jet family, we receive an additional 5% progress payment 24 months before scheduled delivery. We typically receive the remaining amount of the sales price upon delivery of the aircraft. The deposits and the progress payments are generally non-refundable if orders are cancelled.

With respect to options to purchase our aircraft, we customarily receive US\$100,000 for each aircraft in the ERJ 145 regional jet family and US\$200,000 for each aircraft in the EMBRAER 170/190 jet family. Our options generally provide our customers the right to purchase an aircraft in the future at a fixed price and on a specified delivery date, subject to escalation provisions, under a purchase contract. Once a customer decides to exercise an

option, we account for it as a firm order. On occasion, we have extended the exercise date for our options and renegotiated the delivery schedule of firm orders. On occasion, we have allowed customers to convert their firm orders or options for one aircraft into firm orders or options for another aircraft within the same regional jet family.

### **Competition**

We generally face competition from major manufacturers in the international regional aircraft market. Each category of our products faces competition of a different nature and generally from different companies. Some of our competitors have greater financial, marketing and other resources than we do. In the 30-60 seat category, the main competitor of the ERJ 135 and the EMB 120 Brasília aircraft is the De Havilland DHC-8-200, a turboprop aircraft. The main competitors of the ERJ 145 regional jet family are:

the CRJ-100/200/440, manufactured by Bombardier;

the 328Jet previously developed and manufactured by Fairchild Dornier and now manufactured to order by Avcraft Aviation LLC;

the ATR-42, manufactured by ATR G.I.E., a joint project of Italy's Alenia Aerospaziale and EADS; and

the DHC-8-300, manufactured by De Havilland.

Only Bombardier's CRJ-100/200/440 are jet aircraft. Fairchild Dornier filed for bankruptcy protection in April 2002, and the 328Jet is currently marketed and manufactured to order by Avcraft Aviation LLC. Given the success of our regional jet family and the significant barriers to entry into the market, due principally to the high development costs of a new model and the extensive and time-consuming development cycle of a new jet, we believe that we are well positioned to increase our market share for the ERJ 145 regional jet family.

In the 61-90 and 91-120 seat categories, we face our strongest competition. Currently, there are three aircraft in the segment, De Havilland's DHC-8-400, a 72-seat turboprop, ATR's ATR72, a 72-seat turboprop, and Bombardier's CRJ-700, a 70-seat regional jet, which was first delivered in January 2001. Bombardier has also launched the larger CRJ-900 aircraft, which seats 85 passengers and began deliveries in January 2003, before the expected delivery of our EMBRAER 175. In the larger end of the category, Boeing has launched the 717-200, a 106-112 seat jet. Furthermore, Airbus developed a 100+ seat jet, the A318, which was certified by the Joint Aviation Authority of Europe, or JAA, in May 2003. The key competitive factors in the markets in which we participate include design and technological strength, aircraft operational costs, price of aircraft, including financing costs, customer service and manufacturing efficiency. We believe that we will be able to compete favorably with our competitors on the basis of our global customer base, aircraft performance, low operating costs, product development experience, market acceptance, cabin design and aircraft price.

### **Defense Business**

We design, develop, integrate and manufacture a wide range of defense products, principally transport, training, light attack and surveillance aircraft. We are the leading supplier of defense aircraft to the Brazilian Air Force based on number of aircraft sold. We also have sold defense aircraft to military forces of 16 other countries in Europe and Latin America, including the United Kingdom, France, Greece and Mexico. At December 31, 2002, we had sold 519 defense aircraft to the Brazilian government and 525 defense aircraft to other military forces. Our defense business accounted for 5.0% of our net sales for the year ended December 31, 2002.

### **Products**

#### ***Tucano Family; AL-X***

The Tucano is a single engine turboprop aircraft used for pilot training and armed reconnaissance missions. Although no longer manufactured, over 650 EMB 312 Tucanos are in operation in 15 air forces worldwide,



including those of Brazil, the United Kingdom, France, Argentina, Egypt, Colombia, Paraguay, Peru and Venezuela. We are developing the Super Tucano, or the AL-X (*Aeronave Leve de Ataque*, or Light Attack Aircraft). The Super Tucano offers an engine with twice the power of the Tucano's standard engine, fighter standard avionics, ejection seats, an on-board oxygen-generating system and enhanced range and external loads capability. We are currently marketing the Super Tucano. The AL-X is being developed under a contract with the Brazilian Air Force, with FINEP providing US\$21.7 million in research and development debt financing, of which US\$4.4 million was outstanding as of December 31, 2002. The AL-X has sophisticated navigation and attack systems, night operations capability and the ability to operate under severe weather conditions. We have received firm orders for 76 of these aircraft and an additional 23 options from the Brazilian Air Force. One prototype of the AL-X has been flying since 1995, and the maiden flight of the first pre-production aircraft occurred in May 1999. We expect first delivery to be made by the end of 2003. These aircraft are expected to be used for advanced pilot training and for defense operations in the Amazon region of Brazil in connection with the Brazilian government's SIVAM (*Sistema de Vigilância da Amazônia*, or System for the Surveillance of the Amazon) program.

***EMB 145 AEW&C; EMB 145 RS; EMB 145 MP***

We have configured a special version of the ERJ 145 with an advanced early warning and control system to create the EMB 145 AEW&C, with ground remote sensing capability to create the EMB 145 RS, and with marine remote sensing capability to create the EMB 145 MP. The EMB 145 AEW&C's advanced phased-array radar and mission system, developed by Ericsson, is capable of conducting surveillance and providing air traffic control in support of aviation authorities. The EMB 145 RS is designed to carry out ground surveillance and environmental protection activities using advanced synthetic aperture radar, capable of providing day/night and all weather images of the ground over large areas, with multi-spectral sensors developed by subcontractors in the United States. The EMB 145 MP is designed to carry out maritime patrol and anti-submarine warfare missions, using maritime and ground surveillance radar, electro-optical sensors, and communications and other surveillance equipment developed by Ericsson and Thales. We, Ericsson and Thales are jointly marketing these aircraft worldwide. At December 31, 2002, the Brazilian government had ordered a total of eight EMB 145 AEW&C/RS aircraft to conduct surveillance and monitor ground activities in the Amazon region, and, as of December 31, 2002, we had delivered four EMB 145 AEW&Cs and one EMB 145 RS. In October 1999, the Greek government, represented by the Hellenic Air Force, ordered four EMB 145 AEW&C aircraft that will be used in the Greek government's aerospace early warning and control system. Under the same contract, the Greek government purchased one ERJ 135 aircraft for special transportation and support needs. In addition, in February 2001, the Mexican government ordered one EMB 145 AEW&C aircraft and two EMB 145 MP aircraft.

***AM-X; AMX-T***

The AM-X is a subsonic ground attack and close air support aircraft developed under an international cooperation agreement with Alenia Un Azienda Finmeccanica S.p.A. and AerMacchi Aeronautica Macchi S.p.A. and sponsored by the Brazilian and Italian governments. Under the agreement, each of the parties is responsible for key systems of the aircraft. The AM-X is assembled in both Brazil and Italy. Each of Embraer and the Italian partners supplies the other with different key components and systems of the aircraft. In addition, each of Embraer and the Italian partners is free to market the aircraft independently and receives 100% of the proceeds of its sales. Approximately 170 AM-X aircraft are currently in operation in the air forces of Brazil and Italy, of which 55 were sold by us.

We have also developed, with the participation of Alenia and AerMacchi, the AMX-T, an enhanced version of the AM-X, currently being offered internationally. The AMX-T program operates under the same principles as the AM-X program, with the exception that Alenia's role is greater than AerMacchi's, which participates only as a subcontractor. In September 1999, we won the bid for a contract for the sale of a number of AMX-Ts to the Venezuelan government.

***Other Projects and Activities***

In December 2000, we were selected by the Brazilian government to perform a structural and electronics upgrade of the Brazilian Air Force's F-5 fighter jets. As the prime contractor, we will integrate multi-mode radar, advanced navigation and attack systems and enhanced self-protection systems into the existing aircraft under a

program known as F-5BR. In March 2002, we formed a consortium with Dassault, Thales and SNECMA to bid on the development and manufacture of up to 24 fighter jets for the Brazilian Air Force. The planned jet, the Mirage 2000 BR, is modeled on the Dassault Mirage 2000-5 supersonic jet. As leaders of the consortium, we would have coordination and management responsibilities in the program. As a result of this consortium and as part of our strategic alliance agreement, Dassault would transfer to us the technology for the Mirage, enabling us to have full control over the project technology as well. In addition, we intend to market our Legacy line of corporate jets to the Brazilian and other governments, modified to meet the added security needs of these customers. For example, we entered into a contract with the Belgian Air Force for two EMB 135s and two EMB 145s modified to transport government officials, of which two EMB 135s and one EMB 145 were delivered in 2001 and one EMB 145 was delivered in 2002.

### **Competition**

Our defense products face competition from various manufacturers, many of which have greater financial, marketing and other resources than we do. The Super Tucano and the AL-X compete with the Pilatus PC-9M and the Raytheon T-6A Texan II. The EMB 145 AEW&C competes against the Northrop-Grumman E-2C II Hawkeye 2000 and the Lockheed-Martin C-130J AEW&C. In addition, Boeing has announced that it will develop the B737 AEW&C aircraft, with advanced warning and remote sensor capabilities, which is expected to enter the market in 2005. The AM-X/AMX-T competes with the British Aerospace Hawk-100, the Aermacchi MB-339FD and the Aero Vodochody L-159.

### **Corporate Jet Business**

We have developed a line of corporate jets, the Legacy, based on our ERJ 135 regional jet. We are marketing the new line of corporate jets to businesses, including fractional ownership companies. Our corporate jet business accounted for 5.7% of our net sales for the year ended December 31, 2002, resulting from the delivery of eight Legacy jets.

We offer our line of corporate jets in two versions: executive and corporate shuttle. The Legacy was designed to provide customers with a cost-effective alternative to commercial regional airline travel. The executive version features a highly customized interior based on the customer's specific requirements. The corporate shuttle version is partially customized and is generally intended to have business class type seating and in-flight office design features. Both versions of our line of corporate jets have a maximum cruising speed of Mach .8, or 470 knots.

We developed our line of corporate jets by building upon our extensive regional jet design and manufacturing experience. For example, with the exception of the interior of the aircraft, the fuel tank, controller and indication system and the winglets, the Legacy has the same components as the ERJ 135 and is capable of being manufactured on the same production line. Furthermore, the corporate shuttle version of the Legacy does not require separate FAA, European aviation authority or Brazilian aviation authority approval. The executive version of the Legacy was certified by the Brazilian aviation authority in December 2001, by the JAA in July 2002 and by the FAA in August 2002. As a new entrant to the corporate jet market, we face significant competition from companies with longer operating histories and established reputations in this industry. Many of these manufacturers have greater financial, marketing and other resources than we do. These competitors include Dassault Aviation, Cessna Aircraft Co., Bombardier Inc., Israel Aircraft Industries, General Dynamics and Raytheon.

We take orders and build backlog for our line of corporate jets in the same manner as for our regional aircraft. We include an order in backlog once we have received a firm commitment, represented by a signed contract. We customarily receive a deposit at the time of order, three 5% progress payments and full payment of the balance due upon delivery, in the same manner as for our regional aircraft. We generally receive US\$100,000 for each option to purchase a corporate jet, with the terms of the options being substantially the same as those for our regional aircraft.

### **Other Related Businesses**

We also provide after-sales customer support services and manufacture and market spare parts for the aircraft we produce. Activities in this segment include the sale of spare parts, maintenance and repair, training and other product support services. In addition, we provide structural parts and mechanical and hydraulic systems to Sikorsky Corporation for its production of helicopters. We also manufacture, on a limited basis and upon customer request, general aviation propeller aircraft, such as executive aircraft and crop dusters. Our other related businesses accounted for 5.7% of our net sales for the year ended December 31, 2002.

We entered into a joint venture with Liebherr International AG to develop and manufacture landing gear and high precision hydraulic equipment and provide related services for Embraer and other clients around the world. In connection with this joint venture, we formed a new subsidiary, ELEB, to which we transferred all of our landing gear manufacturing activities, the employees and some liabilities related to those activities. On May 22, 2000, Liebherr International AG, acting in coordination with its subsidiary, Liebherr Aerospace Lindenberg GmbH, and through its Brazilian affiliate, purchased 40% of the capital stock of ELEB. Liebherr-Aerospace SAS is our risk-sharing partner responsible for designing, developing and manufacturing the landing gear assemblies for the new EMBRAER 170/190 jet family.

#### ***After-Sales Customer Support; Spare Parts Business***

We also provide after-sales customer support services and manufacture and market spare parts for the fleets of our regional and defense customers. Our after-sales customer support and spare parts business falls into several categories:

field support;

material support, which includes spare parts sales and distribution;

warranty and repair administration;

technical support, which includes engineering support, maintenance engineering and technical publications; and

training.

This business is expected to continue to grow as the number of our aircraft in service grows. Our customers require aircraft manufacturers and their suppliers to maintain adequate spare parts and ground support equipment inventories for a period of 10 years after the production of the last aircraft of the same type, or until fewer than five aircraft are operated in scheduled commercial air transport service. We recently established a pooling program that allows customers to exchange used parts for new or refurbished parts. As we deliver the aircraft we have in our backlog, we expect our after-sales support and spare parts business to grow proportionately. See **Customer Service and Product Support** below for a further discussion of our customer service facilities and arrangements.

#### ***Subcontracting***

We provide subcontracting services to Sikorsky Corporation in connection with the development and manufacture of the landing gear, fuel system and fuel tanks for the S-92 Helibus helicopter. We also act as a risk-sharing partner to Sikorsky. The contracts expire in 2015.

#### ***General Aviation Aircraft***

We build general aviation propeller aircraft. These six-passenger aircraft are produced only on demand and are used by corporations as executive aircraft and by air-taxi companies. At December 31, 2002, we had delivered a total of 2,326 of these aircraft. We also developed a crop duster aircraft pursuant to specifications of the Brazilian

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Ministry of Agriculture. These aircraft are produced only on demand. At December 31, 2002, we had delivered a total of 862 of these aircraft.

### Markets

The following table sets forth our net sales by line of business and geographic region of the end users of our aircraft for the periods indicated.

	Year ended December 31,		
	2000	2001	2002
	(in millions of dollars)		
<b>Regional Aircraft:</b>			
Americas (excluding Brazil)	US\$ 1,377.0	US\$ 1,800.7	US\$ 1,772.2
Europe	1,021.1	644.5	290.5
Brazil		18.1	
Other	55.0	89.2	47.6
	US\$ 2,453.1	US\$ 2,552.5	US\$ 2,110.3
<b>Corporate Jets</b>			
Americas (excluding Brazil)	26.5	72.6	86.6
Europe			58.3
	US\$ 26.5	US\$ 72.6	US\$ 144.9
<b>Defense Aircraft</b>			
Americas (excluding Brazil)		US\$ 6.9	US\$ 13.3
Europe	26.8	74.0	73.5
Brazil	72.4	43.1	40.5
	US\$ 99.2	US\$ 124.0	US\$ 127.3
<b>Other Related Business</b>	US\$ 183.4	US\$ 177.9	US\$ 143.3

In addition, in an attempt to expand into new markets, we entered into a joint venture in December 2002 with Harbin Aircraft Industry (Group) Co., Ltd. and Hafai Aviation Industry Co., Ltd., subsidiaries of China Aviation Industry Corp. II, or AVIC II, to provide for the manufacture, sale and after-sale support of the ERJ 145 regional jet family. We own 51% of the equity of the joint venture company, Harbin Embraer Aircraft Industry Company Ltd. We have licensed to the joint venture the exclusive rights to produce, sell and provide support for the ERJ 145 regional jet family in the Chinese markets, and we will contribute US\$12.8 million in cash and tooling to the joint venture in 2003. Our joint venture partners have contributed the land use rights in Harbin, China and will contribute US\$12.7 million in cash and facilities to the joint venture in 2003. First deliveries by the joint venture company are scheduled for December 2003.

### Suppliers and Components; Risk-Sharing Arrangements

We do not manufacture all of the parts and components used in the production of our aircraft. Approximately 84% to 90% of the production costs of our ERJ 145 regional jet family, depending on aircraft model, consist of materials and equipment purchased from our risk-sharing partners and other major suppliers. Risk-sharing arrangements with suppliers of key components enable us to focus on our core business: design and production of regional aircraft. Risk-sharing arrangements are those in which suppliers are responsible for the design, development and manufacture of major components or systems of our aircraft, such as wings, tail or fuselage. Our risk-sharing partners, therefore, must invest their own money in research and development and share the risk and success of our products with us.

In our regional jet business, we rely on risk-sharing partners to supply vital components of our aircraft, such as the engines, hydraulic components, avionics, wings, sections of the fuselage and portions of the tail. Once we select our risk-sharing partners and program development

and aircraft production begins, it is difficult to substitute these partners. In some cases, our aircraft are designed specifically to accommodate a particular component, such as the engines, which cannot be substituted by another manufacturer without significant delay and

expense. This dependence makes us susceptible to the performance, quality and financial condition of these risk-sharing partners.

***ERJ 145 Regional Jet Family***

*Risk-sharing partners.* We entered into risk-sharing arrangements with the following four suppliers in connection with the development and production of the ERJ 145 regional jet family:

Grupo Auxiliar Metalúrgico S.A., or Gamesa, is a Spanish company owned by Iberdrola S.A., a European power utility, and Banco Bilbao Vizcaya, a large Spanish financial institution. Gamesa supplies the wings, engine nacelles and main landing-gear doors;

Sonaca S.A. Société Nationale de Constructions Aérospatiales, a Belgian company, supplies portions of the central and rear fuselages, the service, main and baggage doors and engine pylons;

ENAER Empresa Nacional de Aeronáutica, a Chilean company, supplies the vertical fin, horizontal stabilizers and elevators; and

C&D Aerospace, Inc., a U.S. company, supplies the cabin and cargo compartment interiors.

Our risk-sharing partners generally receive payment for supplied components within three to five months after delivery of the components to Embraer. The partnering relationship with these suppliers results in lower production costs and higher product quality for the ERJ 145 regional jet family. Our line of corporate jets benefits from the risk-sharing arrangements with Gamesa, Sonaca and ENAER. In addition, the interior of the executive version of the Legacy will be provided by The Nordam Group, Inc.

*Other suppliers.* We have also entered into other agreements with numerous European, American, Canadian and Brazilian suppliers to provide key components for a number of our products, including the ERJ 145 regional jet family. These supply arrangements cover systems and components such as engines, avionics, landing gear and flight control systems. Our suppliers include, among other companies, Rolls-Royce Allison, Parker Hannifin Corp., BF Goodrich Co., United Technologies Corp. Hamilton Sundstrand Division, Honeywell, Rosemount Aerospace and Alcoa Inc.

We select suppliers on the basis of, among other factors, technical performance and quality of their products, production capacity, prior relationship and financial condition. We have had continuing relationships with most of our major suppliers since production of the Bandeirante aircraft began in 1975. We have entered into purchase agreements with our major suppliers, which cover our requirements for five to ten years of production. Our ongoing supplier relationships depend on cooperation, performance and the maintenance of competitive pricing.

***EMBRAER 170/190 Jet Family***

We are developing the EMBRAER 170/190 jet family together with risk-sharing partners that will supply key systems for the aircraft. Our supplier arrangements for the EMBRAER 170/190 jet family will differ from the ERJ 145 regional jet family in that we intend to use fewer suppliers. In the EMBRAER 170/190 jet family, each risk-sharing partner will be responsible for the development and production of aircraft systems, such as the landing gear, the hydraulic system and the flight control system, rather than individual components, and fewer components will be supplied by companies that are not risk-sharing partners. The assumption of responsibility for systems by our risk-sharing partners lowers our capital expenditures and thereby decreases our development risks, increases our operating efficiency by reducing the number of suppliers per product and cutting production costs. It also shortens development and production time. The primary risk-sharing partners for the EMBRAER 170/190 jet family are the following:

General Electric supplies CF34-8E/10E turbofan engines and designs, develops and manufactures the engine nacelles;

Honeywell supplies the avionics systems;

Liebherr is responsible for designing, developing and manufacturing the landing gear assemblies;

Kawasaki, a Japanese company, develops and manufactures the aircraft wing stub, engine pylon, fixed landing and trailing edge assemblies, flaps, spoilers and the wing's flight control surfaces;

Hamilton Sundstrand, a U.S. company and a wholly owned subsidiary of United Technologies Corp., develops and produces the aircraft's tail core, auxiliary power unit, electrical systems and the air management system;

Sonaca is responsible for the aircraft's wing slats;

Gamesa is responsible for the rear fuselage and the vertical and horizontal tail surfaces;

Latecoere, a French company, manufactures two of the three fuselage sections;

C&D Aerospace designs, develops and manufactures the aircraft interior; and

Grimes Aerospace Company, a U.S. company and a wholly owned subsidiary of AlliedSignal Inc., develops and manufactures the exterior and cockpit lighting.

If we cancel the development of the EMBRAER 170/190 jet family because we are unable to obtain certification of the aircraft from the applicable regulatory authorities or for other reasons, then we may be obligated to refund up to the full amount of the cash contributions from these suppliers. However, we generally do not need to refund these contributions as a result of insufficient market demand. At the same time, our rights to the cash contributions also depend on satisfactory completion of a number of steps in our production process. We believe that these financial commitments are a strong endorsement of our aircraft design and our ability to execute our business plan.

Furthermore, some of the risk-sharing partners for the EMBRAER 170/190 jet family will assume a broader role in other aspects of the program by providing sales financing and residual guarantees, rather than simply supplying us with aircraft components.

### **Customer Service and Product Support**

Customer satisfaction and service is critical to our success. We will continue to focus on the development of closer, long-term relationships with our customers by meeting their aircraft requirements, providing after-sale support and spare parts and meeting maintenance requirements. We identify at the time of purchase the appropriate level of after-sale regional or on-site customer support and coordinate regional inventory levels to address expected spare parts and maintenance requirements. To maintain and increase our responsiveness, we have established five support centers worldwide. We have also outsourced distribution services through a facility in Weybridge, United Kingdom. We provide technical assistance, support and distribution to our Brazilian and other Latin American customers through our facility in São José dos Campos. In March 2002, we established a distribution Center in Beijing, China together with China Aviation Supplies Import and Export Corporation (CASC). We also intend to provide support services through our joint venture in China for aircraft sold by the joint venture. In March 2002, we acquired the operating assets of Celsius Aerotech Inc. in Nashville, Tennessee from Reliance Aerotech Inc. We provide full service maintenance and repair services for our regional and corporate aircraft at this Nashville service center, enhancing our level of service to our customers in the United States. Through our customer focus, we aim to enhance customer loyalty and, ultimately, increase sales.

We have dedicated teams in the United States, Europe and Brazil to focus exclusively on enhancing customer support. In addition, for each of our key customers, we have assigned senior relationship managers that are responsible for enhancing our relationships with these customers. We also provide direct field support with on-site technical representatives at several of our major customers' facilities. These on-site representatives are assigned

to major customers prior to the first delivery of their aircraft and provide advice on maintenance and operation. They also monitor our customers spare parts needs and maintain customers' inventories.

We provide support centers that are available 24 hours a day, seven days per week, in our São José dos Campos facility as well as in Ft. Lauderdale, Florida, USA; Le Bourget, France; and Melbourne, Australia. We train pilots, co-pilots, flight attendants and mechanics at these locations. We operate advanced flight simulators for our ERJ 145 regional jet family and for the Legacy at our Florida facility under an agreement with FlightSafety International, Inc., a business specializing in flight simulation. We have entered into an agreement with GE Capital Aviation Training Limited, or GECAT, a joint venture between General Electric Company and Thales, whereby GECAT will provide training for the EMBRAER 170/190 jet family on a non-exclusive basis. We also provide field service and on-the-job training for airline personnel. For example, we routinely dispatch one of our pilots to fly with an operator's crew during the introduction of an aircraft into a customer's regular routes. We also provide technical publications with up-to-date technical information on our aircraft. In addition, in 2001 we launched a new website, AEROChain, to provide a web-based platform for the exchange of information with our suppliers and customers. Through AEROChain, suppliers may view supply chain information and customers may make purchases as well as obtain technical services and learn aircraft maintenance, repair and overhaul techniques.

### **Aircraft Financing Arrangements**

We generally do not provide long-term financing directly to our customers. We assist our customers in obtaining financing arrangements through different sources such as leasing arrangements and the BNDES-*exim* program. In addition, we help our customers qualify for the ProEx program. On a case by case basis, we have provided short-term financing, at market rates, to customers who have completed or are negotiating other financing arrangements and have not received funding in time for delivery. We have also provided guarantees for a portion of the financing of aircraft for certain of our customers. See Notes 7, 8 and 37 to our consolidated financial statements.

We assist customers in their aircraft financing through leasing arrangements, principally through leasing companies, U.S. leveraged leases, U.K. tax leases and French tax leases. These arrangements accounted for approximately 64.0% of the firm orders (in terms of value) we had with our customers at December 31, 2002. Leasing arrangements through leasing companies generally involve the purchase by a leasing company of our aircraft under a customer's purchase contract and the lease of that aircraft to that customer. In leveraged leasing transactions, an investor will borrow a portion of the aircraft purchase price from a third party lender, purchase our aircraft and lease it to our customer. See Note 8 to our consolidated financial statements.

The BNDES-*exim* program, a Brazilian government-sponsored program, provides our customers with direct financing for Brazilian exports of goods and services. At December 31, 2002, approximately 48.0% of our backlog (in terms of value) was financed by the BNDES-*exim* program.

Our customers also benefit from the ProEx program, a Brazilian government-sponsored program of interest rate adjustments. Under the ProEx program, which is intended to offset Brazil's country risk, foreign customers that buy selected products made in Brazil, such as our aircraft, receive the benefits of interest rate discounts. A substantial percentage of our customers benefit from the ProEx program.

See Item 3D. Risk Factors Risks Relating to Embraer Any decrease in Brazilian government-sponsored customer financing, or increase in government-sponsored financing that benefits our competitors, may decrease the cost-competitiveness of our aircraft for a discussion of challenges to and pending negotiations regarding the ProEx program.

### **Intellectual Property**

Our intellectual property, which includes designs, trade secrets, know-how and trademarks, is important to our business. We hold trademarks over our name and symbol, and the names of our aircraft, some of which are registered and some of which are in the process of registration in a number of countries, including Brazil, the United States, Canada, Singapore, Hong Kong, China and in the European Union. At December 31, 2002, we had approximately 44 trademarks. Our registered trademarks are generally renewed at the end of their validity period,



which usually runs from 10 years from the date of application for registration. Brazil provides mechanisms to protect trademarks that are similar to the federal registration systems available in the United States.

#### **Government Regulation and Aircraft Certification**

We are subject to regulation by several regulatory agencies, both in Brazil and abroad. These agencies principally regulate certification of aircraft and of manufacturers. We must obtain certification in each jurisdiction in which our aircraft operate commercially. In addition, our products are subject to regulation in Brazil and in each jurisdiction where our customers are located. The competent authority for the certification of our aircraft in Brazil is the *Departamento de Aviação Civil*, or DAC (Civil Aviation Department), through the Brazilian Aviation Register RAB, currently under the supervision of the Ministry of Defense. However, the Brazilian Congress is presently considering a proposed law that aims to replace the DAC with an independent regulatory agency to be named *Agência Nacional de Aviação Civil*, or ANAC (National Civil Aviation Agency), which will then be the competent Brazilian authority for the ruling, supervision and certification of aircraft and commercial aircraft operations. The aviation authorities in other countries include the FAA, the JAA, the European aviation authority and the Chinese aviation authority. Some countries simply validate and complement the Brazilian aviation authority's original certification, following their own rules. The Brazilian aviation authority has entered into a bilateral certification agreement with the FAA under which most of the FAA's certification requirements are included in the Brazilian aviation authority's certification process. This cooperation among regulatory authorities leads to a faster certification process. The ERJ 145 received certification to operate in the United States and Brazil in the last quarter of 1996, in Europe in the second quarter of 1997, in Australia in June 1998 and, for the LR version, in China in November 2000. The ERJ 145 XR version was certified by the Brazilian aviation authority in August 2002 and by the FAA in October 2002. The ERJ 135 was certified by the Brazilian aviation authority in June 1999, by the FAA in July 1999 and by the European aviation authority in October 1999. The ERJ 140 was certified by the Brazilian aviation authority in June 2001 and by the FAA in July 2001. The executive version of the Legacy was certified by the Brazilian aviation authority in December 2001, by the JAA in July 2002 and by the FAA in August 2002.

The EMBRAER 170 is expected to be certified by the Brazilian aviation authority, the FAA and the JAA by the end of 2003. The EMBRAER 175, EMBRAER 190 and EMBRAER 195 will need to be certified by the relevant authority prior to delivery.

The FAA exercises strong influence over other authorities, such as the Brazilian aviation authority and the aviation authority in Canada, and its regulatory approval process is frequently followed by other regulatory bodies, such as the aviation authority in Australia. In Europe, 27 affiliated countries operate under the rules of the JAA. The JAA is not a certification authority itself, but makes recommendations to several national authorities, such as the aviation authorities of Germany, France, the United Kingdom, Spain and The Netherlands. A recommendation by the JAA is a requirement for certification of an aircraft by the aviation authorities of most European countries. Each affiliated country has the right to adopt new rules or complement the JAA's recommendations as it sees fit. A new European aviation authority is expected to be created, to be called the European Aviation Safety Agency EASA, and will replace the JAA. EASA will be the official certification authority for the European Union in the near future. Certification is an ongoing process. Significant changes in the design of an aircraft may require a separate certification. For example, the LR version of the ERJ 145 had to be certified separately by all relevant authorities due to its structural and design changes. However, any change in the aircraft certification rules themselves will not require recertification of an aircraft already certified.

#### **4C. Organizational Structure**

Our operations are conducted by Embraer Empresa Brasileira de Aeronáutica S.A. as the controlling and principal operating company. We have a number of direct and indirect subsidiaries, none of which are considered significant.

**4D. Property, Plants and Equipment**

We own our headquarters and plant, located in São José dos Campos. Significant portions of our facilities in São José dos Campos are subject to mortgages held by BNDES and Banco do Brasil S.A. We lease, own or have the right to use the following properties:

Location	Purpose	Approximate square footage	Owned/Leased	Lease expiration
São José dos Campos, SP, Brazil	Headquarters, principal manufacturing facility and support center	5,902,102	Owned	
São José dos Campos, SP, Brazil (Eugênio de Mello)	Manufacturing facility	3,658,884	Owned	
Botucatu, SP, Brazil	Manufacturing facility	222,000	Owned	
Harbin, China	Manufacturing facility	258,067	Owned*	
Gavião Peixoto, SP, Brazil	Testing and manufacturing facilities	191,648,512	**	
São Paulo, SP, Brazil	Administrative offices	5,245	Leased	2007
Ft. Lauderdale, Florida, U.S.A.	Support center	91,500	Leased	2020
West Palm Beach, Florida, U.S.A.	Engineering offices	16,800	Leased	2005
Dallas, Texas, U.S.A.	Administrative offices	1,600	Leased	2003
Nashville, Tennessee, U.S.A.	Aircraft maintenance and support center	125,260	Leased	2018
Le Bourget, France	Support center	33,500	Leased	2008
Melbourne, Australia	Support center	12,126	Leased	2003
Beijing, China	Representative offices	1,709	Leased	2004
Singapore	Representative offices	2,239	Leased	2004

\* Land owned pursuant to a land use rights certificate.

\*\* We currently have a temporary authorization from the State of São Paulo to use this facility and expect to receive a concession for the use of this facility as soon as legal formalities are satisfied.

**Production**

The actual manufacture of an aircraft consists of three principal stages: fabrication of primary parts, assembly of major components and final assembly. Primary parts include metal sheets and plates (produced from die-cast molds, stretch forming or various chemical treatments), parts produced using computerized and non-computerized machines, and pre-fabricated parts. The primary parts are then joined, or mated, with one another to produce the aircraft's major components, which are in turn joined to create the aircraft's basic structure. In the final assembly stage, the aircraft's various operating systems (such as wiring and electronics) are installed into the structure and tested.

Production facilities for our regional and defense aircraft are located in São José dos Campos in the State of São Paulo, Brazil. We reduced the aircraft production time of our regional jet aircraft from eight months in 1996 to 3.7 months in 2002. From December 31, 1999 to December 31, 2000, we increased our production rate from 12 to 16 aircraft per month. At March 31, 2001, our production rate was 16 aircraft per month. We have since decreased our production to 11 aircraft per month in response to decreased market demand after the September 11th terrorist attacks and the global economic slowdown. We have the flexibility to increase production in the future in response to increased demand. We build the EMB 120 Brasília according to market demand and adjust production accordingly. To accommodate our current production of the ERJ 145 regional jet family and the start of production of the EMBRAER 170/190 jet family, as well as any production of the line of corporate jets, we have expanded our production facilities and acquired new facilities and will continue to coordinate with our risk-sharing partners.

We are constructing a new facility in Gavião Peixoto, in the State of São Paulo, Brazil, which we anticipate will be used to enhance our flight testing capabilities and provide a final assembly line for our defense and corporate aircraft. As of December 31, 2002, we had invested US\$35.6 million in the construction of this new facility. This facility has been operational since November 2002 and consists of a runway and other features to handle our development of supersonic aircraft technology, as well as to handle flight tests for our EMBRAER 170/190 jet family. The runway has been completed, the hangars have been built and we conducted our flight tests for the EMBRAER 170 from this runway. In addition, in September 2000, we purchased a new facility in São José dos Campos in the State of São Paulo, Brazil, where we currently manufacture small parts and components for our aircraft. Our China joint venture is also in the process of building a production facility for the ERJ 145 jet family in Harbin, China.

#### **Environmental Matters**

Most environmental regulation in Brazil is established at the state rather than at the federal or municipal level, with environmental authorities, in most states, granting operating permits to individual facilities rather than through general regulations. We have all material permits required to operate our business. The terms of these operating permits are reviewed every year and we are in compliance with our permits. In addition, we adhere internally to international ISO 14000 environmental standards. In 2000, 2001 and 2002, we invested US\$0.6 million, US\$1.1 million and US\$1.0 million, respectively, in environmental matters and we anticipate spending approximately US\$1.2 million on environmental matters in 2003 for expenditures relating to the portion of construction of new facilities and modification of existing facilities relating to environmental compliance and improvements.

#### **Insurance**

We insure all of our plants and equipment for loss and replacement. We also carry insurance to cover all potential damages to our own fleet of aircraft, including those occurring during commercial and demonstration flights. In addition, we maintain a comprehensive aviation products liability policy, which covers damages arising out of the manufacture, distribution, sale and servicing of our aircraft and parts. We have been increasing our coverage for aviation products liability as our fleet has grown. We also carry natural disaster and business interruption insurance covering property damage and the related loss of gross income, as defined in the policy, and additional expenses, such as those incurred by us to offset the loss of production and delivery of aircraft due to partial or total interruption of our business because of material losses caused by an accident. We consider the amounts of our insurance coverage to be typical for a company of our size and adequate to meet all foreseeable risks associated with our operations.

## ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

This discussion should be read in conjunction with our consolidated financial statements and notes thereto and other financial information included elsewhere in this annual report. This annual report contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those discussed in the forward-looking statements as a result of various factors, including, without limitation, those set forth in Item 3D, Risk Factors and the matters set forth in this annual report generally.

Except as otherwise indicated, all financial information in this annual report has been prepared in accordance with U.S. GAAP and presented in U.S. dollars. For certain purposes, such as providing reports to our Brazilian shareholders, filing financial statements with the Comissão de Valores Mobiliários, or CVM, the Brazilian securities commission, and determining dividend payments and other distributions and tax liabilities in Brazil, we have prepared and will continue to be required to prepare financial statements in accordance with the Brazilian Corporate Law.

### 5A. Operating Results

#### Critical Accounting Policies

In connection with the preparation of the financial statements included in this annual report, we have relied on variables and assumptions derived from historical experience and various other factors that we deemed reasonable and relevant. Although we review these estimates and assumptions in the ordinary course of business, the portrayal of our financial condition and results of operation often requires our management to make judgments regarding the effects of matters that are inherently uncertain. Actual results may differ from those estimated under different variables, assumptions or conditions. Note 3 to our consolidated financial statements includes a summary of the significant accounting policies and methods used in the preparation of these financial statements. In order to provide an understanding about how management forms its judgments about future events, including the variables and assumptions underlying the estimates, and the sensitivity of those judgments to different variables and conditions, we have included below a brief discussion of our more significant accounting policies.

#### *Sales and Other Operating Revenues*

We generally recognize sales of our regional and commercial aircraft as deliveries are made. In our defense aircraft segment, we perform work under long-term development contracts for the Brazilian government and other governments, and we recognize revenue in accordance with the percentage of completion method. Revenue recognized under this method is based on our estimate of our progress towards completion. Certain contracts contain provisions for the redetermination of price based upon future economic conditions. Anticipated losses, if any, under these contracts are accrued when known and are recorded based on management's estimate of such losses.

#### *Product Warranties*

Generally, aircraft sales are accompanied by a standard warranty for systems, accessories, equipment, parts and software manufactured by us. We recognize warranty expense, as a component of selling expenses, at the time of sale based on the estimated amounts of warranty costs expected to be incurred, which are typically expressed as a percentage of the sales price of the aircraft. These estimates are based on a number of factors including our historical warranty claim and cost experience, the type and duration of the warranty coverage, volume and mix of aircraft sold and in service and warranty coverage available from the related suppliers. The warranty period ranges from two years for spare parts to five years for components that are a part of the aircraft when sold.

We have provided guarantees of specified minimum levels of aircraft performance based on pre-determined operational targets. Costs resulting from a failure to meet these targets cannot be established until after delivery of the aircraft. In the event that these target levels are not met, we may be obligated to pay amounts to the affected customers as reimbursement for their incremental operating or service costs. Losses related to such performance guarantees are recorded at the time they are known, or when circumstances indicate that the aircraft is not expected to meet the minimum performance requirements, based on management's estimate of our ultimate obligation under

the guarantee. In some cases, we may also be obligated to make modifications after aircraft delivery due to improvement or performance of aircraft. The costs related to these modifications are accrued when known.

#### ***Guarantees, Repurchase Commitments and Trade-Ins***

We have provided sales incentives in the form of financial and residual value guarantees, repurchase commitments and trade-in rights related to our aircraft. We review the value of these commitments relative to the aircraft's anticipated future fair value and, in the case of financial guarantees, the creditworthiness of the obligor. Provisions and losses are recorded when and if payments become probable and are estimable. We estimate future fair value using third party appraisals of aircraft valuations, including information developed from the sale or lease of similar aircraft in the secondary market. We evaluate the creditworthiness of obligors for which we have provided credit guarantees by analyzing a number of factors, including third party credit ratings and estimated obligors' borrowing costs.

#### ***Credit Risk***

Credit risk is the risk that we may incur losses if counterparties to our contracts do not pay amounts owed to us. Our primary credit risk derives from the sales of aircraft, parts and related services to our customers, including the financial obligations related to these sales.

We grant credit to our customers for the sale of spare parts and services based upon an evaluation of the customers' financial condition and credit history. Customer credit analyses are continuously monitored and we establish an allowance for doubtful accounts based upon factors that include the credit risk of specific customers and historical aging, collection and write-off trends. Our historical experience in collecting accounts receivable falls within the recorded allowances.

We may also have credit risk related to the sale of aircraft while our customers are finalizing the financing structures for their purchases from us. To minimize these risks, customer credit analyses are continuously monitored and we work closely with the financial institutions to help facilitate customer financing.

We have recognized an allowance for doubtful accounts, which we believe is sufficient to cover potential losses on the realization of accounts receivable.

#### ***Property, Plant and Equipment***

Property, plant and equipment are stated on our balance sheet at cost. Depreciation is calculated using the straight line method over the estimated useful life or utility of the assets. Improvements to existing property that significantly extend useful life or utility are capitalized. We review long-lived assets for impairment annually or whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by comparison of the carrying amount of the asset to our estimate of undiscounted future net cash flows expected to be generated by the asset. If we conclude that an asset is impaired, we recognize the impairment as the amount by which the carrying amount of the asset exceeds its fair value. We report assets to be disposed of at the lower of the carrying amount or fair value less cost to sell.

