ANNUAL REPORT 2002



JRC Japan Radio Co., Ltd.

PROFILE

Communications exists where people link with others in the world. — Japan Radio Co., Ltd. (JRC) that has attached great importance to "technology" and "quality" since its foundation in 1915 has developed as one of the leading manufacturers of radio communications equipment and information technology products. JRC is making challenging efforts to seek for new technology and high quality through in its rich experience in the field of communications and information technology and to develop the IT system business in order to widely contribute to realization of the advanced information society. In its efforts, JRC is now searching for the way of better communication.

In its R&D field, JRC concentrates its development efforts on integrated systems and system support technology which are directly connected to projects and on the practical use of edge IT technology, in order to accelerate its penetration into the market for various information-related projects with high contributability to society.

JRC restructured its organization in April 2002 for early recovery of its business performance and for further corporate development. In this reform, the management generation was changed to be younger, the employment was streamlined and the marketing and technical groups were integrated into 5 divisions, aiming at higher profitability and the speedy decision making in management.

JRC's quality assurance system is intended for improvement of internationally authorized production quality and contribution to global environmental conservation.

We hope that JRC's business activities in the fields of radio communication and information technology will make great contribution to realize better society throughout the world.

CONTENTS

Financial Highlights	1
To Our Shareholders and Friends	2
Management Philosophy and	
Environmental Conservation Philosophy	8
Summary of Sales	9
Review of Operations	10
Communications	10
System Electronics	12
Marine Electronics	14
New JRC	16
Aloka	19
Board of Directors	23
Financial Section	24
Main Office, Plants and Overseas Offices	55
Affiliated Companies of JRC	58

FINANCIAL HIGHLIGHTS

Years ended 31st March, 2002 and 2001

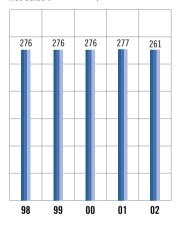
Millions of Yen

		Consolidated		Non-Consolidated
	2002	2001	2002	2001
Net sales	¥261,498	¥276,631	¥145,409	¥159,535
Income (loss) before income taxes	(13,043)	2,503	(12,504)	(3,350)
Net income (loss)	(16,430)	(616)	(14,123)	(1,874)
Total assets	274,311	304,108	152,343	176,484
Shareholders' equity	74,041	89,862	44,724	58,788
Per-share data (in yen):				
Net income (loss)	¥(119.08)	¥(4.46)	¥(102.36)	¥(13.58)
Employees	8,785	9,052	3,428	3,843

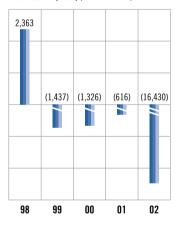
Notes: 1. Certain reclassifications have been made in the 1999 consolidated financial statements to conform to the 2000 presentation.

Consolidated

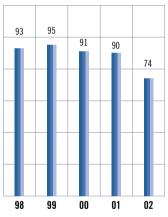
Net Sales (Billions of Yen)



Net Income (Loss) (Millions of Yen)

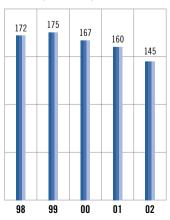


Shareholders' Equity (Billions of Yen)

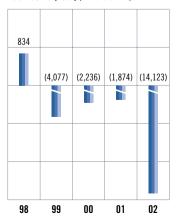


Non-Consolidated

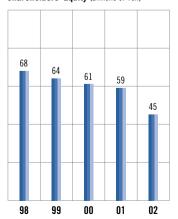
Net Sales (Billions of Yen)



Net Income (Loss) (Millions of Yen)



Shareholders' Equity (Billions of Yen)



TO OUR SHAREHOLDERS AND FRIENDS

We are pleased to present the annual report and financial statement of Japan Radio Co., Ltd. and the JRC

group for the fiscal year ended March 2002.

General Operating Environment

The Japanese economy during the 2001 fiscal year grew worse due to the collapse of the IT bubble originated from the U.S. and the resulting slump of the information and communications industry. Early 2002, the world economy showed a bright prospect partly from expectation of recovery, but the equipment investment as a driving force of business still remained in arrears and the sense of future instability derived from the delay of bad debt reduction, stagnant stock market prices and increase of the unemployment rate could not increase personal consumption as expected.

The electronics industry that experienced sharp fall of IT-related demand brought its worsened busi-



Tadahiro Muta, President

ness results into the open, actively impelled restructuring measures such as business consolidation and relinquishment, and personnel reduction in order to strengthen the constitution of enterprises.

Business Performance

JRC Group

Under these circumstances, the consolidated sales of the JRC group decreased 5.5% from the previous year, to ¥261,498 million. Profit and loss account grew worse, showing ordinary loss of ¥3,998 million and current-term net loss of ¥16,430 million, which were attributed to worsened semiconductor business, inventory depletion and valuation losses in radio communications equipment segment, and loss resulted from valuation of securities due to fall of stock market prices.

Sales by business segment for this fiscal year will be described below.

In the radio communications equipment business, sales of communications equipment increased owing to start of export of power amplifiers for the next-generation mobile phone base stations, but sales of both mobile and PHS terminals stagnated. On the other hand, demand for GPS cores for car navigation equipment and other position information service markets increased. In the system equipment segment, sales of trunk-line transmission systems and broadcasting equipment increased, and meteorological and airport surveillance radars as well as emergency video transmission systems for use with helicopters showed a steady growth. However, sales of large systems such as disaster prevention information systems decreased

due to the between period of large projects, cost reduction in the national and local government levels, and intensified competition among companies. In the marine electronics segment, demand for maritime satellite communications equipment and new large marine radar models increased, sales in this segment showed a decrease below the previous year because of severe price competition.

As a result, total sales in this business segment amounted to ¥167,609 million, a decease of 1.7% below the previous year, and operating loss amounted to ¥5,323 million.

In the semiconductor and microwave tube business, microwave devices for the public sector marked a favorable growth because customers finished their inventory adjustment, though electron tube business with the private sector was severe. Sales of satellite broadcasting and terrestrial communications components showed a sharp decrease because the European and U.S. market was stagnant.

In the main semiconductor products, sales of MOS products such as color LCD drivers and surround IC products increased, but demand for crystal oscillator ICs and OEM products was dull on the whole. Bipolar products was affected by long-term inventory adjustment due to slowing demand for personal computers, peripheral equipment and cellular phones and demand for semiconductor devices such as GaAs ICs for cellular phones from main customers decreased. In addition, sales of optical semiconductor devices for commercial appliances decreased below the previous year.

As a result, total sales in the semiconductor and microwave tube business segment amounted to ¥49,437 million, a decrease of 23.8% below the previous year, and operating income decreased 82.9% to ¥1,223 million.

Medical electronics business was affected by control of the medical expenses increasing with lower fertility and the aging of the working population, and by reduction of doctor's fees, resulting in decrease of equipment to be purchased or renewed in medical institutions and intensified price competition. To cope with this tendency, efforts were made for development of new products, cost reduction, fixed cost compression and more efficient operations.

As a result, total sales in this business segment amounted to ¥46,200 million, an increase of 5.7% above the previous year, but operating income decreased 12.6% below the previous year to ¥2,835 million.

The JRC group consisted of JRC and its 32 consolidated subsidiaries and its 4 affiliated companies to which the entity method applied, increasing 6 subsidiaries and one affiliated company above the previous year.

Japan Radio Co., Ltd.

JRC's non-consolidated business performance in the year under review will be reported.

For all our vigorous business efforts, JRC's total sales decreased 8.9% below the previous year to ¥145,409 million, because of slowing demand for systems during the between period of projects and division of cellular phone business into retailing companies.

Profit was affected by decrease of system projects, intensified competition and reduction of selling prices despite of our steady efforts to slash selling, general and administrative expenses and fixed cost. In this term, we had operating loss of ¥5,898 million. Net loss amounted to ¥14,123 million, though special income resulted from sale of fixed assets was counted up to cover the additional retirement allowance for special favorable recruitment of early retired employees for personnel structure reform aimed at higher profitability, as well as inventory valuation loss and depletion loss, and security valuation loss due to fall of stock market prices.

In our present business situation, we would apology to our shareholders that no dividends as of the end of this term could be paid.

JRC's Sales by Product Segment

Radio Communications Equipment

In the mobile communications field, sales of PHS terminals decreased in the domestic and overseas markets and sales of cellular phone terminals decreased due to delay in release of the new model R211i. The cellular phone base station equipment showed increase in sales for the next-generation cellular phone system in the domestic market and also in the overseas market to which export was started.

In the system-related equipment field, sales of disaster prevention information systems decreased though sales of trunk-line transmission systems and broadcasting equipment increased.

The marine radio communications equipment field remained under severe price competition, but sales remained on the same level as in the previous year because of contribution of international mobile satellite communications equipment.

As a result, total sales in this product segment amounted to ¥63,559 million, an increase of 8.7% above the previous year.

Radio-Applied Equipment

Sales of radar equipment for land, meteorological and airport surveillance use as well as the emergency video transmission systems for use with helicopters remained on the same level. Sales of marine radar equipment increased owing to increase in sales of new large color radar equipment.

In the radio positioning equipment field, demand for GPS cores from car navigation equipment and other position information service markets increased. Also, sales of marine navigation equipment showed a steady growth.

However, total sales in this product segment decreased 31.8% below the previous year, to ¥14,153 million.

Electronics Equipment

Sales of telemetry and telecontrol systems decreased because demand for water and river information systems including river management systems were affected by cost reduction in the national and local govern-

ment levels and intensified competition among system manufacturers though demand for debris/mudflow monitoring systems increased.

Sales of fishing electronics equipment remained under the severe market environment though export increased.

As a result, total sales in this product segment amounted to ¥20,223 million, a decrease of 11.4% below the previous year.

Electronic Devices, Installation Work and Other Operations

In the electronic device business, sales of SAW (surface acoustic wave) filters decreased under the substantial influence of dull demand in the world market for cellular phones. Installation works decreased because of system projects being in the between period. Retail sales of cellular phones decreased because a new retailing company JRC Mobitec Co., Ltd. was started up on November 1, 2001 by dividing the cellular phone business.

As a result, total sales in this segment amounted to ¥47,473 million, a decrease of 17.4% below the previous year.

Plant and Equipment Investment

In the term under review, JRC invested in manufacturing facilities aimed at improving productivity of W-CDMA base station power amplifiers, inspection facilities and equipment aimed at improving the quality and reliability of its products, and in general rationalization of its business. Total investment amounted to ¥2,745 million, which was appropriated from JRC's own funds.

R&D and Other Activities

R&D activities in the term under review focused on promising edge technologies for mobile communications, digital communications, satellite communications, instrumentation and graphic processing. Expenditures relating to R&D activities amounted to ¥12,153 million, which was mainly appropriated to the following developments:

- A 26GHz-band wireless IP (Internet Protocol) access system for connection of radio communications equipment to high-speed Internet was developed. This system adopts the P-MP (multi-link protocol) connection system that allows a maximum of 256 subscriber stations to connect to one base station. Its transmission capacity is 80Mbps and can be allotted between the base station and subscriber stations in a dynamic and flexible manner by changing the modem system on demand from subscriber stations. A communication network can be configured with a higher security than the conventional wireless LAN.
- Digital radio communications equipment with a transmission capacity (208Mbps max.) 4 times as high as the conventional equipment adopting 128 quadrature amplitude modulation (128QAM) was developed for microwave radio networks. The equipment uses both horizontal and vertical polarizations to obtain a high transmission capacity and provides a high-quality network with improved transmission characteristics

based on compensation technologies such as waveform deformation equalization and code error correction.

- Compact optical transmission equipment for W-CDMA communications networks was developed, which allows a number of carriers to be transmitted in a broad band (60MHz band in the IMT-2000 system) in order to cover difficult zones such as within buildings, underground towns and tunnels. The equipment adopts surface-mounting type photo diodes in the optical transmission circuit instead of conventional coaxial type in order to improve radio frequency characteristics and to ensure lower power consumptions of base and remote stations (1/2 for a base station and 1/5 for a remote station).
- Multi-channel amplification relay broadcasting equipment was developed to be compatible with the single-channel amplification system and the simultaneous multi-channel amplification system (up to 8 channels, 30W/channel) and to expand the receiving area of terrestrial digital broadcasting.
- A low power consumption type VICS beacon transceiver was developed, which can receive road traffic information such as current vehicle positions, traffic congestion, traffic regulation and parking lots transmitted from a VICS center via a radio beacon or optical beacon installed roadside and retransmit the information to car navigation units on vehicles. This VICS beacon transceiver has about 1/2 power consumption of the conventional equipment.
- A video monitoring system compatible with IP (Internet Protocol) networks was developed, which is capable of transmitting videos and voice in the MPEG2 over IP system in order to monitor disaster-stricken sites and work sites on TV-quality videos. The system can use high-speed Ethernet and Gigabit Ethernet as transmission lines and transmit videos from mobile stations.
- A shipborne automatic identification system (AIS) that ships will be obligated to carry in phases from July 2002 was developed. The AIS is capable of broadcasting navigational information including ship's position, course and speed and ship's unique information such as ship name and cargoes in a VHF band in a regular basis, receiving information from other ships at all times and presenting an overview display of the broadcast and received information. The system is a universal AIS of class A complying with the international AIS standard and adopts a self-managing TDMA system that need no base station for timing management.
- A voyage data recorder (VDR) for use in inquiry into the cause of a sea accident occurrence was developed. The VDR is capable of recording the information on navigation, hull, radar and crew conversations for the last 12 hours and displaying it on a real-time basis. The equipment is designed to fully comply with the international VDR standard and contained in a protective capsule. It is a marine version of the flight recorder on aircraft.

Future Tasks and Management Strategy

In the radio communications equipment business, we will cope with inventory reduction, cash flow reinforcement through early collection of trade receivable in order to strengthen our business constitution, check the business performance deterioration and recover the profitability in the new management that started in January 2002. The radio communication business is a promising field that can expect the further expansion of the world demand. We will exert our efforts to early launch new businesses with high profitability and to find new customers in the existing businesses in order to secure our business constitution that can stabilize the profitability for middle and long terms.

In the semiconductor and microwave tube business, in which received orders mainly of semiconductor devices were increasing since early in 2002, we will strengthen our marketing capability and expand our marketing network including the Chinese market. We will concentrate our efforts on speedy development of the products to exactly meet the needs of customers, optimum production to respond to the demand trend, and simplification and higher efficiency of indirect departments to secure higher profitability.

In the medical electronics business, we will challenge the development of new products to lead new orders and continue our efforts to expand our share of main medical electronics equipment, increase the total sales through development of new fields such as biotechnology, enhance our technical development capability, strengthen our cost competitiveness and improve the fund efficiency.

We sincerely appreciate your continuing encouragement and further support in these efforts.

27th June, 2002

Tadahiro Muta

Mulas

President

MANAGEMENT PHILOSOPHY

FUNDAMENTAL SPIRIT

Japan Radio Co., Ltd. shall apply its full creative and intelligent resources to develop technologies and products of superior value, in order to contribute to the realization of a society of ever higher quality.

BASIC POLICY OF MANAGEMENT

- 1. JRC shall at all times give its first priority to the needs of the customer.
- 2. JRC shall apply its creative powers to the development of innovative technologies and excellent products.
- 3. JRC shall foster the mutual trust and prosperity of all persons concerned with the company.
- 4. JRC shall consistently conduct sound business activities, so as to fulfill its inherent responsibilities to society.
- 5. JRC shall continuously strive to build an ever more open, fair and satisfying work environment for its employees.

ENVIRONMENTAL CONSERVATION PHILOSOPHY

FUNDAMENTAL SPIRIT

Japan Radio Co., Ltd. (hereinafter referred to as "the company") recognizes that the environmental conservation of the earth is one of the most important common issues for all mankind, and will act with full consideration for environmental conservation of the earth in all stages of its business activity.

BASIC ENVIRONMENTAL POLICY

- 1. The business activity, products and services of the company shall comply with the laws and regulations related to the environment and other social requirements that the company agrees to.
- 2. The business activity, products and services of the company shall contribute to the saving of energy and resources as well as the reduction of discharges and wastes.
- 3. The company shall structure its environmental management system to continually protect the environment, prevent pollution and improve the environmental effects of its business activity as well as products and services.
- 4. The environmental management system established by the company shall define the purposes and objectives of environmental conservation that shall be periodically reviewed. The company shall make maximum efforts to achieve such purposes and objectives.
- 5. The environmental conservation philosophy, including the fundamental spirit and basic policy, shall be made thoroughly known to all employees in order to obtain their full understanding and cooperation. If required, the philosophy shall be made public.

