

Wartime space: 'We have yielded control'

The following remarks are excerpted from testimony delivered by Gen. John L. Piotrowski, USAF, Commander in Chief, United States Space Command, before Senate Appropriations Committee Defense Subcommittee, on May 18. With the simple reminder that Soviet military doctrine calls for "global command of the electro-magnetic spectrum"—which is predicated on control of space—we offer the excerpts with no further comment.

Today the ability to use our space systems during crisis or war depends on the goodwill of the Soviet Union. If the U.S. became engaged in a crisis or war with the Soviet Union, they would use their satellites to locate and target U.S. forces anywhere in the world—with absolutely no risk to their reconnaissance and targeting satellites. In essence, the Soviets control wartime space and all the tactical advantages that come with the use of space. This situation is unacceptable [and]

and intent to employ antisatellite weapons, while the United States has none. . . .

It is important to realize that the combination of diverse aspects of the Soviet military space structure adds up to a total capability which provides the Soviets a net advantage in conflict. . . . The Soviets have the world's largest and most responsive space launch infrastructure enabling them to conduct rapid surge operations to increase wartime support from space—and they are expanding it. . . .

The Soviets average about 100 space launches a year—a launch every three or four days. . . . During the period of the Falklands war, they launched 29 times in just 69 days. They have the world's largest launch pad infrastructure—over 20 pads—about twice as many as the U.S., and they are building more. They've developed two new boosters in just the last four years to give them ten types of boosters including the world's largest—the SL-17 Energia [which allows them to deploy ASAT weapons against deep space, geosynchronous orbit satellites: the backbone of global communications systems—ed.].

to replace every one of their satellites in orbit—over 160—within two or three months. . . .

The Soviets have an operational co-orbital antisatellite system to shoot down U.S. satellites in low-earth orbit. In addition, the Soviet Union has antisatellite technologies res-

ident with high-powered lasers, antiballistic missiles, and electronic warfare systems potentially capable of denying, degrading, or destroying U.S. satellites which provide critical combat support information at crucial times in crisis or war. . . . Their doctrine says that they will employ antisatellite weapons in conflict, and their systems give them that capability . . . to leave our space systems hostage to Soviet philanthropy is untenable because it increases the risk to our warfighters who depend on these systems to conduct operations on the land, at sea, and in the air. In effect we have yielded control of wartime space to the Soviets—a situation that does not serve our national security interests.

Space industrial base found wanting

For example, the U.S. launch response time—the interval between the need for a new payload launch and the time at which a satellite is operational in orbit—is measured in months. The Soviets, on the other hand, can launch additional satellites in hours or days. . . . They also have adequate storage facilities to house them and integrate the spacecraft to the boosters at wartime tempos. This provides a level of combat readiness of great concern to me.

Current U.S. launch systems are inflexible, fragile, vulnerable, and nonresponsive to combat requirements. Booster and payload testing, processing, and launch is lengthy. Months of final assembly, payload integration, and on-pad processing prohibit rapid response to meet changing world conditions. Quick recovery from either on-orbit or launch failures, is not possible today. And we cannot rapidly augment satellites on orbit nor rapidly reconstitute satellites lost from combat attrition. . . .

Anti-drug effort hampered

A space-based, wide area surveillance system—such as a space-based radar and/or infrared system—with the capability to detect and track ships and aircraft in all weather conditions, day or night, would provide long-range surveillance, tracking, targeting, and intelligence information to operational commanders, enabling them to revolutionize planning and tactics and to deny the enemy the element of surprise. . . .

In addition to its military utility, space-based surveillance has other applications. One of the most damaging wars the United States has waged this decade is the war on drugs. In 1987, the Customs Service and the U.S. Coast Guard flew E-2C Hawkeyes more than 1,500 hours to detect drug-smuggling aircraft. These aircraft have limited surveillance areas, limited fuel supplies, and strict crew and maintenance restrictions. A space-based surveillance system would cover the entire Caribbean Basin in the time it takes an E-2C to surveil the narrow Bahamas-to-Florida corridor. Track data generated by the space system could be linked directly to national or regional command centers to enhance their interdiction efforts. . . .