BF for Rotary Speech Mar 21 83

Spar
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Space & Electronics Group

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Dr. P.A. Lapp
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Dear Phil:

We had talked a few days ago about your upcoming Rotary Club circuit. In my view you are closest to Spar's most exciting project in a public interest sense - the inquiry into Canadian participation in a future space station. Indeed, that's a theme I'd like to pursue once your report is in hand.

Nevertheless, on the broader issue let me share with you the remarks Larry Clarke will be making to a conference in June. These represent Spar's views on the needs for a Canadian space program and in whatever way they suit your own talk, may be interwoven in the presentation.

Soon we shall also have a new Corporate film* which you may wish to borrow on your foray.

All the best,

Chris

Christopher G. Trump
Executive Assistant to the Chairman

CGT/nc
encl.

* end of March, I hope

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THE CANADIAN SPACE PROGRAM -- A MANUFACTURER'S VIEWPOINT

Notes for remarks by L. D. CLARKE, Chairman of the Board and Chief Executive Officer of Spar Aerospace Limited at the plenary session of the First Canadian Domestic and Communications SATELLITE COMMUNICATIONS CONFERENCE -- Ottawa, June 15, 1983

It has often been said that humor speaks volumes with a soft tongue. So, if you will permit, let me begin my brief remarks with a story which -- while apocryphal -- is illustrative of a point I would like to make.

A manufacturer had decided to switch pension plans from one to which employees contributed, to a fully-paid plan that would go into force when all employees signed an agreement for the change. All had signed save Willy -- an old-time, trusted employee who would have no part of the new plan. His foreman pleaded with him to no avail. Willy simply wanted nothing to do with something that he saw as yet another socialistic plot. The matter went up the line to the plant manager and then to the vice president of personnel. All made the same entreaty, pointing out that the new plan would provide better benefits at no cost. Willy would have no part of it.

Finally he was called into the chairman's office, who greeted him from behind his big mahogany desk. He looked Willy right in the eye, handed him a pen and pushed a piece of paper at him: "Willy, I want you to sign this ... or you're fired." Without a word Willy picked up the pen and signed.

Somewhat taken aback the chairman said: "What am I to make of this? The foreman asked you, the plant manager asked you and then the vice president for personnel. Each time you refused. Just what made you sign now?" Willy thought for a moment and replied: "Well, sir, they just never really explained the program to me!"

In some respects Will's dilemma is similar to the one experienced by Canadians regarding our own space program. Many, both in government and industry, have made eloquent statements about the benefits of the space program: That domestic communications satellites draw closer together our farflung nation with cost efficient telephone and television transmissions; that other satellites, such as navigation, weather, land resource and search and rescue spacecraft, hold the promise of bettering our condition here on earth.

But somehow these rationalizations -- factual as they are -- fall short of the larger importance of the space program. They make the points made by Willy's foreman, manager and vice president -- but miss the one made by the chairman.

Canada was the third nation in the world to launch a spacecraft -- the Alouette in 1962 -- and the world's first in 1972 to put into geostationary orbit a domestic communications satellite -- the Anik. When explained by men with green eyeshades and sharp pencils, the space program begs the obvious question: If space is so beneficial, why not shop around elsewhere for the cheapest satellites, rather than making them here at home?

Why, indeed! Above all else, Canada's space program is the cutting edge of our determination to be counted with other nations in the high stakes economic league of advanced technology. As did Willy, we either sign up or risk being booted out to the bush leagues.

Canada's solid record of success to date in communications satellites has built a foundation for our long-range commitment to a space program. The late Dr. John Chapman of the Department of Communications was a man with the vision to see this. He was pragmatic enough to recognize that domestic sales of satellite communications services could never fully account for its existence. As he phrased it somewhat delicately: "A minister can justify spending a certain amount extra for a Canadian supplier, but if the differential gets too large this will become more difficult."

But he also saw the larger implications that a space program would:

*Establish Canada in the front ranks internationally in advanced technology

*Develop a sound export market in space products

*Build a firm base at home for technological capability

*Serve as a beacon for young men and women to seek careers in an exciting industry in Canada.

