

Organizer's report of JC-SAT 2002

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AIAA Japan Forum of Satellite Communications and SAT (Satellite Telecommunications Technical group of the Institute of Electronics, Information and Communication Engineers (IEICE)) held a two-day conference with KOSST (Korea Society of Space Technology) on October 10-11, 2002 at Lotte Hotel in Daejeon, Korea. This conference, named the 2002 Joint Conference on SATellite Telecommunications (JC-SAT 2002), was co-sponsored by IEEE VTS Japan Chapter, ETRI (Electric and Telecommunications Research Institute, Korea), KARI (Korea Aerospace Research Institute), IITA (Institute of Information Technology Assessment, Korea) and KICS (Korean Institute of Communication and Sciences). The purpose of JC-SAT2002 is to exchange technical information and encourage research and development efforts through presentations and discussions.

After the successful launches of the 3-ton class communication and broadcasting satellite, KOREASAT-3, and the multi-purpose satellite KOMPSAT-1, Korea is not only developing onboard equipment and satellite bus technologies, but also focusing on the development of a satellite communication network and satellite terminals. In Japan, after the successful launch of the H IIA experimental rocket at the end of August in 2001, followed by the successful launch of the commercial rocket in last September, the country has just entered the commercial service of launching satellites and been steadily deploying services such as contents delivery by using 14 communication and broadcasting satellites. In addition, it recently proposed the quasi zenithal satellite system, a kind of highly elliptical orbit satellite system, which originated in Japan and has a possibility of expanding service area into other parts of Asia and the Pacific region. The globalization trend has fostered greater cooperation within the international satellite community to make the best use of the strong point of satellite communications: wide coverage area. In this light, the joint conference was a very informative, worthwhile opportunity for developing relationship.

The conference's opening addresses were made by Dr. Seong Jong Chung, President of KOSST



Dr. Takeshi Mizuike in his opening address.

and Dr. Takeshi Mizuike, Chairman of SAT. Following the keynote speeches from Emeritus Prof. Soon D. Choi of KAIST (Korea Advanced Institute of Science and Technology) and Dr. Hideki Mizuno of NTT DoCoMo, 35 papers were presented in eight sessions. In the keynote speech from Korean side, it was announced that Korea is planning to launch 20 satellites of 1.5-ton class by 2015 and also enhance engineers and facilities, showing its enthusiasm attitude for a space development as a nation in order to become an advanced country of a space development field. Those papers covered a wide variety of research topics, such as status of the Japanese and Korean R&D for space technologies, new satellite systems such as Next generation Leo System (NeLS) and WINDS (Wideband InterNetworking Engineering Test and Demonstration Satellite), development and design of KOMPSAT-2, a successor of the multi-purpose satellite KOMPSAT-1, experimental results of FTP and HTTP transmission and development of mobile multi-cast service using KOREASAT-3, onboard digital processing technologies, and so on. These papers showed both Japanese and Korean status of current R&D for satellite communications. On top of that, at this conference, there were two participants from US who presented a broadband satellite service for aircrafts. The details of papers on these topics are reported in the Technical Report of IEICE.

There were about 60 attendees at the conference including 30 from Japan. The conference was a great success due to the high

Conference Report

level of the discussions.

At the reception on the first day, attendees could discuss the topics and possible future collaboration. It was emphasized that the close relationship between Japan and Korea should be strengthened in 2003 to ensure the success of future satellite communications technologies and business.

Japan will hold the next joint conference in 2003. Details have not been determined yet; they will be announced on the home page of the satellite telecommunication technical group of IEICE (<http://www.ieice.org/cs/sat/jp>). Inquiries by email are also welcome (sat@ieice.org).