SUMMARY OF SALES

Sales Breakdown (Non-Consolidated)

					Millions of Yen
Year ended 31st March		2002		2001	Rate of
		Percentage		Percentage	Year-to-
	Amount	of Total	Amount	of Total	Year Gain
Radio communications equipment	¥ 63,559	43.7	¥ 58,488	36.7	8.7
Radio-applied equipment	14,153	9.7	20,754	13.0	31.8
Electronics equipment	20,223	13.9	22,813	14.3	11.4
Electronic devices, installations and other operations	47,473	32.7	57,478	36.0	17.4
Total:	¥145,409	100.0	¥159,535	100.0	8.9
Sales to governments	65,683	45.2	75,906	47.6	13.5
Sales to private sector	56,972	39.2	64,357	40.3	11.5
Exports	22,753	15.6	19,270	12.1	18.1

Radio Communications Equipment

Radio communications equipment for merchant fleets and fishing vessels;

Radio communications equipment for land stations;

Mobile and portable radio communications equipment;

Radio communications equipment for coast stations:

Aircraft radio communications equipment;

Mobile telephones;

Satellite communications equipment;

Radio/TV broadcasting equipment:

Satellite broadcast receiving equipment;

Amateur radio equipment.

Radio-Applied Equipment

Marine, meteorological and

airport surveillance radar equipment;

Radio positioning equipment;

Radio guidance systems.

Electronics Equipment

Fish and depth sounders;

Facsimile;

Telemetry & telecontrol systems;

Electronic computers and peripherals;

Electronic measuring instruments;

Electronic training equipment;

Traffic measuring equipment;

Burglar alarm equipment.

Electronic Devices, Installation Work and Other Operations

Other Operations

Electronic devices;

Electro-acoustic equipment;

Simultaneous interpretation equipment;

Equipment installation work, repairs and parts supply.

Millione of Von

COMMUNICATIONS

JRC's business in mobile communications equipment continued to expand in fiscal 2000 because a new i-mode cellular phone model and an Internet-based PHS terminal were put into the domestic market.

The delivery of the new i-mode cellular phone model R211i was started in March 2002 and 90K units were supplied to NTT DoCoMo. The i-mode outdoor type cellular phone model R691i that was jointly developed with NTT DoCoMo has been delivered since February 2001, and sale of more than 110K units are expected during fiscal 2002. The model R691i is designed to guarantee the JIS waterproof protection class 7 and it is also excellent in impact-resistance.

In the sale of PHS terminals, about 1,000K units have been sold since JRC launched the PHS business, which is expected to grow further. Now, JRC's newest models "JHP-920" (AJ-51) for Astel and "JHP-915/JHP-914" for export (mainly to China) are delivered to the domestic and overseas markets respectively. The prime sales point of both models is what we call "seamless hand-over" that allows very quick hand-over.

JRC is playing an important role in the business field of Mobile Communications Infrastructure such as base stations by supplying LPAs (Linear Power Amplifiers) in overseas countries as well as in Japan.

Along with the introduction of new cellular infrastructures for new wireless radio technologies so called 3G (3rd Generation Mobile Telecommunications) that provides high quality services to worldwide subscribers, JRC started commercial shipment of LPAs for 3G in the year 2000.

JRC's various LPA product lines up continuously responds the worldwide huge demand from the considerable market expansion in 2002 onwards.

The JRL-600SU wireless LAN for connection to a broadband network was released in December 2001. The antenna and the transceiver are combined as a single unit of compact and lightweight design, which is easy to install on any place such as the veranda of an apartment house. It has been difficult to introduce a wired broadband network to housing complexes and shopping and amusement quarters so far, but this equipment allows the last one-mile connections to those areas at a low cost, promising a remarkable broadband network expansion. In addition, the equipment installed at building rooftops and poles allows point-to-point communications over a distance of up to 2km, serving for the community information systems in municipalities. In 2002, the sale of about 10,000 sets is in prospect.

In order for Telecom Operators and Internet Service Providers (ISP) to provide the Fixed
Wireless IP Access Service for the customers, JRC is developing the Fixed Wireless Access (FWA)



R211i



R691i



IMT-2000 MCPA



System of 26 GHz band. Since the system is entirely new in terms of Frequency Band, Multipile Access Method, IP Traffic Management and so on, it is essential to verify the system performance in field and comfirm the Validity of services to meet customer's requirements.

GPS receiver cores (CCA-450 series) especially integrated for car navigation systems in such way of factory-line-installation and user-installable options to the automobile industry and system integrators have been expanding its number of supply over one million units already in the fiscal year 2001.

Its next generation with smaller size and lower power consumption is scheduled to be introduced into the market by the middle of 2003, which is expected to call for another demand of application.

One of application of the GPS receiver core is GPSTAR (NNN-310TA), which has been in use with Personal Digital Assistants (PDA). Its standardized production has started early this year with a certificate of FCC in USA and switching function added of data output formats between JRC's and NMEA's responding to the needs in the markets.

Sales of GPS-based automatic vehicle management (AVM) systems to taxi firms, truck-transportation companies and other users were also favorable as in the previous year.

JRC has developed the JEM-400 and JEM-410A base station simulators and the JEM-411A communication tester, which are designed for compatibility with the W-CDMA system internationally standardized for high-speed data communications as one of the third-generation mobile communication systems. In addition to these, JRC has also developed a compact mobile phone tester ahead of the world. The new compact tester features the communication protocols for testing mobile phones and various testing functions including performance tests of RF characteristics, all of which are housed in a compact case. The operating unit is not contained in the case, but a standard personal computer (Windows2000) can be used for operation in consideration of the users' operating environment. This compact tester has a wide range of applications such as inspection of portable phone production lines and failure diagnosis at dealer and retailer shops. JRC plans to release this compact tester to the world market as well as in the domestic market keeping pace with the worldwide spread of the third generation of mobile communication systems.

Sales of radio and TV broadcasting and relay equipment for NHK and commercial broadcasting stations showed a slight increase over the previous year. JRC continues to develop terrestrial digital TV broadcasting equipment to meet the demand from the digital TV broadcasting services that are expected to start in 2003 in Japan.



26G FWA



CCA-450 and NNN-310



JRL-600 wireless LAN adapter/bridge and PCMCIA card type



JEM-411A

SYSTEM ELECTRONICS

The topics of JRC systems for the public sector in Japan and overseas projects during fiscal 2001 will be described below.

In domestic business, the landslide monitoring system for the Tone River Sabo Construction Office under the Ministry of Land, Infrastructure and Transport was completed in the mid-2001. This system employs a new technology of monitoring and measuring crustal movements with GPS (global positioning system) receivers. The system can be configured not only as an independent system but also integrated with a Sabo telemetry system to build an integrated Sabo monitoring system. Demand for this system from other areas throughout Japan is expected to continuously grow.

Under the "Cultural Information Network Development Project" by the Yamanashi Prefectural Office, the public cultural facilities that had independently been deployed across the Prefecture were integrated and networked with each another so that the art and cultural information can be disseminated through a centralized management for tied-up activities of those facilities. This system has realized the "Web computing system" for the first time in Japan.

Concentrated heavy rain hits many local areas across Japan in the rainy season in early summer and in the typhoon season in early autumn, causing large-scale disasters such as land slides and debris/mud flows that may involve many deaths and damages of houses. JRC's radar rain gauge has been playing an important role in the total anti-disaster information system. During fiscal 2001, JRC delivered a radar rain-gauge system to Ministry of Land, Instructure and Transport in Shikoku and Hokkaido. This radar-based system collects current and past rainfall data available from the information terminals installed at major base sites and presents future rainfall forecasts visually on the display windows.

Among overseas system projects, JRC received an order for a big project for Civil Aviation Authority of Singapore and Maritime and Port Authority of Singapore. JRC will install an HF communications system at Changi International Airport for ground-to-air communications with aircraft within the control area and the radio transmitters and receivers for the MF Navtex system at the maritime and port facilities for providing communications services and navigational and meteorological information to ships navigating in the vicinity of Singapore. The delivery of the CAAS/MPA system will be completed early in 2002.



Nikko Sabo Dam Supervising and Information System (Japan)



Komagatake Warning and Evacuation System (Japan)



Bili Bili Dam Telemetry System (Indonesia)

Indonesia is well known as one of the major volcanic countries and there are many volcanoes in Java, some of which are active. Especially, the Merapi volcano located in Jogyakarta at the center of Java has often erupted early in 2001. Whenever it erupted, evacuation recommendation to local residents was issued. The Ministry of Residential Area Development (former Ministry of Public Works) introduced JRC's "Mudflow Forecast and Warning System" under the Japanese loan to secure the residents' safety of life and improve administrative measures against debris and mudflow disasters.

The HF data communications system is configured as a voice and digital data communications network connecting the central station provided at the Manila airport via HF links to remote stations at local airports distributed in the Philippines. The equipment installed at each station incorporates an ALE (automatic link establishment) board to automatically select an optimum frequency and establish an HF link. The internal high-speed modem is capable of transmitting and receiving still images (black/white facsimile and color videos) and text data at the maximum transmission rate of 4800bps. The equipment at the central station can collect supervisory data from the equipment at local stations and control the equipment. No communication expenses are required because of the use of HF links, so that the communications cost is so low as the electric charges. The modem can also be used for various types of HF data communications. The communications cost is inexpensive in comparison with satellite communications cost. The HF data communications system is expected to find other applications such as the main link in a rural communications network in a developing country and in a telemetry communications network to gather information of a large, long river.

In addition, JRC delivered a GMDSS coast station system for the northern part of Vietnam under a Japanese loan for the first telecommunications infrastructure development project in Vietnam to a state-owned enterprise "Vietnam Ship Communications and Electricity Public Corporation" under the control of the Shipping Bureau of Vietnam. The coastal waters of this country are frequently stricken by typhoons. This system is expected to link via radio between the shore stations and the ships navigating in their vicinity in order to ensure safety of navigation, speedy and effective search and rescue operations in case of occurrences of sea accidents. JRC installed class 1 to class 4 radio stations at 11 sites in Vietnam.



HF Data Communications System Equipment



Meteorological Radar Site (Pakistan)



Vietnam Coastal Communication System Hai phong— Operation Center



Vietnam Coastal Communication System Hai phong— Transmitting

MARINE ELECTRONICS

JRC restructured its local subsidiaries and branch offices in overseas countries to reorganize its global network in fiscal 2001. Its marketing, sales, servicing and logistics storehouses were concentrated on three operation bases in Tokyo, Amsterdam and Seattle, aiming at establishing the effective marketing activities and the total maintenance system for a 24-hour quick service.

The Information Technology (IT) is not only a key to the land-use product business, but also very important for the marine electronics business. JRC is a world-leading marine electronics manufacturer making the most of the advanced IT in the marine communications and navigation equipment.

The JUE-310B Inmarsat-B HSD terminal capable of high-speed data transmissions at 64kbps is a key system for IT-based marine communications. The HSD function allows the reduction of communications cost in high-capacity data transmissions, the digital video and animated image transmission and the efficient operation of the fleet management system. JRC's Inmarsat-B is enjoying about the world share of about 30% and well accepted among the users. JRC has also launched the design of the latest Inmarsat system FLEET F77, which is the most advanced system using IP technology and digital packet technology for connection to networks and constant connection as well as system expandability.

In the navigation product line, the JMA-9800 series large color radar and the JAN-3598 large color ECDIS (Electronic Chart Display Information System) was put into the merchant ship market. The Integrated Bridge System (IBS) OceanExplorer and the Integrated Navigation System (INS), which integrated the above advanced navigation equipment, were also well accepted in the newbuilding market, winning a large market share. OceanExplorer is the Japan's first ANTS (Automatic Navigation and Track-keeping System) that acquired the type approval by DNV (Det Norske Veritas) in November 2001.



Inmarsat-B



IBS



Under the amendment to Chapter V of the SOLAS (International Convention for the Safety of Life at Sea), the ships in international voyage were obligated to carry the Automatic Identification System (AIS) and the Voyage Data Recorder (VDR) in and after July 2002. JRC launched the sale of the JHS-180 AIS and the JCY-100 VDR featuring high performance and perfect reliability to meet the demand from the world market.

Sale of the fishing and light marine products was in the almost same level as in the previous year because of the dull tendency in the catch of fish in Japan. In the European and U.S. market, the GPS 112W GPS receiver and the DGPS212W differential GPS receiver, which are designed to the standards WAAS in the U.S. and EGNOS in Europe, both calling for higher position accuracy, were put into the market. The sale of the RADAR1800 radar/plotter and FF50 fish finder/Plot 500F plotter packaged with the 6.5-inch LCD unit was also well received in Europe and in the U.S.

JRC launched the sale of the JLR-10 electronic compass system employing the GPS technology. This system is used as a maintenance-free backup compass for gyrocompasses and can enhance the functionality of ARPA (Automatic Radar Plotting Aid) system by connecting the compass to the radar.

JRC is an independent comprehensive manufacturer of marine electronics since its foundation in 1915 and has a full lineup of marine products supported by its worldwide sales and service network, making its best to contribute to the further development of the world shipping industry.



GPS Compass



Fish Finder-Plotter

tronics. electronics

NEW JRC

New Japan Radio Co., Ltd.

New Japan Radio Co., Ltd. (New JRC) is a semiconductor manufacturer having 8 consolidated subsidiaries (one added to those in the previous year) and manufactures and sell electronic parts (microwave tubes, computer peripheral equipment, microwave devices and semiconductor devices. In April 2001, NJR Service Co., Ltd. was started up to undertake contract-based manufacture of various products and indirect work services.

During the term under review, New JRC was forced to make substantial production adjustment in its main product line of semiconductor devices, while its microwave device business was hard to grow because the information technology field in the U.S. market was extremely sluggish.

As a result, total sales amounted to ¥49,437 million on a consolidated basis, a decrease of 23.8% below the previous year. Ordinary profit decreased 81.8% below the previous year, to ¥1,279 million and net income amounted to ¥654 million, a decrease of 73.3%.

Consolidated Business Performance

oonsonaatoa basinoss i orio	manoo		Millions of Yen
	2002	2001	Growth Rate
Sales	49,437	64,842	23.8%
Operating income	1,222	7,154	82.9%
Ordinary profit	1,279	7,013	81.8%
Net income	654	2,454	73.3%

The business outline by product segment in fiscal 2001 will be described.

• Microwave Tubes and Peripheral Equipment

Business of electron tubes and peripheral equipment for the private sector was dull due to the sluggish market for marine radar products and economic recession, while the business for the public sector showed a favorable growth and an increase in sales above the previous year because inventory adjustment by major customers completed.

As a result, total sales in this product segment amounted to ¥4,567 million, an increase of 8.7% and operating income amounted to ¥593 million, an increase of 69.6% above the previous year.

Microwave Devices

Sales of components for satellite broadcasting equipment decreased due to inventory adjustment affected by the sluggish U.S. market, while sales of components for satellite communications equipment decreased due to slowing demand from major specific customers. Sales of components for terrestrial communications equipment decreased due to inventory adjustment affected by the sluggish European market.

As a result, total sales in this product segment decreased 56.9% below the previous year, to \$\display3,369\$ million. Operating income amounted to \$\display228\$ million, a decrease of 39.1% below the previous year.

Semiconductor Products

Bipolar product business was dull during the term under review because the market was scaled down through long-term inventory adjustment affected by slowing demand for AV equipment, Personal computers and peripheral equipment as well as for cellular phones, scaling down the market.

Sales of MOS products decreased because sales of crystal oscillator ICS and OEM products decreased though demand for color LCDs and surround ICs increased owing to active marketing efforts.

Semiconductor device business was also dull because demand for GaAs ICs from major customers in the cellular phone industry remained slow. Also, sales of optical semiconductor devices decreased mainly for commercial appliances.

As a result, total sales in the semiconductor segment decreased 21.4% to ¥41,499 million, and operating income amounted to ¥5,488 million, a sharp decrease of 50.2%.

R&D Activities

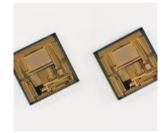
The R&D efforts of the New JRC group ranges from planning and design to production technology of semiconductor products as key devices of electronic equipment and microwave devices for radar, satellite broadcasting and communications and terrestrial communications.

