# Utsunomiya Manufacturing Division

As of March 31, 2013

#### Main Plant

Location	1-1-11, Younan, Utsunomiya City, Tochigi Prefecture 320-8564
Site Area	337,457m <sup>2</sup>
Building Area	176,807m <sup>2</sup>
Number of Employees	1,790
Main Products Manufactured	Aircraft



## **South Plant**

Location	1418 Kamiyokota Town, Utsunomiya City, Tochigi Prefecture 321-0106
Main Products Manufactured	Aircraft



#### 2nd South Plant

Location	2-810-4 Miyanouchi, Utsunomiya City, Tochigi Prefecture 321-0131
Main Products Manufactured	Aircraft



#### **Handa Plant**

Location	1-27, Shiohi-cho, Handa City, Aichi Prefecture 475-0032
Site Area	49,041m²
Building Area	13,854m²
Number of Employees	288
Main Products Manufactured	Aircraft



# **Handa West Plant**

Location	102, Kamihama-cho, Handa City, Aichi Prefecture 475-0804
Site Area	41,977㎡
Building Area	13,809m²
Number of Employees	41
Main Products Manufactured	Aircraft



# Message from the Chief General Manager



Chief General Manager Utsunomiya Manufacturing Division Corporate Executive Vice President Hisashi Nagano

At the Utsunomiya Manufacturing Division, we actively give due consideration to the environment, contribute to society, and implement thorough compliance, based on our "Customer Comes First" policy, with the aim of realizing our business vision of, "An Appealing Company with a Strong Market Presence." By making efforts people can trust, we will continue working to enhance our corporate value while playing our part in the development of a sustainable society.

To realize this goal, as a corporate citizen, we will redouble our efforts to deal with environmental issues such as global warming, step up compliance, promote traffic manners, and sincerely address complaints, led by the slogan, "To Be a Company Favored by the Community," since our plants are often located close to residential areas. At the same time, we will also continue our educational programs, taking advantage of our strengths as a manufacturer, to help children deepen their understanding of science and environmental activities.

# **Relationship with Local Society**

# Communication with the Local Community

We at Utsunomiya Manufacturing Division recognize the importance of coexisting with local communities as responsible members of society, and, equally, the importance of maintaining a prosperous society. In particular, making use of our advantages as a manufacturing industry, we have been involved in supporting school education to foster pupils' understanding of environmental protection activities over a long period.



#### **Environmental Class Delivery Service**

Utsunomiya Manufacturing Division provides environmental classes for pupils mainly of grade five in elementary schools in Utsunomiya City by dispatching our employees to deliver talks on global warming and familiarize them through experiments with how it operates. This is one of our efforts to promote awareness of environmental issues among children, which started in FY2007. In FY2013, we held 48 classes for 1,483 pupils, making a grand total of 220 classes for 7,031 pupils.



# Handa City Secondary Life Festival

At the Handa City-sponsored Secondary Life Festival (venue: Sakura Elementary School) we delivered a lecture titled, "The Amazing Flying Mechanism of the Airplane!" . Participants were invited to experiment with aircraft lift, and experienced first-hand the strength and lightness of composite materials used in aircraft. This was an initial foray into a full-scale class delivery program we intend to conduct in the Handa district in future.



#### **Bon Dance**

In August, a grand Bon
Dance festival was held
with an attendance of some
3,000 people, including
local community associations
for residents, women, and
children, and other local
corporations. The festival
has been a regular annual
event in the community since
1984.



#### Science Experience Bus Tour

With sponsorship from Utsunomiya City, we arranged a plant study visit for the city's elementary and junior high school students and their guardians. With the aim of raising awareness of science and manufacturing among elementary and junior high school students who will lead the next generation, the Science Experience Bus Tour has been held to coincide with students' summer vacations since 2007, and this fiscal year was attended by some 90 students. The students eagerly asked questions and showed a particular interest in aircraft.



#### Friendship Festival

The Friendship Festival was held in October by opening the factory to the public. We welcomed some 4,000 visitors with whom we were able to enjoy more substantial exchanges, despite the rainy weather. The festival also promoted the Utsunomiya Manufacturing Division's CSR and environmental activities, and encouraged greening by presenting visitors with spiraea saplings and herb seeds in collaboration with the Tochigi Prefecture Green Promotion Committee.



