



# ALASKA MISSILE DEFENSE WEEKLY (Thirty-Fifth Edition)

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## **ALASKA SPECIFIC NEWS BREAKS #35**

**OCTOBER 28, 2002-NOVEMBER 1, 2002**

**KODIAK LOCALS DISPUTE MISSILE LAUNCH EFFECTS, FORUM: RESIDENTS DOUBT UAA SCIENTISTS' STAND ON ENVIRONMENT, [The Associated Press](#), October 28, 2002.** Kodiak -- The first five launches at the Kodiak

Launch Complex had minimal impact on the environment, according to University of Alaska Anchorage scientists. Several Kodiak residents questioned those findings Wednesday at an informational forum on the environmental impact statement for the first five launches. Residents said poor methods were used to gather inconclusive data. Army representatives at the forum addressed their progress in preparing an impact statement for adaptation of the Ground-based Midcourse Defense system, formerly known as the National Missile Defense program. A sparse crowd attended the presentation by Sal V. Cuccarese, the interim director of UAA's Environment and Natural Resources Institute. Cuccarese's findings included several years of studies focusing on the effects of the first five rocket launches. His test area was a 6-mile radius around the Narrow Cape launch site, including Ugak Island. Cuccarese outlined five factors determining the impact of the rocket launches: Steller sea lion surveys at the Ugak Island haul-out, rocket motor noise measurements, bald eagle nest monitoring, Steller's eider surveys and environmental quality studying.

Cuccarese said Kodiak's unpredictable weather made it difficult for scientists to distinguish between the environmental impact of the rocket launches and environmental change due to weather. Nevertheless, he said, the study concluded that the impact of the rocket launches on each of the five indicators was negligible. Cuccarese concluded that there was no significant impact on the Steller sea lions at Narrow Cape due to launches. However, the sound pressure levels were within the audible range of the sea lions and the behavioral response of the sea lions was undetermined, the Kodiak Daily News reported. "The sea lions ran into the water four hours before launch," Cuccarese said. "I would think that the rocket did it. We reported it as such." Bald eagles and Steller's eiders were unaffected by the launch, according to the study. In fact, of 38 bird species present within the 6-mile radius around Narrow Cape, there was "no significant difference in numbers pre- and post-launch," Cuccarese said. Cuccarese also looked at water chemistry, vegetation and other indicators. The aim was to determine whether any of the main constituents of the rocket fuel were present in the environment.

There was some indication that components of rocket fuel were present in the environment after the launches. Cuccarese found that the amount of aluminum, one of the main components of rocket fuel, spiked in some streams after the launch. However, he said, the study did not determine whether the fluctuation in aluminum levels was due to the launch or due to natural environmental variation. Members of the audience criticized the study's methods, claiming that the sample area around Narrow Cape was not large enough to set viable controls for the experiment. They questioned the value of the study's findings due to the inconclusive data that did not distinguish between natural environmental factors and effects of the rocket launches. The final environmental impact statement is expected to be completed in 2004.

### **FORT GREELY TEST BED TO BE INCLUDED IN UPCOMING FLIGHT**

**TESTS**, Defense Daily, Oct. 23, 2002. The Missile Defense Agency (MDA) is planning to incorporate the Ft. Greely "test bed" facility into the Ground-based Midcourse missile defense (GMD) flight test program. After the next scheduled flight test (IFT-10, in December 2002), hardware being produced for the three flight tests after that will be brought directly to Ft. Greely to become part of the test bed. While MDA officials believe that the two to four flight tests anticipated to be held in 2003 will not be affected by this move, industry insiders think that the preoccupation with Ft. Greely may preclude another flight test from being held until at least next fall. This step taken by MDA is in response to pressure by the Bush administration to get something concrete fielded to meet its 2004 timeline.

### **FORT GREELY TEST BED ON SCHEDULE FOR 2004 OPERATING START**

**DATE**, Inside Missile Defense, October 30, 2002. The construction of a new missile defense testing facility at Ft. Greely, AK, is approximately 25 percent complete and the project is on schedule to begin operating by September 2004, a spokesman for the Army Corps of Engineers told Inside Missile Defense this week. The Corps of Engineers is supervising the construction of a "validation of operational concept" test bed that will be used by the Missile Defense Agency to test the ground-based midcourse missile defense system and several other missile defense systems. The work covers new facilities at Ft. Greely and at Eareckson Air Force Station, AK. It does not cover installing interceptor missiles in silos at Ft. Greely. Boeing is handling that work under a separate contract. The new midcourse test bed will stretch from Ft. Greely to Vandenberg Air Force Base in Southern California to test sites on the Hawaiian Islands and out to the Ronald Reagan Ballistic Missile Test Site on Kwajalein Atoll in the Marshall Islands. MDA officials expect the Ft. Greely test bed to be operating by the end of September 2004 and a Corps of Engineers spokesman said the project is on schedule.

"The work currently consists of 10 facilities and two site-work 'deliverables' at Ft. Greely, and six facilities 'deliverables' at Eareckson AS," spokesman John Killoran said. "The turnover dates at Ft. Greely span the period February '03 [to] February '04. Approximately 25 percent of the work at Ft. Greely is complete. Turnover dates at EAS began October '02 and will be complete February '04. The work at EAS is approximately 20 percent complete." The primary contractor on the Ft. Greely job is Fluor Alaska, Inc. According to a Corps of Engineers fact sheet, the project will be funded incrementally "at a range of \$100-\$250 million for the basic contract and does not include amounts allotted for exercising options for construction." Fluor Alaska won the contract earlier this year. Future work being considered for the Ft. Greely test bed, but not yet under contract, includes upgrading the power plant at Eareckson and upgrading the barracks, facility and site security systems and facility furnishings at Ft. Greely, Killoran said. "No award dates have been set, but those future requirements are anticipated to be under contract between November '02 and May '03," he added. Fluor