In the year under review, New JRC launched the developments of an electron tube and components for radar, microwave devices and SiC devices. In addition, the developments of the next-generation model of the 20GHz LNB (low noise breaker) for satellite broadcasting and communications and an inexpensive model and a lineup of general-purpose models of the ODU (outdoor unit) for satellite communications were also started. A 26GHz-band FWA (fixed wireless access) product and a high-speed, wide-band operational amplifier with a low current drain have also been developed. The full swing operational amplifier has been designed for a low current drain, low voltage operation and a high output current.

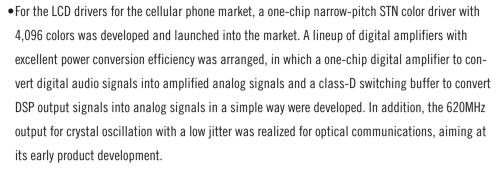
The R&D expenditure amounted to ¥5,541 million, which was appropriated to the following developments:

- A lineup of low saturation type regulator power supply ICs ranging from compact type, thin type to complex type was strengthened to meet diverse market demand including cellular phones.
- A number of audio processor ICs for TV combining electronic volume and tone control with various types surround functions was developed and a lineup of 3V operation video amplifier ICs intended for digital cameras was strengthened and launched into market.
- In the DC motor IC field, the fan motor ICs for PC and OA equipment and the 60V withstand voltage products have been developed and put into the 48V-line market for cellular phone base stations and network servers.





NJU6678



• In the GaAs IC field, a dual-mode IC for the RF unit for cellular phones and a low noise amplifier, mixer and an antenna switch as well as a number of ICs integrating these components were developed. For the optical use, a high-speed photo diode in a small package was developed for production unique to NJRC.



Some of the new products developed in fiscal 2001 will be introduced:

- 1.The development of large liquid crystal displays is actively made to browse i-mode and Web information in the current boom of portable phones. Portable phone manufacturers are now under competition for the development of the portable phones capable of color photo display.
 New JRC has developed two types of color LCD driver IC (NJU6821/25) to keep pace with this development trend.
- The NJU6821 IC is capable of displaying 82 x 128 dots in 256 colors, up to two ICs being connectable to display 164 x 128 dots. The NJU6825 is capable of displaying 162 x 128 dots in 4096 colors. Both products can support the partial display function to display necessary display blocks in the standby mode of a portable phone and the X-Y address function to momentarily rewrite part of the contents on display. Both ICs operate on the power supply voltage of 1.7 to 3.3V, ensuring a low current drain in conjunction with the partial display function and contributing to extended standby time for portable phones.
- 2.The surround audio processors NJM2701 and NJM2702 were developed using NJRC's original technology without relying on any licensed technology, which incorporate a simple circuitry to realize natural surround effects that do not make listeners feel tired in long-time listening. Trial listening was repeated many times until the circuitry was finally designed and the excellent products were completed, which can be introduced to customers with confidence could be completed.
 The NJM2701 and the NJM2702 can reproduce a natural stereophonic field with high clarity from a monaural source and from a stereophonic source respectively.

These products have a unique product name "eala", which is a word combining "ear" in English with "ala" in Spanish to appeal their good performance and image a comfortable sonic space like the dome of the sky in which sounds resonate.



NJU6821



NJU6825



NJM2701P



NJM2701

ALOKA

Aloka Co., Ltd.

Aloka Co., Ltd. is a leading medical electronics manufacturer having 12 consolidated subsidiaries (one added to those in the previous year). Its main product lines are electronic medical systems, radiation protection and analytical instruments, and clinical laboratory systems. In May 2001, Aloka Enterprise Co., Ltd. that is engaged in distribution management was renamed AEC Co., Ltd. In October 2001, Aloka System Engineering Co., Ltd. was started up to undertake software development.

In the year under review, Aloka made efforts for new product development, cost reduction, strengthening of marketing capability, quality and environmental system establishment, and improvement of general management efficiency though fixed cost control.

As a result, total sales amounted to ¥46.2 billion, an increase of 5.7% above the previous year. Ordinary profit decreased 8.9% below the previous year to ¥3,083 million due to decline of selling prices under intensified competition and sluggish stock market despite cost reduction efforts. However, net income amounted to ¥1,499 million, a slight increase of 0.7% above the previous year.

Consolidated Business Performance

			Millions of Yen
	2002	2001	Growth Rate
Sales	46,200	43,720	5.7%
Operating income	2,843	3,246	12.4%
Ordinary profit	3,083	3,385	8.9%
Net income	1,499	1,488	0.7%



ALOKA Servey Meter

The business outline by segment in fiscal 2001 will be described.

• Electronic Medical Systems

The domestic demand for diagnostic ultrasound systems that are main products in this segment is decreasing because the reform of medical treatment fee reduction is promoted, resulting in decrease in equipment investment in medical institutions. Although the oligopolistic system was established through M&A, the competition among products including imported systems became severer. The medical environment had no bright prospect, but Aloka launched new products using edge technology into the market and promoted its active marketing strategy.

The new products put into the market were provided with wealthy applications based on high image quality, realizing advanced system configurations. As a result, these products marked a favorable growth with high reception in the medical field.

Among other products, the bone densitometry system and the bone analysis system applying ultrasound technology showed a steady growth. In the domestic market, however, a hard fight was forced due to the intensified competition and the longer renewal period of these systems.

In the overseas market, sales increased more than expected owing to expansion of the marketing network and the tendency of low yen rate.

As a result, total sales in this segment showed an increase of 15.9% above the previous year, amounting to ¥35.1 billion.

• Radiation Protection and Analytical Instruments

In the products including radiation measuring instruments and radiation monitoring systems, sales of facilities monitors and model-changed survey meters increased because of increase in hospitals in which nuclear medical diagnostic systems and cyclotrons were installed. However, the nuclear power prevention and safety measures that had been promoted for the past 2 years against emergency cases were completed and the entire market entered the between period and changed into the severe environment.

On the other hand, the bio-business team was organized in 2001 because the research into genetic information became active in the biotechnology field. Further, a genetic research center was established in Tukuba district in order to actively promote the business for diagnostic systems in the future age of tailor-made medical care.

As a result, total sales in this segment amounted to ¥7,668 million, a decrease of 18.8% below the previous year.

Clinical Laboratory Systems

The medical institutions and clinical testing centers that were main users of the specimen testing system and the pipetting system suffered a continuous downturn in revenues due to continuous revision of medical treatment fees. In these circumstances, however, the needs for the automated specimen preparation system have been growing in the specimen testing industry because of its accuracy control of test data, high-speed processing and energy saving. This system is also in a good position because the use of the specimen ordering system (using bar codes) has been accelerated to prevent the medical mistakes in the medical institutions. The clinical testing center industry made a large investment in equipment to survive the downturn of revenues. Aloka's products integrating the most advanced mechatronics with wealthy software received high evaluation and increased sales.



ALOKA SSD-4000

However, total sales in this segment decreased 14.1% below the previous year to 43,430 million due to decrease in OEM business with large customers.

R&D Activities

The research and development of Aloka group is categorized into the research into elementary technology and the technical development directly connected with product development made by the engineering departments.

The R&D activities in fiscal 2001 focused on the advanced technologies in the medical, radiation and bioelectronics and development of high-performance products with high safety to meet the needs of customers.

The total R&D expenditure in the year under review amounted to ¥5,048 million, which was appropriated to the following activities:

- The products such as various types of diagnostic ultrasound systems and transducers were developed and engineered.
- High-resolution diagnostic ultrasound system for bodies and blood vessels were developed and engineered.
- An ultrasound bone analysis system for early finding and diagnosis of osteoporosis was developed and engineered.
- Various types of radiation measuring instruments and monitoring systems were developed and engineered for nuclear facilities including nuclear power plants, and universities, hospitals and research institutes using radioisotopes.
- Genome analysis equipment was developed for biotechnological researches in universities and research institutes.
- Automated specimen preparation systems and testing systems were developed and engineered for centrifugal separation, valving and pipetting of specimen such as serums at hospitals and clinical testing centers.

New Products

Some of new products developed by Aloka in the year under review will be introduced:

Automated specimen preparation and pipetting system

Specimens are precious information sources available from patients. The specimen preparation process occupies 30% of the specimen testing work and it is made manually, taking much time. To simply operate this specimen preparation process, the LabFLEX2500 automated specimen preparation and pipetting system was developed.



LabFLEX2500

This system is designed to integrate the processes from valve opening to pipetting and sub-specimen labeling. It features compact design for space saving and superior cost performance to best match with the needs from testing laboratories, succeeding the features and functions of the APS-3000 automated specimen preparation system.

The automated system ensures that the minimum specimen quantity necessary for analysis is effectively used and that the margin of time available in checking of analyzed results is used for feedback of the reliable test results to the clinical side.

• Automatic in-situ hybridization system

The in-situ hybridization system is a means of researching into the functions of in-vivo genes in the cell level, which provides important information in researches and tests. A series of processes including hybridization, antigenic and antibody reactions, and oxygen reaction are simple, but should be handled accurately, and these processes require a long time totally.

The GENEMASTER ISH series automatic ISH system was developed to support the processing of many genes and samples for effective use of precious research hours.

The GENEMASTER ISH series can prepare protocols flexibly by selecting the parameters such as processing time, reactive temperature and stirring speed, and control reagents at adequate temperatures, ensuring full-automatic in-situ hybridization.



ISH

Aloka

BOARD OF DIRECTORS

Tadahiro Muta

Representative Director

President

Katsuhiko Hatano

Representative Director

Managing Director

(Executive, Production Headquarters and

Defense Business)

Kenkichi Hirade

Managing Director

(Executive, Research & Development)

Shoji Tsuji

Managing Director

(Executive, Personnel, Quality Assurance and

Information Processing Departments)

Shinji Takeuchi

Managing Director

(Executive, Corporate Strategy Department

and Branch Offices)

Akihiro Mochizuki

Director

(Chairman, Nisshinbo Industries Inc.)

Akihiko Hayashi

Director

(General Manager, Research & Development)

Toru Shiono

Director

(Executive, Special Mission Matters)

Takeshige Machino

Director

(Executive, Business to Governments)

Mikio Naito

Director

(Executive, Business to Private sectors)

Kouichi Okajima

Director

(Executive, General Affairs and Accounting &

Financial Departments)

CORPORATE AUDITORS

Hiroyuki Kitago

Standing Corporate Auditor

Hideki Takeishi

Standing Corporate Auditor

Akira Kubota

Corporate Auditor

Hisayoshi Arata

Corporate Auditor

(Effective as of 27th June, 2002)

Financial Section

CONTENTS

Independent Auditors' Report on the	
Consolidated Financial Statements	25
Consolidated Balance Sheets	26
Consolidated Statements of Operations	28
Consolidated Statements of Shareholders' Equity	29
Consolidated Statements of Cash Flows	30
Notes to Consolidated Financial Statements	31
Independent Auditors' Report on the	
Non-Consolidated Financial Statements	43
Non-Consolidated Balance Sheets	44
Non-Consolidated Statements of Operations	46
Non-Consolidated Statements of	
Shareholders' Equity	47
Non-Consolidated Statements of Cash Flows	48
Notes to Non-Consolidated Financial Statements	49

INDEPENDENT AUDITORS' REPORT

Tohmatsu & Co.

MS Shibaura Building 13-23, Shibaura 4-chome, Minato-ku, Tokyo 108-8530, Japan

Tel: +81-3-3457-7321 Fax:+81-3-3769-8508 www.tohmatsu.co.jp

Deloitte Touche

To the Board of Directors and Shareholders of

Japan Radio Co., Ltd.:

We have examined the consolidated balance sheets of Japan Radio Co., Ltd. and consolidated subsidiaries as of 31st March, 2002 and 2001, and the related consolidated statements of operations, shareholders' equity, and cash flows for the years then ended, all expressed in Japanese yen. Our examinations were made in accordance with auditing standards, procedures and practices generally accepted and applied in Japan and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the consolidated financial statements referred to above present fairly the financial position of Japan Radio Co., Ltd. and consolidated subsidiaries as of 31st March, 2002 and 2001, and the results of their operations and their cash flows for the years then ended in conformity with accounting principles and practices generally accepted in Japan applied on a consistent basis.

Our examinations also comprehended the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made in conformity with the basis stated in Note 3. Such U.S. dollar amounts are presented solely for the convenience of readers outside Japan.

27th June, 2002

Deloitle Touche Tohnster

CONSOLIDATED BALANCE SHEETS

Japan Radio Co., Ltd. and Consolidated Subsidiaries 31st March, 2002 and 2001

		Millions of	Thousands of U.S. Dollars	
ASSETS	2002	Yen 2001	(Note 3) 2002	
CURRENT ASSETS:				
Cash and cash equivalents	¥ 29,840	¥ 28,434	\$ 223,859	
Short-term investments	1,180	907	8,852	
Marketable securities (Note 4)	87	145	650	
Receivables:				
Trade notes	10,380	13,548	77,873	
Trade accounts	81,067	91,824	608,155	
Unconsolidated subsidiaries and associated companies (Note 16)	847	1,377	6,352	
Other	1,925	1,554	14,444	
Allowance for doubtful accounts	(811)	(609)	(6,081)	
Inventories (Note 5)	69,128	77,390	518,587	
Deferred tax assets (Note 9)	2,941	3,358	22,060	
Prepaid expenses and other current assets (Note 16)	2,420	2,649	18,149	
Total current assets	199,004	220,577	1,492,900	
PROPERTY, PLANT AND EQUIPMENT (Note 6):				
Land	6,307	6,224	47,312	
Buildings and structures	54,973	54,846	412,402	
Machinery and equipment	67,617	65,932	507,251	
Furniture and fixtures	44,469	45,406	333,601	
Construction in progress	964	524	7,237	
Total	174,330	172,932	1,307,803	
Accumulated depreciation	(131,385)	(127,338)	(985,636)	
Net property, plant and equipment	42,945	45,594	322,167	
INVESTMENTS AND OTHER ASSETS:				
Investment securities (Note 4)	8,069	12,298	60,534	
Investments in and advances to unconsolidated				
subsidiaries and associated companies	4,577	6,428	34,338	
Deferred assets		50		
Deferred tax assets (Note 9)	12,620	12,352	94,671	
Other assets	8,669	8,450	65,035	
Allowance for doubtful accounts	(1,573)	(1,641)	(11,799)	
Total investments and other assets	32,362	37,937	242,779	
TOTAL	¥274,311	¥304,108	\$2,057,846	

See notes to consolidated financial statements.

