

ALASKA MISSILE DEFENSE EARLY BIRD WEEKLY

(Nineteenth Edition)

Compiled by: Ms Hillary Pesanti, Community Relations Specialist
Command Representative for Missile Defense
907.552.1038

hillary.pesanti@elmendorf.af.mil



Note: Click on any storyline for more information.

July 8, 2002-JULY 12, 2002

ALASKA SPECIFIC NEWS BREAKS

- [Senate: No nukes in missile defense, Sacramento Bee](#)
- [Boeing finalizes development, test plan for new missile defense boosters, Defense Daily](#)
- [Foes of Missile Defense Are Rigid \(Editorial\), Daily Oklahoman](#)

MONDAY, JULY 8, 2002

- [Russian wants to work with U.S. on nuclear-tipped missile defense, Defense Week](#)
- [Ambitious nuclear arms pact faces a senate examination; minimal details and huge warhead cuts embody Bush policy, Washington Post](#)
- [Bulkier Northrop Grumman to expand missile defense presence, Space and Missile](#)
-

TUESDAY, JULY 9, 2002

- [U.S., Japan review options for future sea-based missile defense, Defense Daily](#)
- [U.S. response: commercial satellites to enhance WMD detection, Global Security Newswire](#)
- [Directed-energy devices are emerging from the 'Black' world as weapons for manned and unmanned aircraft, Aviation Week & Space Technology](#)
- [Statement of Lt. Gen. Ronald T. Kadish before the House Armed Services Committee on military procurement](#)
- [Missile Defenses: Now What? Washington Quarterly](#)

WEDNESDAY, JULY 10, 2002

- [Iran Probably Deploying New Medium-Range Missile, Pentagon Says, Bloomberg News](#)
- [Army May Move Missile Defense Work Out of Huntsville, Huntsville Times](#)
- [Letter to the Editor \(Lt. Col. Rick Lehner, Missile Defense Agency\), Cincinnati Post](#)

THURSDAY, JULY 11, 2002

- [America's Dream Defense, CBS News \(60 Minutes II\)](#)
- [Wolfowitz: DoD Will Still Recommend Veto of FY-03 Senate Defense Bill, Inside Missile Defense](#)
- [MDA, Army Plan New Approach in PAC-3 Full-rate Production Decision, Inside Missile Defense](#)
- [Air Force Says ABL May Have 'Emergency' Capability By 2004, Inside Missile Defense](#)
- [Foes of Missile Defense Are Rigid \(Editorial\), Daily Oklahoman](#)

FRIDAY, JULY 12, 2002

- [Scientists \(Again\) Warn 'Star Wars' Threatens The Safety Of Space Orbit, Wall Street Journal](#)
- [Reports On Maneuvers Incorrect, China Daily](#)
- [In Brief, Washington Post](#)
- [Missiles of Mystery, The American Prospect](#)
- [Singapore Navy Successful in Test Fire of Anti-Missile System, Deutsche Presse-Agentur](#)

ALASKA SPECIFIC NEWS BREAKS #19 **JULY 8, 2002-JULY 12, 2002**

SENATE: NO NUKES IN MISSILE DEFENSE, [Sacramento Bee](#), July 6, 2002. The Senate has passed a bill that would block the use of nuclear warheads in the nation's missile-defense program, part of which is under construction in Alaska's interior. The Missile Defense Agency says it isn't exploring the possibility of using nuclear interceptors. The system it is testing relies on kinetic energy - essentially a very high-speed crash - to knock out an incoming missile. "I think we've all taken the position we don't like nuclear weapons in space," said Sen. Ted Stevens, R-Alaska. But a Pentagon advisory group thinks nuclear interceptors are worth exploring, and a bill the House approved directs the Pentagon to request a study of them. The appeal of going nuclear is

that the defensive missile would not need to be precise. It could clear a large area, destroying a number of incoming warheads, and wouldn't be fooled by decoys (one of the challenges of the current hit-to-kill program). Conversely, critics say, the first nuclear-tipped missile launched to explode in space might be the last. The resulting electromagnetic pulse would destroy satellite and electronic circuitry, they say, rendering useless everything from modern cars to the missile-defense system itself. Sen. Dianne Feinstein, D-Calif., and Stevens sponsored an amendment to the annual defense authorization bill that would prohibit using federal money to research or deploy nuclear-armed interceptors in a missile-defense system. Stevens said he never thought there was much danger the Missile Defense Agency would resort to nuclear warheads, and the idea - promoted by the Defense Science Board, a Defense Department advisory body - needlessly alarmed many Alaskans.