It was in large measure due to his efforts that Canada's involvement in the Anik communications satellites grew from 13% for the first one eleven years ago to 50% for the Anik D launched last August -- a Canadian prime contract awarded to Spar Aerospace Limited and shared in by scores of Canadian sub-contractors. Even more significantly, the experience developed in the program resulted in the winning of Canada's first prime contract in the fiercely competitive international marketplace. By 1985 Spar will have completed the first of two domestic communications satellites and related ground equipment for Brazil -- the first such satellite project for Latin America.

There have been others with the sense of vision of Canada's role in space, including the Hon. John Roberts, who pushed hard for a new commitment by cabinet in 1981; the Hon. Francis Fox, Ed Lumley and Mark MacGuigan, who made repeated trips to Brazil on behalf of the Canadian bid for the Brazilian Satellite System. Then there is Frank Thurston, formerly of the National Research Council, who approached with missionary zeal the cause of Canadian partnership with the United States' space shuttle program. His efforts brought forth the contract for the remote manipulator system, more popularly known as the Canadarm. It has by now become a piece of Canadiana that more than anything else has highlighted Canada's position of excellence in space technology.

Lest the impression be left that enterprise in space is all glory and no gain, it should be stressed that communications satellites alone represent a market in the tens of billions. Spar has seen its satellite business grow from $1 million to $130 million in its 15 years as a publicly-owned Canadian company. During that time its staff has grown from 250 to 2,000, almost a third of whom are engineers and technicians. Its total revenues of $800 million over 15 years represent a 30-fold return on the $26 million contributed by government for capital and research investment.

At present we are working on major subcontracts on the L-Sat, a huge communications satellite for the European Space Agency and Intelsat VI, which will be the world's most powerful communications satellite when launched in 1986. Our Communications Systems Division is building the first ground station for Swaziland and upgrading the ground communications system in China. We are

also offering training to engineers from dozens of countries with Spar-designed equipment for time division multiple access and digital speech interpolation. Canada has a unique contribution to make in assisting developing nations leap-frog entire stages of communications infra-structure. Consider for a moment that only 7% of the world's telephones are in developing nations -- yet they account for 20% of the traffic via Intelsat.

However, in this -- the 21st year of Canada's age in space -- we are still groping our way toward a national commitment to a consistent, long-term space program. In the coming year the United States National Aeronautics and Space Administration, the European Space Agency and the Japanese Space Agency are budgeting some $12 billion. In Canada we are in a holding pattern on a budget line of $375 million.

To be sure, it is a large sum of money. But the stakes are even higher. At risk are the skilled teams and Canada's role in a rapidly burgeoning international competition.

For example, one of Canada's most imaginative programs is the projected joint Department of Defence and Department of Communications MSAT -- or Mobile Satellite. Once in orbit this satellite would provide effective long distance communications by telephone from ship, shore and in the air. The system would be of particular significance for Canada, where in 1981 30% of the mobile radios were in the prairies and Northwest Territories -- areas with only 17% of the population. To date Spar has invested $2 million of its own funds to develop MSAT, the world's first domestic mobile communi-cations satellite program.

Today we stand at a major crossroads -- one in which both industry and government must decide whether to take the turn on the high road to sustain our national role in space. At worst we can stay where we are, sifting data, scanning the past and projecting statistics.

But voluminous reports with graphs, charts and figures have never yet launched a great dream. First must come the sense of vision, as with Columbus and his quest on the western ocean...Sir John A. MacDonald and his unfaltering dream of linking Canada's coasts by rail...John Kennedy and his clarion call to reach the moon before the end of the sixties...and...John Chapman and his belief in Canada's role in communications satellites.

To me a Canadian space program is one that builds on the strengths that we have:

*A highly skilled work force and the scientific and engineering know-how to sustain it

*A record of communications technology that is second to none

*Solid achievements in satellite systems.

Such a program will recognize:

*That Canada has an important part to play in cooperation with nations that have invested billions in space -- the United States, Europe and Japan

*That our role be proportional -- sufficient for our requirements, supportive of the needs of developing nations and contributory to larger multinational efforts.

The driving force in our space program to date has been a remarkable partnership of government and private industry. Together we share the risks of development -- and the rewards, both substantive as they relate to jobs and international trade, and incalculable as they position this nation in the advanced technology sweepstakes. Not to sustain the space program would do more than snuff out an outstanding capability. We would find ourselves on a side road well behind other nations with whom we had embarked in the space age. Given renewed impetus, the space program will move Canada to the high ground of technological excellence and international competitiveness. It is an opportunity we must not miss.