

### 第5回宇宙法シンポジウム 「宇宙探査と産業連携」 平成26年9月3日

# 我が国の宇宙機器産業の現況

## **Current Overview of Japan's Space Industry**

(一般社団法人)日本航空宇宙工業会 常務理事 秦 重義

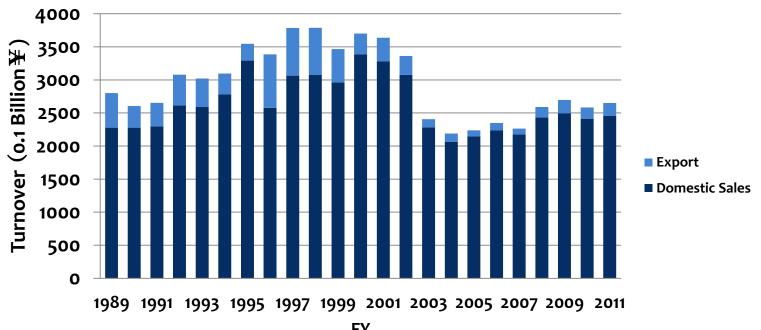
The Society of Japanese Aerospace Companies
Senior Vice President
Shigeyoshi HATA

### 宇宙機器産業の売上額の減少: Product Sales



- 宇宙機器産業の売上額は2000年以降に大きく減少
- The total product sales of Japan's space industry has been greatly reduced from the beginning in FY2000's.

Space industry: manufacturing industry in satellites, rockets and related equipment

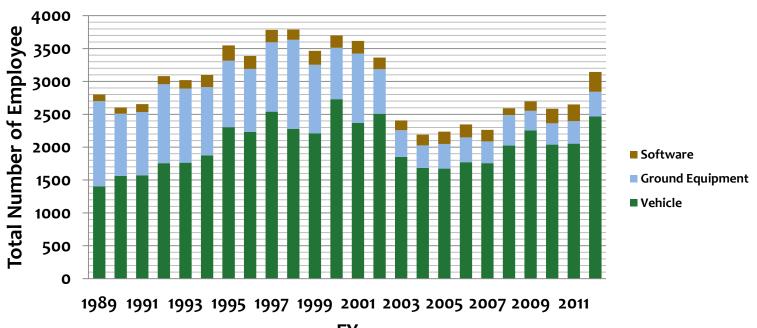


## 従業員数の減少 : Number of Employees



- ・ 宇宙機器産業の従業員数は売上減に伴って大きく減少
- The total number of employees has been continuously decreased with the reduction of total product sales.

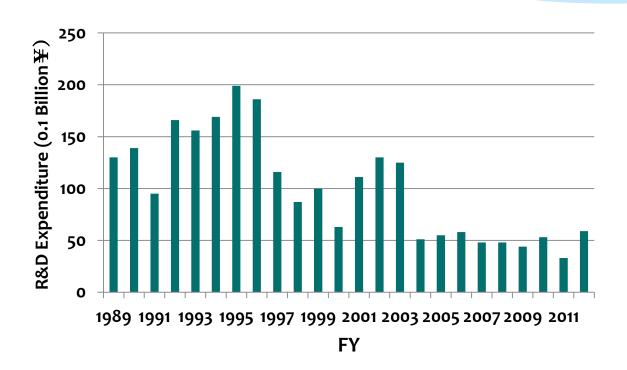
Based on a questionnaire result from 80 space related companies



## 企業独自の研究開発費の減少:R&D Expenditure



- ・ 宇宙開発計画の縮小に伴って企業内の研究開発費も減少の一途
- The expenditure of R & D in space industry has been continuously decreased with the shrinkage of national space programs.

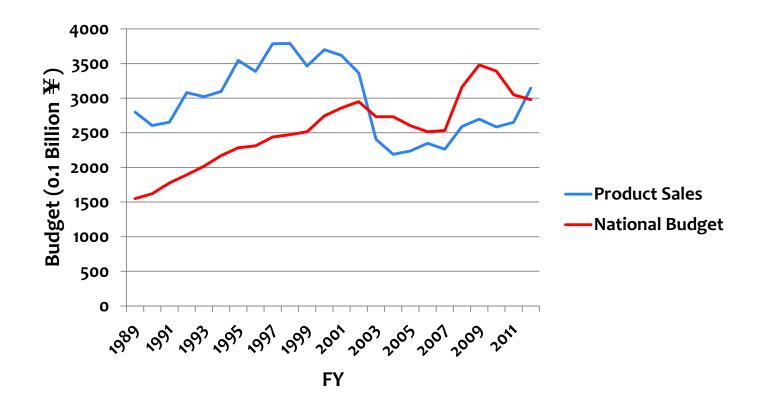


### 国の宇宙関連予算と宇宙機器産業の売上額





- ・ 宇宙機器産業の売上額は2003年以降は国の予算を下回る状況
- The amount of total product sales in space industry has becomes less than the national space budget after FY 2003.



### 国の宇宙探査に関する方針

### : Government Policy for Space Exploration



- ・宇宙基本計画では宇宙探査について以下のように記述されている
- ▶ 大規模なプロジェクトについては、学術のみの目的では実施が困難になりつつある面があり、 国際協力や産業競争力強化など、多様な政策目的との連携など、プロジェクトの企画・立案や 選択にあたり、学術コミュニティーと政策担当者との十分な検討が必要である。
- ▶ 今後とも一定規模の資金を確保し世界最先端技術の成果を目指す

「宇宙基本計画」(平成25.1)

- "Basic Plan on Space Policy" indicates the followings for space exploration.
- The large-scale projects related to space science and space exploration are difficult to carry out for purely academic purposes. On planning or selecting a project, academic community members and policy makers should examine the project together to link it to various policies, including international cooperation and the enhancement of international competitiveness.
- It is necessary to make full use of the scheme and ensure a constant amount of funds, in order to achieve cutting edge breakthrough.

"Basic Plan on Space Policy" (Jan.2013)

## まとめ: Summary



- ・我が国の宇宙機器産業は官需への依存度を高めている
- ・企業内の従業員数の減少と研究開発費の削減は企業の独自活動を縮小した
- ・ 企業が宇宙探査に独自の資源を投入する余裕は少なくなった
- Recently, Japan's space industry heavily relies on the government demand.
- The reduction of employees and R&D expenditure in the industry caused shrinkage of its own activities.
- These circumstances implies that it cannot afford for the industry to spend its own resources for space exploration.



- ・ 政府計画の長期的な方向性の明示が必要となっている
- ・ 新技術の開発機会を創出するプログラムが期待される
- ・ 国際協力によって各国の宇宙予算の効率的な運用が期待される
- Clarifying the long-term program in the government level is expected.
- Programs promoting development in advanced technology are expected.
- International cooperation is expected for efficient uses of national budget.

### 国際協力への視点 : Aspect for International Cooperation



### ✓ TYPE I

### **International Cooperation**

- Governments Agreement
- Industry Participation by Contracts

### ✓ TYPE II

### **Business Relationships**

- Contracts between Companies
- Buyers and Suppliers Relations

#### TYPE III

#### Other Possibilities

- Mutual Partnership
- Joint Program between Companies