#### **JAPAN CUP Cycle Road Race**

The JAPAN CUP Cycle Road Race, Asia' s top cycle race, which is hosted by Utsunomiya City, was held in October. The race, which promotes Utsunomiya as a center of cycle sports both inside and outside Japan, was held over two days, and drew a crowd of around 116,000 spectators. The company has been the main sponsor since 1990, and provided LEGACY and other models as team support

# Activities in the Community—Education, Traffic Safety, and Others

Utsunomiya Manufacturing Division has taken various opportunities to promote its CSR activities, including providing educational and awareness programs for promoting traffic safety and environmental protection to its employees.



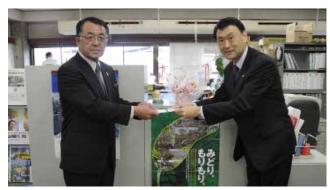
#### Traffic Safety Activities, Installing Safety Reflectors

In September, with the cooperation of the Utsunomiya Police, Utsunomiya Manufacturing Division installed reflectors on electric poles to help prevent traffic accidents during the night. This was part of our local traffic safety activities as the chairing company of the Utsunomiya South Ward Safe Driving Administrators Council. These activities have been conducted in specific areas since 2008 during the Traffic Safety Campaign periods in the spring and autumn.



#### ISO 14001 Renewal Audit

In December, an ISO 14001 renewal audit was conducted by an external auditor. Each of our departments described the ISO implementation status in their workplaces during the audit, and our certification was successfully continued. Commented an auditor: "Environmental risks are progressively being reduced through the fusion of business and environmental activities."



#### **Green Fund**

In November, contributions collected from employees working at the division were donated to the Prefecture Green Promotion Committees of Tochigi and Aichi Prefectures. First launched in 2000, this drive marked its 13th anniversary and was honored with a second Executive Director's Award by the National Land Afforestation Promotion Organization in FY2012, following the Minister of Agriculture, Forestry and Fisheries Award in FY2008. (To date, accumulated donations have totaled 4.49 million yen.)



#### **Crossing Guard Services**

We provide crossing guard services at crossroads in the neighborhood of the division at commuting times to schools and offices. This service also serves to make our employees more conscious of traffic manners. Since there are many different routes to the schools in the vicinity of the division, we offer this service twice yearly: in April, when new pupils begin their classes, and in September, when students might be a little too carefree after the long summer holiday.



#### Clean Campaign

About 400 volunteers from the Utsunomiya Manufacturing Division worked in seven groups and picked up trash and cut grass around Minami-Utsunomiya Station of the Tobu Railway and Miyahara Ballpark near the division. The campaign this year marks the 22nd anniversary. We will continue with such programs to help keep our local communities clean and tidy.



#### **Blood Donation**

A blood donation session is organized twice yearly in Utsunomiya and once yearly in the Hand district. This year, some 350 people volunteered to donate blood. As part of our social contribution, blood donation is useful for one and many people alike, and we shall work to further promote blood donation activities in future.

# **Approaches to Environmental Preservation**

As a comprehensive manufacturer of transportation devices with automobiles as core products, we promote environmental preservation, recognizing that "addressing global environmental problems is a critical management issue."

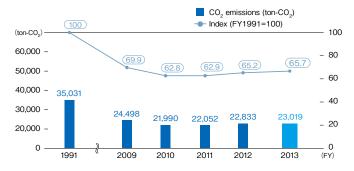
# Approach to Prevention of Global Warming

To meet the government's peak power reduction demand, in the summer of FY2013 we managed to reduce peak power by 10% compared with FY2011 by stopping air conditioners in rotation, in conjunction with the eradication of wasteful energy consumption in equipment and lighting, etc., in each workplace, new installation of demand control equipment in the Handa district, constant monitoring of electrical power use in each and every plant, and automatic broadcasting of simultaneous shut-down of office air conditioners during an increase in usage volume.

In FY2013, our  $CO_2$  emissions volume was 23,019 ton- $CO_2$ , 34.3% compared to FY1991. We shall continue our

efforts to save energy and contribute to the prevention of global warming.