#### ***Provisions for Contingencies***

We are subject to contingencies for labor, tax, commercial and civil litigation in the ordinary course of our business. We record losses for these contingencies when we determine that the loss is probable and can be reasonably estimated. Our assessment of the probability and amount of loss is based on a number of factors, including legal advice and our management's estimate of the likely outcome.

#### ***Recent Trends in the Airline Industry***

The commercial aviation industry has been negatively impacted by a number of factors beginning in 2001. First, the U.S. and world economies have been experiencing an economic downturn that began in 2001 and is characterized by rapid declines in securities markets, a decline in productivity and an increase in unemployment. Second, the terrorist attacks of September 11th caused an immediate decline in airline travel and a high level of financial uncertainty among the worldwide airline industry. Many airlines faced, and continue to face, a reduction in demand, escalating insurance costs, increased security costs, increasing fuel costs and, in some cases, credit downgrades, liquidity concerns and bankruptcy. Finally, airline travel decreased significantly in 2003 as a result of both the commencement of military action by the United States and other countries in Iraq and the concerns over outbreaks of severe acute respiratory syndrome (SARS) in Asia and Canada. In response to these events, beginning in the fourth quarter of 2001 many airlines, including our largest customers, reduced their flight schedules for the long-term and announced significant lay-offs. As a result, we agreed to modify certain delivery schedules to adjust to the changes in our customers' businesses and have reduced scheduled regional, corporate jet and government transportation aircraft deliveries in 2002 to 131 aircraft

as compared to planned 2002 deliveries of 205 at August 31,

2001 and reduced 2003 scheduled deliveries to 110 aircraft from planned 2003 deliveries of 148 as of December 31, 2002. In addition, the economic downturn has caused us to revise our risk metrics related to our financial guarantees and re-evaluate our exposure. A further downturn in general economic conditions could result in further reduction in the passenger aircraft market, decreased orders for our regional aircraft, increased exposure to financial guarantees and additional charges against income. We cannot, at this time, predict the magnitude or duration of the impact that these events will have on the airline industry as a whole and on our business in particular.

In addition, the above events and the ensuing negative effects on the U.S. economy have adversely affected the global and Brazilian economies and securities markets, and have resulted in:

increased volatility in the market price of securities;

significant decline in corporate earnings estimates;

substantial losses in important industries, including the air transport and insurance industries; and

significant erosion of consumer confidence.

The uncertainty surrounding U.S., Brazilian and global economies could in turn lead to the Brazilian government changing existing laws or regulations or imposing new ones, and/or the Central Bank changing base interest rates, which could adversely affect our operations.

### **Brazilian Economic Environment**

The Brazilian economy has been characterized by frequent and occasionally drastic intervention by the Brazilian government and by volatile economic cycles. The Brazilian government has often changed monetary, taxation, credit, tariff and other policies to influence the course of Brazil's economy. For example, the Brazilian government has the authority, when a serious imbalance in Brazil's balance of payments occurs, to impose restrictions on the remittance to foreign investors of the proceeds of their investments in Brazil and on the conversion of Brazilian currency into foreign currencies. Furthermore, Brazilian courts may issue rulings that could adversely affect foreign investors or Brazilian political and economic conditions. In late September 1999, a court in the State of Minas Gerais ruled that the representatives on the board of directors of the minority foreign private partners of Companhia Energética de Minas Gerais, a privatized electric utility in that state, could no longer have veto power over corporate actions. In late October 2000, Brazil's Federal Supreme Court ruled that employee accounts in the Brazilian unemployment compensation fund for the months of January 1989 and April 1990 should have been adjusted using the real inflation rate in those months rather than the official inflation rate previously used. The Brazilian government has reached an agreement with the labor unions on this matter and is currently making settlement payments, which may have an adverse effect on Brazil's federal budget and, therefore, amounts available to us or our customers under Brazilian government financing programs. Changes in monetary, taxation, credit, tariff and other policies could adversely affect our business, as could inflation, currency and interest rate fluctuations, social instability and other political, economic or diplomatic developments, as well as the Brazilian government's response to such developments. See Item 3D. Risk Factors Risks Relating to Brazil.

Rapid changes in Brazilian political and economic conditions that have occurred and may occur in the future will require continued emphasis on assessing the risks associated with our activities and adjusting our business and operating strategy accordingly. Future developments in Brazilian government policies, including changes in the current policy and incentives adopted for financing the export of Brazilian goods, or in the Brazilian economy, over which we have no control, may materially adversely affect our business. See Item 3D. Risk Factors Risks Relating to Brazil.

Brazilian economic conditions may also be negatively affected by economic and political conditions elsewhere, particularly in other South American and emerging market countries. Although economic conditions are different in each country, the reaction of investors in one country, may cause the capital markets in other countries to fluctuate. Developments or conditions on other emerging market countries have at times significantly affected the

availability of credit in the Brazilian economy and resulted in considerable outflows of funds and declines in the amount of foreign currency invested in Brazil.

For example, since 1999, the Argentine economy has been in a recession marked by reduced levels of consumption and investment, increasing unemployment and declining gross domestic product. During late 2001, Argentine depositors withdrew their money from banks and sought to remit such funds abroad. In early December 2001, the government restricted the rights of such depositors to withdraw their funds. The economic crisis gave rise to increasing political instability and eventually led to the announcement by Argentina that it would impose a moratorium on the payment of its foreign debt. On January 3, 2002, Argentina formally defaulted on debt held by certain foreign creditors. On January 7, 2002, Argentina announced that it was devaluing its peso by 29%, ending the peso's decade-old one-to-one peg with the U.S. dollar. In 2002, the Argentine peso experienced a devaluation of over 200% against the U.S. dollar. The situation in Argentina has negatively affected investors' perceptions of risks in Brazil.

The recent political crisis in Venezuela may also influence investors' perception of risk in Brazil. The continuation of the Venezuelan and Argentine crises presents causes for concern relating to Brazil's economic stability. Although market concerns that similar crises would ensue in Brazil have not yet become a reality, the volatility in market prices for Brazilian securities increased in 2001 and 2002. Instability in the Brazilian financial markets caused by the Argentine and Venezuelan crises and other developments in the international financial markets may adversely affect our financial condition and, specifically, our ability to raise capital when needed and the market price of the preferred shares and ADSs.

The Brazilian government has also proposed a broad tax reform in Brazil, mainly designed to reduce the public deficit through the increase in tax collection. It is expected that the final tax reform bill will be submitted to the Brazilian Congress during 2003. It is anticipated that the reform will include the creation of a value-added tax on goods and services that would replace six existing taxes (including contribution for social purposes, the federal tax on industrial products and the state tax on circulation of goods and services). In addition, the *Contribuição Provisória sobre Movimentação Financeira-CPMF*, a provisional levy on checking account transactions, would be replaced by a permanent federal tax on financial transfers. We may have a higher tax burden if the tax reform bill is approved and implemented.

#### Effects of Inflation and Currency Exchange Fluctuations

Until July 1994, Brazil had for many years experienced high, and generally unpredictable, rates of inflation and steady devaluation of its currency relative to the U.S. dollar. The following table sets forth, for the periods shown, Brazilian inflation as measured by the General Market Index and published annually by Fundação Getúlio Vargas and the devaluation of the *real* against the U.S. dollar as measured by comparing the daily exchange rates published by the Central Bank on the last day of each year:

	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Inflation (General Market Price Index)	1.8%	20.1%	9.9%	10.4%	25.3%
Devaluation (appreciation) (R\$ vs. US\$)	8.3%	48.0%	9.3%	18.7%	52.3%

Inflation and exchange rate variations have had, and may continue to have, substantial effects on our financial condition and results of operations.

Inflation and exchange rate variations affect our monetary assets and liabilities denominated in *reais*. The value of such assets and liabilities as expressed in U.S. dollars declines when the *real* devalues against the U.S. dollar and increases when the *real* appreciates. In addition, many financial instruments denominated in *reais* are indexed for inflation. In periods of devaluation of the *real*, we report (a) a remeasurement loss on *real*-denominated monetary assets, which is offset, at least in part, by monetary indexation of *real*-denominated financial instruments and (b) a remeasurement gain on *real*-denominated monetary liabilities, which is offset, at least in part, by the monetary indexation of *real*-denominated financial instruments.



Finally, because revenues in our defense business have historically been denominated principally in *reais*, while our costs for materials for this segment have been principally denominated in U.S. dollars, devaluation of the *real* has adversely affected margins in our defense business. However, at the anniversary date of each contract we are able, under our defense contracts with the Brazilian government, to adjust prospectively our prices (in *reais*) upward to reflect the adverse effects of devaluation. As our defense business becomes more international and our defense sales more U.S. dollar-denominated, we expect that our defense business will be less exposed to devaluation of the *real*.

## Overview

### Basis of Presentation

The consolidated financial statements have been prepared in accordance with U.S. GAAP. See Introduction Presentation of Financial and Other Data Financial Data for a discussion of factors affecting our financial data.

### Operating Data

The following chart sets forth statistical data concerning our deliveries and backlog for our aircraft at the end of the respective periods. Deliveries consist of aircraft that have been delivered to customers and for which the corresponding revenue has been recognized. Our backlog consists of all firm orders that have not yet been delivered. A firm order is a contractual commitment from a customer, customarily accompanied by a down payment, for which we have reserved a place on one of our production lines. See Item 5D. Trend Information for certain information on our firm orders and options.

	At December 31,		
	2000	2001	2002
<b>Regional</b>			
Deliveries			
ERJ 145	112	104	82
ERJ 135	45	27	3
ERJ 140		22	36
EMB 120 Brasília		2	
<b>Defense</b>			
Deliveries	2	3	7
<b>Corporate</b>			
Deliveries	2	5	8
<b>Other Operating Information</b>			
Total backlog (in millions)(1)	US\$11,421	US\$10,693	US\$9,034

(1) Subsequent to December 31, 2002, we received 126 net additional firm orders for our EMBRAER 170/190 jet family.

### Net Sales

We generate revenue primarily from the sale of regional aircraft, which historically consists of our ERJ 145 regional jet family and our EMB 120 Brasília. We also generate revenue from the sale of defense aircraft, including the EMB 312 Tucano, the AM-X, and the EMB 145 AEW&C/RS/MP surveillance aircraft, and from the sale of our Legacy corporate jets. Net sales of regional aircraft and corporate aircraft are denominated in U.S. dollars. Of defense net sales, sales to the Brazilian government accounted for 31.8% in 2002. Finally, we generate revenue from our other related businesses, which include after-sales support (including the sale of spare parts, maintenance and repair, training and other product support services) and single-source supply of structural parts and mechanical and hydraulic systems to other aircraft manufacturers.

We recognize revenue for the sale of our regional and corporate aircraft when the aircraft is delivered to the customer. We customarily receive a deposit upon signing of the purchase agreement for the sale of our regional and corporate aircraft and progress payments in the amount of 5% of the sales price of the aircraft 18 months, 12 months and six months before scheduled delivery. For the EMBRAER 170/190 jet family, we receive an additional 5%

progress payment 24 months before scheduled delivery. We typically receive the remaining amount of the sales price upon delivery. Payments in advance of delivery are recorded under customer advances as a liability on our balance sheet and, when we deliver the aircraft, these payments are recorded as net sales.

As a result of a decrease in the amounts available under the ProEx program in 1999, we assisted some of our affected customers in restructuring their financing arrangements. In cases where we were not able to restructure these arrangements, we provided special price adjustments to these customers to maintain the effective interest rates in their original financing arrangements. Upon delivery of an aircraft to these customers, we record these price adjustments as deductions from gross sales on our income statement and under accounts payable on our balance sheet. These deductions amounted to 2.4% of our net sales in 2000, 1.3% of our net sales in 2001, and 1.0% of our net sales in 2002.

Our sales contracts with our customers typically include adjustments to the purchase price of the aircraft based on an escalation formula which reflects, in part, inflation in the United States. With respect to options to purchase our aircraft, we generally receive US\$100,000 for each aircraft in the ERJ 145 regional jet family and for each Legacy, US\$200,000 for each aircraft in the EMBRAER 170/190 jet family and US\$50,000 for each EMB 120 Brasília. The deposits, progress payments and option payments are generally non-refundable. Once a customer decides to exercise an option, we account for it as a firm order. We record each option payment as a customer advance on our balance sheet. If an option is exercised, we begin to receive progress payments and recognize revenue upon delivery as discussed above.

We recognize revenue from the sale of our defense aircraft, including the funding of the research and development for specific programs, in accordance with the percentage of completion method. Certain contracts contain provisions for the redetermination of price based upon future economic conditions. Our defense customers continue to provide customer advances, which are converted into revenue as we achieve pre-determined stages of completion of the project, such as conception, development and design, and engineering, systems integration and customization. These installments are generally non-refundable.

#### *Cost of Sales and Services*

Our cost of sales and services consists primarily of:

*Material* These costs are primarily U.S. dollar-denominated. Substantially all of our materials costs are covered by contracts with our suppliers. Prices under these contracts are generally adjusted based on an escalation formula which reflects, in part, inflation in the United States.

*Labor* These costs are primarily *real*-denominated.

*Depreciation* We depreciate our property, plant and equipment over their useful lives, ranging from five to 48 years, on a straight line basis.

**Results of Operations**

The following table presents income statement data by business segment.

**Summary Financial Data by Business**

	<b>Operating income</b>		
	<b>Year ended December 31,</b>		
	<b>2000</b>	<b>2001</b>	<b>2002</b>
	(in millions of dollars)		
Net sales:			
Regional	US\$2,453.1	US\$2,552.5	US\$2,110.3
Defense	99.2	124.0	127.3
Corporate	26.5	72.6	144.9
Other related businesses	183.4	177.9	143.3
	<u>2,762.2</u>	<u>2,927.0</u>	<u>2,525.8</u>
Cost of sales and services:			
Regional	(1,692.3)	(1,536.8)	(1,243.9)
Defense	(84.0)	(105.2)	(79.5)
Corporate	(18.8)	(47.0)	(104.6)
Other related businesses	(84.2)	(80.2)	(103.7)
	<u>(1,879.3)</u>	<u>(1,769.2)</u>	<u>(1,531.7)</u>
Gross profit:			
Regional	760.8	1,015.7	866.4
Defense	15.2	18.8	47.8
Corporate	7.7	25.6	40.3
Other related businesses	99.2	97.7	39.6
	<u>882.9</u>	<u>1,157.8</u>	<u>994.1</u>
Operating expenses:			
Regional	(122.6)	(161.9)	(177.5)
Defense	(14.9)	(20.9)	(15.7)
Corporate	(3.7)	(9.3)	(28.4)
Other related businesses	(52.5)	(61.0)	(30.8)
Unallocated corporate expenses	(227.1)	(253.3)	(272.1)
	<u>(420.8)</u>	<u>(506.4)</u>	<u>(524.5)</u>
Income from operations	<u>US\$462.1</u>	<u>US\$651.4</u>	<u>US\$469.6</u>

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The following table sets forth income statement information, and such information as a percentage of our net sales, for the periods indicated.

Year ended December 31,

	2000		2001		2002	
	(in millions of dollars, except percentages)					
Net sales	US\$2,762.2	100.0%	US\$2,927.0	100.0%	US\$2,525.8	100.0%
Cost of sales and services	(1,879.3)	68.0	(1,769.2)	60.4	(1,531.7)	60.6
Gross profit	882.9	32.0	1,157.8	39.6	994.1	39.4
Operating expense						
Selling expenses	(193.4)	7.0	(212.1)	7.2	(211.0)	8.4
Research and development	(69.6)	2.5	(99.6)	3.4	(158.5)	6.3
General and administrative	(96.6)	3.5	(120.8)	4.1	(109.7)	4.3
Employee profit sharing	(41.8)	1.5	(43.7)	1.5	(25.2)	1.0
Stock compensation	(0.5)		(1.1)			
Other operating expenses, net	(19.6)	0.7	(29.5)	1.0	(20.5)	0.8
Equity on income (loss) from affiliates	0.8		0.3		0.4	
Income from operations	462.1	16.7	651.4	22.3	469.6	18.6
Non-operating income (expense)						
Interest income (expenses)	(6.9)	0.2	47.5	1.6	80.5	3.2
Financial transaction gain (loss), net	(24.6)	0.9	(148.6)	5.1	(135.6)	5.4
Other non-operating income (expenses), Net	6.0	0.2	(8.4)	0.3	(1.4)	0.1
Income before income taxes	436.6	15.8	541.8	18.5	413.0	16.4
Provision for income taxes	(117.4)	4.3	(218.4)	7.5	(188.5)	7.5
Income before minority interest	319.2	11.6	323.4	11.0	224.5	8.9
Minority interest	1.5	0.1	(0.4)		(1.9)	0.1
Income before cumulative effect of accounting change	320.7	11.6	323.0	11.0	222.6	8.8
Cumulative effect of accounting change, net of tax			5.4	0.2		
Net income	US\$320.7	11.6%	US\$328.4	11.2%	US\$222.6	8.8%

**2002 Compared with 2001**

*Net sales.* Net sales decreased 13.7% from US\$2,927.0 million in 2001 to US\$2,525.8 million in 2002. Regional net sales decreased 17.3% from US\$2,552.5 million in 2001 to US\$2,110.3 million in 2002. Defense net sales increased 2.7% from US\$124.0 million in 2001 to US\$127.3 million in 2002. Corporate net sales increased 99.6% from US\$72.6 million in 2001 to US\$144.9 million in 2002. Net sales from other related businesses decreased 19.5% from US\$177.9 million in 2001 to US\$143.3 million in 2002.

The decrease in regional sales is primarily due to the rescheduling of customer deliveries from 2002 to 2003 and thereafter, partially offset by a better product mix and a higher average unit price. The increase in corporate net sales resulted from the start of deliveries of the Legacy at the end of 2001. The decrease in net sales from other related businesses is mainly due to a decrease in sales of spare parts, despite an increase in aircraft in service, due to the economic downturn and our customers' cost cutting measures.



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*Cost of sales and services.* Cost of sales and services decreased 13.4% from US\$1,769.2 million in 2001 to US\$1,531.7 million in 2002, principally due to the reduction in number of aircraft delivered during 2002. Cost of sales and services as a percentage of net sales was relatively stable at 60.6% in 2002, in comparison to 60.4% in 2001.

*Gross profit.* Our gross profit decreased 14.1% from US\$1,157.8 million in 2001 to US\$994.1 million in 2002, primarily as a result of the reduction in deliveries in the regional market. As a result of the decline in cost of sales and services, our gross margin remained relatively stable at 39.6% in 2001 compared to 39.4% in 2002.

*Operating expenses.* Operating expenses increased 3.6% from US\$506.4 million in 2001 to US\$524.5 million in 2002. This increase was attributable primarily to an increase of 37.2% in research and development from US\$99.6 million in 2001 to US\$158.5 million in 2002, principally related to higher development costs for the EMBRAER 170/190 and the new versions of our other regional and corporate jets as we approach the later stages of development. Research and development is presented net of contributions from suppliers, which are earned based on meeting specified milestones. In 2002, selling expenses remained relatively stable, despite lower deliveries, due to both a non-cash charge of US\$14.5 million related to financial guarantees and a US\$11.6 million increase in our provision for warranties relating to extended warranty terms for new aircraft deliveries. The US\$14.5 million non-cash charge was caused by the effect of the economic downturn in the airline industry on our risk analysis of financial guarantees.

This increase in operating expenses was partially offset by a 9.2% decrease in general and administrative expenses, from US\$120.8 million in 2001 to US\$109.7 million in 2002, a 42.3% decrease in profit sharing, from US\$43.7 million in 2001 to US\$25.2 million in 2002 and a 30.4% reduction in other operating expenses, net, from US\$29.5 million in 2001 to US\$20.5 million in 2002.

The decrease in general and administrative expenses is primarily due to the effects on the *real*-denominated portion of this item resulting from the 52.3% devaluation of the *real* during 2002. The decrease in profit sharing is related to the reduction in net income and dividends. Operating expenses as a percentage of net sales increased from 17.3% in 2001 to 20.8% in 2002, primarily as a result of the increases in research and development expenses as well as the non-cash charge for guarantees and the increase in our provision for warranties.

*Interest income (expense).* Interest income increased from US\$47.5 million in 2001 to US\$80.5 million in 2002, despite lower average cash balances primarily due to an increase of US\$65.3 million in unearned gains on derivative financial transactions and an increase in net monetary and exchange variations due to the effects of the devaluation of the *real* on increased indexed net liabilities in foreign currency, primarily taxes and social charges in dispute. See Notes 18 and 22 to our consolidated financial statements.

*Financial transaction gain (loss), net.* Financial transaction loss, net decreased from US\$148.6 million in 2001 to US\$135.6 million in 2002. These amounts reflect the restatement of non-U.S. dollar-denominated assets and liabilities into U.S. dollars and the decrease in net assets denominated in *reals*, partially offset by a higher rate of devaluation of the *reals* in 2002.

*Other non-operating income (expense), net.* Other non-operating expense, net decreased from US\$8.4 million in 2001 to US\$1.4 million in 2002. The decrease in 2002 was primarily due to a decrease in provisions for losses on tax incentive investments from US\$8.6 million in 2001 to US\$0.7 million in 2002.

*Provision for income taxes.* Our provision for income taxes decreased from US\$218.4 million in 2001 to US\$188.5 million in 2002 mainly due to lower taxable profits under the Brazilian Corporate Law financial statements. Our effective tax rate in 2002 was 45.6% as compared to 40.3% in 2001. Our statutory tax rate in each year was 34%. The difference between the statutory rate and the effective rates is due to differences in income before income taxes under U.S. GAAP and the taxable income calculated under the Brazilian Corporate Law.

*Net income.* As a result of the foregoing factors, our net income decreased 32.2% from US\$328.4 million in 2001 to US\$222.6 million in 2002. Net income decreased as a percentage of net sales. In 2001, net income was 11.2% of net sales as compared to 8.8% in 2002.

**2001 Compared with 2000**

*Net sales.* Net sales increased 6.0% from US\$2,762.2 million in 2000 to US\$2,927.0 million in 2001. Regional net sales increased 4.1% from US\$2,453.1 million in 2000 to US\$2,552.5 million in 2001. Defense net sales increased 25.0% from US\$99.2 million in 2000 to US\$124.0 million in 2001. In 2000, we entered the corporate jet market, which we account for as a separate business segment. Corporate net sales increased 174.0% from US\$26.5 million in 2000 to US\$72.6 million in 2001. Net sales from other related businesses decreased 3.0% from US\$183.4 million in 2000 to US\$177.9 million in 2001.

The increase in regional sales is primarily due to an increase in our average unit price. The decrease in defense sales is primarily due to the decrease in revenues related to research and development of the EMB 145 AEW&C/RS and the AL-X offset by the revenue resulting from deliveries of two EMB 135s and one EMB 145 to the Belgian Government.

*Cost of sales and services.* Cost of sales and services decreased 5.9% from US\$1,879.3 million in 2000 to US\$1,769.2 million in 2001, principally due to decreased material costs resulting partially from contractual discounts and a better product mix in 2001 and partially from write-offs of inventories in 2000. Cost of sales and services as a percentage of net sales decreased from 68.0% in 2000 to 60.4% in 2001.

*Gross profit.* Our gross profit increased 31.1% from US\$882.9 million in 2000 to US\$1,157.8 million in 2001. As a result, our gross margin increased from 32.0% in 2000 to 39.6% in 2001, primarily as a result of the reduction in cost of sales.

*Operating expenses.* Operating expenses increased 20.4% from US\$420.8 million in 2000 to US\$506.4 million in 2001. This increase was attributable primarily to an increase of 43.1% in research and development from US\$69.6 million in 2000 to US\$99.6 million in 2001, a 9.6% increase in selling expenses from US\$193.4 million in 2000 to US\$212.1 million in 2001, a 25.0% increase in general and administrative expenses from US\$96.6 million in 2000 to US\$120.8 million in 2001 and a 51.0% increase in other operating expenses, net from US\$19.5 million in 2000 to US\$29.5 million in 2001.

The increase in research and development is principally related to development of the new EMBRAER 170/190 jet family. The increase in selling expenses was directly attributable to the marketing campaign for the EMBRAER 170/190 jet family. In addition, we incurred expenses related to our expansion into new markets such as Asia and China. The increase in administrative expenses was partially due to the increase in technology expenses relating to the implementation of an enterprise resource planning system and to the hiring of new administrative personnel in order to accommodate the increased production schedule expected at that time. As a result of the September 11th terrorist attacks, some of our customers rescheduled deliveries. Although we implemented certain cost containment programs, including a reduction of workforce, these reductions were not fully implemented at the time that deliveries were rescheduled.

The increase in other operating expenses, net is primarily due to US\$7.9 million in engineering training and professional development expenses and a non-recurring expense of US\$4.5 million in restructuring costs in 2001 related to headcount reduction.

Operating expenses as a percentage of net sales increased from 15.3% in 2000 to 17.3% in 2001, primarily as a result of the increases in research and development expenses as well as selling, general and administrative expenses.

*Interest income (expense).* Interest income increased from interest expenses of US\$6.9 million in 2000 to interest income of US\$47.5 million in 2001, primarily due to a significant increase in our average cash and cash equivalent balances in the first three quarters of 2001.

*Financial transaction gain (loss), net.* Financial transaction loss, net increased from US\$24.6 million in 2000 to US\$148.6 million in 2001. These amounts reflect the restatement of non-U.S. dollar-denominated assets and liabilities into U.S. dollars. The increase from 2000 to 2001 is due to the increase in the rate of devaluation of *reais* against the U.S. dollar over net assets denominated in *reais*.

*Other non-operating income (expense), net.* Other non-operating income (expense), net decreased from an income of US\$6.0 million in 2000 to an expense of US\$8.4 million in 2001. The decrease in 2001 was primarily due to a gain of US\$12.9 million recognized in 2000 resulting from the sale of shares of our subsidiary ELEB-Embraer Liebherr Equipamentos do Brasil S.A. to Liebherr International AG.

*Provision for income taxes.* Our provision for income taxes increased from US\$117.4 million in 2000 to US\$218.4 million in 2001 mainly due to our higher taxable profits under the Brazilian Corporate Law financial statements as well as the fact that in 2000 our provision for income taxes was reduced by US\$27.5 million related to an adjustment of valuation allowance for deferred tax assets. Our effective tax rate in 2001 was 40.3% as compared to 26.9% in 2000, as compared to a statutory tax rate in each year of 34%. The difference between the statutory rate and the effective rates is due to differences in income before income taxes under U.S. GAAP and the taxable income calculated under the Brazilian Corporate Law.

In 2001, we recorded a gain of US\$5.4 million related to our implementation of FASB 133 in January 2001. As a result, we recognized a gain related to the adjustment of the value of certain of our derivative instruments to fair value. Losses related to these instruments were recognized prior to our adoption of FASB 133.

*Net income.* As a result of the foregoing factors, our net income increased 2.4% from US\$320.7 million in 2000 to US\$328.4 million in 2001. Net income remained relatively stable as a percentage of net sales. In 2000, net income was 11.6% of net sales as compared to 11.2% in 2001.

## **5B. Liquidity and Capital Resources**

Our liquidity needs arise principally from research and development, capital expenditures, principal and interest payments on our debt, working capital requirements and distributions to shareholders. We generally rely on funds provided by operations, borrowings under our credit arrangements, cash contributions from risk-sharing partners, advance payments from customers and, to a lesser extent, capital increases to meet these needs. We believe that these sources of funds will be sufficient to fund our future liquidity needs, develop the EMBRAER 170/190 jet family, make other planned capital expenditures and pay dividends. However, our customers may reschedule deliveries, fail to exercise options or cancel firm orders as a result of the economic downturn and the financial volatility in the airline industry. In addition, our risk-sharing partners' cash contributions are refundable under certain limited circumstances and we may need to find replacement sources of capital.

### **Working Capital and Net Cash Provided by Operating Activities**

We had a working capital surplus of US\$877.5 million at December 31, 2001 and US\$871.2 million at December 31, 2002. Working capital remained relatively flat. We had decreased inventories of US\$150.3 million as a result of the reduced production of the ERJ 145 regional jet family, partially offset by increased inventories for the EMBRAER 170/190 jet family. Offsetting this decrease was a US\$139.1 million increase in accounts receivable due primarily to our continuing to deliver aircraft to customers that had not yet finalized their financing arrangements. As of December 31, 2002, 68% of our short-term trade accounts receivable related to financing that had been approved by BNDES at that time and for which disbursements were pending and 23% of which related to financing that was being negotiated and finalized.

We generated net cash provided by operating activities of US\$507.7 million in 2002, as compared to net cash used in operating activities of US\$263.2 million in 2001 and net cash provided by operating activities of US\$1,120.0 million in 2000. Net cash provided by operating activities increased in 2002 despite the decrease in our income from operations principally due to decreases in inventories in 2002 and a significant increase in trade accounts receivable in 2001 following September 11th. Cash contributions from suppliers increased US\$91.8 million due to the increase in the aggregate development costs for EMBRAER 170/190 during the later stages of development. At December 31, 2002, advances from customers totaled US\$504.9 million, 81.1% of which represented current liabilities.



### **Cash Provided by (Used in) Financing Activities and Total Debt**

Our net cash provided by (used in) financing activities decreased from net cash provided by financing activities of US\$98.4 million in 2001 to net cash used in financing activities of US\$399.4 million in 2002. The decrease was primarily due to reduced borrowings. Our net cash provided by (used in) financing activities increased from net cash used in financing activities of US\$130.4 million in 2000 to net cash provided in financing activities of US\$98.4 million in 2001.

We significantly extended the maturity profile of our debt in 2002. At December 31, 2002, we had total debt of US\$552.6 million under our financing arrangements described below, 55.8% of which consisted of long-term debt and 44.2% of which consisted of short-term debt. In comparison, we had total debt of US\$771.7 million at December 31, 2001 and US\$456.0 million at December 31, 2000, consisting of 31.8% and 20.0% of long-term debt. Our total debt decreased from 2001 to 2002 largely due to a reduced level of new borrowings.

Total debt consists of amounts recorded as loans on our balance sheet and excludes non-recourse debt associated with customer financing arrangements transacted through special purposes entities, or SPEs. In structured financings, an SPE purchases aircraft from us, pays us the full purchase price on delivery or at the conclusion of the sales financing structure, and leases the related aircraft to the ultimate customer. A third-party financial institution facilitates the financing of an aircraft purchase through an SPE, and a portion of the credit risk and the management responsibility associated with the SPE remain with that third party. Under U.S. GAAP, leasing transactions made through an SPE must be consolidated if the equity contribution of independent third parties is less than 3% of the fair value of the SPE's assets, as discussed in EITF 90-15. Some of the SPEs through which we sell aircraft were formed without any equity contribution and, therefore, are consolidated. We also have a temporary variable interest in other leasing transactions that are pending receipt of equity contributions and therefore, under FAS 144 adopted in 2002, are required to be consolidated.

The effect of consolidating these SPEs resulted in non-recourse debt at December 31, 2002, reflected as a separate line item on our balance sheets, of US\$941.9 million and collateralized accounts receivable of the same amount. We have no actual obligation for US\$803.5 million of this debt other than potentially under existing financial guarantees. The remaining US\$138.4 million of debt is recourse to us as a result of our guarantees of the temporary debt financing that is in place while equity contributions are pending. The non-recourse debt is collateralized by the collateralized accounts receivable and by the financed aircraft. These financing transactions do not materially affect our income statement and cash flow data since the terms of the leases and the loans are substantially the same. See Note 8 to our consolidated financial statements.

During 2002, British Airways returned to an SPE two ERJ 145s with a total outstanding amount of underlying debt of US\$22 million, which has been consolidated by us. These aircraft serve as collateral for the non-recourse debt and we have begun remarketing them. Until they are remarketed, we are making interest payments on the underlying debt under our financial guarantee obligations.

FASB Interpretation No. 46, issued in January 2003, will require us to re-evaluate our consolidation of all SPEs. See Recent Accounting Standards below for a further discussion of FASB Interpretation No. 46. See our discussion of these items in Notes 4, 8 and 37 to our consolidated financial statements.

### ***Credit Facilities and Lines of Credit***

#### ***Long-term facilities***

We maintain credit facilities with BNDES primarily to fund development costs of the ERJ 145, of which US\$47.9 million was outstanding at December 31, 2002, and with FINEP primarily to fund development costs of the AL-X, of which US\$5.4 million was outstanding at December 31, 2002. Amounts borrowed from BNDES are secured by first, second and third mortgages on our properties in Brazil. The interest rates on these facilities are either fixed at 5.5% per annum or range from TJLP plus 3.0% to TJLP plus 5.5% per annum plus, for BNDES borrowings, we paid fees at the rate of 0.35% of the sales price of 420 ERJ 145s sold between January 1, 1997 and August 1, 2002.

We have a credit facility with the Tokyo Branch of The Chase Manhattan Bank under which we borrowed the Japanese yen equivalent of US\$150.0 million, principally to fund our purchase of aircraft component parts, of which US\$125.1 million remains outstanding. The interest rate under this facility is equal to the twelve-month Japanese interbank deposit rate, or JIBOR, plus 1.1% per annum. On September 20, 2002, we secured a US\$100.0 million credit facility with Mitsui & Co., Ltd. and borrowed the full amount available thereunder. This loan matures in 2009 and bears interest at an interest rate of LIBOR plus 2.2%. The facility is guaranteed by Unibanco União de Bancos Brasileiros SA. If we fail to maintain a minimum of 100 firm orders during the duration of the facility or fail to obtain certification of the EMBRAER 170 prior to December 2003, Mitsui & Co. Ltd has the right to declare all amounts outstanding under this facility due and payable. We also have US\$100.0 million credit facility with Santander Central Hispano Benelux S.A. to fund our purchases of wings and other equipment from Gamesa. As of December 31, 2002, US\$14.0 million was outstanding under this facility and we have additional availability of US\$86.0 million through December 2003. Amounts outstanding under this facility bear interest at a fixed rate of 4.49% per annum. We recently signed a credit agreement with Sumitomo Mitsui Banking Corp. and other lenders providing for a term loan of US\$200.0 million, at a rate of LIBOR plus 2.97% per annum, to purchase materials for the manufacture of the EMBRAER 170/190 jet family. We expect to borrow the full amount under this facility in early July and have entered into a swap transaction effectively converting the total debt to *real*-denominated CDI-based obligations.

We have various other loans and credit agreements with aggregate outstanding borrowings of US\$113.1 million at December 31, 2002. Each of our long-term financing arrangements includes customary covenants and restrictions, including those that require us to maintain defined debt liquidity and interest expense coverage ratios, with which we were in compliance at December 31, 2002 and none of which are expected to have a material effect on our business. See Note 20 to our consolidated financial statements for further information on these financing arrangements.

#### ***Short-term facilities***

We obtain short-term financing primarily from Brazilian banks in the form of advances against exchange contracts that we enter into with those banks relating to payments we are entitled to receive within a period of not more than 360 days prior to delivery of aircraft. At December 31, 2002, we had US\$80.3 million outstanding under these arrangements.

In addition, we maintain short-term import financing lines of credit in Brazil. As of December 31, 2002, US\$32.8 million was outstanding under these lines of credit. We maintain subsidiary lines of credit from time to time to finance working capital requirements for these subsidiaries. At December 31, 2002, we had US\$33.1 million of outstanding debt under these lines of credit. See Note 20 to our consolidated financial statements for further information on our short-term financing arrangements.

#### **Net Cash Used in Investing Activities**

Our net cash used in investing activities was US\$200.8 million in 2002, compared to US\$275.2 million in 2001 and US\$104.4 million in 2000. The decrease in 2002 was mainly due a higher level of escrow deposits and compulsory loans made in 2001, primarily deposits collateralizing financing guarantees for certain aircraft sold, which increased US\$98.7 million in 2001 as compared to a US\$36.5 million increase in 2002.

#### **Capital Expenditures**

We recorded additions to property, plant and equipment of US\$127.8 million in 2002, US\$143.8 million in 2001 and US\$114.2 million in 2000. These expenditures related to construction of facilities, improvements to our plant and production facilities and modifications for the production of new aircraft models.

We expect our future capital expenditures to decrease in 2003 as we finalize construction and modifications of our facilities. We expect investments in property, plant and equipment to total approximately US\$58 million in 2003 and an additional US\$44 million in 2004, primarily related to the production of the EMBRAER 170/190 jet family, as well as our defense aircraft and corporate jets.

### Capital Contributions and Issuances of Capital Stock

During 2002, we received capital contributions in the aggregate amount of US\$1.2 million, representing the issuance of preferred shares upon the exercise of options. During 2002, we issued 2,261,313 preferred shares at a weighted average exercise price of R\$1.75 per share. In addition, in June 2003, 360,000 preferred shares were issued upon the exercise of options at an exercise price of R\$1.25 per share.

### Contractual Obligations and Commercial Commitments

The following table and discussion provide additional disclosure regarding our material contractual obligations and commercial commitments as of December 31, 2002.

Contractual Obligations	Total	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Loans	US\$541.2	US\$242.3	US\$173.0	US\$80.4	US\$45.5
Capital lease obligations	12.8	7.9	4.5	0.4	
Operating leases	11.4	2.2	3.4	1.1	4.7
Purchase obligations	327.7	327.7			
Other long-term liabilities	1,232.0	96.5	353.9	208.5	573.1
Total	US\$2,125.1	US\$676.6	US\$534.8	US\$290.4	US\$623.3

The above table does not reflect contractual commitments related to repurchase and trade-in options and financial and residual value guarantees discussed in Off-Balance Sheet Arrangements below. See Item 3D. Risk Factors Our aircraft sales are subject to cancellation provisions, repurchase and trade-in options and financial and residual value guarantees that may reduce our cash flow or require us to make significant cash disbursements in the future.

Purchase obligations consist of accounts payable to suppliers and insurance payables.

Other long-term liabilities include non-recourse debt in the total amount of US\$873.0 million that relates to obligations of SPEs. The above table does not reflect any information about our derivative instruments, which are discussed more fully in Item 11. Quantitative and Qualitative Disclosures About Market Risk.

### Off-Balance Sheet Arrangements

We participate in a number of off-balance sheet arrangements, principally relating to repurchase and trade-in obligations, guarantees and variable interests in unconsolidated SPEs. We also have a number of swap transactions that are described in Item 11. Quantitative and Qualitative Disclosures about Market Risk.

#### *Repurchase and Trade-in Obligations*

We may have to repurchase a number of our aircraft. Under the relevant purchase contracts, the price per aircraft of any required repurchase is less than the original purchase price of the aircraft and less than our estimate at that time of the market value of the relevant aircraft type in future years (based on third party appraisals of aircraft valuations). If we are required to repurchase all of the relevant aircraft under our repurchase obligation, which covers the period from 2003 to 2007, we could be required to pay up to approximately US\$500 million for these aircraft. Based on our current estimates and third party appraisals, we believe that any repurchased aircraft could be sold without any material gain or loss.

At December 31, 2002, 34 of our regional jets were subject to trade-in options and additional aircraft may become subject to trade-in options upon delivery. These options provide that the trade-in price can be applied to the price of an upgraded model or any of our other aircraft. The trade-in price is determined in the manner discussed above for regional jets and as a percentage of original purchase price for our corporate jets. We may be required to

accept trade-ins at trade-in prices that are above the then-market price of the aircraft, which would result in financial loss for us when we resell the aircraft. Based on our current estimates and third party appraisals, we believe that any aircraft accepted for trade-in could be sold without any material gain or loss.

#### ***Financial and Residual Value Guarantees***

We have guaranteed the financial performance of a portion of the financing for, and the residual value of, some of our aircraft that have already been delivered. Financial guarantees are provided to financing parties to support a portion of the payment obligations of purchasers of our aircraft under their financing arrangements to mitigate default-related losses. These guarantees are collateralized by the financed aircraft.