BOEING FINALIZES DEVELOPMENT, TEST PLAN FOR NEW MISSILE DEFENSE BOOSTERS, Defense Daily, July 10, 2002. Boeing, as prime contractor of the Missile Defense Agency's Ground-based Midcourse Defense (GMD) program, has completed its plans for developing and testing two boosters for the program in time for integration into the initial GMD testbed at Fort Greely, Alaska, in 2004. Since the selection of Orbital Sciences [ORB] this spring to provide a new alternative booster vehicle for the GMD program, Boeing has been in the process of restructuring the booster plan in preparation for the 2004 testbed, Kenneth Medlin, Boeing vice president and general manager for the Ground-based Missile Defense System, told Defense Daily yesterday. Under this new dual-booster strategy, Orbital will proceed with its plan to build a variant of a commercial booster for the program, and Lockheed Martin [LMT] will supplement Boeing's work on the commercial-off-shelf (COTS) booster that has been in ongoing development and testing for the GMD program, Medlin said...The Pentagon, in the spring, formally approved the Boeing selection of Orbital for the second booster program, but there were still questions regarding what role, if any, Lockheed Martin might play in the dual-booster strategy (Defense Daily, March 5). Lockheed Martin's proposal for a Minuteman-derived booster lost in the dual-booster competition. The booster work is expected to have a potential value of \$1 billion over the course of the GMD program, Medlin said.

FOES OF MISSILE DEFENSE ARE RIGID (Editorial), Daily Oklahoman, July 6, 2002. Opponents of national missile defense haven't given up. The 1972 Anti-Ballistic Missile Treaty has been laid to rest and with it the Cold War anachronism of mutually assured destruction. Ground has been broken on the United States' first missile interceptor base in Alaska. With the treaty and its strictures out of the way, the Bush administration is proceeding with plans to eventually deploy a layered defense that includes sea- and space-based components. We are among those who believe the most plausible sea-based components should be moved along as quickly as possible. On the most difficult aspects of a missile defense, testing to this point is proving that "hitting a

bullet with a bullet" in space with an interceptor can be done with increasing proficiency. According to surveys, most Americans solidly support the notion of protecting the U.S. against missile attack, either intentional or accidental, with a defensive shield. The truth is that millions of Americans think we already have a missile defense, because the logic of it is so obvious... Still, missile defense opponents won't give up. Senate Armed Services Committee Chairman Carl Levin of Michigan is the biggest die-hard of them all. Last month the liberal Democrat succeeded in getting the panel to cut about \$800 million from President Bush's budget for missile defense... The administration will have to play some hardball to get funding restored to the \$7.6 billion-level Bush requested.

GLOBAL NEWS BREAKS #19

MONDAY, JULY 8, 2002

RUSSIAN WANTS TO WORK WITH U.S. ON NUCLEAR-TIPPED MISSILE DEFENSE, Defense Week, July 8, 2002. The head of Russia's premier nuclear-weapons laboratory told visiting U.S. lawmakers recently that he is interested in pursuing U.S.-Russian development of nuclear-tipped antimissile interceptors, an idea that has sparked controversy in Washington. Yevgeny Velikhov, director of the Russian Research Center Kurchatov Institute, broached the idea of U.S.-Russian cooperation in designing new, low-yield nuclear warheads for kill vehicles during a private meeting with a 13-member U.S. congressional delegation this spring, according to a knowledgeable congressional aide. Velikhov's proposal has not previously been publicized. There is no evidence that it could become reality, just that a key Russian is interested. But there seems to be interest in the nuclear option for missile defense among some influential conservatives in Washington. There is no unclassified Pentagon program to develop nuclear-tipped interceptors. But William Schneider, head of the Pentagon's Defense Science Board, told *The Washington Post* in April that Defense Secretary Donald Rumsfeld is "interested in looking at" the concept and that the scientific advisory board plans to study the idea. Moreover, the report accompanying the House-passed fiscal 2003 defense-authorization bill says it would be "prudent" for the Defense Department to investigate alternatives-including "nuclear-armed interceptors"-to the current developmental antimissile systems, which rely on kinetic force to obliterate enemy reentry vehicles... President Bush and Russian President Vladimir Putin have promised to explore antimissile cooperation-from joint exercises to shared early warning. But they have never talked publicly about nuclear interceptors.

