

# Financial Report 2017

Japan Aviation Electronics Industry, Limited and consolidated subsidiaries. Years ended March 31

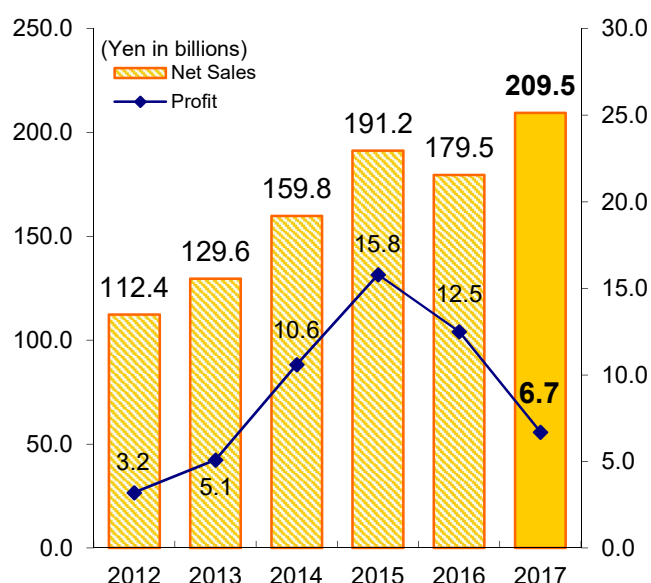
## Financial Outlook

In the first half of the current fiscal year, the global economy maintained its course toward recovery due in large part to the improved employment climate in the United States. The Chinese economy, too, remained stable despite some deceleration, and the global economy as a whole manifested moderate recovery. The Japanese economy also experienced moderate recovery under the impact of the global economy and the steady improvement in consumer spending. The financial markets, on the other hand, experienced some drastic fluctuations caused by the shift from appreciation of the yen triggered by last June's United Kingdom European Union membership referendum and rapid US dollar appreciation and yen depreciation following the US presidential elections last November.

As for the electronics market, shipments of smartphones are still high despite the sluggish growth of the mobile device market, while the automotive market remained strong overall. Regarding the industrial machinery market, despite the continuing stagnation, demand partially recovered in the second half of the fiscal year.

Against this backdrop, our group worked to improve business performance in our major markets of mobile devices, automotive, and industrial machinery and infrastructure by further enhancing efficiency across all business operations. Specifically, we worked to improve our performance, focusing on the expansion of orders and sales through implementation of global marketing and initiatives for development of new products, reducing costs by promoting in-house manufacturing and automation, improving productivity by streamlining facilities, and curbing expenses.

Despite these efforts, however, the increase in the sales volume of products with a large ratio of externally procured components and of expenses for new product development in the first half of the fiscal year, coupled with the impact of the drastic exchange rate fluctuations within the fiscal year led to the following business performance in the current consolidated fiscal year. The net sales were 209.51 billion yen (117% of the previous year). The incomes recorded, however, were 12.06 billion yen in operating income (67% of the previous year), 9.15 billion yen in ordinary income (54% of the previous year), and 6.74 billion yen in profit attributable to owners of parent (54% of the previous year).



Years ended March 31	(Years ended March 31)			% of Previous Year	U.S. dollars
	Yen in billions				in millions
	2015	2016	2017		2017
			From April1, 2016 to March31, 2017		From April1, 2016 to March31, 2017
Net sales	¥ 191.2	¥ 179.5	¥ 209.5	117%	\$ 1,871
Gross profit	46.7	39.6	33.1	84%	295
Operating income	25.85	17.93	12.06	67%	107.7
to sales ratio	13.5%	10.0%	5.8%	(4.2%)	5.8%
Ordinary income	23.15	16.95	9.15	54%	81.7
to sales ratio	12.1%	9.4%	4.4%	(5.0%)	4.4%
Profit	15.76	12.52	6.74	54%	60.1
to sales ratio	8.2%	7.0%	3.2%	(3.8%)	3.2%
Profit attributable to owners of parent	15.76	12.52	6.74	54%	60.1
to sales ratio	8.2%	7.0%	3.2%	(3.8%)	3.2%

