

House Committee on the Judiciary
Subcommittee on Immigration, Border Security, and Claims
"Oversight Hearing on the INS's Implementation
of the Foreign Student Tracking Program."
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Rayburn House Office Building

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We are submitting this statement in outline format, as that seems the most efficient way to represent a somewhat complex and sometimes convoluted topic. We will be pleased to discuss any issue further.

At the end of this document we have provided a guide to abbreviations used.

I. Duke Information

A. Institutional Information.

1. An internationally recognized university and academic medical center offering undergraduate, graduate, and professional degrees, and other specialized degrees and certificates.
2. An internationally recognized research facility conducting research in such diverse areas as biblical archeology, lemur biology and habitat, bioengineering, and medical research.
3. One of the nation's premier medical centers and hospitals providing superior medical care and ongoing bench and clinical research on new drugs, therapies, and procedures.
4. Academic base and employer to over 1200 international students and over 1,000 international professors, researchers, area specialists, and employees.
5. Host for hundreds of international seminars, meetings, conferences, and collaborations every year.
6. For more detailed information on Duke go to <http://www.duke.edu/>. For more detailed information on international students and scholars and visa issues go to <http://www.international.duke.edu/>.

B. Duke's INS/CIPRIS/SEVIS experience.

1. Authorized by INS to operate an F-1 student program since 1954.
2. Authorized by the Department of State to operate a J-1 Exchange Visitor program since 1950.
3. One of the 21 pilot schools that cooperated with INS to develop the electronic data management system initially know as CIPRIS.
4. Only school in the nation to have developed, tested, and *used* a batch system to transmit student data to CIPRIS.
5. First school in the nation to create a student document in the national SEVIS system.
6. Currently an active user of SEVIS with over 400 files in that database and over a thousand files in the earlier CIPRIS database, which INS has not yet converted to SEVIS.

II. An INS/Duke/SEVIS time line. Dates are approximate.

- A. 1994-1995. INS forms a task force on electronic data reporting on students, and in 1995 IIRAIRA mandates electronic reporting.
- B. 1996-1997. INS begins to implement recommendations of the task force and seeks volunteer schools in the Atlanta, GA, INS jurisdiction. Duke applies for and is accepted as one of the 21 pilot schools that will help design and develop the new system. Duke sought participation in the pilot program because we believed that it was essential that INS have information from and experience with a major university with a complex structure and an internationally active student, faculty, and staff community.
- C. 1997. INS launches the CIPRIS pilot program, the precursor to SEVIS. All of the pilot schools except Duke begin issuing F visa and J visa documents out of CIPRIS. Duke delays use of CIPRIS to begin working with INS to design and test batch submission. Duke is a larger school with its own database pertaining to internationals. It could not reasonably double-key into its own database and into CIPRIS. The need for batch at Duke provided an opportunity for INS to explore batch processing while it developed CIPRIS.
- D. 1998, Spring. Duke begins issuing documents in CIPRIS using batch transmissions and real time submissions.
- E. 1998-2001. INS and pilot schools refine CIPRIS. INS brings additional beta test schools into the system. INS builds SEVIS, a

system intended to be more robust, to replace CIPRIS for nationwide service.

- F. 2002, January/February. INS converts all F and M CIPRIS records to SEVIS, and all pilot and beta schools begin using SEVIS.
- G. 2002, January through July. Schools report serious data management problems with SEVIS. INS re-evaluates and restructures SEVIS.
- H. 2002, July. INS launches new national SEVIS.
- I. 2002, July. INS and Duke, via conference call, walk through the process of bringing a school online in SEVIS. Successful logon. Duke becomes the first school in the nation to issue a student document out of the national SEVIS system. INS brings all pilot and beta schools online soon after. Most schools begin reporting bugs in the system and notify INS and the Help Desk. INS responds to and corrects immediate major problems, and begins compiling a list of other problems to be solved.
- J. 2002, July/August. INS begins approving schools nationwide or SEVIS use through the electronic certification system.
- K. 2002, July/August/September. Schools continue to report bugs, "features," and general difficulties to the Help Desk. INS solves some critical problems immediately. Schools are advised that other problems will be resolved for the next release of SEVIS in October 2002.

III. Current status and concerns

- A. INS ability to admit all schools to SEVIS by 30 January 2003
 - 1. The login process is working, though some schools are waiting more than a month for access to SEVIS. We believe that INS can have an electronic mechanism in place to bring all *schools* online and connect them to SEVIS by 30 January 2003. INS can thus achieve the mandatory *schools* compliance date. Schools cannot possibly have all of their data entered into the system by that date (see item B below).
 - 2. Only about 10% of INS approved schools have active F or M programs. INS reports that of the 75,000 schools listed as approved by INS, only 7,000 to 8,000 have issued F-1 or M-1 documents in the last three years - a manageable number to connect to SEVIS in the next four months.
 - 3. INS has not yet brought the J visa programs online in

SEVIS. The J program will require a separate login even if a school operates both an F/M visa and a J visa program. The J program adds about a thousand more logins to the INS task.

