

JUL 11 1977

IEEE - NEWS

J. A. Meyer
5600 Namakagan Rd.
Bethesda, Md. 20016

7 July 77

Mr. E. K. Gannet
Staff Secretary, IEEE Publications Board
IEEE Hq.
345 East 47th Street
New York, N.Y. 10017

Dear Mr. Gannet,

I have noticed in the past months that various IEEE Groups have been publishing and exporting technical articles on encryption and cryptology --- a technical field which is covered by Federal Regulations, viz: ITAR (International Traffic in Arms Regulations, 22 CFR 121-128). I assume that the IEEE Groups are unfamiliar with the ITAR, which apply to publication and export of unclassified as well as classified technical data, and I thought I would draw your attention to them. I have enclosed a few pages of the ITAR which are pertinent.

The key points of ITAR are that unclassified technical data are covered (22 CFR 125.01). All forms of export, including publications and symposia, are covered (22 CFR 125.03). Licences are required unless the material is exempted (22 CFR 125.04). Prior approval by a cognizant government agency is required before publication within the U.S. (22 CFR 125.11, footnote 3). Encryption and cryptologic and related systems are covered by ITAR (Categories XI(c), XIII(b)). The regulations are issued under law and hence have force of law (Mutual Security Act of 1954, Section 414 - 22 USC 1934).

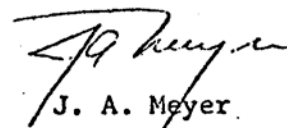
Although ITAR covers a very wide range of weapons technologies, atomic weapons and cryptology are also covered by special secrecy laws (42 USC 2274-77 and 18 USC 798), an indication of the importance of these technologies.

The June 1977 Information Theory Group Newsletter contains minutes of a meeting 19 Oct 76 at which it was proposed that the IT Group become an advisor to NBS on cryptologic secrecy and security, and this led to a call for papers on encryption for the 1977 International Symposium at Ithaca. The reason given was that NBS had only one Federal agency to refer to for cryptologic advice. However, Executive Order 11905 defined that consolidation as government policy. The IT Group seems active in cryptology, and have published several papers in the Nov 76 and May 77 Transactions-IT. The June 1977 issue of Computer also had an article in the same technologic area. One of the papers was presented at an IEEE symposium at Ronneby, Sweden. Several papers on encryption were given at ICC-77. A paper on speech scramblers was given at a VTG meeting at Orlando, this Spring. Another paper on speech scramblers is scheduled for the Cybernetics meeting in September in Washington, D.C. The International Symposium on Information Theory at Ithaca in October 1977 will have papers on encryption. The Facilitator for the IEEE-USSR IT exchange program, Prof. Ephremides, declared on page 7 of the June 77 ITG newsletter (enclosed) that he would forward preprints of new work directly to the USSR in accord with an IEEE-USSR agreement. If any technical papers on encryption or cryptology are sent to USSR before they have been published,

> a difficulty could arise because, according to ITAR, an export licence is required (22 CFR 125.04). Apparently at Ronneby, Sweden this formality was skipped.

Superficially it appears that a small number of authors are providing most of the papers, and most of the motivation. They may not be aware of the full burden of government controls. Some of the topics addressed, e.g. the DES algorithm, are intended for U.S. government activities and hence may be covered by 18 USC 798 as well as by ITAR. Unless clearances or export licences are obtained from the State Department, or there is some special exemption, the IEEE could find itself in possible technical violation of the ITAR (22 USC 1934(c)). As an IEEE member, I suggest that IEEE might wish to review this situation, for these modern weapons technologies, uncontrollably disseminated, could have more than academic effect.

Yours faithfully,



J. A. Meyer

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DIRECT NUMBER
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July 20, 1977

Mr. J. A. Meyer
5600 Namakagan Road
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Dear Mr. Meyer:

I appreciate your calling my attention to the current International Traffic in Arms Regulations (ITAR) as they relate to the exporting of unclassified technical data outside the U. S. We had looked into this question about 10 years ago, and I was glad to have the opportunity you gave us to confirm that our basic exemption from these regulations has not changed since then.

All IEEE conference publications and journals are exempted from export license requirements under Section 125.11(a)(1). In addition, footnote 3 to that Section places the burden of obtaining any required Government approval for publication of technical data on the person or company seeking publication.

It appears to me that the forwarding of preprints to the USSR under the IEEE-USSR IT exchange program is the one activity that needs to be examined further in the light of the ITAR regulations. I am therefore bringing your letter and attachments to the attention of potentially interested parties within the IEEE to review this further.

Again, I am extremely grateful to you for bringing this potentially important question to our attention.

Sincerely yours,

E. K. Gannett
Staff Director
Publishing Services

EKG/mk

bcc: Dr. N. P. Dwivedi
Dr. R. M. Emberson



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MEMORANDUM

To N. P. Dwivedi

Date July 20, 1977

From E. K. Gannett *eg*

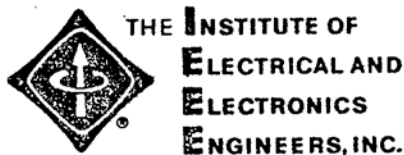
Subject: Regulations on Exporting Technical Data

I am enclosing a letter from J. A. Meyer raising a question of whether certain IEEE activities might be in violation of Government regulations requiring export licenses for publications containing technical data potentially relating to implements of war.

You will see from my reply that IEEE publications are clearly exempt. However, after reviewing the enclosed material you may feel that Professor Ephremides, who is running a preprint distribution program for the Information Theory Group as part of an exchange program with the USSR, should be made aware of the regulations and of Mr. Meyer's letter. Even here, I think the IEEE itself is exempt because the onus, if any, rests with the author or his company. But since we are providing the mechanism, we should perhaps be sure the operators are aware of the rules of the game. But I leave that to your judgement.

Enc.

cc: Dr. R. M. Emberson



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DR. NARENDRA P. DWIVEDI
Director of Technical Activities

August 8, 1977

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SUBJECT: Export Control of Technical Information and Data
— Encryption, Cryptology, etc.

- REF:
1. International Traffic in Arms (ITAR) Regulations, 22 CFR 121-128, excerpts attached
 2. IT Group Newsletter of June 1977

Dear Friends:

A concerned and good meaning member has drawn our attention to a possible violation by authors of ITAR regulations in some subjects which can be linked to be of possible military use. It appears that IEEE and its Groups/Societies/Councils are exempt but the individuals (and/or their employers) have to watch out. I am enclosing the correspondence and excerpts of ITAR.

Based on my experience of working with NASA for a decade, I have the following practical suggestions:

1. If anyone of the authors of a paper is working for a Defense/NASA Contractor Company, then that author should get the paper cleared as "unclassified suitable for foreign publication and presentation".
2. If the sole author of a paper has no clearing facility with the employing institution or is self-employed then the author should refer the paper to the Office of Munitions Control, Dept. of State, Washington, D.C. for their ruling.

(I have no personal experience of dealing with them.)

(Cont'd)

Messrs. Jeninek, Ephemerides, Hellman
Massey, Wyner and Smith

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August 8, 1977

If you are beginning to feel that it is not always easy to carry out good-intentioned projects, I welcome you to the club and wish you the best.

Yours sincerely,

Narendra P. Dwivedi

Narendra P. Dwivedi

Encl. (as above)
NPD:mgc

cc: Dr. F.H. Blecher, V.P., Technical Activities
Dr. R.M. Emberson, Acting General Manager
Mr. E.J. Gannett, Staff Dir., Publishing Services
Dr. J. Sevick, Chairman, Transnational Relations Com.
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Publications File