		Millions of Yen	Thousands of U.S. Dollars (Note 3)
LIABILITIES AND SHAREHOLDERS' EQUITY	2002	2001	2002
CURRENT LIABILITIES:			
Short-term bank loans (Note 6)	¥ 18,221	¥ 15,482	\$ 136,695
Current portion of long-term debt (Note 6)	10,417	12,303	78,146
Commercial paper	11,000	15,000	82,521
Payables:			
Trade notes	4,174	7,923	31,312
Trade accounts	36,086	42,778	270,716
Unconsolidated subsidiaries and associated companies (Note 16)	3,638	4,942	27,290
Other	3,963	6,139	29,730
Income taxes payable (Note 9)	966	3,823	7,249
Accrued expenses (Note 16)	10,044	14,256	75,352
Advances received	2,746	3,742	20,604
Other current liabilities (Note 16)	10,000	5,364	75,010
Total current liabilities	111,255	131,752	834,625
LONG-TERM LIABILITIES:			
Long-term debt (Note 6)	38,319	27,977	287,461
Liability for retirement benefits (Note 7)	27,290	32,122	204,726
Deferred tax liabilities (Note 9)	23	9	171
Other long-term liabilities	971	919	7,285
Total long-term liabilities	66,603	61,027	499,643
MINORITY INTEREST	22,412	21,467	168,131
CONTINGENT LIABILITIES (Note 13)			
SHAREHOLDERS' EQUITY (Note 8):			
Common stock—authorised, 216,000,000 shares;			
issued, 137,976,690 shares in 2002 and 2001	14,704	14,704	110,310
Additional paid-in capital	17,087	17,087	128,184
Retained earnings	42,443	58,480	318,400
Net unrealised gain on available-for-sale securities	64	20	483
Foreign currency translation adjustments	(251)	(428)	(1,885)
Treasury stock—at cost, 13,928 shares in 2002			
and 1,232 shares in 2001	(6)	(1)	(45)
Total shareholders' equity	74,041	89,862	555,447
TOTAL	¥274,311	¥304,108	\$2,057,846

CONSOLIDATED STATEMENTS OF OPERATIONS

Japan Radio Co., Ltd. and Consolidated Subsidiaries Years ended 31st March, 2002 and 2001

		Millions of	Thousands of U.S. Dollars
		Yen	(Note 3)
	2002	2001	2002
NET SALES (Notes 16 and 17)	¥261,498	¥276,631	\$1,961,722
COST OF SALES (Notes 16 and 17)	210,769	216,930	1,581,162
Gross profit	50,729	59,701	380,560
SELLING, GENERAL AND ADMINISTRATIVE			
EXPENSES (Note 14)	51,931	51,491	389,580
Operating income (loss) (Note 17)	(1,202)	8,210	(9,020)
OTHER INCOME (EXPENSES):			
Interest and dividend income	208	378	1,558
Interest expense	(1,060)	(1,207)	(7,953)
Other—net (Note 15)	(10,989)	(4,878)	(82,433)
Other expenses—net	(11,841)	(5,707)	(88,828)
INCOME (LOSS) BEFORE INCOME TAXES AND			
MINORITY INTEREST	(13,043)	2,503	(97,848)
INCOME TAXES (Note 9):			
Current	2,188	5,241	16,417
Deferred	185	(3,822)	1,385
Total income taxes	2,373	1,419	17,802
INCOME (LOSS) BEFORE MINORITY INTEREST	(15,416)	1,084	(115,650)
MINORITY INTEREST	(1,014)	(1,700)	(7,607)
NET LOSS	¥ (16,430)	¥ (616)	\$ (123,257)
		Yen	U.S. Dollars
PER SHARE OF COMMON STOCK (Note 2.0):			
Basic net loss	¥(119.08)	¥(4.46)	\$(0.89)

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

Japan Radio Co., Ltd. and Consolidated Subsidiaries Years ended 31st March, 2002 and 2001

	Thousands					N	lillions of Yen
	Issued Number of Shares of Common Stock	Common Stock	Additional Paid-in Capital	Retained Earnings	Net Unrealised Gain on Available- for-sale Securities	Foreign Currency Translation Adjustments	Treasury Stock
BALANCE, 1ST APRIL, 2000 Net loss Cash dividends, ¥3.00 per share Bonuses to directors Increase due to change in ownership percentage of a subsidiary company Application of revised accounting		¥14,704	¥17,087	¥58,874 (616) (414) (70) 706			¥(1)
standard for foreign currency translation Newly applied accounting for						¥(428)	
financial instruments					¥20		
BALANCE, 31ST MARCH, 2001 Net loss Bonuses to directors Increase due to change in ownership percentage of a subsidiary company Adjustment for retained earnings due to the merger of an unconsolidated subsidiary to a consolidated subsidiary	. 137,977	14,704	17,087	58,480 (16,430) (85) 445	20	(428)	(1)
Net increase in unrealised gain on available-for-sale securities					44		
Net increase in foreign currency translation adjustments					44	177	
Increase in treasury stock (12,696 shares)							(5)
BALANCE, 31ST MARCH, 2002	. 137,977	¥14,704	¥17,087	¥42,443	¥64	¥(251)	¥(6)
					Th	nousands of U.S. Do	ollars (Note 3)
		Common Stock	Additional Paid-in Capital	Retained Earnings	Net Unrealised Gain on Available- for-sale Securities	Foreign Currency Translation Adjustments	Treasury Stock
BALANCE, 31ST MARCH, 2001 Net loss Bonuses to directors Increase due to change in ownership percentage of a subsidiary company Adjustment for retained earnings due to the		\$110,310	\$128,184	\$438,707 (123,257) (642) 3,343	\$153	\$(3,210)	\$(8)
merger of an unconsolidated subsidiary to a consolidated subsidiary Net increase in unrealised gain on				249	000		
available-for-sale securities Net increase in foreign currency					330		
translation adjustments						1,325	(37)
Increase in treasury stock (12,696 shares)							(0)

CONSOLIDATED STATEMENTS OF CASH FLOWS

Japan Radio Co., Ltd. and Consolidated Subsidiaries Years ended 31st March, 2002 and 2001

		Millions of Yen	Thousands of U.S. Dollars (Note 3)
	2002	2001	2002
OPERATING ACTIVITIES:			
Income (loss) before income taxes and minority interest	¥ (13.043)	¥ 2,503	\$ (97,848)
Adjustments for:		-,	Ţ (01,010)
Income taxes—paid	(5,119)	(5,676)	(38,405)
Depreciation and amortisation		9,083	64,134
Provision for doubtful accounts		837	928
Gain on sales of investment securities		(715)	(968)
Loss on disposal of inventories		245	23,986
Changes in assets and liabilities:	,		,,,,,,
Decrease (increase) in notes and accounts receivable	14,996	(8,642)	112,498
Decrease (increase) in inventories	·	(10,752)	33,010
Decrease in interest and dividend receivable		65	297
(Decrease) increase in notes and accounts payable		3,503	(90,353)
(Decrease) Increase in interest payable		29	(1,631)
(Decrease) increase in liability for retirement benefits		3,819	(41,385)
Other—net		4,037	33,902
Total adjustments		(4,167)	96,013
Net cash used in operating activities		(1,664)	(1,835)
INVESTING ACTIVITIES:	(= : :)	(=,===,	(1,000)
Proceeds from sales of property, plant and equipment	1,577	98	11,828
Purchase of property, plant and equipment		(6,984)	(62,754)
Proceeds from sales of marketable securities		2,102	1,085
Purchase of marketable securities		(1,409)	(549)
Proceeds from sales of investment securities		752	18,786
Purchase of investment securities	,	(1,519)	(3,051)
Proceeds from sales of investments in subsidiaries		1,572	(5,553)
Purchase of investments in subsidiaries		(1,038)	
Other—net		(308)	(5,974)
Net cash used in investing activities		(6,734)	(40,629)
FINANCING ACTIVITIES:	(0,110,	(0,70.7)	(10,020)
Net change in short-term bank loans	2,641	437	19,816
Net change in commercial paper		6,000	(30,008)
Proceeds from long-term debt		315	156,258
Repayments of long-term debt	•	(3,821)	(93,168)
Cash dividends		(798)	(2,651)
Proceeds from minority interest shareholders		68	669
Other—net		106	(38)
Net cash provided by financing activities		2,307	50,878
FOREIGN CURRENCY TRANSLATION ADJUSTMENTS ON	,	,	,
CASH AND CASH EQUIVALENTS	61	124	458
INCREASE DUE TO MERGER OF AN UNCONSOLIDATED			
SUBSIDIARY TO A CONSOLIDATED SUBSIDIARY	121		913
CASH AND CASH EQUIVALENTS OF NEWLY CONSOLIDATED			
SUBSIDIARIES, BEGINNING OF YEAR	102		763
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS		(6,091)	8,414
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR		34,401	213,311
CASH AND CASH EQUIVALENTS, END OF YEAR		¥28,434	\$223,859

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Japan Radio Co., Ltd. and Consolidated Subsidiaries Years ended 31st March, 2002 and 2001

1. Basis of Presenting Consolidated Financial Statements

The accompanying consolidated financial statements have been prepared in accordance with the provisions of the Securities and Exchange Law of Japan and its related accounting regulations and in conformity with accounting principles and practices generally accepted in Japan, which are different in certain respects as to application and disclosure requirements of International Accounting Standards. The consolidated financial statements are not intended to present the financial position, results of operations and cash flows in accordance with accounting principles and practices generally accepted in countries and jurisdictions other than Japan.

In preparing these consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a form which is more familiar to readers outside Japan.

Certain reclassifications have been made in the 2001 consolidated financial statements to conform to the classifications used in 2002.

2. Summary of Significant Accounting Policies

a. Consolidation— The consolidated financial statements as of 31st March, 2002 include the accounts of the Company and its 32 significant (26 in 2001) subsidiaries (together, the "Group").

Under the control or influence concept, those companies in which the Parent, directly or indirectly, is able to exercise control over operations are fully consolidated, and those companies over which the Group has the ability to exercise significant influence are accounted for by the equity method.

Investments in 4 (3 in 2001) associated companies are accounted for by the equity method. Investments in the remaining unconsolidated subsidiaries and associated companies are stated at cost. If the equity method of accounting had been applied to the investments in these companies, the effect on the accompanying consolidated financial statements would not be material.

The excess of the cost of an acquisition over the fair value of the net assets of the acquired subsidiary at the date of acquisition is being amortised over a period of 5 years.

All significant intercompany balances and transactions have been eliminated in consolidation. All material unrealised profit included in assets resulting from transactions with the Group is eliminated.

b. Cash and Cash Equivalents— Cash equivalents are short-term investments that are readily convertible into cash and that are exposed to insignificant risk of changes in value.

Cash equivalents include time deposits and mutual funds investing in bonds that represent short-term investments, all of which mature or become due within three months of the date of acquisition.

c. Inventories— Finished goods and work in process are stated at cost, determined principally by the specific identification method.

Raw materials are stated at cost determined by the average method.

Inventories of certain consolidated foreign subsidiaries are stated at the lower of cost or market.

d. Marketable and Investment Securities— Marketable and investment securities are classified and accounted for, depending on management's intent. as follows:

(1) trading securities, which are held for the purpose of earning capital gains in the near term are reported at fair value, and the related unrealised gains and losses are included in earnings, (2) held-to-maturity debt securities, which are expected to be held to maturity with the positive intent and ability to hold to maturity are reported at amortised cost and (3) available-for-sale securities, which are not classified as either of the aforementioned securities, are reported at fair value, with unrealised gains and losses, net of applicable taxes, reported in a separate component of shareholders' equity. Non-marketable available-for-sale securities are stated at cost determined by the moving-average method.

For other than temporary declines in fair value, investment securities are reduced to net realisable value by a charge to income.

e. Property, Plant and Equipment— Property, plant and equipment are stated at cost. Significant renewals and additions are capitalised; maintenance and repairs, and minor renewals and improvements, are charged to income as incurred.

Depreciation is computed by the declining-balance method, while the straight-line method is applied to buildings acquired after 1st April, 1998 for the Company and the domestic consolidated companies. The range of useful lives is from 2 to 50 years for buildings and from 2 to 15 years for machinery and equipment.

f. Retirement and Pension Plans— The Company and certain consolidated subsidiaries have contributory defined benefit pension plans and unfunded retirement benefit plans for employees. Other consolidated subsidiaries have unfunded retirement benefit plans.

Effective 1st April, 2000, the Group adopted a new accounting standard for employees' retirement benefits and accounted for the liability for retirement benefits based on the projected benefit obligations and plan assets at the balance sheet date.

The transitional obligation of ¥9,530 million (\$76,917 thousand), determined as of 1st April, 2000, is amortised over 15 years by the Company and various years by the subsidiaries presented as other expense in the consolidated statements of operations.

The Company and certain subsidiaries have provided an allowance for directors' and corporate auditors' retirement benefits calculated in accordance with each company's policies and have included this amount in the liability for retirement benefits.

g. Allowance for Doubtful Accounts— The allowance for doubtful accounts is stated in amounts considered to be appropriate based on the companies' past credit loss experience and an evaluation of potential losses in the receivables outstanding.

h. Research and Development Costs— Research and development costs are charged to income as incurred.

i. Leases— All leases are accounted for as operating leases. Under Japanese accounting standards for leases, finance leases that deem to transfer ownership of the leased property to the lessee are to be capitalised, while other finance leases are permitted to be accounted for as operating lease transactions if certain "as if capitalised" information is disclosed in the notes to the lessee's consolidated financial statements.

j. Income Taxes— Deferred income taxes are recorded to reflect the impact of temporary differences between assets and liabilities recognised for financial reporting purposes and such amounts recognised for tax purposes. These deferred taxes are measured by applying currently enacted tax laws to the temporary differences.

k. Appropriations of Retained Earnings— Appropriations of retained earnings are accounted for and reflected in the accompanying consolidated financial statements when approved by the shareholders.

I. Foreign Currency Transactions— All short-term and long-term monetary receivables and payables denominated in foreign currencies are translated into Japanese yen at the exchange rates at the balance sheet date. The foreign exchange gains and losses from translation are recognised in the statement of operations to the extent that they are not hedged by forward exchange contracts.

m. Foreign Currency Financial Statements— The balance sheet accounts of the consolidated foreign subsidiaries are translated into Japanese yen at the current exchange rate as of the balance sheet date except for shareholders' equity, which is translated at the historical rate.

Differences arising from such translation were shown as "Foreign currency translation adjustments" in a separate component of shareholders' equity.

Revenue and expense accounts of consolidated foreign subsidiaries are translated into yen at the average exchange rate.

n. Derivatives and Hedging Activities— The Group uses derivative financial instruments to manage its exposures to fluctuations in foreign exchange and interest rates. Foreign exchange forward contracts, interest rate swaps and currency swaps are utilised by the Group to reduce foreign currency exchange and interest rate risks. The Group does not enter into derivatives for trading or speculative purposes.

Derivative financial instruments and foreign currency transactions are classified and accounted for as follows: (a) all derivatives be recognised as either assets or liabilities and measured at fair value, and gains or losses on derivative transactions are recognised in the statements of operations and (b) for derivatives used for hedging purposes, if derivatives qualify for hedge accounting because of high correlation and effectiveness between the hedging instruments and the hedged items, gains or losses on derivatives are deferred until maturity of the hedged transactions.

The foreign exchange forward contracts employed to hedge foreign exchange exposures for import purchases are measured at the fair value and the unrealised gains/losses are recognised in income. Forward contracts applied for committed transactions are also measured at the fair value but the unrealised gains/losses are deferred until the underlying transactions are completed.

Long-term debt denominated in foreign currencies for which currency swaps are used to hedge the foreign currency fluctuations are translated at the contracted rate if the currency swap contracts qualify for hedge accounting.

The interest rate swaps which qualify for hedge accounting and meet specific matching criteria are not remeasured at market value but the differential paid or received under the swap agreements are recognised and included in interest expense or income.

o. Per Share Information— The computation of net income per share is based on the weighted average number of shares of common stock outstanding during each year, retroactively adjusted for stock splits. The weighted average number of common shares used in the computation was 137,971,916 shares for 2002 and 137,975,156 shares for 2001.

Fully diluted net income per share is not disclosed because of the Company's loss position.

3. Translation Into United States Dollars

The consolidated financial statements are stated in Japanese yen, the currency of the country in which the Company is incorporated and operates. The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of ¥133.30 to \$1, the approximate rate of exchange at 31st March, 2002. Such translations should not be construed as representations that the Japanese yen amounts could be converted into U.S. dollars at that or any other rate.

4. Marketable and Investment Securities

Marketable and investment securities as of 31st March, 2002 and 2001 consisted of the following:

			Millions of Yen	Thousa U.S. I	inds of Dollars
	2	2002	2001		2002
Current:					
Marketable equity securities	¥	73	¥145	\$	549
Government and corporate bonds		14			101
Total	¥	87	¥145	\$	650
Non-current:					
Marketable equity securities	¥7	,054	¥9,320	\$5	2,921
Government and corporate bonds		297	817		2,226
Other		718	2,161		5,387
Total	¥8	,069	¥12,298	\$6	0,534

The carrying amounts and aggregate fair values of investment securities at 31st March, 2002 and 2001 were as follows:

			Milli	ons of Yen
		Unrealised	Unrealised	Fair
31st March, 2002	Cost	Gains	Losses	Value
Securities classified as				
available-for-sale:				
Equity securities	¥7,055	¥ 803	¥ 762	¥ 7,096
Debt securities	271	36	11	296
31st March, 2001				
Securities classified as				
available-for-sale:				
Equity securities	¥11,736	¥1,418	¥1,352	¥11,802

		Thousands of U.S. Dollar		
		Unrealised	Unrealised	Fair
31st March, 2002	Cost	Gains	Losses	Value
Securities classified as				
available-for-sale:				
Equity securities	\$52,931	\$6,030	\$5,721	\$53,240
Debt securities	2,033	271	78	2,226

Available-for-sale securities whose fair value is not readily determinable as of 31st March, 2002 and 2001 were as follows:

		Carrying Amount	
		Millions of	Thousands of
		Yen	U.S. Dollars
	2002	2001	2002
Available-for-sale:			
Equity securities	¥762	¥641	\$5,718

Proceeds from sales of available-for-sale securities for the years ended 31st March, 2002 and 2001 were ¥2,094 million (\$15,712 thousand) and ¥945 million, respectively. Gross realised gains and losses on these sales, computed on the moving average cost basis, were ¥129 million (\$968 thousand) and ¥128 million (\$962 thousand), respectively, for the year ended 31st March, 2002 and ¥88 million and ¥3 million, respectively, for the year ended 31st March, 2001.