- B. Inability of schools to enter all student data by 30 January 2003.
1. The surest and most accurate way to enter student data is to allow schools a calendar year, until 30 January 2004, to cycle all of its students and scholars through one annual academic calendar. In this way, every file can be reviewed, verified, and entered in a logical, methodical, and accurate way.
 2. INS has not given schools the time or tools to do massive data entry in only a few months.
 3. INS published a proposed rule for F/M visa SEVIS implementation in May 2002, and an interim final rule on school certification in July 2002. It has not yet published a final version of either of these rules. Schools can only guess at what will finally be required of them and when.
 4. INS/DOS has not yet published even a proposed rule for J visa SEVIS implementation. The final rule could be many months away, again leaving schools to speculate on what will be required of them. The J program has 12 different categories of Exchange Visitors, including professors, researchers, short term scholars, trainees, au pairs, physician trainees, and so on. In comparison the F/M program has the single category of "student." Implementation of the J program in SEVIS will be at least 12 times more complicated than for the F/M program. Considering the bugs in the current SEVIS F/M program, we have no expectation that the J program will be completely usable or accurate when it comes online. We expect a long, difficult, and complicated shake down of that system.
 5. Each school will have to enter dozens, hundreds, or thousands of records to convert to SEVIS. This cannot be done manually by 30 January. We estimate that reviewing, compiling, and keying in each file will take 30 minutes. If a school like Duke has to enter 2,000 records, that is 1,000 hours of time. Based on a 40-hour work week that is one person doing this work all day every day for six months.

Despite repeated requests from the educational community over the last decade, INS will not permit schools to have more than 5 DSOs. That means that only five people at each school have authorization to do data submission in SEVIS. At best, a school like Duke would have to shut down all International Office services for a month to get this done. Although INS has authorized designation of five ASOs for each school to provide clerical help, our experience has shown that SEVIS's administrative programming limitations makes the ASO position nearly useless.

6. The batch submission system will not be available until October 2002 at the earliest. While INS has had several versions of batch specifications available on its web site for over a year, it only posted what we are not told is the final, reliable version in August 2002. We are concerned that INS has indicated no plan to provide a test platform for the batch system. It appears that schools will have to "go live" with real data on an untested system.
 7. Schools are exceedingly concerned about being asked to enter a million records into a database in a matter of a few months using either manual entry or a batch system that is untested and unproven. Schools want to be sure to enter accurate data on their students and scholars so as to provide the information the government needs for security purposes and to ensure that students and scholars are not misidentified or misjudged due to bad data.
 8. Hasty and forced mandatory record entry on a million files will result in a data base that is so full of errors as to be unreliable and unusable. Manual data entry, regardless of how careful the typist is, produces a high error rate. Batch submission using a new and untested transmission protocol can put millions of pieces of bad and unretrievable data into a database very quickly.
 9. A one-year transition is not only the most reasonable approach for schools, but it also provides the most accurate data for national security purposes.
- C. Irresistible force meets immovable object. The rigid SEVIS system in an historically discretionary government environment.
1. SEVIS is a computer system. It thinks like a computer, not

like a person. It expects order, clarity, consistency, and precision. INS has, to its credit, attempted to build a system that prevents errors, calculates options and eligibility for benefits based on the regulations, collects data that the law enforcement and security community needs, and allows the schools to enter data in a logical way. In this effort it has also created sequential requirements and edit checks that cannot accommodate the real world, and that make accurate data entry difficult and frustrating.

2. DOS Consular Officers and INS Immigration Officers are trained to question, examine, and use their powers of observation to assess a situation. They are given broad discretion to make decisions regarding the granting of visas, the admission of aliens into the U.S., and the granting of immigration benefits after aliens arrive. They do what seems logical and lawful in a given circumstance.
3. DSOs and ROs at schools are required by law and regulation to interpret situations to judge whether a particular activity is in keeping with the aims and goals of the visa status and to reflect that determination in reports to INS and DOS.
4. The synthesizing of information, decision making, and operation of discretion required of consular, immigration, and schools officers does not and cannot follow the lock step pattern that the current version of SEVIS expects.
5. One must ask the question of whether the software is organizing data to serve the user or is forcing the user to alter data to accommodate the software. In our experience the immigration officer developers of SEVIS want accurate data, even if it is complicated, while the programmer developers generally tend toward altering the facts to fit the fields unless firmly and continually redirected by INS and the schools.
6. No matter how careful we all are in doing our jobs, the initial transition to SEVIS will create confusion and difficulties for consular officers, INS officers, schools, students, and scholars. We need to move through this process expeditiously, but with care and deliberation to ensure that SEVIS serves our security needs in every venue.

