

**Mr. Mike Pley**  
President and CEO,  
COM DEV, Toronto Canada



**I**n our interview, COM DEV President and CEO Mr. Mike Pley speaks passionately about his business strategies for worldwide satellite communications in All of frequency band for broadband applications.

Space Japan Review (SJR): Thank you for taking time from your busy schedule for this interview. We appreciate the contribution you've made to AIAA-JFSC.

Space Japan Review (SJR) is a technical communications journal published by AIAA Japan Forum on Satellite Communications (AIAA-JFSC), a subcommittee of the American Institute of Aeronautics and Astronautics (AIAA)'s Technical Committee on Communication Systems (TCCS). It was initially published in hard copy, but is now distributed electronically over the Internet. This column provides an opportunity for CEOs of communications satellite development and manufacturing companies and satellite communications providers around the world to discuss their strategies and aspirations, serving as a reference for AIAA members and SJR readers. COM DEV was established over 35 years ago. Today we'd like to discuss your strategies for the satellite communications System worldwide.

First of all, please give us a quick background on yourself and COM DEV and an overview of your strategies.

Mike Pley: I graduated from McMaster University in Ontario with a combined Business and Engineering degree and have been in the space business for over 25 years now. At COM DEV I have progressively moved from an initial engineering position, through sales and program management, to CEO in late 2010. I am a member of the Advisory Board to the Dean of Engineering at McMaster and I actively participate on the Ontario Government's Manufacturing Council.

We have been a leading manufacturer of spaceflight equipment for more than 30 years and have diversified our customer base to include commercial, civil and military satellite markets. We are proud to say that we have supplied equipment on over 850 satellites. Also, we are now providing space-based data services derived from our own small satellites.

SJR: COM DEV started over 35 years ago as microwave equipment development manufacturer for satellite communication especially space qualified microwave static device like filter, multiplexers, switch and so on. It seems you now have a unique mission of “making space technology more affordable, accessible and useful to millions of people on Earth” through your Satellite onboard equipment. What is your policy and strategy of business development in this field?

Mike Pley: Our business model is unique because we have a small number of Customers – usually the satellite prime contractors or Space Agencies. Over the years we have developed very close relationships with our customers at all levels. We spend a lot of time to carefully understand their requirements, align our R&D plans with their needs, and ensure we bring our customers the best value and highest quality.

SJR: How do you expand your business fields? What is your strategy to taking them into your company for both development activity and business proceeding?

Mike Pley: Historically COM DEV has primarily focused on the commercial satellite communications market; in the last few years we have diversified into parallel space markets such as civil and military. In this way we have achieved a good balance and this has served to expand our product portfolio at the same time. The strategy is to ensure our internal resources match our customers’ future needs with respect to the various technologies. We have expanded far beyond specialized microwave filters and currently produce complex optical and electronic systems.

SJR: Could you introduce the main performance advantage of sophisticated satellite onboard equipment including millimeter wave and optical which your company could supply, And how do you expand your capability for markets worldwide?

Mike Pley: We try and partner with our customers and the Principal Investigators on our government science programs to achieve a technical solution and at the same time offer as much flight heritage as we can to minimize their risk. We participate in early studies and concepts, with the hope of ultimately winning a contract for the production of satellite hardware. A good example is the very sophisticated work we are doing for NASA’s James Webb Space Telescope (JWST) with our customer, the Canadian Space Agency. Our space flight equipment ranges from digital electronics through millimeter wave to integrated optical systems.



Fig. 2: Com Dev Facility at Cambridge

SJR: Now, you have launched couple of AIS-Satellite in the orbit in order to proceed the service of AIS data distribution in the world wide. Please explain your ambitious plan.

Mike Pley: We determined there was a need for highly reliable and accurate vessel tracking on a worldwide basis. We constructed and launched a technology demonstrator nanosatellite (EV0) to prove the concept, and now we have an additional five microsatellites on orbit providing this service. Before the end of 2011, we plan to have one more on orbit. Our plan is to deliver superior service on a global basis by using our patented signal decollision technology. Our promise is “every ship, every time”. This unique service pro-