Alaska's work includes the construction of in-flight interceptor communication system data terminals. These IDTs are "communication posts with satellite and antenna feeds used in [the] validation of operational concept test bed facility," according to the Corps' fact sheet. -- Thomas Duffy

**MDA, BOEING REVIEWING GROUND-BASED FLIGHT TEST SCHEDULE,** Inside Missile Defense, October 30, 2002. Beset by problems in developing the booster rockets to power its developing ground-based missile defense system, the Missile Defense Agency and lead contractor Boeing are studying the program's future flight test schedule and will focus the test program over the next year on developing the boosters, an MDA official told Inside Missile Defense this week. "At this time there is no cut and dried schedule for when specific tests will occur," the official said. Over the past year, MDA Director Lt. Gen. Ronald Kadish has told Congress he wants to conduct four flight tests each fiscal year, an aggressive schedule MDA laid out to get the ground-based system developed to the point where it could possibly be used in an emergency situation as early as October 2004. MDA plans to put five interceptors in silos at Ft. Greely, AK, as part of a new missile defense test bed that will stretch across the Pacific Ocean. It is the Ft. Greely system that Kadish has said could be used on a contingency basis. In February, Kadish told the House Armed Services Committee that the overall missile defense testing schedule would be adjusted depending on successes or failures. "We may either accelerate something or delay our activities to do more risk reductions," he said. MDA conducted a successful intercept test of the ground-based system on Oct. 14. The test, termed Integrated Flight Test-9, was first scheduled for mid-August but delayed when officials became concerned about the exhaust nozzles on the first and second rocket motors of the two-stage interceptor. Those motors come from existing Minuteman II missiles and are used as a surrogate booster until the new booster is ready. Lockheed Martin and Orbital Sciences are working on separate booster designs for the ground-based program.

The MDA official said IFT-10 will likely occur in December or January and will be the last scheduled test using the surrogate booster. That test will also be an intercept attempt. According to fiscal year 2003 budget information MDA sent to Congress in February, IFT-11, 12, and 13 would occur in the second, third and fourth quarters, respectively, of FY-03. But industry sources told IMD that MDA and Boeing are considering skipping IFT-11 and IFT-12 and moving right to IFT-13, which would actually be two separate tests of the Lockheed Martin and Orbital Sciences booster rocket designs. The tests would be called IFT-13A and IFT-13B, one industry source said. They would be carried out in May and June of 2003. The next test, IFT-14, would be held in October 2003 and would test Lockheed's objective boost vehicle, the primary delivery system for the kinetic interceptor used to destroy ballistic missiles, the industry sources said. IFT-15 would be held in January 2004 and would test Orbital's objective boost vehicle, the sources said. MDA would use the results of these tests to make a

choice between the two designs, one source suggested. In April 2004, MDA would conduct IFT-16, an intercept test that one industry source referred to as a "dress rehearsal" for the system that would be placed at Ft. Greely.

The MDA official would only say that the agency is still reviewing the future flight schedule for the ground-based system "with an emphasis on what test objectives need to be met and when." That review is looking at the near- and far-term flight tests, he added. "A primary objective for the test program is the continued development of the booster designs from Lockheed Martin and Orbital, and both companies plan to launch their respective boosters next year," the official told IMD. "At this point the booster program is the least mature of all the [ground-based system] elements, so we plan to concentrate on that part of the program over the next year in order to have that booster design ready to begin operationally realistic testing of the [ground-based] system within the [ground-based] test bed." MDA now uses two rocket motor stages from a Minuteman II missile as the surrogate booster. "At this point in time, the integration of a new booster into the [ground-based] system is a priority for the [ground-based] program," the official said.

**KODIAK LOCALS DISPUTE MISSILE LAUNCH EFFECTS**, Associated Press, October 28, 2002. The first five launches at the Kodiak Launch Complex had minimal impact on the environment, according to University of Alaska Anchorage scientists. Several Kodiak residents questioned those findings Wednesday at an informational forum on the environmental impact statement for the first five launches... Army representatives at the forum addressed their progress in preparing an impact statement for adaptation of the Ground-based Midcourse Defense system, formerly known as the National Missile Defense program. A sparse crowd attended the presentation by Sal V. Cuccarese, the interim director of UAA's Environment and Natural Resources Institute. Cuccarese's findings included several years of studies focusing on the effects of the first five rocket launches. His test area was a 6-mile radius around the Narrow Cape launch site, including Ugak Island. Cuccarese outlined five factors determining the impact of the rocket launches: Steller sea lion surveys at the Ugak Island haul-out, rocket motor noise measurements, bald eagle nest monitoring, Steller's eider surveys and environmental quality studying... He said, the study concluded that the impact of the rocket launches on each of the five indicators was negligible... Members of the audience criticized the study's methods, claiming that the sample area around Narrow Cape was not large enough to set viable controls for the experiment. They questioned the value of the study's findings due to the inconclusive data that did not distinguish between natural environmental factors and effects of the rocket launches. The final environmental impact statement is expected to be completed in 2004.

**BUSH'S MISSILE DEFENSE VICTORY SIGNIFIES CHANGING TIMES**, Congressional Quarterly Weekly, October 26, 2002. In the fiscal 2003 defense appropriations bill, President Bush scored a major victory on national missile defense -

the most politically contentious military issue of the past two decades... Bush's success came without much of the ideological turmoil that has accompanied past missile defense decisions. These days, the bigger fights are over which programs should win a piece of the generous missile defense pie... Congress trimmed just \$14 million from the \$7.4 billion Bush requested for an array of missile defense programs. Untouched was the \$2.6 billion earmarked to develop ground-launched interceptor missiles that could be deployed at five launch silos to be built in Alaska as part of a test range... By refusing to commit itself to a specific missile defense "architecture," the administration appears to be keeping its options open to see which approaches are most promising... One casualty of this approach is the effort to develop orbiting satellites armed with lasers that could take out a missile in its "boost-phase," immediately after launch... And by cutting \$10 million from the \$35 million requested for the space-based laser in fiscal 2003, the defense bill sealed the [space-based lasers] program's demise... Indeed, liberals already have a historical precedent handy. They argue that the combination of budget pressures and the Alaska system's technical limitations will cause it to suffer the same fate as the Safeguard anti-missile system fielded by President Richard M. Nixon but later abandoned.