AMBITIOUS NUCLEAR ARMS PACT FACES A SENATE EXAMINATION: MINIMAL DETAILS AND HUGE WARHEAD CUTS EMBODY BUSH POLICY, Washington Post, July 7, 2002. The Senate opens hearings Tuesday on the shortest yet one of the most far-reaching treaties in four decades of arms accords with Russia, a novel document billed by the Bush administration as the embodiment of its

minimalist vision of nuclear arms control... Putin wanted an agreement that covered "verification and control." He had just finished another meeting with Bush where he got nowhere in trying to preserve the Anti-Ballistic Missile Treaty's limits on missile defense tests, a cornerstone of superpower nuclear policy for 30 years. Putin promised to deliver missile cuts, but he wanted a signed document that committed the United States to specific term. The broader position reflected Bush's campaign pledge. The details flowed from the Pentagon's Nuclear Posture Review, which emphasized sufficient deterrence, flexibility and a new missile defense against smaller threats. Missile defense produced "huge hassles," an American negotiator said. The Russians tried for months to include limits on U.S. plans, first seeking a pledge in the treaty that any U.S. defensive system would not threaten Russian strategic forces. When the administration rejected that, the Russians pressed for a firm statement in the treaty's preamble, which the U.S. team also rejected.

BULKIER NORTHROP GRUMMAN TO EXPAND MISSILE DEFENSE

PRESENCE, Space and Missile, July 5, 2002. Northrop Grumman's takeover of TRW Inc. will give the enlarged Northrop a better shot at winning missile-defense work, according to the two men who presided over the deal. The two companies announced July 1 that they had hammered out a merger agreement that will make Northrop the United States' second-largest defense contractor... Now, through its extended bid to acquire TRW, Northrop will have a major share in work it does not currently specialize in, notably in the missile-defense sector, where TRW specializes in battle management systems, warning satellites and lasers. "The new Northrop Grumman will possess an even broader set of capabilities," said TRW Chairman Philip Odeen. "What TRW brings to the new company is significant: communications, from space to the land battlefield to emergency command centers; missile defense, including a range of laser weapons, space-based warning systems and battle-management for the midcourse national defense system; intelligence capabilities ranging from space-based systems to extensive data management and analysis capabilities; and new customer areas where they don't have a strong presence, such as the Missile Defense Agency, the Army and a number of non-defense federal agencies."

TUESDAY, JULY 9, 2002

U.S., JAPAN REVIEW OPTIONS FOR FUTURE SEA-BASED MISSILE

DEFENSE, Defense Daily, July 5, 2002. The nature of United States cooperation with Japan on ballistic missile defense technology development is changing with an increased focus on emerging sea-based missile defense technologies, according to David Martin, Missile Defense Agency (MDA) deputy for strategic relations "As the nature of the sea-based system has changed it has caused some necessary changes in the nature of the work with Japan," Martin told Defense Daily in an interview last week. "They have been rather patient with us in terms of allowing our program to evolve. "The United

States is in the midst of testing the Raytheon [RTN] Standard Missile-3 and Lockheed Martin [LMT] combat system for the Sea-based Midcourse Defense program. In addition, there has been consideration on how to expand the SM-3 capability or design a new, faster missile to meet longer-range threats from the sea...Japan and the United States have not determined how, or if, cooperation on a sea-based missile defense system might expand beyond existing technology-level work, he said. But, future cooperation is likely to be in the sea-based arena, he confirmed...Currently, Japan is contributing 50 percent to a joint effort with the United States to develop kill vehicle and other technologies that would be useful to the program, Martin noted. In addition, Japan has good experience in the composite materials area, he said... Meanwhile, MDA officials are hoping cooperation with Russia on the missile defense front also will grow. Now free of the constraints of the ABM treaty, MDA is expanded efforts to bring international allied participants in the missile defense program and Martin said that should also include Russia (Defense Daily, July 3)...Meanwhile, progress on the U.S-Russian Russian-American Observation Satellite (RAMOS) program has been slow, he reported. The initial plan had been to conduct a demonstration of RAMOS in the 2006 time frame. But, Martin said, a lot of preparation and design work is necessary leading up to that demonstration.