The carrying values of debt securities by contractual maturities for securities classified as available-for-sale at 31st March, 2002 are as follows:

	Millions of Yen	Thousands of U.S. Dollars
Due in one year or less	¥ 29	\$ 218
Due after one year through five years	334	2,510
Due after five years through ten years	270	2,030
Total	¥633	\$4,758

5. Inventories

Inventories at 31st March, 2002 and 2001 consisted of the following:

		Millions of	Thousands of
		Yen	U.S. Dollars
	2002	2001	2002
Finished goods	¥29,847	¥30,544	\$223,907
Work in process	32,259	35,755	242,005
Raw materials and supplies	7,022	11,091	52,675
Total	¥69,128	¥77,390	\$518,587

6. Short-Term Bank Loans and Long-Term Debt

Short-term bank loans were generally unsecured and represented by loans on deeds, short-term notes and bank overdrafts.

The weighted average annual interest rates for short-term bank loans for the years ended 31st March, 2002 and 2001 were 0.78 percent and 1.07 percent, respectively.

Long-term debt at 31st March, 2002 and 2001 consisted of the following:

-		Millions of Yen	Thousands of U.S. Dollars
	2002	2001	2002
1.0 percent Swiss franc bonds	2002	2001	2002
due 2001 issued with warrants			
issued by a consolidated			
subsidiary		¥ 4,982	
Unsecured 2.2 percent		T 4,302	
domestic bonds due 2002		5,000	
Unsecured 2.0 percent		3,000	
domestic bonds due 2002	¥ 5,000	5,000	\$ 37,509
Unsecured 2.7 percent	+ 3,000	3,000	\$ 37,309
domestic bonds due 2004	5,000	5 000	37,509
Unsecured 2.475 percent	3,000	5,000	37,309
domestic bonds due 2004	8,000	8,000	60,015
1.39 percent domestic	0,000	0,000	00,013
bonds due 2005 issued			
with warrants issued			
by a consolidated subsidiary	277		2,082
Unsecured 0.7 percent	211		2,002
domestic bonds due 2007	7,000		52,513
	7,000		32,313
0.69 percent to 2.46 percent loans from			
hanks due 2002 to 2012:			
Secured	2 220	2 050	10 720
	2,230	3,058	16,728
Unsecured Total	21,229	9,240	159,251
	48,736	40,280	365,607
Less current portion	(10,417)	(12,303)	(78,146)
Long-term debt, less	V00 010	V07 077	¢007.401
current portion	¥38,319	¥27,977	\$287,461

The proceeds of bonds with warrants are allocated between a bond portion resulting in a bond discount and a warrant portion. Bond discounts are amortised over the term of the related bonds. The amounts ascribed to warrants are stated as other current liabilities.

Annual maturities of long-term debt outstanding at 31st March, 2002 were as follows:

Vaca Fadina 21 at Manah	Milliana of Van	Thereards of II C Dellara
Year Ending 31st March	Millions of Yen	Thousands of U.S. Dollars
2003	¥10,417	\$78,146
2004	11,856	88,942
2005	10,516	78,890
2006	2,539	19,042
2007	12,640	94,826
2008 and thereafter	768	5,762
Total	¥48,736	\$365,608

The carrying amounts of assets pledged as collateral for long-term debt totalling ¥2,230 million (\$3,058 thousand) at 31st March, 2002 were as follows:

	Millions of Yen	Thousands of U.S. Dollars
Property, plant and equipment—		
net of accumulated depreciation	¥7,454	\$55,925

The current exercise prices of the warrants issued with the above bonds are as follows:

The warrants issued with

1.39 percent domestic bonds
due 2005 exercisable to 2005

¥647 per share

The above exercise prices are subject to adjustments in certain circumstances, including stock splits.

7. Retirement and Pension Plans

The Company and its certain consolidated subsidiaries have severance payment plans for employees, directors and corporate auditors.

Under most circumstances, employees terminating their employment are entitled to retirement benefits determined based on the rate of pay at the time of termination, years of service and certain other factors. Such retirement benefits are made in the form of a lump-sum severance payment from the Company or from certain consolidated subsidiaries and annuity payments from a trustee. Employees are entitled to larger payments if the termination is involuntary, by retirement at the mandatory retirement age, by death, or by voluntary retirement at certain specific ages prior to the mandatory retirement age.

The liability for employees' retirement benefits at 31st March, 2002 and 2001 consisted of the following:

		Millions of	Thousands of
		Yen	U.S. Dollars
	2002	2001	2002
Projected benefit obligation	¥78,374	¥77,032	\$ 587,951
Fair value of plan assets	(35,889)	(34,362)	(269,239)
Unrecognised prior service cost	2,403	2,578	18,033
Unrecognised actuarial loss	(15,363)	(9,752)	(115,254)
Unrecognised transitional			
obligation	(5,334)	(5,812)	(40,018)
Prepaid pension expense	2,006	1,382	15,050
Net liability	¥26,197	¥ 31,066	\$ 196,523

The components of net periodic benefit costs for the years ended 31st March, 2002 and 2001 are as follows:

		Millions of	Thousands of
		Yen	U.S. Dollars
	2002	2001	2002
Service cost	¥4,419	¥ 4,312	\$ 33,154
Interest cost	2,288	2,446	17,168
Expected return on plan assets	(1,111)	(1,717)	(8,336)
Amortisation of prior service cost	(174)	(460)	(1,311)
Recognised actuarial loss	681		5,109
Amortisation of transitional			
obligation	478	3,717	3,589
Contributions by employees	(350)	(354)	(2,629)
Net periodic benefit costs	¥6,231	¥ 7,944	\$ 46,744

Retirement allowances for directors and corporate auditors are paid subject to approval of the shareholders in accordance with the Japanese Commercial Code (the "Code").

The Company recorded a liability for its unfunded retirement allowance plan covering all of its directors and corporate auditors. The annual provisions for retirement allowances for directors and corporate auditors for the years ended 31st March, 2002 and 2001 were ¥1,093 million (\$8,203 thousand) and ¥1,066 million, respectively.

Assumptions used for the years ended 31st March, 2002 and 2001 are set forth as follows:

2002	2001
2.5%-3.0%	3.0%
3.0%-6.3%	3.3%-6.3%
15 years	15 years
10-15 years	10-15 years
5-15 years	5—15 years
	2.5%-3.0% 3.0%-6.3% 15 years 10-15 years

8. Shareholders' Equity

Japanese companies are subject to the Code to which certain amendments became effective from 1st October, 2001.

Prior to 1st October, 2001, the Code required at least 50 percent of the issue price of new shares, with a minimum of the par value thereof, to be designated as stated capital as determined by resolution of the Board of Directors. Proceeds in excess of amounts designated as stated capital were credited to additional paid-in capital. Effective 1st October, 2001, the Code was revised and common stock par values were eliminated resulting in all shares being recorded with no par value.

Prior to 1st October, 2001, the Code also provided that an amount at least equal to 10 percent of the aggregate amount of cash dividends and certain other cash payments which are made as an appropriation of retained earnings applicable to each fiscal period shall be appropriated and set aside as a legal reserve until such reserve equals 25 percent of stated capital. Effective 1st October, 2001, the revised Code allows for such appropriations to be set aside as a legal reserve until the total additional paid-in capital and legal reserve equals 25 percent of stated capital. The amount of total additional paid-in capital and legal reserve which exceeds 25 percent of stated capital can be transferred to retained earnings by resolution of the shareholders, which may be available for dividends. The Company's legal reserve amount, which is included in retained earnings, totals ¥3,365 million (\$25,243 thousand) and ¥3,294 million as of 31st March, 2002 and 2001, respectively. Under the Code, companies may issue new common shares to existing shareholders without consideration as a stock split pursuant to a resolution of the Board of Directors. Prior to 1st October, 2001, the amount calculated by dividing the total amount of shareholders' equity by the number of outstanding shares after the stock split could not be less than ¥50. The revised Code eliminated this restriction.

Prior to 1st October, 2001, the Code imposed certain restrictions on the repurchase and use of treasury stock. Effective 1st October, 2001, the Code eliminated these restrictions allowing companies to repurchase treasury stock by a resolution of the shareholders at the general shareholders meeting and dispose of such treasury stock by resolution of the Board of Directors after 31st March, 2002. The repurchased amount of treasury stock cannot exceed the amount available for future dividend plus amount of stated capital, additional paid-in capital or legal reserve to be reduced in the case where such reduction was resolved at the general shareholders meeting.

The Code permits companies to transfer a portion of additional paid-in capital and legal reserve to stated capital by resolution of the Board of Directors. The Code also permits companies to transfer a portion of unappropriated retained earnings, available for dividends, to stated capital by resolution of the shareholders.

Dividends are approved by the shareholders at a meeting held subsequent to the fiscal year to which the dividends are applicable. Semi-annual interim dividends may also be paid upon resolution of the Board of Directors, subject to certain limitations imposed by the Code.

Under the Code, the amount available for dividends is based on retained earnings as recorded on the Company's books. At 31st March, 2002, retained earnings recorded on the Company's books were ¥10,575 million (\$79,335 thousand) which is available for future dividends subject to the approval of the shareholders and legal reserve requirements.

At the general shareholders meeting of the Company held on 29th June, 2000, the Company's shareholders approved the following stock option plan. The plan provides for granting options to directors and key employees to purchase up to 150 thousand shares of the Company's common stock in the period from 5th January, 2001 to 20th December, 2004. The options will be exercisable at an exercise price of ¥1,093 per share. The exercise price will be subject to adjustment if there are stock splits or additional shares issued for less than the market price.

At the general shareholders meeting of the Company held on 28th June, 2001, the Company's shareholders approved the following stock option plan. The plan provides for granting options to directors and key employees to purchase up to 150 thousand shares of the Company's common stock in the period from 7th January, 2002 to 20th December, 2005. The options will be exercisable at an exercise price of ¥682 per share. The exercise price will be subject to adjustment if there are stock splits or additional shares issued for less than the market price.

9. Income Taxes

The Company and its domestic subsidiaries are subject to Japanese national and local income taxes which, in the aggregate, resulted in normal effective statutory tax rates of approximately 41.8 percent for the years ended 31st March, 2002 and 2001.

The tax effects of significant temporary differences and loss carryforwards which result in deferred tax assets and liabilities at 31st March, 2002 and 2001 were as follows:

			Millio	ons of Yen	sands of S. Dollars
	_	2002		2001	 2002
Current deferred tax assets:					
Inventories	¥	490	¥	509	\$ 3,686
Provision for bonuses	1	,706	1	,649	12,795
Business taxes payable		77		328	575
Provision for doubtful accounts		110		117	825
Unrealised gain		212		231	1,591
Warranty for finished products		338		326	2,534
Other		476		312	3,571
Valuation allowance		(371)		(59)	(2,786)
Total	3	3,038	3	3,413	22,791
Current deferred tax					
liabilities:					
Adjustment of provision					
for doubtful accounts		14		12	105
Other		83		43	626
Total		97		55	731
Net current deferred tax					
assets	¥ 2	2,941	¥ 3	,358	\$ 22,060
Non-current deferred tax assets:					
Provision for					
doubtful accounts	¥	377	¥	357	\$ 2,830
Provision for					
retirement benefits	6	6,785	8	3,105	50,903
Operating loss carried					
forward	7	,036	1	,734	52,783
Software		960		498	7,201
Investment securities	1	,686,			12,645
Unrealised gain	1	,838		659	13,790
Deficit of consolidated					
subsidiaries				308	
Other	1	,328	1	,498	9,967
Valuation allowance	(6	6,817)		(178)	(51,146)
Total	13	3,193	12	,981	98,973
Non-current deferred tax					
liabilities:					
Deferred gain on sales					
of property		316		334	2,373
Special reserve for tax					
purposes		136		137	1,018
Net unrealised gain on					
available-for-sale securities		121		158	911
Total		573		629	4,302
Net non-current deferred					
tax assets	¥12	2,620	¥12	,352	\$ 94,671
Current deferred tax					
liabilities—other	¥	1			\$ 12
Non-current deferred tax					
liabilities		23	¥	9	171

A reconciliation between the normal effective statutory tax rates for the years ended 31st March, 2002 and 2001 and the actual effective tax rates reflected in the accompanying consolidated statements of operations is as follows:

	2002	2001
Normal effective statutory tax rate	41.8%	41.8%
Expenses not deductible for income tax		
purposes	(1.4)	8.7
Dividend income not to be taxed	0.1	(1.0)
Equity in earnings of affiliated companies	(5.3)	10.6
Minimum inhabitants tax	(1.1)	5.7
Tax benefits not recognised of subsidiaries		(8.2)
Change in valuation allowance	(51.4)	
Low income tax rates applicable to		
income in subsidiaries	1.2	
Other—net	(2.1)	(0.9)
Actual effective tax rate	(18.2)%	56.7%

The Group is subject to corporate (national), inhabitants and enterprise (local) taxes which, in the aggregate, resulted in a normal effective statutory tax rate of approximately 41.8% in 2002 and 2001. The actual effective tax rates of the Group for the years ended 31st March, 2002 and 2001 differed from the normal Japanese statutory effective tax rates principally as a result of the loss position of certain subsidiaries.

At 31st March, 2002, certain subsidiaries have tax loss carryforwards aggregating approximately ¥352 million (\$2,639 thousand) which are available to be offset against taxable income of such subsidiaries in future years. These tax loss carryforwards, if not utilised, will expire as follows:

Year Ending 31st March	Millions of Yen	Thousands of U.S. Dollars
2007 and thereafter	¥352	\$2,639
Total	¥352	\$2,639

10. Research and Development Costs

Research and development costs charged to income were \$22,653 million (\$169,943 thousand) and \$22,307 million for the years ended 31st March, 2002 and 2001, respectively.

11. Leases

The Group leases certain machinery, computer equipment, office space and other assets.

Total rental expenses for the years ended 31st March, 2002 and 2001 were ¥1,059 million (\$7,945 thousand) and ¥1,167 million, respectively, including ¥1,043 million (\$7,822 thousand) and ¥1,167 million of lease payments under finance leases.

Pro forma information of leased property such as acquisition cost, accumulated depreciation, obligation under finance lease, depreciation expense, interest expense of finance leases that do not transfer ownership of the leased property to the lessee on an "as if capitalised" basis for the years ended 31st March, 2002 and 2001 was as follows:

			Mi	llions of Yen
				2002
	Machinery	Furniture		
	and	and		
	Equipment	Fixtures	Other	Total
Acquisition cost	¥506	¥3,609	¥550	¥4,665
Accumulated				
depreciation	313	2,196	262	2,771
Net leased property	¥193	¥1,413	¥288	¥1,894

			Mi	Ilions of Yen
				2001
	Machinery	Furniture		
	and	and		
	Equipment	Fixtures	Other	Total
Acquisition cost	¥435	¥3,627	¥517	¥4,579
Accumulated				
depreciation	227	2,105	168	2,500
Net leased property	¥208	¥1,522	¥349	¥2,079

			Thousands o	f U.S. Dollars
				2002
	Machinery	Furniture		
	and	and		
	Equipment	Fixtures	Other	Total
Acquisition cost	\$3,797	\$27,071	\$4,127	\$34,995
Accumulated				
depreciation	2,350	16,474	1,966	20,790
Net leased property	\$1,447	\$10,597	\$2,161	\$14,205

Obligations under finance leases:

		Millions of Yen	Thousands of U.S. Dollars
	2002	2001	2002
Due within one year	¥ 841	¥ 868	\$ 6,309
Due after one year	1,329	1,302	9,973
Total	¥2,170	¥2,170	\$16,282

Depreciation expense and interest expense under finance leases:

		Millions of	Thousands of
		Yen	U.S. Dollars
	2002	2001	2002
Depreciation expense	¥ 942	¥1,069	\$7,067
Interest expense	58	69	436
Total	¥1,000	¥1,138	\$7,503

Depreciation expense and interest expense, which are not reflected in the accompanying consolidated statements of operations, are computed by the straight-line method and the interest method, respectively.