**NORTH KOREA MISSILE THREAT INCREASES**, *Washington Times*, November 1, 2002. North Korea is continuing to develop long-range missiles that threaten the United States and a basic defense system against them is about two years from deployment, the Pentagon's missile-defense chief said yesterday. Air Force Lt. Gen. Ronald Kadish, director of the Missile Defense Agency, said North Korea's first long-range missile test in 1998 caught U.S. intelligence by surprise. As a result, missile-defense development efforts have shifted to meeting a range of threats rather than any specific danger from a single nation. "Along the way, if we get threatened by North Korea, I think the American people understand we would not just sit by with five missiles in the hole and do nothing," Gen. Kadish said. Asked if North Korea was continuing to develop its long-range Taepodong-2 missile without any flight tests, Gen. Kadish told a group of defense reporters: "All the indications that I see and watch, the answer is yes..." "It's not about the Soviet Union," he said. "It's about North Korea, it's about Iran, it's about Iraq, it's about Libya and other states that might threaten us in the process..." "They are moving from the capability of having very good systems in short-range missiles, to the intermediate and longer-range missiles that we're seeing," Gen. Kadish said. "And that's the trend..." Gen. Kadish said the missile-defense test site being built at Fort Greely, Alaska, is moving ahead and by late 2004 or early 2005 will provide the nation with an emergency defense against a North Korean missile attack. "Once the test bed is in place, there will be some amount of capability because of its location to handle any threats from North Korea that might arise, but it will be extremely limited," he said.

## **GLOBAL NEWS BREAKS #35**

**MONDAY, OCTOBER 28, 2002**

**BOOST-PHASE MISSILE DEFENSE SEEN ADVANCING, OFFICIAL SAYS,** Aerospace Daily, October 28, 2002. The Defense Department's missile defense experts believe they have overcome doubts about their ability to pick out an enemy ballistic missile from its exhaust plume in the boost phase of flight, according to a Pentagon official. Missile defense experts had worried that it would be "extremely difficult" to discriminate between a missile and an intense plume, said J.D. Crouch, assistant secretary of defense for international security policy. The challenge was seen as particularly steep for kinetic energy systems, in which a kill vehicle (KV) has to collide with an enemy missile's "hard body" following a high-speed chase. But recent tests have significantly reduced DOD's concerns about tracking missiles in the boost phase. "It turns out that with the sensors that we have now, we think we're able to do it," Crouch said Oct. 24 at a Capitol Hill defense conference sponsored by the Frontiers of Freedom Institute. DOD came to this realization after conducting sensor tests during the recent launches of several long-range rockets, the kind of missiles that boost-phase kinetic energy systems likely would go against. The 1972 Anti-Ballistic Missile Treaty would have restricted some of those sensor tests, but the U.S. withdrew from the pact in June. DOD is eager to develop boost-phase systems, partly because they could shoot down enemy missiles far short of their intended targets.

**ANTIMISSILE AGENCY MAY USE SHIP TO LAUNCH TEST TARGETS,** Defense Week, October 28, 2002. The Missile Defense Agency is borrowing from the Navy an inactive amphibious assault ship from which the agency may launch target missiles for tests of missile-defense systems, a Pentagon official said... Existing land-based test ranges, such as White Sands Missile Range, N.M., are no longer roomy enough to fully test today's high-speed, high-altitude, long-range antimissile interceptors, the official said. A launch platform at sea could fire targets at longer ranges, to push the testing envelope. The targets fired from the ship could test tactical antimissile systems such as the Army's Theater High Altitude Area Defense (THAAD) or even conceivably anti-ICBM defenses. The agency expects to use the USS Tripoli (LPH-10), an Iwo Jima-class amphibious assault ship, to launch two Lance missiles on the Naval Air Warfare Center Weapons Division's test range at Point Mugu, Calif., in the coming weeks, the official said. No interceptor would be involved. The Army Space and Missile Defense Command is executing the proof-of-principle demonstration... Since there are no costs for the Navy-such as paying for a crew, fuel or provisions-the Missile Defense Agency pays only for the costs of the demonstration. If

the ship were deemed unacceptable for use as a launch platform, it would be returned to the Navy. The missile agency has been considering the mobile launch concept since 1997, but there was not enough money, the official said.

### **SEA-BASED BALLISTIC MISSILE DEFENCE: THE 'STANDARD'**

**RESPONSE**, Jane's Defence Weekly, October 30, 2002. On 14 October, the radar aboard the US Navy's (USN's) Aegis destroyer USS John Paul Jones (DDG 53), tracked a ballistic missile target as it sped westward over the Pacific Ocean from Vandenberg Air Force Base, California, toward a point in space at which a prototype ground-based interceptor missile launched from a US test range in the Marshall Islands collided with and obliterated it...Its Lockheed Martin SPY-1 radar tracked the modified Minuteman II missile only in an offline mode, meaning that the GMD operators did not use its data to plot the course of the interceptor missile. Still, the exercise heralded a new era for sea-based ballistic missile defence (BMD) development...Sea-based systems have great promise, according to US defence and industry officials...It is the MDA-Navy dynamic that will play a central role in the capabilities that emerge. The USN is still adjusting to the fact that the MDA will have the pre-eminent role in developing the BMD systems that it will operate...Efforts to bring sea-based BMD elements to maturity have made great strides in the last year. Chief among the successes, the officials note, was a series of flight-tests of the USN's nascent Raytheon Standard Missile-3 (SM-3) interceptor, used in concert with Lockheed Martin's Aegis Weapon System (AWS) ...emboldening advocates to call on senior DoD officials to place greater near-term emphasis on fielding sea-based BMD options...The participation of naval assets will grow in future GMD tests and other exercises in the missile defence testbed that the MDA is establishing in the Pacific Ocean to evaluate BMD components. The agency says it also expects to incorporate land-based sensors like the US Army's Theater High-Altitude Area Defense (THAAD) radar in BMD exercises of navy systems.