- IV. Future - short term concerns and recommendations
- A. INS needs to establish SEVIS Help Desk assistance in all U.S. time zones for at least 12 hours per day. The Help Desk staff must be trained and knowledgeable both in the F, M, and J regulations and in how to represent students and scholar in SEVIS under those regulations. The two skills and knowledge bases must be integrated. Experience has shown us that, when isolated from each other, they provide conflicting and confusing advise that can lead to serious difficulties. The Help Desk has been very responsive, for the most part, but it is severely limited by the level of training and knowledge base of its people.
 - B. INS needs quick and accessible e-mail communication among qualified INS/SEVIS experts, the schools, consular posts, ports of entry, and immigration offices. Note the key element, "qualified INS/SEVIS experts.
 - C. SEVIS has bugs. INS and the schools must continue to work closely to iron out the new relationship between the need to put precise data in the database and the realities of how hundreds of different consular posts, ports of entry, immigration offices, and schools will acquire and interpret information.
 - D. All of us need the next year to use, refine, and revise hardware, software, and business processes. Taking the time to do it right will pay off by providing accurate and useful data, which is the real mission if this data is to be useful for national security purposes.
- V. Future - long term concerns and recommendations
- A. Congress and the representative agencies must commit to long-term support for ongoing development and updating of SEVIS.
 - B. Launching a national system, bringing all schools, consular posts, ports of entry, and immigration offices on line, and entering all records is only the beginning of an endless responsibility of recordkeeping, reporting, and responding to what we learn.
 - C. All parties using SEVIS will identify new needs to make reports and to manage and extract information. Congress will want updates, ports and posts will want enhancements, schools will want statistics, the security community will want different algorithms run on data broken down in different ways. Something as simple as whether a birth date goes in as a single field of 09/18/2002 or as three fields of month (09), day (18), and year

(2002) requires thought, reprogramming, and relearning. Should pick lists replace text fields on data element X? Should first, middle, and more names be entered as a single line, as the concept of middle name is by no means universal and searching a single line of text for "John" or "Richard" or "David" would find any one of those names regardless of whether it were "John Richard David" or "David John Richard" or any other combination thereof? These are exceedingly simply examples of how this database must accommodate global variety and changing needs.

- D. The successful launch and implementation of SEVIS should offer a platform for F/M/J management that abandons the concept of having all parties do busy work for its own sake, or of subjecting bona fide schools and their representatives to needless and resource depleting reviews. Recent events have shown that neither INS nor DOS can handle the avalanche of paper and data, and the human resource expense such busy work produces. SEVIS should embrace the new technologies that allow data to be collected at the source in the most efficient and least intrusive way and then subjects that data to "red flagging," searches for text strings, algorithm analysis, and indicators of patterns of practice or participation. And INS and other agencies should implement the interoperable databases mandated by Congress, rather than having the same or similar data entered from multiple sources.

VI. Closing

- A. Forcing mandatory dates and deadlines for the sake of a sound bite, without consideration as to whether those deadlines are achievable and the data is accurate does a disservice to the country.
- B. Consistent, hard, and careful work is more difficult to sustain, but historically, such work has brought this country its greatest rewards.
- C. INS, indeed all government agencies, and the schools must commit to ongoing cooperative work to protect the tremendous educational, cultural, economic, and political benefits that international education brings to the U.S., while protecting the U.S. from those who would pose as what they are not in order to do us harm.

GUIDE TO ABBREVIATIONS

ARO	Alternate Responsible Officer, authorized to issue visa documents for the J Exchange Visitor Program (see also RO).
ASO	Assistant School Official (also ADSO in some publications), authorized to produce draft documents online in SEVIS, but not authorized to submit data or produce visa documents (see also DSO).
CIPRIS	Coordinated Interagency Partnership Regulating International Students and Scholars, the pilot development version of SEVIS.
DOS	Department of State.
DSO	Designated School Official, authorized to issue visa documents for the F and M student programs (see also ASO).
INS	Immigration and Naturalization Service.
IIRAIRA	Illegal Immigration Reform and Immigrant Responsibility Act.
RO	Responsible Officer, authorized to issue visa documents for the J Exchange Visitor Program (see also ARO), and to conduct all business with the DOS in regard to the operation of the program.
SEVIS	Student and Exchange Visitor Information System, the electronic data management system developed for use with the F, M, and J visa categories.