Assuming all customers supported by financial guarantees defaulted on their aircraft financing arrangements, we were required to pay the full aggregate amount of outstanding residual value guarantees and we were not able to sell or lease any of the aircraft to offset our obligations, our maximum exposure under these guarantees (less provisions and liabilities) would have been US\$1.4 billion as of December 31, 2002. We have deposited US\$187.4 million in escrow accounts to secure a portion of our financial guarantees. Based on current estimates, we believe that the proceeds from the sale or lease of the covered aircraft (based on resale value as of December 31, 2002) and from other offsetting collections would exceed our exposure by US\$326 million.

Our residual value guarantees typically ensure that in the 15th year after delivery, the relevant aircraft will have a residual market value of 10% to 27% of the original sale price. In the event of a decrease in the market value of the underlying aircraft, we will bear the difference between the then market value of the aircraft and the guaranteed residual value. Our exposure is mitigated by the fact that the guaranteed party, in order to benefit from the guarantee, must make the aircraft meet specific return conditions.

#### ***Variable Interests in Unconsolidated Entities***

We are currently assessing the application of FIN 46 as it relates to our variable interests in unconsolidated SPEs. As discussed above, some of our sales transactions are structured financings through which an SPE purchases the aircraft, pays us the full purchase price and leases the related aircraft to the ultimate customer. Our variable interests in these SPEs typically include financial guarantees in favor of the third party financial institution or equity investors. Our exposure related to unconsolidated SPEs is included in the above amounts. Upon effectiveness of FIN 46, discussed below, we may consolidate additional SPE financing transactions which would result in additional non-recourse debt and collateralized accounts receivable on our balance sheet.

We continually re-evaluate our risk under our guarantees and repurchase and trade-in obligations based on a number of factors, including the estimated future market value of our aircraft based on third party appraisals, including information developed from the sale or lease of similar aircraft in the secondary market, and the credit rating of customers. See Note 37 to our consolidated financial statements for a further discussion of these off-balance sheet arrangements.

#### **Recent Accounting Pronouncements**

In June 2001, the Financial Accounting Standards Board, or FASB, issued Statement of Financial Accounting Standards, or SFAS, No. 143, Accounting for Asset Retirement Obligations, which is effective as of January 1, 2003. SFAS No. 143 addresses financial and reporting for obligations associated with the retirement of tangible long-lived assets and the associated retirement costs. We have determined that the implementation of this standard will not have a material effect on our consolidated financial statements.

In July 2002, the FASB issued SFAS No. 146, Accounting for Costs Associated with Exit or Disposal Activities. This standard requires costs associated with exit or disposal activities to be recognized when they are incurred. The requirements of SFAS No. 146 apply prospectively to activities that are initiated after December 31, 2002, and, consequently, we cannot reasonably estimate the impact of adopting these new rules until and unless we undertake the relevant activities in the future.

In November 2002, the FASB issued Interpretation No. 45, or FIN 45, Guarantors Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of the Indebtedness of Others, which clarifies the requirements of SFAS No. 5, Accounting for Contingencies, relating to a guarantors accounting for

and disclosure of certain guarantees issued. FIN 45 requires enhanced disclosures for certain guarantees. It will also require certain guarantees that are issued or modified after December 31, 2002, including certain third-party guarantees, to be initially recorded on the balance sheet at fair value. For guarantees issued before December 31, 2002, liabilities are recorded when and if payments become probable and estimable. We expect FIN 45 to have the general effect of delaying recognition of a certain portion of the revenue for product sales that are accompanied by certain third-party guarantees. The financial statement recognition provisions are effective prospectively, and we cannot reasonably estimate the impact of adopting FIN 45 until guarantees are issued or modified in future periods, at which time their results will be initially reported in our financial statements. See Note 37 to our consolidated financial statements for more information on our guarantees.

In January 2003, the FASB issued Interpretation No. 46, or FIN 46, Consolidation of Variable Interest Entities, which clarifies the application of Accounting Research Bulletin No. 51, Consolidated Financial Statements, relating to the consolidation of certain entities. First, FIN 46 will require identification of our participation in variable interest entities, or VIE, which are defined as entities with a level of invested equity that is not sufficient to fund future activities to permit them to operate on a stand-alone basis, or whose equity holders lack certain characteristics of a controlling financial interest. For entities identified as VIE, FIN 46 sets forth a model to evaluate potential consolidation based on an assessment of which party to the VIE, if any, bears a majority of the exposure to its expected losses, or stands to gain from a majority of its expected returns. FIN 46 also sets forth certain disclosures regarding interests in VIE that are deemed significant, even if consolidation is not required. We are currently assessing the application of FIN 46 as it relates to our variable interests. See Note 37 to our consolidated financial statements.

### **5C. Research and Development**

We incur research and development costs related to our aircraft and aircraft components. We also incur research and development costs that are not associated with the development of any particular aircraft. Such costs include the implementation of quality assurance initiatives, production line productivity improvements and studies to determine the latest developments in technology and quality standards. The research and development costs incurred by Embraer are divided into two categories, research and development expense and additions to fixed assets. The research and development expense is the cost actually associated with the design and development of the aircraft less amounts earned from cash contribution from risk-sharing partners based on meeting performance milestones. Under U.S. GAAP, these costs are expensed in the year in which they are incurred. Additions to fixed assets relate solely to specialized equipment built by us and required for the project. These costs are treated as additions to property, plant and equipment.

We invest significantly in the development of new projects. Total research and development expenses for 2000, 2001 and 2002 were US\$69.6 million, US\$99.6 million and US\$158.5 million, respectively, net of cash contributions provided by risk-sharing partners. We estimate that our research and development costs for 2003 will be approximately US\$167.0 million. We do not record an expense for research and development of defense programs as they are funded by the Brazilian government and other government customers. Most of our research and development expenses are associated with a particular program, whether regional, corporate or defense.

We receive additional funds from risk-sharing partners to fund our cash costs for our commercial research and development. In addition, the Brazilian and other governments fund substantially all of our defense research and development costs under long-term development contracts.

**5D. Trend Information**

The following table summarizes our regional aircraft sales order book at June 30, 2003. Our total backlog at that date, including corporate jets and defense aircraft, was US\$10.3 billion.

	<u>Firm Orders</u>	<u>Options</u>	<u>Deliveries</u>	<u>Firm Order Backlog</u>
In the Regional Market				
EMB 120 Brasília	352		352	
ERJ 145	581	434	502	79
ERJ 135	121	6	100	21
ERJ 140	174	45	68	106
EMBRAER 170	119	157		119
EMBRAER 190	110	120		110
EMBRAER 195	15	32		15

For additional information regarding trends in our business, see Item 4B. Business Overview Business Strategies and Item 5A. Operating Results. For risks affecting our business, see Item 3D. Risk Factors.

**ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES****6A. Directors and Senior Management**

We are managed by our *Conselho de Administração*, or board of directors, composed of at least nine and at most eighteen members, and our *Diretoria*, or committee of officers, composed of at least four members (each an executive officer). We have a permanent *Conselho Fiscal*, or audit board, which is composed of five members.

**Board of Directors**

Our board of directors ordinarily meets four times a year and extraordinarily when called by the chairman or by the majority of members of the board. It has responsibility, among other things, for establishing our general business policies and for electing our executive officers and supervising their management.

Our bylaws provide that the Chief Executive Officer of Embraer is automatically a member of the board of directors. As a result, Maurício Novis Botelho, currently President and Chief Executive Officer of Embraer, is a member of the board of directors. Our controlling shareholders, Cia. Bozano, PREVI and SISTEL, have entered into a shareholders' agreement which provides that when they appoint members of our board of directors at shareholders' meetings, they will each appoint two representatives (and alternates), and together they will vote to elect two representatives (and alternates) of the European Aerospace and Defense Group and one representative (and alternate) of the Brazilian government. This representative of the Brazilian government is in addition to the representative that the Brazilian government is entitled to appoint directly. See Item 7A. Major Shareholders' Voting Rights Shareholders' Agreement for more information on the shareholders' agreement. In addition, our bylaws provide that our employees are entitled to two representatives (and alternates) on our board of directors, who are elected at the annual shareholders' meeting.

All members of the board of directors serve three-year terms. The terms of all current members expire in April 2004. Set forth below are the names, ages, positions and brief biographical descriptions of the members of the board of directors at June 16, 2003.

Name	Age	Position	Year First Elected
Carlyle Wilson	74	Chairman of the Board of Directors	2000
Nélio Henriques Lima	51	Deputy-Chairman of the Board of Directors	2001
Maurício Novis Botelho	60	President and Chief Executive Officer	2000
Vitor Sarquis Hallack	50	Member of the Board of Directors	1995
Juarez Martinho Quadros do Nascimento	59	Member of the Board of Directors	1998
Fernando Antônio Pimentel de Melo	49	Member of the Board of Directors	2000
Luiz Felipe P. Lampreia	61	Member of the Board of Directors	2001
Reginaldo dos Santos	61	Member of the Board of Directors	2001
Paulo Cesar de Souza Lucas	43	Member of the Board of Directors	1999
Mario Hipólito Silva	38	Member of the Board of Directors	2001
Dietrich Russell	61	Member of the Board of Directors	2000
Isaac Marcel Picciotto	59	Member of the Board of Directors	2003
Henrique Pizzolato	50	Member of the Board of Directors	2003

*Carlyle Wilson.* Mr. Wilson has been with the Bozano group since 1972. Mr. Wilson is an executive director of Cia. Bozano and a board member of Bozano Holdings Ltd. Since 1992, Mr. Wilson has been a board member of Berneck Aglomerados, a wood fiber-board manufacturing company. In addition, since 1980, Mr. Wilson has been a board member of Bozano, Simonsen Centros Comerciais S.A., a shopping center administration company, and since 1986 has been a board member of GD Empreendimentos Imobiliários S.A., a real estate company. From January 1995 to January 2000, Mr. Wilson was an alternate board member of Embraer. Mr. Wilson is a representative of Cia. Bozano, and his business address is Rua Visconde de Ouro Preto, 5, 10th floor, 22250-180 Rio de Janeiro, RJ, Brazil.

*Nélio Henriques Lima.* Mr. Lima has worked for Banco do Brasil and PREVI since 1974, having held several positions. Since January 1999, he has been the Executive Superintendent of PREVI. From January 1995 to January 1997, he was the operations manager of PREVI, and from January 1997 to January 1999, he was the executive manager of PREVI. Mr. Lima was a member of the audit committee of La Fonte Participações S.A., a holding company, and Seguradora Brasileira de Crédito a Exportação S.A., an insurance company, and a member of the board of directors of Organização Social Bioamazônia, a biotechnology company, from January 1999 to December 1999. He was also a member of the board of directors of Tele Norte Leste Participações S.A., a telecommunications company, from September 2000 to April 2001. Mr. Lima is a representative of PREVI, and his business address is Praia de Botafogo, 501, 4th floor, 22250-040 Rio de Janeiro, RJ, Brazil.

*Maurício Novis Botelho.* Mr. Botelho has been President and Chief Executive Officer of Embraer since September 1995, as well as an executive officer and/or chairman of the board of several of Embraer's subsidiaries. Mr. Botelho served as chief executive officer of OTL Odebrecht Automação & Telecomunicações Ltda., also known as OTL and later named Stelar Telecom, a telecommunications company, from 1988 to 1995. He also served as chief executive officer of CMW Equipamentos S.A., or CMW, an industrial automation company, from 1985 to 1995. He was also the chief executive officer of STL - Engenharia de Sistemas Ltda., also known as STL, a project engineering company, from 1985 to 1995, a partner in Soluções Integradas PROLAN Ltda., also known as PROLAN, a corporate network company, from 1994 to 1995, and executive vice-president of TENENGE Técnica Nacional de Engenharia Ltda., or TENENGE, a construction company, during 1992. During 1995, Mr. Botelho was an executive officer of Cia. Bozano. Mr. Botelho's business address is the address of our principal executive offices.

*Vitor Sarquis Hallack.* Mr. Hallack has been with the Bozano group since 1993. He is an executive director of Cia. Bozano and a board member and an executive director of Bozano Holdings Ltd. He was an executive officer of Banco Bozano Simonsen S.A. from April 1998 to May 2000. Mr. Hallack was the chief financial officer of Companhia Siderúrgica Paulista COSIPA from September 1993 to December 1994. Prior to 1993, Mr. Hallack was the chief financial officer of Companhia Vale do Rio Doce, a mining company. Mr. Hallack

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is a representative of Cia. Bozano, and his business address is Rua Visconde de Ouro Preto, 5, 10th floor, 22250-180 Rio de Janeiro, RJ, Brazil.

*Juarez Martinho Quadros do Nascimento.* Mr. Nascimento was the Minister of Communications of the Brazilian government from April 2002 to December 2002. From 1997 to April 2002, he was the executive secretary of the Communications Ministry of the Brazilian government and the chairman of the board of directors of Telecomunicações Brasileiras S.A. – Telebrás, a telecommunications company, also known as Telebrás. Mr. Nascimento was the secretary of inspection and concession of the Communications Ministry from 1995 to 1997. From 1990 to 1995, he was an officer of Telebrás, ending his tenure there during 1995 as the assistant to the deputy chief executive officer and the public services department officer. Mr. Nascimento is a representative of SISTEL, and his business address is SCN Quadra 01, Suite 308, 70711-000, Brasília, DF, Brazil.

*Fernando Antônio Pimentel de Melo.* Mr. Melo has been the Officer of Social Security of SISTEL since 1991 and the Superintendent Officer of SISTEL since 1999. He has also been a member of the board of directors of Companhia de Aços Especiais Itabira – Acesita, a steel company, and of Telesp Participações S/A since December 1999, Amerigel S.A. since April 1999, and Telet S.A. since April 2000, all telecommunications companies. Mr. Melo was also the vice-president of SINDAPP – Sindicato Nacional das Entidades de Previdência Privada, having been elected in December 1998 for the term of three years. He is a representative of SISTEL, and his business address is SEP Sul 702/902, Conj. B, Bloco A, Ed. Gal. Alencastro, 4th floor, 70390-025 Brasília, DF, Brazil.

*Luiz Felipe P. Lampreia.* Mr. Lampreia was the Foreign Relations Minister of the Brazilian government from January 1995 to January 2001. Mr. Lampreia has held several positions in the Brazilian government, both in Brazil and abroad, since 1963. From 1992 to 1993, he was the Secretary General of Foreign Relations of the Brazilian government. From 1993 to 1994, Mr. Lampreia was Brazil’s ambassador to various international organizations located in Geneva, and participated in the creation of the WTO. Mr. Lampreia is a representative of the Brazilian government and was appointed by our controlling shareholders. His business address is Av. Ataulfo de Paiva, 341, Suite 605, 22440-030 Rio de Janeiro, RJ, Brazil.

*Reginaldo dos Santos.* Mr. Santos has been a Lieutenant-Brigadier in the Brazilian Air Force since March 2000 and is currently the General Director of the Department of Research and Development of the Brazilian Air Force. Mr. Santos has held various positions in the Brazilian armed forces since 1958, when he began his military career. Mr. Santos is a representative of the Brazilian government and was appointed by our controlling shareholders. His business address is Air Force Command, Department of Research and Development, Esplanada dos Ministérios, Bloco M, 3rd floor, 70045-900 Brasília, DF, Brazil.

*Paulo Cesar de Souza Lucas.* Mr. Lucas has participated in our strategic planning division since 1998 and was the coordinator of Embraer’s implementation of the modernization and cost-reduction strategy from 1990 to 1996. Mr. Lucas has been working at Embraer for more than 16 years and is a representative of our employees. Mr. Lucas’s business address is the address of our principal executive offices.

*Mario Hipólito Silva.* Mr. Silva has been an employee in our production line since 1996 and a union representative for our metallurgical employees since 1997. He is a representative of our employees. Mr. Silva’s business address is the address of our principal executive offices.

*Dietrich Russell.* Mr. Russell has been the Executive Vice President of the Aeronautics Division for EADS since July 2000. From 1972 until 1995, Mr. Russell worked for the Mannesmann Group in various capacities and divisions, culminating in his service as chairman of the board of management of Mannesmann Anlagenbau AG. Mr. Russell was also a member of the board of management of Daimler-Benz Aerospace AG, currently known as EADS, and was responsible for the Aircraft Group between October 1995 and April 1997. Thereafter, he was responsible for the Civil Aircraft and Helicopters Group of Daimler-Benz Aerospace board of management until March 1998. In April 1998, Mr. Russell was appointed chief operating officer of the Airbus Industrie division of EADS, a position he held until July 2000. Mr. Russell is a representative of the European Aerospace and Defense Group, and his business address is 1, Avenue Didier Daurat, 31700 Blagnac, France.



*Isaac Marcel de Piccioto.* Mr. Piccioto has been the Corporate Vice President Strategy for the Business Group Airborne Systems at Thales™ since 2001. Prior to that, he occupied several management positions at Thales™ from 1990 to 2000. He was Vice President International Business Development at Philips from 1988 to 1990. From 1974 to 1986, Mr. Piccioto was Corporate Vice President International Marketing, Export Sales Director, Director for Europe, North America and Asia Pacific at Matra. Mr. Piccioto is a representative of the European Aerospace and Defense Group and his business address is 2, Avenue Gay Lussac, 78851 Elancourt Cedex, France.

*Henrique Pizzolato.* Mr. Pizzolato has been the Marketing and Communications Officer for the Banco do Brasil since February 2003. From June 1998 to May 2002, he was the Director of Social Security at PREVI. He was also a member of the Board of Banco do Brasil from 1993 to 1996. In addition, Mr. Pizzolato was a member of the board of directors of Telecentrosul and Brasil Telecom, telecommunications companies, from 1999 to 2000. He is a representative of PREVI and his business address is SBS Quadro 1, Bloco C, Loto 32, 70073-93 Brasilia, DF, Brazil.

### Executive Officers

Our executive officers are responsible for our day-to-day management. The executive officers have individual responsibilities established by our bylaws and by the board of directors. The business address of each of our executive officers is the address of our principal executive offices.

The executive officers are elected by the board of directors for a three-year term, and any executive officer may be removed by the board of directors before the expiration of his term. Set forth below are the names, ages, positions and brief biographical descriptions of our executive officers at June 16, 2003.

Name	Age	Position	Year First Elected
Maurício Novis Botelho	60	President and Chief Executive Officer	1995
Antonio Luiz Pizarro Manso	58	Executive Vice-President Corporate and Chief Financial Officer	1995
Satoshi Yokota	62	Executive Vice-President-Development and Industry	1997
Frederico Pinheiro Fleury Curado	41	Executive Vice-President-Civil Aircraft	1997
Romualdo Monteiro de Barros	54	Executive Vice-President-Defense Market	1997
Horácio Aragonés Forjaz	51	Executive Vice-President-Corporate Communications	1998
Carlos Rocha Villela	47	Vice-President and General Counsel	1999

*Maurício Novis Botelho.* For a biographical description of Mr. Botelho, please see Board of Directors.

*Antonio Luiz Pizarro Manso.* Mr. Manso has been Executive Vice-President Corporate since 2001 and Chief Financial Officer of Embraer since 1995. Mr. Manso is also a director and/or president of several of Embraer's subsidiaries. Mr. Manso was the administrative and financial officer of STL from 1986 to 1995 and of CMW from 1986 to 1995 and served as member of the board of directors of CMW during 1995. He was also the chief financial officer of OTL from 1989 to 1995, the financial officer of TENENGE during 1992 and the chief financial officer of PROLAN from 1994 to 1995.

*Satoshi Yokota.* Prior to becoming Executive Vice-President-Development and Industry of Embraer in 1997, Mr. Yokota held several other positions at Embraer, including Programs and Commercial Contracts Officer during 1995 and 1996 and Programs Officer from 1992 to 1995. Mr. Yokota is also the chairman of the board of directors of ELEB, one of Embraer's subsidiaries.

*Frederico Pinheiro Fleury Curado.* Prior to becoming Executive Vice-President-Civil Aircraft of Embraer in 1998, Mr. Curado was our Executive Vice-President Planning and Organizational Development from 1997 to August 1998. Prior to that, he held several different positions at Embraer in the areas of manufacturing,

procurement, information technology, contracts and sales. Mr. Curado is also a director and/or secretary of several of Embraer's subsidiaries.

*Romualdo Monteiro de Barros.* Prior to becoming Executive Vice-President-Defense Market of Embraer in 1997, Mr. Barros was the officer responsible for business development at OTL, later named Stelar Telecom, from 1994 to 1997.

*Horácio Aragonés Forjaz.* Prior to becoming Executive Vice-President-Corporate Communications of Embraer in 2001, Mr. Forjaz was Executive Vice-President Planning and Organizational Development of Embraer from 1998 to 2001, and prior to 1998, he was our engineering officer. From 1995 to 1997, Mr. Forjaz was the operational director of Compsis Computadores e Sistemas Ltda., a systems engineering and software company, and from 1975 to 1995, he held several different positions at Embraer in the areas of engineering and systems design.

*Carlos Rocha Villela.* Prior to becoming Vice-President and General Counsel of Embraer in 1999, Mr. Villela was the general counsel of Odebrecht Química S.A., a chemical company, since 1994. Mr. Villela is also a director, executive officer and/or secretary of several of Embraer's subsidiaries.

## **6B. Compensation**

For the fiscal year ended December 31, 2002, the aggregate compensation (including benefits in kind granted) that we paid to members of the board of directors and the executive officers for services in all capacities was approximately US\$6.2 million. In addition, in 2002, the executive officers received pension benefits, instituted in January 1999, of approximately US\$64,173 as of December 31, 2002. The members of our board of directors did not receive any such benefits. The board members and executive officers did not receive any compensation (including benefits in kind) from any of our subsidiaries. At December 31, 2002, none of the board members or executive officers had any financial or other interests in any transaction involving Embraer which was not in the ordinary course of our business.

In addition, at June 16, 2003, the board members and executive officers owned an aggregate of 19 common shares and 3,606,780 preferred shares.

## **Stock Option Plan**

At a special shareholders' meeting held on April 17, 1998, we approved a stock option plan for management and employees, including those of our subsidiaries, subject to restrictions based on continuous employment with us for at least two years.

Under the terms of the plan, we were authorized to grant options to purchase up to 25,000,000 preferred shares over the five-year period from the date of the first grant. As of the end of this five-year period, we had granted options for an aggregate of 19,665,000 preferred shares at a weighted average exercise price of R\$9.17 per share. The options granted to each employee will vest as follows: 30% after three years from the date granted, an additional 30% after four years and the remaining 40% after five years. Employees may exercise their options for up to seven years from the date they are granted. As of June 16, 2003, 7,556,313 of the total options granted had been exercised. Of the total number of options granted, options to purchase an aggregate of 7,200,000 preferred shares have been granted to our executive officers at a weighted average exercise price of R\$5.30 per share, of which 4,445,000 were exercised during the period from January 1, 2001 through June 16, 2003.

## **Profit Sharing Plan**

Pursuant to Brazilian federal law, companies operating in Brazil are required to share profits with employees beginning from and after fiscal year 1996. However, we understand that no government regulation currently exists for determining how the profits should be distributed. Prior to 1998, we did not have a profit sharing plan. However, in light of our continuing financial recovery since then, we implemented a profit sharing plan in 1998 that ties employee profit sharing to dividend payments.

Every time we pay dividends to our shareholders, we also pay a profit sharing participation of 25% of the amount of the dividend payment to employees who have achieved goals established at the beginning of the year. Under the plan, we may pay additional amounts of up to an additional 5% of such dividend payment to exceptional employees, on a discretionary basis. We believe that this policy encourages individual employees to meet our production goals.

For the 2000 fiscal year, we distributed US\$41.8 million to employees, for the 2001 fiscal year, we distributed US\$43.7 million to employees and for the 2002 fiscal year, we distributed US\$25.2 million to employees.

### 6C. Board Practices

All members of our board of directors serve three-year terms and the terms of all current members expire in April 2004. See Directors and Senior Management Board of Directors for the year each of the members of our board of directors was first elected.

The executive officers are elected by the board of directors for a three-year term, and any executive officer may be removed by the board of directors before the expiration of his term. See Directors and Senior Management Executive Officers for the year each of our executive officers was first elected.

None of our directors or executive officers is party to an employment contract providing for benefits upon termination of employment.

### Audit Board

Under the Brazilian Corporate Law, the *conselho fiscal* (audit board) is a corporate body independent of management and a company's external auditors. A Brazilian audit board is not equivalent to, or comparable with, a U.S. audit committee. The primary responsibility of the audit board is to review management's activities and the financial statements, and to report its findings to the shareholders. Under the Brazilian Corporate Law, the audit board may not contain members that are on the board of directors, on the executive committee, our employees, employees of a controlled company or of a company of this group, or a spouse or relative of any member of our management. In addition, the Brazilian Corporate Law requires the audit board members to receive as remuneration at least 10% of the average amount paid to each executive officer. The Brazilian Corporate Law requires an audit board to be composed of a minimum of three and a maximum of five members and their respective alternates.

We have a permanent audit board whose members are elected at the annual shareholders' meeting, with terms lasting until the next annual shareholders' meeting after their election. Under the Brazilian Corporate Law, holders of preferred shares have the right to elect separately one member of the audit board. Also, under the Brazilian Corporate Law, minority groups of shareholders that hold at least 10% of the voting shares also have the right to elect separately one member of the audit board. In any event, however, the common shareholders have the right to elect the majority of the members of the audit board. Set forth below are the names and positions of the members of our audit board and their respective alternates.

Name	Position	Year First Elected
Luiz Tacca Júnior	Effective member	1995
Robson de Araújo Jorge	Alternate	2000
Carlos Alberto de Castro Monteiro	Effective member	2001
Tarcísio Luiz Silva Fontenele	Alternate	2001
José Mauro Laxe Vilela	Effective member	2003
Alberto Carlos Monteiro dos Anjos	Alternate	2003
Paulo Oscar França	Effective member	2003
Ernesto Francisco Magdalena	Alternate	2003
Celene Carvalho de Jesus	Effective member	2003
Nilo Ribeiro Calvalcanti	Alternate	2003

#### **6D. Employees**

We employed a total of 10,334, 11,048 and 12,227 people at December 31, 2000, 2001 and 2002, respectively. Approximately 94.1% of our workforce is employed in Brazil. Of the total workforce at December 31, 2002, 47.8% are directly involved in the production process, 22.3% are engaged in research and development, 7.8% are administrative employees involved in support of the production process and 22.1% are other administrative employees. Most of our technical staff is trained at leading Brazilian engineering schools, including the *Instituto Tecnológico Aeronáutico*, known as the ITA, located in São José dos Campos. A small percentage of our employees belong to one of two different labor unions, the *Sindicato dos Metalúrgicos* (Union of Metallurgical Workers) or the *Sindicato dos Engenheiros do Estado de São Paulo* (Union of Engineers of the State of São Paulo). Overall, union membership as a percentage of total workforce has declined significantly in past years. At December 31, 2002, approximately 80.5% of our employees were non-union. We believe that relations with our employees are good.

We actively support the training and professional development of our employees. We have established a program at our new facility in São José dos Campos to provide newly graduated engineers with specialized training in aerospace engineering. In addition, we provide a masters in business administration course for our administrative personnel at our executive offices, conducted by *Fundação Getúlio Vargas*, a business administration university in São Paulo.

#### **6E. Share Ownership**

At June 16, 2003, the board members and executive officers owned an aggregate of 19 common shares and 3,606,780 preferred shares. None of the officers or directors individually own more than 1% of the outstanding common shares or preferred shares. As of June 16, 2003, our executive officers also owned options to purchase an aggregate of 2,755,000 preferred shares at per-share purchase prices ranging from R\$1.65 to R\$23.00. As of the same date, none of our directors owned any options to purchase shares of common or preferred stock.

See Compensation Stock Option Plan for a description of our stock option plan applicable to our management and employees, including those of our subsidiaries.

## ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

## 7A. Major Shareholders

We have total authorized capital of 1,500,000,000 shares, with a total aggregate of 713,334,355 shares issued and outstanding at June 16, 2003. Of this total, 242,544,448 are common shares (including one special golden share held by the Brazilian government) and 470,789,907 are non-voting preferred shares. The following table sets forth share ownership information for each of our shareholders that beneficially owns 5% or more of any class of our equity securities and for our executive officers and board members at June 16, 2003, including 2,997,545 preferred shares underlying the options exercisable within 60 days of the date of this annual report.

	Common Shares		Preferred Shares		Total shares	
	Shares	(%)	Shares	(%)	Shares	(%)
PREVI(1)	57,594,479	23.8	60,872,078	12.9	118,466,557	16.5
SISTEL(2)	48,508,890	20.0	5,233,725	1.1	53,742,615	7.5
Cia. Bozano(3)(4)	48,509,220	20.0	18,786,588	4.0	67,295,808	9.4
Bozano Holdings Ltd.(3)(4)			18,896,920	4.0	18,896,920	2.6
BNDESPAR(5)	3,734,893	1.5	46,929,918	9.9	50,664,811	7.1
Dassault Aviation(6)	13,744,186	5.7	1,953,132	**	15,697,318	2.2
Thales <sup>TM</sup> (6)	13,744,186	5.7	1,953,132	**	15,697,318	2.2
EADS(6)	13,744,186	5.7	1,953,132	**	15,697,318	2.2
SNECMA(6)	7,276,332	3.0	1,034,010	**	8,310,342	1.2
BB Banco de Investimento, S.A.(7)	3,015,562	1.2	2,890,909	**	5,906,471	**
União Federal/Brazilian Government(8)	1,850,495	**	499,415	**	2,349,910	**
Officers and directors as a group(9)	19	**	4,161,780	**	4,161,799	**
Other(10)	30,822,000	12.7	308,622,713	65.1	339,457,502	47.4
<b>Total</b>	<b>242,544,448</b>		<b>473,787,452</b>		<b>716,344,689</b>	
Percentage of total shares outstanding		33.9		66.1		100.0

\*\* Less than 1%.

- (1) Banco do Brasil Employee Pension Fund, also known as PREVI, was founded in 1904 as a pension fund for the employees of Banco do Brasil S.A, which is controlled by the Brazilian government.
- (2) SISTEL Social Security Foundation, also known as SISTEL, was founded in 1977 as part of the Telebrás system, which, prior to its recent privatization, consisted of the Brazilian government-owned telecommunications companies.
- (3) The above table does not reflect any exchangeable notes issued by BNDES that may be currently owned by Bozano Holdings Ltd.
- (4) Cia. Bozano and Bozano Holdings Ltd. are owned and controlled by Julio Bozano. All preferred shares owned by Cia. Bozano and Bozano Holdings Ltd. have been pledged in favor of Banco Santander Central Hispano, S.A. in connection with its acquisition from Cia. Bozano of substantially all of the capital stock of Banco Meridional S.A.
- (5) BNDESPAR is a wholly owned subsidiary of Banco Nacional de Desenvolvimento Econômico e Social BNDES, the government-owned national development bank of Brazil
- (6) Member of the European Aerospace and Defense Group.
- (7) BB Banco de Investimento, S.A. is an affiliate of the Brazilian government-owned Banco do Brasil S.A.

- (8) The Brazilian government also holds the golden share.
- (9) The number of preferred shares includes 555,000 preferred shares underlying options which are exercisable within 60 days of the date of this annual report.
- (10) The number of preferred shares includes 2,442,545 preferred shares underlying options which are exercisable within 60 days of the date of this annual report.

Other than as discussed in Item 4. Information on the Company History and Development of the Company, there have been no significant changes in percentage ownership by any major shareholder in the past three years.

On June 16, 2003, we had 25,219 holders, either directly or through ADSs, of preferred shares, and 4,167 holders of record of common shares. On June 16, 2003, an aggregate of 209,410,561 preferred shares were held, either directly or through ADSs, by 188 record holders, including DTC, in the United States.

## Voting Rights

### *Voting Rights of the Common Shares*

Each common share entitles the holder thereof to one vote at our annual and special shareholders meetings.

### *Shareholders Agreement*

Each of Cia. Bozano, PREVI and SISTEL, our controlling shareholders, has agreed to comply with the terms of a shareholders agreement entered into on July 24, 1997, as amended, which governs matters relating to their equity ownership of Embraer for a ten-year term and can be successively renewed for five-year terms. According to the shareholders agreement, when appointing the members of our board of directors at shareholders meetings, our controlling shareholders have agreed to appoint two representatives (and alternates) of each one of the controlling shareholders and to vote together to elect two representatives (and alternates) of the European Aerospace and Defense Group and one representative (and alternate) of the Brazilian government.

Our controlling shareholders have also agreed in the shareholders agreement that the Chairman of our board of directors will be chosen by agreement among them every 18 months and that the Chairman shall be one of their representatives. In the event that our controlling shareholders cannot agree on who will be the Chairman of the board, the order in which their representatives will take turns as Chairman shall be decided by lottery.

In accordance with the shareholders agreement, our controlling shareholders may not sell, assign, contribute as capital, pledge or in any other way transfer, dispose of or create a lien on the common shares tied to control of Embraer held by them, except as provided for in the shareholders agreement or if the transaction is previously authorized in writing by the other parties. According to the shareholders agreement, if any controlling shareholder wishes to sell, assign, transfer or in any way dispose of part or all of its common shares tied to control of Embraer, whether or not together with other shares of Embraer of any kind or class, the other controlling shareholders shall have a right of first refusal to acquire the shares being offered.

The shareholders agreement provides that our controlling shareholders shall meet or shall manifest their position by fax or any other electronic means in connection with any shareholders meeting or meeting of the board of directors, as the case may be, when any of the following matters involving us or any of our subsidiaries shall be decided:

amendment to the bylaws, except when required by law;

increase of capital by subscription, creation of a new class of shares, change in the characteristics of the existing shares or reduction of capital;

issuance of debentures convertible into shares, subscription warrants and options for the purchase of shares;

merger or spin-off;

liquidation, dissolution and voluntary acts of financial reorganization;

acquisition or sale of participation in other companies, except special purpose companies that are necessary or desirable in our business of selling aircraft;

establishment of a dividend policy which differs from that provided for in the bylaws as the minimum dividend;

approval of new investments and/or financing and/or sale of investments in an amount higher than that agreed upon by the parties from time to time;

approval and change of long-term business plans;

determination of the remuneration of, and participation in our profits by, our managers;

selection, hiring and firing of our executive officers;

choosing our external auditors;

granting liens on, or guarantees in favor of, real or personal property or obligations of management except for those necessary or desirable in our business of manufacturing and selling aircraft;

sale of a substantial part of our permanent assets; and

use of profits.

The shareholders' agreement also states that our controlling shareholders will vote in favor of maintaining and increasing our strategic relationship with the Brazilian Armed Forces, particularly with the Brazilian Air Force, in order to assure that we continue to prioritize our relationship with Brazil, without prejudice to our other corporate interests.

### ***Golden Share***

The golden share is held by the Federative Republic of Brazil. The golden share is entitled to the same voting rights as the holders of common shares. In addition, the golden share entitles the holder thereof to veto rights over the following corporate actions:

change of our name and corporate purpose;

amendment to and/or extension of our logo;

creation and/or alteration of military programs (whether or not involving Brazil);

third party training in technology for military programs;

discontinuance of the supply of military airplane maintenance and replacement parts;

transfer of share control; and

any change to the list of corporate actions over which the golden share carries veto power, to the structure and composition of the board of directors, and to the rights conferred to the golden share.

### ***Voting Rights of the Preferred Shares***

Preferred shares do not entitle the holder to vote except as set forth below. However, holders of preferred shares are entitled to attend meetings of shareholders and to participate in the discussion of matters submitted for consideration.

The Brazilian Corporate Law requires that non-voting preferred shares which are entitled to receive fixed or minimum dividends shall acquire voting rights in the event a company fails to pay, from one to three consecutive fiscal years as established in the bylaws, the fixed or minimum dividend to which such shares are entitled. Because our preferred shares are not entitled to fixed or minimum dividends, they cannot acquire voting rights under this rule. However, our preferred shares are entitled to their share of any mandatory dividends distributions that we



make. See Item 8A. Consolidated Statements and Other Financial Information Dividends and Dividend Policy Amounts Available for Distribution.

Any change in the preference or rights of preferred shares, or the creation of a class of shares having priority or preference over preferred shares, requires approval by at least half of all outstanding voting shares and either (1) prior approval of holders of a majority of the outstanding preferred shares at a special meeting of holders of preferred shares or (2) subsequent ratification by holders of a majority of the outstanding preferred shares. In such special meetings, each preferred share will entitle the holder thereof to one vote.

Pursuant to the recent amendments to the Brazilian Corporate Law, shareholders that together hold preferred shares representing at least 10% of our total share capital are entitled to appoint a member of our board of directors. To date, none of our directors was appointed by our preferred shareholders.

## 7B. Related Party Transactions

We have engaged in a number of transactions with our subsidiaries, the Brazilian government and affiliates of Cia. Bozano, as described below. According to the shareholders' agreement, our controlling shareholders will not permit us to engage in transactions or arrangements with any of our affiliates on a basis or terms less favorable to us than would be obtainable at that time from an unaffiliated third party in an arm's-length transaction or other arrangement.

### Brazilian Government

The Brazilian government, principally through the Brazilian Air Force, has participated in the development of Embraer since its inception. For the years ended December 31, 2000, 2001 and 2002, the Brazilian government accounted for approximately 2.6%, 1.5% and 1.6% of our net sales, respectively. We expect to continue to be the primary source of new aircraft and spare parts and services for the Brazilian government. For a description of our transactions with the Brazilian government, see Item 4B. Business Overview Defense Business.

The Brazilian government plays a key role as:

a source for research and development debt financing through technology development institutions such as FINEP and BNDES; and

an export support agency through BNDES.

See Item 4B. Business Overview Aircraft Financing Arrangements, Item 3D. Risk Factors Risks Related to Embraer Any decrease in Brazilian government-sponsored customer financing, or increase in government-sponsored financing that benefits our competitors, may decrease the cost-competitiveness of our aircraft and Item 3D. Risk Factors Risks Related to Embraer Brazilian government budgetary constraints could reduce amounts available to our customers under government-sponsored financing programs.

We maintain credit facilities with BNDES and FINEP, primarily to fund development costs of the ERJ 145 and AL-X, of which US\$47.9 million and US\$5.4 million was outstanding, respectively, at December 31, 2002. Amounts borrowed from BNDES are secured by first, second and third mortgages on Embraer's properties in Brazil. The interest rates under our FINEP credit facility range from TJLP plus 3.0% to TJLP plus 5.5% per annum. The interest rates under our BNDES credit facility are either fixed at 5.5% per annum or range from TJLP plus 3.3% to TJLP plus 4.4%, plus fees at the rate of 0.35% of the sales price of 420 ERJ 145s sold between January 1, 1997 and August 1, 2002.

The Brazilian government has been an important source of export financing for our customers through the BNDES-*exim* program, administered by BNDES. In addition, Banco do Brasil S.A., which is owned by the Brazilian government, administers the ProEx program, which enables some of our customers to receive the benefit of interest discounts.

In connection with a private offering of exchangeable notes by BNDES completed on June 19, 2001, we became party to a registration rights agreement pursuant to which we agreed, among other things, to register resales of the ADSs and underlying preferred shares relating to the exchangeable notes. We agreed to indemnify the initial purchasers of these notes and holders selling under our resale registration statement against certain liabilities under the Securities Act, or to contribute to payments that they may be required to make in respect of those liabilities.

In February and March of 1999, we sold a total of 83,330 debentures with a principal amount of R\$1,800 per debenture with a term of seven years, mostly to BNDESPAR, a wholly owned subsidiary of BNDES. We coupled each debenture with 100 detachable subscription warrants issued in five series. Each warrant entitled its holder to subscribe for ten preferred shares or, under some limited circumstances, ten common shares of Embraer. In February 2000, holders exercised 833,500 of these subscription warrants, resulting in our issuing 8,335,000 preferred shares at an issue price of R\$2.1998 per share. After that date, BNDESPAR became the only holder of subscription warrants. In July 2000, BNDESPAR exercised 105,700 of the subscription warrants, resulting in our issuing 1,057,000 preferred shares at an issue price of R\$2.4769 per share. On May 3, 2001, BNDESPAR exercised its remaining 7,393,800 warrants in exchange for 73,938,000 preferred shares at an issue price of R\$2.4769 per share.

