NLOS-LS: Another critical operational capability on the verge of cancellation.

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Engaged, as is Secretary Gates in the longest war that the United States has ever fought, he needs to pay closer attention to its growing human costs, not only in lives lost, but also in the ever-expanding numbers of wounded warriors. Our adversaries know well that it is those numbers, not the size of the defense budget that will determine success or failure. Congress has been generous in providing funds to lessen the impact of Improvised Explosive Devices, but that is a measure/countermeasure contest that the U.S. is far from winning. My advice to Bob Gates –an old friend and CIA colleague—would be to look as well at force structure and operational concepts.

Over the past months our enemies in Afghanistan have found it possible to inflict heavy casualties by attacking the small outposts the coalition has established in the interests of fostering a presence in the midst of the population, and thus neutralizing anti-government factions. The very success of that policy has increased the incentive for deadly assaults mounted by skilled, well-armed fighters who know how to use darkness to creep in close to the defenders. As was the case in the Pacific islands of World War II, and in Korea and Vietnam, such “hugging tactics” render defensive fires from artillery and mortars useless in that they fall uselessly behind the attackers, who rise up suddenly at short range to concentrate their assault weapons on destroying or suppressing key elements of the defense, such as mortars or TOW. Artillery usually supports from a distance, well away from the battleground, but because of Afghanistan’s mountains, its projectiles are typically fired at high-angle, and therefore have extensive range dispersion. When artillery fires are properly planned and on-call, they are more responsive and continuous, but they are imprecise. They evidently do not deter the attackers, and they often cause collateral damage and civilian casualties that gainsay the purpose if having the friendly unit there in the first place. Only the arrival of aircraft armed with precision weapons gives the enemy pause, and causes

withdrawal. But on the record, even loitering aircraft such as the B-1 or REAPER arrive at least a half hour or more after the onslaught, by which time the enemy often achieves his intended effect.

Our adaptation to this circumstance can not be to deploy more artillery and mortar units, for such conventional weapons will necessitate sending to theater skilled crews, guns, ammunition, trucks, and onerous road-bound logistics, will rarely be useful in stopping a well-executed assault, and will lead to higher casualties not only by failing to save the defenders, but also by rendering the force more vulnerable to IED ambush.

Instead, the Secretary might exercise an option to substitute rockets-in-a-box for mortars and artillery. In the mid-'90s I assisted DARPA's development of containerized missiles launched instantaneously in response to signals on a network. Termed NETFIRES, the DARPA program centered on a steerable-jet rocket capable of flying to a GPS coordinate up to 40 km away, or of homing on an infrared image, or of hitting a laser spot. Its warhead would be a fragmentation-wrapped, shaped-charge capable of defeating both soft and hard targets. Moreover, the system was to function night and day, whatever the weather. Eventually, the system was successfully transitioned to the Army, and incorporated into its Future Combat System as the Non-Line of Sight-Launch System (NLOS-LS). NLOS-LS, expected to be fielded in FY 2011, consists of three elements: (1) the Container Launch Unit (CLU) with 15 missiles and a radio, (2) the Precision Attack Missile (PAM), and (3) the controlling network, with related communications and management software. When Sec Def cancelled FCS, NLOS-LS was one of the systems the Army judged valuable and mature enough for retention and further development.

Up until the recent past, through numerous program reviews and detailed U.S. Army analyses, NLOS-LS was repeatedly selected for continuation. OSD recognized that over a billion dollars had been invested in developing NLOS-LS. The Army believed that system could close a critical capability gap in mutual fire support among forward operating bases, and could do so without the combat support and combat service support burden entailed by conventional indirect

without extensive training. Strategically, it is adaptable to a wide range of CONOPS, and is rapidly deployable: a 90 missile NLOS-LS package for 6 FOBs could be deployed to Afghanistan with five trucks, 11 personnel, and four C-130 sorties. This potential led to accelerated development and aggressive testing. Haste has presented issues, and precipitated a reexamination of cost effectiveness.

In a recent Limited User Test (LUT), I understand that PAM did not perform well. I am told that the prime contractors (Raytheon and Lockheed Martin, partnered in Netfires LLC), have identified the cause, an untried software enhancement just before the firings, and have remedied the defect(s).

But in the meantime, costs have been questioned. In December 2009 the Defense Acquisition Board prompted the Army to conduct an Analysis of Alternatives (AoA) on NLOS-LS for the BCT. In approximately 30 days a report was delivered that was contrary to previous, more detailed studies that supported the program's cost-effectiveness and relevancy. I am told that the AoA failed to address the serious operational concern that often aviation support isn't responsive enough to our soldiers because of weather, terrain and mission priorities. The AoA suggested Maverick missiles, Hellfire missiles and the Joint Air to Ground missile, which is still in development, as suitable alternatives to the NLOS-LS PAM. However, all of these missiles are dependent on aviation platforms constrained by weather, terrain, command and control, and time to target. In fact, reports from theater suggest that the enemy capitalizes on our lack of responsiveness, and our inability to cope with bad weather and adverse terrain.

In my view, the Secretary ought to intervene before the budgeters scrap NLOS-LS, and insure that we field that system, for it surely can prevent friendly casualties, assist the dispersal of our own and allied forces, and thereby extend the area within which runs the writ of the government of Afghanistan.