## CO<sub>2</sub> emissions



# Approach to Zero Emissions

The waste emissions volume in FY2013 was 2,269 ton. Our record of zero ton landfill waste has continued uninterrupted since FY2004. We shall continue with our efforts to improve recycling and further reduce waste.

#### **Amount of Waste Material Generated and**



# Approach to Pollution Prevention

To live together with local communities and to maintain a verdant natural environment, we manage exhaust emissions as well as wastewater discharge to reduce environmental risks, and promote activities to prevent environmental accidents and public hazards.

Regarding the ground operations of helicopters at the South Plant, they are conducted on an apron located furthest from the boundary of the premises to minimize noise for nearby residents.

No environmental accidents and complaints have been recorded inside or outside the premises since FY2011.

We will strive, not only to ensure that we do not exceed the standard limits, but rather with the aim of attaining our own "zero" targets.

## FY2013 Environmental Data

The measured results all comply with the Water Quality Pollution Control Act, the Utsunomiya Sewerage Ordinance, and the Handa Pollution Prevention Agreement. They also meet our voluntary standards\* which are 20% stricter than the levels under the agreement and ordinances.

\* FHI established the voluntary standards (for air, water, and vibration), which are 20% stricter than environmental laws and regulations.

# Water Quality Data

The measured results all comply with the Water Quality Pollution Control Act and the Sewerage Act, as well as with our voluntary standards, which are 20% stricter than the levels under the agreement and ordinances.

#### Main Plant: The Sewerage Act and the Utsunomiya Sewerage Ordinance

Substance	Regulated Values	Voluntary Standard	Maximum Values	Minimum Values	Average Values
pН	5~9	5.4~8.6	7.7	5.9	6.8
SS	600	480	229	under 1.0	115
BOD	600	480	449	0.7	224.9
'n-Hexane Extracts (inorganic)	5	4	under 1.0	under 1.0	under 1.0
'n-Hexane Extracts (organic)	30	24	19.8	under 1.0	10.4
Fluorine	8	6.4	0.8	under 0.2	0.5
Cadmium	0.1	0.08	0.053	under 0.005	0.029
Cyanide	1	0.8	under 0.1	under O.1	under 0.1
Total Chromium	2	1.6	0.19	under 0.01	0.1
Hexavalent Chromium	0.1	0.08	0.03	under 0.02	under 0.02

# ■ South Plant: The Sewerage Act and the Utsunomiya Sewerage Ordinance

Substance	Regulated Values	Voluntary Standard	Maximum Values	Minimum Values	Average Values
pH	5~9	5.4~8.6	7.9	6.7	7.3
SS	600	480	104	9.2	56.6
BOD	600	480	185	7.7	96.4
'n-Hexane Extracts (inorganic)	5	4	under 1.0	under 1.0	under 1.0
'n-Hexane Extracts (organic)	30	24	17.2	under 1.0	9.1
Cadmium	0.1	0.08	under 0.005	under 0.005	under 0.005
Cyanide	1	0.8	under 0.1	under O.1	under 0.1
Total Chromium	2	1.6	under 0.01	under 0.01	under 0.01
Hexavalent Chromium	0.1	0.08	under 0.02	under 0.02	under 0.02

#### [Notations]

pH: Hydrogen-ion concentration, BOD: Biochemical oxygen demand, SS: Concentration of suspended solids in water (diameter: 2 mm or smaller), COD: Chemical oxygen demand [Units]

All others except pH: mg/L

# ■ 2nd South Plant: The Sewerage Act and the Utsunomiya Sewerage Ordinance

Substance	Regulated Values	Voluntary Standard	Maximum Values	Minimum Values	Average Values
рН	5~9	5.4~8.6	7.9	6.9	7.4
SS	600	480	118	under 1.0	59.5
BOD	600	480	151	under 0.5	75.8
'n-Hexane Extracts (inorganic)	5	4	under 1.0	under 1.0	under 1.0
'n-Hexane Extracts (organic)	30	24	5.9	under 1.0	3.5
Fluorine	8	6.4	1.5	under 0.2	0.9
Cadmium	0.1	0.08	under 0.005	under 0.005	under 0.005
Cyanide	1	0.8	under O. 1	under O. 1	under 0.1
Total Chromium	2	1.6	0.59	under 0.01	0.3
Hexavalent Chromium	0.1	0.08	under 0.02	under 0.02	under 0.02