We have entered into numerous financing transactions from time to time in the past with the Brazilian government-owned Banco do Brasil S.A. and its affiliates. At December 31, 2000, 2001 and 2002, we maintained cash investments of US\$46.9 million, US\$69.5 million and US\$74.1 million, respectively, with Banco do Brasil S.A. and several of its affiliates. We also had outstanding borrowings from Banco do Brasil S.A. and several of its affiliates, which at December 31, 2000, 2001 and 2002 equaled US\$331.0 million, US\$182.3 million and US\$213.1 million, respectively. In addition, BB Banco de Investimento, S.A., an affiliate of Banco do Brasil S.A., was an underwriter in a secondary offering in Brazil, completed on June 19, 2001, in which some of our shareholders sold an aggregate of 6,900,000 of our preferred shares.

#### **European Aerospace and Defense Group**

Thales, a member of the European Aerospace and Defense Group, is also a joint venture partner with the General Electric Company in a company called GE Capital Aviation Training Limited, or GECAT. We have entered into an agreement with GECAT whereby GECAT will provide training for the EMBRAER 170/190 jet family on a non-exclusive basis. We will pay GECAT for the training services to be provided by GECAT to our customers for the EMBRAER 170/190 jet family and for each component of the system to be supplied by GECAT to provide training for our customers for the EMBRAER 170/190 jet family, which system includes flight simulators, courseware, training media, computer-based training, and training courses.

In March 2002, we formed a consortium with Dassault, Thales and SNECMA to bid on the development and manufacture of up to 24 fighter jets for the Brazilian Air Force. The planned jet, the Mirage 2000 BR, is modeled on the Dassault Mirage 2000-5 supersonic jet. As leaders of the consortium, we would have coordination and management responsibilities in the program. As a result of this consortium and as part of our strategic alliance agreement, Dassault would transfer to us the technology for the Mirage, enabling us to have full control over the project technology as well. The selection of the winner of the bid has not yet been made.

#### **Cia. Bozano**

From time to time we hold temporary cash investments through Cia. Bozano. At December 31, 2002, we had US\$151,000 of such temporary investments.

See Note 33 to our consolidated financial statements for more information regarding related party transactions.

#### **7C. Interests of Experts and Counsel**

Not applicable.

## ITEM 8. FINANCIAL INFORMATION

### 8A. Consolidated Statements and Other Financial Information

See Item 3A. Selected Financial Data and Item 18. Financial Statements.

#### Legal Proceedings

We have some individual labor lawsuits, and we have already settled several of them, but we are awaiting the decision of the Brazilian labor courts on others. We do not believe that any liabilities related to these individual lawsuits will have a material adverse effect on our financial condition or results of operations.

We have challenged the constitutionality of the nature of and modifications in rates and the increase in the calculation base of certain Brazilian taxes and social charges in order to obtain writs of mandamus or injunctions to avoid payments or recover past payments. Interest on the total amount of unpaid taxes and social charges accrues monthly based on the Selic rate, the key lending rate of the Central Bank, and we make an accrual as part of the interest income (expense) item of our statements of income. As of December 31, 2002, we had obtained preliminary injunctions for not paying or recovering past payments in the total amount, including interest, of US\$186.9 million, which is included as a liability on our balance sheet. See Item 3D. Risk Factors Risks Relating to Embraer We may have to make significant payments as a result of unfavorable outcomes of pending challenges to certain taxes and social charges and Note 18 to our consolidated financial statements for a further discussion of these challenges.

In addition, we are involved in other legal proceedings, including tax disputes, all of which are in the ordinary course of business. Our management believes that none of these other proceedings, if adversely determined, would materially or adversely affect our business, financial condition or results of operations. See Note 19 to our consolidated financial statements for a further discussion of the legal proceedings we face.

#### Dividends and Dividend Policy

##### *Amounts Available for Distribution*

At each annual shareholders meeting, the board of directors is required to recommend how net profits for the preceding fiscal year are to be allocated. For purposes of the Brazilian Corporate Law, net profits are defined as net income after income taxes and social contribution taxes for such fiscal year, net of any accumulated losses from prior fiscal years and any amounts allocated to employees and management's participation in our profits. In accordance with the Brazilian Corporate Law and our bylaws, the amounts available for dividend distribution are the amounts equal to our net profits less any amounts allocated from such net profits to:

the legal reserve;

a contingency reserve for anticipated losses; and

an unrealized revenue reserve.

We are required to maintain a legal reserve, to which we must allocate 5% of net profits for each fiscal year until the amount for such reserve equals 20% of our paid-in capital. However, we are not required to make any allocations to our legal reserve in respect of any fiscal year in which it, when added to our other established capital reserves, exceeds 30% of our capital. Net losses, if any, may be charged against the legal reserve. At December 31, 2002, the balance of our legal reserve was US\$76.2 million, which was equal to 8.5% of our paid-in capital at December 31, 2002.

The Brazilian Corporate Law also provides for two additional, discretionary allocations of net profits that are subject to approval by the shareholders at the annual meeting. First, a percentage of net profits may be allocated to a contingency reserve for anticipated losses that are deemed probable in future years. Any amount so allocated in a prior year must be either reversed in the fiscal year in which the loss was anticipated if such loss does not in fact

occur, or written off in the event that the anticipated loss occurs. Second, if the amount of unrealized revenue exceeds the sum of:

the legal reserve;

the investment and working capital reserve;

retained earnings; and

the contingency reserve for anticipated losses,

such excess may be allocated to an unrealized revenue reserve. Under the Brazilian Corporate Law, unrealized revenue is defined as the sum of:

price-level restatement of balance sheet accounts;

the share of equity earnings of affiliated companies; and

profits from installment sales to be received after the end of the next succeeding fiscal year.

According to our bylaws and subject to shareholders' approval, our board of directors may allocate at least 5% of our net income to an investment and working capital reserve. The purpose of the investment and working capital reserve is to make investments in fixed assets or increase our working capital. This reserve may also be used to amortize our debts. We may also grant a participation in our net income to our management and employees. However, the allocation to the investment and working capital reserve or the participation of our management and employees cannot reduce the mandatory distributable amount (discussed below). The balance of the investment and working capital reserve plus the balance of other profit reserves (except the contingency reserve for anticipated losses and the unrealized revenue reserve) may not be higher than our capital. Otherwise, the amount in excess of our capital must be used to increase our capital or be distributed as a cash dividend. The balance of the investment and working capital reserve may be used:

in the deduction of accumulated losses, whenever necessary;

in the distribution of dividends, at any time;

in the redemption, withdrawal, purchase or open market repurchase of shares, as authorized by law; and

to increase our capital, including by means of an issuance of new shares.

The amounts available for distribution may be further increased by a reversion of the contingency reserve for anticipated losses constituted in prior years but not realized, or further increased or reduced as a result of the allocations of revenues to or from the unrealized revenue reserve. The amounts available for distribution are determined on the basis of financial statements prepared in accordance with the Brazilian Corporate Law method.

#### ***Mandatory Distribution***

The Brazilian Corporate Law generally requires that the bylaws of each Brazilian corporation specify a minimum percentage of the amounts available for distribution by such corporation for each fiscal year that must be distributed to shareholders as dividends, also known as the mandatory distributable amount. Under our bylaws, the mandatory distributable amount has been fixed at an amount equal to not less than 25% of the amounts available for distribution, to the extent amounts are available for distribution. On May 5, 1997, Law No. 9,457 became effective, granting holders of preferred stock not carrying a right to fixed or minimum dividends, such as our preferred shares, a statutory right to receive dividends in an amount per share of at least 10% more than the amount per share paid to holders of common stock.

The mandatory distribution is based on a percentage of adjusted net income, not lower than 25%, rather than a fixed monetary amount per share. The Brazilian Corporate Law, however, permits a publicly held company, such as Embraer, to suspend the mandatory distribution of dividends if the board of directors and the audit committee report to the shareholders' meeting that the distribution would be inadvisable in view of the company's financial condition. This suspension is subject to approval of holders of common shares. In this case, the board of directors shall file a justification for such suspension with the CVM. Profits not distributed by virtue of the suspension mentioned above shall be attributed to a special reserve and, if not absorbed by subsequent losses, shall be paid as dividends as soon as the financial condition of such company permits such payments. As our preferred shares are not entitled to a fixed or minimum dividend, our ability to suspend the mandatory distribution of dividends applies to the holders of preferred shares and, consequently, to the holders of ADSs.

#### ***Payment of Dividends***

We are required by the Brazilian Corporate Law and by our bylaws to hold an annual shareholders' meeting by the fourth month after the end of each fiscal year at which, among other things, the shareholders have to decide on the payment of an annual dividend. The payment of annual dividends is based on the financial statements prepared for the relevant fiscal year. Under the Brazilian Corporate Law, dividends generally are required to be paid within 60 days following the date the dividend was declared, unless a shareholders' resolution sets forth another date of payment, which, in either case, must occur prior to the end of the fiscal year in which the dividend was declared. A shareholder has a three-year period from the dividend payment date to claim dividends (or interest payments) in respect of its shares, after which the amount of the unclaimed dividends reverts to us.

The Brazilian Corporate Law permits a company to pay interim dividends out of preexisting and accumulated profits for the preceding fiscal year or semester, based on financial statements approved by its shareholders. According to our bylaws, the shareholders may declare, at any time, interim dividends based on the preexisting and accumulated profits, provided the mandatory dividend has already been distributed to the shareholders. Our bylaws also permit us to prepare financial statements semiannually and for shorter periods. Our board of directors may approve the distribution of dividends calculated with reference to those financial statements, even before they have been approved by the shareholders. However, such dividends cannot exceed the amount of capital reserves.

In general, shareholders who are not residents of Brazil must register with the Central Bank to have dividends, sales proceeds or other amounts with respect to their shares eligible to be remitted outside of Brazil. The preferred shares underlying our ADSs will be held in Brazil by Banco Itaú S.A., also known as the custodian, as agent for the depositary, which will be the registered owner on the records of the registrar for our shares. Our current registrar is Banco Itaú. The depositary electronically registered the preferred shares underlying our ADSs with the Central Bank and, therefore, is able to have dividends, sales proceeds or other amounts with respect to these shares eligible to be remitted outside Brazil.

Payments of cash dividends and distributions, if any, will be made in Brazilian currency to the custodian on behalf of the depositary, which will then convert such proceeds into U.S. dollars and will cause such U.S. dollars to be delivered to the depositary for distribution to holders of ADSs. Under current Brazilian law, dividends paid to shareholders who are not Brazilian residents, including holders of ADSs, will not be subject to Brazilian withholding income tax, except for dividends declared based on profits generated prior to December 31, 1995. See Item 10E. Taxation - Brazilian Tax Consequences.

#### ***History of Dividend Payments and Dividend Policy and Additional Payments on Shareholders' Equity***

We did not pay dividends from 1988 through 1997 because we did not have net profits for any year during that period. On January 16, 1998, we reduced our capital in order to offset our accumulated deficit. As a result, we were then able to distribute profits achieved in 1998.

Law No. 9,249, dated December 26, 1995, as amended, provides for distribution of interest on net worth to shareholders as an alternative form of payment to shareholders. Such interest is limited to the daily *pro rata* variation of the TJLP and cannot exceed the greater of:

50% of net income (after taking into account the provisions for the *Contribuição Social sobre o Lucro Líquido*, or Social Contribution on Net Profits, or CSLL, but before taking into account such distribution and any deductions for income taxes) for the period in respect of which the payment is made; or

50% of the sum of retained earnings and profit reserves as of the beginning of the year in respect of which the payment is made.

Distribution of interest on net worth may also be accounted for as a tax deductible expense. Any payment of interest on shareholders' equity to holders of ADSs or preferred shares, whether or not they are Brazilian residents, is subject to Brazilian withholding income tax at the rate of 15% or 25% if the beneficiary is resident in a tax haven. See Item 10E. Taxation Brazilian Tax Consequences. The amount paid to shareholders as interest on net worth, net of any withholding tax, may be included as part of any mandatory distributable amount. Under Brazilian law, we are obligated to distribute to shareholders an amount sufficient to ensure that the net amount received by them, after payment by us of applicable Brazilian withholding taxes in respect of the distribution of interest on net worth, is at least equal to the mandatory distributable amount. When we distribute interest on net worth, and that distribution is not accounted for as part of the mandatory distribution, Brazilian withholding tax will apply. All payments to date were accounted for as part of the mandatory distribution.

The following table sets forth the historical payments of dividends and historical payments of interest on shareholders' equity we made to our shareholders.

Date of approval	Period in which profits were generated	Total amount of distribution (US\$ in millions)
September 18, 1998(1)	First two quarters of 1998	18.0
March 30, 1999(1)	Remaining two quarters of 1998	27.7
September 28, 1999(1)	First two quarters of 1999	20.8
January 31, 2000(1)	Remaining two quarters of 1999	48.3
March 24, 2000(2)	First quarter of 2000	11.2
June 16, 2000(2)	Second quarter of 2000	11.0
July 6, 2000(1)	First two quarters of 2000	44.2
September 22, 2000(2)	Third quarter of 2000	15.0
December 15, 2000(2)	Fourth quarter of 2000	17.1
March 16, 2001(1)	Remaining two quarters of 2000	51.4
March 16, 2001(2)	First quarter of 2001	15.7
June 13, 2001(2)	Second quarter of 2001	18.0
September 14, 2001(1)	First two quarters of 2001	53.4
September 14, 2001(2)	Third quarter of 2001	18.1
December 15, 2001(2)	Fourth quarter of 2001	24.6
March 19, 2002(1)	Remaining two quarters of 2001	43.1
March 19, 2002(2)	First quarter of 2002	25.4
June 14, 2002(2)	Second quarter of 2002	20.9
September 13, 2002(2)	Third quarter of 2002	17.0
December 13, 2002(2)	Fourth quarter of 2002	19.8
December 13, 2002(2)	1998 and 1999	20.5

(1) Represents dividend payments.

(2) Represents interest on shareholders' equity.

Further, on June 16, 2003, our Board of Directors approved the payment of interest on shareholders' equity for the first two quarters of 2003 in the total amount of R\$76.7 million to be paid on August 15, 2003, which, translated using the exchange rate on June 16, 2003, would be equivalent to US\$26.8 million.

On March 1, 2002, we issued 88,430,168 preferred shares in the form of a stock dividend to each holder of common and preferred shares at that date, at the rate of 0.142106 new preferred shares for each existing share.

We intend to declare and pay dividends and/or interest on shareholders' equity, as required by the Brazilian Corporate Law and our bylaws. Our Board of Directors may approve the distribution of dividends and/or interest on shareholders' equity, calculated based on our semiannual or quarterly financial statements. The declaration of annual dividends, including dividends in excess of the mandatory distribution, requires approval by the vote of the majority of the holders of our common stock. The amount of any distributions will depend on many factors, such as our results of operations, financial condition, cash requirements, prospects and other factors deemed relevant by our board of directors and shareholders. Within the context of our tax planning, we may in the future continue determining that it is to our benefit to distribute interest on shareholders' equity.

## 8B. Significant Changes

No significant changes or events have occurred after the close of the balance sheet date at December 31, 2002, other than the events already described in this annual report.

## ITEM 9. THE OFFER AND LISTING

### 9A. Offer and Listing Details

Our ADSs are listed on the New York Stock Exchange under the symbol ERJ. In addition, our preferred shares are traded on the São Paulo Stock Exchange under the symbol EMBR4. Each ADS represents four preferred shares.

The reported high and low closing sale prices in U.S. dollars for the ADSs on the New York Stock Exchange for the periods indicated are set forth in the following table:

	Price in U.S. dollars per ADS	
	High	Low
2000:		
Year end (from July 20)	39.75	18.50
2001:		
First quarter	41.75	34.50
Second quarter	45.50	36.00
Third quarter	39.45	11.95
Fourth quarter	22.20	11.45
Year end	45.50	11.45
2002:		
First quarter	25.01	19.85
Second quarter	23.77	19.09
Third quarter	21.20	13.30
Fourth quarter	16.47	12.85
Year end	25.01	12.85
2003:		
First quarter	16.27	9.15
Second quarter (through June 16)	20.26	9.48
Month ended:		
December 31, 2002	16.05	14.43
January 31, 2003	16.27	13.40
February 28, 2003	13.92	9.15
March 31, 2003	11.97	9.48
April 30, 2003	14.59	12.38
May 31, 2003	15.37	14.00
June 30, 2003 (through June 16)	20.26	14.92

The table below sets forth, for the periods indicated, the reported high and low closing sale prices in nominal *reais* for preferred shares on the São Paulo Stock Exchange. The preferred shares have not traded every day on which the São Paulo Stock Exchange was open. The common shares are also listed and traded on the São Paulo Stock Exchange.

	Nominal <i>reais</i> per preferred share	
	High	Low
1998:		
Year end	2.23	1.15
1999:		
Year end	8.15	1.15
2000:		
Year end	18.30	7.20
2001:		
First quarter	21.50	17.82
Second quarter	25.45	19.40
Third quarter	23.30	8.30
Fourth quarter	13.20	7.65
Year end	25.45	7.65
2002:		
First quarter	15.20	11.66
Second quarter	15.30	11.20
Third quarter	15.19	12.30
Fourth quarter	15.00	12.40
Year end	15.30	11.20
2003:		
First quarter	14.05	8.10
Second quarter (through June 16)	14.31	9.84
Month ended:		
December 31, 2002	14.00	13.46
January 31, 2003	14.05	12.21
February 28, 2003	12.29	8.10
March 31, 2003	10.14	8.13
April 30, 2003	10.96	9.84
May 31, 2003	11.15	10.25
June 30, 2003 (through June 16)	14.31	11.01

On June 16, 2003, we had 25,219 holders, either directly or through ADSs, of preferred shares, and 4,167 holders of record of common shares. On June 16, 2003, an aggregate of 209,410,561 preferred shares were held, either directly or through ADSs, by 188 record holders, including DTC, in the United States.

On June 16, 2003, the closing sale price for our preferred shares on the São Paulo Stock Exchange was R\$14.12, which is equivalent to US\$19.77 per ADS. On the same date, the closing sale price for our ADSs on the New York Stock Exchange was US\$19.63. The ADSs are issued under a deposit agreement and JPMorgan Chase Bank serves as depositary under that agreement.

#### 9B. Plan of Distribution

Not applicable.



## 9C. Markets

### Trading on the São Paulo Stock Exchange

On January 27, 2000, protocols were signed in order to merge the nine Brazilian stock exchanges. Pursuant to the protocols, publicly traded Brazilian companies' securities are traded on the São Paulo Stock Exchange, and Brazilian government debt securities are traded on, and privatization auctions are carried out at, the Rio de Janeiro Stock Exchange. Trading on each exchange is limited to member brokerage firms and a limited number of authorized non-members. The CVM and the São Paulo Stock Exchange have discretionary authority to suspend trading in shares of a particular issuer. Trading in securities listed on the São Paulo Stock Exchange may be effected off the exchange, although such trading is limited.

The preferred shares are listed and traded on the São Paulo Stock Exchange. Trades in our preferred shares on the São Paulo Stock Exchange settle in three business days after the trade date. Delivery of and payment for shares is made through the facilities of the *CBLC Companhia Brasileira de Liquidação e Custódia*, the clearinghouse for the São Paulo Stock Exchange, which maintains accounts for member brokerage firms. The seller is ordinarily required to deliver the shares to the exchange on the second business day following the trade date.

In order to better control volatility, the São Paulo Stock Exchange adopted a circuit breaker system pursuant to which trading sessions may be suspended for a period of 30 minutes or one hour whenever the indices of this stock exchange fall below the limit of 10% and 15%, respectively, in relation to the index registered in the previous trading session.

The São Paulo Stock Exchange is less liquid than the New York Stock Exchange and other major exchanges in the world. The São Paulo Stock Exchange had an aggregate market capitalization of approximately US\$156.9 billion at May 31, 2003. In comparison, the New York Stock Exchange had a market capitalization of approximately US\$13.9 trillion at the same date. Although any of the outstanding shares of a listed company may trade on the São Paulo Stock Exchange, in most cases fewer than one-half of the listed shares are actually available for trading by the public, the remainder being held by small groups of controlling persons, by governmental entities or by one principal shareholder. At May 31, 2003, we accounted for approximately 1.6% of the market capitalization of all listed companies on the São Paulo Stock Exchange.

There is also significantly greater concentration in the Brazilian securities markets than in the New York Stock Exchange or other major exchanges. During the one year period ended May 31, 2003, the five most actively traded shares represented approximately 41.6% of the total volume of shares traded on the São Paulo Stock Exchange.

Trading on the São Paulo Stock Exchange by non-residents of Brazil is subject to limitations under Brazilian foreign investment legislation.

### Regulation of Brazilian Securities Markets

The Brazilian securities markets are regulated by the CVM, which has regulatory authority over stock exchanges and the securities markets generally, and by the Central Bank, which has, among other powers, licensing authority over brokerage firms and regulates foreign investment and foreign exchange transactions.

Under the Brazilian Corporate Law, a corporation is either public (*companhia aberta*), like us, or closely held (*companhia fechada*). All public companies, including us, are registered with the CVM and are subject to reporting requirements. Our shares are listed and traded on the São Paulo Stock Exchange and may be traded privately subject to limitations.

We have the option to ask that trading in our securities on the São Paulo Stock Exchange be suspended in anticipation of a material announcement. Trading may also be suspended on the initiative of the São Paulo Stock Exchange or the CVM, among other reasons, based on or due to a belief that a company has provided inadequate

information regarding a material event or has provided inadequate responses to the inquiries by the CVM or the São Paulo Stock Exchange.

The Brazilian securities law, the Brazilian Corporate Law and the regulations issued by the CVM, the National Monetary Council and the Central Bank provide for, among other things, disclosure requirements, restrictions on insider trading and price manipulation, and protection of minority shareholders. However, the Brazilian securities markets are not as highly regulated and supervised as the U.S. securities markets or markets in other jurisdictions.

Trading on the São Paulo Stock Exchange by non-residents of Brazil is subject to limitations under Brazilian foreign investment and tax legislation. The Brazilian custodian for our preferred shares and the depository for our ADSs have obtained an electronic certificate of registration from the Central Bank to remit U.S. dollars abroad for payments of dividends, any other cash distributions, or upon the disposition of the shares and sales proceeds thereto. In the event that a holder of ADSs exchanges ADSs for preferred shares, the holder will be entitled to continue to rely on the depository's electronic certificate of registration for five business days after the exchange. Thereafter, the holder may not be able to obtain and remit U.S. dollars abroad upon the disposition of the preferred shares, or distributions relating to the preferred shares, unless the holder obtains a new electronic certificate of registration or registers its investment in the preferred shares under Resolution No. 2,689.

#### **9D. Selling Shareholders**

Not applicable.

#### **9E. Dilution**

Not applicable.

#### **9F. Expenses of the Issue**

Not applicable.

### **ITEM 10. ADDITIONAL INFORMATION**

#### **10A. Share Capital**

Not applicable.

#### **10B. Memorandum and Articles of Association**

*Set forth below is material information concerning our capital stock, and a brief summary of certain significant provisions of our bylaws and the Brazilian Corporate Law. This description does not purport to be complete and is qualified by reference to our bylaws and to Brazilian law.*

#### **Corporate Purposes**

We are a joint stock company with a principal place of business and jurisdiction in the city of São José dos Campos, São Paulo, Brazil, governed mainly by our bylaws and the Brazilian Corporate Law. Our corporate purpose, as stated in our bylaws, is to (1) design, manufacture and market aircraft and aerospace materials and their respective accessories, components and equipment in accordance with the highest technology and quality standards, (2) promote and carry out technical activities related to the production and maintenance of aerospace materials, (3) contribute towards the education of technical personnel required for the aerospace industry and (4) conduct technological, industrial and commercial activities and services related to the aerospace industry.

## Description of Capital Stock

### *General*

At December 31, 2002, our capital stock consisted of a total of 712,974,356 outstanding shares, without par value, of which 242,544,448 were common shares, including one special class of common share known as the golden share, held by the Brazilian government, and 470,429,907 were preferred shares. Our bylaws authorize the board of directors to increase the capital stock up to 500,000,000 common shares and up to 1,000,000,000 preferred shares, without seeking specific shareholder approval. All our outstanding shares are fully paid. Our shareholders must approve at a shareholders meeting any capital increase that exceeds the above-referenced authorized amounts. Under the Brazilian Corporate Law, however, the number of non-voting preferred shares may not exceed two-thirds of the total number of shares. According to the edital (invitation to bid) issued by the Brazilian government in connection with our privatization in 1994, non-Brazilians may not hold in excess of 40% of our common shares. There is no similar restriction on ownership of our preferred shares.

### *Common Shares*

Each common share entitles the holder thereof to one vote at our annual and special shareholders meetings. The Brazilian Corporate Law and our bylaws require that all our shareholders meetings be called by publication of a notice in the *Diário Oficial do Estado de São Paulo*, the official government publication of the State of São Paulo, and in a newspaper of general circulation in our principal place of business, currently São José dos Campos, at least fifteen days prior to the meeting. The quorum to hold shareholders meetings on first call is generally 25% of the shares entitled to vote, and on second call the meetings can be held with the presence of any number of the shares entitled to vote.

According to the Brazilian Corporate Law, the common shares are entitled to dividends in proportion to their share of the amount available for distribution, subject to any preference of the preferred shares. See Item 8A. Consolidated Statements and Other Financial Information Dividends and Dividend Policy for a more complete description of payment of dividends on our shares. In addition, upon any liquidation of the company, the common shares are entitled to return of capital in proportion to their share of our net worth, also subject to the preference of the preferred shares.

### *Preferences of Preferred Shares*

According to our bylaws, the preferred shares are non-voting except under limited circumstances and, upon any liquidation of the Company, are entitled to priority over the common shares in the return of capital in proportion to their share of our net worth. In addition, according to our bylaws, the preferred shares are not entitled to fixed or minimum dividend payments. However, under the Brazilian Corporate Law, preferred shares, not entitled to fixed or minimum dividend payments, are entitled to receive dividends in an amount per share that is 10% greater than the dividends payable on our common shares. See Item 8A. Consolidated Statements and Other Financial Information Dividends and Dividend Policy for a more complete description of mandatory annual distributions on our preferred stock.

### *Golden Share*

The golden share is held by the Federative Republic of Brazil. The golden share is entitled to the same voting rights as the holders of common shares. In addition, the golden share entitles the holder thereof to veto rights over the following corporate actions:

change of our name and corporate purpose;

amendment to and/or extension of our logo;

creation and/or alteration of military programs (whether or not involving Brazil);

third party training in technology for military programs;

discontinuance of the supply of military airplane maintenance and replacement parts;

transfer of share control; and

any change to the list of corporate actions over which the golden share carries veto power, to the structure and composition of the board of directors, and to the rights conferred to the golden share.

#### ***Voting Rights of the Preferred Shares***

Preferred shares do not entitle the holder to vote except as set forth below. However, holders of preferred shares are entitled to attend meetings of shareholders and to participate in the discussion of matters submitted for consideration.

The Brazilian Corporate Law requires that non-voting preferred shares which are entitled to receive fixed or minimum dividends shall acquire voting rights in the event a company fails to pay, from one to three consecutive fiscal years as established in the bylaws, the fixed or minimum dividend to which such shares are entitled. Because our preferred shares are not entitled to fixed or minimum dividends, they cannot acquire voting rights under this rule. However, our preferred shares are entitled to their share of any mandatory dividends distributions that we make. See Item 8A. Consolidated Statements and Other Financial Information Dividends and Dividend Policy Amounts Available for Distribution.

Any change in the preference or rights of preferred shares, or the creation of a class of shares having priority or preference over preferred shares, requires approval by at least half of all outstanding voting shares and either (1) prior approval of holders of a majority of the outstanding preferred shares at a special meeting of holders of preferred shares or (2) subsequent ratification by holders of a majority of the outstanding preferred shares. The meeting may be called by publication of a notice in the *Diário Oficial do Estado de São Paulo* and in a newspaper of general circulation in our principal place of business, currently São José dos Campos, at least fifteen days prior to the meeting. In such special meetings, each preferred share will entitle the holder thereof to one vote.

#### ***Conversion Rights***

The shareholders may authorize the conversion of the common shares into preferred shares on a voluntary basis and in the proportion of the requests received, in case the requests are higher than the authorized amount of the conversion; provided that, as a result of such conversion, the number of non-voting shares, such as our preferred shares, remains below the limit of two-thirds of our capital stock.

#### ***Form and Transfer***

As our shares are in registered book-entry form, the transfer of shares is governed by the rules of Article 35 of the Brazilian Corporate Law. This Article provides that a transfer of shares is effected by an entry made by Banco Itaú S.A., also known as the registrar, in its books, by debiting the share account of the transferor and crediting the share account of the transferee. Banco Itaú also performs all the services of safe-keeping and transfer of shares and related services for us.

Transfers of shares by a foreign investor are made in the same way and executed by that investor's local agent on the investor's behalf except that, if the original investment was registered with the Central Bank pursuant to Resolution No. 2,689, the foreign investor must also seek amendment, if necessary, through its local agent, of the electronic registration to reflect the new ownership.

The São Paulo Stock Exchange operates as a central clearing system. A holder of our shares may choose, in its discretion, to participate in this system and all shares elected to be put into this system will be deposited in custody with the São Paulo Stock Exchange (through a Brazilian institution duly authorized to operate by the Central Bank and having a clearing account with the São Paulo Stock Exchange). The fact that those shares are held

in custody with the São Paulo Stock Exchange will be reflected in our register of shareholders. Each participating shareholder will, in turn, be registered in our register of beneficial shareholders maintained by the São Paulo Stock Exchange and will be treated in the same way as registered shareholders.

### **Board of Directors**

Under Brazilian Corporate Law, the members of a company's Board of Directors must be shareholders of the company. There is no requirement as to the number of shares an individual must own in order to act as a member of the board of directors.

According to Brazilian Corporate Law, our officers and directors are prohibited from voting on, or acting in, matters in which their interests conflict with ours.

Our by-laws provide that the shareholders are responsible for determining the global remuneration of the members of our management bodies. Our Board of Directors is responsible for dividing such remuneration among the members of management. There are no specific provisions regarding the directors' power to vote on their compensation in the absence of an independent quorum.

With respect to the borrowing powers of the Board of Directors, the Board of Directors have the power to authorize borrowing of funds, either in the form of bonds, notes, commercial papers or other instruments of regular use in the market. Other financing arrangements, including bank loans, may be entered into by us upon the joint signatures of (i) two executive officers; (ii) one officer and one attorney-in-fact; or (iii) two attorneys-in-fact.

There is no requirement under Brazilian Corporate Law or our bylaws that directors retire upon reaching a certain age. In addition, our bylaws do not provide for the reelection of directors at staggered intervals.

For a discussion of our Board of Directors, see Item 6A. Directors and Senior Management Board of Directors and Item 6C. Board Practices.

### **Limitations on Share Ownership**

According to the *edital* (invitation to bid) issued by the Brazilian government in connection with our privatization in 1994, non-Brazilians may not hold in excess of 40% of our common shares. There is no similar restriction on ownership of our preferred shares. However, foreign investments must be registered with the Central Bank and/or CVM, as the case may be. See Item 10D. Exchange Controls. In addition, there are no legal limitations on the rights of non-resident or foreign shareholders to exercise their voting rights as shareholders.

There are no provisions in our bylaws with respect to the disclosure of share ownership. Notwithstanding, Brazilian Corporate Law states that a corporation shall provide information regarding their share registry book to any person, provided that such information is necessary to protect any rights or clarify situations involving interests of (i) the requesting person, (ii) a shareholder or (iii) the securities market.

### **Changes to the Brazilian Corporate Law**

The Brazilian Congress enacted Law No. 10,303 on October 31, 2001, which modified several provisions of the Brazilian Corporate Law and became effective with respect to us in March 2002. According to this new law, preferred shareholders who own at least 10% of the total share capital of a company and common shareholders who own at least 15% of the total common shares of a company are each entitled to elect, in a separate election, a representative to the board of directors. If preferred shareholders and common shareholders cannot separately achieve the 10% and 15% levels, respectively, preferred shareholders and common shareholders who together own at least 10% of the total share capital of a company will be entitled to elect, in a separate election, a representative to the board of directors. Law 10,303 also modified the minimum rights attributed to preferred shares, appraisal rights, share redemption procedures and requirements for the disclosure of trades by insiders.

## 10C. Material Contracts

### Joint Venture with Liebherr International AG

We entered into a joint venture with Liebherr International AG to develop and manufacture landing gear and high precision hydraulic equipment and provide related services for Embraer and other clients around the world. In connection with this joint venture, we formed a new subsidiary, ELEB, to which we transferred all of our landing gear manufacturing activities, the employees and some liabilities related to those activities on December 1, 1999. On May 22, 2000, Liebherr International AG, acting in coordination with its subsidiary, Liebherr Aerospace Lindenberg GmbH, and through its Brazilian affiliate, purchased 40% of the capital stock of ELEB. Liebherr-Aerospace SAS is our risk-sharing partner responsible for designing, developing and manufacturing the landing gear assemblies for the new EMBRAER 170/190 jet family.

## 10D. Exchange Controls

There are no restrictions on ownership of our preferred shares by individuals or legal entities domiciled outside Brazil. However, the right to convert dividend payments and proceeds from the sale of preferred shares into foreign currency and to remit such amounts outside Brazil is subject to restrictions under foreign investment legislation which generally requires, among other things, the registration of the relevant investment with the Central Bank.

Under Resolution No. 2,689, foreign investors registered with the CVM may buy and sell shares on the São Paulo Stock Exchange without obtaining a separate certificate of registration for each transaction. Investors under these regulations are also generally entitled to favorable tax treatment.

Annex V to Resolution No. 1,289, as amended, of the National Monetary Council, also known as the Annex V Regulations, provides for the issuance of depositary receipts in foreign markets in respect of shares of Brazilian issuers.

In connection with both equity offerings of our preferred shares, an electronic registration was issued in the name of the depositary with respect to the ADSs and is maintained by the custodian on behalf of the depositary. This electronic registration was carried on through the Central Bank Information System-SISBACEN. Pursuant to the registration, the custodian and the depositary are able to convert dividends and other distributions with respect to the preferred shares represented by ADSs into foreign currency and remit the proceeds outside Brazil. In the event that a holder of ADSs exchanges such ADSs for preferred shares, the holder will be entitled to continue to rely on the depositary's registration for five business days after the exchange. Thereafter, a holder must seek to obtain its own electronic registration. Unless the preferred shares are held pursuant to Resolution No. 2,689 by a duly registered investor or a holder of preferred shares who applies for and obtains a new certificate of registration, that holder may not be able to convert into foreign currency and remit outside Brazil the proceeds from the disposition of, or distributions with respect to, the preferred shares. In addition, if the foreign investor resides in a tax haven jurisdiction or is not an investor registered under Resolution No. 2,689, the investor will be subject to less favorable Brazilian tax treatment than a holder of ADSs.

See Item 3D. Risk Factors Risks Relating to the Preferred Shares and the ADSs If holders of ADSs exchange the ADSs for preferred shares, they risk losing the ability to remit foreign currency abroad and Brazilian tax advantages and Item 10E. Taxation Brazilian Tax Consequences.

### Preemptive Rights

Each of our shareholders has a general preemptive right to subscribe for shares or securities convertible into shares in any capital increase, in proportion to its shareholding, except in the event of the grant and exercise of any option to acquire shares of our capital stock. A period of at least 30 days following the publication of notice of the issuance of shares or securities convertible into shares is allowed for exercise of the right, and the right is negotiable. According to the Brazilian Corporate Law and our bylaws, the board of directors may, in its discretion, eliminate the preemptive rights of the shareholders in the event that we issue shares, debentures convertible into

shares, or subscription warrants that will be offered either through a stock exchange or in a public offering, or through an exchange of shares in a public offering, the purpose of which is to acquire control of another company, as established by law.

In the event of a capital increase by means of the issuance of new shares, holders of ADSs, or of preferred shares, would, except under circumstances described above, have preemptive rights to subscribe to any class of our newly issued shares. However, a holder may not be able to exercise the preemptive rights relating to the preferred shares underlying the ADSs unless a registration statement under the Securities Act is effective with respect to those shares to which the rights relate or an exemption from the registration requirements of the Securities Act is available. See Item 3D. Risk Factors Risks Relating to the Preferred Shares and the ADSs Holders of our ADSs might be unable to exercise preemptive rights with respect to the preferred shares.

### **Redemption and Right of Withdrawal**

According to our bylaws, our common shares and preferred shares are not redeemable.

The Brazilian Corporate Law provides that, under limited circumstances, a shareholder has the right to withdraw his equity interest from the company and to receive payment for the portion of shareholder's equity attributable to his equity interest. This right of withdrawal may be exercised by dissenting shareholders of Embraer (including any holder of preferred shares) in the event that at least half of all voting shares outstanding authorize us:

to create preferred shares or to increase disproportionately an existing class of preferred shares relative to the other class of shares, unless such action is provided for or authorized by the bylaws;

to modify a preference, privilege or condition of redemption or amortization conferred on one or more classes of preferred shares, or to create a new class with greater privileges than the existing classes of preferred shares;

to reduce the mandatory distribution of dividends;

to change our corporate purpose;

to merge us into another company or to consolidate us with another company, subject to the conditions set forth in the Brazilian Corporate Law;

to transfer all of our shares to another company in order to make us a wholly owned subsidiary of such company, known as *incorporação de ações*;

to acquire control of another company at a price which exceeds the limits set forth in the Brazilian Corporate Law;

to participate in a centralized group of companies as defined under the Brazilian Corporate Law and subject to the conditions set forth therein; or

to conduct a spin-off that results in (a) a change of our corporate purposes, except if the assets and liabilities of the spun-off company are contributed to a company that is engaged in substantially the same activities, (b) a reduction in the mandatory dividend or (c) any participation in a centralized group of companies, as defined under Brazilian Corporate Law.

In addition, in the event that the entity resulting from a merger, or *incorporação de ações*, as described above, a consolidation or a spin-off of a listed company fails to become a listed company within 120 days of the shareholders' meeting at which such decision was taken, the dissenting or non-voting shareholders may also exercise their right of withdrawal.

Only holders of shares adversely affected by the changes mentioned in the first and second items above may withdraw their shares. The right of withdrawal lapses 30 days after publication of the minutes of the relevant shareholders' meeting. In the first two cases mentioned above, however, the resolution is subject to the prior approval or subsequent ratification by holders of a majority of the outstanding preferred shares, which must be obtained at a special meeting held within one year. In such cases, the 30-day term is counted from the date the minutes of the special meeting are published. We would be entitled to reconsider any action giving rise to withdrawal rights within ten days following the expiration of such rights if the withdrawal of shares of dissenting shareholders would jeopardize our financial stability. In addition, the rights of withdrawal in the fifth and eighth bullet points above may be exercised by holders of shares under other limited circumstances.

The Brazilian Corporate Law contains provisions that restrict withdrawal rights and allow companies to redeem their shares at their economic value, subject to certain requirements. As our bylaws currently do not provide that our shares would be redeemable at their economic value, our shares would be redeemable at their book value, determined on the basis of the last balance sheet approved by the shareholders. If the shareholders' meeting giving rise to withdrawal rights occurs more than 60 days after the date of the last approved balance sheet, a shareholder may demand that its shares be valued on the basis of a new balance sheet that is of a date within 60 days of such shareholders' meeting.

According to the Brazilian Corporate Law, in events of consolidation, merger, *incorporação de ações*, participation in a group of companies, and acquisition of control of another company, the right to withdraw does not apply if the shares in question meet certain tests relating to market liquidity and float. Shareholders would not be entitled to withdraw their shares if the shares are a component of a general stock index in Brazil or abroad and shares held by persons unaffiliated with the controlling shareholder represent more than half of the outstanding shares of the relevant type or class.