The minimum rental commitments under noncancellable operating leases at 31st March, 2002 were as follows:

	Millions of Yen	Thousands of U.S. Dollars
	2002	2002
Due within one year	¥39	\$295
Due after one year	56	417
Total	¥95	\$712

12. Derivatives

The Group enters into foreign currency forward contracts and currency swap contracts to hedge foreign exchange risk associated with certain assets and liabilities denominated in foreign currencies. The Group also enters into interest rate swap contracts to manage its interest rate exposures on certain liabilities.

All derivative transactions are entered into to hedge interest and foreign currency exposures incorporated within its business. Accordingly, market risk in these derivatives is basically offset by opposite movements in the value of hedge assets or liabilities.

Because the counterparties to these derivatives are limited to major international financial institutions, the Group does not anticipate any losses arising from credit risk.

Derivative transactions entered into by the Group have been made in accordance with internal policies which regulate the authorisation and credit limit amount.

The Group had no derivatives contracts outstanding at 31st March, 2002 and 2001.

13. Contingent Liabilities

Contingent liabilities at 31st March, 2002 and 2001 for notes discounted in the ordinary course of business and guarantees of bank loans amounted to \pm 724 million (\pm 5,430 thousand) and \pm 797 million, respectively.

14. Selling, General and Administrative Expenses

Details of selling, general and administrative expenses for the years ended 31st March, 2002 and 2001 consisted of the following:

		Millions of	Thousands of
		Yen	U.S. Dollars
	2002	2001	2002
Salary	¥18,003	¥17,417	\$135,055
Depreciation expense	684	650	5,132
Rent expense	2,751	2,683	20,637
Research and			
development cost	10,461	10,451	78,478
Provision for retirement			
benefits	1,982	1,491	14,865
Other	18,050	18,799	135,413
Total	¥51,931	¥51,491	\$389,580

15. Other Income (Expenses) —Net

Other income (expenses)—net for the years ended 31st March, 2002 and 2001 consisted of the following:

		Millions of Yen	Thousands of U.S. Dollars
	2002	2001	2002
Gain on sales of	2002	2001	2002
marketable securities		¥ 55	
Gain on sales of			
investment securities	¥ 129	715	\$ 968
Loss on valuation of			
investment securities	(2,128)	(1,097)	(15,966)
Equity in loss of			
associated companies	(1,657)	(635)	(12,435)
Gain on valuation of			
money trust		32	
Loss on valuation and			
disposal of inventories	(4,165)	(945)	(31,242)
Foreign exchange gain	1,091	1,362	8,187
Reversal of allowance			
for doubtful accounts	58	55	436
Reversal of liability for			
retirement benefits	1	611	7
Provision for retirement			
benefits	(89)	(3,819)	(664)
Gain on sales of fixed			
assets	1,336		10,026
Gain on reversal of			
subscription right	109		821
Special retirement			
expenses	(4,688)	(27)	(35,172)
Other loss—net	(986)	(1,185)	(7,399)
Total	¥(10,989)	¥(4,878)	\$(82,433)

16. Related Party Transactions

Transactions of the Group with unconsolidated subsidiaries and associated companies for the years ended 31st March, 2002 and 2001 were as follows:

		Millions of	Thousands of
		Yen	U.S. Dollars
	2002	2001	2002
Sales	¥ 1,638	¥ 2,039	\$12,287
Purchases	12,336	13,286	92,540

Balances due to or from these unconsolidated subsidiaries and associated companies at 31st March, 2002 and 2001 were as follows:

		Millions of Yen	Thousands of U.S. Dollars
	2002	2001	2002
Notes and accounts receivables	¥748	¥1,137	\$ 5,615
Other receivables	99	240	737
Prepaid expenses and			
other current assets	312	91	2,346
Notes and accounts			
payables	3,638	4,938	27,290
Other payables		4	
Accrued expenses and			
other current liabilities	109	184	816

17. Consolidated Segment Information

Information about operations in different industry segments, foreign operations and sales to foreign customers for the years ended 31st March, 2002 and 2001 is as follows:

1,257,380

1,297,314

\$ (39,934)

(1) Industry Segment

Sales and Operating Income

						Millions of Yen
						2002
		Electron Tubes and	Medical			
	Telecommunications	Semiconductor	Electronics		Eliminations or	
	Equipment	Devices	Equipment	Total	Corporate	Consolidated
Sales to customers	¥166,433	¥48,866	¥46,199	¥261,498		¥261,498
Intersegment sales	1,176	571	1	1,748	¥(1,748)	
Total sales	167,609	49,437	46,200	263,246	(1,748)	261,498
Operating expenses	172,932	48,214	43,365	264,511	(1,811)	262,700
Operating income (loss)	¥ (5,323)	¥ 1,223	¥ 2,835	¥ (1,265)	¥ 63	¥ (1,202)
Total Assets, Depreciation ar	nd Capital Expenditures					
						Millions of Yen
						2002
	Tilining	Electron Tubes and	Medical		Filmination	
	Telecommunications Equipment	Semiconductor Devices	Electronics Equipment	Total	Eliminations or Corporate	Consolidated
Total assets	¥169,764	¥54,171	¥51,054	¥274,989	¥(678)	¥274,311
	,		,	,	+(0/0)	
Depreciation	2,952	4,698	550	8,200		8,200
Capital expenditures	4,240	3,613	554	8,407		8,407
Sales and Operating Income						
					Thousa	ands of U.S. Dollars
		Electron Tubes and	Medical			2002
	Telecommunications	Semiconductor	Electronics		Eliminations or	
	Equipment	Devices	Equipment	Total	Corporate	Consolidated
Sales to customers	\$1,248,557	\$366,583	\$346,582	\$1,961,722	,	\$1,961,722
Intersegment sales	8,823	4,288	5	13,116	\$(13,116)	. , ,
	7	, , , , ,		, ,	, -,	

370,871

361,700

\$ 9,171

346,587

325,316

\$ 21,271

1,974,838

1,984,330

(9,492)

(13,116)

(13,588)

472

1,961,722

1,970,742

(9,020)

Total sales

Operating expenses

Operating income (loss)

					Thous	ands of U.S. Dollars
					1110400	2002
		Electron Tubes and	Medical			
	Telecommunications	Semiconductor	Electronics		Eliminations or	
	Equipment	Devices	Equipment	Total	Corporate	Consolidated
Total assets	\$1,273,551	\$406,386	\$382,998	\$2,062,935	\$(5,089)	\$2,057,846
Depreciation	22,142	35,244	4,126	61,512		61,512
Capital expenditures	31,812	27,103	4,155	63,070		63,070
Sales and Operating Income	9					
						Millions of Yen
						2001
		Electron Tubes and	Medical		E	
	Telecommunications	Semiconductor Devices	Electronics	Total	Eliminations or	Consolidated
Sales to customers	Equipment		Equipment		Corporate	
	¥168,687	¥64,224	¥43,720	¥276,631	V//0 0.E.7\	¥276,631
Intersegment sales	1,739	618		2,357	¥(2,357)	
Total sales	170,426	64,842	43,720	278,988	(2,357)	276,631
Operating expenses	172,953	57,688	40,474	271,115	(2,694)	268,421
Operating income (loss)	¥ (2,527)	¥ 7,154	¥ 3,246	¥ 7,873	¥ 337	¥ 8,210
Total Assets, Depreciation a	nd Capital Expenditures					
						Millions of Yen
						2001
	Telecommunications	Electron Tubes and Semiconductor	Medical Electronics		Eliminations or	
	relecommunications Equipment	Semiconductor Devices	Equipment	Total	Corporate	Consolidated
Total assets	¥186,652	¥63,611	¥55,004	¥305,267	¥(1,159)	¥304,108
Depreciation	3,146	5,042	615	8,803	T(1,133)	8,803
•	•	,				,
Capital expenditures	4,144	7,063	823	12,030		12,030

(2) Geographical Segment

The Company and its consolidated subsidiaries operate predominantly in Japan. Geographical segment is minor in relation to the total consolidated sales. Accordingly, the presentation of geographical segment information is not required under the related regulations.

(3) Sales to Foreign Customers

					Millions of Yen
					2002
	Asia	Europe	North America	Others	Total
Sales to foreign customers	¥29,902	¥18,902	¥9,644	¥10,111	¥ 68,559
Consolidated sales					261,498
The ratio of sales to foreign customers	11.4%	7.2%	3.7%	3.9%	26.2%
				Thou	sands of U.S. Dollars
					2002
	Asia	Europe	North America	Others	Total
Sales to foreign customers	\$224,318	\$141,804	\$72,346	\$75,853	\$ 514,321
Consolidated sales					1,961,722
The ratio of sales to foreign customers	11.4%	7.2%	3.7%	3.9%	26.2%
					Millions of Yen
					2001
	Asia	Europe	North America	Others	Total
Sales to foreign customers	¥32,133	¥13,103	¥10,948	¥12,077	¥ 68,261
Consolidated sales					276,631
The ratio of sales to foreign customers	11.6%	4.7%	4.0%	4.4%	24.7%

Notes:

- Asia area consists of China, Korea, Taiwan, Philippines.
- Europe area consists of the United Kingdom, Germany, France.
- North America area consists of the United States of America.
- Other area consists of Middle East, Latin America.

INDEPENDENT AUDITORS' REPORT

Tohmatsu & Co.

MS Shibaura Building 13-23, Shibaura 4-chome, Minato-ku, Tokyo 108-8530, Japan

Tel: +81-3-3457-7321 Fax:+81-3-3769-8508 www.tohmatsu.co.jp

Deloitte Touche Tohmatsu

To the Board of Directors and Shareholders of Japan Radio Co., Ltd.:

We have examined the non-consolidated balance sheets of Japan Radio Co., Ltd. as of 31st March, 2002 and 2001, and the related non-consolidated statements of operations, shareholders' equity, and cash flows for the years then ended, all expressed in Japanese yen. Our examinations were made in accordance with auditing standards, procedures and practices generally accepted and applied in Japan and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the non-consolidated financial statements referred to above present fairly the financial position of Japan Radio Co., Ltd. as of 31st March, 2002 and 2001, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles and practices generally accepted in Japan applied on a consistent basis.

Our examinations also comprehended the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made in conformity with the basis stated in Note 3. Such U.S. dollar amounts are presented solely for the convenience of readers outside Japan.

27th June, 2002

Deloitte Touche Tohnston

NON-CONSOLIDATED BALANCE SHEETS

Japan Radio Co., Ltd. 31st March, 2002 and 2001

		Millions of	Thousands of U.S. Dollars
		Yen	(Note 3)
ASSETS	2002	2001	2002
CURRENT ASSETS:			
Cash and cash equivalents	¥ 19,700	¥ 16,599	\$ 147,785
Marketable securities (Note 4)	66	2	494
Receivables:			
Trade notes	4,110	5,295	30,834
Trade accounts	49,934	61,055	374,602
Subsidiaries and associated companies (Note 15)	1,395	3,459	10,468
Other	679	1,024	5,090
Allowance for doubtful accounts	(297)	(155)	(2,229)
Inventories (Note 5)	35,467	42,665	266,071
Deferred tax assets (Note 9)	928	1,104	6,960
Prepaid expenses and other current assets (Note 15)	1,540	2,140	11,554
Total current assets	113,522	133,188	851,629
PROPERTY, PLANT AND EQUIPMENT:			
Land	1,878	1,997	14,089
Buildings and structures	23,938	24,458	179,577
Machinery and equipment	13,716	13,584	102,892
Furniture and fixtures	29,016	30,337	217,673
Construction in progress	3	3	24
Total	68,551	70,379	514,255
Accumulated depreciation	(52,959)	(52,861)	(397,290)
Net property, plant and equipment	15,592	17,518	116,965
INVESTMENTS AND OTHER ASSETS:			
Investment securities (Note 4)	6,424	8,214	48,191
Investments in and advances to subsidiaries and			
associated companies (Note 4)	5,770	5,912	43,287
Deferred tax assets (Note 9)	7,251	8,369	54,396
Other assets	4,429	4,716	33,225
Allowance for doubtful accounts	(645)	(1,433)	(4,835)
Total investments and other assets	23,229	25,778	174,264
TOTAL	¥152,343	¥176,484	\$1,142,858

		Millions of	Thousands of U.S. Dollars
		Yen	(Note 3)
LIABILITIES AND SHAREHOLDERS' EQUITY	2002	2001	2002
CURRENT LIABILITIES:			
Short-term bank loans (Note 6)	¥ 4,550	¥ 4,900	\$ 34,134
Current portion of long-term debt (Note 6)	5,720	5,000	42,911
Commercial paper	11,000	15,000	82,521
Payables:			
Trade notes	1,845	2,665	13,842
Trade accounts	22,023	29,037	165,214
Subsidiaries and associated companies (Note 15)	4,921	6,156	36,919
Other	533	1,174	3,994
Income taxes payable (Note 9)	65	34	486
Accrued expenses (Note 15)	6,701	9,279	50,271
Other current liabilities (Note 15)	4,915	5,425	36,870
Total current liabilities	62,273	78,670	467,162
Long-term debt (Note 6)	28,280	18,000	212,153
Liability for retirement benefits (Note 7)	17,066	21,026	128,029
Total long-term liabilities	45,346	39,026	340,182
CONTINGENT LIABILITIES (Note 12) SHAREHOLDERS' EQUITY (Note 8):			
Common stock—authorised, 216,000,000 shares;			
issued, 137,976,690 shares in 2002 and 2001	14,704	14,704	110,310
Additional paid-in capital	17,087	17,087	128,184
Legal reserve	2,278	2,278	17,093
Retained earnings	10,582	24,705	79,380
Net unrealised gain on available-for-sale securities	79	14	592
Treasury stock—at cost, 13,928 shares in 2002	(6)		(45)
Total shareholders' equity	44,724	58,788	335,514
TOTAL	¥152,343	¥176,484	\$1,142,858

NON-CONSOLIDATED STATEMENTS OF OPERATIONS

Japan Radio Co., Ltd. Years ended 31st March, 2002 and 2001

			Thousands of
		Millions of Yen	U.S. Dollars (Note 3)
	2002	2001	2002
NET SALES (Note 15)	¥145,409	¥159,534	\$1,090,843
COST OF SALES (Note 15)	126,886	136,792	951,887
Gross profit	18,523	22,742	138,956
SELLING, GENERAL AND ADMINISTRATIVE			
EXPENSES (Note 13)	24,421	25,836	183,200
Operating loss	(5,898)	(3,094)	(44,244)
OTHER INCOME (EXPENSES):			
Interest and dividend income	713	852	5,353
Interest expense	(650)	(671)	(4,879)
Other—net (Note 14)	(6,669)	(438)	(50,032)
Other expenses—net	(6,606)	(257)	(49,558)
LOSS BEFORE INCOME TAXES	(12,504)	(3,351)	(93,802)
INCOME TAXES (Note 9):			
Current	373	77	2,800
Deferred	1,246	(1,553)	9,350
Total income taxes	1,619	(1,476)	12,150
NET LOSS	¥ (14,123)	¥ (1,875)	\$ (105,952)
		Yen	U.S. Dollars
PER SHARE OF COMMON STOCK (Note 2.0):		_	
Basic net loss	¥(102.36)	¥(13.58)	\$(0.77)

NON-CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

Japan Radio Co., Ltd. Years ended 31st March, 2002 and 2001

Thousands					Mi	llions of Yen
Issued Number of Shares of Common Stock	Common Stock	Additional Paid-in Capital	Legal Reserve	Retained Earnings	Net Unrealised Gain on Available- for-sale Securities	Treasury Stock
BALANCE, 1ST APRIL, 2000 137,977	¥14,704	¥17,087	¥2,237	¥27,035		
Net loss	, -	,	,	(1,875)		
Cash dividends, ¥3.00 per share				(414)		
Transfer to legal reserve			41	(41)		
Newly applied accounting for						
financial instruments					¥14	
BALANCE, 31ST MARCH, 2001 137,977	14,704	17,087	2,278	24,705	14	
Net loss				(14,123)		
Net increase in unrealised gain on						
available-for-sale securities					65	
Application of revised accounting						
standard for treasury stock at cost						¥(6)
BALANCE, 31ST MARCH, 2002 137,977	¥14,704	¥17,087	¥2,278	¥10,582	¥79	¥(6)
				Thous	ands of U.S. Dol	lars (Note 3)
	Common Stock	Additional Paid-in Capital	Legal Reserve	Retained Earnings	Net Unrealised Gain on Available- for-sale Securities	Treasury Stock
BALANCE, 31ST MARCH, 2001	\$110,310	\$128,184	\$17,093	\$185,332	\$99	
Net loss				(105,952)		
Net increase in unrealised gain on						
available-for-sale securities					493	
Application of revised accounting						
standard for treasury stock at cost						\$(45)
BALANCE, 31ST MARCH, 2002	\$110,310	\$128,184	\$17,093	\$79,380	\$592	\$(45)

