

JAXA Announced A Long-Term Vision

The Japan Aerospace Exploration Agency (JAXA) announced a long-term vision for the next 20 years in April 2005. The details of the vision can be obtained at the JAXA's homepage (<http://www.jaxa.jp>). A brief introduction is given with key words here.

At first the outlines of this vision is indicated by the key words such as “from overall viewpoint of our country”, “JAXA's own initiative”, “desirable figure of aerospace”, “stimulate broad arguments”, “national strategy”, and “reflect to the national policy”. It is epoch-making that this vision was proposed on JAXA's own initiative. This is why the National Space Development Agency, former of JAXA have never announced such a vision and the vision should have been devised by the Space Activities Commission so far. However, at this time it was proposed originally and without any discussion with other organization. It is expected to stimulate broad arguments based on this vision. In addition, the field of aerospace symbolizes the jurisdiction of JAXA expanding not only space but also aviation, because JAXA was created by three organizations unification two years ago. At all events it is hoping that this proposal reflected to a national strategy and policy.

It is important to recognize that the space development is regarded as a nucleus technology for the sustainable development of Japan. Showing that the space activity is regarded as means of security and problem solution of a nation in many foreign countries, it is expected to discuss such a matter in Japan. In addition, it is described to strengthen a fundamental of a space industrial technology because it is weakened in Japan in particular. It indicates the independent strategic development of the civil passenger plane that has not been started since YS-11 for approximately 40 years more. The development of the aerospace is indispensable to wrestle as a national policy. Therefore it is needed that JAXA has the long-term vision.

The basic principle of the vision is that the space development and utilization as well as aeronautics R&D are essential to achieve policy goals of Japan. Therefore, contributing to solve Japanese significant issues is an important mission for JAXA.

Four objectives are:

- To build a secure and prosperous society by practical use of aerospace technology
- To stimulate hopes of the public
- To develop the capability to carry out autonomous space activities, and
- To enhance a new key industry.

A JAXA symposium was held at Federation of Economic Organizations Hall on April 25, 2005. Mr. Kazuma Yamane, non-fiction writer and a coordinator of the panel discussion, said that he was impressed its idea very different from conventional one, when he saw "JAXA protects Earth and us" on a brochure of this JAXA symposium.

This long term vision has a characteristic to foresee the next 20 years; “To develop launch vehicles and satellites with the highest reliability and world class capability, and contribute to realize rich and secure society. In addition, to promote top science and push forward preparations to original manned space activity and the use of the moon. Furthermore,

demonstrate a hypersonic speed experiment aircraft of Mach number five classes. By these, to contribute for a key industry of aerospace.”

Furthermore, the vision gives 5 concrete ideas in more detail.

- Vision (1): To contribute to rich society by utilizing aerospace technology.
- Vision (2): To contribute to creation of intellect and expansion of an activity domain by researching a mystery and possibility of space.
- Vision (3): To establish Japanese own space activity by the world's best technology, in another word, to develop launch vehicles and orbital transfer vehicles with the highest reliability and competitiveness in the world, and to establish technologies to enable original manned space activity.
- Vision (4): To contribute to growth of a space industry to have autonomous activities and competition in the international market.
- Vision (5): To aim at a breakthrough of the aviation transportation with contribution to growth of aviation industry in the future.

What's more important is that the next 20 years in this vision are divided into two parts. In the first half of 10 years, space development is to innovate space utilization concretely, because space development plan is almost fixed for the next 10 years. In the latter half of 10 years, based on the government direction, take actions toward new space utilization, including the utilization of the Moon, and Japan's own human space activities. As far as an example that it seems to relate to the JFSC is concerned, Information Gathering and Warning System for Disaster and Crisis Management is proposed as shown in **Fig. 1**. This is an integral observation, monitoring and warning system through which anybody, at anytime and anywhere, can be informed about the current situations and predictions of disasters as well as conditions of the global environment.