### **TUESDAY, OCTOBER 29, 2002**

### **U.S. MISSILE DEFENSE AGENCY FOCUSES ON STOPPING LAUNCHES,**

Defense News, October 28, 2002. The Pentagon's Missile Defense Agency (MDA) is mounting a major effort to find ways to knock down enemy ballistic missiles during the boost phase - early in a missile's flight, just as it leaves the launch pad... Industry executives expect boost-phase anti-missile systems to receive great attention in years to come to circumvent the challenge of countermeasures. In the past few months, several major U.S. defense firms have submitted broad outlines for research and experiments in kinetic energy boost-phase anti-missile systems. Several defense firms have submitted proposals capable of using a common interceptor fired from land-, sea- or air-based platforms, industry executives said. Lt. Col. Richard Lehner, an MDA spokesman, said the agency's long-term goal is to develop such a common interceptor, but added that it is not close to picking any designs...Industry officials say designing a battle

management, command-and-control system capable of connecting the different elements under development, and possible new ones, is the toughest challenge they face...The MDA and industry executives on the National Team are debating whether they should design a new battle management system capable of connecting all the elements, or add new software to the battle management systems of individual anti-missile elements. Industry executives also said the absence of a grand design or an objective system for the global Ballistic Missile Defense System is hurting progress on various systems.

**DELEGATE: U.S. DEFENSE PLAN INCLUDES GUAM**, Agana Pacific Daily News (Guam), October 29, 2002. North Korea's admission earlier this month that it has been operating a nuclear weapons program is of concern to Guam, said Guam Delegate Robert Underwood, but he said the island since 1996 has been included in the U.S. government's plan for theater missile defense. "If anyone feels that Guam is not part of those plans, they're just mistaken," said Underwood, who is a candidate for governor. Underwood said it has been proposed that Navy vessels be used to destroy missiles launched in this part of the world -- hitting the missiles on their upward arch. "There's nothing for anybody at this point. All of the missile defense systems are currently under development. A lot of that development is occurring out here," Underwood said. He said he has attended briefings regarding North Korea's weapons, and said the key issue is its delivery system and whether its nuclear weapons can be launched accurately -- something that appears unlikely at this point. "But that should be small comfort to us," Underwood said, adding that North Korea should be encouraged to stop developing weapons of mass destruction, as it had pledged to do.

**HOMELAND MEADS**, Defense Daily, October 28, 2002. There has been U.S. interest in increasing on using the joint international Medium Extended Air Defense System (MEADS) in some type of homeland defense role, says Klaus Riedel, executive vice president of MEADS International. The MEADS could be placed on coastlines to defend against a variety of threats. MEADS also could be deployed to a coast area within a day, he notes. "Today we have to think about everything," Riedel says. The United States, Italy and Germany are teamed on MEADS, which is envisioned as a highly mobile missile defense system that can be rapidly deployed to a field of operations and move seamlessly with troops as they maneuver the battlefield. MEADS would consist of a Lockheed Martin PAC-3 missile, a lightweight launcher and a 360-degree fire control radar. That 360-degree coverage would make the system an asset for the homeland defense mission, Riedel notes.

**MEADS PROBLEM**, Aerospace Daily, October 28, 2002. A "bureaucratic" problem is holding up an arms transfer item critical to the Medium Extended Air Defense Systems [MEADS], but corporate executives expect to settle the matter within a few weeks, says Klaus Riedel, executive vice president of MEADS International joint

venture. Reidel won't identify the item or the cause of the delay. MEADS, which relies on the United States Patriot Advanced Capability-3 (PAC-3) missile, has been plagued by transfer delays since the program's launch in 1996. But U.S. export officials agreed last year to approve the transfer of sensitive technologies and data relating to the program by using a phased approach. Reidel says 97 percent of the joint venture's requests have been approved since the issue was settled, but a small paperwork problem still delays at least one request.

**LOCKHEED MARTIN PITCHES AIRSHIP**, Defense Week, October 28, 2002...The North American Aerospace Defense Command, the Missile Defense Agency and the Office of the Secretary of Defense held an "industry day" Wednesday in Virginia on a requirement for an unmanned, gas-filled airship that could carry a payload of up to 4,000 pounds at those altitudes for as long as a month. The three-year Advanced Concept Technology Demonstration program has an estimated value of between \$50 million and \$100 million...The High Altitude Airship procurement will be flexible, Missile Defense Agency officials told the best-qualified contractors who responded to a pre-solicitation notice issued in September, according to industry and defense sources. There will be three technical interchange meetings with contractors to be held in November, December and January, the sources said. The request for proposals will be issued in mid-January with proposals due in early February, sources said. The contract award is expected in mid-March, with about two further years for the demonstration. The agency wants three demonstrations: in August 2004, November 2004, and in April 2005. After the demonstration is concluded, the airship would be available to perform a variety of missions in crisis situations...No final decisions have been made on specific missions for the airship.