NON-CONSOLIDATED STATEMENTS OF CASH FLOWS

Japan Radio Co., Ltd. Years ended 31st March, 2002 and 2001

		Millions of Yen	Thousands of U.S. Dollars (Note 3)	
	2002	2001	2002	
ODERATING ACTIVITIES				
OPERATING ACTIVITIES:	V/10 E04)	V/2 251\	¢/02.002	
Loss before income taxes	. ¥(12,504)	¥(3,351)	\$(93,802)	
Adjustments for:	(242)	/1 CEO\	/2 ECE	
Income taxes—paid Depreciation and amortisation		(1,650) 2,952	(2,565 20,657	
Reversal of allowance for doubtful accounts		2,932	20,65 <i>7</i> (5,919	
Provision for doubtful receivables		1,093	2,293	
Loss on sales and disposal of property, plant and equipment		425	3,258	
Gain on sales of property, plant and equipment		(1)	(20,037	
Loss on sales of marketable securities		275	(20,03 <i>1</i> 474	
Gain on sales of investment securities—net		(34)	4/4	
Gain on sales of investments in and advance to subsidiaries	•	(34)		
and associated companies	. (1,498)	(1,382)	(11,241)	
Loss on valuation and disposal of inventories	- ·	311	30,670	
Loss on valuation of investment securities		840	13,449	
Loss on valuation of investments in and advances to	. 1,/33	040	13,443	
subsidiaries and associated companies	. 739	107	5,542	
Changes in assets and liabilities:		107	3,342	
Decrease (increase) in notes and accounts receivable		(2,980)	107,664	
Decrease (increase) in inventories	•	(8,830)	23,330	
(Decrease) increase in notes and accounts payable		2,651	23,330 (68,038)	
		807	(10,433)	
(Decrease) increase in other payable(Decrease) increase in accrued expenses		3,418	(10,433)	
(Decrease) increase in liability for retirement benefits		358	(25,024	
Other—net		(116)	(23,024)	
Total adjustments		(1,756)	44,831	
•	,	•	(48,971)	
Net cash used in operating activities	. (6,528)	(5,107)	(40,371)	
INVESTING ACTIVITIES:	0.004	40	01 005	
Proceeds from sales of property, plant and equipment		43	21,635	
Purchase of property, plant and equipment		(3,300)	(3,123)	
Purchase of marketable securities	,		(494)	
Proceeds from sales of investment securities		(221)	3,001	
Purchase of investment securities	. (289)	(331)	(2,168)	
Purchase of investments in and advance to subsidiaries and	(1.000)	(1.000)	(0.100	
associated companies		(1,093)	(8,198)	
Proceeds from sales of investments in subsidiaries	,	1,572	14,964	
Other—net		(1,666)	(3,231)	
Net cash provided by (used in) investing activities	. 2,984	(4,775)	22,386	
FINANCING ACTIVITIES:				
Net change in short-term bank loans			(2,626)	
Net change in commercial paper		6,000	(30,008)	
Proceeds from long-term debt	,		120,030	
Repayments of long-term debt			(37,509)	
Cash dividends		(414)		
Other—net			(38)	
Net cash provided by financing activities	. 6,645	5,586	49,849	
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	. 3,101	(4,296)	23,264	
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	•	20,895	124,521	
CASH AND CASH EQUIVALENTS, END OF YEAR	· · · · · · · · · · · · · · · · · · ·	¥16,599	\$147,785	

NOTES TO NON-CONSOLIDATED FINANCIAL STATEMENTS

Japan Radio Co., Ltd. Years ended 31st March, 2002 and 2001

1. Basis of Presenting Non-consolidated Financial Statements

The accompanying non-consolidated financial statements have been prepared from the accounts maintained by Japan Radio Co., Ltd. (the "Company") in accordance with the provisions set forth in the Japanese Commercial Code (the "Code") and in conformity with accounting principles and practices generally accepted in Japan, which are different in certain respects as to application and disclosure requirements of International Accounting Standards. The non-consolidated financial statements are not intended to present the financial position, results of operations and cash flows in accordance with accounting principles and practices generally accepted in countries and jurisdictions other than Japan.

The non-consolidated statements of cash flows are not required as part of the basic financial statements in Japan but are presented herein for the convenience of readers outside Japan.

In preparing these non-consolidated financial statements, certain reclassifications and rearrangements have been made to the Company's financial statements issued domestically in order to present them in a form which is more familiar to readers outside Japan. In accordance with accounting procedures generally accepted in Japan, certain comparative disclosures are not required to be and have not been presented herein.

Certain reclassifications have been made in the 2001 non-consolidated financial statements to conform to the classifications used in 2002.

2. Summary of Significant Accounting Policies

a. Non-Consolidation— The non-consolidated financial statements include only the accounts of the Company. The accounts of its subsidiaries have not been consolidated.

Investments in subsidiaries and affiliated companies (20 percent to 50 percent owned) are stated at cost and the equity method is not applied.

b. Cash and Cash Equivalents—Cash equivalents are short-term investments that are readily convertible into cash and that are exposed to insignificant risk of changes in value.

Cash equivalents include time deposits and mutual funds investing in bonds that represent short-term investments, all of which mature or become due within three months of the date of acquisition.

c. *Inventories*—Finished goods and work in process are stated at cost determined principally by the specific identification method.

Raw materials are stated at cost determined by the average method.

d. Marketable and Investment Securities—Marketable and investment securities are classified and accounted for, depending on management's intent. as follows:

(1) trading securities, which are held for the purpose of earning capital gains in the near term, are reported at fair value, and the related unrealised gains and losses are included in earnings, (2) held-to-maturity debt securities, which are expected to be held to maturity with the positive intent and ability to hold to maturity are reported at amortised cost, (3) investment securities in subsidiaries and associated companies, are reported at cost, and (4) available-for-sale securities, which are not classified as either of the aforementioned securities, are reported at fair value, with unrealised gains and losses, net of applicable taxes, reported in a separate component of shareholders' equity.

Non-marketable available-for-sale securities are stated at cost determined by the moving-average method.

For other than temporary declines in fair value, investment securities are reduced to net realisable value by a charge to income.

e. Property, Plant and Equipment—Property, plant and equipment are stated at cost. Significant renewals and additions are capitalised; maintenance and repairs, and minor renewals and improvements, are charged to income as incurred.

Depreciation is computed by the declining-balance method, while the straight-line method is applied to buildings acquired after 1st April, 1998. The range of useful lives is from 10 to 50 years for buildings, from 7 to 10 years for machinery and equipment and from 2 to 15 years for furniture and fixtures.

- f. Investments in Subsidiaries and Associated Companies—Investments in subsidiaries and associated companies are stated at cost, except that appropriate write-downs are recorded for investments in companies which have incurred substantial losses deemed to be of a permanent nature.
- g. Retirement and Pension Plans The Company has contributory defined benefit pension plans and unfunded retirement benefit plan for employees.

Effective 1st April, 2000, the Company adopted a new accounting standard for the employees' retirement benefits and accounted for the liability for retirement benefits based on projected benefit obligations and plan assets at the balance sheet date.

The transitional obligation of ¥5,848 million (\$47,199 thousand), determined as of 1st April, 2000, is amortised over 15 years and presented as other expense in the non-consolidated statements of operations.

The Company has provided an allowance for directors' and corporate auditors' retirement benefits calculated in accordance with the Company's policies and has included this amount in the liability for retirement benefits.

- h. Allowance for Doubtful Accounts— The allowance for doubtful accounts is stated in amounts considered to be appropriate based on the Company's past credit loss experience and an evaluation of potential losses in the receivables outstanding.
- i. Research and Development Costs—Research and development costs are charged to income as incurred.
- j. Leases— All leases are accounted for as operating leases. Under Japanese accounting standards for leases, finance leases that deem to transfer ownership of the leased property to the lessee are to be capitalised, while other finance leases are permitted to be accounted for as operating lease transactions if certain "as if capitalised" information is disclosed in the notes to the lessee's non-consolidated financial statements.
- **k. Income Taxes**—Deferred income taxes are recorded to reflect the impact of temporary differences between assets and liabilities recognised for financial reporting purposes and such amounts recognised for tax purposes. These deferred taxes are measured by applying currently enacted tax laws to the temporary differences.
- *I. Appropriations of Retained Earnings* Appropriations of retained earnings are accounted for and reflected in the accompanying non-consolidated financial statements when approved by the shareholders.
- m. Foreign Currency Transactions— All short-term and long-term monetary receivables and payables denominated in foreign currencies are translated into Japanese yen at the exchange rates at the balance sheet date. The foreign exchange gains and losses from translation are recognised in the statement of operations to the extent that they are not hedged by forward exchange contracts.
- n. Treasury Stock— Prior to 1st April, 2001, treasury stock was included in "Prepaid expenses and other" as an asset.

Effective 1st April, 2001, such stock is presented as a separate component of shareholders' equity in accordance with the new disclosure requirement for treasury stock.

o. Per Share Information— The computation of net income per share is based on the weighted average number of shares of common stock outstanding during each year, retroactively adjusted for stock splits. The weighted average number of common shares used in the computation was 137,971,916 shares for 2002 and 137,975,156 shares for 2001.

Fully diluted net income per share is not disclosed because of the Company's loss position.

3. Translation Into United States Dollars

The non-consolidated financial statements are stated in Japanese yen, the currency of the country in which the Company is incorporated and operates. The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of ¥133.30 to \$1, the approximate rate of exchange at 31st March, 2002. Such translations should not be construed as representations that the Japanese yen amounts could be converted into U.S. dollars at that or any other rate.

4. Marketable and Investment Securities

Marketable and investment securities as of 31st March, 2002 and 2001 consisted of the following:

			Million	ns of	Thousa	inds of
				Yen	U.S.	Dollars
	2	2002	2	001		2002
Current—						
Marketable equity securities	¥	66	¥	2	\$	494
Total	¥	66	¥	2	\$	494
Non-current:						
Marketable equity						
securities	¥5	,697	¥7,	520	\$4	2,741
Government and						
corporate bonds		254		614		1,903
Trust fund investments						
and other		473		80		3,547
Total	¥6	,424	¥8,	214	\$4	8,191

The carrying amounts and aggregate fair values of investment securities in subsidiaries and associated companies whose market values are available at 31st March, 2002 and 2001 are as follows:

			Millions of Yen
			2002
	Carrying	Market	Unrealised
	Amount	Value	Gain
Subsidiaries	¥3,423	¥22,743	¥19,320
Associated companies	766	2,139	1,373
Total	¥4,189	¥24,882	¥20,693
			Millions of Yen
			2001
	Carrying	Market	Unrealised
	Amount	Value	Gain
Subsidiaries	¥3,695	¥31,242	¥27,547
Associated companies	766	4,193	3,427
Total	¥4,461	¥35,435	¥30,974
		Thousands	of U.S. Dollars
			2002
	Carrying	Market	Unrealised
	Amount	Value	Gain
Subsidiaries	\$25,681	\$170,618	\$144,937
Associated companies	5,743	16,043	10,300
Total	\$31,424	\$186,661	\$155,237

5. Inventories

Inventories at 31st March, 2002 and 2001 consisted of the following:

		Millions of	Thousands of
		Yen	U.S. Dollars
	2002	2001	2002
Finished goods	¥12,471	¥14,989	\$93,553
Work in process	18,113	21,931	135,885
Raw materials and supplies	4,883	5,745	36,633
Total	¥35,467	¥42,665	\$266,071

6. Short-Term Bank Loans and Long-Term Debt

Short-term bank loans are represented by loans on deeds and bank overdrafts.

The weighted average annual interest rates for short-term bank loans for the years ended 31st March, 2002 and 2001 were 0.5 percent, respectively.

Long-term debt at 31st March, 2002 and 2001 consisted of the following:

		Millions of Yen	Thousands of U.S. Dollars
	2002	2001	2002
Unsecured 2.2 percent			
domestic bonds due 2002		¥ 5,000	
Unsecured 2.0 percent			
domestic bonds due 2002	¥5,000	5,000	\$ 37,509
Unsecured 2.7 percent			
domestic bonds due 2004	5,000	5,000	37,509
Unsecured 2.475 percent			
domestic bonds due 2004	8,000	8,000	60,015
Unsecured 0.7 percent			
domestic bonds due2006	7,000		52,513
Loans from banks, due			
serially to 2007 with			
interest rates ranging			
from 1.42 percent to			
2.13 percent—Unrealised	9,000		67,518
Total	34,000	23,000	255,064
Less current portion	(5,720)	(5,000)	(42,911)
Long-term debt,			
less current portion	¥28,280	¥18,000	\$212,153

Annual maturities of long-term debt outstanding at 31st March, 2002 were as follows:

Year Ending 31st March	Millions of Yen	Thousands of U.S. Dollars
2003	¥ 5,720	\$ 42,911
2004	6,070	45,536
2005	9,070	68,042
2006	1,070	8,027
2007	12,070	90,548
Total	¥34,000	\$255,064

7. Retirement Allowances for Directors and Corporate Auditors

Retirement allowances for directors and corporate auditors are paid subject to approval of the shareholders in accordance with the Code.

The Company recorded a liability for its unfunded retirement allowance plan covering all of its directors and corporate auditors. The annual provisions for retirement allowances for directors and corporate auditors for the years ended 31st March, 2002 and 2001 were ¥405 million (\$3,042 thousand) and ¥358 million, respectively.

8. Shareholders' Equity

The Company is subject to the Code to which certain amendments became effective from 1st October, 2001.

Prior to 1st October, 2001, the Code required at least 50 percent of the issue price of new shares, with a minimum of the par value thereof, to be designated as stated capital as determined by resolution of the Board of Directors. Proceeds in excess of amounts designated as stated capital were credited to additional paid-in capital. Effective 1st October, 2001, the Code was revised and common stock par values were eliminated resulting in all shares being recorded with no par value.

Prior to 1st October, 2001, the Code also provided that an amount at least equal to 10 percent of the aggregate amount of cash dividends and certain other cash payments which are made as an appropriation of retained earnings applicable to each fiscal period shall be appropriated and set aside as a legal reserve until such reserve equals 25 percent of stated capital. Effective 1st October, 2001, the revised Code allows for such appropriations to be set aside as a legal reserve until the total additional paid-in capital and legal reserve equals 25 percent of stated capital. The amount of total additional paid-in capital and legal reserve which exceeds 25 percent of stated capital can be transferred to retained earnings by resolution of the shareholders, which may be available for dividends. Under the Code, the Company may issue new common shares to existing shareholders without consideration as a stock split pursuant to a resolution of the Board of Directors. Prior to 1st October, 2001, the amount calculated by dividing the total amount of shareholders' equity by the number of outstanding shares after the stock split could not be less than ¥50. The revised Code eliminated this restriction.

Prior to 1st October, 2001, the Code imposed certain restrictions on the repurchase and use of treasury stock. Effective 1st October, 2001, the Code eliminated these restrictions allowing the Company to repurchase treasury stock by a resolution of the shareholders at the general shareholders meeting and dispose of such treasury stock by resolution of the Board of Directors after 31st March, 2002. The repurchased amount of treasury stock cannot exceed the amount available for future dividend plus amount of stated capital, additional paid-in capital or legal reserve to be reduced in the case where such reduction was resolved at the general shareholders meeting.

The Code permits the Company to transfer a portion of additional paid-in capital and legal reserve to stated capital by resolution of the Board of Directors. The Code also permits the Company to transfer a portion of

unappropriated retained earnings, available for dividends, to stated capital by resolution of the shareholders.

Dividends are approved by the shareholders at a meeting held subsequent to the fiscal year to which the dividends are applicable. Semi-annual interim dividends may also be paid upon resolution of the Board of Directors, subject to certain limitations imposed by the Code.

At the general shareholders meeting of the Company held on 29th June, 2000, the Company's shareholders approved the following stock option plan. The plan provides for granting options to directors and key employees to purchase up to 150 thousand shares of the Company's common stock in the period from 5th January, 2001 to 20th December, 2004. The options will be exercisable at an exercise price of ¥1,093 per share. The exercise price will be subject to adjustment if there are stock splits or additional shares issued for less than the market price.

