June 27, 2005

Matthew S. Borman
Deputy Assistant Secretary for Export Administration
U.S. Department of Commerce
14th & Pennsylvania Avenue, NW.
Room 2705
Washington, DC 20230

Re: Export Controls, RIN 0694-AD29

Dear Deputy Assistant Secretary Borman:

The American Civil Liberties Union submits these comments, formally opposing the Department of Commerce's proposed rule changing the definition of "use" in the regulatory requirements for deemed exports. The proposed rule¹ stifles scientific freedom, threatens America's preeminence in the sciences, and harms national security. Instead, the Department of Commerce should retain the existing rules that recognize that our scientists and engineers need the freedom to pursue fundamental research. Their research is vital to discovering innovative new technologies that are critical for America's economic and national security.

As the Commerce Department knows, export controls do not just control technology and information exported outside the United States. They also govern what technical information individuals who are not United States citizens or legal permanent residents can learn.² The NPRM's proposed change in the definition of use would mean that any researcher who is not a United States citizen or legal permanent resident may have to get a license to work with a variety of technologies.³ It is even possible that if the researcher is from a country to which export of a specific technology is controlled, and an export license is denied, the researcher could be completely banned from working on a project.⁴ Much more troubling, the proposed rules would create an extraordinarily burdensome regulatory process which requires: cataloguing every technology in the university lab; determining if that technology is subject to use restriction; ascertaining if the technology is publicly available (and hence exempt from export controls); and

³ *Id*.

¹ 70 Fed. Reg. 15607-15609, "Revision and Clarification of Deemed Export Related Regulatory Requirements," RIN 0694-AD29.

² 15 C.F.R. § 734.2

⁴ 15 C.F.R. § 736.2

learning the national origin of every researcher and the projects upon which they are working.⁵

The obvious effect of this regulation will be a delay in the start of research. But the more subtle and dangerous effect will be the stigmatization of foreign researchers, thus making work in the United States more difficult and cumbersome for foreign nationals. In some cases, universities may choose, justly or unjustly, to simply avoid this burden altogether by not employing foreign researchers at all.

The direct result of the policy enumerated in the NPRM will be a decrease in the number of individuals who choose to study and work in the United States. We have already seen a similar pattern after the US increased the burdens and restrictions on the granting of visas through programs like Student and Exchange Visitor Information System (SEVIS),⁶ Visa Condor Program⁷ and Visa Mantis Program.⁸ In 2003, total enrollment of foreign students in the U.S. fell for the first time in three decades, following only a minimal increase in 2002. Total enrollment in 2003 fell by 2.4%, and 2002 enrollment had increased by only 0.6%, as compared to 6.4% increases the previous two years.⁹ Forty-two percent of universities responding to a survey conducted by the Association of American Universities in 2004 attributed a decline in foreign student enrollment to the applicants opting to study in another country.¹⁰ It is reasonable to assume that increased restrictions like the ones contemplated by the NPRM will only accelerate these trends.

Nor should there be any question regarding the value of foreign born visitors to our nation and its history of successful academic and scientific inquiry:

- More than 580,000 international students attended colleges and universities in the U.S. in 2002.¹¹
- These students contributed almost \$12.9 billion to the U.S. economy. 12

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⁵ 15 C.F.R. §§ 734 & 736.

⁶ Section 416 of the USA Patriot Act mandated the creation of a the full-scale implementation and expansion of a national electronic foreign student tracking system, SEVIS, which requires schools to enter and maintain current information about all of their foreign students and nonimmigrant exchange visitors.

⁷ Under the Visa Condor Program visa applications from individuals determined to be "high risk" are forwarded to the FBI and compared against various government databases.

⁸ Under Visa Mantis, students and scholars applying for visas to study subjects or engage in activities that will involve exposure to technologies must undergo extra scrutiny and obtain additional security clearances.

⁹ Goodman, Allan E., "Addressing the New Reality of Current Visa Policy on International Students and Researchers," Statement before the U.S. Senate Foreign Relations Committee, 6 October 2004. Available at: http://foreign.senate.gov/hearings/2004/hrg041006a.html

¹⁰ Association of American Universities (AAU), "AAU summarizes 2004 visa survey results for AAU universities," 10 November 2004. Available at: http://www.aau.edu/homeland/students.cfm

¹¹ Goodman, Allan E., President and C.E.O., Institute of International Education, Written Testimony, "Addressing the new reality of current visa policy on international students and researchers," Senate Foreign Relations Committee Hearing, 6 October 2004.