**ARMY CONTRACT**, DoD, October 29, 2002. Technical and Management Services Corp., Beltsville, Md., was awarded a \$12,200,000 increment as part of a \$37,645,524 firm-fixed-price, time and materials, cost contract for supplies and services for the F-15 aircraft awarded on Oct. 24, 2002. Work will be performed in Saudi Arabia, and is to be completed by May 31, 2003. Contract funds will not expire at the end of the current fiscal year. This was a sole-source contract initiated on May 30, 2002. The U.S. Army Space and Missile Defense Command, Huntsville, Ala., is the contracting activity (DASG60-02-F-0049).

## **OPINION/LETTERS**

**THE GREATEST THREAT**, New York Times, October 29, 2002. The scariest place in the world right now is not Iraq, but rather the Korean peninsula. We're being blackmailed by a nuclear power, and so President Bush is in an exceptionally difficult situation — one that he has handled very ably so far. But the administration's game plan to isolate North Korea is, as our allies are desperately trying to tell us, potentially catastrophic. President Bush wants to squeeze North Korea into abandoning the

uranium enrichment program to which it recently confessed...North Korea has enough plutonium in Yongbyon to rapidly make at least five nuclear weapons, possibly more. That's its leverage: threatening to turn Yongbyon into a nuclear assembly line, which in turn might ultimately lead Japan and South Korea to go nuclear as well. So play the scenario out. We cut off fuel oil and introduce sanctions. Then North Korea revives Yongbyon and threatens to uncan the plutonium. From there, it's easy to imagine the U.S. bombing Yongbyon (both the first Bush and the Clinton administrations had contingency plans to do just that), after which North Korea lashes out with artillery at Seoul...In fact, North Korea's ballistic missiles probably can't reach the continental U.S. Still, North Korea's artillery can destroy Seoul. Don Oberdorfer, in his book "The Two Koreas," cites an estimate from a former American commander in South Korea that a war could kill one million people, including 100,000 Americans...In the coming months, the most delicate problem in international relations will be how to negotiate an end to this crisis. If all sides play their cards wisely, we could not only defuse the confrontation, but also launch North Korea on a path like the one China pursued away from Stalinism. North Korea is the most totalitarian country in the world, and possibly the most dangerous adversary we face. But that's precisely the reason we need to engage it. *Nicholas D. Kristof*

### **WEDNESDAY, OCTOBER 30, 2002**

**SMDC KEEPS WORK GOING AT KWAJALEIN RANGE DESPITE PROTEST,** Defense Daily, October 30, 2002. The Army Space and Missile Defense Command (SMDC) has approval to override a stop work order that would have halted work at Kwajalein Atoll until the General Accounting Office resolves a pending contract protest over future contractor support of the range, SMDC officials said yesterday. "The U.S. Army Space and Missile Defense Command contracting officer announced Friday that the override approval for Kwajalein Range Services' suspension of work was received," SMDC officials said in a response to query yesterday. "Override approval means Kwajalein Range Services can proceed with transition activities." Earlier this month, Northrop Grumman and a Raytheon-Teledyne Brown Engineering team both filed separate protests with GAO requesting examination of SMDC's selection of a Bechtel-Lockheed Martin team to provide range support at the Army's Ronald Reagan Test Site on the Kwajalein Atoll in the Pacific. At the time of the protest filing, SMDC initiated steps to keep work moving forward for transitioning work to the new support contractor at the range. Typically, a stop work order is issued and work cannot proceed while a protest is under review... The contractors heading the protest contend there were problems with the SMDC selection process.

**ARGUMENTS SCHEDULED IN LAWSUIT CHALLENGING ABM TREATY WITHDRAWAL,** Aerospace Daily, October 30, 2002. A federal court is scheduled to hear oral arguments Oct. 31 on a lawsuit challenging President' Bush's authority to

withdraw from the 1972 Anti-Ballistic Missile Treaty without congressional approval. More than 30 House members led by Rep. Dennis Kucinich (D-Ohio) filed the lawsuit in June, contending that treaties have the status of laws and cannot be terminated without congressional consent. The Bush Administration insists the president has the constitutional power to withdraw from treaties on his own. The Administration announced the withdrawal in December and maintains that the pullout became effective in June.

**NEW EXOCET, ATBM ASTER SET**, Aviation Week and Space Technology, October 28, 2002. The French defense ministry has agreed to develop a further upgrade of the MBDA Exocet antiship missile and is preparing to start work on a Block 2 upgrade of the Aster 30 anti-air missile with an anti-theater ballistic missile capability. According to program manager Philippe Cotier, the Exocet upgrade, designated Block 3 MM40, will have a 180-naut.-mi. (333.3 km.) range, up from about 90 naut. mi. now... Test firings of the upgraded Exocet are planned for 2004 and first delivery of the new version is set for 2006. In an unrelated decision, the DGA French armaments agency said at the Euronaval exhibition here last week that it would begin preliminary design on the Block 2 Aster 30, which is expected to have a range of about 1,500 km. (800 naut. mi.), up from 600 km. The Aster is currently designed to hunt and kill cruise missiles and other shorter range weapon systems, in addition to aircraft. MBDA executives foresee additional partners joining the program. Analysts said MBDA could seek to exploit the U.S. Defense Dept.'s decision to terminate Raytheon's Standard SM-2 Block 4A low-tier naval ATBM, which some European countries, including Italy and, reportedly, the U.K., have considered procuring. The Block 2 Aster 30 could evolve into an attractive alternative, they said. The German, Dutch, Spanish and Norwegian navies have already selected the Standard's anti-air version.