At the general shareholders meeting of the Company held on 28th June, 2001, the Company's shareholders approved the following stock option plan. The plan provides for granting options to directors and key employees to purchase up to 150 thousand shares of the Company's common stock in the period from 7th January, 2002 to 20th December, 2005. The options will be exercisable at an exercise price of ¥682 per share. The exercise price will be subject to adjustment if there are stock splits or additional shares issued for less than the market price.

9. Income Taxes

The Company is subject to Japanese national and local income taxes which, in the aggregate, resulted in a normal effective statutory tax rates of approximately 41.8 percent for the years ended 31st March, 2002 and 2001.

The tax effects of significant temporary differences and loss carryforwards which result in deferred tax assets and liabilities at 31st March, 2002 and 2001 were as follows:

		Millions of Yen	Thousands of U.S. Dollars
	2002	2001	2002
Current deferred tax assets:			
Inventories	¥ 792	¥ 277	\$ 5,942
Provision for bonuses	326	771	2,443
Provision for doubtful			
accounts		44	
Other	132	12	994
Valuation allowance	(322)		(2,419)
Total	¥ 928	¥1,104	\$ 6,960

		Millions of Yen	Thousands of U.S. Dollars
	2002	2001	2002
Non-current deferred tax			
assets:			
Provision for retirement			
benefits	¥4,267	¥5,332	\$32,010
Tax loss carryforwards	6,565	1,528	49,248
Software	960	498	7,201
Provision for doubtful			
accounts	188	431	1,409
Investment securities	1,473		11,052
Other	757	947	5,681
Valuation allowance	(6,565)		(49,248)
Total	7,645	8,736	57,353
Non-current deferred tax			
liabilities:			
Deferred gain on sales			
of property	316	333	2,374
Special reserve for tax			
purposes	21	25	158
Other	57	9	425
Total	394	367	2,957
Net non-current deferred			
tax assets	¥7,251	¥8,369	\$54,396

A reconciliation between the normal effective statutory tax rates and the actual effective tax rates reflected in the accompanying non-consolidated statements of operations for the years ended 31st March, 2002 and 2001 is as follows:

	2002	2001
Normal effective statutory tax rate	41.8%	41.8%
Expenses not deductible for income tax purposes	(0.7)	(3.4)
Dividend income not to be taxed	2.1	8.9
Minimum inhabitants tax	(0.5)	(2.1)
Change in valuation allowance	(52.5)	
Other— net	(3.2)	(1.1)
Actual effective tax rate	(13.0)%	44.1%

10. Research and Development Costs

Research and development costs charged to income were ¥12,153 million (\$91,170 thousand) and ¥11,860 million for the years ended 31st March, 2002 and 2001, respectively.

11. Leases

The Company leases certain machinery, computer equipment, office space and other assets.

Total rental expenses for the years ended 31st March, 2002 and 2001 were ¥449 million (\$3,368 thousand) and ¥495 million, respectively, including ¥433 million (\$3,245 thousand) and ¥495 million of lease payments under finance leases.

Pro forma information of leased property such as acquisition cost, accumulated depreciation, obligation under finance lease, depreciation expense, interest expense of finance leases that do not transfer ownership of the leased property to the lessee on an "as if capitalised" basis for the years ended 31st March, 2002 and 2001, was as follows:

		M	illions of Yen
			2002
	Machinery	Furniture	
	and	and	
	Equipment	Fixtures	Total
Acquisition cost	¥498	¥1,122	¥1,620
Accumulated depreciation	306	706	1,012
Net leased property	¥192	¥ 416	¥ 608

			Millions of Yen
			2001
	Machinery	Furniture	
	and	and	
	Equipment	Fixtures	Total
Acquisition cost	¥424	¥1,431	¥1,855
Accumulated depreciation	219	800	1,019
Net leased property	¥205	¥ 631	¥ 836

		Thousands o	f U.S. Dollars
			2002
	Machinery	Furniture	
	and	and	
	Equipment	Fixtures	Total
Acquisition cost	\$3,737	\$8,413	\$12,150
Accumulated depreciation	2,294	5,296	7,590
Net leased property	\$1,443	\$3,117	\$4,560

Obligations under finance leases:

		Millions of	Thousands of
		Yen	U.S. Dollars
	2002	2001	2002
Due within one year	¥349	¥374	\$2,617
Due after one year	520	533	3,900
Total	¥869	¥907	\$6,517

Depreciation expense and interest expense under finance leases:

		Millions of Yen	Thousands of U.S. Dollars
	2002	2001	2002
Depreciation expense	¥367	¥437	\$2,755
Interest expense	28	35	211
Total	¥395	¥472	\$2,966

Depreciation expense and interest expense, which are not reflected in the accompanying non-consolidated statements of operations, are computed by the straight-line method and the interest, respectively.

The minimum rental commitments under noncancellable operating leases at 31st March, 2002 were as follows:

	Millions of Yen	Thousands of U.S. Dollars
	2002	2002
Due within one year	¥39	\$295
Due after one year	56	417
Total	¥95	\$712

12. Contingent Liabilities

Contingent liabilities at 31st March, 2002 and 2001 for guarantees of bank loans amounted to ¥2,666 million (\$19,999 thousand) and ¥926 million, respectively.

13. Selling, General and Administrative Expenses

Details of selling, general and administrative expenses for the years ended 31st March, 2002 and 2001 consisted of the following:

		Millions of	Thousands of
		Yen	U.S. Dollars
	2002	2001	2002
Salary	¥ 7,279	¥ 8,112	\$ 54,610
Depreciation expense	305	305	2,288
Rent expense	1,189	1,242	8,921
Research and			
development cost	6,671	7,241	50,042
Provision for retirement			
benefits	1,283	1,070	9,626
Other	7,694	7,866	57,713
Total	¥24,421	¥25,836	\$183,200

14. Other Income (Expenses)—Net

Other income (expenses)—net for the years ended 31st March, 2002 and 2001 consisted of the following:

		Millions of	Thousands of
		Yen	U.S. Dollars
	2002	2001	2002
Gain on sales of			
investment securities		¥ 34	
Loss on valuation of			
investment securities	¥(1,793)	(840)	\$(13,449)
Gain on sales of			
investments in and			
advances to subsidiaries			
and affiliated companies	1,498	1,382	11,241
Loss on valuation of			
investments in and			
advances to subsidiaries			
and associated companies	(739)	(107)	(5,542)
Loss on valuation and			
disposal of inventories	(4,088)	(311)	(30,670)
Foreign exchange gain	421	627	3,159
Reversal of allowance for			
doubtful accounts	789		5,919
Provision for doubtful			
accounts		(838)	
Gain on sales of fixed assets	2,671		20,037
Loss on disposal of			
fixed assets	(276)	(421)	(2,070)
Loss on sales of fixed assets	(212)	(4)	(1,594)
Loss on valuation of			
golf club membership	(24)	(47)	(181)
Special retirement expenses	(4,688)		(35,172)
Other loss—net	(228)	87	(1,710)
Total	¥(6,669)	¥(438)	\$(50,032)

15. Related Party Transactions

Transactions of the Company with subsidiaries and associated companies for the years ended 31st March, 2002 and 2001 were summarised as follows:

		Millions of	Thousands of
		Yen	U.S. Dollars
	2002	2001	2002
Sales	¥ 3,654	¥ 3,571	\$ 27,410
Purchases	21,234	20,365	159,294

Balances due to or from these subsidiaries and associated companies at 31st March, 2002 and 2001 were as follows:

		Millions of Yen	Thousands of U.S. Dollars
	2002	2001	2002
Notes and accounts			
receivables	¥1,171	¥3,020	\$ 8,789
Other receivables	224	439	1,679
Prepaid expenses and			
other current assets	347	183	2,597
Notes and accounts			
payables	4,898	6,129	36,743
Other payables	23	27	176
Accrued expenses and			
other current liabilities	283	186	2,126

Directory of Main Office, Plants, Overseas Offices and Affiliated Companies of JRC

CONTENTS

Main Office, Plants and Overseas Offices	5
Affiliated Companies of IRC	5

MAIN OFFICE, PLANTS AND OVERSEAS OFFICES



Main Office

Akasaka Twin Tower (Main), 17-22, Akasaka 2-chome, Minato-ku,

Tokyo 107-8432 Phone: (03)3584-8836 Fax: (03)3584-8878

Home Page

Address: http://www.jrc.co.jp/index-e.html



Mitaka Factory

1-1, Shimorenjaku 5-chome Mitaka,

Tokyo 181-8510 Phone: (0422)45-9111 Fax: (0422)45-9110



Saitama Plant

1-4, Fukuoka 2-chome, Kamifukuoka, Saitama Prefecture 356-0011

Phone: (0492)66-5611 Fax: (0492)66-5615

Overseas Subsidiaries

JRC do Brasil Empreendimentos Electronicos Ltda.

Av. Almirante Barroso, 63-S/309 Rio de Janeiro, RJ, Brasil Phone: 21-2220-8121

Fax: 21-2240-6324 Telex: 2130428 JRCR BR

JRC (HK) Limited

Room 1701, Telford House, 16 Wang Hoi Road, Kowloon Bay, Kowloon, Hong Kong

Phone: 2707-9170 Fax: 2707-9226

Overseas Branch Office

U.S.A.

Japan Radio Co., Ltd. Seattle Branch 1011 SW Klickitat Way Bldg. B, Suite 100 Seattle, WA 98134, USA Phone: 206-654-5644

Fax: 206-654-7030

Netherlands

Japan Radio Co., Ltd. Amsterdam Branch Cessnalaan 40-42, 1119NL, Schiphol-Rijk, The Netherlands Phone: 020-658-0750

Fax: 020-658-0755

Overseas Offices

Indonesia

Japan Radio Co., Ltd. JI, Cikini 5, No.15, Jakarta Pusat Phone: 21-3924150 Fax: 21-334143

Taiwan

Japan Radio Co., Ltd. 7F, No.146, Sung Chiang Road, Taipei, TAIWAN, R.O.C. Phone: 886-2-2571-3100

Phone: 886-2-25/1-3100 Fax: 886-2-2571-2999

U.S.A.

Japan Radio Co., Ltd. Suite208, 2125 Center Avenue, Fort Lee, N.J. 07024

Phone: 201-242-1882 Fax: 201-242-1885

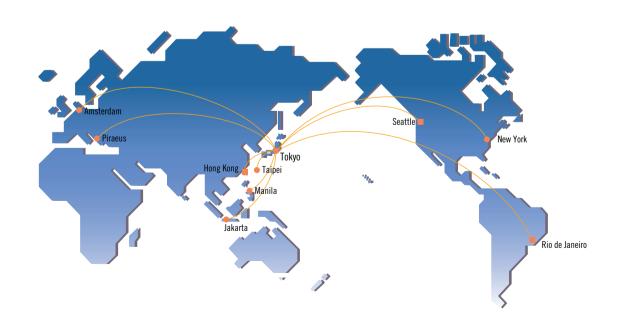
Philippines

Japan Radio Co., Ltd. Unit 901,Liberty Center 104 H.V.Dela, Costa Street, Salcedo Village, Makati City, Manila, THE PHILIPPINES Phone: 2-884-6088,6089

Fax: 2-884-6090

Greece

Japan Radio Co., Ltd. Akti Miaoli 57, Piraeus Phone: 1-429-3304/3305 Fax: 1-429-3306



AFFILIATED COMPANIES OF JRC

Aloka Co., Ltd.*

Number of employees: 1,058

Business scope: Manufacture and sale of radio and ultrasonic diagnostic equipment,

radiation measuring instruments, nuclear medical equipment, probe testing

and analysis equipment, and therapeutic and surgical equipment

Head office and factory: 22-1, Mure 6-chome, Mitaka, Tokyo 181-8622

Phone:(0422)45-5111 Fax:(0422)45-7093

Tokyo works: 7-19, Imai 3-chome, Oume, Tokyo 198-8577

Subsidiaries: Aloka Technical Service Co., Ltd./Shanghai Aloka Medical Equipment Company/Aloka Hong Kong Limited/Aloka Korea Co., Ltd./

Aloka Holding Europe AG/Aloka Sarl/Aloka SpA/Aloka Espana SL/Aloka GesmbH/Aloka Deutschland Gmbit

Homepage address: http://www.aloka.com

New Japan Radio Co., Ltd.*

Number of employees: 1.603

Business scope: Manufacture and sale of microwave products for radar and satellite communications,

and semiconductor devices such as operational amplifiers, 3D surround ICs,

LCD controller and driver ICs for cellular phones

Head office: 3-10, Yokoyama-cho, Nihonbashi, Chuo-ku, Tokyo 103-8456

Phone:(03)5642-8222 Fax:(03)5642-8220

Factory: 1-1, Fukuoka 2-chome, Kamifukuoka, Saitama Prefecture 356-8510

Subsidiaries: Saga Electronics Co., Ltd./NJR Trading Co., Ltd./NJR Chichibu Co., Ltd./NJR Corporation/

Thai NJR Co., Ltd./NJR (Singapore) Pte., Ltd./NJR (HK) Limited

Homepage address: http://www.njr.co.jp

Nagano Japan Radio Co., Ltd.

Number of employees: 1,009

Business scope: Manufacture and sale of VHF radio equipment, radars, data transmission equipment,

 $controllers, \ public \ address \ sets, \ power \ supply \ equipment, \ capacitors, \ etc.$

Head office and factory: 1163 Shimohigano, Inazato-machi, Nagano, Nagano Prefecture 381-2288

Phone: (026) 285-1111 Fax: (026) 285-1030 http://www.nirc.co.ip

Homepage address: http://www.njrc.co.jp

Ueda Japan Radio Co., Ltd.

Number of employees: 830

Business scope: Manufacture of VHF radio equipment, radio receivers, measuring instruments,

and electromedical equipment, etc.

Head office and factory: 10-19, Fumiiri 2-chome, Ueda, Nagano Prefecture 386-8608

Phone:(0268)26-2112 Fax:(0268)26-2070

Homepage address: http://www.ujrc.co.jp

JRC Tokki Co., Ltd.*

Number of employees: 354

Business scope: Repairs and overhaul of defense electronics for ships and aircraft,

system support engineering for installations on ships, and manufacture of

peripheral equipment

Head office and factory: 781, Shinyoshida-cho, Kohoku-ku, Yokohama,

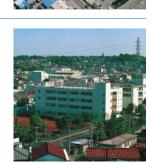
Kanagawa Prefecture 223-0056

Phone: (045)547-8572 Fax: (045)546-0141

Homepage address: http://www.jrctokki.co.jp







JRC Engineering Co., Ltd.*

Number of employees: 160

Business scope: Software development and engineering for information and data processing

systems using general-purpose computers, mini-computers and microcomputers

Head office and factory: c/o Japan Radio Co., Ltd.

1-1, Shimorenjaku 5-chome, Mitaka, Tokyo 181-8510 Phone:(0422)45-9661 Fax:(0422)45-9652

Homepage address: http://www.jrce.co.jp

Nihonmusen Glass Co., Ltd.*

Number of employees: 122

Business scope: Manufacture and sale of glassware for outdoor lamps, mercury-vapor lamps,

electron tubes, physicochemical apparatus, tableware and other glass tubes

Head office and factory: 1-8, Fukuoka 2-chome, Kamifukuoka,

Saitama Prefecture 356-0011 Phone:(0492)64-4411 Fax:(0492)63-6357



Musashino Electric Co., Ltd.*

Head office and factory:

Number of employees: 178

Business scope: Manufacture of radio communications and medical electronics

equipment, and electronics parts 1-33, Shimorenjaku 8-chome,

Mitaka, Tokyo 181-0013 Phone:(0422)47-6341 Fax:(0422)47-6138

Homepage address: http://www.musashino-e.com



Sougou Business Service Co., Ltd.*

Number of employees: 122

Business scope: Distribution management of electronic equipment

Head office: Japan Radio Co., Ltd.

Mitaka Factory

1-1, Shimorenjaku 5-chome, Mitaka, Tokyo 181-0013

Phone:(0422)40-0471 Fax:(0422)45-9790



JRC Mobitec Co., Ltd.*

Number of employees: 73

Business scope: Proxy servise business for telecommunications carriers

Sales for mobile telecommunication equipment

System sales and maintenance for mobile telecommunication

Head office: Kanda Ponpian Bldg. 5-12, Iwamoto-cho 2-chome,

Chiyoda-ku, Tokyo 101-0032 Phone:(03)3865-3041 Fax:(03)3865-3036

Homepage address: http://www.jrcmobitec.co.jp



^{*} Consolidated subsidiary



