Japanese Aerospace Industry
Emerging Worldwide Partner

Shigeyoshi HATA
The Society of Japanese Aerospace Companies

in Farnborough Air Show
July 16, 2014
What is SJAC?

- **Sole public entity founded in 1952 as a private forum representing the interests of Japanese aerospace industry**

**Mission**

1. **Industrial Policies Promotion**
   - Participation and support in reviewing aerospace administration
   - Negotiation with government ministries and departments
2. **Industrial Foundation Buildup and Maintenance**
   - Wide range of survey, research and investigation on industries status quo
   - Search of trends in aerospace technology
   - Review of technical standards, i.e. ISO
3. **Cooperation with Oversea Aerospace Industries**
   - Participation in international exhibitions and hold meetings
4. **Host our international exhibition every 4 years**

**Member**

- Regular: 90 Companies
- Associated: 46 Companies
Current Views of Japanese Aerospace Industry

Current Topics

Aircraft:
- This new policy will make us contribute to international cooperation in joint development / production of defense products.
- Previously, Japan’s aircraft production relied heavily on demand from defense sector, however, this trend is changing due to considerable sales expansion in civil aircraft production.
- The full-scale manufacturing of MRJ has been proceeding toward its first flight scheduled in 2014.

Space:
- The government revised the Basic Space Plan and integrated the promotion of Japan’s space industry into overall space policy in 2013.
- The revision implies our industry expand appearance in the overseas market under the joint effort between government and private sector.
Examples of Domestic Products: Aircraft

Aircraft Developed by Japanese Aerospace Industry

- US-2
- P-1
- MRJ
- C-2
- BK117 C-2
Examples of Domestic Products: Space Vehicles

- International Space Station Experiment Module
- H-2A / H-2B
- H-2B Transfer Vehicle
- Planetary Exploration
- Quasi-Zenith Satellite
- Epsilon

(Source: JAXA)
Current Views of Japanese Aerospace Industry

- Employees (2012) : **35,411** persons
  - Aircraft : 27,230 persons
  - Space : 8,181 persons

  - Aircraft : US$ 11.67 Billion
  - Space : US$ 3.16 Billion

When compared with the automobile, home electric, computer and other industries in Japan, the aerospace industry is still relatively small.

(1 US$ = ¥ 100)
## Current Views of Japanese Aerospace Industry

### Turnover of Aerospace in 2011

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<th>Year</th>
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<th>Space</th>
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**Turnover in 2011**: Total 1,292

- **Aircraft**: 1,027
- **Space**: 265

*Graph (unit: Billion Yen)*
Current Views of Japanese Aerospace Industry

Turnover of Aircraft Products

(unit: Billion Yen)

Turnover of Space Products
The total work share of Japanese firms will account for approximately 35% of the 787 structures and systems.
Japanese companies are participating in the A380 program as the parts suppliers.
Major Companies are participating in Engine for 787.

**TRENT 1000 (Rolls-Royce)**
Participation of Japanese Companies:

- **KHI**: Intermediate Pressure Compressor Module
- **MHI**: Combustor Module, Low Pressure Turbine Blade

**GEnx (General Electric)**
Participation of Japanese Companies:

- **IHI**: Low Pressure Turbine Module,
  High Pressure Compressor Parts,
  Low Pressure Turbine Shaft
- **MHI**: Combustor Case
The trade balance was in pronounced deficit, however, the deficit is gradually narrowing with growing demand for aircraft exports in the private sector.
Aerospace foreign trade in 2011 amounted to negative ¥163 billion.
Current Views on Activities: Trade Balance

Export
- All countries to All Countries
  - Airframe Parts: 256,073
  - Airframe: 558
  - Equipment: 367
  - E/G Parts: 158,902
  - Engines: 198
- USA to USA
  - Airframe Parts: 201,800
  - Airframe: 19
  - Equipment: 359
  - E/G Parts: 99,253
  - Engines: 174
- EU to EU
  - Airframe Parts: 16,540
  - Equipment: 16,540
  - E/G Parts: 54,943
  - Engines: 6
- to ASEAN
  - Airframe Parts: 918
  - Airframe: 63
  - Equipment: 90
  - E/G Parts: 645
  - Engines: 229
- from ASEAN
  - Airframe Parts: 32,639
  - Airframe: 17
  - Equipment: 1,034
  - E/G Parts: 31,389
  - Engines: 9,161

Import
- from USA
  - Airframe Parts: 141,871
  - Airframe: 81
  - Equipment: 6,620
  - E/G Parts: 146,461
  - Engines: 146
- to USA
  - Airframe Parts: 198
  - Airframe: 63
  - Equipment: 90
  - E/G Parts: 645
  - Engines: 229
- to EU
  - Airframe Parts: 71,137
  - Airframe: 63
  - Equipment: 90
  - E/G Parts: 146,461
  - Engines: 146
- from EU
  - Airframe Parts: 92,131
  - Airframe: 63
  - Equipment: 90
  - E/G Parts: 146,461
  - Engines: 146

Unit: Millions of Yen
Current Views of Japanese Aerospace Industry

Japan is one of the few countries that can provide service in almost the entire aircraft field ranging from system integration to material components.

- **Integration**
  - MHI, KHI, FHI, ShinMaywa

- **Tier 1 Suppliers**
  - MHI, KHI, FHI, IHI, MELCO, NEC, etc.

- **Tier 2-3 Suppliers**
  - Shimazu, SPP, Mitsubishi Materials, Nabtesco, JAMCO, etc.

- **Material Industries**
  - Parts manufacturer
    - 30-40 clusters involving over 800 companies

- **Carbon Fiber Components**
  - New Titanium Alloys etc.
Our Location in the Air Show

Booth #. C-17, Hall 2

Chalet 270,272,274,276 Row A : Mitsubishi Aircraft Corporation
Thank you for your Attention

The Next Japan Aerospace International Exhibition is held in Tokyo in October, 2016.

More details on SJAC:
Please access

http://www.sjac.or.jp/en_index.html