

DEFENSE INDUSTRY INITIATIVE ON BUSINESS ETHICS AND CONDUCT

• Mr. SANTORUM. I rise today to congratulate the Defense Industry Initiative on Business Ethics and Conduct for its 11 years of active effort in creating high standards of business ethics, business conduct, and compliance in the defense industry. I know that many of my colleagues in the Senate are not familiar with the unique DII effort.

In 1986, the DII was created as an outgrowth of the work of the President's Blue Ribbon Commission on Defense Management, known as the Packard Commission. At that time, a number of leading defense contractors drafted a set of DII Principles. These Principles obligated signatory companies to have written codes of conduct, to distribute the codes to all of their employees, to have ethics training programs which made certain that employees understood the codes, to have a hotline or ombudsman system, to have systems to make voluntary disclosures of violations of law or regulation to the Government, to attend annual best practices forums, and to participate in a public accountability process.

The group of DII signatory companies has grown over these 11 years to 48 companies, including virtually all of the largest defense contractors. To be frank, I would think that at least all of our hundred largest defense contractors should be willing to sign up publicly to the Defense Industry Initiative Principles. Therefore, I call upon those companies that are among this group which, for whatever reason, are not presently signatories to sign this statement in order to pledge themselves to the Defense Department and to the public as being committed to these ideals.

On June 5 and 6, 1997, in Washington, DC, the DII conducted its 12th Best Practices Forum. This session included some 160 representatives of the signatory companies and 40 senior Government officials. The program was a state-of-the-art exploration of best practices in corporate ethics and compliance programs.

I understand that the Defense Industry Initiative is the only industry ethics initiative of its type. There are any number of other industries which have had sufficient ethical problems and should consider something equivalent.

I will conclude by saying that all the evidence available to me suggests that the participation of these 47 companies has had a very positive impact on their levels of compliance, as well as in the tone of the relationship with the Government. I am certain that we all recall the events that gave rise to the creation of the Packard Commission—things such as high price spare parts or improper labor charging. It is my understanding that the Government audits show that the level of such problems has dropped dramatically among these DII signatory companies. Furthermore, I believe that the DII effort

has forged a true partnership in the best sense of the word between Government officials responsible for procurement and those in industry who design, develop, and manufacture the items necessary for our national defense.

So that the contribution that has been made and the excellent work that has been done can be fully recognized, I would like to place into the CONGRESSIONAL RECORD a list of those companies which are signatories to the DII. All of these defense contractors are to be congratulated for the leadership they have shown and their accomplishments to date. I am sure that we can count on them to continue this exemplary work in the future. And I hope other defense contractors can be counted on to join this important effort.●

IN HONOR OF MSUSA'S 30TH ANNIVERSARY

• Mr. WELLSTONE. Mr. President, on November 7, 1997, the Minnesota State University Student Association [MSUSA] will celebrate its 30th Anniversary of representing Minnesota State University students.

MSUSA is an advocate organization which was formed in 1967 as an informal coalition of student leaders. Today, it represents more than 60,000 students at Minnesota's state universities in Bemidji, Mankato, Minneapolis/St. Paul, Moorhead, St. Cloud, Marshall, and Winona.

MSUSA is an independent, nonprofit corporation funded and operated by students. In order to fulfill its main objectives—affordable, quality and accessible State university education—students have taken an activist approach to establish affordable tuition and child care facilities, increase student work study wages, simplify transfer between institutions, improve cultural diversity, and advocate fair State and Federal financial aid programs including those in the Higher Education Reauthorization Act.

In assisting State university students achieve their goals and voice their concerns, MSUSA provides liaisons to the Governor's office, the legislature, the board of trustees of MnSCU, the Minnesota Higher Education Services Council, the inter faculty organization, Congress, the administration, and the U.S. Department of Education.

One of MSUSA's most outstanding activities is the Penny Fellowship Program, which encourages students to take a leadership role in serving their communities by performing internships in public and community service. Other noteworthy programs include the MSUSA newspaper, the Monitor, which has the largest circulation of any State system student organization, and the MSUSA Cultural Diversity Project, which fosters understanding and cooperation of students from all cultural backgrounds.

Finally, Mr. President, I would like to recognize and congratulate the current officers of MSUSA, who are:

Francis Klinkner, State chair from Mankato State University; Garret Melby Aanerud, vice chair from Moorhead State University; and Frank X. Viggiano, executive director. Their hard work on behalf of Minnesota students has led them to many successes, and I'm sure their continuing effort will mean a better-educated and a more productive Minnesota. ●

RETIREMENT OF DR. CHARLES TILL

• Mr. KEMPTHORNE. Mr. President, I take the floor today with some sadness, but also with a great deal of gratitude. I rise today to mark the retirement and celebrate the career of one of our Nation's great leaders in science, my constituent and my friend, Dr. Charles Till.