#### **10E. Taxation**

This summary contains a description of certain Brazilian and U.S. federal income tax consequences of the purchase, ownership and disposition of preferred shares or ADSs by a holder, also called a U.S. holder, that is the beneficial owner of preferred shares or ADSs and that is a citizen or resident alien of the United States or a U.S. domestic corporation or that otherwise will be subject to U.S. federal income tax on a net income basis in respect of preferred shares or ADSs, but it does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a decision to purchase preferred shares or ADSs. In particular, this summary deals only with U.S. holders that will hold preferred shares or ADSs as capital assets and does not address the tax treatment of U.S. holders that own or are treated as owning 10% or more of our voting shares or that may be subject to special tax rules, such as banks, insurance companies, dealers in securities or currencies, individual retirement and other tax deferred accounts, tax-exempt organizations, persons that will hold preferred shares or ADSs as a position in a straddle, a hedging transaction or a conversion transaction for tax purposes, and persons that have a functional currency other than the U.S. dollar. Further, if a partnership (including for this purpose any entity treated as a partnership for U.S. federal income tax purposes) is a beneficial owner of preferred shares or ADSs, the treatment of a partner in a partnership will generally depend upon the status of a partner and upon the activities of the partnership. A holder of preferred shares or ADSs that is a partnership and partners in such partnership should consult their tax advisors. The summary is based upon the tax laws of Brazil and the United States as in effect on the date of this annual report, which are subject to change, possibly with retroactive effect, and to differing interpretations.

Although there presently is no income tax treaty between Brazil and the United States, the tax authorities of the two countries have had discussions that may culminate in such a treaty. No assurance can be given, however, as to if or when a treaty will enter into force or how it will affect the U.S. holders of preferred shares or ADSs.

#### **Brazilian Tax Consequences**

*General.* The following discussion summarizes the material Brazilian tax consequences of the acquisition, ownership and disposition of preferred shares or ADSs, as the case may be, by a holder that is not domiciled in Brazil, also called a non-Brazilian holder, for purposes of Brazilian taxation and, in the case of a holder of preferred shares, which has registered its investment in preferred shares at the Central Bank as a U.S. dollar investment.



Pursuant to Brazilian law, investors may invest in the preferred shares under Resolution No. 2,689, of January 26, 2000, of the National Monetary Council. The rules of Resolution No. 2,689 allow foreign investors to invest in almost all financial assets and to engage in almost all transactions available in the Brazilian financial and capital markets, provided that some requirements are fulfilled. In accordance with Resolution No. 2,689, the definition of foreign investor includes individuals, legal entities, mutual funds and other collective investment entities, domiciled or headquartered abroad.

Pursuant to the rules, foreign investors must: (1) appoint at least one representative in Brazil with powers to perform actions relating to the foreign investment; (2) complete the appropriate foreign investor registration form; (3) register as a foreign investor with the CVM; and (4) register the foreign investment with the Central Bank.

Securities and other financial assets held by foreign investors pursuant to Resolution No. 2,689 must be registered or maintained in deposit accounts or under the custody of an entity duly licensed by the Central Bank or the CVM. In addition, securities trading is restricted to transactions carried out in the stock exchanges or organized over-the-counter markets licensed by the CVM.

*Taxation of Dividends.* Dividends, including stock dividends and other dividends paid in property, paid by us to the depositary in respect of the ADSs, or to a non-Brazilian holder in respect of the preferred shares, are currently not subject to income withholding tax, provided that they are paid out of profits generated as of January 1, 1996 (or out of reserves derived therefrom). We do not have retained earnings generated prior to January 1, 1996 (or reserves out of such earnings).

*Taxation of Gains.* Gains realized outside Brazil by a non-Brazilian holder on the disposition of ADSs to another non-Brazilian holder are not subject to Brazilian tax.

The deposit of preferred shares in exchange for ADSs may be subject to Brazilian capital gains at the rate of 15% if the amount previously registered with the Central Bank as a foreign investment in the preferred shares is lower than (1) the average price per preferred share on a Brazilian stock exchange on which the greatest number of such shares were sold on the day of deposit or (2) if no preferred shares were sold on that day, the average price on the Brazilian stock exchange on which the greatest number of preferred shares were sold in the fifteen trading sessions immediately preceding such deposit. In such a case, the difference between the amount previously registered and the average price of the preferred shares, calculated as above, will be considered a capital gain. Such taxation is not applicable in case of investors registered under Resolution No. 2,689 which are not located in a tax haven jurisdiction. The withdrawal of ADSs in exchange for preferred shares is not subject to Brazilian tax. On receipt of the underlying preferred shares, the non-Brazilian holder registered under Resolution No. 2,689 will be entitled to register the U.S. dollar value of such shares with the Central Bank as described below in Registered Capital. However, if this non-Brazilian holder does not register under Resolution No. 2,689, it will be subject to the less favorable tax treatment described below.

Non-Brazilian holders are not subject to tax in Brazil on gains realized on sales of preferred shares that occur abroad to persons who are not resident in Brazil. Non-Brazilian holders are generally subject to income tax imposed at a rate of 15% on gains realized on sales or exchanges of the preferred shares that involve a resident of Brazil, if the transaction is carried out outside of any Brazilian stock, future or commodities exchange. Gains realized by a non-Brazilian holder upon redemption of preferred shares will be treated as a gain from the disposition of such shares to a Brazilian resident occurring outside of any Brazilian stock, future and commodities exchange and, accordingly, will be subject to tax at a rate of 15%.

Non-Brazilian holders are subject to income tax imposed at a rate of 20% on gains realized on sales or exchanges in Brazil of preferred shares that occur on the Brazilian exchanges unless such a sale is made by a non-Brazilian holder which is not resident in a tax haven jurisdiction and (1) such sale is made within five business days of the withdrawal of such preferred shares in exchange for ADSs and the proceeds thereof are remitted abroad within such five-day period or (2) such sale is made under Resolution No. 2,689 by registered non-Brazilian holders who obtain registration with the CVM. In these two cases, the gains realized are exempt from income tax. The gain realized is the difference between the amount in *reais* realized on the sale or exchange and the acquisition cost measured in *reais*, without any correction for inflation, of the shares sold. The gain realized as a result of a transaction that occurs other than on the São Paulo Stock Exchange will be the positive difference between the

amount realized on the sale or exchange and the acquisition cost of the preferred shares, both such values to be taken into account in *reais*; there are grounds, however, to hold that the gain realized should be calculated based on the foreign currency amount registered with the Central Bank, such foreign currency amount to be translated into reais at the commercial market rate on the date of such sale or exchange. There is no assurance that the current preferential treatment for holders of the ADSs and some non-Brazilian holders of the preferred shares under Resolution No. 2,689 will continue or will not change in the future.

Any exercise of preemptive rights relating to the preferred shares will not be subject to Brazilian taxation. Any gain on the sale or assignment of preemptive rights relating to our preferred shares by the depositary on behalf of holders of our ADSs will be subject to Brazilian income taxation according to the same rules applicable to the sale or disposition of preferred shares, unless such sale or assignment is performed on the São Paulo Stock Exchange by an investor under Resolution No. 2,689 who is not a resident in a tax haven jurisdiction, in which case the gains are exempt from income tax.

*Taxation on Interest on Shareholders' Equity.* Any payment of interest on shareholders' equity (see Item 8A. Consolidated Statements and Other Financial Information Dividends and Dividend Policy History of Dividend Payments and Dividend Policy and Additional Payments on Shareholders' Equity ) to holders of ADSs or preferred shares, whether or not they are Brazilian residents, is subject to Brazilian withholding tax at the rate of 15% at the time Embraer records such liability, whether or not the effective payment has been made at that time. In the case of non-Brazilian residents that are resident in a tax haven jurisdiction, the applicable rate for income tax is 25%. Current Brazilian Corporate Law establishes that a notional interest charge attributed to shareholders' equity can either be accounted for as part of the mandatory dividend or not. In case the payment of such interest is accounted for as part of the mandatory dividend, we would be required to pay an additional amount to ensure that the net amount received by the shareholders, after the income tax, is at least equal to the mandatory dividend. The distribution of interest attributed to shareholders' equity would be proposed by our board of directors and subject to subsequent declaration by the shareholders at a general meeting.

*Taxation of Foreign Exchange Transactions ( IOF/Câmbio ).* Pursuant to Decree No. 2,219 of May 2, 1997, the conversion into Brazilian currency of proceeds received by a Brazilian entity from a foreign investment in the Brazilian securities market (including those in connection with an investment in preferred shares or the ADSs and those under Resolution No. 2,689) and the conversion into foreign currency of proceeds received by a non-Brazilian holder is subject to a tax on exchange transactions known as IOF, the rate of which is currently 0%. However, according to Law No. 8,894/94, the Minister of Finance has the power to increase the IOF/Câmbio rate at any time to a maximum of 25%, but only in relation to future exchange transactions.

*Taxation on Bonds and Securities Transactions ( IOF/Títulos ).* Law No. 8,894/94 created the Tax on Bonds and Securities Transactions, or IOF/Títulos, which may be imposed on any transactions involving bonds and securities, even if these transactions are performed on the Brazilian stock, futures or commodities exchange. The applicable rate of this tax is currently 0%, although the executive branch may increase such rate up to 1.5% per day, but only with respect to future transactions.

*Other Brazilian Taxes.* There are no Brazilian inheritance, gift or succession taxes applicable to the ownership, transfer or disposition of preferred shares or ADSs by a non-Brazilian holder, except for gift and inheritance taxes which are levied by some states of Brazil on gifts made or inheritances bestowed by individuals or entities not resident or domiciled in Brazil within such state to individuals or entities resident or domiciled within such state in Brazil. There are no Brazilian stamp, issue, registration, or similar taxes or duties payable by holders of preferred shares or ADSs.

*Transactions on Bank Accounts ( CPMF ).* As a general rule, the *Contribuição Provisória sobre Movimentação Financeira*, the tax on transactions on bank accounts, or CPMF, is imposed on any debit to bank accounts. Therefore, transactions by the depositary or by holders of preferred shares that involve the transfer of Brazilian currency through Brazilian financial institutions will be subject to the CPMF tax. When a non-Brazilian holder transfers the proceeds from the sale or assignment of preferred shares by an exchange transaction, the CPMF tax is levied on the amount to be remitted abroad in *reais*. If we have to perform any exchange transaction in connection with ADSs or preferred shares, we will also be subject to the CPMF tax. The CPMF tax is generally imposed on bank account debits, at the current rate of .38%. The CPMF tax was originally scheduled to expire on

June 16, 2002. However, the Brazilian Congress has approved an extension of the CPMF tax until 2004 and is discussing a permanent extension of the tax. In the event we perform any exchange transaction in connection with ADSs or preferred shares, we will be responsible for collecting the CPMF tax.

*Beneficiaries Resident or Domiciled in Tax Havens or Low Tax Jurisdictions.* Law No. 9,779, dated as of January 1, 1999, states that, with the exception of limited prescribed circumstances, income derived from operations by a beneficiary resident or domiciled in a country considered a tax haven is subject to withholding income tax at the rate of 25%. Tax havens are considered to be countries which do not impose any income tax or which impose such tax at a maximum rate of less than 20%. Accordingly, if the distribution of interest attributed to shareholders' equity is made to a beneficiary resident or domiciled in a tax haven jurisdiction, the applicable income tax rate will be 25% instead of 15%. Capital gains are not subject to this 25% tax, even if the beneficiary is resident in a tax haven jurisdiction. See Taxation of Gains.

*Registered Capital.* The amount of an investment in preferred shares held by a non-Brazilian holder who obtains registration under Resolution No. 2,689, or by the depositary representing such holder, is eligible for registration with the Central Bank; such registration (the amount so registered being called registered capital) allows the remittance outside Brazil of foreign currency, converted at the commercial market rate, acquired with the proceeds of distributions on, and amounts realized with respect to dispositions of, such preferred shares. The registered capital for each preferred share purchased as part of the international offering, or purchased in Brazil after that date, and deposited with the depositary will be equal to its purchase price in U.S. dollars. The registered capital for a preferred share that is withdrawn upon surrender of an ADS will be the U.S. dollar equivalent of:

the average price of a preferred share on the Brazilian stock exchange on which the greatest number of such shares were sold on the day of withdrawal; or

if no preferred shares were sold on that day, the average price on the Brazilian stock exchange on which the greatest number of preferred shares were sold in the 15 trading sessions immediately preceding such withdrawal.

The U.S. dollar value of the average price of preferred shares is determined on the basis of the average of the U.S. dollar/*real* commercial market rates quoted by the Central Bank information system on that date (or, if the average price of preferred shares is determined under the second option above, the average of such average quoted rates on the same 15 dates used to determine the average price of preferred shares).

A non-Brazilian holder of preferred shares may experience delays in effecting such registration, which may delay remittances abroad. Such a delay may adversely affect the amount, in U.S. dollars, received by the non-Brazilian holder. See Item 3D. Risk Factors Risks Relating to Brazil Exchange rate instability may result in uncertainty in the Brazilian economy and the Brazilian securities market and could lower the market value of the preferred shares and the ADSs.

#### **U.S. Federal Income Tax Consequences**

In general, for U.S. federal income tax purposes, U.S. holders that are beneficial owners of ADSs will be treated as the beneficial owners of the preferred shares represented by those ADSs.

*Taxation of Dividends.* Distributions with respect to the preferred shares or the ADSs (other than distributions in redemption of the preferred shares subject to Section 302(b) of the U.S. Internal Revenue Code of 1986 (also called the Code) or in a liquidation of Embraer) (including distributions of notional interest charges attributed to shareholders' equity, as described above in Brazilian Tax Consequences Taxation on Interest on Shareholders' Equity ) will, to the extent made from current or accumulated earnings and profits of Embraer as determined under U.S. federal income tax principles, constitute dividends for U.S. federal income tax purposes. Whether such current or accumulated earnings and profits will be sufficient for all such distributions on the preferred shares or ADSs to qualify as dividends for U.S. federal income tax purposes depends on the future profitability of Embraer and other factors, many of which are beyond our control. To the extent that such a distribution exceeds the amount of Embraer's earnings and profits, it will be treated as a non-taxable return of

capital to the extent of the U.S. holder's adjusted tax basis in the preferred shares or ADSs, and thereafter as capital gain (provided that the preferred shares or ADSs are held as capital assets). As used below, the term "dividend" means a distribution that constitutes a dividend for U.S. federal income tax purposes. Cash dividends (including amounts withheld in respect of Brazilian taxes) paid with respect to:

the preferred shares generally will be includible in the gross income of a U.S. holder as ordinary income on the day on which the dividends are received by the U.S. holder; or

the preferred shares represented by ADSs generally will be includible in the gross income of a U.S. holder as ordinary income on the day on which the dividends are received by the depositary;  
and, in either case, these dividends will not be eligible for the dividends received deduction allowed to corporations, but may be taxed at a preferential rate under recently enacted legislation, as discussed below.

Dividends paid in *reais* will be includible in the income of a U.S. holder in a U.S. dollar amount calculated by reference to the exchange rate in effect on the day they are received by the U.S. holder, in the case of preferred shares, or the depositary, in the case of preferred shares represented by ADSs, regardless of whether the payment is in fact converted to U.S. dollars.

If dividends paid in *reais* are converted into U.S. dollars on the day they are received by the U.S. holder or the depositary, as the case may be, U.S. holders should not be required to recognize foreign currency gain or loss in respect of the dividend income. Generally, any gain or loss resulting from currency exchange fluctuations during the period from the date the dividend payment is included in the gross income of a U.S. holder through the date such payment is converted into dollars (or otherwise disposed of) will be treated as U.S. source ordinary income or loss. However, U.S. holders should consult their own tax advisors regarding the treatment of any foreign currency gain or loss if any *reais* received by the U.S. holder or the depositary are not converted into U.S. dollars on the date of receipt.

Dividends received by most U.S. holders will constitute foreign source "passive income" or, in the case of some U.S. holders such as banks, financial services "income for U.S. foreign tax credit purposes. Subject to limitations under U.S. federal income tax law concerning credits or deductions for foreign taxes, the Brazilian withholding tax will be treated as a foreign income tax eligible for credit against a U.S. holder's U.S. federal income tax liability (or at a U.S. holder's election, may be deducted in computing taxable income). The rules with respect to foreign tax credits are complex and U.S. holders are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances. The Internal Revenue Service, or IRS, has expressed concern that intermediaries in connection with depository arrangements may be taking actions that are inconsistent with the claiming of foreign tax credits by U.S. persons who are holders of depository shares. Accordingly, investors should be aware that the discussion above regarding the availability of foreign tax credits for Brazilian withholding tax on dividends paid with respect to preferred shares represented by ADSs could be affected by future action taken by the IRS.

Section 305 of the Code provides special rules for the tax treatment of preferred stock. According to the U.S. Treasury Regulations under that section, the term "preferred stock" generally refers to stock which enjoys limited rights and privileges (generally associated with specified dividend and liquidation priorities), but does not participate in corporate growth to any significant extent. While the preferred shares have some preferences over our common shares, the preferred shares are not fixed as to dividend payments or liquidation value; thus, it is not entirely clear whether the preferred shares will be treated as "preferred stock" or "common stock" within the meaning of section 305 of the Code. If the preferred shares are treated as "common stock" for purposes of section 305, distributions to U.S. holders of additional shares of such "common stock" or preemptive rights relating to such "common stock" with respect to their preferred shares or ADSs that are made as part of a pro rata distribution to all our shareholders likely will not be treated as dividend income for U.S. federal income tax purposes. On the other hand, if the preferred shares are treated as "preferred stock" within the meaning of section 305, then, in addition to being taxable on cash distributions as described above, a U.S. holder will be taxable on distributions of additional shares or preemptive rights (including amounts withheld in respect of any Brazilian taxes). In that event, the amount

of such distribution (and the basis of the new shares or preemptive rights so received) will equal the fair market value of the shares or preemptive rights on the date of distribution.

*Taxation of Capital Gains.* Deposits and withdrawals of preferred shares by U.S. holders in exchange for ADSs will not result in the realization of gain or loss for U.S. federal income tax purposes.

Gain or loss realized by a U.S. holder on the sale, redemption or other disposition of preferred shares or ADSs will be subject to U.S. federal income taxation as capital gain or loss in an amount equal to the difference between such U.S. tax holder's adjusted basis in the preferred shares or the ADSs and the amount realized on the disposition. As further discussed below, capital gains of individuals derived with respect to capital assets held for more than one year may be eligible for various reduced rates of taxation. The deductibility of capital losses is subject to limitations. Any gain or loss realized by a U.S. holder will generally be treated as a U.S. source gain or loss.

If a Brazilian withholding tax is imposed on the sale or disposition of preferred shares or ADSs (see *Brazilian Tax Consequences*), the amount realized by a U.S. holder will include the gross amount of the proceeds of such sale or disposition before deduction of the Brazilian withholding tax. The availability of U.S. foreign tax credits for these Brazilian taxes and any Brazilian taxes imposed on distributions that do not constitute dividends for U.S. tax purposes is subject to various limitations and involves the application of rules that depend on a U.S. holder's particular circumstances. U.S. holders are urged to consult their own tax advisors regarding the application of the foreign tax credit rules to their investment in, and disposition of, preferred shares or ADSs.

*Passive Foreign Investment Companies.* If, during any taxable year of a non-U.S. corporation, 75% or more of the corporation's gross income consists of certain types of passive income, or the average value during a taxable year of the passive assets of the corporation (generally assets that generate passive income) is 50% or more of the average value of all the corporation's assets, the corporation will be treated as a passive foreign investment company, or PFIC, under U.S. federal income tax law. If a corporation is treated as a PFIC, a U.S. holder may be subject to increased tax liability upon the sale of preferred shares or ADSs, or upon the receipt of certain dividends, unless such U.S. holder makes an election to be taxed currently on its pro rata portion of the corporation's income, whether or not such income is distributed in the form of dividends, or otherwise makes a mark-to-market election with respect to the corporation's stock as permitted by the Code. In addition, a U.S. holder would not be entitled to (if otherwise eligible for) the preferential reduced rate of tax payable on certain dividend income under recently enacted United States tax legislation, as discussed below. Based on our operations and business plans, we do not believe that we are currently a PFIC, and do not expect to become a PFIC in the foreseeable future.

*Information Reporting and Backup Withholding.* Information reporting requirements will apply to dividends in respect of the preferred shares or ADSs or the proceeds received on the sale, exchange, or redemption of the preferred shares or ADSs paid within the United States (and, in some cases, outside of the United States) to U.S. holders other than some exempt recipients (such as corporations), and a 28% backup withholding may apply to such amounts if the U.S. holder fails to provide an accurate taxpayer identification number or to report interest and dividends required to be shown on its federal income tax returns. The amount of any backup withholding from a payment to a U.S. holder will be allowed as a credit against the U.S. holder's U.S. federal income tax liability, provided that the required information is furnished to the IRS.

*Recent United States Tax Law Changes Applicable to Individuals.* Recently enacted United States tax legislation (the 2003 Tax Act) generally has reduced the rates of tax payable by individuals (as well as certain trusts and estates) on certain items of income. For example, for capital assets held for over one year and sold or exchanged on or after May 2, 2003 but in taxable years beginning before January 1, 2009, the maximum rate of tax generally will be the 15% (rather than the higher rates of tax generally applicable to items of ordinary income). Further, qualified dividend income received by individuals in taxable years beginning after December 31, 2002 and beginning before January 1, 2009, generally will be taxed at rates applicable to these capital gains (*i.e.*, a maximum rate of 15%) rather than the higher rates applicable to other items of ordinary income. For this purpose, qualified dividend income generally includes dividends paid on stock in United States corporations as well as dividends paid on stock in foreign corporations if, among other things, (1) the stock of the foreign corporation is readily tradable on an established securities market in the United States, or (2) the foreign corporation is eligible for

the benefits of a comprehensive income tax treaty with the United States, such qualifying treaties to be identified by the Secretary of the United States Treasury Department. For this purpose, stock should be treated as so traded if an ADR or ADS backed by such stock is so traded. The precise extent to which dividends paid on stock by foreign corporations will constitute qualified dividend income and the effect of such status on the ability of a taxpayer to utilize associated foreign tax credits is not entirely clear, but it is anticipated that there will be administrative pronouncements concerning these provisions in the future. Holders are urged to consult their own tax advisors regarding the impact of the provisions of the 2003 Tax Act on their particular situations.

**10F. Dividends and Paying Agents**

Not applicable.

**10G. Statements by Experts**

Not applicable.

**10H. Documents on Display**

We are subject to the periodic reporting and other informational requirements of the Exchange Act. Accordingly, we are required to file reports and other information with the U.S. Securities and Exchange Commission, or the Commission. You may inspect and copy reports and other information to be filed by us at the Public Reference Room maintained by the Commission at 450 Fifth Street, N.W., Washington D.C. 20549. You may obtain copies of these materials from the Public Reference Room of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549, at prescribed rates. You may obtain information on the operation of the Commission's Public Reference Room by calling the Commission in the United States at 1-800-SEC-0330. You may also inspect and copy this material at the offices of the New York Stock Exchange, Inc., 20 Broad Street, New York, New York 10005.

We file our annual report on Form 20-F, including our financial statements, and other reports, including our reports on Form 6-K, electronically with the Commission. These filings are available at [www.sec.gov](http://www.sec.gov). We also file financial statements and other periodic reports electronically with the CVM at their website, [www.cvm.gov.br](http://www.cvm.gov.br). Copies of our annual reports on Form 20-F and documents referred to in this annual report and our bylaws will be available for inspection upon request at our headquarters at Av. Brigadeiro Faria Lima, 2170, 12227-901 São José dos Campos, São Paulo, Brazil.

**10I. Subsidiary Information**

Not required.

**ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

We are exposed to various market risks, primarily related to potential loss arising from adverse changes in interest rates and foreign currency exchange rates. We have established policies and procedures to manage sensitivity to interest rate and foreign currency exchange rate risk. These procedures include the monitoring of our levels of exposure to each market risk, including an analysis based on a forecast of future cash flows, the funding of variable rate assets with variable rate liabilities, and limiting the amount of fixed rate assets which may be funded with floating rate liabilities. We also use derivative financial instruments to mitigate the effects of interest rate fluctuations and to reduce our exposure to exchange rate risk, but not for speculative purposes. The following sections address the significant market risks associated with our financial activities.

**Interest Rate Risk**

Our exposure to market risk for interest rate fluctuations principally relates to changes in the market interest rates of our U.S. dollar-denominated and *real*-denominated monetary assets and liabilities, principally our short-term investments (classified as cash and cash equivalents on our balance sheet) and short- and long-term debt

obligations. Increases and decreases in prevailing interest rates generally translate into increases and decreases in interest expense on debt and interest income on monetary assets. Additionally, the fair values of interest rate-sensitive instruments are also affected by general market conditions.

*Monetary Assets.* We primarily invest in short-term financial assets with low risk, such as bank certificates of deposit and money market funds denominated in Brazilian *reais* and U.S. dollars, which generally earn interest based on the Brazilian overnight rate for interbank deposits, referred to as the CDI, or the quoted bank rates for U.S. time deposits or overnight funds. At December 31, 2002, our short-term investments totaled US\$656.8 million, of which US\$280.8 million was represented by U.S. dollar investments and the equivalent of US\$376.0 million was represented by Brazilian investments. Our Brazilian certificates of deposit and financial investment funds guarantee a minimum rate of return, usually 101% of the CDI. The annualized weighted average interest rate earned on our U.S. dollar time deposits was 1.95% and on our Brazilian investments was 19.22%.

*Monetary Liabilities.* Our short- and long-term debt obligations totaled US\$552.6 million at December 31, 2002 and were primarily denominated in U.S. dollars, Brazilian *reais* and Japanese yen. Of the total amount of debt denominated in U.S. dollars, US\$373.6 million, approximately US\$221.0 million was fixed rate. The remaining floating rate U.S. dollar-denominated debt was indexed to either six-month or 12-month LIBOR. All of our Brazilian *reais*-denominated debt, totaling US\$24.1 million at December 31, 2002, bears interest at a variable rate based on the TJLP, the long-term interest rate in Brazil. The TJLP ranged from 9.5% per annum to 10.0% per annum during 2002. Of the US\$152.1 million of Japanese yen-denominated debt, US\$27.1 million was fixed rate. The remaining floating rate debt was indexed to the Japanese interbank deposit rate, or JIBOR.

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The table below provides information about our short- and long-term debt obligations as of December 31, 2002 that are sensitive to changes in interest rates and foreign currency exchange rates.

	Weighted average interest rate 2002	Total outstanding amount	Outstanding amount by year of maturity					Thereafter	Total Fair Value
			2003	2004	2005	2006	2007		
(in thousands, except percentages)									
<b>Short-term debt</b>									
U.S. dollars (LIBOR indexed)	5.55%	US\$ 25,647	US\$ 25,647						US\$ 30,693
U.S. dollars (fixed rate)	5.44	176,451	176,451						177,326
Reais (TJLP indexed)	13.58	8,253	8,253						9,309
EURO (LIBOR indexed)	3.27	2,754	2,754						2,785
Japanese yen (JIBOR indexed)	1.15	31,321	31,321						30,761
Japanese yen (fixed rate)	1.67	100	100						494
Total short-term debt		244,526	244,526						251,369
<b>Long-term debt</b>									
U.S. dollars (LIBOR indexed)	5.55%	US\$ 126,948	US\$ 22,588	US\$ 24,360	US\$ 20,000	US\$ 20,000	US\$ 40,000		US\$ 121,602
U.S. dollars (fixed rate)	5.44	44,578	6,064	20,764	4,742	3,858	9,151		42,612
Reais (TJLP indexed)	13.58	15,868	7,875	5,434	664	1,056	840		14,080
Japanese yen (JIBOR indexed)	1.15	93,758	31,253	31,253	31,252				82,495
Japanese yen (fixed rate)	1.67	26,958	26,958						24,042
Total long-term debt		308,110	94,737	81,811	56,657	24,914	49,991		284,831
<b>Total debt</b>		<b>US\$ 552,636</b>	<b>US\$ 244,526</b>	<b>US\$ 94,737</b>	<b>US\$ 81,811</b>	<b>US\$ 56,657</b>	<b>US\$ 24,914</b>	<b>US\$ 49,991</b>	<b>US\$ 536,200</b>



In order to better match our interest risk on our monetary assets to our monetary liabilities, we have entered into a number of swaps, primarily effectively converting our fixed and floating rate U.S. dollar-denominated debt and fixed and floating rate yen-denominated debt into CDI-based *reais*-denominated obligations. Specifically, as of December 31, 2002, we had effectively converted US\$101.1 million of our U.S. dollar floating rate debt, US\$70.7 million of our U.S. dollar fixed rate debt, the yen equivalent of US\$97.4 million of our yen floating rate debt and the yen equivalent of US\$27.1 million of our yen floating rate debt into the *reais* equivalent of US\$296.2 million of CDI-based *reais*-denominated obligations. The weighted average interest rate of these CDI-based obligations for 2002 was 14.9%. Through these swaps, we have also effectively converted the yen equivalent of US\$27.7 million of our yen-denominated floating rate debt to an equivalent amount of U.S. dollar obligations with a fixed interest rate of 5.8% per annum. These swaps did not affect the maturity or amortization schedule of our existing debt.

Because these swaps are not accounted for as hedging transactions under U.S. GAAP, these swaps are recorded at fair value on our balance sheet, and we recognized an unrealized gain of US\$49.7 million in 2002 as part of interest income (expense), net. For further information about the terms of these swap transactions, including notional amount, maturity date and fair value gains and losses, see Note 34 to our consolidated financial statements.

We believe our remaining potential risk for debt indexed to LIBOR is not material because these rates have historically been lower and more stable than interest rates in Brazil. We do not currently have any derivative instruments that limit our exposure to changes in the TJLP because we believe that our total exposure, combined with the relatively lower volatility of the TJLP, is unlikely to have a material effect on our company.

### Foreign Currency Risk

In managing our foreign currency risk, we focus on balancing our non-U.S. dollar-denominated assets against our non-U.S. dollar-denominated liabilities plus shareholders' equity in relation to our forecasts of future cash flows. Beyond the foreign currency exposure related to our debt obligations and short-term investments as summarized above, we also have other assets and liabilities denominated in currencies other than the U.S. dollar. These assets and liabilities are primarily cash and cash equivalents, accounts receivable and payable, income taxes, dividends and certain other assets and liabilities and are primarily denominated in Brazilian *reais*. At December 31, 2002, the net position of these *real*-denominated assets and liabilities, before taking into account the swap agreements discussed above, was a net asset of US\$81.1 million. Since we have effectively converted \$296.2 million of our U.S. dollar and yen-denominated liabilities into *real*-denominated obligations, our effective exposure to fluctuations in the *real* is net *real*-denominated liabilities of US\$215.1 million as of December 31, 2002. As a

result, we are exposed primarily to fluctuations in the *real*/dollar exchange rate to the extent of these net liabilities. The effects of the devaluation of the *real* on *real*-denominated net assets result in foreign exchange losses and the effects on *real*-denominated net liabilities result in foreign exchange gains.

**ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES**

Not applicable.

**PART II**

**ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES**

No matters to report.

**ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS**

No matters to report.

**ITEM 15. CONTROLS AND PROCEDURES**

Our president and chief executive officer, Maurício Novis Botelho, and our executive vice-president corporate and chief financial officer, Antonio Luiz Pizarro Manso, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-14(c) and 15d-14(c)) as of June 26, 2003, have concluded that, as of such date, our disclosure controls and procedures were effective to ensure that material information relating to us and our consolidated subsidiaries would be made known to them by others within our company and our consolidated subsidiaries.

There were no significant changes in our internal controls or in other factors that could significantly affect our disclosure controls and procedures subsequent to the date of their evaluation, nor were there any significant deficiencies or material weaknesses in our internal controls. As a result, no corrective actions were required or taken.

**ITEM 16. [Reserved]**

**PART III****ITEM 17. FINANCIAL STATEMENTS**

We have responded to Item 18 in lieu of responding to this item.

**ITEM 18. FINANCIAL STATEMENTS**

Our consolidated financial statements, together with the Independent Auditors' Report thereon, are filed as part of this annual report and are located following the signature page hereof.

**ITEM 19. EXHIBITS**

Exhibit Number	Description
1.1	Bylaws of Embraer (English translation).
2.1	Shareholders' Agreement dated July 24, 1997, as amended, together with an English translation, incorporated herein by reference to Exhibit 9.1 to Embraer's Registration Statement No. 333-12220.
2.2	Form of Deposit Agreement among Embraer, Morgan Guaranty Trust Company of New York, as depositary, and the Holders from time to time of American Depositary Shares issued thereunder, including the Form of American Depositary Receipts, incorporated herein by reference to Exhibit 4.1 to Embraer's Registration Statement No. 333-12220.
4.1*	Shareholders' Agreement executed by Embraer and Liebherr International AG on May 22, 2000, incorporated herein by reference from Exhibit 10.5 to Embraer's Registration Statement No. 333-12220.
4.2	Lease Agreement, as amended, between the Paris Airport and Embraer, dated as of January 1, 1999, together with an English translation, incorporated herein by reference from Exhibit 10.6 to Embraer's Registration Statement No. 333-12220.
4.3	Lease Agreement, as amended, between Howard County and Embraer Aircraft Corporation, dated as of April 21, 1998, incorporated herein by reference from Exhibit 10.6 to Embraer's Registration Statement No. 333-12220.

**SIGNATURES**

Pursuant to the requirements of Section 12 of the Securities and Exchange Act of 1934, the Registrant hereby certifies that it meets all of the requirements for filing this Annual Report on Form 20-F and has duly caused this Annual Report or amendment thereto to be signed on its behalf by the undersigned, thereunto duly authorized.

EMBRAER EMPRESA BRASILEIRA DE  
AERONÁUTICA S.A.

By: /s/ Antonio Luiz Pizarro Manso \_\_\_\_\_

Name: Antonio Luiz Pizarro Manso  
Title: Executive Vice-President Corporate and Chief  
Financial Officer

By: /s/ Carlos Rocha Villela \_\_\_\_\_

Name: Carlos Rocha Villela  
Title: Vice-President and General Counsel

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**INDEX TO FINANCIAL STATEMENTS**

	<b>Page</b>
Index to Financial Statements	F-1
Independent Auditors' Report	F-3
Consolidated Balance Sheets at December 31, 2001 and 2002	F-4
Consolidated Statements of Income and Comprehensive Income for the Years Ended December 31, 2000, 2001 and 2002	F-5
Consolidated Statements of Shareholders' Equity for the Years Ended December 31, 2000, 2001 and 2002	F-6
Consolidated Statements of Cash Flows for the Years Ended December 31, 2000, 2001 and 2002	F-8
Notes to Consolidated Financial Statements for the Years Ended December 31, 2000, 2001 and 2002	F-9

***Embraer - Empresa Brasileira  
de Aeronáutica S.A.***

*Consolidated Financial Statements  
for the Years Ended  
December 31, 2000, 2001 and 2002 and  
Independent Auditors Report*

F-2

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Shareholders of  
Embraer - Empresa Brasileira de Aeronáutica S.A.  
São Paulo - SP - Brazil

1. We have audited the accompanying consolidated balance sheets of Embraer - Empresa Brasileira de Aeronáutica S.A. and subsidiaries (the Company) as of December 31, 2001 and 2002, and the related consolidated statements of income and comprehensive income, cash flows and shareholders' equity for each of the years in the three-year period ended December 31, 2002. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.
2. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statements presentation. We believe that our audits provide a reasonable basis for our opinion.
3. In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Embraer - Empresa Brasileira de Aeronáutica S.A. and subsidiaries as of December 31, 2001 and 2002, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States of America.
4. As discussed in note 34 to the consolidated financial statements, effective January 1, 2001 the Company changed its method of accounting for derivative financial instruments to conform to Statement of Financial Accounting Standards No. 133, Accounting for Derivative Financial Instruments and Hedging Activities, as amended.

/s/ Deloitte Touche Tohmatsu

June 18, 2003  
São Paulo, Brazil



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Embraer - Empresa Brasileira de Aeronáutica S.A.

EMBRAER - EMPRESA BRASILEIRA DE AERONÁUTICA S.A.

CONSOLIDATED BALANCE SHEETS

(In thousands of U.S. dollars)

	Notes	2001	2002
<b>ASSETS</b>			
<b>CURRENT ASSETS</b>			
Cash and cash equivalents	(5)	749,302	656,822
Trade accounts receivable, net of allowance of 23,700 and 24,490	(6)	596,801	735,927
Customer and Commercial Financing	(7)		18,973
Collateralized accounts receivable and nonrecourse debt	(8)	16,315	68,872
Inventories	(9)	1,015,081	864,800
Deferred income tax assets	(29)	98,756	90,014
Other assets	(10)	89,093	77,715
Total current assets		<u>2,565,348</u>	<u>2,513,123</u>
<b>NONCURRENT ASSETS</b>			
Held to maturity investments	(11)	35,651	23,263
Collateralized accounts receivable and nonrecourse debt	(8)	306,033	873,046
Customer and commercial financing	(7)	28,672	59,401
Inventories	(9)	22,714	15,518
Property, plant and equipment, net	(13)	366,481	436,715
Investments	(12)	4,362	4,745
Deferred income taxes	(29)	85,139	72,827
Other assets	(10)	146,387	286,826
Total noncurrent assets		<u>995,439</u>	<u>1,772,341</u>
<b>TOTAL ASSETS</b>		<u><b>3,560,787</b></u>	<u><b>4,285,464</b></u>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>			
<b>CURRENT LIABILITIES</b>			
Loans	(20)	526,550	244,526
Capital lease obligation	(21)	8,985	7,949
Nonrecourse debt	(8)	16,315	68,872
Accounts payable to suppliers	(14)	265,593	323,115
Customer advances	(17)	385,265	409,258
Other accounts payable and accrued liabilities	(16)	277,779	297,463
Taxes and social charges payable	(18)	132,288	199,857
Contingencies	(19)	4,395	5,244
Accrued taxes on income	(29)	48,379	49,218
Accrued dividends	(26)	22,314	36,431
Total current liabilities		<u>1,687,863</u>	<u>1,641,933</u>
<b>LONG-TERM LIABILITIES</b>			
Loans	(20)	245,186	308,110
Capital lease obligation	(21)	7,640	4,895
Nonrecourse debt	(8)	306,033	873,046
Customer advances	(17)	106,594	95,625
Contribution from suppliers	(15)	143,615	235,445
Taxes and social charges payable	(18)	21,380	16,117
Other accounts payable and accrued liabilities	(16)	3,183	2,794
Contingencies	(19)	10,767	9,093

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Total long-term liabilities	844,398	1,545,125
	<u>          </u>	<u>          </u>
MINORITY INTEREST	8,170	8,226
	<u>          </u>	<u>          </u>
SHAREHOLDERS EQUITY	(25)	
Statutory capital:		
Common	50,263	207,014
Preferred	380,317	684,078
Additional paid-in capital - Stock Option	8,353	8,353
Legal reserve	59,162	76,172
Retained earnings (restricted)	523,834	123,399
Accumulated other comprehensive income	(1,573)	(8,836)
	<u>          </u>	<u>          </u>
Total shareholders equity	1,020,356	1,090,180
	<u>          </u>	<u>          </u>
TOTAL LIABILITIES AND SHAREHOLDERS EQUITY	3,560,787	4,285,464
	<u>          </u>	<u>          </u>

The notes are an integral part of the consolidated financial statements.

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Embraer - Empresa Brasileira de Aeronáutica S.A.

EMBRAER - EMPRESA BRASILEIRA DE AERONÁUTICA S.A.

CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME

(In thousands of U.S. dollars except per share data)

		For the years ended December 31,		
	Notes	2000	2001	2002
<b>GROSS SALES</b>				
Foreign market		2,771,847	2,902,936	2,493,313
Domestic market		56,301	62,702	58,342
Sales deductions		(65,986)	(38,643)	(25,855)
<b>NET SALES</b>		<b>2,762,162</b>	<b>2,926,995</b>	<b>2,525,800</b>
Cost of sales and services		(1,879,318)	(1,769,234)	(1,531,720)
<b>GROSS PROFIT</b>		<b>882,844</b>	<b>1,157,761</b>	<b>994,080</b>
<b>OPERATING EXPENSES</b>				
Selling expenses		(193,420)	(212,057)	(211,015)
Research and development		(69,593)	(99,566)	(158,499)
General and administrative		(96,645)	(120,787)	(109,673)
Employee profit sharing	(24)	(41,770)	(43,746)	(25,222)
Stock compensation	(28)	(510)	(1,074)	
Other operating expense, net	(30)	(19,518)	(29,463)	(20,498)
Equity in income (loss) from affiliates	(12)	753	310	389
<b>INCOME FROM OPERATIONS</b>		<b>462,141</b>	<b>651,378</b>	<b>469,562</b>
Interest income (expense), net	(22)	(6,874)	47,502	80,456
Financial transaction loss, net	(31)	(24,637)	(148,637)	(135,647)
Other nonoperating income (expense), net	(32)	5,955	(8,426)	(1,394)
<b>INCOME BEFORE INCOME TAXES</b>		<b>436,585</b>	<b>541,817</b>	<b>412,977</b>
Provision for income taxes	(29)	(117,379)	(218,394)	(188,502)
<b>INCOME BEFORE MINORITY INTEREST</b>		<b>319,206</b>	<b>323,423</b>	<b>224,475</b>
Minority interest		1,522	(423)	(1,883)
<b>INCOME BEFORE CUMULATIVE EFFECT OF ACCOUNTING CHANGE</b>		<b>320,728</b>	<b>323,000</b>	<b>222,592</b>
<b>CUMULATIVE EFFECT OF ACCOUNTING CHANGE, NET OF TAX</b>	(34)		5,440	
<b>NET INCOME</b>		<b>320,728</b>	<b>328,440</b>	<b>222,592</b>
Foreign currency translation adjustments, net of tax		(1,090)	2,998	(7,263)
<b>COMPREHENSIVE INCOME</b>		<b>319,638</b>	<b>331,438</b>	<b>215,329</b>
<b>EARNINGS PER SHARE</b>	(27)			
Basic:				

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Common	0.55	0.48	0.30
Preferred	0.61	0.53	0.33
Diluted:			
Common	0.48	0.46	0.30
Preferred	0.53	0.50	0.33
WEIGHTED AVERAGE SHARES (thousands of shares)			
Basic:			
Common	242,544	242,544	242,544
Preferred	308,401	402,035	454,414
Diluted:			
Common	242,544	242,544	242,544
Preferred	392,954	433,386	459,415

The notes are an integral part of the consolidated financial statements.

F-5

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EMBRAER - EMPRESA BRASILEIRA DE AERONÁUTICA S.A.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS EQUITY

(In thousands of U.S. dollars except share data)

	Statutory capital				Additional paid-in capital - stock option	Legal Reserve	Retained earnings (restricted)	Accumulated other comprehensive income	Total
	Common		Preferred						
	Shares	Amount	Shares	Amount					
BALANCE ON DECEMBER 31, 1999	242,544,448	50,263	294,253,609	49,461	6,769	17,995	243,894	(3,481)	364,901
Capital increase:									
In cash			65,095,603	235,460					235,460
Debentures converted into capital			11,579,127	11,708					11,708
Stock option compensation					510				510
Net income							320,728		320,728
Legal reserve						17,066	(17,066)		
Cash dividends declared							(146,857)		(146,857)
Currency translation adjustment								(1,090)	(1,090)
BALANCE ON DECEMBER 31, 2000	242,544,448	50,263	370,928,339	296,629	7,279	35,061	400,699	(4,571)	785,360
Capital increase:									
In cash			6,084,220	1,761					1,761
Debentures converted into capital			91,156,035	81,927					81,927
Stock option compensation					1,074				1,074
Net income							328,440		328,440
Legal reserve						24,101	(24,101)		
Cash dividends declared							(181,204)		(181,204)
Currency translation adjustment								2,998	2,998
BALANCE ON DECEMBER 31, 2001	242,544,448	50,263	468,168,594	380,317	8,353	59,162	523,834	(1,573)	1,020,356

(Continues)



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CONSOLIDATED STATEMENTS OF SHAREHOLDERS EQUITY

(In thousands of U.S. dollars except share data)

(Continuation)

	Statutory capital				Additional paid-in capital - stock option	Legal Reserve	Retained earnings (restricted)	Accumulated other comprehensive income	Total
	Common		Preferred						
	Shares	Amount	Shares	Amount					
BALANCE ON DECEMBER 31, 2001	242,544,448	50,263	468,168,594	380,317	8,353	59,162	523,834	(1,573)	1,020,356
Capital increase:									
In cash			2,261,313	1,194					1,194
Capitalization of reserves		156,751		302,567			(459,318)		
Net income							222,592		222,592
Legal reserve						17,010	(17,010)		
Cash dividends declared							(146,713)		(146,713)
Expired dividends							14		14
Currency translation adjustment								(7,263)	(7,263)
BALANCE ON DECEMBER 31, 2002	242,544,448	207,014	470,429,907	684,078	8,353	76,172	123,399	(8,836)	1,090,180

The notes are an integral part of the consolidated financial statements.

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CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands of U.S. dollars)

	For the years ended December 31,		
	2000	2001	2002
<b>CASH FLOWS - OPERATING ACTIVITIES</b>			
Net income	320,728	328,440	222,592
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	30,596	46,417	55,602
Provision for doubtful accounts	6,105	6,938	1,436
Provision for inventory obsolescence	32,150	12,968	22,061
Deferred income and social contribution tax	(17,125)	41,333	21,054
Cumulative effect of accounting change		(5,440)	
Gain on sale of minority interest in subsidiary	(12,935)		
Loss on the disposition of assets	986	966	1,119
Stock compensation	510	1,074	
Equity in income from affiliates	(753)	(310)	(389)
Accrued interest recorded in loans	42,453	33,285	22,712
Minority interests	(1,522)	423	1,883
Other	9,463	(9,351)	(7,243)
Changes in assets and liabilities:			
Trade accounts receivable	124,317	(438,021)	(140,562)
Inventories	124,486	(434,571)	135,416
Other assets	13,599	(59,792)	(712,111)
Accounts payable to suppliers	66,860	(1,299)	57,522
Other accounts payable and accrued liabilities	156,941	34,093	638,865
Accrued taxes on income	25,282	8,469	839
Customers advances	50,691	117,521	13,024
Contribution from suppliers	120,420	1,945	91,830
Contingency	(7,263)	90	(825)
Taxes and social charges payable	33,985	51,662	82,858
Net cash provided by (used in) operating activities	<u>1,119,974</u>	<u>(263,160)</u>	<u>507,683</u>
<b>CASH FLOWS - INVESTING ACTIVITIES</b>			
Purchase of property, plant and equipment	(114,227)	(143,828)	(127,746)
Proceeds from the sale of property, plant and equipment	1,026		790
Proceeds from the sale of minority interest of subsidiary	22,205		
Customer and commercial financing - net additions	(83)	(13,735)	(49,701)
Held to maturity investment	(2,701)	(18,932)	12,388
Guarantee deposits and compulsory loans	(10,650)	(98,677)	(36,521)
Net cash used in investing activities	<u>(104,430)</u>	<u>(275,172)</u>	<u>(200,790)</u>
<b>CASH FLOWS - FINANCING ACTIVITIES</b>			
Repayment of loans	(1,344,246)	(1,210,155)	(1,103,848)
Proceeds from borrowings	1,112,096	1,495,119	868,046
Proceeds from the issuance of shares	235,460	1,761	1,194
Dividends paid	(126,293)	(179,491)	(134,421)



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Payments of refinanced taxes	(2,599)	(1,618)	(20,552)
Payments on capital lease obligations	(4,816)	(7,213)	(9,792)
	<u>          </u>	<u>          </u>	<u>          </u>
Net cash provided (used) by financing activities	(130,398)	98,403	(399,373)
	<u>          </u>	<u>          </u>	<u>          </u>
Net increase (decrease) in cash and equivalents	885,146	(439,929)	(92,480)
Cash and cash equivalents at beginning of year	304,085	1,189,231	749,302
	<u>          </u>	<u>          </u>	<u>          </u>
Cash and cash equivalents at end of year	1,189,231	749,302	656,822
	<u>          </u>	<u>          </u>	<u>          </u>

SUPPLEMENTAL CASH FLOW DISCLOSURES

Cash paid during the year for:

Income taxes	108,939	166,891	79,860
Interest	44,051	34,358	32,396
Noncash transactions:			
Conversion of debentures to capital	11,708	81,927	
Lease of assets	7,480	11,019	6,010

The notes are an integral part of the consolidated financial statements.

Embraer - Empresa Brasileira de Aeronáutica S.A.

EMBRAER - EMPRESA BRASILEIRA DE AERONÁUTICA S.A.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2000, 2001 AND 2002  
(In thousands of U.S. dollars except per share data)

1. OPERATIONS

Embraer - Empresa Brasileira de Aeronáutica S.A. (the Company) is engaged in the design, development, production and marketing of a range of jet and turboprop aircraft for regional airline and defense use, of light reciprocating and turboprop aircraft for general aviation, corporate and agricultural uses and of aviation-related structural parts and mechanical and hydraulic systems.

2. PRESENTATION OF FINANCIAL STATEMENTS

The consolidated financial statements of Embraer - Empresa Brasileira de Aeronáutica S.A. and its subsidiaries have been prepared in conformity with accounting principles generally accepted in the United States of America ( U.S. GAAP ), which require management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses during the reporting periods and require the disclosure of contingent assets and liabilities as of the date of the financial statements. The consolidated financial statements include estimates used in the determination of items including, among others, the allowance for doubtful accounts and notes receivable, the selection of useful lives of property, plant and equipment, provisions necessary for asset impairment, the valuation allowance related to deferred income taxes, the reporting of contingent obligations and employee post-retirement benefits. Actual results may vary from estimates.

a) Basis of presentation

The consolidated financial statements have been prepared in accordance with U.S. GAAP, which differs in certain significant respects from the Brazilian accounting principles applied by the Company in its statutory financial statements prepared in accordance with Brazilian corporate legislation ( Brazilian corporate law ).

Up to December 31, 2000, as permitted, the Company presented its consolidated financial statements in accordance with generally accepted accounting principles in Brazil ( Brazilian GAAP ), stated in Brazilian reais (R\$), using the price-level accounting methodology prescribed by the Brazilian Federal Accountancy Council, which differs in certain significant respects from U.S. GAAP and Brazilian corporate law. Previously, amounts of net income and shareholders' equity under Brazilian GAAP were reconciled to those that would have been reported under U.S. GAAP.

F-9

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Embraer - Empresa Brasileira de Aeronáutica S.A.

Beginning January 1, 2001, the Company is presenting its consolidated financial statements in accordance with U.S. GAAP, stated in U.S. dollars (US\$), as it believes such presentation is more meaningful to readers. The Company exports more than 97% of its products and operates in an industry that uses the U.S. dollar as its primary currency of reference. The Board of Directors and management have historically considered the U.S. dollar as the Company's functional currency. Accordingly, the Company's management has concluded that the Company's functional currency is and will continue to be the U.S. dollar. For consistent presentation, the consolidated financial statement information has been restated in accordance with U.S. GAAP for all periods presented.

The Company and its subsidiaries maintain their financial records in local currency. For operations with the U.S. dollar as the functional currency, the U.S. dollar amounts have been remeasured from local currency in accordance with the criteria set forth in Statement of Financial Accounting Standards No. 52 - Foreign Currency Translation (SFAS No. 52). Nonmonetary balance sheet items (including inventories; prepaid expenses; property, plant and equipment; certain deferred assets and liabilities; and equity) and the related income statement accounts are remeasured using prevailing historical rates as of the date of the related transaction. Monetary assets and liabilities (including cash and cash equivalents; accounts and notes receivable; deferred taxes, accounts payable and accrued liabilities; and debt) are remeasured using rates in effect at the date of the balance sheet.

For foreign operations with functional currencies other than the U.S. dollar, asset and liability accounts are translated using rates in effect at the date of the balance sheet and income and expense items are translated using weighted average exchange rates. Resulting translation adjustments are reported in a separate component of shareholders' equity. Gains and losses resulting from transactions denominated in currencies other than the functional currency are recognized in the statements of income.

As a result of the remeasurement of amounts to the functional currency and other adjustments related to the differences in accounting principles between U.S. GAAP and Brazilian GAAP, the amounts of net income and shareholders' equity as reported in the consolidated financial statements presented herein differ from that included in the Company's statutory accounting records.

b) Principles of consolidation

The consolidated financial statements of the Company, together with its subsidiaries, include the accounts of all majority-owned subsidiaries. Investments in affiliates for which the Company does not have control, but has the ability to exercise significant influence over the operating and financial policies, are accounted for under the equity method with the Company's share of net earnings and losses from these investments recorded in the consolidated statements of income. Intercompany profits, transactions and balances have been eliminated in consolidation. Certain reclassifications have been made to prior periods to conform with the current reporting.

Embraer - Empresa Brasileira de Aeronáutica S.A.

c) Operating activities of subsidiaries

The following is a brief summary of the operating activities of the Company's subsidiaries:

Embraer Aircraft Holding Inc. - EAH

On January 1, 2002, ownership of certain subsidiaries in the United States, including Embraer Services Inc. - ESI, Embraer Aircraft Customer Services Inc. - EACS (formerly Embraer Aircraft Corporation - EAC), both directly controlled by Embraer until December 31, 2001; Embraer Marketing Corporation - EMC, responsible for commercial representation, marketing and promotion for commercial and corporate aviation, Embraer Aircraft Maintenance Services Inc. - EAMS and AEROChain LLC (responsible for e-commerce activities), were transferred to a new holding company, Embraer Aircraft Holding Inc. - EAH, located in Fort Lauderdale, Florida, and formed as a wholly-owned subsidiary of the Company. In addition, a new subsidiary of the Company was created in the United States, Embraer Representation LLC - ERL.

At the end of 2001, the Company signed a contract with Reliance Aerotech Inc. for the acquisition of operating assets of Celsius Aerotech Inc., located in Nashville, Tennessee. This transaction was concluded in March 2002 for the price of \$13,601 and the operations are being conducted by Embraer Aircraft Maintenance Services Inc. - EAMS. This unit provides maintenance services for aircraft and components.

Embraer Services Inc. - ESI, located in Dallas, Texas, provides support in the United States for the development activities of the EMB 145 special configurations contracted under the SIVAM Program (Integrated Surveillance System for the Amazon Region) to carry out remote vigilance and air patrol missions, as well as engineering services for Embraer programs.

Embraer Finance Ltd. - EFL

This wholly-owned subsidiary located in the Cayman Islands, B.W.I., provides support in the purchasing and sales activities of the Company, as well as assisting customers in obtaining financing from third parties.

Trumpeter Inc.

This wholly-owned subsidiary located in Wilmington, Delaware, USA, has a 25% interest in Expressprop LLC, which provides support for the sale of used EMB 120 Brasília aircraft.

Indústria Aeronáutica Neiva Ltd. - NEIVA

This wholly-owned subsidiary located in Botucatu, São Paulo, Brazil, is involved in the production and sale of agricultural aircraft, as well as the production and assembly of parts for the EMB 120 Brasília, ERJ 145, ERJ 140 and ERJ 135 aircraft.

On June 17, 2002, this company was changed from a Brazilian corporation to a limited liability company.

Embraer - Empresa Brasileira de Aeronáutica S.A.

ELEB - Embraer Liebherr Equipamentos do Brasil S.A.

Based in São José dos Campos, São Paulo, Brazil, its principal business is produce and sell precision hydraulic and mechanical equipment for the aviation industry. Embraer has 60% of the capital and Liebherr International AG 40%.

Embraer Aviation Europe SAS - EAE

In 2001, this wholly-owned subsidiary located at Le Bourget, north of Paris, France, became the holding company of Embraer Aviation International SAS - EAI, which represents the Company in Europe, Africa and the Middle East by providing after-sales support.

Embraer Europe SARL - EES

This wholly-owned subsidiary located at Villepinte, north of Paris, France, provides sales representation for the Company in Europe, Africa and the Middle East.

Embraer Australia PTY Ltd. - EAL

This wholly-owned subsidiary located at Melbourne, Australia, provides services and after-sales support to customers in Oceania, Asia and that region.

Embraer Credit Ltd. - ECL

This wholly-owned subsidiary located at Wilmington, Delaware, USA, supports sales operations.

Embraer Representation LLC - ERL

This wholly-owned subsidiary located in Fort Lauderdale, Florida, formed on January 1, 2002, provides support to Embraer's products.

Embraer Spain Holding Co. SL - ESH

On September 27, 2002, this wholly-owned subsidiary was formed in Spain for the purpose of coordinating the investments of the international subsidiaries, including those related to aircraft sales support and the management of assets involved in those operations. ESH's activities will be conducted by its subsidiary ECC Investment Switzerland, AG located in Switzerland, which owns 100% of ECC Insurance & Financial Co. Ltd. (ECC Insurance), a captive insurance company, located in the Cayman Islands.

ECC Insurance & Financial Co. Ltd. provides financial guarantees to customers and/or financing agents involved in the structuring of aircraft sales.

ECC Leasing Co. Ltd.

On September 18, 2002, the Company established a new subsidiary ECC Leasing Co. Ltd., located in Ireland, for the purpose of leasing and selling used aircraft.

Embraer - Empresa Brasileira de Aeronáutica S.A.

Harbin Embraer Aircraft Industry Company Ltd.

The Company entered into a joint venture in December 2002 with Harbin Aircraft Industry (Group) Co., Ltd. and Hafai Aviation Industry Co., Ltd., subsidiaries of China Aviation Industry Corp. II, or AVIC II, to provide for the manufacture, sales and after-sales support of the ERJ 145 regional jet family. The Company owns 51% of the equity of the joint venture company, Harbin Embraer Aircraft Industry Company Ltd. The Company has licensed to the joint venture the exclusive rights to produce, sell and provide support for the ERJ 145 regional jet family in the Chinese market, and the Company will contribute US\$12.8 million in cash and tooling to the joint venture in 2003. The Company's joint venture partners have contributed the land use rights in Harbin, China and will contribute US\$12.7 million in cash and facilities to the joint venture in 2003. First deliveries by the joint venture company are scheduled for December 2003.

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### a) Cash and cash equivalents

Cash and cash equivalents consist of highly liquid instruments, such as certificates of deposit, time deposits, treasury notes and other money market instruments, which have original maturities of three months or less.

#### b) Allowance for doubtful accounts

The allowance for doubtful accounts is recorded based on an analysis of accounts receivables in an amount considered sufficient to cover probable losses on receivables.

#### c) Inventories

Inventories, including spare parts, are stated at the lower of average production or acquisition cost or market value. Inventories of work-in-process and finished goods are reduced, when applicable, to net realizable value after deduction for costs, taxes and selling expenses. Inventories of raw materials are reduced to market value based on the average cost compared with the average cost of replacement. An allowance is established for potential losses when items are determined to be obsolete or are held in quantities that are in excess of projected usage based on management's estimate of net realizable values.

Exchange Pool inventories are segregated and placed into the exchange pool for exclusive use by customers who participate in the program. Costs to refurbish parts may be capitalized based on certain dollar thresholds. Costs below these thresholds are expensed as incurred. The Exchange Pool inventory is depreciated using the straight-line method over an estimated useful life of 7 years and an estimated residual value of 20%, which the Company believes approximates the usage and change in value of the Exchange Pool each year. The Exchange Pool inventory is classified as long-term in the consolidated balance sheets.

Embraer - Empresa Brasileira de Aeronáutica S.A.

d) Aircraft valuation

To the extent that the Company has used aircraft deemed available for sale, such aircraft are stated at the lower of cost or fair value and are included in inventory (see note 9). The Company also reviews its obligations under used aircraft purchase commitments, residual value guarantees and trade-in allowances relative to the aircraft's anticipated fair value, and records any deficiency as a charge to earnings.

The Company analyzes fair value by using third party appraisals of aircraft value, including information developed from the sale of similar aircraft in the secondary market.

Impairment review for equipment under operating leases and held for re-lease:

The Company reviews these assets for impairment when events or circumstances indicate that the carrying amount of these assets may not be recoverable. An asset under operating lease or held for re-lease is considered impaired when the expected undiscounted cash flow over the remaining useful life is less than the book value. Various assumptions are used when determining the expected undiscounted cash flow. These assumptions include lease rates, lease term(s), periods in which the asset may be held in preparation for a follow-on lease, maintenance costs, remarketing costs and the life of the asset. The determination of expected lease rates is generally based on outside publications and observing similar aircraft in the secondary market. The Company uses historical information and current economic trends to determine the remaining assumptions. When impairment is indicated for an asset, the amount of impairment loss is the excess of carrying value over fair value.

e) Long-lived assets

As of January 1, 2002, the Company adopted SFAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets. Long-lived assets deemed held for sale are stated at the lower of cost or fair value. Long-lived assets held for use are subject to an impairment assessment if the carrying value is no longer recoverable based upon the undiscounted future cash flows of the asset. The amount of the impairment is the difference between the carrying amount and the fair value of the asset.

f) Property, plant and equipment

Property, plant and equipment are stated at cost including applicable construction-period interest. Materials allocated to specific projects are added to construction-in-progress and in accordance with the provisions of SFAS No. 34, Capitalization of Interest Costs, interest incurred on borrowings is capitalized to the extent that borrowings do not exceed construction-in-progress. The credit is a reduction of interest expense.

The costs incurred for the development of computer software for internal use are capitalized in accordance with Statement of Position (SOP) 98-1, Accounting for the Costs of Computer Software Developed or Obtained for Internal Use.

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Depreciation is calculated using the straight-line method over the estimated useful lives of the assets. Improvements to existing property that significantly extend the useful life or utility of the asset are capitalized while maintenance and repair costs are charged to expense as incurred.

g) Investments

Investments are classified as Other assets on the Consolidated Balance Sheets. The Company classifies investments as operating assets. Operating investments are strategic in nature, which means they are integral components of the Company's operations. Earnings from operating investments are related to the Company's share of income or loss from certain equity method investments and are recorded in Equity in income (loss) from affiliates. Other than temporary losses on operating investments are recorded in Income/(loss) from operating investments, net.

Certain investments are accounted for under SFAS No. 115, Accounting for Certain Investments in Debt and Equity Securities. Held-to-maturity securities are National Treasury notes for which the Company has the positive intent and ability to hold to maturity. Held-to-maturity securities are reported at amortized cost.

h) Loans and financing

The amounts of loans, capital leases and obligations include accrued interest and applicable monetary exchange incurred but not paid to the balance sheet date.

i) Leasing transactions

Payments related to assets under agreements classified as operating leases are recognized in expense on a straight-line basis over the contractual term of the lease. For leases classified as capital leases, the leased asset is capitalized and the corresponding lease liability is recognized in the balance sheet as the present value of the minimum lease payments. The asset is depreciated using the straight-line method over the shorter of the lease term or the estimated useful life of the asset. Payments made under the lease are recorded as interest expense and as a principal reduction of the related capital lease obligation.

j) Product warranties

Warranty expense related to aircraft and parts is recognized at the time of sale based on estimated amounts of warranty costs anticipated to be incurred, typically expressed as a percentage of revenue. These estimates are based on factors that include, among other things, historical warranty claim and cost experience, warranty coverage available from suppliers, type and duration of warranty coverage, and the volume and mix of aircraft sold and in service. The warranty period typically ranges from two years for spare parts and up to five years for aircraft components.



Embraer - Empresa Brasileira de Aeronáutica S.A.

Certain sales contracts contain provisions for guarantees of certain minimum levels of aircraft performance subsequent to delivery based on predetermined operational targets. If the aircraft subject to such guarantees do not achieve the minimum performance indices after delivery, the Company may be obligated to reimburse its customers for the implied incremental operational and service costs incurred based on formulas defined in the related agreements. Losses related to such performance guarantees are recorded at the time such losses are known, or when circumstances indicate that the aircraft is not expected to meet the minimum performance requirements, based on management's estimate of the Company's ultimate obligation under the guarantee. In some cases, the Company may be obligated to make modifications to the products after the delivery due to introduction of improvements or performance of the aircrafts. The costs related to these modifications are accrued when they are known.

Warranty expense is recorded as a component of selling expenses.

k) Provisions for contingencies

Losses for contingencies related to labor, tax, civil and commercial litigation are recorded when they are determined to be probable and can be reasonably estimated and are based on management's estimates. These estimates are based on legal advice and management's estimate as to the likely outcome of the outstanding matters and the estimated amount of loss at the balance sheet date.

l) Post-retirement benefits

The Company participates in a defined contribution pension plan that provides pension benefits for its employees. Expense is recognized as the amount of the required contribution for the period and is recorded on the accrual basis.

The Company's EAH subsidiary sponsors a defined benefit post-retirement plan that provides pension and post-retirement medical benefits. The estimated costs of benefits under the plan are accrued over the expected employee service periods

m) Employee profit sharing plan

The Company maintains a profit sharing plan that provides employees of the Company and its subsidiaries the right to share in the Company's profits. The amounts recorded for profit sharing expense are accrued in accordance with the variable compensation policy approved by the Board of Directors in April 1996.

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n) Sales and other operating revenues

Revenues are generally recognized for the sale of regional aircraft and parts when shipped or when the customer has accepted delivery. In the defense aircraft segment, operations consist principally of performing work under long-term development contracts for the Brazilian and other Governments and revenues are recognized in accordance with the percentage of completion method. Certain contracts contain provisions for the redetermination of price based upon future economic conditions. Anticipated losses on contracted sales in the defense aircraft segment are recognized when they become known and are recorded based on management's estimate of such losses. Revenues recognized under the defense segment represented 3.6%, 4.2% and 5.0 % of net sales in 2000, 2001 and 2002, respectively.

The Company maintains a pool of spare parts for exclusive use by customers (the Exchange Pool). Customers may withdraw for use an equivalent functioning part, as defined, from the Exchange Pool in exchange for an unserviceable part, as needed. Customers are billed a service fee based on a per flight hour per aircraft basis and a monthly on-site inventory availability fee. Revenues under the Exchange Pool program are recognized when services are provided and as actual flight hours are incurred and recorded as net sales.

o) Research and development

Research and development costs are expensed when incurred and are recorded net of amounts contributed by risk-sharing suppliers. Amounts received from risk-sharing suppliers as contributions for research and development activities are deferred and recognized only when the Company has met its obligations under the provisions of the related supply agreements related to such contributions. Net research and development expense was \$69,593, \$99,566 and \$158,499 for 2000, 2001 and 2002, respectively.

p) Stock compensation

SFAS No. 123, Accounting for Stock-Based Compensation (SFAS No. 123), encourages, but does not require, companies to record compensation cost for stock-based employee compensation plans at fair value. The Company has chosen to continue to account for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees (APB No. 25), and related Interpretations. Accordingly, the Company records expense in an amount equal to the excess of the quoted market price over the option price on the grant date. Such expense is typically recognized at the grant date as awards are for past employee service. As described in note 28, the Company has granted options to certain employees to purchase stock at prices below market.

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q) Income and social contribution taxes

The provision for income taxes includes federal income tax and social contribution taxes and is computed at current tax rates, less tax credits. Taxes are adjusted both for items that do not have tax consequences and for the cumulative effect of any changes in tax rates from those previously used to determine deferred tax assets or liabilities. The provision for income taxes includes amounts that are currently payable, plus changes in deferred tax assets and liabilities that arise because of temporary differences between the time when items of income and expense are recognized for financial reporting and income tax purposes. Deferred tax assets and liabilities are recognized under the liability method for temporary differences between the financial accounting and income tax basis of assets and liabilities. Deferred tax assets are reduced by a valuation allowance to an amount that management believes is more likely than not to be realized.

In years with operations resulting in net taxable income, Brazilian companies may elect to apply a portion up to 2.7% of their income tax liability to investment securities of specific projects sponsored by the government in certain industries or in less developed regions of the country. At the time such investment payment options are made, the corresponding amount is charged to a noncurrent asset account, net of valuation reserve, and credited to income, thereby reducing the provision for income tax.

r) Derivatives financial instruments

Effective January 1, 2001, the Company accounts for derivative financial instruments pursuant to SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, as amended. This standard requires that all derivative instruments be recognized in the financial statements and measured at fair value regardless of the purpose or intent for holding them. Changes in the fair value of derivative instruments are either recognized periodically in income or shareholders' equity (as a component of accumulated other comprehensive income), depending on their use and designation. The Company's derivative financial instruments have not qualified for hedge accounting designation for purposes of SFAS No. 133. Changes in the fair value of these derivative financial instruments are recorded in income and are classified as a component of interest income (expense) in the consolidated statements of income.

The adoption of SFAS No. 133 in 2001 resulted in a transition gain of \$5,440, net of related deferred income taxes of \$2,802, which was recorded as a cumulative effect of an accounting change in the consolidated statements of income.

s) Comprehensive income

SFAS No. 130, *Reporting Comprehensive Income*, establishes standards for reporting and display of comprehensive income and its components in financial statements. It requires that all items that are required to be recognized under accounting standards as components of comprehensive income be reported in a financial statement that is displayed with the same prominence as other financial statements. Comprehensive income consists of net income and the effects of foreign currency translation adjustments.

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4. NEW ACCOUNTING PRONOUNCEMENTS

In June 2001, the FASB issued SFAS No. 143, *Accounting for Asset Retirement Obligations*, which is effective January 1, 2003. This standard addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated retirement costs. The Company has determined that the implementation of this standard will not have a material effect on its financial statements.

In July 2002, the FASB issued SFAS No. 146, *Accounting for Costs Associated with Exit or Disposal Activities*. This standard requires costs associated with exit or disposal activities to be recognized when they are incurred. The requirements of SFAS No. 146 apply prospectively to activities that are initiated after December 31, 2002, and as such, the Company cannot reasonably estimate the impact of adopting these new rules until and unless it undertakes relevant activities in future periods.

In November 2002, the FASB issued Interpretation No. 45 (FIN 45), *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of the Indebtedness of Others*, which clarifies the requirements of SFAS No. 5, *Accounting for Contingencies*, relating to a guarantor's accounting for and disclosures of certain guarantees issued. FIN 45 requires enhanced disclosures for certain guarantees. It also will require certain guarantees that are issued or modified after December 31, 2002, including certain third-party guarantees, to be initially recorded on the balance sheet at fair value. For guarantees issued on or before December 31, 2002, liabilities are recorded when and if payments become probable and estimable. The Company expects FIN 45 to have the general effect of delaying recognition for a portion of the revenue for product sales that are accompanied by certain third-party guarantees. The financial statement recognition provisions are effective prospectively, and the Company cannot reasonably estimate the impact of adopting FIN 45 until guarantees are issued or modified in future periods, at which time their results will be initially reported in the financial statements. See Note 37.

In January 2003, the FASB issued Interpretation No. 46 (FIN 46), *Consolidation of Variable Interest Entities*, which clarifies the application of Accounting Research Bulletin No. 51, *Consolidated Financial Statements*, relating to consolidation of certain entities. First, FIN 46 will require identification of the Company's participation in variable interests entities (VIE), which are defined as entities with a level of invested equity that is not sufficient to fund future activities to permit them to operate on a standalone basis, or whose equity holders lack certain characteristics of a controlling financial interest. For entities identified as VIE, FIN 46 sets forth a model to evaluate potential consolidation based on an assessment of which party to the VIE, if any, bears a majority of the exposure to its expected losses, or stands to gain from a majority of its expected returns. FIN 46 also sets forth certain disclosures regarding interests in VIE that are deemed significant, even if consolidation is not required. The Company is currently assessing the application of FIN 46 as it relates to its variable interests. See Note 37.

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## 5. CASH AND CASH EQUIVALENTS

	At December, 31	
	2001	2002
Cash and bank accounts	26,743	26,108
Short-term investments:		
In U.S. dollars:		
Time deposits	104,025	176,750
Overnight funds	41,440	55,823
Investments funds		25,547
In Brazilian reais:		
Bank certificates of deposit		11,701
Investments funds	577,094	360,893
	749,302	656,822

The average annualized interest rates related to the investments in U.S. dollars and Brazilian reais for the year ended December 31, 2002 were 1.95% and 19.22% (2.50% and 17.52% in 2001), respectively. These investments are stated at cost plus accrued interest at the balance sheet date.

## 6. TRADE ACCOUNTS RECEIVABLE

	At December 31,	
	2001	2002
Foreign customers (a)	594,921	618,511
Brazilian Air Force (b)	18,494	12,704
Domestic customers	7,086	3,858
Accounts receivable-BNDES (c)		125,344
	620,501	760,417

- (a) At December 31, 2002 68% of this balance corresponds to structured financing already approved by BNDES, which funds are expected to be delivered to the Company during the first half of 2003, such related transactions may be consolidated in the future, according to provisions in note 37; 23% of the balance refers to financing being negotiated and structured; and the remaining balance refer to accounts receivable from sales of spare parts.
- (b) At December 31, 2001 and 2002, accounts receivable from the Brazilian Air Force include the unbilled portion of revenues recognized under the percentage of completion method in the amounts of \$15,102 and \$4,304, respectively. The remaining balance refers to billed amounts for aircraft and spare parts sales.
- (c) Refers to funds retained by BNDES, pending completion of the export documentation, which is expected to take place in the first semester of 2003.

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The allowance for doubtful accounts is summarized as follows:

	<u>2001</u>	<u>2002</u>
Beginning balance	17,239	23,700
Write-offs	(477)	(646)
Provision for bad debt expense	6,938	1,436
	<u>          </u>	<u>          </u>
Ending balance	<u>23,700</u>	<u>24,490</u>

#### 7. CUSTOMER AND COMMERCIAL FINANCING

Aircraft financing and operating lease equipment is recorded at cost depreciated over its useful life to an estimated salvage value, using the straight-line method.

Aircraft financing operating leases equipment relates to leases of 5 used EMB 120 Brasilia turboprop aircraft and one used ERJ 145 aircraft. Aircraft financing notes receivable represents sales financing for 2 EMB 120, one Legacy corporate jet and 10% of the value of each of 11 ERJ 145s.

Customer and commercial financing consists of the following:

	<u>At December 31,</u>	
	<u>2001</u>	<u>2002</u>
Aircraft financing:		
Notes receivable	13,735	46,012
Operating lease equipment, at cost, less accumulated depreciation of 15,037 and 11,554, respectively	15,779	33,320
Less valuation allowance	(842)	(958)
	<u>          </u>	<u>          </u>
	28,672	78,374
Less-Current Portion	<u>          </u>	<u>18,973</u>
	<u>          </u>	<u>          </u>
Long Term Portion	<u>28,672</u>	<u>59,401</u>

Interest rates on notes receivable range from 7.5% to 12.0% and six-month LIBOR plus 2.5 per annum.

Aircraft financing is collateralized by security in cash and the related asset, and the Company has not experienced problems in accessing such collateral. However, the value of the related asset is closely tied to commercial airline performance and may be subject to reduced valuation with market decline.

Income recognition is generally suspended for receivables at the date when a full recovery of income and principal becomes doubtful. Income recognition is resumed when the receivables become contractually current and performance is demonstrated by the customer. There are no impaired receivables in 2001 and 2002.

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As of December 31, 2002 the Company had three used aircraft ( EMB 120 ) available for lease, for which the Company does not expect any loss.

Impairments primarily result from deteriorated aircraft values and airline customer credit ratings for financing lease assets and reduced estimated cash flows for operating lease assets. Impairments for the years ended December 31, 2001 and 2002, were not significant.

See Note 35 for a discussion regarding the creditworthiness of counterparties in customer and commercial financing arrangements.

Scheduled payments on customer and commercial financing are as follows:

Year	Principal payments on notes receivable	Operating lease payments
2003	18,973	3,492
2004	13,572	1,450
2005	936	1,082
2006	1,009	992
2007	1,089	137
Beyond 2007	10,433	
	<b>46,012</b>	<b>7,153</b>

8. COLLATERALIZED ACCOUNTS RECEIVABLE AND NONRECOURSE DEBT

Some of the Company's sales transactions are structured financings through which a Special Purpose Entity - SPE purchases the aircraft, pays the Company the full purchase price on delivery or at the conclusion of the sales financing structure, and leases the related aircraft to the ultimate customer. A third-party financial institution facilitates the financing of the aircraft purchase through an SPE, and a portion of the credit risk and the management responsibility associated with the SPE remain with the third party. The Company may provide financial guarantees and/or residual value guarantees in favor of the financial institution.

In accordance with Emerging Issues Task Force Issue No. 90-15, Impact of Nonsubstantive Lessors, Residual Value Guarantees, and Other Provisions in Leasing Transactions, the Company has concluded that certain of these leasing transactions made through an SPE must be consolidated if the equity contribution of independent third parties is less than 3% of the fair value of the SPE's assets. Some of the SPEs through which the Company sells aircraft were formed without any equity contribution and, therefore, have been consolidated.

Generally, the underlying lease transactions qualify for sales-type lease accounting and as such, the consolidation of these SPE's transactions resulted in an amount of investments in minimum lease payments and in sales-type leases of \$440,452 and \$1,606,578 and \$322,348 and \$941,918 at December 31, 2001 and 2002 respectively, which are being presented as collateralized accounts receivable.

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Such consolidation has also resulted in an amount of non-recourse debt of \$322,348 and \$803,517 at December 31, 2001 and 2002, respectively, and in an amount of recourse debt of \$138,401 at December 31, 2002. The non-recourse debt is collateralized in favor of the financial institution by accounts receivable and by the financed aircraft. The impacts on the consolidated statements of income and cash flows were not material as the terms of the underlying lease and the debt are substantially the same.

During 2002, British Airways returned to an SPE 2 ERJ 145s, with a total outstanding amount of underlying debt of \$22 million which has been consolidated by the Company. These aircraft serve as collateral for the non-recourse debt and the Company has begun remarketing them.

The maturities under the collateralized accounts receivable and the non-recourse and recourse debt are summarized as follows:

Year	At December 31,	
	2001	2002
2002	16,315	
2003	25,225	68,872
2004	25,337	67,262
2005	25,982	90,171
2006	27,223	85,140
2007	24,532	86,398
Beyond 2008	177,734	544,075
	<u>322,348</u>	<u>941,918</u>

9. INVENTORIES

	At December 31,	
	2001	2002
Finished goods	64,189	61,229
Work-in-process	335,999	259,739
Raw materials	487,126	357,948
Inventory in transit	78,968	74,768
Advances to suppliers	45,566	102,796
Used aircraft for resale	2,181	7,578
Supplies	1,052	742
Exchange pool, net	22,714	15,518
	<u>1,037,795</u>	<u>880,318</u>
Less- Current portion	<u>1,015,081</u>	<u>864,800</u>
Long-term portion	<u>22,714</u>	<u>15,518</u>



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The balances of inventory are presented net of applicable allowances for obsolete and excess inventory as well as for adjustments to reduce certain inventories to the lower of cost or market. A summary of the allowance is as follows:

	At December 31,	
	2001	2002
Allowance:		
Beginning balance	90,152	101,004
Allowance	12,968	22,061
Disposals	(2,116)	(15,796)
Ending balance	101,004	107,269

The Company has an Exchange Pool Program, for which inventory in the amounts of, \$22,714 and \$15,518 at December 31, 2001 and 2002, respectively, are segregated and placed into the Exchange Pool for exclusive use by customers in the program. Customers may withdraw for use an equivalent functioning part, as defined, from the Exchange Pool in exchange for an unserviceable part, as needed. Costs to refurbish parts may be capitalized based on certain dollar thresholds. Costs below these thresholds are expensed as incurred. The Exchange Pool inventory is depreciated using the straight-line method over an estimated useful life of 7 years and an estimated residual value of 20%, which the Company believes approximates the usage and change in value of the Exchange Pool each year. The Exchange Pool inventory is classified as long-term in the consolidated balance sheets.

During 2000, 2001 and 2002, the Company recognized \$2,046, \$8,320 and \$9,604, respectively, in revenue related to the Exchange Pool, which is included in net sales in the accompanying consolidated statements of income. Amounts capitalized and expensed for refurbishments were not material during the years ended December 31, 2001 and 2002.