**WE'LL BACK STAR WARS; BUT ONLY IF YOU PROMISE TO PROTECT US, MR PRESIDENT**, The Mirror, October 30, 2002. Tony Blair will back George W Bush's plans for a "Star Wars" missile defence system, it was claimed last night. Senior defence sources said the PM made the pledge in return for a guarantee the system will cover the UK. But the move has angered Labour MPs who warn it will increase the threat of attack. British officials insist no formal request has been received from the U.S. to use early warning radar stations at RAF Fylingdales in North Yorkshire and the Menwith Hills base near Harrogate. But a senior defence source said: "Blair told Bush if security to the UK and Nato was improved and we were covered by the missile defence system there would not be a problem." Defence Secretary Geoff Hoon told MPs earlier this month that a public debate was needed on the issue... Labour MP Jeremy Corbyn said: "This is a coded statement that Britain will take part in missile defence. "It will cost this country dear and line us up ever more closely with the US against the rest of the world." U.S. officials have visited other European countries to set out their plans and offer protection to allies. Mr. Hoon said the Ministry of Defence had started looking

into Britain's possible role in the system. There are fears that states such as Iraq and North Korea could soon have the capability to launch missiles with nuclear, chemical or biological warheads against targets in Europe.

**TAIWAN VIEWS MIXED ON PURCHASE OF ARLEIGH BURKE-CLASS DESTROYERS**, Asia Pulse, October 30, 2002. Two long-time observers of military affairs had mixed reactions Tuesday on Taiwan's proposed purchase of Arleigh Burke-class destroyers, which are equipped with state-of-the-art Aegis radar...The purchase of Arleigh Burke-class destroyers became the focus in the Legislative Yuan Tuesday after a news report said Taiwan had quietly asked Washington for four Aegis-equipped destroyers ahead of mainland Chinese President Jiang Zemin's visit to the United States last week. Minister of National Defense Tang Yiau-min denied the reports that Taiwan had reached consensus on the procurement of the Aegis-equipped destroyers...Military commentator Kao Hsiung-po had a different view of the proposed purchase, saying that from a strategic angle, the Aegis-equipped destroyers would have the advantage in some war zones, but Taiwan must realize the fact that obtaining an edge in some parts of a sea war will not be a great help to the overall combat...Meanwhile, a military spokesman said Tuesday that even if the United States agrees to sell Aegis-equipped destroyers to Taiwan, it would take eight to 10 years for the ROC military to take delivery of any of the newly built Arleigh Burke-class destroyers.

#### **THURSDAY, OCTOBER 31, 2002**

**CANADIAN FIRM WORKS ON U.S. DEFENCE SHIELD**, Ottawa Citizen, October 31, 2002. A Canadian company will participate for the first time in the development of the U.S. missile defence shield, a deal some military analysts warn is part of an American government strategy to subtly pressure Canada to support the controversial project. CAE of Montreal will join forces with U.S. aerospace giant Boeing to conduct research on simulating how the anti-missile system might operate...The Canadian government has yet to decide whether to support the anti-missile system. Canada, along with other U.S. allies, shares a concern that the project could spark a new arms race. Various governments have also questioned whether there is enough of a threat to warrant spending billions of dollars for the shield. But [Steven Staples, a military analyst with the Polaris Institute] noted that as Canadian companies see the potential for missile defence contracts, they will lobby the federal government to support the U.S. program. In fact, the U.S. is so technologically advanced in missile defence that it does not need the expertise offered by other countries, he added. What it does need, however, is the political support for the program, according to Mr. Staples...In the past, U.S. government officials have voiced their displeasure over Canada's continued silence on whether it will take part in the missile defence shield. Senior Canadian Forces officers have warned that such foot-dragging could hurt future military relations between the two countries...But any follow-on U.S. scheme to put

devices such as lasers into orbit so they can destroy missiles would go directly against the Canadian government's long-held opposition to putting weapons into space.

**U.S. MAY SPEED UP HOPED-FOR SCUD NEMESIS**, Washington Post, October 31, 2002. Top Pentagon officials, worried about the vulnerability of U.S. troops to Iraqi Scuds and other short-range ballistic missiles, want to speed up production of a new anti-missile weapon despite a series of test failures earlier this year... Under development since the mid-1990s, the system known as PAC-3 (Patriot Advanced Capability-3) has a more accurate interceptor [than the Patriot system] as well as improvements in radar and communication links... While Rumsfeld has yet to make a decision, Pentagon officials have notified Congress that there may be a request to shift about \$120 million from other missile defense programs into PAC-3... But support is not unanimous within the Pentagon. Officials responsible for overseeing the testing of new weapons caution that a green light to rush out more PAC-3's might take pressure off the program to continue with planned improvements and demonstrate the system can meet all its performance requirements. Already the program has received Pentagon waivers allowing limited production of PAC-3 interceptors whose performance still lags, particularly against more advanced ballistic missiles and cruise missiles. Plans call for these shortfalls to be addressed in later versions of the interceptor... Still, with strong bipartisan congressional backing for the program, Pentagon officials are unlikely to encounter much, if any, opposition should they decide to move ahead more quickly. They can point to assertions by PAC-3 program managers that nothing is wrong with the weapon's design.

**U.S. WATCHES FOR NORTH KOREAN MISSILE TESTS TO COMPLEMENT NUCLEAR PROGRAM**, Associated Press, October 31, 2002. U.S. intelligence is watching for signs that North Korea will conduct a flight test of a ballistic missile capable of delivering a nuclear warhead to American soil. The missile, the Taepo Dong 2, far enough along in development that intelligence agencies believe the North Koreans could launch one in a test fairly quickly. For now, U.S. intelligence officials say they have no evidence that Pyongyang is preparing for such a test. A deployed weapon, while somewhat further off, would threaten the continental United States and probably hasten U.S. efforts to deploy a missile defense system. The North Koreans may also sell it to other countries, including Iran, Iraq, Pakistan, Libya and Egypt, as they have many of their other long-range missiles. Since 1999, the North Koreans have been under a self-imposed moratorium on long-range missile test flights, which are usually a prerequisite to deploying a usable weapon... But Pyongyang has also said the flight-test moratorium is contingent on U.S.-North Korean talks moving forward, and the North Korean acknowledgment earlier in October that they were pressing ahead with a nuclear weapons program has scrambled the two countries' relations... Some U.S. experts regard the North Korean acknowledgment of a renewed nuclear program as a strategy to gain new economic and other concessions for the impoverished nation, and the United

States and other powers are attempting to address the issue diplomatically with the North Koreans. A test of a Taepo Dong 2 missile could increase the pressure from Pyongyang, intelligence officials said.