At the end of this year, Dr. Till will conclude more than three decades of outstanding accomplishment at Argonne National Laboratory. For the past 13 years, Chuck has served as associate laboratory director over engineering research. Dr. Till's leadership, his vision, and his good humor will be sorely missed.

Chuck Till sprang from humble beginnings, with little early indication of the opportunities and demands that lie ahead. He grew up on a farm in rural Saskatchewan, and by his own admission, and his father's observation, showed no outstanding aptitude for technical and mechanical things. This would change.

Chuck entered the University of Saskatchewan, where he earned a bachelors degree in engineering physics and a masters degree in physics. He then attended the University of London, where he earned his doctorate in nuclear engineering. Apparently, somewhere along the way, this small town farm boy developed an aptitude for technical matters.

Dr. Till's first job out of college found him in the unlikely, but not surprising, position of being in charge. He was hired by the Canadian General Electric Co., as reactor physicist and given responsibility for the start of the first prototype heavy water reactor in Canada—no small task for a first professional job. And of course, Chuck excelled.

In 1963, Dr. Till joined Argonne National Laboratory as a reactor physicist. His rise in this great organization is best traced by his accomplishments rather than the positions he has held.

Early on in his career, Chuck got the attention of scientists worldwide with a breakthrough advancement in fast reactor measurement techniques. The Doppler Effect was known to be crucially important, but its measurement was uncertain. Dr. Till completely revamped the heated sample Doppler technique, and an order-of-magnitude improvement in the measurement resulted. The technique became the standard worldwide, and essentially has not changed to this day.

Dr. Till soon became responsible for all fast reactor work at Argonne, and continued to emerge as a leader in his field. Chuck wrote several important works examining technical issues of nuclear physics and engineering. Dr. Till has also served on several advisory committees and evaluation boards, and testified numerous times before congressional committees. Notably, Chuck served as technical director and a member of the U.S. delegation to the International Nuclear Fuel Cycle Evaluation, and was largely responsible for the United States retaining its leadership role in fast-reactor technology.

But his greatest contribution, to both his discipline and to the world, lies in the development of the Integral Fast Reactor, the IFR. This inspired source of electrical power has the capability to achieve incredible efficiency in fuel use, while significantly lessening problems associated with reactor safety and nuclear waste. In 1986, the IFR showed that it can protect itself from overheating and meltdown. It does so through the natural physical properties of the materials used rather than by relying on operator intervention or an engineered safety system. The IFR was also designed to burn most of its own waste, as well as that of other reactors and the material from dismantled weapons. Unfortunately, this program was canceled just 2 short years before the proof of concept. I assure my colleagues someday our Nation will regret and reverse this shortsighted decision. But complete or not, the concept and the work done to prove it remain genius and a great contribution to the world.

Through his work on the Integral Fast Reactor program, Dr. Till demonstrated that his technical solutions out paced the ability of the political process to appreciate them. Dr. Till also demonstrated that technical leaders can take scientific material and present them in a manner understandable by citizens and Members of Congress. This skill is what makes Chuck Till such a valuable asset to me in my duties as a Member of the U.S. Senate.

I am pleased and gratified that my work in the Senate has allowed me to get to know Chuck Till and his lovely wife Kay. I cannot question that this is the best decision for them, but Chuck's talents will be missed at Argonne National Lab.

Perhaps the greatest legacy that one can leave is knowing your ideas and work are important enough to be carried on when one departs. We will do that with Chuck Till.

I want to wish Chuck and Kay the very best in retirement and on behalf of a grateful nation, I want to say thank you for your unmatched contributions and service.●

THE MERITS OF ETHANOL

● Ms. MOSELEY-BRAUN. Mr. President, several months ago, during the debate on the Balanced Budget Act of

1997, some of my colleagues called upon Congress to end its commitment to ethanol.

Ethanol, as my colleagues are aware, is an alcohol-based motor fuel manufactured from corn.

These lawmakers, predominately from oil States, drew their daggers in professed horror, branding Federal support for ethanol as a "deficit buster," or a conspiracy of "corporate welfare."

While I know this mantra has become popular and convenient for many in Congress in recent years, the truth is that, in this instance, it is simply false. I would like to urge my colleagues to examine an excellent essay recently printed in the Wall Street Journal which illustrates the truth about ethanol, and which, I am hopeful, will convince critics to reconsider their position.

