## Section I

One of the functions of the Air Force Systems Command Liaison Office in Ottawa is to stay current on Canadian industrial capabilities and trends, and to make this information available to the USAF R&D community. This Guide was prepared in pursuit of that objective. It presents descriptive data on 236 companies that have expressed interest in doing business with the USAF. All information was provided by each of the respective companies. Leads to new entries were obtained through newspapers, magazines and through contacts with various departments of the Canadian Government. This Guide presents a representative cross-section of the Canadian aerospace and defense industry.

Canada has a very large industrial commitment to the aerospace, communications, electronics, and space areas. As one might expect, these industries are primarily concentrated in the Ontario-Quebec corridor, extending from Windsor through Toronto and Ottawa to Montreal. Other locations with expanding industrial bases are the Winnipeg (Manitoba), Edmonton-Calgary (Alberta), and Vancouver (British Columbia) areas. Substantial contributions to the Canadian industrial capability are also afforded by the Quebec City (Quebec) and Halifax (Nova Scotia) areas.

As in the other editions of this Guide, this fifth edition does not attempt to group companies into specific categories such as aerospace or electronics. Neither does this Guide attempt to differentiate R&D capabilities from pure product lines. While most companies have product lines, some are very R&D oriented and seem eager to engage in R&D contracts. For those companies that appear primarily product oriented, it is assumed that they do have an R&D capability within their area of expertise.

Section II of this Guide presents Canadian industrial capabilities as a compilation of individual company profiles. The general format for the company profiles include the following subsections: NAME, ADDRESS, CONTACT POINT, HISTORY, CAPABILITY, AVERAGE WORK FORCE, GROSS SALES, PLANT SIZE, EQUIPMENT, EXPERIENCE, KEYWORDS and the DATE of the material.

Section III (Company Keyword Index) relates company capabilities in the form of keywords. The specific keywords are presented in columnar form in alphabetical order. The second column lists the company associated with the keyword. The company index forms Section IV.

Defense economic cooperation between the United States and Canada has deep roots. In the late 1950s, the governments initiated an agreement that has come to be called the Defense Production Sharing Arrangement (DPSA). The DPSA was historic in that it became US defense procurement policy to consider Canadian defense contractors as an integral part of the US industrial/mobilization base. The terms of this arrangement remains valid today. Canadian contractors are to be considered the same as domestic American suppliers. The Buy American Act is waived for all defense supplies made in Canada. US customs dùties are waived on most Canadian supplies entering the US for defense programs. The specifics of the arrangement are valid for both Canadian prime contractors and for Canadian sub-contractors to US primes. AF Regulation 400-34 and AFSC Supplement thereto, apply to this program as well as DFAR and AF FAR Supplements 25.71. The letter agreement itself is contained in DAR Appendix T.

Under the procedures of the DPSA with Canada, the US buyer contracts with the Canadian Commercial Corporation (CCC). CCC is 100% government-owned; a Crown Corporation, basically an arm of the Canadian Government. CCC wholly subcontracts the work to be performed to the Canadian defense

contractor. In the process, CCC guarantees the performance of the Canadian contractor, and if necessary, will re-procure at their expense to get the job done. The DPSA also provides US acceptance of all Canadian government contracting and contract management procedures. CCC and their associates with the Canadian Department of Supply and Services certify all pricing data supplied by the Canadian contractor. There are indeed intergovernmental arrangements for quality assurance, in-plant inspection, and industrial security for classified programs.

There is a second special arrangement with Canada called the Defense Development Sharing Arrangement (DDSA). The DDSA was signed by both governments in November 1963. The Development Sharing Program enjoys all the benefits of the Production Sharing Program. In addition, projects under the DDSA receive financial assistance from the Canadian government. Project Agreements are negotiated for each effort and generally reflect a 50/50 cost sharing ratio. The joint projects must be in support of a US defense requirement, and the US project office remains the design authority throughout the effort. Use of the DDSA can really stretch your R&D dollars; an important consideration in the face of declining defense budgets.

The DPSA and DDSA have received highest level support from all administrations. The joint declaration by the Prime Minister of Canada and the President of the US at the Quebec Summit on 18 May 85 stated that "... To provide for an effective use of resources and to aid both our countries in bearing our share of the Allied defense burden, we reaffirm the Canada/United States Defense Development and Production Sharing Arrangements and agree to strengthen our North American defense industrial base". Similar expressions of support have come from subsequent summit meetings.

USAF/AFSC project officers are encouraged to take full advantage of these arrangements with Canada and to submit Canadian sources for their projects. We at the AFSC Liaison Office in Ottawa, Canada, can assist you in locating sources or in other aspects of the arrangements. Please feel free to contact us at the address noted in the preface to this report. The ICR&D focal point located at your organization can also provide insight in the process of doing business with Canada.

Information on the DPSA and DDSA, and Canadian sources can also be obtained from the US Division of the Canadian Department of External Affairs at (613) 996-1814 or Autovon 846-1814. Their mailing address is:

> Defence Programs Division (TDP) Defence Programs and Advanced Technology Bureau Department of External Affairs 125 Sussex Dr Ottawa, Ontario, Canada K1A 0G2

The Government of Canada also maintains Trade Counselors at many locations in the US. Please feel free to contact these individuals as well for more information on Canadian Industry.

For the most part, Canada's high-technology industrial capability is on an even par with that of the United States, but on a smaller scale. It may certainly be considered another source base for USAF R&D procurements, as well as for commodity buys. It is hoped that this Guide will help provide the user with some insight into the Canadian system and encourage its use if deemed appropriate. Increased competition and "new blood" can only reduce USAF procurement costs and hopefully lead to better products.