¹² Jischke, Martin, President, Purdue University, Testimony before the U.S. Senate Foreign Relations Committee, 6 October 2004.

- Over the past 20 years, noncitizens have accounted for more than 50% of the growth in the number of Ph.D.s earned in the U.S. Most of this growth has occurred within the sciences. ¹³
- More than half of the students enrolled in science and engineering programs in the U.S. are foreigners. ¹⁴
- Approximately 40 percent of U.S. engineering faculty¹⁵ and engineering, math, and computer sciences graduate students are foreign-born.¹⁶

The contributions of foreign nationals to our society and to global security are immense. Many foreign nationals who study in the U.S. return to their home countries where they take on leadership positions with an understanding and appreciation of American culture and American values. The fact that nations around the world from Nepal to Saudi Arabia are seeded with leaders in a variety of fields who received their educations in the United States cannot be anything but an enormous boon for our country.

Other foreign nationals stay on in the U.S. to make invaluable contributions to our society. Consider that:

- More than a third of U.S. Nobel laureates are foreign-born. 17
- 38% of doctorate holders in America's science and engineering workforce are foreign-born. 18
- Nearly 50% of the scientific and medical professionals at the National Institutes of Health are foreign nationals. 19

Our nation's hard earned position as a world leader in the sciences has been put at risk by ill-conceived "security" policies that will only harm our nation by unduly restricting hundreds of thousands of talented foreigners. Once famous for its open arms and its ability to attract talented and enterprising individuals from around the world, the United States risks losing out in the competition for global brainpower. Misguided policies including those contemplated by the NPRM could have the disastrous effect of excluding or repelling some of the world's best and brightest minds. This loss will be felt not only by America's thousands of colleges and universities; it will reverberate

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¹³ "Academic freedom and national security in a time of crisis: A report of the AAUP's special committee," *Academe*, Vol. 89, No. 6 (November-December), 2003.

¹⁴ Zakaria, Fareed, "Rejecting the next Bill Gates," *Newsweek*, 28 November 2004 (citing National Science Board (NSB) Statistics from 2003).

¹⁵ Gast, Alice P. "The impact of restricting information access on science and technology," MIT, April 2003, p. 4. Available at: http://www.aau.edu/research/Gast.pdf

¹⁶ Statement issued on December 13, 2002, by Bruce Alberts, president of the National Academy of Sciences; William A. Wulf, the president of the National Academy of Engineering; and Harvey Fineberg, the president of the Institute of Medicine. Available at:

http://www.aaup.org/publications/Academe/2003/03so/03sointer.htm

¹⁷ Gast, 2003, p.4.

¹⁸ Zakaria, 2004 (citing National Science Board (NSB) Statistics from 2003).

¹⁹ Gast, 2003, p.4.

throughout our corporate, medical, scientific, and engineering communities for decades to come.

Such actions not only threaten the scientific advancement that has brought so many benefits to the United States and the world, but also are a misguided response to the threat of terrorism. Our ability to address problems or respond to disasters – whether they are caused by terrorists or not – is at least partially dependent on international scientific communication and cooperation. Hamstringing the free exchange of scientific ideas and information will diminish the capacity of the scientific community to address threats to public health and safety.

This NPRM is part of a larger trend evident since 9/11 of hindering scientific inquiry, not just by restricting the people that can work in the sciences but also by limiting the materials that scientists can work on and the type of information that they can speak about and publish. For more information please see the ACLU's recently released report describing restrictions on academic freedom at www.aclu.org/scientificfreedom.

For all of these reasons, we urge the Department of Commerce to reject the regulatory scheme outlined in its Notice of Proposed Rulemaking and continue the current policy of exempting most university research under the exemption for "fundamental research".

Sincerely,

Christopher R. Calabrese

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Counsel, Technology & Liberty Program

Barry Steinhardt

Director, Technology & Liberty Program