U.S. RESPONSE: COMMERCIAL SATELLITES TO ENHANCE WMD DETECTION, Global Security Newswire, July 3, 2002. New U.S. plans to

substantially increase its reliance on commercial satellites will help to verify arms control treaties and to uncover illegal or other suspect weapons development programs, government officials, industry experts and private analysts told Global Security Newswire this week. The move will make publicly available more timely, precise and affordable pictures of the Earth than ever before, they predicted. Greater access to high-resolution space imagery would assist international arms inspectors, strengthen diplomatic efforts to pressure would-be proliferators and treaty violators, and otherwise improve the ability of governments, international bodies, independent analysts and nongovernmental organizations to examine WMD-related activities around the globe.

DIRECTED ENERGY DEVICES ARE EMERGING FROM THE 'BLACK' WORLD AS WEAPONS FOR MANNED AND UNMANNED AIRCRAFT,

Aviation Week & Space Technology, July 8, 2002 Lockheed Martin is tailoring a laser for the F-35 Joint Strike Fighter that could be ready as early as 2010 for demonstration and the start of a full-scale development program. Variants of the solid-state laser, powered by a drive shaft from an aircraft's engine instead of batteries, also are being considered for use on AC-130 gunships and Lockheed Martin-designed unmanned aircraft. The high-energy laser system is being designed in a joint project with Raytheon. An advantage of a directed-energy weapon is that it can shoot indefinitely and is limited only by the ability to cool it. And it's covert.

STATEMENT OF LT. GEN. RONALD T. KADISH BEFORE THE HOUSE

ARMED SERVICES COMMITTEE ON MILITARY PROCUREMENT, June 27, 2002. My objective is to meet or exceed the Department-wide execution goals. MDA`s financial systems show that we are on track to do this. Despite the continuing resolution during the first quarter of this fiscal year, MDA`s financial systems indicate that overall in FY 2002, we are 60 percent obligated and 18 percent expended through April 2002. This is comparable to our execution this time last year, by the end of which MDA had exceeded, overall, the Department-wide goals for obligations and expenditures... We are truly at a crossroads in the development of missile defenses. Our pace has picked up, and it is important that we sustain our momentum to be able to take full advantage of the opportunities that now lie before us. Some of the momentum is most readily seen in our recent testing progress. Additionally, our redesigned processes and management structures are now beginning to mature, although there are start up problems we need to solve, as you would expect with such a new management ... I mentioned we had broken ground at Ft. Greely for the expanded BMD System Test Bed. This test bed will add two essential dimensions to our ability to test. First, it will allow us to test our individual elements under more operationally realistic and stressing conditions than we could before. And second, it will allow us to test the integration of those elements into a single BMD System in ways we that would not have been possible before. Some of the tests we will now be able to conduct would not have been permitted under the ABM Treaty. As we look ahead over the next 6 months, we have some 15 ground tests and 20 flight tests scheduled, including several data gathering flight tests.

MISSILE DEFENSES: NOW WHAT? Washington Quarterly, Summer 2002. Events during the past 18 months have created new possibilities for the sea basing of national defenses against intercontinental ballistic missiles (ICBMs). Some conceivable designs would enhance U.S. prospects for defeating a rogue state's missile attack on the United States and its allies, but other deployments could undermine the nation's strategic stability with Russia and China. The most efficacious architecture from both a technical and strategic perspective would include a navy boost-phase intercept program and some sea-based radar... Sea basing of midcourse missile interceptors or terminal defense systems against ICBMs is a much less attractive alternative. Better land-based alternatives for midcourse intercepts, which would be less destabilizing and would not mix theater and national missile defenses, are available. Defense of a large enough area to be anything other than the last-ditch defense of very important strategic facilities is simply impossible for terminal defense systems of the continental United States. Those defense facilities, however, generally do not move; therefore, paying a premium for making the defense system mobile does not seem sensible.

