

and in turn our state is one of the nation's leaders in space industries. The National Space Symposium, held annually in Colorado Springs, emphasizes the importance of technology in our state and nation. Space Command, Air Force Academy, and NASA, are some of the major presences. In addition, four space centers tied in with NASA are based in Northern Colorado: the Center for Aerospace Structure, Colorado Center for Aerospace Research, Center for Space Construction, and Bioserve Technologies, which produces hardware for the space shuttle.

Our universities are aware of the need for high-tech education, and have focused on preparing students for this field. The University of Colorado at Colorado Springs offers a well established Master of Engineering Degree in Space Operations, and the Air Force Academy continually graduating students into this field. Graduates of the University of Colorado-Boulder, which offers the only aerospace degree in Northern Colorado, also support Colorado's space industry.

At the college level internship opportunities become significant. Employers see cooperative education programs and internships as real-world employment experience which lets college students become familiar with an organization and its work style. High-tech industries are seeing a trend toward expensive training costs and high employee turnover. By partnering with colleges and universities, high-tech industries will see a more highly trained workforce entering their industry and employees who are more committed to the organization.

The main idea behind cooperative education and internships are that they provide students the opportunity to apply theory learned in the classroom to the workplace. High-tech industries now consider the use of partnering with a university's cooperative education and internship programs as the number one recruitment tool for long-term commitments of regular employment.

For example, the University of Colorado at Colorado Springs recognized this as an important investment in students' futures. In addition to helping their own students with internships, the University itself provides internships to students from other universities without internship opportunities. The University has formed partnerships with community, junior, and 4-year colleges without engineering programs.

In conclusion, this is a critical time; we must start today if we want to solve the high-tech employment problem. The signs are everywhere that high-tech is booming, but high-tech employees are not. We must act fast, for studies show key math and science decisions are made by a student at the 5th to 7th grade level. This means that there can be up to a ten-year lead-time for bachelor degree level technology workers. There are four areas that I

think we should focus on in order to help solve the problem.

No. 1, Clearly understand the challenge, communicate it to our teachers, parents and students, and consider the consequences of not acting on this issue immediately.

No. 2, Better connect education systems and industry.

No. 3, Find innovative ways to remove barriers to education in math and science, and continue improvement in higher education.

No. 4, Leverage government funding through greater collaboration among government agencies, educational institutions and the private industry.

We need to work together in order to solve this problem. Our universities need to increase engineering and computer sciences scholarships, improve distance learning, and expand their internship and cooperative education programs to meet the needs of the high-tech industry. Our government needs to upgrade training and outsource more work, education, and training. Our industries must increase recruiting, build higher retention rates, and offer on-site courses. And finally, our public schools must increase partnerships with outside entities, educate our teachers about technology, and make science and math fun for our students.

The examples I have given from my home state of Colorado demonstrate that through increased internships, partnerships, teacher training, and K-12 student programs, communities can do something to meet the employment needs of the 21st Century.

The United States will continue to be a global leader in the technology arena if these ideas are implemented tomorrow and we ensure that our schools are producing the best, most educated workforce in the world.

Mr. President, I yield the floor.

Mr. WARNER addressed the Chair.

The PRESIDING OFFICER. The Senator from Virginia.

DEPARTMENT OF DEFENSE AUTHORIZATION BILL

Mr. WARNER. Mr. President, first, for the information of all Senators and others who are following the status of the conference between the Senate and the House on the annual authorization bill for the Department of Defense, the negotiations between the Senate and the House reached the final stage—and, indeed, concluded for all practical purposes—last night.

We had several meetings throughout the day, under the supervision of our able chairman, Mr. THURMOND, with Mr. SPENCE and Mr. SKELTON from the House, and Senator LEVIN and myself.

I wish to report that at the day's end we were far enough along in reaching a final conference agreement that a set of sheets—the traditional conference sheets—were signed by all 10 Republicans on the committee. I have to await any statement by Senator LEVIN

with respect to participation by the Democrats. But I anticipate on behalf of Senator THURMOND that Senator THURMOND will soon send to the House a final conference proposal, as modified by such agreements as we were able to reach in the course of our negotiations yesterday. If the House is able to agree to that proposal, we have essentially concluded the conference. With 10 signatures on the conference sheets, we have enough Senate conferees in support of the conference agreement for the Committee to file a conference report.

