Aircraft Division Guide

ShinMaywa
Brighten Your Future
ShinMaywa Industries plays a key role in the global aircraft industry

The origins of ShinMaywa Industries lie in the aircraft manufacturing business. Since its inception under the name Kawanishi Aircraft Company, the company has developed countless high-performance aircraft such as the flying boat Kawanishi H8K “Emily” and the fighter Shiden-kai “George”.

Beginning with the development of the US-1 primarily for search and rescue (SAR) operations, our technology for developing amphibious rescue aircraft has evolved steadily through generations of improvements. Today, the US-2 STOL SAR amphibious aircraft, which boasts cutting-edge technology and unmatched top-end performance, is operated by JMSDF of Japan’s Ministry of Defense.

The technology cultivated from this amphibious aircraft has allowed us to expand our business fields and continue to play a part in the world-wide aircraft industry via the production and provision of components to commercial aircraft manufacturers, such as the Boeing Company.

**Organization of Aircraft Division**

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**History of the Aircraft Division**

1918 Established Nihon Aircraft Manufacturing Company, a partnership company, by Seibei Kawanishi and others as the first aircraft manufacturer in Japan.

1920 Established Kawanishi Machinery Company. Established an aircraft division.

1928 Established the Kawanishi Aircraft Company. As of 1945 we had manufactured a total of 2,862 aircraft.

1949 Established Shin Meiwa Industry, Co., Ltd.

1960 Changed the name to ShinMaywa Industries, Ltd.

1967 Completed the prototype of the PX-S Seaplane (PS-1 ASW aircraft).

1974 Opened the Tokushima plant.

1975 Completed the first US-1 search and rescue (SAR) aircraft (later retrofitted the engines and renamed the US-1A).

1987 Modification of the first U-36A training support aircraft.

1988 Delivered the first MD-11 wing pylon.

1993 Delivered the first wing-to-body fairing for the Boeing 777.


1997 Awarded the Collier Trophy as a member of the Gulfstream GV development team.

2002 Participated in the development of the Airbus A380.

2003 Completed the first prototype of the improved UA-1A “kai” (US-2).

2004 Participated in the development of the main wing spar of the Boeing 787.

2006 Delivered the first main wing spar for the Boeing 787.

2007 The US-2 is officially assigned for troop deployment and mass production begins on the first aircraft.

2011 Opened the Takarazuka plant.

2012 Participated in the development of flaps, spoilers and slats for Bombardier’s Global 7000 & 8000.

2014 Awarded Boeing’s 2013 Supplier of the Year. Participated in the development of the wing-to-body fairings for the Boeing 777X.

2015 Awarded Boeing’s 2014 Supplier of the Year.

2016 Opened Harima plant.
We used an ingenious modification of a seaplane (based on the PS-1 antisubmarine warfare aircraft) to develop the US-1 Amphibian aircraft. Then we upgraded its engine performance for a more advanced US-1A. To further enhance its abilities, we perfected the US-2 by focusing development of modifications around improving its 1) maneuverability during take-off and landing 2) patient transport facilities and 3) open-sea rescue capabilities. The dramatic improvement of the in-flight environment and greater range of the US-2 for SAR missions resulted in over 1,000 dispatches to date for marine rescue and transport of emergency patients from remote islands.

*The number of dispatches is calculated from the US-1.

We are working on research into using it for responding to large fires, relief work, carrying emergency supplies and commercial transport to remote islands.

We manufacture the rear fuselage, escape hatch, flight control surfaces and other components, leveraging our metalwork and composites fabrication techniques.

We cooperate in the production of the stabilator (horizontal stabilizer). We employ our sheet metal work and composites fabrication technique.

We manufacture the external fuel tanks for the F-2, F-15 and other fighters. We use the know-how from producing those tanks in the manufacture of various kinds of pods, as well as our sheet metal work and aluminium welding expertise.
Our advanced technological capabilities prove themselves around the world. ShinMaywa reliability and quality serve as the backbone of safe air travel.

Since the 1940s, our production of commercial aircraft components has been significantly engaged with various overseas commercial aircraft programs and we handle the production of many components for large passenger aircraft, as well as regional and business jets. We have and will continue to provide products that meet customer reliability demands with our high quality and the latest technologies.

**Boeing 787 Main Wing Spar**

Composite materials are widely used for over 50% of the airframe of the Boeing 787 (commonly called the Dreamliner), a first for commercial aircraft. This next-generation aircraft achieves a 20% fuel saving over similarly-sized aircraft. We fabricate the main wing spar in partnership with Mitsubishi Heavy Industries, Ltd. The spars are mainly made of composite materials and partially of titanium alloy and aluminum alloy parts.

**Boeing 777 Wing-to-Body Fairing**

The Boeing 777 is a best-selling model, with more than 1,500 aircraft already delivered to airlines. The wing-to-body fairing that we manufacture consists of composite materials, a combination of materials, such as carbon and glass fibers.

**Boeing 777X Wing-to-Body Fairing**

The Boeing 777X, that we participated in its development commenced in 2014, is a new series of the Boeing 777 family. We will supply the wing-to-body fairing with an updated design from the existing 777 series.

**Airbus A380, A330neo Wing Root Fairing**

The world's largest passenger airplane, the Airbus A380, is a full two stories high. We make its wing root fillet fairing (linking between the leading edge of the main wing and the fuselage) and ramp surface panels (fairing on the leading edge of the main wing). Both components are primarily made of composite materials. We are manufacturing the main wing fillet fairing for the A330 and participating in the development of the same part on the A320neo, which is under development. A320neo will be an beast new aircraft and first flight will be October 2017 and E15 (Entry Into Service) will be 2018. A320neo will fly around the world coming years.

**EMBRAER E170/ E190 Flap Track Fairing and Fillet Fairing**

We are manufacturing composite flap track fairings (fairing covering the flap actuator mechanism) and fillet fairings for high-performance regional jets.

**Gulfstream G550 (GV-SP) Flaps and Other Parts**

The Gulfstream G550 is a long-range business jet and we manufacture flaps, slotted winglet fairings, winglet fairing and other parts for it. These components are mostly made of composite materials and aluminum alloy parts.

**Bombardier Global 7000 and Global 8000 Flaps and Others**

The Bombardier Global 7000 and Global 8000 business jets are ultra-long-range, high speed aircraft. We participated in their development in 2015, and design and manufacture the parts for them, such as aluminum alloy outboard flaps, spoilers and skids.
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1-1, Ohgi, Higashinada-ku, Kobe-shi 658-0027, Japan
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Description of Business
• Manufacture, periodic repair of amphibian aircraft
• Manufacturing aircraft components

Takarazuka Plant
1-1, Shinmeiwa-cho, Takarazuka-shi 665-8550, Japan
Phone: +81-798-57-5610 Fax: +81-798-57-5620

Description of Business
• Assembly of aircraft components

Harima Plant
30, Takumidai Ono-shi, 675-132, Japan
Phone: (0794)-64-0625 Fax: (0794)-64-0635

Description of Business
• Machining, Surface Treatment and Paint of aircraft parts

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Sep. 2017 A-E002B Printed in Japan 1.8