Interview With CEO"



Kiyoshi Isozaki, President & CEO JSAT Corporation

In this interview, Yoshiaki Suzuki, Executive Director, Wireless Communications Department, the National Institute of Information and Communications Technology (NICT) and former head of the editing committee for this magazine, talks with Mr. Kiyoshi Isozaki, President and CEO of the revitalized JSAT Corporation. Topics include the launch of Horizons-2—JSAT's second satellite in its joint venture with PanAmSat Corporation—and other global strategies. President Isozaki also shared his thoughts on future space development strategies, the need for hybrid satellite networks and other issues.

SJR: First, I would like to thank you for taking time to appear in our "Interview with CEO" segment. I'd also like to say how much we appreciate your leadership as vice-chairman of AIAA JFSC.

As you know, SJR is an industry publication for technical communication created by AIAA Japan Forum Satellite Communications, a subcommittee under one of the American Institute of Aeronautics and Astronautics (AIAA)'s technical committees on satellite communications. Initially, we were published in hard copy, but now SJR is an electronic publication distributed over the Internet. In this segment, we discuss the strategies and ambitions of those involved in the world of satellite communications, namely satellite communications operators and CEOs of communications satellite development companies, providing a point of reference for AIAA members and SJR readers. SJR: First, please tell us briefly about yourself and JSAT's recent activities. Isozaki: I joined JSAT three years ago, but the Company's has been around for 20 years now. JSAT wouldn't be where it is today without the dedication of all of my predecessors. I imagine the first decade or so in business was pretty tough as they worked to reduce accumulated losses and faced other challenges. From that point through to 2003 marked a period of growth that, among other accomplishments, saw JSAT attain a TSE First Section stock listing in August 2000. Today, we're in a period of competition with fiber optics, ADSL and other new media formats. Right now, a key topic for management is supplementing the four pillars underpinning the priority policies we've pursued so far, essentially initiatives for the DTH, cable television, global and mobile services market sectors, with a fifth pillar embodying initiatives for the increasingly important public sector. Currently around 4% of our sales are from the global sector, while the domestic sector accounts for 96%. This suggests that the global sector promises much more room for future growth.



Mr. Isosaki, CEO JSAT and SJR Mr. Suzuki, Interviewer

SJR: JSAT is said to have launched Japan's first commercial satellite communications service and is now Asia's largest satellite communications operator. How did these accomplishments come about?

Isozaki: JSAT started out in 1985 as Japan Communications Satellite Company Inc. That company merged with Satellite Japan Corporation in 1993 to form Japan Satellite Systems Inc. In 1995, that company obtained an international telecommunications business license. The following year, "PerfecTV!" began full-scale digital broadcasting services, marking the start of digital satellite broadcasts using the JCSAT-3 satellite. In 1998, PerfecTV Corporation and Japan Sky Broadcasting Co., Ltd. merged, giving rise to SKY Perfect Communications Inc. Digital satellite broadcasts also commenced using the JCSAT-4 satellite as the shift from analog to digital gained momentum. Looking back, the first ten years were certainly a hectic time for JSAT.

SJR: I'm sure there was a host of difficult challenges initially as Japan's first satellite communications services got off the ground. Can you please tell us more about the background to this and other issues, such as choosing communications frequencies or attracting customers?

Isozaki: From what my predecessors have said, it was tough proposing applications using expensive satellite links, where transponders cost ± 600 million each. Outside of bulk contracts to Type II telecommunications carriers, it was an era where most of JSAT's business centered on in-house satellite networks for major corporations. So JSAT first began proposing methods of using these networks. It was a demanding period where hard work was needed to explain basics like the advantages of broadband communications, a defining feature of satellites. From there we entered an era that saw increased demand from terrestrial TV stations, CS television broadcasters and other operators. Today, JSAT once again finds itself in a period where its earliest business plans and methods, such as proposing new applications and providing satellite communication facilities, will come into play.

SJR: JSAT seems to have moved quickly to launch international satellite communications services, broadening its business expansion framework beyond just Japan. What can you tell us about the current state and future of satellite communications services in the Asia-Pacific region?