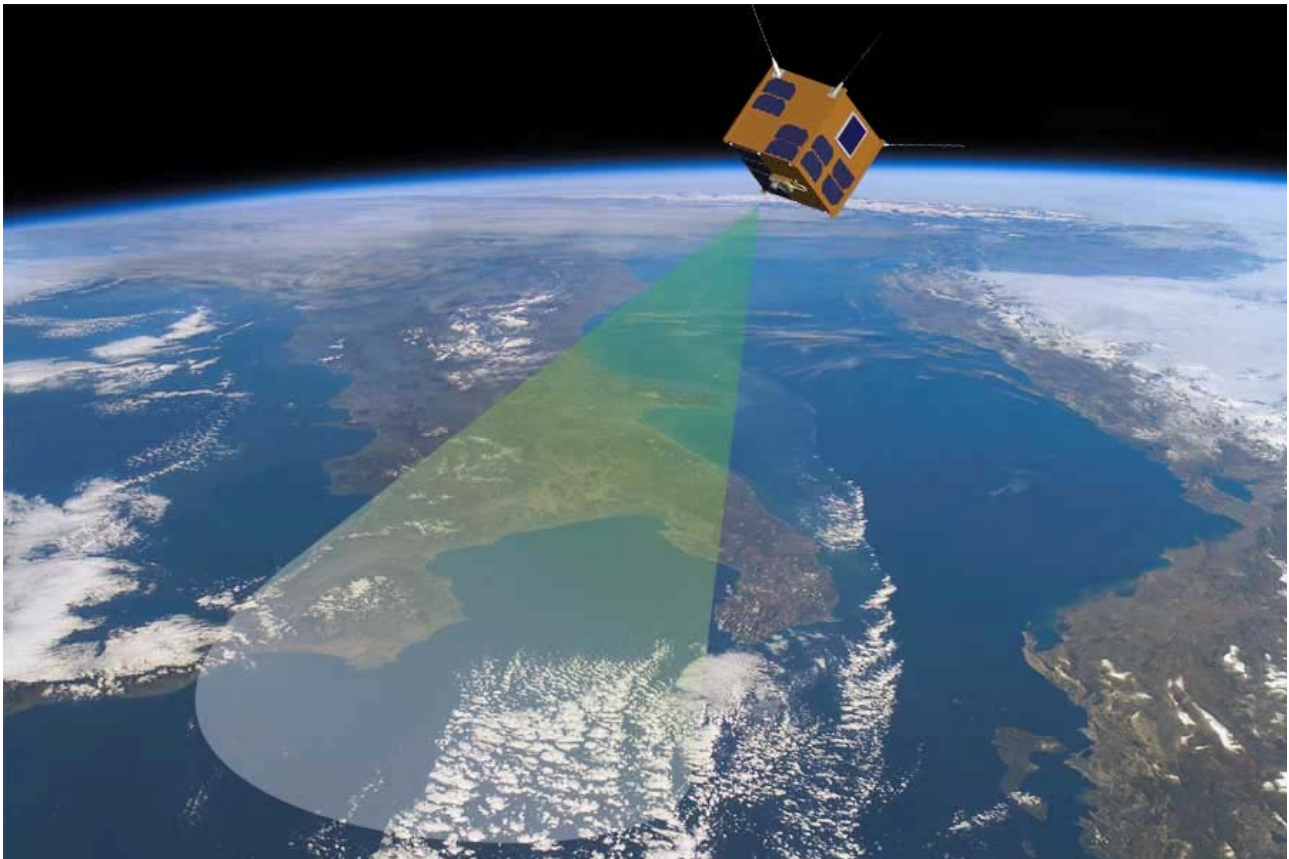


Fig. 3: View of AIS-S Satellite in Orbit

vides governments and agencies the opportunity to track maritime traffic in a very cost-effective manner. We are addressing four main markets: Search and Rescue, Environmental Protection, Security and Surveillance, and commercial Ship Reporting.

**SJR:** What gave you energy to succeed in the new field of Satellite business development and which market area is your company focused on as an initial starting point, and how did you get the resource and educated manpower?

**Mike Pley:** When we located in Cambridge Ontario on 1980, we chose our location primarily based on the proximity to very good local colleges and universities—9 in total within 100 kms of Cambridge. We are an engineering company and we knew as we grew the company that we must attract the best talent possible. This has proven to be an excellent strategy. You have to remember that back in the late 1970s commercial satellite communications was in its infancy and it was a very exciting time for young engineers to join COM DEV and participate in this new and growing business.

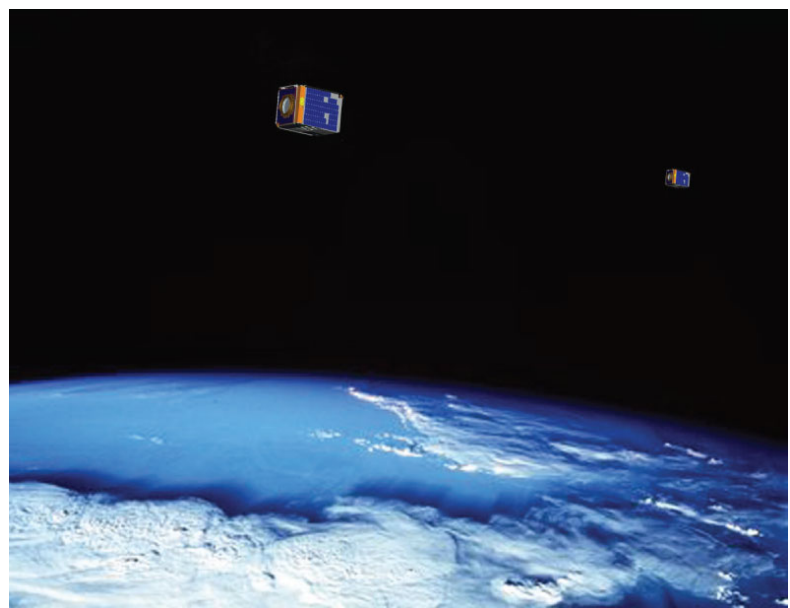


Fig. 3 (continued): View of AIS-S Satellite in Orbit



SJR: What are your next series of business development initiatives world wide? And what are your international business development strategies including Japan?

