
LEADING THE COMPETITION

A Forum to Develop a Trade Strategy for
Canada's Advanced Technology Sector

PROCEEDINGS



Electronics
Industry
Association of
Manitoba



Canadian
Advanced
Technology
Association

MOSST Ministry of State
for Science
and Technology

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1986

with the support of The Manitoba Department of Industry, Trade and Technology

June 26, 1986
Winnipeg, Manitoba

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A Project of:

The Canadian Advanced Technology Association
Electronics Industry Association of Manitoba

and

The Ministry of State for Science and Technology

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Technology

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PURPOSE

Canada and the United States are now embarked on negotiations to move towards a more open, bilateral trading relationship. Multilateral trade negotiations are also about to begin within the framework of GATT.

These negotiations could expand market opportunity for Canadian-based companies. They could also increase competition within both Canadian and foreign markets, influence investment patterns and alter market structures.

The purpose of the Winnipeg forum was to bring together senior industry executives and others knowledgeable in the development and marketing of advanced technology goods and services to:

- assess the manner in which freer trade will influence international market structures for advanced technology goods and services:
- identify barriers to international market access that should be removed:
- examine features of the Canadian investment climate that are essential to sustain continued investment in advanced technology areas:
- identify the challenges free trade poses for advanced technology companies and the steps required to facilitate transition: and,
- provide Western Canada "high tech" companies with an opportunity to contribute to the formulation of Canadian negotiating positions for the upcoming bilateral trade talks with the United States and the next round of GATT consultations.

The forum and agenda were designed to facilitate discussion and enable participants to achieve these objectives.

The proceedings of the day's discussion, the consensus on the issues examined and priorities for action will become part of the national discussion on how the public and private sectors can work together to develop a more vigorous advanced technology industry in Canada.

SUMMARY OF
DISCUSSION AND
RECOMMENDATIONS

LEADING THE COMPETITION

A Forum to Develop a Trade Strategy for
Canada's Advanced Technology Sector

SUMMARY OF DISCUSSION AND RECOMMENDATIONS

BACKGROUND

The project was initiated by CATA and the EIAM, in cooperation with the federal Ministry of State for Science and Technology and the Manitoba Department of Industry, Trade and Technology, to assist with the development of briefing information for current trade negotiations. Participants in the seminar included corporate executives and senior government representatives involved in the advanced technology sector.

ORGANIZATION

In his introductory comments, Roy Woodbridge, President of CATA, highlighted the issues and challenges associated with freer trade as they impact on the advanced technology sector. He referred to the workshop previously held in Ottawa (March 25, 1986) and indicated the task for the Winnipeg workshop was to broaden and deepen the analysis of these issues and to move closer to the formulation of a specific negotiating position.

Participants then assembled in two workshops that were tasked with the following responsibilities (see annex 5).

- assess general attitudes towards freer trade;
- identify and evaluate the barriers that currently exist to access to international markets (particularly the U.S.) and protectionist elements in the Canadian market;
- determine how to strike a balance between the removal of barriers to access to the U.S. market and continued use of comparable policy instruments in a Canadian context;
- determine the impact of freer trade on the longer term ability of Canada to attract investment in research, development and the commercial production of advanced technology products and services; and,
- consider implementation timeframes and other measures that might be required to minimize possible negative impacts of free trade on portions of Canadian industry.

Workshop spokespersons reported back to all participants in a plenary session at the end of the day.

General Attitudes to Freer Trade

Participants were universally supportive of a move to freer trade, particularly with the U.S. They were generally confident in the capability of Canadian advanced technology firms to compete in the larger market which would be available.

It was also felt that advantages would result for Canadian business with regard to improved access to technology.

On the other hand, it was recognized that some Canadian companies will not be able to compete because of a lack of management and marketing skills, or, in some cases, cost competitiveness. Thus, there will be losers as well as winners. This suggests the need for a period of grace to allow rationalization to take place.

The Need for a Complementary Science and Technology Strategy

It was generally accepted that freer trade will be of most benefit to countries that are relatively more sophisticated in the development and use of technology.

There are signs that Canada is slipping behind the world's technology leaders. Thus, for Canada to reap the full benefits of freer trade, the nation as a whole must become more technology driven. This will require closer links and increased cooperation between government, industry, academia and labour.

More specifically, there was strong support for the view enunciated in the Ottawa workshop that freer trade must proceed in concert with the introduction of a national science and technology strategy targeted on moving Canada towards becoming a more knowledge and technology intensive society.

Characteristics of International Markets and Canadian Capability

The views of participants tended to reinforce the assessment on international market trends identified during the Ottawa workshop (i.e. technology markets and opportunities are diversifying on an international scale, while market advantage is shifting to companies most skilled in the use of modern production technologies and able to produce and sell on a global basis).

At the same time, Canadian-based, advanced technology companies tend to be strong with respect to technology but weak in terms of overall management and international marketing skills.

Consequently, in the transition phase, there needs to be increased

emphasis on enhancing overall management and market development capabilities and on building the infrastructure required to sustain continued high levels of innovation in small and medium-sized enterprise.

The Extent and Significance of Tariff and Non-Tariff Barriers to Advanced Technology Trade

It was felt that existing tariff and non-tariff barriers do not provide prohibitive obstacles to trade with the U.S. at the present time. Similarly, the Canadian market is extremely open to penetration by offshore suppliers.

However, with respect to non-tariff barriers, their arbitrary and uncertain nature means they impact disproportionately on small and medium-sized enterprise. Timely marketing initiatives and perseverance can generally overcome these barriers. However, the effort required is time intensive and frequently expensive; it can seriously stretch the limited resources of small companies.

The most significant problems appear to arise with respect to the movement of people back and forth across borders, government procurement (including military programs), and the "red tape" associated with administrative requirements. Participants also expressed concern at the growing trend towards constraints on technology access.

Striking a Balance: Towards a Specific Canadian Negotiating Position

The following sections summarize the consensus, or lack thereof, reached by participants with respect to specific barriers to trade.

a) Government Procurement

It was generally felt that the complex and rather pervasive set of procurement policies currently in place in the U.S. provide a significant level of competitive advantage to American-based companies in the U.S. market. The most substantial U.S. programs include the "Buy America" Act and complementing State legislation, small business and minority set-asides, and the extensive system of support for military-related research, development and procurement.

The U.S. preferences are balanced in Canada by the "Think Canadian" program; the federal government's Rationalization Policy through which MNE's are qualified to bid on Canadian contracts on the basis of their investment, employment, and production record and intentions in Canada; major project offsets, and federal and provincial procurement preferences.

From the point of view of the advanced technology industry, it is important to distinguish between procurement incentives in Canada that are oriented towards encouraging good corporate behaviour among the foreign-owned multinational community and the use of government procurement in support of smaller companies and those in a start up situation.

For the latter group, preferential treatment can be a critical element in the commercialization of new technologies and in establishing market credibility.

The question, therefore, is how to strike a balance between improved access to the U.S. government procurement market (which is ten times as large as the Canadian) and guaranteed access to the Canadian government market, particularly in so far as the latter is used as an incubator for new technological enterprise.

The feeling among participants was that some minimum level of "Buy Canada" must be non-negotiable. In part, this view was conditioned by the belief that the total removal of all procurement preferences on a North American basis, although desirable, could not be negotiated.

Thus, we need some yardsticks for negotiation. These could not be defined in the time available. Indeed, the view was expressed that they trade-offs could only be judged in the context of specific proposals. Thus, there is a need for ongoing liaison with Canadian negotiators as the talks proceed.

However, it was felt that if the U.S. small business set-asides are "not negotiable" and Canadian small business cannot receive equal treatment in the U.S. market, then Canada should introduce the same type of policies in a Canadian context for Canadian-based small business.

b) Military Markets

U.S. procurement policies, together with extensive research support, strongly favour U.S. manufacturers. The main problem appears to be rooted in security clearances which make it more difficult for foreign companies to operate in this market.

There is a trend to place tighter restrictions on the access of non-U.S. citizens to even non-classified information.

COCOM regulations are generally now applied with more rigour in Canada than in the U.S. This discrepancy may be heightened as the U.S. is now qualifying companies for East European exports on the basis of past performance. It is not clear whether Canadian companies will qualify for such treatment. Thus, they may find it even more difficult to compete in East European technology markets because they will be subject to relatively more onerous qualification procedures for export.

It was felt that U.S. attitudes towards Canadian companies is the price we pay for Canada's desire to pursue an independent foreign policy. These views may be aggravated by the U.S. perception that Canada is not pulling its weight in NATO/NORAD, etc.

It was generally felt that the military aspects of U.S. technology development are an important element of any U.S./Canada free trade agreement.