WEDNESDAY, JULY 10, 2002

IRAN PROBABLY DEPLOYING NEW MEDIUM-RANGE MISSILE, PENTAGON SAYS, Bloomberg News, July 9, 2002. Iran probably has deployed a new missile capable of hitting Saudi Arabia, Turkey and Israel, according to U.S. defense officials. That would put these allies at risk should the U.S. attack Iranian targets such as the nuclear power facility at Bushehr, which the U.S. suspects is accelerating Iran's effort to acquire nuclear weapons. The first of at least four test flights of Iran's Shahab-3 missile was in July 1998, the latest in May. "The Shahab-3 has completed development and a few missiles are likely deployed, which would allow Iran to reach Israel, most of Saudi Arabia, and Turkey," the Pentagon stated in response to questions from Bloomberg News.

ARMY MAY MOVE MISSILE DEFENSE WORK OUT OF HUNTSVILLE, Huntsville Times, July 9, 2002. Pentagon leaders are considering an Army reorganization plan that could force the Space and Missile Defense Command to move or disband, members of the Alabama congressional delegation said Monday. Most of SMDC's more than 1,000 employees do missile defense work in Huntsville. High-level Department of Defense officials have been reviewing the way missile defense is managed and structured since the Bush administration took over more than 18 months ago. In a separate review, Army leaders have been working to modernize and streamline Army commands. The two reviews could lead to changes in the way missile defense is developed and used, but the Army is keeping quiet on the details until the reports are completed, U.S. Rep. Bud Cramer said... The Pentagon has already changed missile defense command structure at a higher level. In late June, Space Command and Strategic Command were merged into an as-yet-unnamed command. The merged command will jointly oversee nuclear forces and space-based resources such as satellite detection systems.

LETTER TO THE EDITOR (Lt. Col. Rick Lehner, Missile Defense Agency), Cincinnati Post, July 9, 2002. Your recent editorial on missile defense ("More Risky Secrets," June 14) took issue with our efforts to make the necessary transition to a "classified" program to protect information related to current and future missile defense tests. The technology we're now developing is a military program, no different than a new tank or fighter aircraft. And, as with any military weapon system, a point is reached at the beginning of advanced testing that requires the protection of information about the specifics of that testing. This is now the case with tests involving long-range missile interceptor technology. As we proceed with this advanced testing, the system's effectiveness and capabilities-especially during this development phase--in dealing with

different types of target warheads and decoys must be protected. Current and potential adversaries want this information, and should not be able to get it simply by picking up a copy of The New York Times or the Cincinnati Post. To do otherwise would be a dereliction of duty, and cause great harm to our national security. Why in the world would we make it easier for potential adversaries to learn about how we deal with different targets and decoys, perhaps providing a shortcut to their own missile development efforts? Despite your assertion to the contrary, the Missile Defense Agency continuously provides classified briefings for members of Congress, their staffs, and independent analysts who have the required security clearances, and we will continue to do so. But enemies of America want information about our missile defense technologies. We should not give it to them. -,

THURSDAY, JULY 11, 2002

AMERICA'S DREAM DEFENSE, CBS News (60 Minutes II), July 10, 2002. The way the Bush administration sees it, Sept. 11 proves that America needs a fail-safe, high-tech missile defense system. It would be a dream defense, which could destroy, in space, incoming nuclear or germ warheads. Two years ago, the Pentagon agreed to let us watch an elaborate, expensive test of the missile defense system it is developing, a test using real rockets and sophisticated computerized technology. It was estimated then that actually building the system might cost another \$60 billion, on top of the tens of billions already spent. Earlier this year, the Congressional Budget Office concluded the real cost may be much higher - over \$230 billion. To Pentagon critics, that's an enormous waste of money because they're convinced the system, as designed, is fatally flawed. To the Pentagon, this missile defense system would be America's dream defense: a shield that would withstand virtually any strike, with more countries developing nuclear and biological weapons. The intelligence community believes a rocket carrying a nuclear or germ warhead could be shot at the United States within five years by North Korea or Iran, and a few years later by Iraq.

