Interview with CEO(33)

Dr. Hiroshi Kimura

President & CEO
Advanced Space Business Corporation (ASBC)

Biography:

1969	Graduated from Kyushu Univ., School of Aeronautical Engineering
	Joined Mitsubishi Electric Corp.(MELCO)
1981	Ph.D. Degree from Univ. of Tokyo
1988-1992	Project Manager, SFU Project, Kamakura Works, MELCO
1992-1995	General Manager, Space Systems Department, Kamakura Works, MELCO
1995-1998	Director and General Manager, Satellite Engineering & Operation Division, Space Communications Corp.(SCC)
1998-2001	General Manager, Space Systems Division, MELCO
2001-2002	Director & Group Executive Vice President, Electronic Systems Group, MELCO
2002-2005	Senior Executive Vice President, SCC
2005	President & CEO, Advanced Space Business Corp. (ASBC)

Interviewer : Takao Ueda, JFSC

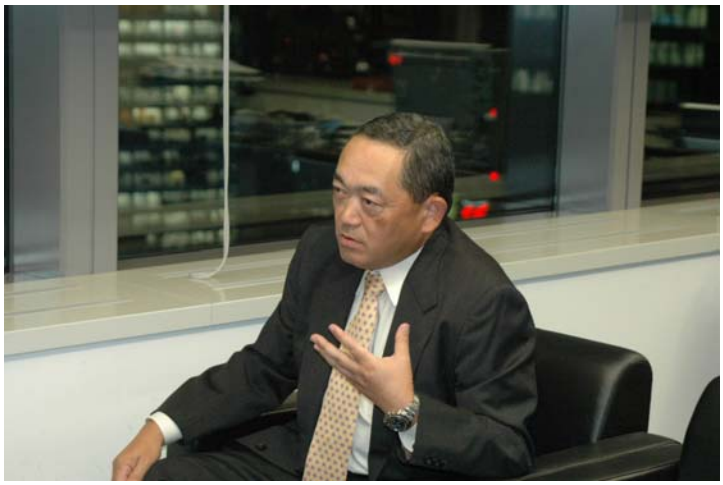
--- Thank you so much for accepting the interview by SPACE JAPAN REVIEW magazine, while you are very busy in your new assignment.
First of all, would you summarize the results of your company's business feasibility study on the quasi-zenith satellite project over the last three years? You had been deeply involved in the project at the initial stage, then, you have worked outside the company for the past three years. What do you think of developments in the project during that period?

Kimura : This year marks the third anniversary of the establishment of Advanced Space Business Corporation(ASBC) on November 1, 2005. I am very pleased that it has now been decided to promote the quasi-zenith satellite system (QZSS) as a national project, through the joint efforts of the public and private sectors. First, the project was proposed by the private sector. Then, the project was given the highest priority by the Council for Science and Technology Policy. In addition, through the alliance of Congress members of Liberal Democratic Party (LDP) and discussion at the LDP joint sectional meeting, satellite positioning systems have been ranked as a key national infrastructure, and it has been decided to establish a reliable and accurate satellite positioning system. I think this successful result is due to the LDP's strong leadership.

Japan is the world's largest user of satellite positioning systems, and such systems are now part of the everyday indispensable infrastructure of the country. Hence, it is a matter of course that Japan also has responsibility to secure and maintain such systems. I think the progress described above is surely an outstanding achievement, in view of the benefits Japanese people can obtain from satellite positioning technology and the development of

new industries based on this technology.

ASBC has contributed substantially to securing the frequencies used in quasi-zenith satellite positioning, communications and broadcasting, in order to promote the use of frequencies allocated to Japan for non-geostationary satellites. The company has also confirmed that the necessary infrastructure can be established, in harmony with the research and development that are carried out by the Japan Aerospace Exploration Agency (JAXA) and other governmental organizations. Moreover, ASBC has devised a model in which projects are divided into infrastructure and service fields, to facilitate the participation of private-sector companies, while clarifying the division of roles between the government and the private sector.



--- You were appointed as the second president of ASBC. What is the first issue you want the company to tackle? Tell us about your aspirations as the new president.

*Kimur*a: Already four months have passed since I assumed the presidency, and since then, I have constantly been embarking on new challenges every day. Now, I am aiming to "establish infrastructure for using space, so that the QZSS can really contribute to the safety and security of the public and also revitalize industries." I strongly believe that Japan is an advanced country in the field of space technology, and the success of the project will be a key test case for passing the benefits of this technology onto the people in a quick and comprehensive fashion.

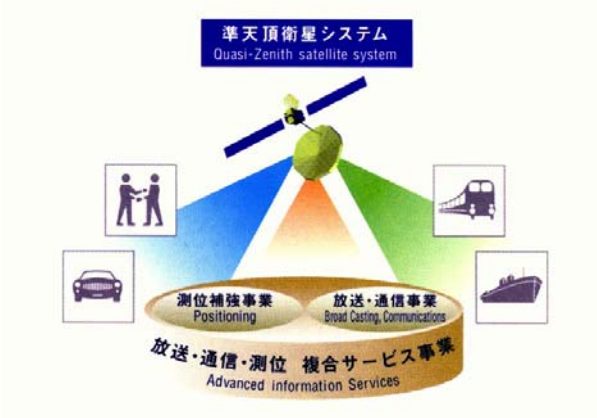
Of course it will be important to make the business profitable once space technology has been commercialized. At the same time, I want the QZSS to become a source of Japanese vitality, as a lasting and innovative system. Such a system will be achieved by making full use of the advantages brought about by "combining national infrastructure and private-sector activity": continuing the business; reducing costs; and utilizing cutting-edge technologies, including those for ground systems.

The immediate issue for the company is to transform ASBC, now just a business planning company, into a business operating company, and then start up a new enterprise through the joint efforts of the public and private sectors. We are now in the final stages of doing this, and we are working out the details with relevant organizations and other companies.

--- ASBC has been operating as a business planning company for about three years. How do you expect to turn ASBC into a business operating company and develop and commercialize systems by sharing funds with the government? Please include the schedule for doing this in your answer.

Kimura: It takes time to build infrastructure for using space, as the process for doing so involves several steps, including the launch of satellites, verification of related systems in space, and the start-up of businesses. Nevertheless, we will implement Japan's first space project supported by private activities, with the belief that we will surely succeed. It is vital to launch the satellites by 2009, to meet the deadline for filing frequencies to the ITU. With the government requesting that the budget applications for next fiscal year be submitted, it is necessary to build a joint business scheme between the public and private sector that

enables a smooth execution of the budgets. To this end, the private sector is preparing for the launch of a corporation by June 2006.



Quasi-Zenith Satellite System Concept

--- With regards to the high-precision satellite positioning business, of which much is expected, how do you think manufacturers should develop necessary technologies and open up new avenues of use, as well as proposing this business to the government?

Kimura: Since the ASBC was established, the "QZSS Project Promotion Study Group" has been regularly convening, under the auspices of the Japan Business Federation, to elicit opinions about high-precision satellite positioning from the private sector, explore fields where related technologies are applied based on these opinions, and, when necessary, put together proposals to offer to the government.

We will work on the development of technologies and their applications, by regimenting the private sector's collective opinions obtained through working groups that we will form within the "QZSS Project Promotion Study Group." The working groups consist of participants from private-sector companies in a wide variety of fields.
In cooperation with the "Japan GPS Council" and the "NPO Research Forum on Social Infrastructure for Advanced Positioning", we will clarify issues to be tackled and seek action from related offices about the promotion of projects through cooperation between industry, academia and the government. Thus, we will promote collaboration with the government.

--- How are you promoting the development of terminals on the ground for users, which are indispensable for the success of commercialization?

Kimura: Application of ground terminals will include cellular phones, measuring equipment and automobiles. But these are ultimately only examples, and from now on we will create and improve an image of the products that users want. We explained the details of this at the "QZSS Project Promotion Study Group" held on Oct.17th. In order to bring about terminals on the ground that would be used widely in society, we think it is necessary to raise our awareness of jointly developing related technologies, through consortiums, forums, and the like. This will enable us to develop the necessary components, while sharing the image of the terminals on the ground.
We have just made the first step toward this.

--- What convenience or merit can be obtained by commercializing this project, from the viewpoint of ordinary people's lives or national security? Please give specific examples.

Kimura: Japan currently receives the benefits of the global positioning system (GPS) operated by the U.S., whose accuracy of positioning is said to be around 10 meters. The largest merit of using the QZSS is that this accuracy will be dramatically improved, to levels of submeter, decimeter and centimeters. In the future, Japanese satellite positioning is expected to have autonomous ability, as they are improved and advanced. If this happens, even if U.S. systems are not available, Japan will still be able to obtain positioning data

from its own systems. Furthermore, we can build, for example, a system that integrates positioning information about mobile objects, by combining communications functions, a feature of the QZSS. This will enable us to make remarkable advances in risk management, and improvement for the safety and security.

--- How about the possibility that the present project would develop into an international project in which Japan cooperates with, for example, the Asia-Pacific countries and regions, as was the case with the satellite-based mobile broadcasting service?

Kimura: Given that the functions to complement positioning systems now can be used for Asia and Oceania, international cooperation concerning the project is in sight. Alliance with countries and regions in Asia and Oceania on the project often becomes the subject of talk in the space development sector. I would like this to be realized somehow.

--- We know you are very busy with many things every day, but tell us about how you spend your holidays and other free time

Kimura: On holidays, for my health, I spend a lot of time playing golf outside, and also looking for golf balls among the trees. However, I am starting to think that I should also spend such time more calmly making the rounds of hot springs, museums and so on.

Dr.Kimura and Mr.Ueda after interview