Note: U.S. dollar amounts are translated from yen, for convenience only, at the rate of 112=U.S.\$1

## Sales-by-segment

### ■ Connector Line: Sales of 189.3 billion yen (119% of the previous year)

The increase in the sales volume of products primarily in the field of mobile devices with a large ratio of composite products using purchased parts and of expenses for new product development coupled with the impact of the exchange rates on operations overall led to the business.

### ■ User Interface Solutions Line: Sales of 8.1 billion yen (101% of the previous year)

In the automotive field, this fiscal year was a transition season in the field of launching of new captive touch panels for installation in vehicles. Coupled with the capital investments for development of new products and the impact of the exchange rate fluctuations affected the business.

### ■ Aerospace Line: Sales of 11.4 billion yen (97% of the previous year)

In the second half of the fiscal year, shipments of new products for oil drilling steadily increased, but overall sales suffered stagnation in the defense and aerospace fields, as well as in the industrial machinery, infrastructure, and automotive fields.

## Sales by Business Segment

Years ended March 31	Yen in billions			% of Previous Year	U.S.dollars in millions 2017
	2015	2016	2017		
Connector	169.1	158.9	<b>189.3</b>	119%	<b>\$ 1,690</b>
U.I.S.	7.1	8.0	<b>8.1</b>	101%	<b>73</b>
Aerospace	14.2	11.8	<b>11.4</b>	97%	<b>102</b>
Others	0.8	0.8	<b>0.7</b>	91%	<b>6</b>
<b>Total</b>	<b>191.2</b>	<b>179.5</b>	<b>209.5</b>	<b>117%</b>	<b>1,871</b>
Overseas	136.1	126.7	<b>152.6</b>	120%	<b>1,363</b>
%	71.2%	70.6%	<b>72.8%</b>	—	<b>72.8%</b>
Domestic	55.1	52.8	<b>56.9</b>	108%	<b>508</b>

## Operating Income by Business Segment

Years ended March 31	Yen in billions			% of Previous Year	U.S.dollars in millions 2017
	2015	2016	2017		
Connector	28.7	22.1	<b>16.1</b>	73%	<b>\$ 143</b>
U.I.S.	0.4	1.1	<b>0.8</b>	73%	<b>7</b>
Aerospace	0.7	(1.0)	<b>(0.6)</b>	—%	<b>(5)</b>
Others	(3.9)	(4.3)	<b>(4.2)</b>	—%	<b>(37)</b>
<b>Total</b>	<b>25.9</b>	<b>17.9</b>	<b>12.1</b>	<b>67%</b>	<b>108</b>

## Connector Sales by Segment

Years ended March 31	Yen in billions			% of Previous Year	U.S.dollars in millions 2017
	2015	2016	2017		
Mobile Devices	80.4	70.7	<b>105.2</b>	149%	<b>\$ 939</b>
Automotive	55.8	62.8	<b>59.7</b>	95%	<b>533</b>
Industrial & Infrastructure	18.9	16.2	<b>17.1</b>	105%	<b>152</b>
Others	14.0	9.2	<b>7.3</b>	79%	<b>66</b>
<b>Total</b>	<b>169.1</b>	<b>158.9</b>	<b>189.3</b>	<b>119%</b>	<b>1,690</b>
Overseas	129.6	120.8	<b>146.8</b>	122%	<b>1,311</b>
%	76.7%	76.0%	<b>77.6%</b>	—	<b>77.6%</b>
Domestic	39.5	38.1	<b>42.5</b>	111%	<b>379</b>

# Management policies, management environment and outstanding issues

## **(1) JAE's basic management policy**

Ever since its establishment, the JAE Group has aimed to increase its corporate value and contribute to the creation of a sustainable society through growth based on the corporate philosophy of “Explore, Create and Practice.”