The article, entitled "Alcohol and Driving Can Mix," and authored by former Central Intelligence Agency Director James Woolsey, outlines the environmental and energy benefits of replacing gasoline with alcohol fuels, like ethanol.

Mr. President, the concept of alcohol-based fuels is not new. Fifty years ago, an Illinois lawmaker named Everett Dirksen encouraged policymakers to consider "processing our surplus farm crops into an alcohol of 10 percent." In doing so, Dirksen believed, we would "create a market in our own land for our own people."

Half a century later, this idea has become reality. Today, demand for ethanol is estimated at 1.5 billion gallons. There are approximately 50 commercial facilities producing fuel ethanol in more than 20 different States across the country. By 2005, 640 million bushels of corn will be used to produce 1.6 billion gallons of ethanol.

Ethanol has a wide range of benefits, such as its effects on the environment. Ethanol burns more cleanly than gasoline, and, according to the Environmental Protection Agency, diminishes dangerous fossil-based fumes, like carbon monoxide and sulfur, that choke our congested urban areas.

Oil tankers will not spill ethanol into our oceans, killing wildlife. National parks and refuges will not be targets for exploratory drilling. When ethanol supplies run low, you simply grow more corn.

Ethanol also strengthens national security. Ethanol flows not from oil wells in the Middle East, but from grain elevators in the Middle West, using American farmers, and creating American jobs. With each acre of corn, 10 barrels of foreign oil are displaced—up to 70,000 barrels each day.

And for farmers, ethanol creates value-added markets, creating new jobs and boosting rural economic development. According to a recent study conducted by Northwestern University, the 1997 demand for ethanol is expected to create 195,000 new jobs nationwide.

The bottom line is that ethanol is the fuel of the future—and the future is

here. Illinois drivers consume almost 5 billion gallons of gasoline, one-third of which is blended with ethanol. Chicago automotive plants are assembling a new Ford Taurus that runs on 85 percent ethanol. More and more gas stations are offering ethanol as a choice at the pump.

Isn't it worth cultivating an industry that improves the environment and promotes energy independence? Isn't it the responsibility of Congress to foster an economic climate that creates jobs and strengthens domestic industry? Don't we have a commitment to rural America, and a responsibility for its economic future?

Mr. President, I think the answer to these questions is a resounding yes, and that's why I will work to ensure that the Federal commitment to ethanol is kept.

I ask that the text of this article be printed in the RECORD.

The article follows:

ALCOHOL AND DRIVING CAN MIX

(By R. James Woolsey)

President Clinton's global-warning proposal includes some \$5 billion in tax breaks to encourage the development of new technologies to curb carbon dioxide emissions. But promising technologies may already be in the offing. New microbes and biocatalysts with names like *zymomonas mobilis* and KO-11 have been genetically engineered to produce ethyl alcohol not just from feed grains but also from other plants and common organic wastes. The production of ethyl alcohol from biomass may turn out to be as revolutionary as the production of integrated circuits from silicon, vastly affecting the world's distribution of wealth and the fundamentals of international security.

Replacing gasoline with biomass-derived ethyl alcohol would greatly reduce man-made greenhouse-gas emissions—estimates put carbon dioxide emissions at 1/10th or less than those for gasoline over the life cycle of fuel production and use. Other changes in transportation would be far more costly: Fuel-cell cars, for example, would require retooling Detroit's factories; other efforts would need a vast new infrastructure for fuel distribution; and a major shift toward mass transit seems implausible in many of today's fast-growing, sprawling cities.

In contrast, very little such new investment would be necessary for ethyl alcohol to become a major share of transportation fuel. Older cars' engines are able to burn gasohol (10 percent ethyl alcohol); and a computer chip in the fuel systems of this year's midsize Ford and Chrysler minivans permits the use of up to 85 percent alcohol. Federal fuel economy standards encourage these new "flexible fuel vehicles," and they have fortuitously arrived just as the new technology is ready to reduce alcohol costs. Mixing these fuels with gasoline is now done easily at filling stations that sell gasohol. Environmental costs go down with alcohol: its wide use would lead to a substantial improvement in air quality. And an alcohol spill on an Alaskan shore would produce nothing worse than dispersal, evaporation and possibly some inebriated seals.

VOLATILE COSTS

The one real barrier to ethyl alcohol's replacing a large share of gasoline is production cost, which today is comparatively high and volatile. Alcohol's current feedstock, corn, is subject to the caroming behavior of feed markets. In 1995 its price, normally