It would be highly desirable to have enhanced access to this market or for Canadian companies to be treated on an equal footing with American with respect to their ability to compete for research contracts and sales.

However, because the quid pro quo the Americans might demand is uncertain, no consensus emerged within the group on what we might wish to push for, nor was there much optimism that this would be an area where much progress could really be made because of the basic security problem and foreign policy overtones.

c) Intellectual Property Rights

It was felt the U.S. position on strengthening the international protection of intellectual property rights is essentially very sound (see attached statement by U.S. trade representative in Annex 6).

There was concern, however, that U.S. patents and technology are increasingly being protected under the umbrella of "national security". The tight control and lack of disclosure of patents is restricting the access to intellectual property. There is also a belief that the U.S. will increasingly use U.S. trade laws unilaterally to protect U.S. intellectual property.

U.S. attitudes to licensing are also becoming more restrictive, particularly with respect to Third Party Countries, where the U.S. wants to ensure that they do not obtain state-of-the-art capability.

This is, however, an area where we can cooperate strongly with the U.S.

d) Border Problems: The Movement of People

A variety of arbitrary and discretionary measures exist on both sides of the border that inhibit the movement of individuals.

The problem is particularly acute in relation to Canadian-based service persons seeking access to the U.S. to service systems exported from Canada. Other problems relate to U.S. restrictive hiring practices and difficulties encountered in re-importing goods into Canada for repair.

If anything, however, Canada may be more rigorous in these areas than the U.S. Canadian immigration regulations also hinder the international recruitment of highly skilled personnel.

This is an area where a "good neighbour" policy is in the interests of both countries.

Participants felt that all restrictions on both sides of the border should be lifted with respect to the movement of service people from either country. Canadian constraints on the re-importation of goods into Canada for servicing should also be removed.

There was no wish to move to a common labour market in the advanced technology areas. Thus, participants were unsure of how far to push for removal of U.S. restrictive hiring practices. They were of the view, however, that immigration restrictions for senior management and skilled workers might be eased in the Canadian context. Similarly, the lifting of restrictions on the ability of Canadians to staff Canadian branch plant operations in the U.S. might be included as part of a free trade agreement.

e) Tariffs

Existing tariffs are not a serious barrier to trade between the two countries. Thus, the existence of Canadian tariffs do not particularly benefit Canadian industry. Rather, participants saw them more as a government revenue generator. On the U.S. side, tariffs are generally less than Canadian sales taxes. Therefore, they are not considered a serious impediment to trade.

Nevertheless, the view was expressed that small Canadian companies would benefit from the selective use of tariffs until their activity reaches a critical size in specified niches. This view was countered by the argument that most advanced technology markets are increasingly international. As well, the trend in tariffs is to reduce, rather than increase them, and this trend is inevitable.

On balance, the great majority of participants believe that tariffs on advanced technology goods should be reduced across the board on both sides of the border.

f) "Think Canadian"

The "Think Canadian" program has merit. Canadians tend to have a negative attitude towards technology and products originating in

this country. Thus, there is an extremely useful role for the program in enhancing the image of Canadian advanced technology products and services.

g) Standards

There are very different standards and requirements for accreditation in different jurisdictions across the U.S.

The object in the trade talks should be to negotiate movement towards the adoption of multinational standards with the ability to qualify products in Canadian-based facilities for sale in the U.S.

There is also need for a more effective international distribution of information on standards and more openness in the certification process.

h) "Red Tape": Administration

There are many problems related to the administration of current systems that could be improved (e.g. bureaucratic "red tape" by U.S. Customs respecting payment of duties, inconsistency of application of the regulations at different U.S. border crossings, slowness to receive product certification, and the arbitrary use of countervail and legal redress).

There is a need to reach a clear understanding with the U.S. administration on the processes and procedures to be followed to obtain quick and certain trade/duty rulings on or prior to entry into the U.S.

i) The Transfer of Legal Jurisprudence

Concern was expressed at the possible extra territorial application of U.S. law that might emerge from a free trade agreement. For example, would Canadian firms wishing to merge have to gain U.S. approval under American Anti-Trust regulations?

In light of this concern, it should be made clear in the negotiations that business arrangements entered into in Canada by Canadian-based companies would not be subject to U.S. law as a consequence of the negotiation of a free trade agreement.

j) Trans Border Data Flow

In some subsectors of economic activity, there are now restrictions on international data flow (e.g. banks). Other sectors, however, process their data and store records in the U.S.

It is recognized that TBDF is extremely difficult to restrict. On the other hand, the view was expressed that if we want data processing capacity in Canada, it must be protected.

Thus, in the negotiations we might wish to protect our options with respect to the development of enhanced data processing capacity in Canada. Policy instruments selected to accomplish this end should only remain in place for a finite period of time.

Impact of Free Trade on Long Term R&D Investment and Production in Canada

There was a general feeling that long term investment by Canadian firms will be greater in both Canada and the U.S. as a result of a Canada/U.S. trade agreement.

On the other hand, R&D will generally remain in the U.S. as a result of free trade. The branch plant economy will remain intact in Canada. In this respect, some participants felt that world product mandate firms in Canada cannot be on the cutting edge of R&D. Almost by definition they tend to produce mature products and the market pull for frontier R&D would be strongly towards U.S. markets.

Overall, the participants at the Winnipeg forum were less optimistic about the long term effects on investment in R&D and production in Canada than were the participants in the Ottawa workshop.

Adjustment Issues

The winners in the free trade arrangement will be the firms that take advantage of market niches. The size of firms will be somewhat secondary to the ability of firms to take advantage of opportunities.

"Losers" will be firms which restrict their market horizons to local or even Canadian levels. There will also be some adjustment in U.S. branch plants in Canadian firms which established operations in

various regions and provinces in order to take advantage of government incentives.

Despite the general optimism, there was concern that many small companies may be hurt. As a result, any agreement should have a transition period of between five and ten years and allow for an adjustment process which is more advantageous to Canada than to the U.S.

In this respect, companies must quickly become more aware of the need for new products, new technologies and an international marketing focus. Governments can assist by providing support programs which encourage new approaches to marketing (joint ventures, consortiums, etc.), facilitating technology transfer, and using government procurement to nurture emerging enterprise.

There is also a strong feeling that the overall business climate in the U.S. is more favourable to advanced technology investment than in Canada. Thus, over the long haul, there must also be a recognition that we may have to make some adjustments in government programs which add cost to Canadian firms, vis-a-vis their U.S. competitors (e.g. social legislation, workmen's compensation, UIC, etc.). (Note: Contrary to the view, prevalent in the U.S., that these programs are a subsidy to industry, they actually add significantly to industry operating costs!).

Other factors such as the significantly higher cost of satellite communications for Canadian-based companies should also be addressed.

Provincial barriers to trade should also be reduced or eliminated.

Some industrial incentives might have to be sacrificed as well. In this respect, grants should go before tax-based incentives.

The question of the exchange rate generated discussion. At some point it should be pegged to allow Canadian firms to have an advantage.

PROGRAM AGENDA



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LEADING THE COMPETITION
Sheraton Hotel, Winnipeg
June 26, 1986

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PLANNING AGENDA

- 11:30 - 12:30 Registration
- 12:00 p.m. Reception
- 12:30 p.m. Lunch:
 - Definition of Issues/Introduction to Workshops
Roy M. Woodbridge, President
Canadian Advanced Technology Association
 - and
 - Richard Jones
President
Electronics Industry Association of Manitoba
- 2:00 - 5:00 p.m. Concurrent Working Groups

Workshop participants will meet in pre-selected smaller groups to review the major themes around which the workshop is organized.
- 5:30 p.m. Reception
- 6:15 p.m. Dinner:
 - Guest Speaker: Mr. Edward J. Robertson
Deputy Minister
Department of Industry, Trade
and Technology
Province of Manitoba
 - Reports of workshop chairmen
- 8:00 p.m. Adjournment

BACKGROUND PAPERS AND NOTES

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NOTES FOR AN ADDRESS BY
THE HONOURABLE FRANK OBERLE
MINISTER OF STATE FOR SCIENCE AND TECHNOLOGY

Ladies and Gentlemen:

Welcome to the CATA Seminar on Canada - U.S. trade issues. I would like to congratulate the people who organized this seminar on our behalf. This occasion is a unique opportunity for the exchange of ideas and opinions between industry and government on the issue of free trade with the United States.

Canada faces an enormous challenge. The future of this country is being decided now, and that future depends on how we develop and manage science and technology over the next ten years.