In the pursuit of our business, our basic policy has been the development of operations on a global scale and management that places priority on consolidated management performance and cash flow.

Also, based on the JAE Group Charter of Corporate Behavior, as a good corporate citizen, we will abide by relevant laws and rules, and fulfill social responsibilities toward customers, stockholders and investors, business partners, and other related parties in the community at large.

## **(2) Medium- and long-term management strategies**

With the global spread of the Internet of Things (IoT), as for our major markets, we expect further advancement of in-vehicle electronics in the automotive market, sophistication of the functionality of smartphones and expansion of the markets in newly-emerging economies on the mobile device market, and advancement of smart factories and robotization in the industrial machinery market, as well as expansion of wearable devices and VR/AR devices.

In this market environment, the JAE Group shall pursue the strategies summarized below and shall aim to further boost our corporate value.

1. We will continue efforts to expand business by capturing demand for devices with potential for growth and global emerging trends in new markets.
2. Enhancement of proactive global marketing and technology development capacities and incorporating them in the global corporate slogan, “Technology to Inspire Innovation,” in order to promote sustainable development of new products and their horizontal development and thus increase profits
3. Increasing profitability by slashing costs, reduction of lead times, enhancement of efficiency and further quality improvement based on a synergy effect of company-wide management innovation activities evolved from manufacturing improvement and technological innovation focused on efforts for in-house manufacturing, and active investment in construction of plants and reinforcement of production facilities

Through the implementation of these strategies, we shall aim to achieve the mid-term management goals announced in April 2015, that is, 250 billion yen in net sales and more than 20 billion yen in profit attributable to owners of parent.

## **(3) Issues that JAE must address**

The business environment that surrounds our company is increasingly uncertain due to the stagnation of economic growth in newly-emerging economies as well as intensifying geopolitical risks, although it is generally expected that economic recovery will continue to proceed at a moderate pace, driven by growing consumer spending in the advanced economies. In markets where we have a presence, we expect market conditions to remain harsh with intensifying competition and rapid fluctuations in demand.

Under these circumstances, the JAE Group shall work to reinforce its competitiveness through implementation of global marketing and proactive technological development. At the same time, we shall aim to further slash costs and improve our ability to respond to changes through innovative management focused on promotion of in-house manufacturing.

# Consolidated Balance Sheets

Japan Aviation Electronics Industry, Limited, and consolidated subsidiaries Years ended March 31

Assets	Yen in millions		U.S. dollars in thousands
	2016 As of March 31	2017 As of March 31	2017 As of March 31
<b>Current assets:</b>			
Cash and deposits	¥ 37,918	¥ 36,529	\$ 326,154
Notes and accounts receivable	34,361	48,575	433,710
Securities	14	-	-
Inventories	12,937	16,140	144,112
Deferred tax assets	1,542	1,893	16,908
Other current assets	1,561	1,304	11,644
Allowance for doubtful accounts	( 59 )	( 90 )	( 807 )
<b>Total current assets</b>	<b>88,276</b>	<b>104,353</b>	<b>931,723</b>
<b>Property, plant and equipment:</b>			
Land	5,787	5,791	51,706
Buildings and structures	48,179	49,798	444,630
Machinery, equipment and others	152,057	168,197	1,501,767
Construction in progress	9,404	6,130	54,736
Less: Accumulated depreciation and impairment loss	( 150,350 )	( 162,817 )	( 1,453,732 )
<b>Net property, plant and equipment</b>	<b>65,078</b>	<b>67,100</b>	<b>599,109</b>
<b>Investments and long-term loans receivable:</b>			
Investment securities	2,652	2,474	22,093
Shares of subsidiaries and associates	1,019	1,019	9,101
Long-term loans receivable	1,132	1,127	10,062
<b>Total investments and long-term loans receivable</b>	<b>4,804</b>	<b>4,620</b>	<b>41,257</b>
<b>Other assets:</b>			
Net defined benefit asset	277	341	3,053
Deferred tax assets	3,080	2,546	22,739
Other assets	4,454	4,373	39,045
Allowance for doubtful accounts	( 138 )	( 139 )	( 1,246 )
<b>Total other assets</b>	<b>7,674</b>	<b>7,122</b>	<b>63,592</b>
<b>Total assets</b>	<b>165,833</b>	<b>183,196</b>	<b>1,635,682</b>