**SMDC CHIEF: ARMY 'BETTER POSTURED' FOR MISSILE DEFENSE IN WAR VS. IRAQ**, Inside Missile Defense, October 30, 2002. The Army is "better postured" today than it was in Operation Desert Storm to provide air and missile defense capabilities to troops prosecuting a war against Iraq, a senior service official said last week. Moreover, the Pentagon is taking steps to ensure the service has sufficient numbers of advanced Patriot theater defense missiles on hand, according to Deputy Defense Secretary Paul Wolfowitz. Lt. Gen. Joseph Cosumano, commanding general of the Space and Missile Defense Command, told reporters at the Association of the U.S. Army's annual meeting last week that "we've made a lot of progress over the last decade to" improve air and missile defense capabilities. The general highlighted improved early warning systems for detecting missile launches, initiatives to bolster attack operations and the development of the Patriot Advanced Capability-3 missile for the Patriot system... While PAC-3 missiles are still being produced in a low-rate initial production, Wolfowitz said late last week that the Defense Department is "looking at ways to accelerate production of PAC-3 out of concern for near-term vulnerabilities."... Cosumano also re-emphasized the need for an organized effort to lead the research and development of cruise missile defenses. Systems like the Medium Extended Air Defense System, the Patriot system and the Mobile Tactical High Energy Laser are all potential contributors to protecting U.S. forces against TBMs, cruise missiles and rockets, mortars and artillery.

## **FRIDAY, NOVEMBER 1, 2002**

**MDA MOVING AHEAD WITH PROGRAM TO DEVELOP NEW BOOST PHASE INTERCEPT MISSILE**, Defense Daily, November 1, 2002. The Missile Defense Agency (MDA) is moving forward with a new kinetic energy boost phase intercept (KE BPI) program planned to result in development of a new multi-use interceptor that could defend against incoming missiles in various phases of flight, MDA and industry officials reported. Air Force Lt. Gen. Ronald Kadish, director of MDA, speaking at a Defense Writers Group breakfast yesterday, confirmed MDA plans to have a strategy in place by the spring for the KE BPI interceptor program. The envisioned multi-use missile, which could be used for defense in the mid-course and boost phases of an incoming missile's flight, could be developed within the next decade, Kadish said. "We plan to have the strategy underway by next spring... I believe it will be certainly in the next five to 10 years that we'll have that capability," Kadish said. Under the current MDA plan, contractors with previous proven experience in interceptor development will be invited to submit options to MDA in late March, industry officials told Defense Daily. The selection process would be less formal than

the more traditional procurement request for proposals process, with up to about five contractors expected to submit their preliminary design ideas early on in the program, an official noted. Following the initial review of concepts, MDA is expected to select two contractors to proceed with development and conduct flight tests of a KE BPI interceptor that would first be tested from a ground-based platform, industry officials said. However the overall requirement for the system calls for a sea-based KE BPI capability, they said. MDA ultimately would like to have a fielded KE BPI system by the 2008 time frame, officials noted. "The KE Boost effort is a good example of what we're going to do without the ABM treaty restrictions," Kadish said. MDA also intends to take lessons learned from the components of its Ground-based Midcourse Defense (GMD) program and build upon that for the KE BPI system, Kadish said. "Early experiments in boost are very promising in terms of results," Kadish said. MDA this summer, in coordination with a routine Air Force Minuteman III ICBM launch, tested some new sensor technologies that could have applications for future BPI systems (Defense Daily, July 22). During a July 17 Minuteman III flight from Vandenberg AFB, Calif., MDA tested its Generation I Boost Kill Vehicle (KV) seeker flown aboard the Airborne Surveillance Testbed. The KV seeker was able to track the Minuteman III flight and collect data on rocket plume and other aspects of flight, according to MDA officials. "The technology we are looking has applications for boost phase kinetic energy intercepts," Air Force Lt. Col. Richard Lehner, MDA spokesman, said following that test. MDA also in June tested the seeker technologies during another Air Force launch of a Titan II rocket from Vandenberg. That experiment "expands our experience beyond the liquid fueled Titan we tracked last month and reduces risk in our KV guidance, navigation and control strategy," Lehner noted. In addition, the Titan II is a liquid fuel booster, while Minuteman III is solid fuel, so MDA collected varied data from the two different launches, he said.

**ARMY TO TAKE OVER PAC-3 PROGRAM,** Defense Week Daily Update, October 31, 2002. Army Secretary Thomas White said today the Army will soon take over the Patriot PAC-3 antimissile program from the Missile Defense Agency. His comments came as a Pentagon panel was scheduled to meet today to weigh whether to increase production of the PAC-3, the hit-to-kill version of the Patriot interceptor, ahead of a possible U.S. war with Iraq...In the fiscal 2003 budget, the Defense Department put PAC-3 money in the Army's budget submission, but the recently enacted defense-appropriations law for fiscal 2003 moves the money back to the Missile Defense Agency. Congress had expressed concerns that the service would use the funds for other purposes. The Army's proposed takeover of the program is thus the latest move in a tug of war between the antimissile agency and the services over missile-defense programs. Meanwhile, at another press breakfast today, Air Force Lt. Gen. Ronald Kadish, director of the Missile Defense Agency, told reporters PAC-3 should be produced in quantity, despite some recent testing setbacks...The Army thinks PAC-3 is a "significant upgrade," to the system, which includes radar and software upgrades and is

“enormously effective,” White said. “We’re fielding the first battalion at [Fort] Bliss, [Texas] of PAC-3.”