Mr. DOMENICI. Mr. President, do we have a standing order with reference to time?

The PRESIDING OFFICER. There is a morning business limit of 5 minutes.

Mr. DOMENICI. Mr. President, I have about four items. I am not sure I can finish them in 5 minutes, but if there is no one here I will ask for an extension of time.

STEVE SCHIFF AUDITORIUM

Mr. DOMENICI. Mr. President, last night the Senate passed H. Res. 3731. This legislation designates a special auditorium at Sandia National Laboratories as the Steve Schiff Auditorium. Steve spoke in that auditorium on several occasions as part of his long service to the people of the State of New Mexico. I believe we all know, now that we have had a chance to look at Steve Schiff's life and his time in the House, before his unfortunate death from cancer, that he was in all respects a good public servant—he demonstrated integrity of the highest order, deep and fundamental decency, and an acute and open mind. He went about his business quietly but with efficiency. He was great at telling stories, usually about himself. He was a model for all politicians to admire.

Mr. President, I wish that we could do something more significant than naming this very, very fine auditorium at Sandia National Laboratories after him. We will have a ceremony when that takes place officially, and the people of his district and our State will join us in a celebration that I hope is a fitting tribute to our deceased colleague.

(The remarks of Mr. DOMENICI pertaining to the introduction of S. 2395 are located in today's RECORD under "Statements on Introduced Bills and Joint Resolutions.")

FRENCH UTILIZATION OF NUCLEAR ENERGY

Mr. DOMENICI. Now, Mr. President, Senator ROD GRAMS and I traveled to France to develop a better understanding of policies underpinning the utilization of nuclear energy for about 80 percent of their electricity. We visited several key French facilities, and Senator FRED THOMPSON joined us after the site visit and participated in several of the high-level meetings with

elected and appointed Government officials.

Observations from our trip provide some important perspectives for consideration in the United States:

Nuclear energy has been implemented in France with strict attention to minimizing environmental consequences. Waste products are reduced at each step in their process.

The French nuclear energy system enables them to achieve world-class standards for minimal environmental impact from power generation. They are justifiably proud of their record. Their carbon dioxide emissions per capita are about one-third those in the United States.

French reliance on a "closed fuel cycle" has enabled recycle and recovery of the energy content of spent fuel while also dramatically reducing the volume and toxicity of waste products below those in the United States with our "open fuel cycle."

Transportation and interim storage of spent fuel are done carefully in France, with virtually no negative impacts. Interim storage is essential in implementing their fuel cycle.

At each site in France, attention to protection of the environment is outstanding. For example, while the United States left corrosive waste from uranium enrichment in tens of thousands of steel casks at places like Paducah, Kentucky and Portsmouth, Ohio, the French have routinely extracted commercial products from the same waste and stored only inert products.

The nuclear industry in France is structured around a closed fuel cycle, which recycles much of their spent fuel. This requires reprocessing of the fuel, a step that the U.S. banned in 1977. That decision by President Carter sought to avoid availability of separated plutonium with its proliferation concerns. The French, along with other countries, were equally concerned about proliferation; but they simply ensured careful safeguards on the plutonium and today are seeking to increase their reuse of plutonium to minimize plutonium reserves. Excellent security and international safeguards were obvious in their facilities.

When the French reprocess spent fuel, they reuse plutonium in mixed oxide or MO_x fuel, consisting of a mixture of plutonium and uranium oxides. Their reprocessing allows the plutonium and uranium to be reused and dramatically reduces the toxicity and volume of their waste below the U.S. open cycle. In contrast, we just plan to bury our spent fuel with no attempt to recycle the valuable energy content of the spent fuel or reduce its volume or toxicity. The resulting waste volume from 20 years of a family of four in France is about 2.5 cubic inches, about that of a pack of cards. And after 200 years, the radiotoxicity of their waste is only about 10% of the value of our spent fuel.

The French have gone to great lengths to educate their public about

nuclear issues, and extensive environmental monitoring information is routinely shared with the citizens from all the activities we saw.

Transportation of spent fuel is required in the French system. But the French have never experienced a radioactive spill in any traffic accident. Simple interim storage is routinely used in France, without the political debates we face in the United States over this necessary step towards a credible fuel cycle.