Liabilities and net assets	Yen in millions		U.S. dollars in thousands
	2016 As of March 31	2017 As of March 31	2017 As of March 31
<b>Current liabilities:</b>			
Short-term loans payable	¥ 8,856	¥ 8,118	\$ 72,489
Notes and accounts payable	31,525	40,812	364,393
Accrued expenses	4,783	5,255	46,923
Income taxes payable	591	1,495	13,354
Other current liabilities	2,634	4,016	35,866
<b>Total current liabilities</b>	<b>48,390</b>	<b>59,698</b>	<b>533,026</b>
<b>Non-current liabilities:</b>			
Long-term loans payable	8,084	11,451	102,246
Net defined benefit liability	4,196	2,392	21,360
Other non-current liabilities	533	631	5,637
<b>Total non-current liabilities</b>	<b>12,815</b>	<b>14,475</b>	<b>129,244</b>
<b>Net assets:</b>			
Capital stock			
At March 31, 2016 - Shares authorized: 350,000,000, shares issued: 92,302,608	10,690		
At March 31, 2017 - Shares authorized: 350,000,000, shares issued: 92,302,608		10,690	95,448
Capital surplus	14,497	14,498	129,451
Retained earnings	78,947	82,958	740,700
Less: Treasury shares			
At March 31, 2016 - 1,456,426 shares	( 1,093 )		
At March 31, 2017 - 1,445,174 shares		( 1,089 )	( 9,724 )
Valuation difference on available-for-sale securities	953	919	8,209
Foreign currency translation adjustment	1,106	783	6,997
Remeasurements of defined benefit plans	( 576 )	134	1,198
Subscription rights to shares	102	126	1,128
<b>Total net assets</b>	<b>104,627</b>	<b>109,022</b>	<b>973,411</b>
<b>Total liabilities and net assets</b>	<b>165,833</b>	<b>183,196</b>	<b>1,635,682</b>

	Yen		U.S. dollars
Net assets per share	¥ 1,150.57	¥ 1,198.53	\$ 10.701

Notes : U.S.dollar amounts are translated from yen, for convenience only, at the rate of 112=U.S.\$1

## Consolidated Statements of Income and Retained Earnings

Japan Aviation Electronics Industry, Limited, and consolidated subsidiaries Years ended March 31

	Yen in millions		U.S. dollars in thousands
	2016	2017	2017
Net sales .....	¥ 179,494	¥ 209,510	\$ 1,870,633
Cost of sales .....	139,922	176,419	1,575,170
Gross profit .....	39,572	33,091	295,462
Selling, general and administrative expenses .....	21,643	21,032	187,789
Operating income .....	17,928	12,059	107,673
Other income (expenses):			
Interest expenses .....	( 115 )	( 82 )	( 736 )
Interest and dividend income .....	127	137	1,230
Foreign exchange gains (losses) .....	12	( 2,548 )	( 22,758 )
Loss on retirement of non-current assets .....	( 1,008 )	( 374 )	( 3,345 )
Other, net .....	0	( 36 )	( 321 )
	( 983 )	( 2,904 )	( 25,932 )
Ordinary income .....	16,945	9,154	81,740
Profit before income taxes .....	16,945	9,154	81,740
Income taxes-current .....	3,026	2,416	21,579
Income taxes-deferred .....	1,403	1	13
Profit .....	12,515	6,736	60,148
Profit attributable to owners of parent .....	12,515	6,736	60,148
Retained earnings:			
Balance at beginning of the year .....	69,157	78,947	704,887
Add:			
Profit attributable to owners of parent .....	12,515	6,736	60,148
Deduct:			
Dividends of surplus .....	2,725	2,725	24,335
Balance at end of the year .....	78,947	82,958	740,700
		Yen	U.S. dollars
Net income per share (*1) .....	¥ 137.77	¥ 74.15	\$ 0.662

(\*1) Figures represents profit attributable to owners of the parent.