Isozaki: Compared to Europe and the U.S., satellite communications services in the region still have room to develop in the field of

multi-channel broadcasting services. In contrast to European and American operators, the Asia-Pacific region is structured such that each country has its own "flagship satellite operator." This essentially makes the region less open to corporate integrations through M&As based on a purely capitalist approach, as is done in Europe and the U.S. Hence, I believe it's critical to establish partnerships that respect flagship satellite operators. At the same time, price-based competition for transponders among satellite operators is fierce.

SJR: Despite the constraints of operating a business requiring the approval of national governments, JSAT has joined forces with PanAmSat to establish Horizons Satellite LLC, and is moving ahead with developing its business worldwide. Please outline any subsequent developments and your global strategies. How do PanAmSat and JSAT complement one another? Isozaki: International strategies in Europe and the U.S. usually take the form of partnerships. With this approach, the most important basics are trust between the companies and complementary relationships. The Horizons Satellite project with PanAmSat is a collaboration that combines that company's sales capabilities with JSAT's fund procurement strengths. Right now Horizons-1 (127 degrees west longitude; launched in 2003) is performing extremely well. U.S.-based subsidiary JSAT International Inc., responsible for sales of satellite links using Horizons-1, is already making a profit. Applications mainly consist of HDTV transmissions, basic transmissions and transmissions for CATV, all in North America. The satellite is also effective for other tasks, including the transmission, via Hawaii, of content from the U.S. to Japan. In June 2005, we signed a master agreement on the second phase of this joint venture project, Horizons-2 (74 degrees west longitude; scheduled for launch in 2007). The accomplishments and trust we've built with Horizons-1 enabled us to reach an agreement very quickly.

SJR: Do you intend to expand the collaboration with PanAmSat to include Europe and other regions?

Isozaki: Collaborations between companies must be founded on trust. If that exists, then expansion in Europe, Asia and elsewhere will surely open up more business opportunities.



Overall Direction for Key Actions by Mr. Isosaki, CEO of JSAT

SJR: Japan's neighbors China and India are vigorously pursuing their space development programs, and in light of what you've said about partnerships in Asia, what is your view on guiding the development of the satellite communications business in the Asia-Pacific region, and what room do you see for growth in demand and further progress?

Isozaki: We visit Asia several times a year. The region has a plethora of markets, but China's is tightly regulated, making entry difficult. While I think it will be tough to find opportunities to enter directly if our focus is on transponder sales, we'll keep a close eye on trends in deregulatory policy as we search for opportunities to gain a foothold. India is another country where price-based competition is a real barrier to entry, making direct business dealings difficult. However, we are focusing on providing satellite services via sales agents in Asia.

Suzuki: Actually, I'm off to India on a business trip tomorrow as part of Internal Affairs and Communications Minister Taro Aso's entourage to encourage partnership between Japan and India in the satellite communications field.

Isozaki: Then you'll have the perfect opportunity to do a survey of

deregulation trends there. I can't wait to talk when you get back! (both laugh)

SJR: Right now, the WINDS Program and others are headed in the direction of satellite-based broadband services. What sort of strategies do you have for competing with fiber optic communications?

Isozaki: In the 1980s and 1990s, most of these services were offered via satellite only. Then came fiber optic communications and mobile services. We will be promoting hybrid networks that combine satellites and fiber optics, satellites and mobile units, satellites and wireless, and other options. As we do so, networks that take advantage of the strengths and features of satellites will gain ground.



JSAT Fleet for Satellite Communications

SJR: Broadcasting is one major application of satellite communications. JSAT provides the SKY PerfecTV! broadcasting service using a communications satellite, and operates a communications satellite in a 110° east orbital slot. What trends do you foresee in satellite operation and what are your thoughts on the convergence of communications and broadcasting?

Isozaki: SKY PerfecTV! currently has 3.8 million subscribers, which is only about 8% of Japanese households. That's a very small number indeed when compared to the DTH population in Europe and the U.S. Add cable TV transmissions and the number of multi-channel subscribers is still

probably around 7 million. While this may indicate that programming from NHK and private-sector terrestrial broadcasters suffices for most, I think that sales policies for CS antennas and tuners have also had an impact. If set-top boxes for DTH allowing broadcast images to be temporarily stored for later viewing become available, and programming requiring special features and interactivity or other needs become more diverse, even more business opportunities will materialize for SKY PerfecTV! and 110 degree satellite broadcasts.



At Reception Desk of JSAT Headquarter

SJR: The shift to hybrid networks combining satellite communications with other kinds of networks, including terrestrial lines, will be a key theme. What is JSAT's strategy?