10. OTHER ASSETS

	At December 31,	
	2001	2002
Guarantee deposits (a)	124,254	187,356
Credits with suppliers (b)	28,887	21,113
Spare parts and training concession (c)	15,984	8,465
Value-added tax credits	14,654	11,403
Advances to employees	12,294	5,049
Credit insurance (d)	8,209	28,071
Compulsory loans, guarantee and other deposits	7,417	9,547
Commission Advances	5,137	5,293
Judicial deposits	5,058	5,357
Insurance	4,774	8,851
Unrealized gains on fair value of derivatives		71,776
Other	8,812	2,260
	235,480	364,541
Less- Current portion	89,093	77,715
Long-term portion	146,387	286,826

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- (a) Guarantee deposits represent U.S. dollar amounts deposited in an escrow account as collateral for financing and residual value guarantee of certain aircraft sold (see Note 37). If the guarantor of the debt (an unrelated third party) is required to pay the creditors of such financing arrangement or the residual value guarantee, the guarantor has the right to the escrow funds. The deposited amounts will be released when the financing contracts mature (from 2013 to 2017) if no default by the buyers of the aircraft occurs or the aircrafts market price is above the residual value guarantee. The interest earned on the escrow funds is added to the balance in escrow and is recorded as interest income by the Company.
- (b) Credits with suppliers represent price discounts, rebates and free aircraft parts to be received from suppliers in connection with purchases made.
- (c) Spare parts and training concessions represent credits for parts and the training of pilots, mechanics and flight attendants granted to customers in connection with the sale of aircraft. Such credits are stated in the sales contract in terms of number of aircraft sold and are included in the overall sales price of the aircraft. The actual delivery of such parts and services may be different from that of the aircraft. The amounts reflect the cost of such concessions provided in advance of the aircraft delivery. These amounts will be recognized in expense over the related period of the sales contract as aircraft deliveries are made with the corresponding revenue.
- (d) Premium on credit insurance relates to costs incurred in connection with a foreign line of financing. The premium is being amortized over the financing term through 2008.

11. HELD TO MATURITY INVESTMENTS

	At December, 31	
	2001	2002
National Treasury Notes - NTN	35,651	23,263

Refers to receivables, represented by National Treasury Notes, acquired by the Company from customers, related to the equalization of interest rates to be paid by Programa de Financiamento às Exportações - PROEX between the 11<sup>th</sup> and 15<sup>th</sup> year after the sale of the related aircraft, recorded at present value. The interest earned is added to the balance and recorded as interest income, as the Company has the ability and the intent to hold these securities until maturity.

12. INVESTMENTS

	At December 31,	
	2001	2002
Affiliated companies:		
Expressprop LLC	4,357	4,745
Others	5	
	4,362	4,745
	4,362	4,745

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Embraer owns 25% and Continental Airlines Finance Corporation 75% of the capital stock of Expressprop LLC. This affiliate provides support for the sale of used EMB 120 Brasília aircraft. The Company's investment is accounted for under the equity method and as such, income from affiliates represents the Company's share of net income or loss. The net income of this affiliate was \$3,011, \$1,241 and \$1,552 for the years ended December 31, 2000, 2001 and 2002, respectively.

13. PROPERTY, PLANT AND EQUIPMENT, NET

	Estimated Useful life (years)	2001			2002		
		Cost	Accumulated depreciation	Net	Cost	Accumulated depreciation	Net
Land		2,512		2,512	2,489		2,489
Buildings and land improvements	10 to 48	112,499	37,730	74,769	134,831	42,158	92,673
Installations	10 to 31	71,660	45,950	25,710	80,482	49,652	30,830
Machinery and equipment	5 to 17	141,434	92,987	48,447	158,078	102,844	55,234
Tooling	10	85,419	21,053	64,366	101,489	26,970	74,519
Furniture and fixtures	5 to 10	15,429	8,843	6,586	17,642	8,760	8,882
Vehicles	5 to 14	4,422	2,390	2,032	4,560	2,807	1,753
Aircraft (a)	5 to 10	36,766	5,870	30,896	80,328	9,666	70,662
Computers and peripherals	5	72,582	35,638	36,944	84,209	47,455	36,754
Software	5	37,542	10,549	26,993	50,466	17,848	32,618
Others	5	13,567	2,958	10,609	5,870	2,569	3,301
Construction in progress		36,617		36,617	27,000		27,000
		<u>630,449</u>	<u>263,968</u>	<u>366,481</u>	<u>747,444</u>	<u>310,729</u>	<u>436,715</u>

(a) These aircrafts are used for external demonstration and for internal use.

Interest capitalized during the construction period related to property, plant and equipment amounted to \$129, \$737 and \$329 in 2000, 2001 and 2002, respectively.

14. ACCOUNTS PAYABLE TO SUPPLIERS

	At December 31,	
	2001	2002
Foreign suppliers:		
Risk-sharing partners	61,808	85,345
Others	187,360	226,491
Local suppliers	16,425	11,279
	<u>265,593</u>	<u>323,115</u>

The Company's risk-sharing partners develop and manufacture significant portions of the Company's aircraft, including the engines, hydraulic components, avionics, wings, interior and parts of the fuselage and tail. The Company's contracts with risk-sharing partners are long term in nature and include deferral of payments for components and systems for a negotiated period of time after the delivery of such components and systems.



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Once risk-sharing partners have been selected and the program development and aircraft production have begun, it is difficult to substitute these partners. In some cases, the aircraft are designed specifically to accommodate a particular component, such as the engines, which cannot be substituted by another manufacturer without significant delays and expense. This dependence makes the Company susceptible to the risks of performance, product quality and financial condition of these risk-sharing partners.

#### 15. CONTRIBUTION FROM SUPPLIERS

The Company has agreements with certain key suppliers for the participation in research and development activities. Certain of the supply agreements require such suppliers provide cash contributions to the Company in compensation for its research and development activities. As part of the related supply agreements, these contributions are subject to the Company meeting certain performance milestones, including successful certification of the aircraft, first delivery and minimum number of aircraft deliveries. The Company records such contributions when received as a liability and subsequently recognizes them in income as a reduction of research and development costs when such milestones are met. The following summarizes the activity related to contributions from suppliers:

	At December 31,	
	2001	2002
Balance at beginning of year	141,670	143,615
Receipts of investments from risk-sharing suppliers	16,079	92,831
Reduction of research and development expense	(14,134)	(1,001)
Balance at end of year	143,615	235,445

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16. OTHER ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	At December 31,	
	2001	2002
Due to Brazilian Air Force (a)	2,156	2,239
Product warranties (b)	51,570	72,211
Product improvement liabilities (b)	43,246	43,228
Commercial rebates (c)	20,625	6,839
Customer credits (c)	23,665	24,775
Technical assistance and training (c)	19,165	25,557
Accrued employee vacation	38,213	30,252
Accrued employee profit sharing	25,510	18,510
Accrued pension and benefits	5,154	3,766
Unrealized losses on fair value of derivatives	15,506	22,117
Reserve for losses under contractual obligations	8,996	6,010
Insurance	2,891	4,603
Accrued financial guarantees (see note 37)		14,509
Other	24,265	25,641
	<u>280,962</u>	<u>300,257</u>
Less- Current portion	277,779	297,463
	<u>3,183</u>	<u>2,794</u>

- (a) Amounts payable to the Brazilian Air Force represent materials related to the delivery of AM-X aircraft.
- (b) Amounts represent accruals for product liability programs including warranty and contractual obligations to implement improvements in aircraft sold to meet contractual performance indices.
- (c) Amounts represent accruals for customer sales incentives and allowances including free parts, finance incentives and free services including technical assistance and training of mechanics and crews.

17. CUSTOMER ADVANCES

	At December 31,	
	2001	2002
Denominated in:		
U.S. dollars	441,493	483,880
Brazilian reais	50,366	21,003
	<u>491,859</u>	<u>504,883</u>
Less- Current portion	385,265	409,258
	<u>106,594</u>	<u>95,625</u>

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The foreign currency advances denominated in Brazilian reais are presented in U.S. dollars in the above chart at the exchange rates prevailing at the respective balance sheet dates. The allocation between current and long-term portions is based on the contractual terms for delivery of the related aircraft.

18. TAXES AND SOCIAL CHARGES PAYABLE

	At December 31,	
	2001	2002
Refinanced taxes:		
INSS (social charges on payroll)	22,832	14,421
FNDE (education tax on payroll)	3,074	
	25,906	14,421
Current taxes	11,344	14,677
Contingent tax and social charges (a)	116,418	186,876
	153,668	215,974
Less- Current maturities	132,288	199,857
Long-term portion	21,380	16,117

The above taxes represent taxes and social charges other than those related to income. The Company has received authorization by the Brazilian tax authorities to pay certain of its tax obligations over time. The outstanding balances of these deferred taxes as of December 31, 2002 are subject to monthly interest of 1%, which is added to the principal amount.

The maturities of the above taxes and social charges are as follows:

	At December 31,	
Year	2001	2002
2002	132,288	
2003	2,020	199,857
2004	2,020	4,746
2005	2,020	1,371
2006	2,020	1,319
2007	2,020	1,319
2008 to 2013	11,280	7,362
	153,668	215,974

- (a) The Company is challenging in court the constitutionality of the nature and modifications in rates and the increase in the calculation base of certain taxes and social charges in order to obtain writs of mandamus or injunctions to avoid payments or recover past payments. As of December 31, 2002, the Company had obtained preliminary injunctions for not paying or recovering past payments of taxes and social charges in the total amount of \$186,876, monetarily restated. The monetary restatement is being charged to interest income (expense). The subject taxes and social charges are as follows:

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Beginning January 1, 1999, the tax bases of PIS and COFINS (taxes on sales) have been expanded. The Company obtained a preliminary injunction to prevent payment of the related tax and has accrued the amount of \$67,145.

The Company is required to pay the government a tax called SAT (Workers Compensation Insurance) at a rate of 3% of wages. In December 1998, the Company obtained a preliminary injunction to reduce the tax rate payment from 3% to 1%, and the difference has been accrued in the amount of \$9,574.

In April 1999, the Company obtained a writ of mandamus to offset social charges payments (INSS - National Institute of Social Security), which were made in August, September and October 1989, against future payments due to a rate increase from 10% to 20%, which has been considered unconstitutional. The amount of \$28,245 is recorded as an accrued liability.

The Company administratively requested the compensation of VAT credits generated from the acquisition of consumable materials used in the production of finished products for export to be offset with other taxes. The amount of taxes outstanding without the benefit of offset was \$42,550 at December 31, 2002.

Income tax and social contribution tax on income - The Company is claiming the suspension of the social contribution tax on export sales and the right to offset income and social contribution taxes with IPI (VAT) credits on the acquisition of non-taxable or zero rate raw materials. The amount of taxes was \$36,216.

The Company has taken tax credits of \$3,146 related to monetary correction of carry forward losses. Such tax credit are still pending of approval by tax authority and accordingly a provision has been recorded.

### 19. CONTINGENCIES

	At December 31,	
	2001	2002
Labor contingencies (a)	4,451	3,262
Import tax (b)	579	930
FUNDAF (c)	4,215	2,785
Tax contingencies (d)	5,917	6,336
Civil (e)		1,024
	15,162	14,337
Less-Current Portion	4,395	5,244
Long Term Portion	10,767	9,093

- (a) The labor lawsuits relate to claims brought by unions on behalf of employees or by individuals, in which former employees are individually claiming overtime, productivity premiums, reinstatement, allowances, and retroactive salary increases and adjustments.



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A lawsuit claiming a retroactive salary increase was brought by the union in June 1991 in the name of all employees of the Company at November 1990. The objective of the claim is to make the salary increase granted by the Company in January and February 1991 retroactive to November and December 1990, through an agreement with the employees' union. As of December 31, 2002, 97% of current and former employees have agreed to settlements. The Company is currently attempting to settle this case with the employees who have not yet settled.

The total exposure of the labor litigation mentioned above is approximately \$5,470. The proceedings are in various stages awaiting judgment. Based on opinions of the Company's legal counsel, the amount accrued is considered sufficient by management.

- (b) This provision relates to import duty and VAT (IPI) tax on imported materials for two flight simulators which must be exported to be exempt from such taxes. As a result of default by the customer, these products were exported after the previously established period. The tax authorities have assessed the Company the related taxes and the Company is currently discussing payment terms.
- (c) This provision relates to a tax entitled FUNDAF (Special Fund for Development and Improvement of Taxation), assessed by the federal tax authorities on customs clearance of imported materials in October 1999. The Company is currently challenging the legality of the tax.
- (d) This provision relates to various tax contingencies including a deficiency notice received from the Federal Revenue Department, certain social contributions whose applicability are currently being challenged and certain nationalization taxes calculated based upon concessionary acts.
- (e) Gaplan Administradora de Bens S/C Ltd. filed suit against Indústria Aeronáutica Neiva Ltd. related to a Consortium and Aircraft Delivery Guarantee it entered into with Neiva for the period from 1988 to 1997, under which Neiva was obligated to deliver a certain number of light aircraft, in a determined period, with a standard configuration at the time of fabrication, directly to the customers. Gaplan alleged delays in aircraft deliveries, which caused the termination of the contracts by customers who are claiming refund of the progress payments, financial losses due to increases in terms and prices, and a reduction in administrative charges.

On November 4, 2002, Neiva was ordered to pay a total of \$2,200 by a lower court. Based on legal counsel assessment and management estimates, the Company recognized a liability of \$1,024 in the financial statements as of December 31, 2002.

In addition, the Company is involved in other legal proceedings, all of which arose in the ordinary course of business. In the opinion of management, none of these proceedings is expected to have a material adverse effect on the financial position or results of operations of the Company.

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20. LOANS

	Maturity	Currency	Interest rate - %	Balances at December 31,	
				2001	2002
U.S. dollars:					
FINAMEX - export financing	2004	U.S. dollar	LIBOR + 1.50	10,437	10,330
Materials acquisition	2007	U.S. dollar	4.09 to 8.31; LIBOR + 2.15 to 4.00	174,608	99,709
Advances on export sales contracts	2003	U.S. dollar	3.50 to 5.30	220,033	80,256
Project development	2008	U.S. dollar	LIBOR + 3.00	15,360	12,092
Working capital	2009	U.S. dollar	3.00 to 5.48; LIBOR + 2.15	109,464	147,076
Property and equipment acquisition	2014	U.S. dollar	5.45 to 11.80	9,908	24,161
Total				539,810	373,624
Brazilian currency:					
Project development	2008	Brazilian real	TJLP (long-term interest rate) plus 3.00 to 5.50	39,736	22,635
Property and equipment acquisition	2007	Brazilian real	TJLP (long-term interest rate) plus 3.30 to 4.40	1,689	1,486
Total				41,425	24,121
Other foreign currency:					
Materials acquisition	2006	Japanese yen	1.66 to 1.68; JIBOR + 1.05	182,871	152,137
Working capital	2003	Euro	3.49 to 5.50	7,630	2,754
Total				190,501	154,891
Total				771,736	552,636
Less- Current maturities				526,550	244,526
Long-term portion				245,186	308,110
Accrued interest				13,432	5,870

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The following summarizes the maturities of long-term debt including accrued interest:

Year	At December 31,	
	2001	2002
2003	87,016	
2004	88,265	94,434
2005	41,107	81,998
2006	28,798	56,559
2007		24,914
2008		22,003
2009		21,349
2010		1,237
2011		1,301
2012		1,367
2013		1,437
2014		1,511
	245,186	308,110

The foreign currency exchange rates (expressed in units per US\$1.00) related to the above debt instruments were as follows:

	At December 31,	
	2001	2002
Brazilian reais	2.3204	3.5333
Euro	0.8893	1.0475
Japanese yen	131.2760	118.8690

Total debt denominated in Brazilian reais is subject to monetary restatement based on the variation of the Brazilian long-term interest rate - TJLP. The annualized variations of this index were 10.00% for 2001 and 2002.

The Company and its subsidiaries partially hedge their foreign currency liabilities. See further details at note 34.

The following summarizes the weighted average interest rates by currency denomination of outstanding borrowings at December 31:

	2001	2002
U.S. dollars	5.45%	5.33%
Brazilian reais	13.63%	13.61%
Other	1.29%	1.24%

Total debt interest, including amounts capitalized, leasing interest and interest on debentures, was \$44,112, \$36,001 and \$32,083 for the years ended December 31, 2000, 2001 and 2002, and interest payments were \$44,051, \$34,358 and \$32,396, respectively.

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The Company maintains lines of credit from time to time to finance working capital requirements in the aggregate principal amount of \$6.3 million. At December 31, 2002, \$5.2 million aggregate principal was outstanding under these lines of credit. The interest rates on outstanding borrowings under these revolving lines of credit range from 3.4% to 6.0% per annum.

As of December 31, 2000, 2001 and 2002, management believes the Company was in compliance with all financial covenants and restrictions.

The Company renegotiated reductions in the spreads on loans from the BNDES (National Economic and Social Development Bank) from 4.5% for the FINEM line (a line of credit made available by BNDES to Brazilian corporations) and 6.5% for the import line to 3.0% and 5.5% per year, respectively, and on the collateral amount, effective January 1, 1997. Because of these decreases, the Company pays fees to the BNDES of 0.35% of the sales price of each ERJ 145 aircraft sold, limited to 420 aircraft sold between January 1, 1997 and December 31, 2005. These royalties are recorded as a component of interest expense. In April 2002, the 420th ERJ 145 aircraft was delivered.

Collateral for part of these loans includes the pledge of property and inventories in the amount of \$62,290. Of this amount, \$50,174 is related to a second and third mortgage on real estate.

21. OPERATING AND CAPITAL LEASE OBLIGATIONS

The Company and its subsidiaries lease certain land, equipment and computers and peripherals under noncancelable agreements classified as operating leases. Rental expense for leased properties was \$412, \$659 and \$2,118 for 2000, 2001 and 2002, respectively.

Future minimum lease payments under noncancelable lease agreements are as follows:

<u>Year</u>	<u>Total</u>
2003	2,227
2004	1,937
2005	1,489
2006	646
2007	480
Thereafter	4,619
	<u>11,398</u>

The installations of Embraer Aircraft Customer Services Inc - EACS are located on land leased under a lease extending through the year 2020. The lease includes a clause which obligates EACS to make investments, totaling \$10 million. This obligation has been fully satisfied.

Obligations under capital leases relate to the lease of software and equipment with terms ranging from 2003 to 2006 and implicit interest rates which range from 8.2% to 15.5%. The related software and equipment is being depreciated over 5 years. Future minimum lease payments under this lease agreement, including implicit interest, are as follows:

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Year	Total
2003	9,125
2004	4,283
2005	890
2006	438
Total	14,736
Less- Implicit interest	1,892
Capital lease obligation	12,844
Less- Current portion	7,949
Long-term portion	4,895

22. INTEREST INCOME (EXPENSE), NET

The following summarizes the components of interest income and expense:

	For the year ended December 31,		
	2000	2001	2002
<b>Interest expense:</b>			
Interest and commissions on loans	(42,652)	(33,694)	(27,540)
Interest on taxes, social charges and contributions under litigation (note 18)	(11,744)	(7,231)	(18,356)
Interest and premium on debentures	(2,020)	(627)	
CPMF (tax on bank account transactions)	(11,176)	(12,651)	(12,063)
Interest on refinanced taxes	(1,225)	(987)	(903)
Amortization of deferred credit insurance	(1,883)	(2,111)	(2,291)
Royalties to BNDES on aircraft sold	(5,964)	(5,512)	(1,417)
Structuring finance costs	(1,146)	(2,118)	(5,401)
Tax on interest on foreign loan	(2,850)	(1,089)	(967)
Other	(5,733)	(4,665)	(9,690)
	<u>(86,393)</u>	<u>(70,685)</u>	<u>(78,628)</u>
<b>Interest income:</b>			
Temporary cash investments	70,567	131,310	82,097
Interest on NTN, customers' accounts receivable and guarantee deposits	7,193	15,467	15,676
Discount on payment in advance	1,717	1,372	732
Other	7,255	7,732	1,750
	<u>86,732</u>	<u>155,881</u>	<u>100,255</u>
Monetary and exchange variations, net	(4,905)	(22,045)	9,170
Unearned gain (loss) on derivatives	(2,308)	(15,649)	49,659
Interest income (expense), net	<u>(6,874)</u>	<u>47,502</u>	<u>80,456</u>



F-35



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### 23. SUPPLEMENTARY RETIREMENT PLAN

#### Defined Contribution

The Company and its subsidiaries sponsor a defined contribution pension plan for their employees. The plan is a private, defined contribution plan where participation is optional. The plan is administered by a Brazilian pension fund administrator controlled by Banco do Brasil. The Company's and its subsidiaries' contributions to the plan in 2000, 2001 and 2002 were \$3,916, \$4,494 and \$5,169, respectively.

#### Defined Benefit

The Embraer Aircraft Holding, Inc. sponsors a defined benefit pension plan for some of its employees and also a post retirement health care plan.

The Plan was amended and restated, effective January 1, 2002, for changes effected by the Economic Growth and Tax Relief Reconciliation Act of 2001 ( EGTRRA ). The amended and restated plan provides for: an increase in elective deferral limits to 100%, an increase in compensation limits to \$200,000, catch-up contributions and a two (2) year graded vesting schedule for employer matching contributions. In addition, the name of the Plan was changed to the Embraer Aircraft Holding, Inc. 401(k) Retirement Plan (formerly Embraer Aircraft Corporation 401(k) Retirement Plan ).

The expected cost of providing postretirement medical benefits to an employee and the employee's beneficiaries and covered dependents are accrued during the years that employees renders the necessary service.

The change in benefit obligation for the years ended December 31, 2000, 2001 and 2002 is as follows:

	Pension benefits			Post-retirement benefits		
	2000	2001	2002	2000	2001	2002
Benefit obligation - beginning of year	7,863	9,443	10,365	3,138	3,877	4,768
Service cost	1,091	1,420	1,501	300	421	359
Interest cost	510	654	819	229	280	260
Plan amendments	585		324			
Actuarial (gain) loss	(373)	(891)	3,702	294	255	(518)
Benefits paid to participants	(233)	(261)	(475)	(84)	(65)	(119)
Benefit obligation - end of year	9,443	10,365	16,236	3,877	4,768	4,750

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The change in plan assets for the years ended December 31, 2000, 2001 and 2002 is as follows:

	Pension benefits			Post-retirement benefits		
	2000	2001	2002	2000	2001	2002
Fair value of plan assets - beginning of year	4,244	4,980	6,010	1,748	2,046	2,009
Employer contributions	911	1,218	3,000	358		
Actual return on plan assets	58	73	(290)	24	28	(92)
Benefits paid to participants	(233)	(261)	(475)	(84)	(65)	(119)
Fair value of plan assets - end of year	4,980	6,010	8,245	2,046	2,009	1,798

The components of accrued benefit cost at December 31, 2000, 2001 and 2002 are as follows:

	Pension benefits			Post-retirement benefits		
	2000	2001	2002	2000	2001	2002
Funded status	(4,463)	(4,355)	(7,991)	(1,831)	(2,759)	(2,952)
Unrecognized transition obligation	124	86	49			
Unamortized prior service cost	386	361	640	(38)	(31)	(24)
Unrecognized net loss	2,581	1,922	6,350	596	933	633
Accrued benefit cost	(1,372)	(1,986)	(952)	(1,273)	(1,857)	(2,343)

The accrued benefit cost as of December 31, 2000, 2001 and 2002 is included in other accounts payable and accrued liabilities in the accompanying balance sheets.

The weighted average assumptions at December 31, 2000, 2001 and 2002 are as follows:

	Pension benefits (%)			Post-retirement benefits (%)		
	2000	2001	2002	2000	2001	2002
Average discount rate	6.50	7.50	6.75	6.75	7.75	7.25
Expected return on plan assets	7.75	7.75	7.75	7.75	7.75	7.75
Rate of compensation increase	6.00	5.50	5.50	6.00	5.50	5.50



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The components of net periodic benefit cost as of December 31, 2000, 2001 and 2002 were as follows:

	Pension benefits			Post-retirement benefits		
	2000	2001	2002	2000	2001	2002
Service cost	1,091	1,420	1,501	300	421	359
Interest cost	510	654	819	229	279	260
Expected return on plan assets	(341)	(410)	(491)	(135)	(156)	(151)
Amortization of transition obligation	38	38	37			
Amortization of prior service cost	26	25	45	(7)	(7)	(7)
Amortization of loss	131	105	57		47	25
Net periodic benefit cost	1,455	1,832	1,968	387	584	486

The net benefit cost is included in selling, general and administrative expenses in the accompanying consolidated statements of income.

For measurement purposes, an annual rate of increase in the per capita cost of covered health and dental care benefits of 6%, 9% and 14% was assumed for 2000, 2001 and 2002, respectively. The rate was assumed to remain at 9% through 2004, then decrease gradually to 4.5% for 2014.

Assumed health care cost trend rates have a significant effect on the amounts reported for the post-retirement medical benefit plan. A one-percentage point change in assumed health care cost trend rates would have the following effects:

	One-percentage point	
	Increase	Decrease
Effect on total of service and interest cost components:		
Service cost	448	(289)
Interest cost	300	(226)
Effect on the post-retirement benefit obligation	830	(684)

24. EMPLOYEE PROFIT SHARING

The Company has an employee profit sharing policy (PLR) linked to dividend payments to shareholders and to action plans and specific goals which are established and agreed upon at the beginning of each year. During the years 2000, 2001 and 2002, the Company recognized profit sharing expense of \$41,770, \$43,746 and \$25,222, respectively.

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## 25. SHAREHOLDERS EQUITY

The Company's authorized statutory capital consists of 1,500,000,000 shares of which the following were outstanding as of December 31, 2002:

Classes of shares	Quantity	Amount
Common shares	242,544,447	207,014
Special common share	1	
Preferred shares	470,429,907	684,078
	712,974,355	891,092

The Company's preferred shares do not have voting rights but have priority in capital redemption and, in accordance with present corporate law, have the right to dividends in an amount 10% greater than those payable to the common shares. In connection with the 4th Series Debenture, as stipulated in the debenture indenture, \$28,090 of the statutory preferred share capital is legally designated as a capital reserve due to the conversion of such Debentures.

Special common share - golden share

One special common share ( golden share ) is held by the Brazilian Government. As holder of the golden share, the Brazilian Government is entitled to the same voting rights as the other holders of common shares. In addition, the golden share carries veto power over the following actions:

Change of the Company name and purpose.

Amendment to and/or extension of the Company logo.

Creation an/or extension of military programs whether or not involving, the Federative Republic of Brazil.

Third party training in technology for military programs.

Discontinuance of supply of military airplane maintenance and replacement parts.

Transfer of share control.

Any change to the list of corporate actions over which the golden share carries veto power, to the structure and composition of the Board of Directors, and to the rights attributed to the golden share.

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Composition of shareholders as of December 31

Shareholders	Quantity				Total equity interest	
	Common		Preferred		%	
	2001	2002	2001	2002	2001	2002
Caixa de Previdência dos Funcionários do Banco do Brasil - Previ	57,594,480	57,594,480	60,872,078	60,872,078	16.67	16.62
Fundação SISTEL de Seguridade Social	48,508,890	48,508,890	18,814,826	8,600,725	9.47	8.01
Cia. Bozano	48,509,220	48,509,220	25,703,908	23,968,612	10.44	10.17
Bozano Holdings, Ltd.			23,896,920	23,896,920	3.36	3.35
BNDES Participações S.A. - BNDESPAR	1,054,400	3,734,893	60,271,801	47,941,318	8.63	7.25
Dassault Aviation	13,744,186	13,744,186	1,953,132	1,953,132	2.21	2.20
Thomson CSF/Thales	13,744,186	13,744,186	1,953,132	1,953,132	2.21	2.20
EADS	13,744,186	13,744,186	1,953,132	1,953,132	2.21	2.20
SNECMA	7,276,332	7,276,332	1,034,010	1,034,010	1.17	1.17
Brazilian Government (including golden share)	3,514,388	1,850,495	499,415	499,415	0.56	0.33
Others	34,854,180	33,837,580	271,216,240	297,757,433	43.07	46.50
	<u>242,544,448</u>	<u>242,544,448</u>	<u>468,168,594</u>	<u>470,429,907</u>	<u>100.00</u>	<u>100.00</u>

Equity transactions

On June 16, 2003, the Board of Directors approved the payment of interest on shareholders' equity for the first two quarters of 2003 in the total amount of R\$76.7 million to be paid on August 15, 2003, which, translated using the exchange rate on June 16, 2003, would be equivalent to \$26.8 million.

On March 21, 2003, the Board of Directors approved an addition to capital of \$191,142 without issuance of shares, from the reserve for investments and working capital, subject to ratification at the Extraordinary Shareholders' Meeting scheduled for April 28, 2003.

In June, September, October and December 2002, 2,261,313 options for preferred shares were exercised for an aggregate exercise price of \$1,194.

The Extraordinary Shareholders' Meeting on March 1, 2002 approved the addition of \$236,149 to capital from the reserve for investments and working capital, without issuance of shares and attributable to all shareholders.

Also, the same Extraordinary Shareholders' Meeting approved the addition of \$223,169 to capital from the reserve for investments and working capital, with the issuance of 88,430,168 preferred shares in a form of stock dividend, attributed to all common and preferred shareholders, in proportion to their participation in capital at that date, at the rate of 0.142106 new preferred share for each existing share.

As a result of the stock dividend, shareholders of the Company on March 1, 2002, received additional preferred share based the proportion mentioned above. The additional shares were distributed on March 1, 2002. All per-share amounts and number of shares outstanding in this report have been restated for the stock dividend.



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The amount for the preferred shares issued from the capitalization of reserves was determined based on the net book value of the Company's shares as of September 30, 2001.

The preferred shares attributed to the stock dividend have the same characteristics as the existing preferred shares. The new preferred shares issued by the Company did not have rights to dividends for the year ended December 31, 2001.

In June and November 2001, 4,935,000 employee stock options were exercised for an aggregate exercise price of \$1,761.

In June and July of 2000, the Company completed a public offering of 52.8 million preferred shares, represented by 13.2 million ADSs, for \$235,460, net of transaction expenses of \$9,909.

#### Legal reserve

Brazilian corporations are required to allocate 5% of annual net income to a legal reserve until that reserve equals 20% of capital, or that reserve plus other capital reserve equals 30% of capital; thereafter, allocations to this reserve are not mandatory. This reserve can only be used to increase share capital or to offset accumulated losses.

#### Retained earnings (restricted)

Retained earnings are statutorily restricted by a reserve for discretionary appropriations ( Reserve for Investments and Working Capital ), which was ratified by the Company's shareholders for plant expansion and other capital projects. The amount restricted is based on an approved capital budget presented by management. After completion of such projects, the Company may elect to retain the amounts in this reserve until the shareholders vote to transfer all or a portion of the reserve to capital or to retained earnings, from which a cash dividend may then be paid.

At their annual meeting, the Company's shareholders approved the appropriation of 100% of net income for the year, after allocation to the legal reserve and for dividend distribution, as a reserve for investments and working capital for:

Research and development - Development of the EMBRAER 170/190 family, new versions and modifications for the ERJ 145 family and Legacy corporate jet.

New technologies, processes and management models in order to improve the Company's results, competencies and productivity, and investments in subsidiaries.

## 26. DIVIDENDS

Brazilian law permits the payment of cash dividends only from retained earnings and certain reserves registered in the Company's statutory accounting records. At December 31, 2002, the earnings and reserves available for distribution as dividends, upon approval by the Company's shareholders, were \$123,399. Dividends are calculated on the Company's statutory adjusted net income for the year, which is determined using the equity method of accounting for subsidiaries.

F-41

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In conformity with the Company's bylaws, shareholders are entitled to minimum dividends equivalent to 25% of annual net income computed in accordance with the accounting principles emanating from Brazilian corporate law. The Company's preferred shares do not have voting rights but have priority in capital redemption and, in accordance with present corporate law, have the right to dividends in an amount 10% greater than those payable to the common shares.

The Company has elected to pay interest on shareholders' capital, calculated on a quarterly basis in accordance with article 9 of Law No. 9,249/95 based on the TJLP, for deductibility purposes in computing income and social contribution taxes, and charged directly to shareholders' equity for reporting purposes, in compliance with CVM Instruction No. 207/96. The amount paid to shareholders as interest on net worth, net of any withholding tax, may be included as part of any mandatory distributable dividends amount.

The dividends declared and approved in 2000, 2001 and 2002 are composed as follows:

Approval date	Amounts	Dividends per share	
		Common	Preferred
<b>2000:</b>			
February 15, 2000 - dividends	48,252	0.08522	0.09374
March 24, 2000 - interest on capital	11,209	0.01941	0.02135
June 16, 2000 - interest on capital	11,039	0.01911	0.02102
July 6, 2000 - dividends	44,205	0.07654	0.08420
September 22, 2000 - interest on capital	15,027	0.02310	0.02541
December 15, 2000 - interest on capital	17,125	0.02632	0.02895
	<hr/>		
Total dividends in 2000	146,857		
	<hr/>		
<b>2001:</b>			
March 16, 2001 - dividends	51,448	0.07908	0.08699
March 16, 2001 - interest on capital	15,661	0.02407	0.02648
June 13, 2001 - interest on capital	17,963	0.02392	0.02632
September 14, 2001 - dividends	53,418	0.07064	0.07770
September 14, 2001 - interest on capital	18,102	0.02394	0.02633
December 15, 2001 - interest on capital	24,612	0.03249	0.03574
	<hr/>		
Total dividends in 2001	181,204		
	<hr/>		
<b>2002:</b>			
March 19, 2002 - dividends	43,100	0.05690	0.06259
March 19, 2002 - interest on capital	25,353	0.03347	0.03681
June 14, 2002 - interest on capital	20,929	0.02763	0.03039
September 13, 2002 - interest on capital	17,022	0.02244	0.02468
December 13, 2002 - interest on capital	19,804	0.02606	0.02867
December 13, 2002 - interest on capital 1998 and 1999	20,505	0.02699	0.02969
	<hr/>		
Total dividends in 2002	146,713		
	<hr/>		

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27. EARNINGS PER SHARE

Because the preferred and common shareholders have different dividend, voting and liquidation rights, basic and diluted earnings per share have been calculated using the two-class method. The two-class method is an earnings allocation formula that determines earnings per share for preferred and common shares according to the dividends to be paid as required by the Company's bylaws and participation rights in undistributed earnings. Effective January 1, 1997, preferred shareholders are entitled to receive per-share dividends of at least 10% greater than the per-share dividends paid to common shareholders. Undistributed earnings, therefore, have been allocated to common and preferred shareholders on a 100 to 110 basis, respectively, based upon the weighted average number of shares outstanding during the period to total shares (allocation percentage). Because the allocation percentage for each class differs for basic and diluted earnings per share, allocated undistributed earnings differ for each calculation.

Basic earnings per common share is computed by dividing net income available to common shareholders by the weighted average number of common shares outstanding during the period. Net income available to common shareholders is computed by deducting distributed and undistributed net income available to preferred shareholders from net income. Net income available to preferred shareholders is the sum of the preferred stock dividends and the preferred shareholders' portion of undistributed net income. Undistributed net income is computed by deducting total dividends (the sum of preferred and common stock dividends, including the premiums accrued related to redeemable preferred stock) from net income.

Diluted earnings per share is computed similarly to basic earnings per share except that the outstanding shares are increased to include the number of additional shares that would have been outstanding if the potential dilutive shares attributable to stock options and convertible debt with warrants had been issued during the respective periods, utilizing the treasury stock method. In computing the effect of convertible debt, the net income available for distribution is adjusted to add back the interest recognized in the period associated with convertible debt.

All share and per share amounts have been restated for the effects of the stock split as described in Note 25.

F-43

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The computation of basic and diluted earnings per share is as follows:

	In thousands, except per share data and percentages					
	At December 31, 2000			At December 31, 2001		
	Common	Preferred	Total	Common	Preferred	Total
<b>Basic numerator:</b>						
Actual dividends declared	61,224	85,633	146,857	64,181	117,023	181,204
Basic allocated undistributed earnings (a)	72,486	101,385	173,871	52,150	95,086	147,236
Allocated net income available for common and preferred shareholders	133,710	187,018	320,728	116,331	212,109	328,440
<b>Basic denominator:</b>						
Weighted average shares	242,544	308,401		242,544	402,035	
Basic earnings per share	0.55	0.61		0.48	0.53	
<b>Diluted numerator:</b>						
Actual dividends declared	61,224	85,633	146,857	64,181	117,023	181,204
Diluted allocated undistributed earnings (a)	63,221	112,670	175,891	49,861	98,002	147,863
	124,445	198,303	322,748	114,042	215,025	329,067
Allocated net income available for common and preferred shareholders	115,281	205,447	320,728	110,753	217,687	328,440
Interest expense on convertible debt (b)	726	1,294	2,020	211	416	627
Allocated diluted net income available for common and preferred shareholders	116,007	206,741	322,748	110,964	218,103	329,067
<b>Diluted denominator:</b>						
Weighted average shares outstanding	242,544	308,401		242,544	402,035	
Dilutive effects of convertible debt (b)		75,314			24,646	
Dilutive effects of stock options (b)		9,239			6,705	
Diluted weighted average shares (c)	242,544	392,954		242,544	433,386	
Diluted earnings per share	0.48	0.53		0.46	0.50	

[Additional columns below]

[Continued from above table, first column(s) repeated]

In thousands, except per share data and percentages



	At December 31, 2002		
	Common	Preferred	Total
<b>Basic numerator:</b>			
Actual dividends declared	47,932	98,781	146,713
Basic allocated undistributed earnings (a)	24,790	51,089	75,879
Allocated net income available for common and preferred shareholders	72,722	149,870	222,592
<b>Basic denominator:</b>			
Weighted average shares	242,544	454,414	
Basic earnings per share	0.30	0.33	
<b>Diluted numerator:</b>			
Actual dividends declared	47,932	98,781	146,713
Diluted allocated undistributed earnings (a)	24,607	51,272	75,879
Allocated net income available for common and preferred shareholders	72,539	150,053	222,592
Interest expense on convertible debt (b)	72,186	150,406	222,592
Allocated diluted net income available for common and preferred shareholders	72,186	150,406	222,592
<b>Diluted denominator:</b>			
Weighted average shares outstanding	242,544	454,414	
Dilutive effects of convertible debt (b)			
Dilutive effects of stock options (b)		5,001	
Diluted weighted average shares (c)	242,544	459,415	
Diluted earnings per share	0.30	0.33	

- (a) The Company calculates earnings per share on common and preferred shares under the two-class method. Effective January 1, 1997, preferred shareholders are entitled to receive per share dividends of at least 10% greater than the per share dividends paid to common shareholders. Undistributed earnings, therefore, from January 1, 1997 forward have been allocated to common and preferred shareholders on a 100 to 110 basis, respectively, based upon the weighted average number of shares outstanding during the period to total shares (allocation percentage). Because the allocation percentage for each class differs for basic and diluted earnings per share purposes, allocated undistributed earnings differ for such calculations.
- (b) For purposes of computing diluted earnings per share, the convertible debt (including subscription warrants) and outstanding stock options are assumed to be converted into common and preferred shares using the treasury stock method. The related interest expense related to the convertible debt is added back to arrive at allocated diluted net income available for common and preferred shareholders.
- (c) The effect of the stock split (see note 25) is reflected retroactively for all of the period presented for purpose of computing basic and diluted Earnings per Share (EPS).

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28. STOCK COMPENSATION

On April 17, 1998, the Company's shareholders approved a stock option plan for management and employees, including those of the Company's subsidiaries, subject to restrictions based on continuous employment with the Company for at least two years. The Administration Committee, which was appointed by the Board of Directors on the same date, is responsible for managing the plan.

Under the terms of the plan, options for 25,000,000 preferred shares are authorized to be granted. Options are granted with an exercise price equal to the weighted average price of the Company's preferred shares traded on the BOVESPA (São Paulo Stock Exchange) in the 60 trading days prior to the grant date, increased or decreased by 30%, as defined by the Administration Committee. Such percentage is deemed to offset unusual fluctuations in the market price during this 60-day period. These options generally vest 30% after three years, 30% after four years, and 40% after 5 years, if the employee is still employed by the Company on each date. The options expire seven years from the date of grant. The right to grant options under the plan terminates five years after the first grant.