## Consolidated Statements of Cash Flows

Japan Aviation Electronics Industry, Limited, and consolidated subsidiaries Years ended March 31

	Yen in millions		U.S. dollars in thousands
	2016	2017	2017
Net cash provided by (used in) operating activities			
Profit before income taxes .....	¥ 16,945	¥ 9,154	\$ 81,740
Depreciation and amortization .....	17,683	20,252	180,827
Increase (decrease) in net defined benefit liability .....	741	( 1,834 )	( 16,375 )
Loss on retirement of non-current assets .....	1,008	374	3,345
Decrease (increase) in notes and accounts receivable-trade .....	6,750	( 11,697 )	( 104,440 )
Decrease (increase) in inventories .....	( 594 )	( 3,259 )	( 29,104 )
Increase (decrease) in notes and accounts payable-trade .....	( 1,349 )	8,933	79,759
Other, net .....	( 6,241 )	( 481 )	( 4,295 )
<b>Net cash provided by (used in) operating activities .....</b>	<b>34,944</b>	<b>21,443</b>	<b>191,458</b>
Net cash provided by (used in) investing activities			
Proceeds from withdrawal of time deposits .....	16	7	68
Payments into time deposits .....	( 0 )	-	-
Purchase of property, plant and equipment .....	( 22,378 )	( 21,716 )	( 193,898 )
Proceeds from sales of property, plant and equipment .....	34	14	131
Purchase of investment securities .....	( 250 )	( 3 )	( 28 )
Other, net .....	( 970 )	( 762 )	( 6,803 )
<b>Net cash provided by (used in) investing activities .....</b>	<b>( 23,548 )</b>	<b>( 22,459 )</b>	<b>( 200,530 )</b>
Net cash provided by (used in) financing activities			
Proceeds from long-term loans payable .....	-	10,000	89,285
Repayments of long-term loans payable .....	( 7,359 )	( 7,370 )	( 65,810 )
Cash dividends paid .....	( 2,725 )	( 2,725 )	( 24,335 )
Other, net .....	9	3	27
<b>Net cash provided by (used in) financing activities .....</b>	<b>( 10,075 )</b>	<b>( 93 )</b>	<b>( 833 )</b>
Effect of exchange rate change on cash and cash equivalents .....	( 1,142 )	( 270 )	( 2,416 )
Net increase (decrease) in cash and cash equivalents .....	178	( 1,380 )	( 12,322 )
Cash and cash equivalents at beginning of period .....	37,730	37,909	338,477
<b>Cash and cash equivalents at end of period .....</b>	<b>37,909</b>	<b>36,529</b>	<b>326,154</b>
Supplemental disclosure of cash flow information			
Cash paid during the year for:			
Interest expenses paid .....	115	86	768
Income taxes paid .....	5,283	1,570	14,020

Notes : U.S.dollar amounts are translated from yen, for convenience only, at the rate of 112=U.S.\$1

# Notes to Consolidated Financial Statements

Japan Aviation Electronics Industry, Limited and consolidated subsidiaries Years ended March 31

## 1. Basis of presenting consolidated financial statements

Japan Aviation Electronics Industry, Limited (the "Company"), a Japanese corporation and its domestic subsidiaries maintain their records and prepare financial statements in Japanese yen in conformity with accounting principles generally accepted in Japan.

Overseas consolidated subsidiaries prepare financial statements in accordance with either Accounting Standards generally accepted in the United States of America or International Financial Reporting Standards.

