

Americans to seek help when they need it.

TRIBUTE TO AMBASSADOR OLEH SHAMSHUR

Mr. KERRY. Mr. President, as chairman of the Senate Foreign Relations Committee, I wish today to mention the outstanding work of an ambassador who is leaving Washington after 4 years of distinguished achievement—Ambassador Oleh Shamshur of Ukraine.

There is little doubt that he has made a major contribution to strengthening bilateral relations between our countries. Ambassador Shamshur was one of the senior negotiators of the United States-Ukraine Charter on Strategic Partnership signed on December 19, 2008, which elevated relations between the United States and Ukraine to a new level. The charter is a living document and continues to guide cooperation between the two countries. On April 12, 2010, President Obama and President Yanukovich reaffirmed their commitment to the charter and expressed their intention to realize its full potential.

Ambassador Shamshur also played an important role in the establishment of the United States-Ukrainian Strategic Partnership Commission and participated in its first inaugural session in December 2009. The commission has reinvigorated relations between the United States and Ukraine with an ongoing dialog and program of cooperation on issues of democracy, economic freedom and prosperity, security and territorial integrity, energy security, defense-related cooperation, the rule of law, and people-to-people contacts.

During Ambassador Shamshur's tenure in Washington, Ukraine once more demonstrated its important leadership on the question of nonproliferation and arms control issues. Cooperation on these issues between Washington and Kyiv has been significantly enhanced. These efforts were conspicuous in the positive outcome of the Nuclear Security Summit in Washington.

While in Washington, Ambassador Shamshur's accomplishments were not limited to issues of international security or geopolitics. Early on in his service here, the United States reinstated tariff preferences for Ukraine under the Generalized System of Preferences and granted Ukraine market economy status. The Ambassador was instrumental in the efforts that led to Ukraine's graduation from the Jackson-Vanick Amendment on 23 March 2006. The United States and Ukraine were also able to sign a bilateral agreement on market access issues, which became a key step in Ukraine's eventual joining the World Trade Organization. The establishment of the United States-Ukraine Council on Trade and Investment in March 2008 was also a re-

sult of Ambassador Shamshur's tireless efforts. This year, Ambassador Shamshur can also claim credit for the resolution of difficulties surrounding the operation of the Overseas Private Investment Corporation in Ukraine and its return to the Ukrainian market.

Many of us on Capitol Hill and in the administration share an appreciation for Ambassador Oleh Shamshur's achievements. He leaves relations between Ukraine and the United States immeasurably stronger for having served here these 4 years. We wish him and the Ukrainian people well on the occasion of his departure.

AMERICA COMPETES ACT

Mr. ALEXANDER. Mr. President, about a year ago, the United Arab Emirates decided to secure its energy future. The Emirates is a small Persian Gulf state that is awash in oil and annually rakes in about \$80 billion in oil revenues. For its own domestic energy needs, however, it opted to go with another technology—nuclear power. Its reasoning was that the oil in the ground will eventually run out and that it would be best to conserve and prepare for that day.

The Emirates specified they wanted to build four nuclear reactors and estimated the costs at around \$40 billion. Sure enough, the bids soon started coming in from the world's leading nuclear vendors. There was Areva, the company born out of France's nuclear effort—they now get 80 percent of their electricity from nuclear and are building one of their new Evolutionary Power Reactors in Finland. There was Westinghouse, which is building its new AP1000 reactors in Japan and China. You may recognize the name. They were once, along with General Electric, America's leading electrical manufacturer. Now they are a Japanese company, bought by Toshiba in 2006.

While these two giants dueled, a third competitor entered the field. South Korea only started building its own nuclear reactors in 1996. Before that they bought from the U.S. and the Japanese. But then they took an old design from Combustion Engineering, another American company, and fashioned the APR-1400. After building a few for themselves they entered the world market. Meanwhile, in the Persian Gulf oil business, the Koreans had established a reputation for getting things done on budget and on time.

Still, it was a complete shock last October when the United Arab Emirates passed over bids from the world's two leading companies, Areva and Westinghouse, and awarded the contract to South Korea for \$20 billion—half the original estimated price. The French and the Japanese have gone back to the drawing boards to figure out what went wrong so they will be better able to compete next time.

How did the Koreans come so far so fast? People will talk about “cheap labor,” “government enterprise” and “copycat technology.” But I have another hypothesis. Year after year, Korean students are at the top of world performance in math and science while the United States doesn't even rank in the top 10. In the Program for International Student Assessment's math test for 15-year-old students, for instance, South Korea ranks third, behind Finland and Taiwan, while the United States ranks 21st. They are 75 points ahead of us on a scale of 1,000.

We have been hearing about these statistics for decades—maybe we have even grown used to them—but now we are starting to see the consequences. We are a country that is falling behind the rest of the world in science literacy. In terms of energy, the rest of the world is currently going through a nuclear renaissance while we are barely able to construct new reactors in our own country. Part of our population still thinks a nuclear reactor is an atomic bomb that can go up in a mushroom cloud any minute. A larger number believes that if we cover the Great Smoky Mountains with windmills we could generate all the electricity we need without having to build either nuclear reactors or coal plants. I call this “Going to War in Sailboats.” That is the title of a book I have just written. If we were to go to war tomorrow, would we put our fleet of nuclear submarines and aircraft carriers in mothballs and commission a fleet of sailing vessels?

Four years ago Senator JEFF BINGAMAN and I asked the National Academies:

What are the top 10 actions, in priority order, that federal policymakers could take to enhance the science and technology enterprise so that the United States can successfully compete, prosper, and be secure in the global community of the 21st century? What strategy, with several concrete steps, could be used to implement each of those actions?

The Academies responded quickly to that request by assembling a distinguished panel, headed by Norman R. Augustine that quickly produced a list of 20 recommendations along with strategies in the report, “Rising Above the Gathering Storm.” That report was issued 3 years ago. I think its message is even more immediate today.

In response to the Gathering Storm report, Congress enacted and the President signed the America COMPETES Act in 2007, incorporating many of the Academies' recommendations and establishing a blueprint for maintaining America's competitive position. In the COMPETES Act we authorized funding to improve education in science, technology, engineering and mathematics. We increased funding for scientific and technological research. And we established ARPA-E—modeled on the Defense Department's Advanced Research Project Agency, the one that started