Despite what you have read in recent media reports, I would like to assure you that the Mulroney government places the highest priority on research and development. Although we don't have a lot of money to throw at problems, we have come up with some innovative solutions for dealing with the issues that have plagued the S&T sector for years. Evidence shows modest success.

This government has put the emphasis back on the private sector, on the small, innovative firm that is the engine of industrial growth in Canada. We believe that the private sector is the best judge of what is best for business in this country.

Our biggest challenge is a high technology trade deficit that has soared from \$1.5 billion in 1970 to \$12 billion in 1984. This deficit is the worst among European Summit countries. Other indicators confirm this disturbing story. Canada's expenditures on industrial R&D ranked seventh in 1981 among OECD nations. We were eighth in terms of market share of OECD exports of R&D intensive products and that market share is slipping.

The resource-based industries - the economic backbone of our country - have seen their market share slip due to increasingly heavy competition from the large volume, low-labour cost approach of the newly-industrialized countries. Canada has been slow to adopt new technologies that will enhance our trade in agriculture, wood, fish and minerals.

Canada depends on trade more than most other OECD countries. For example, 27% of our products are exported, while Germany exports 28%. We can compare this to 14% for Japan and 21% for Great Britain. There has been much discussion lately about the merits of free trade versus protectionism. Basically, protectionism works in favour of those countries with something to protect. Canada, for example, has a very limited domestic market compared to the large, self-contained domestic market in the U.S. Thus, the Americans are motivated to try to protect their markets, while we Canadians are eager to penetrate those markets and to increase our share of them.

Free trade works in favour of nations with something to sell beyond their own limited markets. As Adam Smith said, the economic growth of a nation depends as much on its capacity to consume as it does on its ability to produce. And Canada does not have a large consumer market.

The prospect of enhanced Canada - U.S. trade offers us enormous potential for growth, and yet at the same time poses questions that must be resolved as soon as possible. We know that industry wants 'secure access' to U.S. markets. Some of the firms in your sector export up to 90% of their products to the U.S. 'Secure access' is essential to their survival. We also know that tariff barriers no longer concern your industry as much as non-tariff barriers do. We are here today to learn which of these non-tariff barriers are the worst obstacles, and to work out solutions to deal with them.

Of course, Canada faces challenges in the form of non-tariff barriers that cannot be resolved through discussion. Many non-tariff barriers are the result of intangible and entrenched attitudes. For example, our U.S. neighbours are proudly nationalistic, and usually prefer to 'Buy American' if it is a choice between two products of equal value. This is a challenge to Canada to work at changing that attitude and to come up with superior products that will leave no room for choice.

We also face difficulties in the area of institutional procurement. Many of you here today are trying to penetrate the U.S. market for defence goods, and some of you may have been frustrated by rigid non-tariff barriers and regulations. I would like to know what your problems are in this respect and your ideas on what we in government can do in our trade talks with the U.S. to abolish these barriers.

I see great opportunities for Canada in trading with the U.S. We have developed expertise in many unique areas, and must work to secure these 'niche' markets. I also see many areas of strategic importance to Canada where we have not developed an expertise. This is hurting us.

This country's rich resource base is the envy of many countries, and yet to a great extent we've ignored the strategic technologies needed to manage these resources. Canadians are resourceful and innovative, but we have not profited fully from the opportunities we were blessed with. Instead - even though we are the biggest wood producer in the world - we import whole saw mills because we do not manufacture them here. We import mining equipment to tap some of the world's richest mineral deposits.

I am thinking here of how poorly or irresponsibly we have managed our resources. How little attention we paid bending our technologies to help us manage better and develop industrial technology. One thing is certain. We don't need freer trade with the United States to sell our natural resources - our forest products and minerals. Instead, we need to enhance our trade opportunities in the manufacturing sectors. While it is so important for us to compete effectively in pure high-tech products with Japan and the United States, it is equally important to begin developing more technology-enhanced products, to give a value-added component to our mineral and forest products and to open up market niches for ourselves in these areas.

With a \$12 billion high technology trade deficit, we should perhaps concentrate some of our energy on looking after our domestic market and enhancing our natural resource products. In this way, we might not find ourselves in as much of a head-on competition in high tech consumer products with the U.S. and Japan.

The philosophy of the federal government on the question of free trade follows the same lines we have proposed since we took office. Our main thrust has been to reorient the federal machinery to increase private sector investment and influence in the Canadian economy.

The Federal budget was notable because it addressed two urgent priorities. It took a hard look at the deficit and introduced measures to eliminate it. At the same time, it is increasing the private sector's influence in the economy and in the way government spends its R&D dollars.

The budget restored a very important principle that was first introduced by the Conservative government in 1979. It has established guaranteed funding to the university research granting councils over the next five years. In addition to stabilizing the granting councils' base budgets, we have introduced a new element which gives the private sector major influence over research conducted in the universities.

Three principles:

- stability in funding
- university-private sector linkage,
- instant diffusion of technology.

I have asked Canadian industry to commit itself to \$370 million of university funding over the next five years. The full participation of the private sector would result in an increase of more than \$1 billion in total resources available to the councils over the balance of this decade.

The government has set the policy framework which is built on important linkages between industry, the universities and government. It's now up to industry to act on that. The federal government is prepared to match, on a dollar for dollar basis, incremental private sector contributions up to six percent of each council's budget in the previous year. The councils need industry's commitment and investment if the five-year funding formula is to succeed.

The message I want to leave with you today is that the only way Canada is going to succeed is if we work together. Over the short-term, this means we are all going to have to put a little more in than we take out. That's basically the bottom line.

We have to as governments balance what we do for business with the other priorities we have. But just as you criticize us when we goof off - publicly - it would not hurt if you also spoke out publicly if you feel we are on the right track.

I would like to thank all of you for taking time out of your busy schedules to come here to give us your advice on the Canada-U.S. trade issue. This government is committed to consultation with the private sector. We need your ideas; we need to know about your problems and about how you think we can help solve them.

We are here today to explore ways of improving our access to foreign markets. One possibility you may wish to consider has been used effectively in Japan and some European countries. It involves encouraging joint ventures between groups of companies, possibly even including some foreign companies as partners, to do research and development.

- immigration laws
- patent act
- constraints on the venture capital market
- structural problems in securing HQ persons
- government procurement.

I hope you will take with you today the feeling that you have met with your partners instead of your adversaries. We are here to work with you to realize Canada's potential to the fullest. Free trade talks are about to begin and we want to know what your concerns are and what you think we can do to help. Again, thank you for coming. I know that this exercise will profit all of us.

INTRODUCTORY REMARKS
BY
ROY M. WOODBRIDGE, PRESIDENT,
CANADIAN ADVANCED TECHNOLOGY ASSOCIATION
TO THE
FORUM ON "LEADING THE COMPETITION"
WINNIPEG, MANITOBA
JUNE 26, 1986

I WOULD LIKE TO WELCOME YOU ALL TO THIS FORUM. THE DISCUSSIONS THIS AFTERNOON WILL MAKE AN IMPORTANT CONTRIBUTION TO THE FORMULATION OF A NEGOTIATING STRATEGY IN THE FORTHCOMING BILATERAL TRADE TALKS WITH THE UNITED STATES AND ALSO IN PREPARATIONS FOR THE NEXT ROUND OF CONSULTATIONS UNDER GATT.

BEFORE OUTLINING THE ISSUES WE ARE GOING TO BE DISCUSSING AND THE FORMAT FOR THE AFTERNOON SESSIONS, I WOULD LIKE TO EXPRESS OUR DEEP APPRECIATION TO THE MINISTRY OF STATE FOR SCIENCE AND TECHNOLOGY FOR THEIR SUPPORT IN HELPING TO ORGANIZE THIS WORKSHOP. THEIR MINISTER, THE HONOURABLE FRANK OBERLE, HAS TAKEN A KEEN INTEREST IN ASSESSING THE MANNER IN WHICH THE TRADE TALKS MIGHT IMPACT ON CANADA'S ADVANCED TECHNOLOGY COMMUNITY.

I WOULD ALSO LIKE TO THANK THE MANITOBA MINISTRY OF INDUSTRY, TRADE AND TECHNOLOGY, WHO WILL BE HOSTING THIS AFTERNOON'S RECEPTION. THEIR DEPUTY MINISTER, MR. ED ROBERTSON, WILL BE JOINING US AT THAT TIME.

WELL, THE FREE TRADE TALKS ARE ON. THE NEGOTIATING APPARATUS IS NOW IN PLACE. FOURTEEN SECTOR ADVISORY GROUPS ON INTERNATIONAL TRADE, OR SAGITS, ARE BEGINNING TO REVIEW THE ISSUES THAT IMPACT ON SPECIFIC SECTORS AND TO DRAW UP SPECIFIC NEGOTIATING POSITIONS.