A 1991 French law prescribed a 15 year period to assess options for disposition of their final waste products, whereas we precluded our options and focused on a permanent repository with the Nuclear Waste Policy Act of 1982. Under this program, they are actively studying further reductions in the toxicity of their waste. We learned that they would welcome strong collaboration in this field with the U.S. The Accelerator Transmutation of Waste program, funded for the first time in the current Energy and Water Appropriations Bill, is one program they singled out for enhanced cooperation.

The French do not justify their closed cycle with economic arguments, instead they point to its sensitivity to environmental issues and the minimal legacy left for future generations. In fact, with uranium prices currently extremely low, the closed cycle may be slightly more expensive than our open cycle, at least in the near term. Partly for that reason, partly because of the large investment required if the U.S. tried to now duplicate the French system, and partly because there are now alternative options to achieve a closed cycle, we do not recommend that the U.S. simply adopt the French closed cycle.

New closed cycle options should be considered driven by technological advances in the decades since the French initiated their system. We believe that these new options deserve evaluation here to enable the U.S. to consider the benefits of a closed fuel cycle. Some of these newer options would provide benefits similar to the French system, plus some would avoid proliferation concerns by never separating plutonium. Some of the new nuclear initiatives funded for next year should explore these attractive options. Almost any of these options, however, require interim storage of spent fuel—our trip only adds to the strength of current arguments for prompt implementation of this simple and important step.

In summary, there are important lessons from the French system for our use of nuclear energy. In the next session of Congress, we look forward to working with you to improve our system, drawing upon these lessons where appropriate.

SCHIZOPHRENIA

Mr. DOMENICI. Mr. President, I don't know how many Senators saw an

article in the Washington Post today, in section B of the Washington Post, called "Tears Of Blood." I have the article in front of me. I ask unanimous consent it be printed in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

[From the Washington Post, July 31, 1998]

TEARS OF BLOOD

(By Megan Rosenfeld)

First there was the gruesome and heart-breaking news of Russell Weston's attack on the U.S. Capitol. Then came word that he is a paranoid schizophrenic, information that resonated for one set of families with unsettling emotions: recognition mixed with horror, and in some cases thankfulness that it wasn't the faces of their sons or sisters flashing across the television screen.

The families of schizophrenics, like those of other seriously mentally ill people, suffer a particular kind of torment. Years of bewildering and sometimes destructive behavior usually precedes a diagnosis; years of false starts or abandoned treatment often follow. Even when a mother or father recognizes mental illness—as opposed to drug addiction, rebelliousness or eccentricity—discovering the legal barriers to involuntary commitment is yet another body blow.

"Parents always feel it's your responsibility to help your children, but we were powerless to help him," says Jacqueline Shannon, whose son Greg began behaving strangely in his last year of college. Now 35, Greg Shannon has been stabilized for more than six years with the drug clozapine—although it took four hospital commitments before that medication was prescribed.

A publication by the Canadian-based Schizophrenia Society lists some of the emotions family members are likely to feel: sorrow ("We feel like we've lost our child"); anxiety ("We're afraid to leave him alone or hurt his feelings"); fear ("Will he harm himself or others?"). They also list shame, bitterness, isolation, anger and "excessive searching for possible answers."

"You want not to be blamed that your family member has become deranged," says David Kaczynski, whose brother, Ted, is notorious as the Unabomber. "And you don't want people to hate your brother or son, to form judgments that are not based on compassion for the fact that this person is mentally ill." There are so many complicated emotions, he said. "You recognize this family member you love is also an enemy."

Kaczynski recalls taking some of his brother's letters to a psychologist in the early 1990s—before he knew that Ted had been mailing lethal bombs—and was told that his brother was very ill and needed treatment. And also that there was very little David could do about that.

For years Ted Kaczynski's primary method of communication with his family was through long, irrational letters, in which he blamed his parents for his loneliness and fears, and even for the fact that he was three inches shorter than David.

"I have got to know, I have GOT TO, GOT TO, GOT TO know that every last tie joining me to this stinking family has been cut FOREVER and that I will never NEVER have to communicate with any of you again," he wrote David in 1991. "I've got to do it NOW. I can't tell you how desperate I am. . . . It is killing me."

It was five years and hundreds of letters later that David, recognizing similarities between things his brother had written and the excerpts from the Unabomber manifesto printed in The Washington Post and the New York Times, went to the FBI, Ted Kaczynski