# ■ Handa Plant: Water Pollution Control Law, Environmental Agreement with Handa City

Substance	Regulated Values	Voluntary Standard	Maximum Values	Minimum Values	Average Values
рH	6~8	6.2~7.8	7.8	6.6	7.2
SS	25	20	18.0	1.0	9.5
BOD	25	20	11.0	0.7	5.9
COD	25	20	17.0	1.0	9.0
'n-Hexane Extracts (inorganic)	5	4	under 0.5	under 0.5	under 0.5
Cadmium	0.1	0.08	under 0.005	under 0.005	under 0.005
Cyanide	1	0.8	under 0.1	under 0.1	under 0.1
Total Chromium	2	1.6	under 0.04	under 0.04	under 0.04
Hexavalent Chromium	0.5	0.4	under 0.04	under 0.04	under 0.04

# ■ Handa West Plant: Water Pollution Control Law, Environmental Agreement with Handa City

Substance	Regulated Values	Voluntary Standard	Maximum Values	Minimum Values	Average Values
рН	6~8	6.2~7.8	7.8	7.2	7.5
SS	15	12	8.0	2.0	5.0
BOD	15	12	11.0	3.1	7.1
COD	15	12	8.9	3.9	6.4
'n-Hexane Extracts (inorganic)	2	1.6	under 0.5	under 0.5	under 0.5
Cadmium	0.05	0.04	under 0.005	under 0.005	under 0.005
Cyanide	0.5	0.4	under 0.1	under 0.1	under 0.1
Total Chromium	0.2	0.16	under 0.04	under 0.04	under 0.04
Hexavalent Chromium	0.3	0.24	under 0.04	under 0.04	under 0.04

# Air Pollution Data

The measured results all comply with the Air Pollution Control Act, and they were also less than our voluntary standards, which is 20% stricter than Law.

# ■ Main Plant, South Plant, 2nd South Plant: Air Pollution Control Law

Facilities	Substance	Regulated Values	Voluntary Standard	Maximum Values	Average Values
Co-generation System	NOx	600	480	272	127
Doy off Europea	NOx	230	184	under 100	under 100
Dry-off Furnace	PM	0.2	0.16	under 0.001	under 0.001

[Unit] NOx: ppm, PM: g/ m<sup>3</sup>N

Among the 9 facilities specified by Law, we present here data of a co-generation system and dry-off furnaces.

# ■ Handa West Plant: Air Pollution Control Law, Environmental Agreement with Handa City

Facilities	Substance	Regulated Values	Voluntary Standard	Maximum Values	Average Values
	SOx	1.5	1.2	under 0.002	under 0.002
2-ton Boiler	NOx	180	144	40	36
	PM	0.1	0.08	under 0.002	under 0.002

[Unit] NOx: ppm, SOx:  $m^3N/h$ , PM:  $g/m^3N$ 

Among the 3 facilities specified by Law, we present here data of a boiler. Also at the specified facilities not indicated here, measured values were in the range of values specified by Law.

#### ■ Handa Plant: Air Pollution Control Law, Environmental Agreement with Handa City

Facilities	Substance	Regulated Values	Voluntary Standard	Maximum Values	Average Values	
	SOx	1.5	1.2	under 0.002	under 0.002	
2-ton Boiler	NOx	180	144	39	38	
	PM	0.1	0.08	under 0.002	under 0.002	

[Unit] NOx: ppm, SOx: m³N/h, PM: g/m³N Among the 4 facilities specified by Law, we present here data of a boiler. Also at the specified facilities not indicated here, measured values were in the range of values specified by Law.

## Measurement Result of Noise and Vibration

The measured results all comply with the Noise and Vibration Act, and they were also less than our voluntary standards.