THE SAGIT OF MOST INTEREST TO THE ADVANCED TECHNOLOGY COMMUNITY, THE TELECOMMUNICATIONS, COMPUTERS AND SERVICES GROUP, UNDER THE CHAIRMANSHIP OF ALEX CURRAN OF SED, WILL BE HOLDING ITS FIRST MEETING IN THE NEXT SEVERAL WEEKS AND WILL BE WORKING HARD OVER THE SUMMER TO SET THE HIGH TECH AGENDA FOR THE NEGOTIATIONS.

IF WE WANT TO ENSURE THAT THE TALKS PRODUCE MEANINGFUL BENEFITS FOR OUR INDUSTRIES, IT IS IMPORTANT THAT WE RECORD OUR VIEWS ON THESE ISSUES IN THE NEXT SHORT WHILE.

TODAY'S WORKSHOP IS PART OF AN ONGOING EFFORT TO DEVELOP A COMPREHENSIVE POSITION. IT IS A FOLLOW UP TO A WORKSHOP WE ORGANIZED IN OTTAWA ON MARCH 25, 1986. YOU ALL HAVE THE PROCEEDINGS FROM THAT WORKSHOP. TODAY, WE WANT TO BUILD ON THE BASE OF UNDERSTANDING THAT WE DERIVED FROM THESE EARLIER DISCUSSIONS.

I WOULD, THEREFORE, LIKE TO BRIEFLY OUTLINE WHERE WE NOW STAND IN THIS PROCESS OF ANALYSIS, WHAT STILL REMAINS TO BE DONE AND, THUS, BY IMPLICATION, WHAT WE HOPE TO ACCOMPLISH TODAY.

A GOOD STARTING POINT IS THE GENERALLY EXPRESSED VIEW WITHIN THE ADVANCED TECHNOLOGY COMMUNITY THAT FREER TRADE IS A DESIRABLE GOAL.

THE GREAT MAJORITY OF COMPANIES THAT WE HAVE TALKED TO, AND PARTICULARLY THOSE AT THE OTTAWA WORKSHOP, ARE ALREADY EXPORTING TO THE U.S. AND ELSEWHERE. THEY TEND TO SEE THEIR MARKETS AS BEING INTERNATIONAL, RATHER THAN DOMESTIC. THE TECHNOLOGIES THEY ARE DEALING WITH ARE INTERNATIONAL IN TERMS OF SOURCING FINANCE AND SALES. IN FACT, THEY ARE "INTERNATIONALIZING" IN THE SENSE THAT THEIR APPLICATION AND USE IS MAKING THE WORLD A SMALLER PLACE.

THESE COMPANIES GENERALLY BELIEVE THAT FREE TRADE WILL EXPAND INTERNATIONAL MARKET OPPORTUNITIES AND THEY FEEL CONFIDENT OF THEIR ABILITY TO COMPETE SUCCESSFULLY FOR A LARGER SHARE OF THOSE GROWING MARKETS.

WE WANT TO DETERMINE IF YOU SHARE THAT VIEW.

THE PROBLEM OF ANALYSIS, HOWEVER, BECOMES MUCH MORE DIFFICULT WHEN WE GO BEYOND THIS GENERALIZED ATTITUDE AND TRY TO DEVELOP SPECIFIC NEGOTIATING POSITIONS. THE REASON FOR THIS IS THAT WE SEEM TO BE, AS A COUNTRY, ON THE HORNS OF AN INDUSTRIAL DEVELOPMENT DILEMMA.

WE ALL SEEM TO TAKE IT FOR GRANTED THAT AN EXPLOSION OF TECHNOLOGICAL INNOVATION IS DRIVING CURRENT AND FUTURE ECONOMIC GROWTH. ESTIMATES SUGGEST THAT ROUGHLY 90% OF THE BASE OF SCIENTIFIC KNOWLEDGE THAT CURRENTLY EXISTS HAS BEEN CREATED IN THE LAST THIRTY YEARS AND THAT THIS VOLUME OF KNOWLEDGE WILL DOUBLE AGAIN IN THE NEXT FIFTEEN. IT IS THIS MASSIVE EMPHASIS ON TECHNOLOGICAL INNOVATION AND THE PARTICIPATION IN THAT PROCESS BY INDIVIDUALS AND COMPANIES THAT WILL BE INCREASINGLY THE SOURCE OF NATIONAL WEALTH AND JOB CREATION.

AT THE SAME TIME, HOWEVER, THE DEVELOPMENT AND USE OF NEW TECHNOLOGIES IS CHANGING INTERNATIONAL MARKETS, THE STRUCTURE OF COMPETITION IN THOSE MARKETS AND, INDEED, THE VERY BASIS OF NATIONAL AND CORPORATE COMPETITIVE STRENGTH. OF PARTICULAR IMPORTANCE, THE TECHNOLOGICAL EXPLOSION IS SHIFTING ADVANTAGE TO COMPANIES ABLE TO PRODUCE AND MARKET ON A WORLD WIDE BASIS. DOWNSTREAM COMMERCIAL ADVANTAGE ALSO SEEMS TO BE SHIFTING TO COMPANIES AND/OR COUNTRIES ABLE TO ASSEMBLE A CRITICAL MASS OF INNOVATIVE EFFORT IN PARTICULAR TARGET AREAS. AND THE PACE OF TECHNOLOGICAL ADAPTATION ALSO SEEMS TO BE ACCELERATING. THE TIMEFRAMES FOR COUNTRIES, AND WE ARE TALKING HERE PARTICULARLY ABOUT THE NEWLY INDUSTRIALIZED COUNTRIES OF THE THIRD WORLD, TO ADJUST AND ADAPT TO THE USE OF MODERN PRODUCTION TECHNOLOGIES, ARE SHORTENING.

ALL OF THESE CHANGES ARE HAPPENING AND WILL CONTINUE TO HAPPEN, WITH OR WITHOUT FREER TRADE. THE IMPACT OF FREE TRADE WILL, HOWEVER, BE TO ACCELERATE MOST OF THESE TENDENCIES.

AS A CONSEQUENCE, THE BENEFITS OF FREE TRADE WILL FLOW DISPROPORTIONATELY TO THOSE COUNTRIES BEST POSITIONED TO DEVELOP AND APPLY TECHNOLOGY.

THIS IS THE SOURCE OF OUR DILEMMA, FOR CANADA'S RELATIVE

SOPHISTICATION AND LEADERSHIP POSITION AMONG THE MOST TECHNOLOGICALLY ADVANCED NATIONS OF THE WORLD APPEAR TO BE WEAKENING. WE ARE CURRENTLY DOING ONLY HALF THE R&D OF MAJOR COMPETITOR COUNTRIES AND WE EMPLOY, ON A PER CAPITA BASIS, ROUGHLY HALF THE NUMBER OF SCIENTISTS AND ENGINEERS. OUR ADVANCED TECHNOLOGY BASE, OUTSIDE OF THE ACTIVITIES OF MNE'S OPERATING IN CANADA, IS OVERWHELMINGLY COMPOSED OF SMALL AND MEDIUM-SIZED ENTERPRISE WHICH HAS A STRONG TECHNOLOGY, RATHER THAN MARKET ORIENTATION. AS A CONSEQUENCE, THE ABILITY OF SME'S TO EXPLOIT INTERNATIONAL MARKET OPPORTUNITY IS PERHAPS MORE LIMITED THAN CORPORATIONS OPERATING OUT OF COMPETITOR COUNTRIES. SIMILARLY, OUR RESEARCH AND DEVELOPMENT BASE TENDS TO BE SUB-OPTIMAL IN SCALE AND FRAGMENTED.

IN LIGHT OF THESE CONSIDERATIONS WE HAVE ARGUED THAT WE MUST IMPLEMENT A NATIONAL SCIENCE AND TECHNOLOGY POLICY IN CONCERT WITH THE MOVE TOWARDS FREER TRADE IF CANADA IS TO REAP THE FULL BENEFITS OF SUCCESSFUL NEGOTIATIONS.

AND THAT CREATES THE DILEMMA, FOR WE HAVE TO BE SURE THAT IN THE COURSE OF NEGOTIATING A FREE TRADE ARRANGEMENT, WE DO NOT THROW AWAY OUR ABILITY TO USE THE POLICY INSTRUMENTS THAT WILL HELP US MOVE TOWARDS A MORE KNOWLEDGE- AND TECHNOLOGY-INTENSIVE SOCIETY.