**U.S. MUST BEEF UP MISSILE DEFENSE**, Associated Press, November 1, 2002.

The Pentagon is working to solve problems with its most advanced anti-missile rockets and increase production so the newest Patriots will succeed where their predecessors didn’t in destroying Iraqi Scuds, the Missile Defense Agency chief said Thursday. Lt. Gen. Ronald Kadish said the United States has only about 40 of its most advanced Patriot missiles to defend against short-range ballistic and cruise missiles. Experts suspect Iraq alone has several times that many Scud and other short-range missiles, which could be topped with chemical or biological warheads... Kadish said the problems have been fixed and the Pentagon needs many more of the advanced Patriots to counter threats from North Korea, Iran and Libya as well as Iraq. The main contractors on the latest Patriot, known as Patriot Advanced Capability III, can make two of the rockets per month, Kadish said. The Pentagon hopes to speed up that process, but doing so will take time, he said... Kadish called this year’s PAC-III test problems “extremely annoying” and said they included improper soldering of electronic components. “I am very confident we have those problems fixed,” Kadish said. The PAC-III missiles already manufactured have been retrofitted to fix the problems, he said.

**U.S. NEEDS MORE MISSILE DEFENSES, GENERAL SAYS**, Reuters, October 31, 2002.

The United States should buy new Lockheed Martin Corp. anti-missile weapons as fast as it can to counter a growing threat from states like North Korea, Iraq, Iran and Libya, the head of the Pentagon’s Missile Defense Agency said on Thursday...Kadish said he was recommending increased production and purchases of an advanced version of the Patriot system, first used in the 1991 Gulf War ([news - web sites](#)) to counter short-range Iraqi Scud missiles fired at U.S. forces in Saudi Arabia and population centers in Israel. Under development since the mid-1990s, the interceptor known as PAC-3, or Patriot Advanced Capability-3, is now performing well in operational tests after problems last year... With deployment of more PAC-3 missiles, in addition to Israel’s Arrow system and earlier-generation PAC-2 interceptors, Kadish said he was confident of being able to defend against any Iraqi Scud launches in any new war over President Saddam Hussein’s suspected banned weapons programs. The defenses of the United States and its allies represent a “quantum change from what we had in the Gulf War,” he said. U.S. and British intelligence analysts estimate Iraq now has only 12 to 25 mobile Scuds. Keeping Iraq from causing any harm to Israel with them is a key U.S. goal in an effort to prevent Israel from entering any Gulf war. U.S. officials fear Israel’s involvement would fracture any alliance with moderate Arab states that might otherwise go along with a U.S.-led drive to disarm Saddam.

**MDA DIRECTOR SAYS AIRBORNE LASER SHOOT DOWN TEST MAY BE POSTPONED,** Inside the Air Force, November 1, 2002. The director of the Missile Defense Agency said this week the Airborne Laser's critical missile shoot down test might be postponed again because of problems with the hardware used aboard the Boeing 747-based anti-missile system. "We're still assessing . . . the fourth quarter of calendar year 2004 as being the shoot down time frame," Lt. Gen. Ronald Kadish said during an Oct. 31 breakfast with reporters. "I don't think we can pin that down specifically with as much certainty as I'd like until we get through next spring with the efforts of putting the airplane together." . . . "Basically, the problem we have with the Airborne Laser is not that it's carrying too much stuff, but in one part of the airplane it has too much weight," Kadish said, alluding to the back of the aircraft where the laser modules are stored. "It's not a question of the airplane can't carry all the stuff it's supposed to carry." The lethality demonstration had been scheduled for 2003; however, in his testimony before the House Armed Services research and development and procurement subcommittees last February, Kadish said major subsystem integration and testing activities will need to be accomplished first. In fiscal year 2003 budget justification information MDA sent to Congress last February, the ABL lethality demonstration is listed as occurring during the first quarter of FY-05. In a report released in July, the Government Accounting Office said the Missile Defense Agency overestimated the maturity of the ABL, which is designed to shoot down ballistic missiles in the boost phase. Some of the tests to date have used equipment that is not representative of the final system, GAO said in the report.

**PAC-3'S 'ANNOYING' GLITCHES ARE BEING SOLVED, KADISH SAYS,** Aerospace Daily, November 1, 2002. A string of failed flight tests earlier this year for the Patriot Advanced Capability-3 (PAC-3) interceptor missile were the result of "extremely annoying" glitches that are being solved as Pentagon leaders look to accelerate the missile defense program, the Missile Defense Agency's top official said Oct. 31. "We got a briefing from the technical teams a couple weeks ago that gives me great confidence that we found the root cause of those problems," MDA chief Lt. Gen. Ron Kadish said. . . Improperly soldered diodes within the missile and the launcher set, for example, disrupted one test when the second of two missiles failed to be fired from the launcher, Kadish said. . . The glitch was the result of a lapse in simple quality control processes that began in the manufacturing area and continued throughout the contractor and government organization, he said. . . Although to explain who was to blame and how they were disciplined, Kadish said the organization fixed the problem without resorting to a "witch-hunt" to punish those responsible for the error. . . Four PAC-3 operational tests between February and May resulted in three launch failures, two misses and one hit that failed to destroy the incoming warhead. A malfunctioning radar and software problems were blamed for the missed shots. The launch failures were linked to electrical mismatch with White Sands Missile Range safety systems and a generator that had lost power. . . By December, the U.S. Army is scheduled to have 53 PAC-3 missiles, which it

could use to protect troops from Iraqi Scud missiles. The military expects to receive 126 more PAC-3 missiles over the next two years. But Bush Administration officials don't think that will be enough to counter "near-term vulnerabilities," and plan to accelerate the program, Deputy Defense Secretary Paul Wolfowitz said last week (DAILY, Oct. 25). The Defense Acquisition Board was to review PAC-3 production plans Oct. 31