news from CUASA

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SALARY INCREASES FOR THE SALARY YEAR 1984-85

George Neuspiel, President of the Association, informed members at the Special General Meeting held on February 10th that for the salary year 1984-85 members of the bargaining unit will not be subject to any restraint legislation and consequently their salaries will be increased by the full contractual scale increase (CPI -1%) of 5.7% plus CDI's.

FEDERAL INCOME TAX

CAUT has taken the unusual step of writing to all 26,000 members to ask them to engage in lobbying the Federal Government with respect to income tax. Your Association fully supports this initiative and strongly urges you to add your support. Please review the Special Supplement to the CAUT Bulletin entitled THE TAX COLLECTOR when it reaches you and do whatever you can to let the Government know that these matters are a general concern of a large group of individuals and not just four or five people from an obscure little office somewhere in downtown Ottawa.

caut canadian association of university teachers

EDITOR

The Canadian Association of University Teachers requires an Editor for the Bulletin, a tabloid newspaper with a circulation of 27,000 published seven times a year. This is an eleven-month term replacement appointment for the Editor who will be on career development leave in 1984-85.

DUTIES: To edit and publish the Bulletin to a high professional standars; to prepare reports on CAUT activities for publication in the Bulletin; to serve as member and secretary of the CAUT Publications Committee.

QUALIFICATIONS: Experience in the technical and professional aspects of writing, editing and publishing a monthly newspaper of high quality obtained through a combination of formal training and/or work-related experience. Familiarity with the Canadian university environment would be an advantage.

DURATION OF APPOINTMENT: August 1, 1985 to June 30, 1985.

SALARY AND BENEFITS: This is a limited-term appointment under the terms of the collective agreement between CAUT and its professional staff. The salary will be $20,000.00 for eleven months adjusted by the 1984-85 base salary increase. No moving expenses.

Applications with the names of two or three persons from whom references can be obtained should be submitted to: Dr. D.C. Savage
Executive Secretary
Canadian Association of University Teachers
75 Albert Street, Suite 1001
Ottawa, Ontario K1P 5E7

TRANSFER OF TECHNOLOGICAL INFORMATION TO COUNTRIES OTHER THAN THE UNITED STATES

The CAUT has asked CUASA to draw the following to your attention:

The Academic Freedom and Tenure Committee has been concerned for some time about regulations which would restrict the right of members of the Canadian academic community to engage in scholarly and intellectual exchanges with colleagues in foreign countries. The concern of the AF&T Committee was generated, initially, the press coverage of the decision of the United States government to expand the authority of officials to classify information on boradened national security grounds. Executive Order 12356 (April 13, 1982) provides that "...if there is reasonable doubt about the need to classify...the information shall be considered classified".

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The Deputy Director of the U.S. Central Intelligence Agency had earlier expressed concern about the publication of technical information which could affect the national security. The media carried numerous stories about the censoring of scientific and technical papers.

The CAUT Board subsequently approved a statement which was forwarded to the Solicitor General, Mr. Robert Kaplan (copy attached), urging the Canadian government not to implement similar restrictions without carefully considering the need for them in Canada, the effect they would have on Canadian scholarship and how effective the restrictions in the United States were in preventing the transfer of technologically useful information.

Correspondence with the Department of External Affairs in the autumn of 1983 revealed that there are now in place regulations covering the transfer of strategically useful information and technology to persons outside the country. These regulations are administered by Canada Customs under the authority of the Export and Import Permits Act. A permit is required for the export (to all countries but the United States) of a wide range of strategic goods and technologies as defined on the "Export Control List". Permits are also required for the shipment of "all goods", whether they appear on the Export Control List or not, to Warsaw Pact countries, Albania, Mongolia, North Korea and Vietnam. Restrictions appear to be primarily directed against actual hardware (goods) though there is also a restriction on the export of technical data in "material form" which can apparently include books, reports and other printed materials. Export of such materials is called, in the quaint language of the regulations, "tangible transfers". "Intangible transfers" of information through conversations are not subject to restrictions under the Act. Efforts are, however, made to control such "transfers" by other means.

The Department of External Affairs publishes "Notice to Exporters" which outlines the export control law and provides information on the procedures for obtaining a permit. It is likely that many Canadian faculty members are not aware of the provisions of the legislation and the procedures for obtaining permits. CAUT has been advised that except where it can be established that there has been a wilful intent to circumvent the regulations a first infraction usually results in a warning only. Subsequent infractions can, however, attract a fine or a prison sentence. Faculty members who are in contact with colleagues in foreign countries and who are contemplating sending hardware and related technical information are urged to obtain a permit in advance or assurance in writing that a permit is not required.

The Canadian government monitors and controls access to sensitive information by visitors to Canada from Eastern Europe, the Soviet Union, Albania, North Korea and Vietnam. The federal Interdepartmental Visits Panel approves visas for academics and business visitors from the proscribed countries and seeks the prior co-operation of host institutions and organizations (including universities) in ensuring that such viitors do not have unauthorized access to sensitive information.

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STATEMENT ON THE TRANSFER OF STRATEGICALLY USEFUL TECHNOLOGICAL DEVELOPMENTS TO EAST BLOCK COUNTRIES

The Academic Freedom and Tenure Committee of the Canadian Association of University Teachers has been asked to comment on potential pressure by the U.S. government on the Canadian government to limit the export of militarily-sensitive technologies to Eastern Block countries.

1. The Issue

In the summer of 1982 the Solicitor General reported that there was a possibility of pressure by the United States on its NATO allies to restrict the transfer of strategically useful technological developments to the Soviet Union and its allies [Donald C. Savage, Executive Secretary, CAUT, to the Solicitor General, 12 July 1982]. He invited the CAUT to consider the implications of such restrictions on university research.

Through the courtesy of the American Association of University Professors, public statements by American officials describing the nature of "the strategically useful technological developments" have been supplied. Admiral B.R. Inman, former Deputy Director of the Central Intelligence Agency, expressed concern over the "publication of certain technical information [which] could affect the national [U.S.] security in a harmful way." He cited information about crop projections and manufacturing processes as examples. The Deputy Secretary of Defense was alarmed at the attempts to siphon away from the U.S. "miliarily related critical technologies." [Both quotations from AAUP statement, no date.]

Our initial task is then to translate these general statements into specific classes of information which may be transferred to Eastern Block countries and which would jeopardize Canadian security directly or so endanger the U.S. security as to have an adverse effect on Canada and, secondly, to consider whether restricting these classes of information would have an adverse effect on academic freedom through limiting the flow of scientific and technical information among scientists in Canada and elsewhere.

2. What is to be Restricted?

The restriction is proposed to cover "technological developments", "technical information" and "critical technologies". These terms include, at least, the following classes of information and people: technical and scientific papers, photographs, computer tapes and other ways of transmitting symbolic information; models, samples and other physical embodiments of advanced technologies; and the trained scientist or technician who is capable of describing or reproducing advanced technologies.

The types of technologies that are to be restricted are those which are "strategically useful" to Eastern Block countries, "affect the national (U.S.) security" and are "militarily related." Without going beyond the recent pages of the Canadian press, Science, the International Herald Tribune and the documentation provided to the drafting committee, we learn that at least the following technologies are deemed by some U.S. government officials to be covered under one or more of the above labels:

1. advanced computing technology including magnetic bubble memories and other memory technology, super-fast circuitry, machine architecture, pattern-recognition devices, all advanced interactive devices;
2. high energy lasers;
3. rocketry and satellite guidance systems;
4. radar and other detection and tracking systems;
5. all advanced systems of radio and telecommunication including the TELIDON system;
6. high performance aircraft design and engineering;
7. advanced ground or marine weapons and defences including tanks, remote sensing devices, deep diving submersibles and vehicles for cold-weather operation;
8. cryptology and other related forms of mathematical research;
9. research on viral diseases, funguses and other biologic means of attacking and defending against attacks (anthrax and mycotoxins in Southeast Asia);
10. chemical means of disabling opponents and of destroying their agriculture and forests (Agent Orange in Vietnam);
11. devices and methodologies for forecasting agricultural crops;
12. human physiological research on ways of limiting radiation effects;
13. a number of unspecified manufacturing processes, presumably bio-technology-related processes and such devices as turbine blades for high-capacity pumps.

If anything, this list, in spite of its wide generality and lack of precision, is more limited than the blanket of restrictions that may be thrown over information in the U.S. The American Association of University Professors' statement reports that Executive Order 12356 (13 April 1982) expands the authority of government officials to classify information on broadened national security grounds. The Order provides, "if there is reasonable doubt about the need to classify...the information shall be considered classified." The "doubt" that can lead to classification need, presumably, exists only in the mind of the administering bureaucrat. We trust that it is clear that the characterization of such information as "strategically useful" or affecting "the national security" is not only an open-ended classification, but is probably so inclusive as to be an unenforcable restriction.

3. The Enforcement of Increased Restrictions

To enforce such an enlarged limitation would require continuous judgements by government officials as to whether a particular paper, a specific machine or a unique biological sample was likely to be "strategically useful" to Eastern Block countries. Canadian officials would lack information as to the military and production secrets in the Eastern Block countries. They would also be acutely aware of their own lack of understanding of the possible applications of specific technologies. Under such circumstances they would be quite incapable of making an informed judgement. We could predict that they would simply accept American "recommendations" with little question--another abnegation of Canadian sovereignty.

Further, to restrict the flow of technologies to Eastern Block countries is a senseless policy, if such technologies can continue to be relayed through third countries. Canada has a number of technological and scientific agreements as well as scholarly exchanges with countries such as India, China, Argentina and Japan. Some of these countries, in turn, have close relations with Eastern Block countries. To be specific, Canada has worked with India on inertial guidance systems and India has close military relations with the U.S.S.R. In the nuclear field Canada has transferred technology to Argentina which in turn has signed nuclear cooperation pacts with Peru and other Latin American countries. While there is no direct link to the Eastern Block countries spreading technological know-how could soon flow to them as well. Would the enforcing Canadian officials be competent to judge what information might or might not be relayed to Eastern Block countries through third parties, and what affect would such judgements have on our scientific exchanges with all third-party countries?

In sum, when military and industrial technology were simple, as in the days of swords and hand looms, restriction of information outflows might have been simple. When "technical information (that) could affect the national security" becomes so extensive and ramified that it is nearly co-terminous with some fields of engineering and computing and pervades data processing, electronics, medicine, chemistry and many other scientific fields, then effective restriction is equally complex. In recent decades the flow of information has become so fast and so complete among advanced scientific and industrial countries that there is unlikely to be any effective means of shutting it off without shutting down a major part of our scientific exchanges.

4. Some Implications for Canada

Canada, creating its own culture and defending its nationhood in the shadow of America, has found an opportunity to develop within the present international order of soverign states. We can only withdraw from the exchanges which are the life-blood of the international system at the risk of being overwhelmed by the United States. All the Canadian arguments that apply to free trade also apply to free exchanges of information. More specifically, we in Canada have a larger stake in the free-flow of scientific communication and technical exchanges than the U.S.A. Absolutely, we generate fewer of the innovations needed in advanced manufacturing than the U.S.A. and so are very dependent on the importation of new technologies. Canada does not have the resources to match larger countries across the full range of scientific research and technical development. It is understood that Canada's research is under-developed by world standards in such important developing fields as genetic engineering, pharmaceutical drugs, space science, to name only a few examples. Of course, there are fields in which we contribute to the pool of technical information that other countries draw upon, such as in the biological control of pests, diagnostic techniques in cancer, the marine biology of fish stock management, etc. If we are to have continued access to the foremost research in the fields which are not well developed in Canada, we must be able to offer our own research findings in exchange. It may be thought of as a barter system for scientific and technical information.

The exchange of useful information is not only with the United States but with countries with which we are not allied militarily such as France, Japan, Austria or Sweden as well as the Eastern Block countries. We have been told that Canada has benefitted from Soviet engineering and biological research on the Arctic and from Hungarian engineering of public transportation systems. We know that the development of mathematical theory is far advanced in the Eastern European countries which has wide ranging implications for basic research. We would suggest that the more tightly Canada tries to close the door to the flow of scientific and technical information, the less information will come into Canada to off-set our own limited scientific capabilities. We believe it is in Canada's national interest to have as full a flow of scientific communication as possible, not an increasingly restricted trickle.

Further, there is the question as to where the greatest threat to Canada's security might lie. Perhaps a greater threat than economic competition or armed conflict with the conservative Eastern Block countries might come from the export of "militarily related critical technologies" to governments that do not accept the present operation of the world economic and political system such as Iran, South Africa, Libya, Vietnam or some other Latin American countries. Perhaps a greater threat comes from the failure to modify the world system to make it fairer in its operation for marginal countries, as for example in providing equitable access to the resources of the oceans. Perhaps a greater threat comes from the enormous stresses on the world's organizational resources associated with the unprecedented increase of population. Perhaps a greater threat comes from the advancing destruction of the life-sustaining resources of the planet such as the ozone layer which is needed to block out lethal radiation from the sun.

To meet any or all of these threats requires the immediate and continuing cooperation of all influential governments in the world. These issues cannot be faced in isolation by any single government or by any group of allies seeking to insulate themselves from the world. The resolution or at least amelioration of these problems requires an increasing interchange of scientific and technical information on a global level.

5. Some Implications for the Universities and Academic Freedom

There is a complex question of evaluating research and establishing ownership rights over scientific information and technological developments. Where new understanding emerges from academic research, the common test of its quality is publication and comment by other researchers who may be resident in any country. The innovating researcher's contribution to the advancement of scientific understanding is related to wide circulation and peer group comment.

Already we have experience with the tensions surrounding studies supported by private companies or funded as classified government research in university laboratories. In both cases, the common practice has emerged to lay down the conditions of publication, with the consent of the university administration, at the time when the research is initiated.

However, we now appear to have a different possibility where all research whether government or private may be classified after completion rather than as a condition known to all parties from the beginning. To administer such altered terms for carrying out research, the government of Canada would have to organize boards of censors to vet research reports before publication. If the communication of research findings were to be restricted in the name of national security, in such a manner, it would undermine the procedure for peer evaluation of the scientific quality, raise awkward questions of the ownership and rights of disposition of intellectual property and, more importantly, demolish academic freedom and erode civil liberties.

The nature of the Canadian legal system makes the application of such after-the-fact censorship potentially much more serious than in the U.S. There, scientists have ready access to the courts and a large body of precedent law arguing against "prior restraint". In Canada, we have only an untested constitution and the Official Secrets Act. It is entirely possible that a government official could muzzle a scientist without appeal or recourse and, further, order him not to divulge the fact that he may not publish on penalty of secret trial and imprisonment.

6. A Policy Recommendation

After consideration of these various issues, we recommend the following policy. The Government of Canada should wait until the tightened American restrictions on the flow of scientific and technological information to Eastern Block countries are in place. We should observe if these restrictions are successful both in restricting information while maintaining a vigorous and innovative scientific and technological activity in the U.S. When it is clear that both goals can be attained simultaneously and that a major conduit for the flow of "strategically useful technological developments" to the Eastern Block countries is Canada, then and only then should Canada consider falling into step with the U.S. restrictions. For Canada to initiate restrictions before then would, in the opinion of the CAUT, imperil the relatively small and fragile Canadian science and technology establishment.

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APPROVED BY THE BOARD
March 26, 1983