PUTTING THE PROBLEM ANOTHER WAY, WE HAVE TO CHOOSE WHERE TO STRIKE A BALANCE BETWEEN THE PURSUIT OF FREE TRADE AND OUR USE OF TARIFF AND NON TARIFF POLICY INSTRUMENTS TO ENCOURAGE DOMESTIC, INDUSTRIAL DEVELOPMENT.

THIS AFTERNOON WE ARE GOING TO TRY TO DETERMINE HOW TO STRIKE THAT BALANCE.

WE WOULD LIKE TO BEGIN THE DISCUSSION IN EACH OF THE WORKSHOPS BY

TESTING PEOPLE'S GENERAL ATTITUDES TO FREER TRADE. WHERE DO YOU STAND PHILOSOPHICALLY ON THE ISSUE?

NEXT WE WANT TO IDENTIFY AND EVALUATE THE BARRIERS THAT CURRENTLY EXIST TO ACCESS TO THE U.S. MARKET. THEN WE WANT TO LOOK AT PROTECTIONISM IN THE CANADIAN MARKET IN ORDER TO DETERMINE WHICH POLICY ELEMENTS YOU FEEL ARE ESSENTIAL TO ENCOURAGE THE GROWTH AND DEVELOPMENT OF TECHNOLOGICAL ENTERPRISE IN CANADA.

WE MUST THEN ATTEMPT TO STRIKE A BALANCE. HOW DO WE TRADE OFF OUR DESIRE TO REMOVE BARRIERS TO ACCESS TO THE U.S. MARKET WITH OUT WISH TO EMPLOY COMPARABLE POLICY INSTRUMENTS IN A CANADIAN CONTEXT?

ONE OF THE ISSUES WE KNOW IN ADVANCE THE AMERICANS WISH TO PLACE ON THE TABLE IS THE QUESTION OF PROTECTION FOR INTELLECTUAL PROPERTY RIGHTS. CONSEQUENTLY, WE WOULD LIKE TO FOCUS A PORTION OF OUR AFTERNOON'S DISCUSSION ON THAT SPECIFIC QUESTION.

ONCE WE HAVE REVIEWED THESE ISSUES AND HAVE A SENSE FOR WHERE WE WISH TO DRAW THE LINES, THE NEXT TASK WILL BE TO ASSESS THE IMPACT OF OUR BALANCING ACT ON OUR ABILITY TO SUSTAIN AN ATTRACTIVE INVESTMENT CLIMATE IN CANADA FOR ADVANCED TECHNOLOGY ENTERPRISE. PUT VERY SIMPLY, THE QUESTION IS "IF WE REMOVE THE BORDER INSOFAR AS TRADE POLICIES ARE CONCERNED, WILL THERE CONTINUE TO BE SUFFICIENT APPEAL FOR INVESTING IN LONG TERM TECHNOLOGICAL INNOVATION IN CANADA?"

TIME PERMITTING, WE THEN WANT TO ADDRESS THE QUESTION OF WHO WINS AND WHO LOSES WITHIN THE ADVANCED TECHNOLOGY COMMUNITY IN A FREE TRADE ENVIRONMENT AND WHAT, IF ANY, TRANSITIONAL ASSISTANCE OR ADJUSTMENT TIMEFRAMES ARE REQUIRED TO MINIMIZE THE POTENTIAL NEGATIVE IMPACTS OF FREE TRADE ON THOSE PORTIONS OF CANADIAN INDUSTRY MOST ADVERSELY AFFECTED.

FINALLY, I WOULD DRAW YOUR ATTENTION TO THE BLUE SHEET ATTACHED TO YOUR INFORMATION PACKAGE. THIS IS A QUESTIONNAIRE ASKING YOU TO OUTLINE SPECIFIC MARKET ACCESS PROBLEMS THAT YOU ARE CURRENTLY ENCOUNTERING IN THE U.S. MARKET. IT IS IMPORTANT THAT WE DOCUMENT THESE ISSUES SO THAT CANADA'S NEGOTIATORS CAN HAVE A FIRM BASIS FROM WHICH TO DISCUSS REMEDIAL MEASURES WITH THEIR U.S. COUNTERPARTS.

SO, THOSE ARE THE ISSUES AND THE MANNER IN WHICH WE PROPOSE TO ADDRESS THEM THIS AFTERNOON. IT SIMPLY REMAINS NOW FOR US TO BREAK UP INTO OUR RESPECTIVE WORKSHOPS AND GET ON WITH THE ANALYSIS.

WE WILL REGROUP AT THE END OF THE DAY IN THIS ROOM FOR COCKTAILS. DINNER WILL THEN BE SERVED AT WHICH TIME THE RAPORTEURS FROM THE WORKSHOP WILL REPORT THEIR FINDINGS.

NOTES FOR AN ADDRESS BY
Mr. E.J. ROBERTSON
DEPUTY MINISTER
DEPARTMENT OF INDUSTRY, TRADE AND TECHNOLOGY
PROVINCE OF MANITOBA

NOTES FOR SPEECH BY E.J. ROBERTSON TO
THE CANADIAN ADVANCED TECHNOLOGY ASSOCIATION,

JUNE 26, 1986

THE CANADA-U.S. TRADE NEGOTIATIONS AND ADVANCED TECHNOLOGY

Manitoba's Position

-Our research, which included a survey of manufacturers, and our consultative meetings with business, labour and farm groups, (including the Electronic Industry Association of Manitoba) have led us to the conclusion that the impact of liberalized bilateral trade will be positive but modest. [Note: A copy of the notes taken at the meeting between the Minister and the EIAM is attached.]

-The claim is made in some quarters that free trade will solve many of Canada's economic problems, including unemployment and low productivity growth. In our view, these claims are exaggerated. We note for example, that our surplus on merchandise trade with the U.S. has grown steadily and rapidly since 1979, and now stands at \$20 billion. We could hardly expect to improve on this under a bilateral trade agreement.

-On the other hand, the claim is made in other quarters that free trade will be disastrous for Canada. Although we are very sympathetic to the problems of those who stand to lose under free trade, and we believe further that a few sectors must be exempt from free trade, we do not believe that the negative consequences are overwhelming.

-In general, Manitoba hopes that the talks give rise to some sort of formal joint mechanism for resolving trade disputes, and with very few exceptions, we welcome the abolition of tariffs on trade in goods.

-However, there are certain non-tariff issues which the U.S. side may raise, and on which we do not want to see any changes. For example, we think it is vital that orderly marketing arrangements be retained in agriculture, and that regulation of the trucking industry continue.

Advanced Technology and Trade Liberalization

-The advanced technology sectors in Canada will be affected by a trade agreement in at least two ways:

-the relevant tariffs will probably be eliminated, thereby providing improved access to the U.S. market and lower prices for imported inputs, but increasing competition in the domestic market from U.S. firms;

-preferential purchasing policies of the governments of both countries will be changed to afford "national treatment" to Canadian firms in the U.S. government procurement market and to U.S. firms in the Canadian government procurement market.

-It seems to us that the advanced technology industries are as well situated as any Canadian industries to take advantage of trade liberalization. You are already export oriented to a considerable degree, and many of your products are so highly specialized that you require the largest possible market. The U.S. market is so large and diverse, that innovative Canadian companies producing high-quality goods should be able to find profitable niches there.

-There will be certain costs, however. The preferential purchasing policies of both the government and government agencies like Manitoba Hydro and the Manitoba Telephone System may be eliminated. Firms which have relied on such preferential access may have to make certain adjustments.

-These are our general impressions of the likely impact of a bilateral trade agreement on Canada's advanced technology industries. We are relying on your association to provide us with a more detailed assessment of the potential impact.

-We are also interested in knowing:

- what opportunities you see in the U.S.;
- what changes you would like to see on the U.S. side that Canada's negotiators should be aware of;
- what adjustments advanced technology firms will have to make in order to take full advantage of trade liberalization;
- what role government might play in promoting adjustment.

SW/1734S
June 25, 1986

LEADING THE COMPETITION

WINNIPEG, JUNE 26

WORKSHOPS: SUGGESTED AGENDA FOR DISCUSSION
AND PRELIMINARY IDENTIFICATION OF ISSUES

1. Introduction: attitudes to free trade
2. Constraints on access to the U.S. market
3. Protectionism in the Canadian market
4. Striking a balance
5. Protection of intellectual property rights
6. Impact on longer term investment
7. Adjustments issues for "winners" and "losers"
8. Attitudes revisited
9. Questionnaire: U.S. market access problems

Note: Draft positions and related information on these agenda items are appended to help focus discussion.

1. ATTITUDES TO FREER TRADE

"There was a consensus to support "freer trade" negotiations, albeit with appropriate safeguards, adjustment mechanisms and timeframes. Companies considered "freer trade" pivotal to the growth of international markets for advanced technology and that this will increase opportunities for Canadian companies. There was a general feeling that most Canadian companies would be able to compete successfully in a more open market environment.

Notwithstanding, there was opinion expressed that Canada must be careful to protect existing advantages."

(Excerpt from Ottawa Conference report)

2. CONSTRAINTS ON ACCESS TO THE U.S. MARKET

Examples of U.S. trade barriers

- tariffs
- barriers to the movement of people back and forth across the border
- countervailing duties and cumbersome adjudication processes, particularly in the context of protectionist sentiment in the U.S.
- Government procurement
 - "Buy America Act"
 - congressional/regional concerns for job protection
 - small business and minority set asides
- security regulations (e.g. COCOM) and security clearances required to access critical technologies
- surface transportation act
- restrictive requirements for communications and other licences
- standards, as a major area of concern notably for newer technologies not yet identified or classified in customs codes in Canada/U.S. trade and the newly adopted Harmonized System (HS) of tariff classification (e.g. advanced materials, biotechnology, etc.)
- emerging trend towards protection of intellectual property rights/constraints on technology transfer.

3. PROTECTIONISM IN THE CANADIAN MARKET

Canadian Barriers to Trade

- tariffs
- interprovincial trade impediments
- custom regulations re bringing equipment back into Canada for servicing
- immigration and other policies that hinder movement of people across borders
- "Negative attitudes to technology capability
- application of COCOM and other U.S. security regulations more demanding in Canada
- communication regulations with respect to the transfer of information
- Governments procurement
 - "Think Canadian" program
 - government procurement (federal-provincial preferences/major project offsets)
- Canadian Standards Association/Underwriters Laboratories activities
- higher mail and communications (satellite particularly) rates in Canada.

4. STRIKING A BALANCE

The objective is a level "playing field". To get this we need to reach agreement with the U.S. on:

- a) equal treatment for Canadian and U.S. companies on both sides of the border and/or
- b) agreement on the types of government support mechanisms in industry that are acceptable in the context of Canada/U.S. trade



6. IMPACT ON LONGER TERM INVESTMENT

"It was felt that the implications for longer term investment in R&D and commercial production in Canada would be at worst neutral, with most participants tending to think that overall private sector research and investment in Canada would be stimulated."

(Excerpt from Ottawa Conference report)

7. ADJUSTMENT ISSUES

a) "WINNERS"

"There is a particular challenge facing almost all small and medium-sized companies with respect to upgrading their market development and sales capabilities."

b) "LOSERS"

"Companies now producing in Canada only for the domestic market will be under intense pressure if freer trade is negotiated."

"There are a lot of unanswered questions with respect to the implications of freer trade for emerging technologies (e.g. advanced materials, advanced manufacturing equipment, biotechnology, etc.)"

"...appropriate safeguards and adjustment timeframes required for strategic sectors and segments of the market."

(Excerpts from Ottawa Conference report)

"LEADING THE COMPETITION"
LIST OF MARKET RESTRICTIONS

Company

Address

.....

Key Contact

Telephone Number

List of Market Restrictions (i.e. tariff or non tariff
barriers)

.....

.....

.....

.....

.....

Brief Description of the Items Noted Above:

.....

.....

.....

.....

Please return form to:

Canadian Advanced Technology Association
275 Slater Street, Suite 803
Ottawa, Ontario, K1P 5H9

Attention: Mr. John Reid

OFFICE OF THE
UNITED STATES TRADE REPRESENTATIVE
EXECUTIVE OFFICE OF THE PRESIDENT
WASHINGTON, D.C. 20506

ADMINISTRATION STATEMENT ON THE
PROTECTION OF U.S. INTELLECTUAL PROPERTY RIGHTS ABROAD

April 7, 1986

GENERAL CONCERNS AND ISSUES

Inadequate recognition and protection of intellectual property rights abroad is a serious and growing problem. Foreign violations of U.S. intellectual property rights, through piracy, counterfeiting, misappropriation and infringement, severely distort international trade and deprive innovators, creators and inventors of rewards and opportunities that are rightfully theirs.

Intellectual property protection is critically important to the United States, our trading partners and the world economy.

- * Adequate and effective protection fosters creativity and know-how, encouraging investment in research and development and in new facilities.
- * Innovation stimulates economic growth, increases employment and improves the quality of life.
- * Technological progress is a critical aspect of U.S. competitiveness as well as freer and fairer global trade.
- * In developing countries, improved intellectual property protection can foster domestic technologies and attract needed foreign know-how and investment.

The Administration has pursued initiatives to encourage adequate and effective protection of intellectual property rights at home and abroad. The United States provides strong protection for intellectual property rights within our borders for domestic and foreign citizens and businesses. We expect other nations to do the same in the interest of stimulating increased innovation and improving living standards throughout the world. To achieve better protection, the Administration's program includes:

- strengthening existing international and national standards for protection and enforcement;

- extending existing standards, or developing new ones, to cover frontier technologies;
- improving international standards to eliminate discrimination or unreasonable exceptions or pre-conditions to protection;
- encouraging our trading partners to commit themselves to enacting and enforcing laws adequately recognizing intellectual property rights and providing effective penalties for violations;
- ensuring that U.S. laws provide a high standard of protection.

PROBLEMS OF INTELLECTUAL PROPERTY PROTECTION ABROAD

All nations share a responsibility to recognize and protect intellectual property rights. The forms of protection that should be recognized include patents, copyrights, trademarks, trade-dress, industrial designs and trade secrets. Where needed, new forms of protection should be developed for frontier technologies.

Certain countries persistently fail to enforce laws adequately. Further, some countries have adopted policies that explicitly sanction abuse of intellectual property rights.

Practices that impose the greatest burden on U.S. commerce, and therefore most concern the Administration, include inadequacies in national laws, in enforcement and in international standards.

The absence or inadequacy of national laws

- * A number of nations flagrantly disregard intellectual property rights. Some even encourage their nationals, through government policies, to appropriate foreign-owned technologies and creative and artistic works, without adequately compensating the inventor or creator.
- * Some nations do not allow product-based patents in such areas as chemical compounds, pharmaceuticals and biotechnology. While they may provide process patent protection, it is often ineffective. Absent product patent protection, such process patents foster inefficiencies, since they encourage pirate companies to devote their research to finding often less efficient new ways of making old products, rather than creating new products.
- * Many nations provide only limited copyright protection for works such as books, motion pictures, records and tapes. Their copyright laws do not cover many new and evolving

forms of authorship, such as computer software and satellite retransmissions. In some cases domestic laws do not even cover foreign works.

- * Many nations require that trademarks be used in commerce as a condition for maintaining ownership rights, despite the fact that the countries' trade policies make such use impractical or impossible.

Inadequate enforcement

- * Piracy thrives even in some countries that have nominally good laws. The causes are simple: inadequate penalties that have no meaningful deterrent effect and a lack of government commitment to enforcing the rights guaranteed by law. This problem is particularly acute for such industries as motion pictures, sound recordings and software. Such industries lose hundreds of millions of dollars annually to pirates whose actions, if not encouraged or condoned, are at least not adequately penalized by their governments.

Inadequate international standards:

- * The standards contained in some international conventions are too weak, especially in the patent area. A country can be in full compliance with international conventions even though it may not provide any protection whatsoever for entire classes of products, such as chemicals, pharmaceuticals and biotechnology. In addition, countries can grant patents for as little as five years and still meet the standards of current international conventions. Such unreasonably short patent terms do not provide the inventor an adequate opportunity to recoup research and development costs.
- * The value of intellectual property rights of U.S. nationals is also diminished by a variety of other practices perfectly in keeping with the international conventions. Among these are unreasonable working requirements and compulsory licensing policies that fail to provide prompt, adequate and effective compensation. Efforts in recent years to reopen the conventions to improve standards of protection have encountered concerted efforts by many nations to weaken standards even further.
- * Many new and still emerging technologies, such as semiconductor chips, software and biotechnologies, either are not explicitly covered or are discriminated against by international conventions, and they are constantly in danger of not being protected under national laws.

- * Finally, the dispute settlement and enforcement mechanisms of existing conventions are ineffective.

THE ADMINISTRATION'S AGENDA

The Administration's strategy to pursue vigorously the strengthening of intellectual property protection involves using existing intellectual property conventions and organizations (for example the World Intellectual Property Organization), improving them by amplifying other international agreements to cover intellectual property concerns (for example, the General Agreement on Tariffs and Trade) and using bilateral and domestic policy instruments.

A. INTERNATIONAL INITIATIVES

Multilateral actions

The Administration will:

- (1) seek to conclude, in the new GATT round of multilateral trade negotiations, an enforceable multilateral trade agreement against trade-distorting practices arising from inadequate national protection of intellectual property. We will examine and discuss with our trading partners the possibility of incorporating into such an agreement the guaranteed or minimum protections contained in existing international intellectual property conventions where they are adequate. Where the guaranteed or minimum protections are inadequate, we will seek to include provisions for greater protection. In this connection, we will seek to develop trade-based dispute settlement procedures that would draw on the trade expertise of the General Agreement on Tariffs and Trade and the intellectual property expertise of the World Intellectual Property Organization.
- (2) work to resolve the persistent problems of counterfeiting by seeking the early adoption of a GATT Anti-Counterfeiting Code and to strengthen existing standards through the World Intellectual Property Organization.
- (3) seek commitments by adherents to existing international intellectual property agreements to provide -- through trade-based agreements where appropriate -- adequate enforcement, transparency of governmental actions and regulations and a commitment not to use intellectual property laws to distort international trade.
- (4) work for increased protection under the Paris Convention and vigorously pursue U.S. accession to the Berne Convention.

- (5) improve protection for new and evolving technologies such as biotechnology and semiconductor-chip designs.
- (6) oppose erosion of protection under existing international treaties and agreements.
- (7) pursue greater adherence to agreements to reduce the burden and expense to U.S. intellectual property owners of filing for protection in a large number of countries.
- (8) engage our trading partners in discussing the idea of establishing a multilateral or regional patent office. Such an office could provide a higher level of common patent protection, including coverage and terms, and establish a more efficient system for gaining patent protection beyond the U.S. borders.

Bilateral actions

The Administration will:

- (1) pursue a vigorous program of bilateral negotiations and consultations to encourage development and enforcement of adequate and effective protection for U.S. intellectual property rights.
- (2) work to ensure that intellectual property provisions of existing bilateral agreements are fully observed.
- (3) make representations to countries where U.S. parties are injured because their intellectual property rights are not protected in accordance with international obligations.
- (4) make vigorous use of the full array of U.S. trade and other laws to encourage other nations to provide timely, adequate and effective protection for intellectual property rights.
- (5) expand existing programs of seminars and technical cooperation aimed at improving expertise and competence on technical intellectual property issues.

B. DOMESTIC INITIATIVES

The Administration will:

- (1) work for enactment of the Administration's "Intellectual Property Rights Improvement Act of 1986 to strengthen and expand the protection of U.S. intellectual property rights.

- (2) cooperate with private sector representatives to establish technical assistance programs to aid developing countries in implementing adequate protection for intellectual property.

ADMINISTRATION'S STATEMENT ON PROTECTION OF U.S. INTELLECTUAL PROPERTY RIGHTS ABROAD, DRAFT BILL ENTITLED "INTELLECTUAL PROPERTY RIGHTS IMPROVEMENT ACT OF 1986," AND SECTION-BY-SECTION ANALYSIS OF DRAFT BILL, RELEASED BY OFFICE OF THE U.S. TRADE REPRESENTATIVE, APRIL 7, 1986
(TEXT)

OFFICE OF THE
UNITED STATES TRADE REPRESENTATIVE
EXECUTIVE OFFICE OF THE PRESIDENT
WASHINGTON, D.C. 20506

ADMINISTRATION STATEMENT ON THE
PROTECTION OF U.S. INTELLECTUAL
PROPERTY RIGHTS ABROAD

April 7, 1986

GENERAL CONCERNS AND ISSUES

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Intellectual property protection is critically important to the United States, our trading partners and the world economy.

- Adequate and effective protection fosters creativity and know-how, encouraging investment in research and development and in new facilities.
- Innovation stimulates economic growth, increases employment and improves the quality of life.
- Technological progress is a critical aspect of U.S. competitiveness as well as freer and fairer global trade.
- In developing countries, improved intellectual property protection can foster domestic technologies and attract needed foreign know-how and investment.

The Administration has pursued initiatives to encourage adequate and effective protection of intellectual property rights at home and abroad. The United States provides strong protection for intellectual property rights within our borders for domestic and foreign citizens and businesses. We expect other nations to do the same in the interest of stimulating increased innovation and improving living standards throughout the world. To achieve better protection, the Administration's program includes:

- strengthening existing international and national standards for protection and enforcement;
- extending existing standards, or developing new ones, to cover frontier technologies;
- improving international standards to eliminate discrimination or unreasonable exceptions or pre-conditions to protection;
- encouraging our trading partners to commit themselves to enacting and enforcing laws adequately recognizing intellectual property rights and providing effective penalties for violations;
- ensuring that U.S. laws provide a high standard of protection.

PROBLEMS OF INTELLECTUAL PROPERTY PROTECTION ABROAD

All nations share a responsibility to recognize and protect intellectual property rights. The forms of protection that should be recognized include patents, copyrights, trademarks, trade-dress, industrial designs and trade secrets. Where needed, new forms of protection should be developed for frontier technologies.

Certain countries persistently fail to enforce laws adequately. Further, some countries have adopted policies that explicitly sanction abuse of intellectual property rights.

Practices that impose the greatest burden on U.S. commerce, and therefore most concern the Administration, include inadequacies in national laws in enforcement and in international standards.

The absence of inadequacy of national laws

• A number of nations flagrantly disregard intellectual property rights. Some even encourage their nationals, through government policies, to appropriate foreign-owned technologies and creative and artistic works, without adequately compensating the inventor or creator.

• Some nations do not allow product-based patents in such areas as chemical compounds, pharmaceuticals and biotechnology. While they may provide process patent protection, it is often ineffective. Absent product patent protection, such process patents foster inefficiencies, since they encourage pirate companies to devote their research to finding often less efficient new ways of making old products, rather than creating new products.

• Many nations provide only limited copyright protection for works such as books, motion pictures, records and tapes. Their copyright laws do not cover many new and evolving forms of authorship, such as computer software and satellite retransmissions. In some cases domestic laws do not even cover foreign works.

• Many nations require that trademarks be used in commerce as a condition for maintaining ownership rights, despite the fact that the countries' trade policies make such use impractical or impossible.

Inadequate enforcement

• Piracy thrives even in some countries that have nominally good laws. The causes are simple: inadequate penalties that have no meaningful deterrent effect and a lack of government commitment to enforcing the rights guaranteed by law. This problem is particularly acute for such industries as motion pictures, sound recordings and software. Such industries lose hundreds of millions of dollars annually to pirates whose actions, if not encouraged or condoned, are at least not adequately penalized by their governments.

Inadequate international standards:

• The standards contained in some international conventions are too weak, especially in the patent area. A country can be in full compliance with international conventions even though it may not provide any protection whatsoever for entire classes of products, such as chemicals, pharmaceuticals and biotechnology. In addition, countries can grant patents for as little as five years and still meet the standards of current international conventions. Such unreasonably short patent terms do not provide the inventor an adequate opportunity to recoup research and development costs.

• The value of intellectual property rights of U.S. nationals is also diminished by a variety of other practices perfectly in keeping with the international conventions. Among these are unreasonable working requirements and compulsory licensing policies that fail to provide prompt, adequate and effective compensation. Efforts in recent years to reopen the conventions to im-

prove standards of protection have encountered concerted efforts by many nations to weaken standards even further.

• Many new and still emerging technologies, such as semiconductor chips, software and biotechnologies, either are not explicitly covered or are discriminated against by international conventions, and they are constantly in danger of not being protected under national laws.

• Finally, the dispute settlement and enforcement mechanisms of existing conventions are ineffective.

THE ADMINISTRATION'S AGENDA

The Administration's strategy to pursue vigorously the strengthening of intellectual property protection involves using existing intellectual property conventions and organizations (for example the World Intellectual Property Organization), improving them by amplifying other international agreements to cover intellectual property concerns (for example, the General Agreement on Tariffs and Trade) and using bilateral and domestic policy instruments.

A. INTERNATIONAL INITIATIVES

Multilateral actions

The Administration will:

(1) seek to conclude, in the new GATT round of multilateral trade negotiations, an enforceable multilateral trade agreement against trade-distorting practices arising from inadequate national protection of intellectual property. We will examine and discuss with our trading partners the possibility of incorporating into such an agreement the guaranteed or minimum protections contained in existing international intellectual property conventions where they are adequate. Where the guaranteed or minimum protections are inadequate, we will seek to include provisions for greater protection. In this connection, we will seek to develop trade-based dispute settlement procedures that would draw on the trade expertise of the General Agreement on Tariffs and Trade and the intellectual property expertise of the World Intellectual Property Organization.