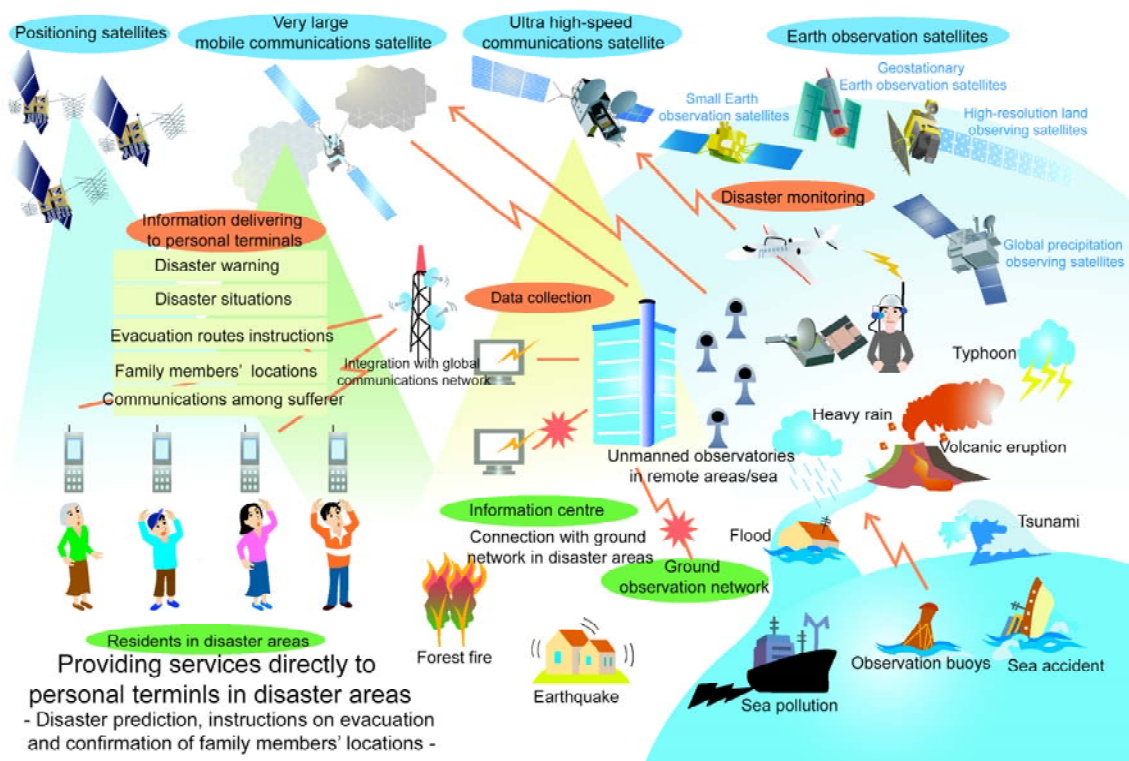


Fig. 1 An Image of Information Gathering and Warning System for Disaster and Crisis Management.

Finally, some cross-sectional actions such as personnel training and international cooperation. JAXA is going to give more effort to personnel training, especially education for children by establishing its Space Education Center in April 2005. The recent children's keeping away from science is said to be a problem, and some actions are performed to prevent it. For example, the simple scientific experiment is carried out to show the children that science is so interesting. I do not deny such an activity, but I was not interested in such experiment at all when I was a child. To watch the real thing is really be interesting. Because space is in particular the best example that to see the real thing is very impressed with its dynamism. So I expect its effectiveness.

As for the budget, the budget of 240-280 Billion Yen will be necessary to conduct the future projects. It seems that this budget is a possible value, because the budget was 240 Billion Yen before it began to be decreased.

A road map as shown in **Fig. 2** is given as the final figure of the JAXA vision.

(Written by T.Iida, Advisor of Editorial Board)

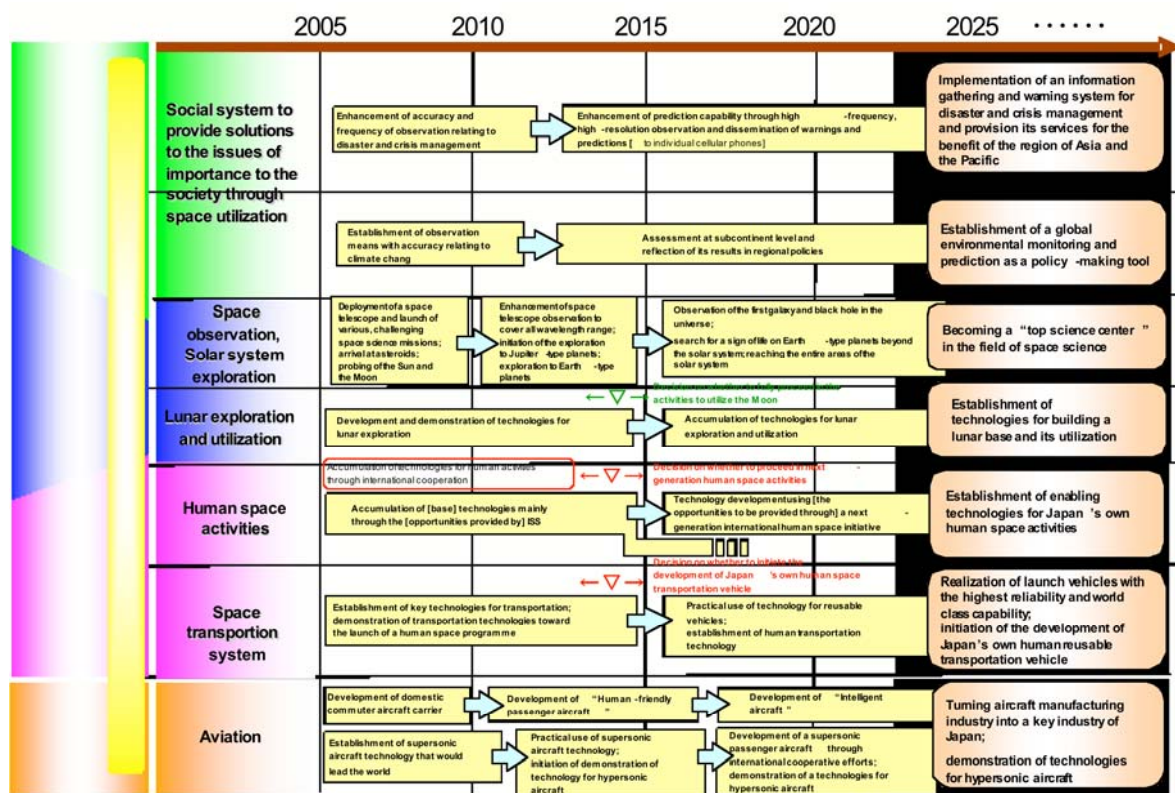


Fig. 2 JAXA Vision Overall Roadmap.