#### ■ Noise: Noise Regulation Law

[Unit] dB(A)

Measurement Area	Regulated Values (night)	Voluntary Standard	Number of Measurements	Actual Values	
Main Plant	60	58	8	51	
South Plant	50	48	3	35	
2nd South Plant	50	48	3	46	
Handa Plant	65	63	3	55	
Handa West Plant	65	63	6	61	

#### ■ Vibration: Vibration Regulation Law

[Unit] dB(Z)

Measurement Area	Regulated Values (night)	Voluntary Standard	Number of Measurements	Actual Values	
Main Plant	65	63	8	34	
South Plant	60	58	2	under 30	
2nd South Plant	60	58	3	under 30	
Handa Plant	70	68	3	under 30	
Handa West Plant	70	68	5	38	

## Amount of PRTR chemical substances handled and emitted

#### ■ Utsunomiya Manufacturing Division (Aerospace Company)

[Unit: kg/year]

Chemical Substances	Amount Handled	Air Release	Water Emissions(public)	Transfer(sewer)	Transfer	Consumption	Solvent Wiping Removal	Recycle
Bisphenol A	1,801				721	1,080		
Ethyl benzene	108	84			24			
Xylene	3,572	1,858			632	1,082		
Compounds of Hexavalent chromium	2,137			361	640	738	398	
Toluene	20,290	15,812			4,447	30		
Manganese and its compounds	1,175				470	705		
1,3-dioxolane	8.495	6,626			1,869			
Total	37.578	24,381	0	361	8,803	3,635	398	0

#### ■ Utsunomiya Manufacturing Division (Eco Technologies Company)

[Unit: kg/year]

Chemical Substances	Amount Handled	Air Release	Water Emissions(public)	Transfer(sewer)	Transfer	Consumption	Solvent Wiping Removal	Recycle
Ethyl benzene	4.713	2,866			1,145			702
Xylene	15,336	9,324			3.727			2,285
Toluene	5,633	3,425			1,369			839
Total	25,682	15,615	0	0	6,241	0	0	3,826

 $<sup>^{\</sup>star}$  Listed are only those substances with annual handling volumes of 0.5 ton or more.

# Signing Agreement of Environmental Preservation with Handa City

We publicly concluded a pollution prevention agreement with Handa City to replace an expiring agreement. On February 22, 2011, we newly entered into an environmental conservation agreement with the city expanding its scope to include environmental activities such as energy saving and the disposal of industrial waste.

## **Division History**

March 2002

June 2002

January 1944	Utsunomiya Manufacturing Plant of Nakajima Aircraft Co., Ltd. opened and started army aircraft fuselage production
August 1945	Renamed as Fuji Industries Co., Ltd.
July 1950	Utsunomiya Cars Co., Ltd. established
July 1953	Fuji Heavy Industries Ltd. established
January 1958	T-1 intermediated trainer aircraft succeeded in First Flight
March 1962	Production of Road Packer (predecessor of current refuse collection vehicle Fuji-mighty) started.
August 1963	UH-1B turbine helicopters delivered to the Defense Agency
August 1965	Domestic light aircraft FA-200 (Aero SUBARU) succeeded in First Flight
March 1978	T-3 primary trainer aircraft delivered to the Defense Agency
December1984	AH-1S anti-tank helicopters delivered to the Defense Agency
August 1988	T-5 primary trainer aircraft delivered to the Defense Agency
December1992	Assembly plant of Boeing 777 (Handa Plant) started operations
September1993	UH-1 J Helicopters delivered to the Defense Agency
July 1999	Utsunomiya Manufacturing Division acquired ISO14001 certification
November 2000	FUJI-MIGHTY Type LP0 went on sale

September 2002 T-7 new primary trainer aircraft succeeded in maiden flight and delivered to the Defense Agency

September2005 Main wings of Transport Aircraft X and fixed-wing patrol aircraft delivered to the Defense Agency

December 2005 Pilot large-scale wind power generation unit built in Kamisu City,

March 2006 AH-64D helicopters succeeded in maiden flight and delivered to the Defense Agency

and Defended Algericy

January 2007 First delivery of Boeing 787, Main Wing

January 2010 Fuji Heavy Industries Ltd., acquired ISO14001 Corporate

Integrated Certification

April 2010 FUJI MIGHTY ELECTRA launched

July 2012 Wind Power Generation Business transferred to Hitachi, Ltd.

January 2013 Eco-car business transferred to ShinMaywa Industries, Ltd.

March 2013 Eco-technology company discontinued





Boeing 777 Boeing

Technologies Company established Aerospace Company

Utsunomiya Manufacturing Division achieved zero emission

Company system introduced Aerospace Company and Eco