Isozaki: Fiber optics and ADSL both suffer from the "last one mile" problem and other issues that make building a nationwide network that covers Japan a financially daunting task. However, nationwide coverage can be achieved by using satellites to cover areas that cannot be reached with fiber optics or ADSL. There's also promise for combining satellite and wireless formats, such as Wi-Max. Meanwhile, hybrid networks can also be applied to asymmetrical communications links for auction and other networks, where downlinks must be high speed, but uplinks can be slower. What's more, the rising efficiency of CS transmission technology for

HDTV is bringing CS transmission of terrestrial digital broadcasts and other new initiatives into view.

SJR: You once spent some time at NTT. Can you tell us about any collaborations and domestic strategies with the NTT Group?

Isozaki: JSAT and NTT have had cooperative ties since JSAT's inception. The relationship runs deep, with JSAT supplementing NTT's terrestrial network with satellite coverage and providing backup links, among other tasks. Other new cooperative relationships have just gotten under way with the transfer of the NSTAR-a and b satellites, a share acquisition and other developments, paving the way for realizing similar relationships in fiber optics and a diverse array of other fields. We're not talking about simple initiatives here. We're envisioning "triple play" fields combining communications outside of DTH with broadcasts and video content. All of these options will be explored going forward.

SJR: At AIAA Japan Forum, we're striving to predict future developments in the satellite communications business, including competition between satellite Internet, mobile communications and fiber optics, as well as developments in satellite communications technology. As Japan's space development program moves forward, what kind of technological developments are you hoping will emerge?

Isozaki: There's a limit to the kind of services available only through satellite transponders. Combining satellites and other applications is crucial, as is proposing systems that include application terminals. Business models that only consider rockets and satellites are probably behind the times. Satellites are part of numerous systems, from broadcasting to mobile services, communications, and remote sensing, as well as positioning and land-, sea- and air-based measurement systems. What I would like to see is technology development on systems that combine satellites with other applications and media.

SJR: In closing, AIAA Japan Forum will be a full-fledged partner at AIAA ICSSC 2005, being held this September in Rome, Italy. We plan to ask Yutaka Nagai, senior executive officer of JSAT's Engineering Group, to serve as session chairperson, and hold a seminar on satellite

communications. Once again, I'd like to thank you for your cooperation. Isozaki: On behalf of Mr. Nagai, who besides leading our Engineering Group is also one of JSAT's senior executive officers, let me say that when it comes to the satellite communications field, we are always more than happy to cooperate.

SJR: I thank you again for your cooperation and dedication to the development of satellite communications. I appreciate your taking time out of your busy schedule to meet with me today.

(Editing by: Dr.Susumu Kitazume, Executive advisor for Editorial Committee)

Please see the next page showing Résumé of Mr. Isosaki, President and CEO of JSAT



Mr. Kiyoshi Isozaki

President and CEO, JSAT Corporation

Birthday and Birthplace February 23, 1946, Tokyo, Japan

EDUCATION

Mar. 1968 Graduated from the University of Tokyo

BUSSINESS CAREER

Apr. 1968	Joined Nippon Telegraph and Telephone Public Corporation
Feb. 1977	Senior Assistant, Corporate Planning, development of governmental
	online management systems
Feb. 1981	Senior Assistant to Director General, Visual Communications Systems
	Group Engineering Bureau, "Captain System"
Apr. 1985	Senior Manager, Plant Planning Department, Tokyo Regional Headquarters
Jun. 1988	Chief Director, Public Enterprise Department, NTT Data Corporation,
Feb. 1991	Chief Director, Software Development Department
Jun. 1995	Vice President, Executive Manager, Sales and Marketing Department,
	Business Communications Headquarters, Nippon Telegraph and
	Telephone Corporation,
Jul. 1997	President and CEO, NTT Worldwide Telecommunications Corporation
Apr. 2001	Member of the Board and Senior Vice President,
	General Manager, Data Center Business Division,
Dec. 2001	Member of the Board and Senior Vice President, General Manager,
	Corporate Users Business Division, Data Center Business Division
Jun. 2002	Member of the Board and Executive Vice President,
Jun. 2003	President & CEO, JSAT Corporation
	*NTT was reorganized in 1999 into 4 corporations: