July 11, 2002

The Honorable John H. Marburger
Director, Office of Science and Technology Policy
Executive Office of the President
Washington D.C. 20502

Dear Jack,

We deeply appreciate your interest in the problems universities are facing with space-based fundamental research governed by the International Traffic in Arms Regulations (ITAR). We know that your office was involved with NASA, DOD, the Department of State, and other agencies in seeking to ameliorate some of the recent problems and we appreciate your leadership, as well as the technical expertise of Vic Teplitz on your staff. We are writing today in response to your invitation for our assessment of the recently promulgated clarifications to the ITAR regulations, which were published in the Federal Register on March 29.

While the new ITAR rule presents a carefully defined construct, we are concerned because its practical application will leave basic problems unresolved. We bring them to your attention in the hope that they may be addressed before the interim rule becomes final.

The first point is the limited applicability of the new exemptions. Under the proposed rule, the universities may place fewer restrictions on those foreign faculty and students who are citizens of NATO countries or of major non-NATO allies. Citizens of those countries, however, comprise only a portion of the 547,000 scientists and students currently enrolled at U.S. institutions. We would like to see the current list of acceptable countries broadened to include all but those countries which are identified by the State Department as sponsors of terrorism. This would also solve the problem regarding cooperative research between U.S. citizens and foreign nationals. U.S. universities cannot ensure compliance with ITAR terms by foreign entities and have no means to require those countries to impose those terms on themselves. As a result, universities would have to choose between two undesirable options-to turn away from conducting research involving foreign collaborations, or be forced to seek export licenses.
Our second point is that the interim rule appears to narrow the definitions of "public domain" and "fundamental research." The interim final rule's definition of public domain states that such information "will be published and shared broadly" while the definition contained in Section 120 of the ITAR provides that such information be "generally accessible or available" to the public and "ordinarily" shared broadly in the scientific community. Likewise, the term "fundamental research" appears narrower in the interim rule than in National Security Decision Directive 189 (NSDD 189) and the Export Administration Regulations (EAR). We recommend amending the final rule to make the definitions consistent with NSDD 189, the ITAR, and the EAR.

It is particularly important that the definition of fundamental research be clearly understood. The interim final ITAR rule does not provide guidance on this point. As universities and industry collaborate on federally funded research projects, both sides need to understand that university-based research does qualify for the fundamental research exclusions, whether or not the industrial partner qualifies. Otherwise, international collaboration will suffer, as will the involvement of foreign nationals in U.S.-based research projects. The EAR has a very clear and workable set of explanations and we recommend that they be adopted into the final ITAR rules.

Finally, we want to clarify a misperception found in the Supplementary Information to the rule. The Supplementary Information refers to the academic community as having concerns "about potential government restriction on disclosure of information in university classrooms" through ITAR. That has been only a part of our concern. The activities in question more generally involve design, construction, testing calibration, data acquisition and analysis of actual flight experiments. These activities do not take place in a classroom, but rather in a research laboratory and the university community has provided numerous examples over the past three years of the difficulties caused in this area.

In an attachment to this letter, we provide additional technical comments and requests for clarification of the interim rule. The letter plus attachment reflect the feedback we have received from discussing the interim ITAR regulations with our memberships. We respectfully request your continued assistance, although we are aware that the inherent difficulty in reconciling the position of the academic community regarding fundamental research with the perspective of military and civilian agencies is now exacerbated by our joint concern about homeland security and defense. Please know how much we appreciate OSTP's work on this issue over the past two years.

Cordially,

Nils Hasselmo
President, AAU
Detailed Additional Comments

- **Issues on Which General Clarification is Needed**

We recommend that a clarifying document address the following questions:

1. While the permission to export defense articles in the public domain only to universities or government funded research institutes abroad is an improvement, **questions have arisen regarding non-NATO nationals and non-Major Non-NATO Allies (MNNA) at foreign institutions**. U.S. universities obviously cannot insist that foreign institutions restrict their entire faculties and/or student bodies to nationals of listed countries. Would it be a reasonable interpretation of the rule that U.S. universities are in compliance so long as the document governing the particular agreement specifies that only nationals of the specified countries can participate?

2. **To what extent does the fundamental research exemption apply to fundamental research done at laboratories managed by universities**, such as the Jet Propulsion Laboratory at the California Institute of Technology or the Applied Physics Laboratory at Johns Hopkins University?

3. **It is unclear whether the exemption allows for fundamental research on a
remote sensing satellite. The amendment concerns defense articles fabricated only for fundamental research purposes covered by Category XV (a) or (e) and the provision of defense services and related unclassified technical data for the assembly and integration of such articles into a scientific, research or experimental satellite. This seems to imply that if the research/technology does not fall into that category, then the exemption does not apply. We believe the exemption should apply to remote sensing satellites and urge that such a position be clearly stated.

- **Suggested Technical Corrections**

We also recommend that the final rule include the following technical corrections:

1. Section 125.4(d)(i) allows the export of defense services (including training) to nationals of specified countries "when engaged in international fundamental research conducted under the aegis of an accredited U.S. institution of higher learning." This language suggests that the U.S. university must be the lead university on all research projects involving the spacecraft and satellite exemption. If it isn't intended to so restrict the exemption, "involving an accredited U.S. institution of higher learning," is more appropriate. This is a critical correction, as U.S. institutions are not always the lead institution and it is important to the advancement of fundamental research that institutions be encouraged to collaborate regardless of which one is the primary funded institution.

2. One condition to the exemption in Section 123.16(b)(10)(iii) is that the platform or system in which the articles may be incorporated, presumably abroad, must be "exclusively concerned with fundamental research..." Yet the definition of fundamental research under ITAR Section 120.11(8) requires, among other conditions, that the scientific and engineering research be at an accredited university in the U.S. If we are exporting abroad, the receiving institution is not in the U.S. It seems clear that this exemption is meant to apply to scientific and engineering research at qualified institutions in NATO and other specified countries (not just those in the U.S.) which meets all of the other conditions of fundamental research. A technical correction should be made as follows-"For purposes of Section 123.16(b)(10)(iii), "fundamental research" shall include research that qualifies as fundamental research under Section 120.11 (8), whether at an accredited institution of higher learning in the U.S. or at an accredited institution of higher learning, a governmental research center or an established government funded private research center in any countries identified in Section 123.16(b)(10)(i) with which the United States collaborates."