WOLFOWITZ: DoD WILL STILL RECOMMEND VETO OF FY-03 SENATE DEFENSE BILL, Inside Missile Defense, July 10, 2002. Despite a Senate amendment to its fiscal year 2003 defense authorization bill that could restore an \$814 million cut in missile defense funding, President Bush's top defense advisers would continue to recommend that he veto the bill, Deputy Defense Secretary Paul Wolfowitz told a House committee June 27. Before adjourning for the July 4 holiday, the Senate added two amendments to its bill that would use midyear inflation adjustments made by the Office of Management and Budget to generate the \$814 million in missile defense funding the Senate Armed Services Committee cut from Bush's request when it marked up the authorization bill. One amendment, offered by Sen. John Warner (R-VA), the committee's ranking member, would give Bush the option of using the money from the inflation adjustment for either missile defense or fighting terrorism. On the heels of

Warner's amendment, the Senate then approved one offered by committee Chairman Carl Levin (D-MI) that makes it the position of the Senate that terrorism should take priority over missile defense if Bush has additional money to spend. The Senate passed the FY-03 defense authorization bill June 27...The "burdensome statutory restrictions" the Senate bill imposes -- separate from the funding issue -- would block the Pentagon's ability to effectively manage missile defense programs, Wolfowitz said.

MDA, ARMY PLAN NEW APPROACH IN PAC-3 FULL-RATE PRODUCTION DECISION, Inside Missile Defense, July 10, 2002. In making the full-rate production decision for the Patriot Advanced Capability-3 missile system, the Missile Defense Agency and the Army plan to take a new approach that focuses less on securing an inventory objective and more on getting the current capabilities to the field quickly, a top MDA official said. The traditional defense acquisition process has "been a failure," said MDA Director Lt. Gen. Ronald Kadish during a recent breakfast sponsored by the National Defense University Foundation. "We have to start talking about and thinking about this idea of [full-rate production in] terms different for missile defense systems than we have in the past... The proposed acquisition method is consistent with the Defense Department's support for spiral development, which aims to field systems early in blocks rather than waiting to reach a system's objective capability. PAC-3 will be the first missile defense system to undergo this new acquisition process. The system completed its initial operational test and evaluation at the end of May and is currently under review by the Army Test and Evaluation Command. A full-rate production decision is expected to follow the command's report.

AIR FORCE SAYS ABL MAY HAVE 'EMERGENCY' CAPABILITY BY 2004, Inside Missile Defense, July 10, 2002. The Air Force transformation plan says the Airborne Laser system could have "a potential emergency operating capability in 2004," with a full operational capability by 2010 if the first developmental ABL aircraft is used. To reach the 2010 date, the ABL program will need \$5.5 billion between fiscal years 2003 and 2007, according to a proposed funding profile included in the service's plan...Management of the ABL program was transferred from the Air Force to the Missile Defense Agency last October. According to documents sent to Congress in support of the FY-03 Defense Department budget request, MDA's funding profile over the FY-03/07 time period calls for about \$2.7 billion for ABL -- approximately \$2.8 billion less than the amount called for in the Air Force transformation plan...The estimated ABL initial operational capability date is 2008, with full capability slated to occur two years later, according to the Air Force plan. "The ABL's advanced [infrared] sensor system, active ranging system, and illuminator lasers enable autonomous operations and will provide precise trajectory data to significantly enhance the performance of mid-course and terminal phase missile defense systems," the Air Force plan states. The initial flight of the first ABL developmental aircraft is scheduled for

later this summer at Edwards Air Force Base, CA. The first attempted shoot-down of a ballistic missile target is set for the first quarter of FY-05.

COSUMANO SEES NEED TO EXPAND CRUISE MISSILE DEFENSE

TECHNOLOGIES, Defense Daily, July 11, 2002. While the Pentagon has a good plan in place with the Missile Defense Agency (MDA) for ballistic missile defense systems, more technologies are needed to combat a growing cruise missile threat, according to Army Lt. Gen. Joseph Cosumano, director of the Army Space and Missile Defense Command (SMDC)...Meanwhile, unlike ballistic missile defense which has the MDA, there is no one-stop organization to coordinate cruise missile defense programs and research and development activities, Cosumano noted...First, there is a need for more overhead sensors for the detection of cruise missiles. Cosumano said aerostat platforms like the Raytheon Joint Land-attack cruise missile defense Elevated Netted Sensor (JLENS) is one of these systems. Other technological needs include: low cost interceptor technologies for use against cruise missiles, a single integrated air picture and more long-range combat identification systems, Cosumano said...Under the current plan, JLENS would come online in 2010, but the Army has options for pushing that forward.