Mike Pley: In addition to COM DEV's core business areas, our future worldwide plans are to capitalize on the emerging markets, such as Brazil, Russia, India and China through partnerships that allow us to access these customers. We have a good relationship with the Japanese prime contractors, who are expanding their activities into export markets.

SJR: Could you introduce your Cambridge Facility in Canada Toronto to our readers in Japan who are interesting in the excellent performance of satellite communication equipment manufacturer.

Mike Pley: The heart of our operation lies in the 280,000 sq. ft (26,000 sq. meters) facility in Cambridge that has steadily grown over the years. Even though we are an "engineer-to-order" company, we have embraced Lean Operations, a philosophy that allows us to reliably realize custom designs in a very cost effective manner. As an independent supplier we must add value and this is critical because we often compete with the in-house capability of satellite prime contractors.

SJR: your company has developed key onboard equipment for Japan's satellite project named WINDS that is the high-speed Internet satellite, and now working on Earthcare Japanese project. What do you think about Japanese satellite project? What your strategies are for cooperating with them?

Mike Pley: WINDS is one of many ambitious programs that the Japanese government has invested in with a view to provide a long term benefit to people of Japan. We were honored to hear that the satellite was used for direct communication in distressed areas after the tsunami temporarily affected the terrestrial network. We also supplied ship data from our exactEarth satellites at no charge during that time, which was greatly appreciated by Japan. Our strategy for cooperation is to look at technologies that we have developed



Fig. 4: Sky view of Cambridge Facility in Toronto Canada

uniquely for Canada, and apply them to opportunities in Japan.

SJR: the Basic Low and Basic Plan for Space Policy in Japan was established 2008 and 2009 respectively and new activities in the field of space development are expected to open worldwide, what is you and COM DEV's strategy to get in this field opened ?

Mike Pley: Clearly the space business has become a global industry and space is now understood to be part of the global infrastructure, complementing other technologies. Our strategy is to participate where it makes sense, where we can add value to Japanese activity. This is exactly the case with the Earthcare program, where COM DEV leveraged its experience on NASA's Cloudsat program.



Fig. 5: Interview with CEO Mike Pley

SJR: On the whole business is growing steadily, and although the share price has not performed well in general, perhaps due to the fallout from the subprime loan crisis in the U.S and currently EU crisis in addition to that, Current earthquake disaster in east part of Japan. You've been proactive in your investor relations program and other activities. What successes and setbacks have you had in this regard?

Mike Pley: Over the past years, we were concentrating on growth and revenue generation and therefore not necessarily realizing optimum returns on all programs. We have recently sent a message to the investment community that we will now only accept work that has reasonable profit margins, a strategy that we are confident will manifest itself in a higher share price.

SJR: The AIAA Japan Forum tries to keep abreast of developments in the satellite communications business, such as competition among satellite Internet, mobile communications and fiber optic service providers, as well as remain up-to-date on the state of R&D for satellite communication. What sort of technological development do you think is necessary for Japan's space development in future? We appreciate your kind suggestion to our reader.

Mike Pley: R&D should be deployed to satellite projects where they can provide cost effective solutions, compared to terrestrial solutions. Currently there is a great interest in moving from large monolithic satellites to constellations of small satellites working together. We believe that there is a future in small satellites & microsatellites to provide unique services, similar to S-AIS (Space-AIS) to governments and industry worldwide.

Also, all governments today are under fiscal pressure, so it only makes sense that international partnerships are formed for important space science, earth observation and communications missions, rather than a single government funding all aspects.



Fig. 6: Visitors from Japan



Fig. 7: Key Person in marketing activity  
(Mr. Sid Rao)

SJR: Finally, the AIAA Japan Forum is providing wide-ranging support for the AIAA ICSSC conference. AIAA Japan Forum has planned to perform the AIAA ICSSC 2011 to be held in Nara Japan in this autumn. We look forward to your support.

Mike Pley: We have been actively involved in the AIAA for years and look forward to participating in this prestigious event.

SJR: We hope you will continue to cooperate with us in the development of satellite Broadband communication Systems. Thank you for taking the time to talk with us today and for support to previous issue of our SJR by your executive.

**(Planning & Editing: Susumu Kitazume, Special Editorial Advisor)**