The accompanying consolidated financial statements are basically an English version of those that have been prepared for Japanese domestic purposes in accordance with the provisions of the Financial Instruments and Exchange Law of Japan, and filed with the Ministry of Finance Japan, and the Tokyo Stock Exchange. Certain modifications, including presentation of the statements of net assets and the cash flows have been made in the accompanying financial statements to facilitate understanding by readers outside Japan.

The translations of the Japanese yen amounts into U.S. dollars are included solely for the convenience of readers and have been calculated at the rate of ¥112=U.S.\$1.

## 2. Scope of consolidation

### (1) Number of consolidated subsidiaries: 17

The consolidated subsidiaries are as follows: JAE Hirosaki, Ltd., JAE Yamagata, Ltd., JAE Fuji, Ltd., JAE Shinshu, Ltd., JAE Taiwan, Ltd., JAE Oregon, Inc., Nikko Logistics, Corp., JAE Hakko Ltd., JAE Electronics, Inc., JAE Philippines, Inc., JAE Hong Kong, Ltd., JAE Singapore Pte Ltd., JAE Europe, Ltd., JAE Wuxi Co., Ltd., JAE Korea, Inc., JAE Wujiang Co., Ltd. and JAE Shanghai Co., Ltd.

### (2) Number of non-consolidated subsidiaries: 8

The non-consolidated subsidiaries are as follows: JAE Business Support, Ltd., JAE Foods, Ltd., Hirosaki Hakko Co., Ltd., Meiyu - Giken Co., Ltd., Meiyu Automation Corporation, JAE Houston, LLC, JAE Tijuana, S. A. de C. V. and JAE Dongguan Service Co., Ltd.

### (3) Reason for exclusion of non-consolidated subsidiaries from scope of consolidation

The 8 non-consolidated subsidiaries were excluded from the scope of consolidation because they are all small in terms of their total assets, net sales, profit and retained earnings, and would have no significant overall impact on the consolidated financial statements.

## 3. Application of equity method

The impact of the 8 non-consolidated subsidiaries and 2 affiliated companies on the consolidated profit and consolidated retained earnings is slight, and overall they are of minor importance.

Investments in said companies have therefore been valued according to the cost method rather than the equity method.

## 4. Business years of consolidated subsidiaries

Since the consolidated subsidiaries, JAE Wuxi Co., Ltd., JAE Wujiang Co., Ltd. and JAE Shanghai Co., Ltd. have closing dates falling on December 31, the financial statements contained herein are based on the statements of the provisional settlement of accounts, which were performed on the consolidated closing date.

## 5. Accounting standards

### (1) Standards and methods for valuing major assets

#### 1. Securities

Other securities:

Listed shares: Market value method based on the market on the closing date.

(The entire difference between the acquisition cost and the market price is accounted for by the direct-inclusion-to-net assets method, and the cost of sales is calculated by the moving average method.)

Unlisted shares: Cost method based on the moving average method.

#### 2. Derivatives: Market value method

#### 3. Inventories: Lower of cost or market method for valuation

Mainly weighted average method for costing

**(2) Depreciation on major depreciable assets**

Property, plant and equipment

Buildings: The Company and 15 out of the 17 consolidated subsidiaries use the straight line method, while the remaining 2 use the declining balance method.

Items other than buildings: The Company and 8 out of the 17 consolidated subsidiaries use the declining balance method, while the remaining 9 use the straight line method.

**(3) Standards for calculating allowance for doubtful accounts**

As provision against losses from bad debts, bad debts reserve has been calculated in accordance with past records of bad debts in the case of general credits. In cases of the specialized credits such as doubtful credits, the possibility of recovery has been considered individually, and the estimated non-recoverable amount has been accrued.

**(4) Treatment of major hedge accounts**

1. Hedge accounting

Deferred treatment. Interest rate swap is applied, however, in cases meeting the necessary requirements.

In addition, forward exchange contract and currency swap is applied in cases meeting the necessary requirements.

2. Hedge method and transactions

Hedge method: derivatives (interest rate swap, forward exchange contract, currency swap and currency option trading)

Hedged transaction: A part of debts due to variable interest rate, foreign currency assets and liabilities and time deposit.

3. Hedge policy

It is our policy not to conduct speculative transactions. Derivatives are used to avoid risks from interest rate fluctuations on debts, and exchange rate fluctuations on foreign currency transactions and so on.

4. Evaluation of hedge effectiveness

Effectiveness is assessed by rate analysis of the sum total of price fluctuation involving hedged transactions, or cash flows, and the sum total of price fluctuation involving hedge methods, or cash flows.

**(5) Funds involved in consolidated statements of cash flows**

Funds (cash and cash equivalents) stated in consolidated statements of cash flows consist of cash on hand, demand deposits, and short-term investments which are redeemable within 3 months from the acquisition date, having high liquidity and convertibility into cash and low risk against price fluctuation.

**(6) Method of accounting for retirement benefit**

1. Method of period attribution for estimated retirement benefit

We adopt the fixed period standard to impute the estimated retirement benefit amount until the current consolidated fiscal year end upon calculation of the defined benefit obligation.

2. Method of cost processing of actuarial gains and losses

We process the actuarial gains and losses in the fixed amount method for a specified period (mostly 15 years) in the average remaining service time of the employee upon occurrence from the subsequent consolidated fiscal year.

3. Adoption of a simplified method in small-scale consolidated subsidiaries

In determining net defined benefit liability and periodic benefit cost, some consolidated subsidiaries apply a simplified method that the amount required for voluntary termination of employees at end of year is treated as defined benefit obligations.

**(7) Treatment of consumption taxes**

Consumption taxes are recorded by the tax exclusion method.

## 6. Relating to the Consolidated Statements of Income and Retained Earnings

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2016	2017	2017
<b>(1) Selling, general and administrative expenses</b>			
Main categories and amounts			
1. Packing and transportation expenses	¥ 2,903	¥ 3,358	\$ 29,989
2. Salaries and bonuses	7,741	7,155	63,886
3. Commission fee	2,282	2,310	20,631
4. Retirement benefit expenses	374	379	3,385
5. Depreciation	232	212	1,900
<b>(2) R&amp;D expenses included in administrative expenses and current manufacturing expenses</b>			
General and administrative expenses	1,282	1,208	10,786
Current manufacturing expenses	7,894	8,044	71,825
Total	9,176	9,252	82,611

## 7. Relating to the Consolidated Statements of Cash Flows

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2016	2017	2017
Cash and deposits account	¥ 37,918	¥ 36,529	\$ 326,154
Time deposits that exceeds three months	(8)	—	—
Cash and cash equivalents	37,909	36,529	326,154

## 8. Pension and retirement plans

### Outline of retirement schedule

JAE and some of our consolidated subsidiaries have mainly introduced the consolidated defined-benefit corporate group pension plan. This plan adopts the cash balance plan, in which we open assumed private accounts equivalent to the reserve and pension resource amounts. In the assumed private accounts, the contributed credits based on the interest credit, salary level, etc. are accumulated. Employees may select a lump-sum or a pension plan (limited period pension up to 15 years) at retirement, and when they select the pension plan, the interest that fluctuates mostly by the market interest is added during the effective period.

Some consolidated subsidiaries adopt the lump-sum plan or defined-contribution pension benefit plan.

Some consolidated subsidiaries adopt a simplified method in calculating defined benefit obligations.

### Defined benefit plan

#### (1) Reconciliation between the beginning balance and the ending balance of defined benefit obligation (excluding simplified method)

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2016	2017	2017
Balance at beginning of year	¥ 28,662	¥ 28,938	\$ 258,377
Service cost	1,298	1,344	12,003
Interest cost	317	274	2,448
Actuarial gains and losses	634	(240)	(2,150)
Benefit paid	(1,887)	(1,414)	(12,627)
Others	(86)	41	373
Balance at end of year	28,938	28,943	258,423



**(2) Reconciliation between the beginning balance and the ending balance of pension assets (excluding simplified method)**

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2016	2017	2017
Balance at beginning of year	¥ 25,326	¥ 24,926	\$ 222,562
Expected return on pension assets	631	613	5,476
Actuarial gains and losses	(1,337)	702	6,275
Contributions from the employer	2,258	1,904	17,000
Benefit paid	(1,887)	(1,414)	(12,627)
Others	(63)	31	282
Balance at end of year	24,926	26,764	238,969

**(3) Reconciliation between the beginning balance and the ending balance of net defined benefit liability for simplified method**

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2016	2017	2017
Balance at beginning of year	¥ (145)	¥ (92)	\$ (825)
Periodic benefit cost	194	69	616
Benefit paid	(2)	—	—
Contributions paid to pension plan	(131)	(106)	(948)
Others	(7)	1	9
Balance at end of year	(92)	(128)	(1,147)

**(4) Reconciliation between the ending balance of defined benefit obligations and pension assets and net defined benefit liability and asset recorded on the consolidated balance sheet**

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2016	2017	2017
Funded defined benefit obligations	¥ 29,898	¥ 29,973	\$ 267,624
Pension assets	(26,103)	(28,093)	(250,833)
	3,794	1,880	16,791
Unfunded defined benefit obligations	124	169	1,516
Net liability and asset recorded on the consolidated balance sheet	3,919	2,050	18,307
Net defined benefit liability	4,196	2,392	21,360
Net defined benefit asset	(277)	(341)	(3,053)
Net liability and asset recorded on the consolidated balance sheet	3,919	2,050	18,307

Note) Includes plan that adopt a simplified method

**(5) Components of periodic benefit costs**

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2016	2017	2017
Service cost	¥ 1,298	¥ 1,344	\$ 12,003
Interest cost	317	274	2,448
Expected return on pension assets	(631)	(613)	(5,476)
Recognized actuarial gains and losses	125	83	744
Amortization of prior service cost	(128)	—	—
Periodic benefit cost in simplified method	194	69	616
Periodic benefit costs of defined benefit plan	1,176	1,157	10,337

**(6) Reconciliation of remeasurements of defined benefit plans before income tax effect**

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2016	2017	2017
Prior service cost	¥ (128)	¥ —	\$ —
Actuarial gains and losses	(1,846)	1,027	9,176
Total	(1,974)	1,027	9,176

**(7) Components of remeasurements of defined benefit plans before income tax effect**

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2016	2017	2017
Unrecognized actuarial gains and losses	¥ 769	¥ (258)	\$ (2,306)
Total	769	(258)	(2,306)

**(8) Items relating to pension assets****1. Components of pension assets by major categories**

Years ended March 31	2016	2017
Japanese bonds	27.7%	23.5%
Foreign bonds	6.3%	6.3%
Japanese equities	21.7%	19.5%
Foreign equities	17.7%	16.6%
General account	18.3%	24.0%
Others	8.3%	10.1%
Total	100.0%	100.0%

**2. Method determining expected long-term rate of return on pension assets**

Expected long-term rate of return on pension assets is determined based on the current and the expected allocation of pension assets and the current and the expected long-term rates of return from various assets composing the pension assets.

**(9) Assumptions used for actuarial calculation (weighted-average rates are applied)**

Years ended March 31	2016	2017
Discount rate	1.0%	1.0%
Expected long-term rate of return on pension assets	2.5%	2.5%
Expected rate of future salary increases	3.7%	3.6%

**Defined contribution plan**

Years ended March 31	Yen in millions		U.S.dollars in thousands
	2016	2017	2017
Required contribution amount to the defined contribution plan of consolidated subsidiaries	¥ 121	¥ 115	\$ 1,032