(2) work to resolve the persistent problems of counterfeiting by seeking the early adoption of a GATT Anti-Counterfeiting Code and to strengthen existing standards through the World Intellectual Property Organization.

(3) seek commitments by adherents to existing international intellectual property agreements to provide — through trade-based agreements where appropriate — adequate enforcement, transparency of governmental actions and regulations and a commitment not to use intellectual property laws to distort international trade.

(4) work for increased protection under the Paris Convention and vigorously pursue U.S. accession to the Berne Convention.

(5) improve protection for new and evolving technologies such as biotechnology and semiconductor-chip designs.

(6) oppose erosion of protection under existing international treaties and agreements.

(7) pursue greater adherence to agreements to reduce the burden and expense to U.S. intellectual property owners of filing for protection in a large number of countries.

(8) engage our trading partners in discussing the idea of establishing a multilateral or regional patent office. Such an office could provide a higher level of common patent protection, including coverage and terms, and establish a more efficient system for gaining patent protection beyond the U.S. borders.

Bilateral actions

The Administration will:

(1) pursue a vigorous program of bilateral negotiations and consultations to encourage development and enforcement of adequate and effective protection for U.S. intellectual property rights.

(2) work to ensure that intellectual property provisions of existing bilateral agreements are fully observed.

(3) make representations to countries where U.S. parties are injured because their intellectual property rights are not protected in accordance with international obligations.

(4) make vigorous use of the full array of U.S. and other laws to encourage other nations to provide timely, adequate and effective protection for intellectual property rights.

(5) expand existing programs of seminars and technical cooperation aimed at improving expertise and competence on technical intellectual property issues.

B. DOMESTIC INITIATIVES

The Administration will:

(1) work for enactment of the Administration's Intellectual Property Rights Improvement Act of 1986 to strengthen and expand the protection of U.S. intellectual property rights.

(2) cooperate with private sector representatives to establish technical assistance programs to aid developing countries in implementing adequate protection for intellectual property.

A BILL

To encourage innovation, promote research and development, and stimulate trade by strengthening the protection given intellectual property rights by making necessary and appropriate amendments to the intellectual property rights laws.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that this Act may be cited as the "Intellectual Property Rights Improvement Act of 1986".

TITLE II — TECHNOLOGY LICENSING UNDER THE ANTITRUST LAWS

SECTION 201. The Clayton Act, as amended (19 U.S.C. 12 et seq.) is amended by renumbering Section 27 as Section 28 and by adding the following new Section:

"Section 27. Agreements to convey rights to use, practice, or sublicense patented inventions, trade secrets, or know-how, or rights in a mask work subject to protection under Chapter 9 of title 17, United States Code, shall not be deemed illegal per se in actions under the antitrust laws."

TITLE III — ELIMINATION, IN CERTAIN SECTION 337 CASES, OF REQUIREMENT OF INJURY TO A U.S. INDUSTRY

SECTION 301. Subsection (a) of section 337 of the Tariff Act of 1930 (19 U.S.C. 1337) is amended by—

SECTION 301. Subsection (a) of section 337 of the Tariff Act of 1930 (19 U.S.C. 1337) is amended by—

(1) striking out "(a) Unfair" and inserting in lieu thereof "(a) (1) Unfair", and

(2) adding at the end thereof the following new paragraph:
 "(2) The lawfulness under this section of the foregoing acts shall be determined without regard to whether such acts have the effect or tendency to destroy or substantially injure an industry, efficiently and economically operated, in the United States, or to impair the establishment of such an industry:

"(A) Importation of an article into the United States which infringes a valid and enforceable United States patent or the sale of such an imported article;

"(B) Importation of an article into the United States which—

"(i) was made, produced, processed, or mined under, or by means of, a process covered by a valid and enforceable United States patent, and

"(ii) if made, produced, processed, or mined in the United States, would infringe a valid and enforceable United States patent, or the sale of such an imported article;

"(C) Importation of an article into the United States which infringes a valid and enforceable United States copyright, or the sale of such an imported article;

"(D) Importation of an article into the United States which infringes a valid and enforceable United States registered trademark, or the sale of such an imported article; and

"(E) Importation of an article into the United States which infringes a valid and enforceable United States mask work right protected under Chapter 9 or title 17, United States Code, or the sale of such an imported article."

SECTION 302. Section 337 of the Tariff Act of 1930 (19 U.S.C. 1337) is amended—

(1) by striking out "If" in the first sentence of subsection (e) and inserting in lieu thereof "(1) If",

(2) by adding at the end of subsection (e) the following new paragraph:

"(2) Any person may petition the Commission for the issuance of an order under this subsection. When such petition is filed prior to the date on which the Commission's notice of investigation is published in the Federal Register, the Commission shall make a determination with regard to such petition by no later than the date that is 90 days, or 135 days in cases declared more complicated, after the date on which the Commission published its notice of investigation in the Federal Register. The Commission may require the petitioner to post a bond as a prerequisite to the issuance of an order under this subsection. When such petition is filed after publication of the Commission's notice of investigation in the Federal Register, the Commission shall make a determination with regard to such petition no later than the day which is 90 days, or 135 days in cases declared more complicated, after the date on which the petition is filed. Any petition filed under this subsection must be filed within 30 days after the date on which the Commission's notice of investigation is published in the Federal Register."

(3) by striking out "In lieu of" in subsection (f)(1) and inserting in lieu thereof "In addition to, or in lieu of,"

(4) by inserting "twice" after "of \$10,000 or" in subsection (f)(2).

(5) by striking out "Except" in subsection (h), and inserting in lieu thereof "(1) Except",

(6) by adding at the end of subsection (h) the following new paragraph:

"(2) If any person who has previously been found by the Commission to be in violation of this section petitions the Commission for a determination that the petitioner is no longer in violation of this section, or for a modification or rescission of an order under subsection (d), (e), or (f), the burden of proof in any proceeding before the Commission regarding such petition shall be on the petitioner."

(7) by striking out "patent" each place it appears in subsection (1) and inserting in lieu thereof "patent, copyright, registered trademark or mask work right".

SECTION 303. The Act of July 2, 1940 (54 Stat. 724, chapter 515; 19 U.S.C. 1337a) is hereby repealed.

TITLE IV — PROCESS PATENTS

SECTION 401. Section 154 of title 35, United States Code (35 U.S.C. 154), is amended by inserting after "United States," the words "and, if the invention is a process, of the right to exclude others from using or selling products directly produced thereby throughout, or importing products directly produced thereby into, the United States,".

SECTION 402. Section 271 of title 35, United States Code (35 U.S.C. 271), is amended by—

(1) redesignating subsection (a) as paragraph (a)(1); and

(2) inserting the following new paragraph (a)(2):

"(a)(2) If the patented invention is a process, whoever without authority uses or sells within, or imports into, the United States during the term of the patent therefor a product directly produced by such process infringes the patent."

SECTION 403. Section 287 of title 35, United States Code (35 U.S.C. 287), is amended by—

(1) designating the existing language as subsection (a); and

(2) adding the following new subsection (b):

"(b) No damages shall be recovered by the patentee for infringement under section 271(a)(2) of this title from an infringer who did not use the patented process except on proof that such infringer knew of or was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such knowledge or notice. Filing of an action for infringement shall constitute such notice."

SECTION 404. (a) Title 35, United States Code, is amended by adding the following new section 295:

"Section 295. Presumption: Product directly produced by patented process.

"In actions alleging infringement of a process patent based on use, sale, or importation of a product directly produced by the patented process, if the court finds (1) that a substantial likelihood exists that the product was directly produced by the patented process and (2) that the claimant has made a reasonable effort to determine the process actually used in the production of the product and was unable so to determine, the product shall be presumed to have been so produced, and the burden of establishing that the product was not produced by the patented process shall be on the party asserting that it was not so produced."

(b) The table of sections for chapter 29 of title 35, United States Code, is amended by adding after the item relating to section 294 the following:

"295. Presumption: Product directly produced by patented process."

TITLE V — PATENT TERM RESTORATION FOR CERTAIN AGRICULTURAL AND CHEMICAL PRODUCTS

SECTION 501. (a) Title 35, United States Code, is amended by adding the following new section immediately after section 157.

"Section 158. Restoration of Patent Term for Certain Agricultural and Chemical Products.

"(a)(1) The term of a patent which claims a product subject to a regulatory review period or a method for using such a product or a method for manufacturing such a product shall be extended, in accordance with this section, from the original expiration date of the patent if—

"(A) the product sponsor notifies the Commissioner in compliance with the provisions of subsection (b)(1);

"(B) the product has been subject to a regulatory review period before its commercial marketing or use;

"(C) the term of the patent has never been extended under this section; and



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