Aerospace Systems

Main Products

- Aircraft for the Japan Ministry of Defense Parts for commercial aircraft Commercial helicopters
- Missiles/Space equipment
 Jet engines
 Aerospace gearboxes

Hiroyoshi Shimokawa

Aerospace Systems Company



Vision

A leading company that consistently creates new value for the world through excellent aerospace technologies and monozukuri manufacturing quality

Opportunities

Defense Aircraft

• Sustained domestic defense equipment development and production

- Prospects of defense equipment
- Commercial Aircraft
 - Medium- to long-term growth in air passenger and air freight volume, in line with economic growth in emerging countries
- Jet Engines Increase in demand as a result of long-term growth in the commercial

aircraft market

Risks Defense

Aircraft

- Reduced equipment prices due to defense budget
- Aircraft
- **Commercial** Slow recovery in passenger demand due to COVID-19 Fiercely competitive environment, reflecting com
 - petition for market share between Boeing and
 - Rise of manufacturers in emerging countries
- Jet Engines Slow recovery in passenger demand due to COVID-19
 - Development risks related to introducing cuttingedge technologies

Core Competence

Aircraft

- Technological capabilities as a manufacturer of finished aircraft acquired through the defense aircraft business (system integration capabilities)
- Technological capabilities based on international joint development with Boeing, and sophisticated. large-scale production facilities
- High quality and productivity through the Kawasaki Production System (KPS)

- Jet Engines Sophisticated technological capabilities built through international joint development projects and developing engines for defense aircraft
 - High quality and productivity through leading-edge production technology

Business Direction

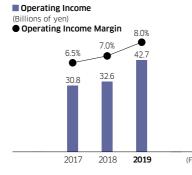


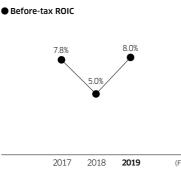
Jet Engines

- Steady progress on existing development projects and production contracts
- Expand orders for new projects

- Commercial Aircraft Improve productivity and efficiency in response to decreased aircraft demand
 - Consider participation in next-generation aircraft projects
 - Secure inclusion in new engine projects by improving development capabilities
 - Provide additional development and production for projects in which we are already participating
 - Consider entering the maintenance, repair, and overhaul (MRO) business

Orders Received Net Sales 2018





* The results for fiscal 2017 shown above have been restated to reflect company reorganization in April 2018.

Operating Environment and Strategies

Global air passenger and air freight volume were expected to expand over the medium to long term, reflecting economic growth in emerging countries, but in fiscal 2020, the COVID-19 pandemic caused passenger demand to fall sharply, and recovery in the commercial aircraft and jet engine markets is expected to take several years. In this business environment, we will work toward further improvement in productivity and efficiency while aiming for quick recovery in business performance by implementing a variety of new initiatives (such as pursuing automatic PCR viral testing systems) not bound by our conventional businesses.

In the defense aircraft sector, we will move steadily toward mass production of the P-1 patrol aircraft and C-2 transport aircraft while seeking to capture orders for modernized and derivative types of aircraft. We will also export defense equipment in line with government policy.

In the commercial aircraft sector, we will work to improve productivity and efficiency in response to decreased aircraft demand while advancing considerations of participation in next-generation aircraft programs.

In the jet engine division, we will work to further stabilize quality, reduce costs, and reinforce supply chains for projects in which we already participate while adopting IoT and other advanced technologies to improve productivity.

We will further reinforce our technological strengths in compressors, combustors, and gears-strategic components for Kawasaki-and use these strengths as a foundation for participating in new projects. In addition, we aim to gradually secure engine maintenance capabilities with a view to entering the MRO business.

Initiatives to Create Social Value

The Aerospace Systems Company has designated as its vision for 2030 providing air transportation systems combining excellent environmental performance with excellent safety and reliability. To achieve this vision, we are participating in the development of Boeing 787 and 777X aircraft as well as jet engines, such as the Trent series and PW1100G-JM. to contribute to the steady supply of low fuel consumption aircraft and low fuel consumption engines. We will also focus on the production and sale of the BK117 low-noise helicopter, which is expected to be used in firefighting, disaster response, and ambulance services. Furthermore, we aim to participate in the joint international development of new, environmentally conscious aircraft and engines and thereby contribute to environmental improvement.













Goals for fiscal 2021

- Provide environmentally conscious aircraft, helicopters, and engines and participate in new programs
- Produce components for Boeing 787
- Sales of BK117 units: Produce finished units and components
- Produce components for Trent 1000, Trent XWB and PW1100G-JM low fuel consumption engines

Fiscal 2019 Results

- Components for Boeing 787: 167 units sold
- Sales of BK117 units: One finished unit and 83 components
- Produce components for the Trent 1000, Trent XWB, and PW1100G-JM low fuel consumption engines





BK117 D-2 helicopter

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