FRIDAY, JULY 12, 2002

SCIENTISTS (AGAIN) WARN 'STAR WARS' THREATENS THE SAFETY OF

SPACE ORBIT, Wall Street Journal, July 12, 2002. From the moment President Reagan announced on March 23, 1983, that the U.S. should launch a Strategic Defense Initiative to shield the country from enemy missiles, some of the fiercest opponents of "Star Wars" have not been starry-eyed pacifists. They've been scientists...A new risk -- this one to the nation's \$125 billion-a-year space industry and to intelligence satellites -- has emerged with the revival of a once-discredited idea: space-based missile intercepts and anti-satellite weapons (ASATs). "Even one war in space would create a battlefield lasting forever," says physicist Joel Primack of the University of California, Santa Cruz, "encasing the planet in a shell of whizzing debris that would make space near Earth highly hazardous for peaceful as well as military purposes." Low-Earth orbit, from roughly 180 to 1,200 miles up, is the space equivalent of the Long Island Expressway on a Friday evening in August: "Crowded" doesn't begin to describe it. This belt is home to important astronomical satellites, including the Hubble Space Telescope at 375 miles. The International Space Station orbits about 250 miles up. All are highly vulnerable to space debris...Tests of space weapons could create enough debris to threaten the lives of astronauts aboard the space station, says Clay Moltz of the Monterey Institute of International Studies...The Pentagon is sharply split on space-based weapons. Many political appointees are gung-ho, but the operations side is leery, sources say.

REPORTS ON MANEUVERS INCORRECT, China Daily, July 12, 2002. China yesterday confirmed that it is planning joint military exercises with Russia. The mid-August exercises will be aimed at preventing "dangerous military activities" along the borders of two countries. "They are not aimed at a third party," said Foreign Ministry spokesman Liu Jianchao...China and Russia, in July 1994, signed an official treaty on the prevention of "dangerous military activities" along the border areas of the two countries, according to the spokesman. "The purpose of the military exercises is to test the reliability of the signal communication in order to fulfill the treaty so as to prevent possible dangerous military activities in the border areas and maintain peace and stability in the region," Liu said. Recently, some western media reported that the joint military exercises were to demonstrate opposition to the planned US anti-ballistic missile defense shield and the deployment of US weapons in space.

IN BRIEF, Washington Post, July 12, 2002. Orbital Sciences, a Dulles satellite equipment company, said it was awarded two contracts worth a total of \$46.4 million. Under a four-year, \$39 million contract with the Jet Propulsion Laboratory, Orbital will design, manufacture and provide support services for a new NASA atmospheric science satellite, the Orbiting Carbon Observatory. The satellite will produce high-resolution maps of atmospheric carbon dioxide concentrations worldwide. Under a \$7.4 million deal with the U.S. Missile Defense Agency, Orbital will integrate a rocket motor with avionics, guidance and other electronic systems for a target vehicle to be used in testing defensive missile systems.

MISSILES OF MYSTERY, The American Prospect, July 15, 2002. It's taken us a while, but the Prospect has finally figured out the logic of the Bush administration's anti-missile system. To the lay eye, there was always something a little off-kilter about the system...All was murk and mystery, until a Washington Post story clarified the thinking behind what we had concluded was just a mortally dangerous boondoggle. In brief, the Pentagon intends to place the entire project -- the missiles, their cost, and whether they actually work -- beyond the realm of verifiable fact. According to the Post, "In recent months, defense officials have exempted missile defense projects from the planning and reporting requirements normally applied to major acquisition projects. They have stopped providing Congress with detailed cost estimates and time tables...they have announced plans to restrict information about targets and decoys used in flight tests of the most advanced [weapons]." Both murk and mystery, it seems, are intentional and essential; unknowability is at the very heart of our missile-defense program...security through uncertainty -- theirs, ours, whoever's. Feels safer already.

SINGAPORE NAVY SUCCESSFUL IN TEST FIRE OF ANTI-MISSILE SYSTEM, Deutsche Presse-Agentur, July 11, 2002. The Singapore Navy successfully test-fired the Barak anti-missile defence system in a combined exercise with the U.S. Navy in the South China Sea, officials said on Thursday. Targets simulating missiles

attacking a corvette, the RSS Valiant, were hit during the exercise, the Defense Ministry said. The annual 11-day event which concludes on Friday has involved 2,000 military personnel in land, sea and air-combat maneuvers, as well as search-and-rescue and non-combat evacuation operations, the ministry said. Rear Admiral Sim Gim Guan, the Singapore fleet commander, cited the firing segment for taking "on an additional level of complexity".