As of December 31, 2002, the Administration Committee had made seven grants, equivalent to 400 lots of 50,000 shares each, totaling 19,665,000 preferred shares, net of 335,000 shares which were forfeited, as the grantees are no longer employees of the Company. During 2000 and 2001, the Company granted options with exercise prices below the market value of the underlying stock on the date of grant which resulted in noncash compensation expense of \$510 and \$1,074, respectively. In June and November 2001, 4,935,000 options were exercised, in the total amount of \$1,761. During 2002, 2,261,313 options were exercised, in the total amount of \$1,194.

In connection with the 14.2106% stock dividend approved at the Extraordinary Shareholders' Meeting on March 1, 2002 (see Note 25), the Administration Committee granted an additional 25,576 options to purchase preferred shares to holders of vested options as of the record date. In addition, all non-vested option holders were offered an additional grant of 14.2106% of the number options held. The total of these additional grants were 637,318 grants with an exercise price of R\$14.99 (which was higher than the market price of the preferred stock on the date of grant).

Information regarding options granted to management and employees is shown in the following table (options in thousands):

	2000		2001		2002	
	Options	Weighted average exercise price (R\$)	Options	Weighted average exercise price (R\$)	Options	Weighted average exercise price (R\$)
Outstanding at beginning of year	12,550	1.80	17,800	4.07	14,815	7.63
Granted	5,250	9.49	2,050	23.00		
Bonus (March 1 <sup>st</sup> )					26	
Adhesion of the bonus (March 1 <sup>st</sup> )					637	14.99
Exercised			(4,935)	1.19	(2,261)	1.76
Canceled or expired			(100)	23.00	(85)	8.73
Outstanding at end of year	17,800	4.07	14,815	7.63	13,132	8.98
Exercisable at end of year			180	1.65	812	3.56

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The weighted average grant date fair values of options granted in 2000, 2001 and 2002 was \$2.65, \$5.83 and \$ 2.39, respectively. The estimated fair values of the options were computed using the Black-Scholes option pricing model based on the U.S. dollar to Brazilian real exchange rates in effect on the date of grant and using the following weighted average assumptions:

	<b>Expected option life</b>	<b>Expected Volatility</b>	<b>Dividend Yield</b>	<b>Risk-free interest rate</b>
2000	5 years	50%	3.0%	13.40%
2001	5 years	60%	3.0%	13.40%
2002	5 years	60%	3.0%	10.00%

The following table summarizes information about stock options outstanding at December 31, 2002 (options in thousands):

<b>Exercise price (R\$)</b>	<b>Number of outstanding stock options</b>	<b>Options exercisable</b>	<b>Weighted average remaining contractual life (years)</b>
(*)	6	6	2.9
0.75	240		2.4
1.07	60		2.4
1.65	3,408	390	3.2
5.22	1,630	405	3.9
8.11	3,950		4.4
13.70	1,250		4.9
14.99	638	11	5.4
23.00	1,950		5.4
	<b>13,132</b>	<b>812</b>	<b>4.2</b>

(\*) Stock options granted without exercise price (see stock split mentioned above), but must be exercised with other options.

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The following table summarizes information about outstanding stock options by anticipated vesting date and outstanding at December 31, 2002 (options in thousands):

<u>Grant dates</u>	<u>Vesting date</u>	<u>Expiration date</u>	<u>Weighted average exercise price (R\$)</u>	<u>Number of outstanding stock options</u>
November 1998	November 2001	November 2005	1.44	51
May 1998 and 1999	May 2002	May 2005 and 2006	1.65	225
November 1998 and 1999	November 2002	November 2005 and 2006	4.61	536
May 1998, 1999 and 2000	May 2003	May 2005 and 2006	4.82	2,556
November 1998, 1999 and 2000	November 2003	November 2005, 2006 and 2007	5.74	1,760
May 1999, 2000 and 2001	May 2004	May 2006, 2007 and 2008	8.71	3,103
November 1999 and 2000	November 2004	November 2006 and 2007	8.56	1,138
May 2000 and 2001	May 2005	May 2007 and 2008	12.32	2,312
November 2000	November 2005	November 2007	13.85	566
May 2001	May 2006	May 2008	22.05	885
			Total	13,132

The Company applies APB Opinion No. 25 and related interpretations in accounting for its stock option plan. Accordingly, compensation cost has been recognized for grants of stock options based on market prices and grant prices at the date of grant. Had compensation cost for the Company's stock-based compensation plans been determined in accordance with the provisions of SFAS No. 123 Accounting for Stock-based Compensation, the Company's U.S. GAAP net income and earnings per share would have been changed to the pro forma amounts indicated below:

	<u>2000</u>	<u>2001</u>	<u>2002</u>
Net income under U.S. GAAP - as reported	320,728	328,440	222,592
Net income under U.S. GAAP - pro forma	307,310	318,151	221,132
<b>EARNINGS PER SHARE</b>			
Basic - as reported:			
Common	0.55	0.48	0.30
Preferred	0.61	0.53	0.33
Basic - pro forma :			
Common	0.53	0.46	0.30
Preferred	0.58	0.51	0.33
Diluted - as reported:			
Common	0.48	0.46	0.30
Preferred	0.53	0.50	0.33
Diluted - pro forma :			
Common	0.46	0.44	0.30
Preferred	0.50	0.49	0.33

The pro forma amounts reflected above are not representative of the effects on reported earnings per share future years.

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29. INCOME AND SOCIAL CONTRIBUTION TAX

The following is an analysis of the provision for income taxes:

	For the year ended December 31,		
	2000	2001	2002
Current	(134,504)	(177,061)	(167,448)
Deferred:			
Temporary differences:			
Additions	60,222	35,301	(5,535)
Tax loss carryforwards:			
Utilized to offset taxable income for the year	(70,636)	(75,577)	(10,651)
Change in valuation allowance	27,539	(1,057)	(4,868)
	<u>17,125</u>	<u>(41,333)</u>	<u>(21,054)</u>
Total deferred			
Provision for income taxes	<u>(117,379)</u>	<u>(218,394)</u>	<u>(188,502)</u>

Brazilian income taxes comprise federal income tax and social contribution tax. In 2000, 2001 and 2002 the rate was 25% for income tax, and for social contribution rates were 12% in January 2000 and 9% from February 2000 to December 2002 resulting in a combined statutory tax rate of approximately 34% in 2000, 2001 and 2002.

F-48

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The following is a reconciliation of the reported income tax expense (benefit) and the amount calculated by applying the combined statutory tax rate of 34% in 2000, 2001 and 2002:

	For the year ended December 31,		
	2000	2001	2002
Income before taxes as reported in the accompanying consolidated financial statements	436,585	541,817	412,977
Tax expense at the combined statutory rate	148,439	186,067	140,412
Permanent additions:			
Nondeductible expenses	2,204	3,911	2,299
Stock option compensation	168	354	
Financial transaction gain (loss)	34,948	65,397	83,110
Other	1,216	2,974	3,565
	38,536	72,636	88,974
Permanent exclusions:			
Dividends - interest on capital	(17,951)	(25,778)	(35,453)
Gain on equity investment	(6,594)		
Reversal of tax incentives	(12,831)	(14,980)	(12,822)
Expense of global equity offering	(3,270)		
Others	(1,411)		
	(42,057)	(40,758)	(48,275)
Other items:			
Income tax rate difference			3,085
Interest on capital of subsidiaries eliminated in consolidation		(608)	(562)
Subtotal		(608)	2,523
	144,918	217,337	183,634
Change in valuation allowance on deferred tax assets	(27,539)	1,057	4,868
Provision for income tax as reported in the accompanying statements of income	117,379	218,394	188,502

Income tax payments, net of tax incentives, were \$108,939, \$166,891 and \$79,860 in 2000, 2001 and 2002, respectively.

F-49

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The Company's net deferred tax asset is comprised of the following:

	At December 31,	
	2001	2002
Deferred tax assets on:		
Income tax losses	21,427	11,107
Social contribution tax losses	783	452
Valuation allowance	(5,054)	(9,922)
	<u>17,156</u>	<u>1,637</u>
Effect of tax loss carryforwards, net	17,156	1,637
Temporary differences:		
Accrual for product warranties and improvements	31,068	39,326
Accrued taxes, other than taxes on income	38,523	28,622
Deferred charges, principally research and development	45,746	44,358
Other accrued expenses not deductible for tax purposes	17,389	25,226
Difference in bases of property, plant and equipment	20,051	27,881
Inventory allowances	8,604	14,343
Pension accrual	1,344	1,141
Unrealized losses on derivative transactions	5,926	
Other	33,550	10,244
	<u>202,201</u>	<u>191,141</u>
Total deferred tax assets	<u>219,357</u>	<u>192,778</u>
Deferred income tax liabilities on:		
Temporary differences:		
Difference in bases of property, plant and equipment	(26,395)	(22,542)
Contributions from suppliers	(4,664)	(4,848)
Other	(4,403)	(2,547)
	<u>(35,462)</u>	<u>(29,937)</u>
Total deferred tax liabilities	<u>(35,462)</u>	<u>(29,937)</u>
Net deferred tax asset	<u>183,895</u>	<u>162,841</u>

As of December 31, 2002, the Company and its subsidiaries had tax loss carryforwards for income and social contribution taxes, which can be used to offset future taxable income and for which there are no expiration dates for utilization. The tax loss carryforwards are composed as follows:

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At December 31, 2002

Year	Income tax	Social contribution tax
1993	4,474	2,666
1994	1,692	
1995	1,210	977
1996	755	523
1997	886	824
1998	4	4
1999	23	23
2000	5	5
2001	1,649	
2002	33,730	
	<u>44,428</u>	<u>5,022</u>

The Company follows the policy of recognizing deferred tax assets on tax loss carryforwards only when realization is probable. During 2000, based on an assessment of future taxable income and given the Company's improved profitability and the expected increases in sales and backlog, the previously recorded valuation allowance against tax loss carryforwards was reduced by \$27.5 million. Valuation allowances associated with other temporary tax differences were not required due to their nature.

Increase in the valuation allowance in 2001 and 2002 related to tax loss carryforwards of foreign subsidiaries which can not be offset against taxable income in Brazil.

Management believes that the recorded valuation allowance reduces deferred tax assets to an amount that is more likely than not to be realized. Based on internal studies and projections, management believes that the present net amounts should be realized within five years.

F-51



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30. OTHER OPERATING EXPENSE, NET

Other operating expense, net is composed of the following income (expense) items:

	For the year ended December 31,		
	2000	2001	2002
Production process improvements	(4,872)	(7,564)	
Product modifications	(3,866)	(3,672)	(961)
Pre-operational cost of Gavião Peixoto		(1,916)	(3,856)
Education, training and professional development (a)		(7,929)	(12,963)
Restructuring costs (b)		(4,521)	
Provision for contingencies	(6,528)	(1,930)	(6,185)
Provision for losses on contractual obligations (c)	(6,000)		
Contractual fines	3,815	4,004	4,117
Expense reimbursement	566	988	4,692
Insurance recoveries	3,017	1,431	88
Other	(5,650)	(8,354)	(5,430)
	<u>(19,518)</u>	<u>(29,463)</u>	<u>(20,498)</u>

- (a) Refers to training and professional development provided to Company employees.
- (b) Restructuring costs relate to the cost of employee terminations resulting from adapting the work force to production postponements.
- (c) Provision for losses on contractual obligations relate to anticipated cost overruns expected to be incurred in the manufacturing of the AL-X for the Brazilian Air Force, which were recorded in 2000.

F-52

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31. FINANCIAL TRANSACTION LOSS, NET

Financial transaction gains and losses results from the remeasurement of the balance sheet accounts from the local currency to the functional currency as follows:

	For the year ended December 31,		
	2000	2001	2002
<b>Assets:</b>			
Cash and cash equivalents	(42,282)	(204,160)	(211,482)
Accounts receivable	(81)	(717)	(3,574)
Other	5,005	(5,334)	(17,698)
Transaction (loss) on assets, net	(37,358)	(210,211)	(232,754)
<b>Liabilities:</b>			
Accounts payable	2,267	26,038	62,492
Income taxes	316	(371)	4,208
Dividends	709	11,165	(256)
Provisions	6,231	15,809	17,777
Other	3,198	8,933	12,886
Transaction gain on liabilities, net	12,721	61,574	97,107
Transaction loss, net	(24,637)	(148,637)	(135,647)

32. OTHER NONOPERATING INCOME (EXPENSE), NET

Other non-operating income (expenses) is comprised of the following:

	For the year ended December 31,		
	2000	2001	2002
Net loss on sales on fixed assets	(66)	(142)	(145)
Provision for losses on tax incentive investments	(7,390)	(8,567)	(733)
Gain on sale of minority interest of subsidiary (a)	12,935		
Valuation allowance on fixed assets		(518)	
Other	476	801	(516)
	5,955	(8,426)	(1,394)

(a) The gain on sale of minority interest in subsidiary in 2000, resulted from the sale of a 40% minority interest in the Company's subsidiary ELEB - Embraer Liebherr Equipamentos do Brasil S.A.

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33. TRANSACTIONS WITH RELATED PARTIES

	At December 31,		
	2000	2001	2002
<b>Brazilian Air Force:</b>			
Current assets/liabilities:			
Accounts receivable	30,841	18,494	12,704
Customers advances	20,144	46,451	99,290
Accounts payable	3,161	2,156	2,239
Income (expense):			
Sales	77,482	45,703	53,167
Recovery of cost		(75)	
<b>Cia. Bozano:</b>			
Interest income (expenses):			
Temporary cash investments	151		

The Company has engaged in a number of transactions with the Brazilian Air Force and Cia. Bozano as shown above.

The Brazilian Government, principally through the Brazilian Air Force, has participated in the development of the Company and plays a key role as:

A source for research and development debt financing through technology development institutions such as FINEP (Financiadora de Estudos e Projetos, a Brazilian Government financing agency) and the BNDES (National Economic and Social Development Bank).

An export support agency through the BNDES.

The Company maintains credit facilities with the BNDES and FINEP of which \$47,879 and \$5,373 principal amount, respectively, was outstanding at December 31, 2002. In addition, as described in note 20, the Company renegotiated reductions in the interest rates on loans from the BNDES.

34. DERIVATIVE FINANCIAL INSTRUMENTS

The Company's primary market risks include fluctuations in interest rates and foreign currency exchange rates. The Company has established policies and procedures to manage sensitivity to interest rate and foreign currency exchange rate risk. These procedures include the monitoring of the Company's levels of exposure to each market risk, including the analysis of the amounts based on a forecast of future cash flows, the funding of variable rate assets with variable rate liabilities, and limiting the amount of fixed rate assets which may be funded with floating rate liabilities. These procedures may also include the use of derivative financial instruments to mitigate the effects of interest rate fluctuations and to reduce the exposure to exchange rate risk.

F-54

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#### Interest rate risk

Interest rate risk is the risk that the Company will incur economic losses due to adverse changes in interest rates. This interest rate exposure principally relates to changes in the market interest rates related to the Company's cash and cash equivalents and its debt. The Company primarily invests in short-term financial assets with low risk, such as bank certificates of deposit and money market funds denominated in Brazilian reais, which generally earn interest based on the Brazilian overnight interest rate for interbank deposits or the quoted bank rates for U.S. time deposits or overnight funds (see note 5). The Company's U.S. dollar denominated debt bears interest at fixed rates or variable rates based on 6 month or 12 month LIBOR. The Company's foreign currency denominated debt is primarily denominated in Brazilian reais and Japanese yen. The Brazilian real denominated debt bears interest at a variable rate based on TJLP, the long-term interest rate in Brazil, and the Japanese yen denominated debt bears interest at fixed rates or variable rates based on JIBOR (Japanese interbank deposit rates). The Company continuously monitors market interest rates, and may use derivative instruments to hedge these risks.

#### Exchange rate risk

Exchange rate risk is the risk that changes in foreign currency exchange rates may cause the Company to incur losses due to fluctuations in exchange rates, leading to a reduction in amounts billed or an increase in loan amounts. The Company's primary exposures to foreign currency exchange fluctuations are the Brazilian real/U.S. dollar and Japanese yen/U.S. dollar exchange rates. As 97.7% of the Company's net sales for the year ended December 31, 2002 were denominated in U.S. dollars and as this situation may continue for the next few years, the Company considers anticipated future sales in the foreign markets as a natural hedge for its liabilities denominated in foreign currencies. The Company's foreign currency risk management strategy may also use derivative instruments to protect against foreign exchange rate volatility, which could impair the value of certain of the Company's assets. The Company typically uses foreign currency forward and swap contracts to implement this strategy.

#### Derivative financial instruments

As discussed above, the Company's exposures to interest rate and exchange rate risk are managed, in part, with the use of derivative financial instruments. The Company generally uses interest rate swap and foreign currency forward and swap contracts to hedge the exposures to the exchange rate and interest rate risk on its loans.

Effective January 1, 2001, the Company accounts for derivatives pursuant to SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, as amended. This standard requires that all derivative instruments be recorded on the balance sheet at fair value. Changes in the fair value of derivatives are recorded each period in income or other comprehensive income, depending on whether the derivative is designated as part of hedge transaction and on the type of hedge transaction. The ineffective portion of all hedges is recognized in income. The Company's derivative financial instruments have not qualified for hedge accounting designation for purposes of SFAS No. 133. As such, changes in the fair value of the derivatives are recorded in income as a component of interest income (expense) in the consolidated statements of income.

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In connection with the adoption of SFAS No. 133 on January 1, 2001 the Company accordingly recorded a cumulative effect of account change to income in the amount of \$5,440, net of related taxes of \$2,802.

The purpose of derivative instruments contracted by the Company is to protect the Company's operations from exchange rate risks and interest rate fluctuations; they are not utilized for speculative purposes. As of December 31, the derivative financial instruments consist of the following:

2002

Purpose	Type	Notional amount	Maturity date	Agreed average rate	Gain (Loss)
					Fair value
Import financing	Swap - JPY into R\$	124,862	2006	76.59% of CDI (*)	20,200
Import financing	Swap - US\$ into R\$	167,519	2009	89.84% of CDI (*)	38,206
Import financing	Swap - JPY into US\$	26,564	2006	5.80% per year	(222)
Accounts receivable	Non Deliverable Forward (NDF) - US\$ into R\$	59,984	2003		(8,525)
<b>Total</b>		<b>378,929</b>			<b>49,659</b>

2001

Purpose	Type	Notional amount	Maturity date	Agreed Average rate	Gain (Loss)
					Fair value
Import financing	Swap - JPY into R\$	26,701	2004	86.17% of CDI (*)	(7,035)
Import financing	Swap - US\$ into R\$	20,841	2003	87.50% of CDI (*)	(1,587)
Import financing	Swap - JPY into US\$	33,205	2006	5.80% per year	(2,152)
Import financing	Non Deliverable Forward (NDF) - JPY into US\$	21,672	2002	102.61	(4,732)
<b>Total</b>		<b>102,419</b>			<b>(15,506)</b>

(\*) CDI - Interbank Deposit Rates.

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35. SIGNIFICANT GROUP CONCENTRATIONS OF CREDIT RISK

Credit risk is the risk that the Company may incur losses if counterparties to the Company's contracts do not pay amounts owed to the Company. The Company's primary credit risk derives from the sales of aircraft, parts and related services to its customers, including the financial obligations related to these sales discussed in Note 8 and 37.

The Company grants credit to its customers for the sale of spare parts and services based upon an evaluation of the customers' financial condition and credit history. Customer credit analyses are continuously monitored and the Company establishes an allowance for doubtful accounts based upon factors that include the credit risk of specific customers and historical aging, collection and write-off trends. The Company's historical experience in collecting accounts receivable falls within the recorded allowances. Based on these factors, the Company believes no additional credit risk beyond amounts provided for collection losses is inherent in the Company's trade accounts receivable.

The Company may also have credit risk related to the sale of aircraft while its customers are finalizing the financing structures for their purchases from the Company. To minimize these risks, customer credit analyses are continuously monitored and the Company works closely with the financial institutions to help facilitate customer financing. The Company has recognized an allowance for doubtful accounts, which it believes is sufficient to cover potential losses on the realization of accounts receivable.

Financial instruments involving potential credit risk are predominantly with commercial aircraft customers and the Brazilian Air Force. Of the \$760,417 in accounts receivable included in the consolidated balance sheet at December 31, 2002, \$719,953 related to commercial aircraft customers and \$40,464 related to the Brazilian and other Governments. In addition, during 2002, Continental Express, Solitair Wexford/Chautauqua and American Eagle Corporation represented 37.3%, 6.8% and 17.5% of all Company sales, respectively.

36. DISCLOSURES ABOUT FAIR VALUE OF FINANCIAL INSTRUMENTS

The estimated fair values of the Company's financial assets and liabilities are presented below and have been determined using available market information and appropriate valuation methodologies. However, considerable judgment was required in interpreting market data to produce the estimated fair values. Accordingly, the estimates presented below are not necessarily indicative of the amounts that could be realized in a current market exchange. The use of different market assumptions and/or estimation methodologies may have a material effect on the estimated fair values.

Cash and cash equivalents, trade accounts receivable, other assets, other accounts payable and accrued expenses

The carrying values of cash and cash equivalents, trade accounts receivable, other assets, other accounts payable and accrued expenses approximate their fair value given their short term nature. Customer advances and contributions from suppliers are not included in the analysis of fair value, as it is not expected that such amounts will be repaid in cash.

F-57

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#### Loans

Loans are subject to interest at rates as set forth in note 20. The estimated fair value of loans was calculated based on the present value of future cash payments using interest rates that are currently available to the Company for the issuance of debt with similar terms and maturities. The estimated fair value of the loans, including short-term installments, is as follows:

	At December 31,	
	2001	2002
Book value	771,736	552,636
Fair value	764,655	536,200

#### Financed taxes

The conditions are similar to the usual terms for financed taxes and there are no material differences related to interest rates applicable to loans. The estimated fair value was calculated based on the present value of future cash payments using interest rates that are currently available to the Company for issuance of debt with similar terms and maturities. The estimated fair value for the financed taxes, including short-term installments, is as follows:

	At December 31,	
	2001	2002
Book value	25,906	14,421
Fair value	13,872	9,291

#### 37. OFF-BALANCE-SHEET ARRANGEMENTS

The Company participates in certain off-balance sheet arrangements, as defined by SEC, including certain guarantees and variable interests in unconsolidated entities, as discussed below.

##### Guarantees

In November 2002, the FASB issued an Interpretation No. 45 (FIN 45), namely, Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of the Indebtedness of Others, which clarifies the requirements of SFAS No. 5, Accounting for Contingencies, relating to guarantor's accounting for and disclosures of certain guarantees issued. Refer to Note 4 for more information about the impact of FIN 45 on the Company's financial statements.

Embraer - Empresa Brasileira de Aeronáutica S.A.

### Third Party Guarantees

Financial guarantees are triggered if customers do not perform its obligation to serve the debt during the term of the financing under the relevant financing arrangements. Financial guarantees provide credit support to the guaranteed party to mitigate default-related losses. The underlying assets collateralize these guarantees. The value of the underlying assets may be adversely affected by an economic downturn. Upon an event of default, the Company usually acts as an agent for the guaranteed party for the refurbishment and remarketing of the underlying asset. The Company may be entitled to a fee for such remarketing services. Typically a claim under the guarantee shall be made only upon surrender of the underlying asset for remarketing.

Residual Value Guarantees provides a third party with a specific guaranteed asset value typically at the end of the financing agreement. In the event of a decrease in market value of the underlying asset the Company shall bear the difference between the specific guaranteed amount and the actual fair market value. The Company's exposure is mitigated by the fact that, in order to benefit from the guarantee, the guaranteed party has to make the underlying assets meet tight specific return conditions.

The following table provides quantitative data regarding the Company's guarantees to third parties. The maximum potential payments represent a worst-case scenario, and do not necessarily reflect the expected results by the Company. Estimated proceeds from performance guarantees and underlying assets represent the anticipated values of assets the Company could liquidate or receive from other parties to offset its payments under guarantees.

(US\$ millions)	At December 31,	
	2001	2002
Maximum financial guarantees	948	1,175
Maximum residual value guarantees	556	624
Mutually exclusive exposure (1)	(350)	(362)
Provisions and liabilities		(15)
Off-balance sheet exposure	1,154	1,422
Estimated proceeds from performance guarantees and underlying assets	1,564	1,748

- (1) In the event both guarantees were issued for the same underlying asset, the residual guarantees can only be exercised if the financial guarantees have expired without having been triggered, and therefore, their distinct effects have not been combined to calculate the maximum exposure.

The Company provides premium payments to its Captive Insurance affiliate to assume such liabilities. The premium liability amount is considered to be sufficient to cover the Company's estimate of future payments it may incur as part of fulfilling of its guarantee obligations.



Embraer - Empresa Brasileira de Aeronáutica S.A.

The Company has developed a financial and residual value guarantee stochastic assessment methodology and implemented a model, which allows for monitoring of its guarantees portfolio and actively manage the associated risks. Such methodology demands a constant trend analysis for the underlying assets values and their intrinsic volatility, as well as a proactive credit monitoring.

**Aircraft Repurchase Options:** The Company is contingently liable for repurchasing of a number of aircraft sold under sales contracts that provide the customer with the right to sell the aircraft back to the Company in the future, according to defined price rules. These put options may become exercisable at various times from 2003 to 2006 and can be exerted at customer's sole discretion. The put price per aircraft under the repurchase option is less than the original sales price of the aircraft and less than management's estimation for the future market value of the relevant aircraft during the exercise period as assessed at the date of sale. If the Company is required to repurchase all of the relevant aircraft under the Company's repurchase obligations, the Company may be required to pay up to approximately \$500 million for these aircraft. Based on the Company's current estimation and third-party appraisals related to the forecasted fair values of the aircraft, management believes that at December 31, 2001 and 2002, any repurchased aircraft could be sold in the market without a material gain or loss.

**Aircraft Trade-In Options:** The Company is also subject to trade-up options for 34 firm aircraft. These options provide that the trade-up price can be applied to the purchase of a brand-new upgraded aircraft. The trade-up price is based on a percentage of the original purchase price of the aircraft. The Company continues to monitor all trade-in commitments to anticipate adverse developments. Based on the Company's current estimation and third-party appraisals, management believes that any potential aircraft accepted under trade-in could be sold in the market without a material gain or loss.

As discussed in Note 10, at December 31, 2001 and 2002 the Company has maintained escrow deposits in amount of \$124,254 and \$187,356 in favor of third parties who have provided financial guarantees and residual value guarantees in connection with certain aircraft sales financing structures.

#### Product warranties

The Company provides product warranties in conjunction with certain product sales.

Generally, aircraft sales are accompanied by a standard warranty for systems, accessories, equipment, parts, and software manufactured by the Company. Warranty expense related to aircraft and parts is recognized at the time of sale based on estimated amounts of warranty costs anticipated to be incurred, typically expressed as a percentage of revenue. These estimates are based on factors that include, among other things, historical warranty claim and cost experience, warranty coverage available from suppliers, type and duration of warranty coverage, and the volume and mix of aircraft sold and in service. The warranty period typically ranges from two to five years.

F-60

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Certain sales contracts contain provisions for guarantees of certain minimum levels of aircraft performance subsequent to delivery based on predetermined operational targets. If the aircraft subject to such guarantees do not achieve the minimum performance indices after delivery, the Company may be obligated to reimburse its customers for the implied incremental operational and service costs incurred based on formulas defined in the related agreements. Losses related to such performance guarantees are recorded at the time such losses are known, or when circumstances indicate that the aircraft is not expected to meet the minimum performance requirements, based on management's estimate of the Company's ultimate obligation under the guarantee.

The following table summarizes product warranty activity recorded during 2002.

(US\$ millions)	At December 31, 2001	Additions for New Warranties	Reductions for Payments Made	At December 31, 2002
Product warranty liabilities (*)	51.6	43.4	(22.8)	72.2

(\*) Amounts included in other accounts payable and accrued liabilities

#### Material Variable Interests in Unconsolidated Entities

The Company is currently assessing the application of FIN 46 as it relates to its variable interests (see Note 4). As discussed in Note 8, some of the Company's sales transactions are structured financings through which a Special Purpose Entity - SPE purchases the aircraft, pays the Company the full purchase price on delivery or at the conclusion of the sales financing structure, and leases the related aircraft to the ultimate customer. The Company's variable interests in these VIEs typically include financial guarantees in favor of the third party financial institution or investors. Exposures related to unconsolidated entities have been included in the table above.

While the Company is currently not required to consolidate all of these financing transactions, specifically for transactions with respect to 54 aircraft, as of December 31, 2002 where a third-party has sufficient equity investments, the Company is unable to definitively conclude at this time whether consolidation or disclosure will be required for these financing transaction upon full adoption of FIN 46.

#### 38. SEGMENT INFORMATION

The Company is organized based on the products and services it offers. Under this organizational structure, the Company operates in the following four principal segments: regional aircraft, defense aircraft, corporate jet and other related businesses.

##### Regional aircraft segment

The Regional aircraft segment's operations principally involve the development, production and marketing of commercial jet aircraft and providing related support services, principally to the regional airline industry worldwide. The Company's products in the regional aircraft segment are organized around product families, including the ERJ 135/140/145 family, the EMBRAER 170/190 family and the EMB 120 Brasília.

Embraer - Empresa Brasileira de Aeronáutica S.A.

The ERJ 145 family is composed of the ERJ 135, ERJ 140 and ERJ 145 aircraft, certified to operate with 37, 44 and 50 seats, respectively. These aircraft share approximately 96% of common parts and components. The Company relies on a limited number of customers for a substantial portion of its total net sales. The Company's largest customers for these aircraft are Continental Express and American Eagle.

The Company is developing a new family of commercial jets composed of the EMBRAER 170 for 70 passengers, EMBRAER 175 for 78 passengers, EMBRAER 190 for 98 passengers and EMBRAER 195 for 108 passengers. As of December 31, 2002, the Company had 118 firm orders for this aircraft family. The first model to reach full development is the EMBRAER 170, whose prototype was officially introduced on October 29, 2001. On February 19, 2002, the EMBRAER 170 made its first flight, initiating the certification and test flight campaign.

The EMB 120 Brasília is a 30-seat turboprop aircraft that has been operating since 1985. As of December 31, 2002, 352 aircraft had been delivered.

The regional aircraft segment is subject to both operational and external business environment risks. Operational risks that can seriously disrupt the Company's ability to make timely delivery of its commercial jet aircraft and meet its contractual commitments include execution of internal performance plans, regulatory certifications of the Company's commercial aircraft by the U.S. Government and foreign governments, collective bargaining labor disputes and performance issues with key suppliers and subcontractors.

The Company's principal operations are in Brazil, with some key suppliers and subcontractors located in the United States, Europe and South America. External business environment risks include adverse governmental export and import policies, factors that result in significant and prolonged disruption to air travel worldwide, and other factors that affect the economic viability of the commercial airline industry. Examples of factors relating to external business environment risks include the volatility of aircraft fuel prices, global trade policies, worldwide political stability and economic growth, acts of aggression that impact the perceived safety of commercial flight and a competitive industry environment.

#### Defense aircraft segment

Operations in the defense aircraft segment principally involve research, development, production, modification and support of military defense aircraft, products and related systems. Although some military defense aircraft products are contracted in the commercial environment, the Company's primary customer is the Brazilian Air Force. In the defense aircraft segment, the Company has the following products:

The EMB 312, in two platforms, the basic Tucano and the Super-Tucano - EMB 314. Also, the Super Tucano is being used as a platform of the AL-X, aircraft developed for the Brazilian Air Force.

The AM-X, an advanced ground attack jet, developed and manufactured through an industrial cooperation agreement between Brazil and Italy.

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A modified platform of the ERJ 145 is in the development stage (EMB 145 AEW&C Airborne Early Warning and Control aircraft, EMB 145 RS Remote Sensing aircraft and EMB 145 MP Marine Remote Sensing aircraft) for use by the Brazilian, Mexican and Greek governments. As of December 31, 2002, the Company had 10 firm orders for this aircraft.

The Brazilian Air Force is the largest customer of the Company's defense aircraft products. A decrease in defense spending by the Brazilian government due to defense spending cuts and general budgetary constraints or other factors could materially adversely affect the Company's defense sales and defense research and development.

### Corporate jet segment

The Company developed a line of corporate jets, based on the ERJ 135 regional jet. The Legacy, as the corporate jet is named, is being marketed by the Company to businesses, including fractional ownership companies, in two versions—the executive version and corporate shuttle version.

### Other related businesses

The other related businesses segment relates to after-sales customer support services and the manufacture and marketing of spare parts for the Company's aircraft. Activities in this segment include the sale of spare parts, maintenance and repair, training and other product support services. In addition, the Company provides structural parts and mechanical and hydraulic systems to Sikorsky Corporation for its production of helicopters. The Company also manufactures, on a limited basis and upon customer request, general aviation propeller aircraft, such as executive aircraft and crop dusters.

The Company has entered into a joint venture with Liebherr International AG to develop and manufacture landing gear and high precision hydraulic equipment and to provide related services for the Company and clients around the world.

### Significant customers

During 2000, 2001 and 2002, the Company had significant customers which each represented more than 10% of sales for the respective year. The percentages below show the percentage of total net sales and accounts receivable for each customer.

	Net Sales (%)			Accounts Receivables (%)	
	2000	2001	2002	2001	2002
<b>Regional</b>					
Continental/Express Jet	18.7	23.1	37.3	56.6	36.4
American Eagle	13.7	14.5	17.5		
Republic	7.3	15.7	6.8	17.9	1.4
<b>Defense</b>					
Brazilian Air Force	2.6	1.5	1.6	2.8	.7

F-63

Embraer - Empresa Brasileira de Aeronáutica S.A.

Backlog

At December 31, 2002 the Company had \$9.0 billion in backlog representing 528 aircraft among all segments.

Segment financial information

The information in the following tables is derived directly from the Company's internal financial reports used for corporate management purposes. The expenses, assets and liabilities attributable to corporate activities are not allocated to the operating segments. Approximately 4% of operating assets are located outside Brazil.

Other unallocated costs include corporate costs not allocated to the operating segments and include the costs attributable to stock-based compensation. Unallocated capital expenditures and depreciation relate primarily to shared services assets.

The following table provides geographic information regarding net sales, presented in millions of U.S. dollars. The geographic allocation is based on the location of the operator of the aircraft.

	Net sales by geographic area (in millions of U.S. dollars)		
	Year ended December 31,		
	2000	2001	2002
<b>The Americas without Brazil:</b>			
Regional	1,377.0	1,800.7	1,772.2
Defense		6.9	13.3
Corporate	26.5	72.6	86.6
Other related businesses	95.5	93.2	78.1
	<u>1,499.0</u>	<u>1,973.4</u>	<u>1,950.2</u>
<b>Brazil:</b>			
Regional		18.1	
Defense	72.4	43.1	40.5
Other related businesses	27.7	18.9	20.1
	<u>100.1</u>	<u>80.1</u>	<u>60.6</u>
<b>Europe:</b>			
Regional	1,021.1	644.5	290.5
Defense	26.8	74.0	73.5
Corporate			58.3
Other related businesses	51.7	64.0	43.2
	<u>1,099.6</u>	<u>782.5</u>	<u>465.5</u>
<b>Others:</b>			
Regional	55.0	89.2	47.6
Other related businesses	8.5	1.8	1.9
	<u>63.5</u>	<u>91.0</u>	<u>49.5</u>
<b>Total</b>	<u>2,762.2</u>	<u>2,927.0</u>	<u>2,525.8</u>

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The following table presents income statement information by operating segment, presented in millions of U.S. dollars.

	<b>Operating income</b> <b>(in millions of U.S. dollars)</b>		
	<b>Year ended December 31,</b>		
	<b>2000</b>	<b>2001</b>	<b>2002</b>
Net sales:			
Regional	2,453.1	2,552.5	2,110.3
Defense	99.2	124.0	127.3
Corporate	26.5	72.6	144.9
Other related businesses	183.4	177.9	143.3
	<u>2,762.2</u>	<u>2,927.0</u>	<u>2,525.8</u>
Cost of sales and services:			
Regional	(1,692.3)	(1,536.8)	(1,243.9)
Defense	(84.0)	(105.2)	(79.5)
Corporate	(18.8)	(47.0)	(104.6)
Other related businesses	(84.2)	(80.2)	(103.7)
	<u>(1,879.3)</u>	<u>(1,769.2)</u>	<u>(1,531.7)</u>
Gross profit:			
Regional	760.8	1,015.7	866.4
Defense	15.2	18.8	47.8
Corporate	7.7	25.6	40.3
Other related businesses	99.2	97.7	39.6
	<u>882.9</u>	<u>1,157.8</u>	<u>994.1</u>
Operating expenses:			
Regional	(122.6)	(161.9)	(177.5)
Defense	(14.9)	(20.9)	(15.7)
Corporate	(3.7)	(9.3)	(28.4)
Other related businesses	(52.5)	(61.0)	(30.8)
Unallocated corporate expenses	(227.1)	(253.3)	(272.1)
	<u>(420.8)</u>	<u>(506.4)</u>	<u>(524.5)</u>
Income from operations	<u>462.1</u>	<u>651.4</u>	<u>469.6</u>

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The following tables present other information about the Company's operating segments, presented in millions of U.S. dollars.

<b>Fixed assets</b> (in millions of U.S. dollars)			
<b>At December 31,</b>			
	<b>2000</b>	<b>2001</b>	<b>2002</b>
Regional	27.4	29.0	39.9
Defense	55.2	51.6	46.4
Other related businesses	6.5	6.6	7.3
Unallocated	165.9	279.3	343.1
<b>Total</b>	<b>255.0</b>	<b>366.5</b>	<b>436.7</b>

<b>Depreciation expense</b> (in millions of U.S. dollars)			
<b>At December 31,</b>			
	<b>2000</b>	<b>2001</b>	<b>2002</b>
Regional	9.9	15.0	9.8
Defense	0.9	4.0	1.7
Other related businesses	1.8	4.1	1.8
Unallocated	18.0	23.3	42.3
<b>Total</b>	<b>30.6</b>	<b>46.4</b>	<b>55.6</b>

<b>Trade accounts receivable</b> (in millions of U.S. dollars)			
<b>At December 31,</b>			
	<b>2000</b>	<b>2001</b>	<b>2002</b>
Regional	64.6	493.3	655.6
Defense	31.8	44.1	31.4
Other related businesses	86.9	83.1	73.4
<b>Total</b>	<b>183.3</b>	<b>620.5</b>	<b>760.4</b>

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<b>Customers advances</b> <b>(in millions of U.S. dollars)</b>			
<b>At December 31,</b>			
	<b>2000</b>	<b>2001</b>	<b>2002</b>
Regional	339.2	231.2	193.8
Defense	17.6	179.1	221.7
Corporate		31.2	41.1
Other related businesses	17.5	50.3	48.3
<b>Total</b>	<b>374.3</b>	<b>491.8</b>	<b>504.9</b>

### 39. WORLD TRADE ORGANIZATION WTO

In July 1998, the Canadian Government initiated a proceeding with the World Trade Organization WTO, challenging the Brazilian Government's Export Financing Program - PROEX (the most relevant subsidy challenged being interest rate discounts up to 3.8% per year on export financing).

In December 2000, the Brazilian Government changed the PROEX export incentive legislation to comply with the WTO ruling on the aforementioned proceeding. In relation to export financing for regional aircraft, the Brazilian Government also established an interest rate discount for each case based on the Commercial Interest Reference Rate established on a monthly basis by the Organization for Economic Cooperation and Development - OECD. The Brazilian Government maintained the interest rate discount at a maximum of 2.5% per annum.

The Canadian Government declared that the modifications made by Brazil were unsatisfactory and fell short of compliance with the regulations established by the WTO. As a result, in February 2001, a new panel was appointed to determine whether the WTO rulings were in fact implemented by Brazil.

In July 2001, the panel issued a report, concluding that the modifications made by the Brazilian Government to the PROEX Program comply with the WTO's ruling.

Based on declarations by the Brazilian Government that it will honor commitments assumed, management does not expect a significant impact on the backlog nor on the competitiveness of its products.

F-67