
[Virtual Library] ホームページ <http://www.space-library.com> ミルスペースのアーカイブ, Virtual 書架 他

[新着] 新聞、データ: Northern Light (MISAWA Base)、Orbital Debris Quarterly(NASA JSC),

DefenseTOP-100(Defense News), 欧州宇宙産業データ(ASD-Eurospace): アップ

Annual Report & Investor Conference プレゼ: Lockheed Martin, Boeing, EADS アップ

下記、NISTEP より寄贈、感謝

2006.6 科学技術動向 No.63

[シンポジウム開催案内] 「放射能テロと非通常型核物質脅威への対策」 (詳細は下記URL参照)

受講料: 一般: 4万5千円、会員: 3万5千円

時: 平成18年7月20日(木)0900 ~ 21日(金)1700 の2日間

所: NPO法人「NBCR対策推進機構」事務所(三武ビル)9F会議室

・ 住所…東京都中野区東中野4丁目27番25号 三武ビル

お申込みは下記WEB最新ニュース欄記事からのFAX用紙にてお願いします。(E-mail でも受付)

URL: <http://www15.ocn.ne.jp/~cbern/>

<問合せ先> NPO法人「NBCR対策推進機構」(TEL/FAX: 03-3362-1286)

担当: 加藤、二見 /// E-mail: nbc-ngo@tea.ocn.ne.jp

[セミナー開催案内] 「危機管理セミナー」 (詳細は下記URL参照)

受講料(懇親会費含む): 一般: 1万円、会員: 9千円

時: 平成18年7月27日(木) 12:30 ~ 18:30

所: ホテルグランドヒル市ヶ谷

東京都新宿区市谷本村町4-1 (JR総武線市ヶ谷駅 徒歩5分)

お申込みは下記WEB最新ニュース欄記事からのFAX用紙にてお願いします。(E-mail でも受付)

URL: <http://www15.ocn.ne.jp/~cbern/>

<問合せ先> NPO法人「NBCR対策推進機構」(TEL/FAX: 03-3362-1286)

担当: 加藤、二見 /// E-mail: nbc-ngo@tea.ocn.ne.jp

[シンポジウム開催案内] 「月周回衛星 SELENE シンポジウム~カウントダウン SELENE~」 無料

日時: 平成18年7月31日(月) 10:00~17:00

場所: 経団連ホール(経団連会館 14階 東京都千代田区大手町1-9-4)

お申込みは下記WEBから、またはFAX、郵送などで受付けております。

URL: http://www.jsfws.info/selene_sympto/jp/index.html

<問合せ先> /// SELENE シンポジウム運営事務局 (財)日本宇宙フォーラム内

担当: 武石/菅原 /// TEL: 03-5200-1302 / FAX: 03-5200-1420 /// e-mail: selenesympo@jsforum.or.jp

June 29, 2006 CDI Space Security Update #8 Center for Defense Information www.cdi.org

SIPRI ストックホルム国際平和研究所の年鑑の第11章「宇宙における欧州の集会的努力の次元」を CDI ディレクタ Theresa Hitchens と WSI ディレクタ Thomas Valasek が執筆

NB: CDI Director Theresa Hitchens and Tomas Valasek, formerly

the director of the World Security Institute's Brussels office, have a chapter in the 2006 version of the Stockholm International Peace Research Institute (SIPRI) yearbook. Their contribution, "The Security Dimension of European Collective

Efforts in Space,” can be found at

<http://yearbook2006.sipri.org/chap11>.

1. **EELV 計画、初の西海岸打上げ**

1. **First West Coast launch for EELV program**

2. **中国はガリレオタイプの衛星システムを製造計画**

2. **China to build Galileo-type satellite system**

3. **DARPA マイクロサテライトが GEO 静止軌道に打上げられた**

3. **DARPA microsattellites launched to GEO**

4. **中国は月通信を実証**

4. **China demonstrates lunar communications**

5. **空軍と偵察局は宇宙資産の連携を改善する**

5. **Air Force and NRO improve coordination of space assets**

6. **宇宙兵器を排除しないのか？**

6. **Not ruling out space weapons?**

7. **小惑星が地球をかすめる**

7. **Asteroid to miss Earth**

8. **新しいロシアの軍事衛星**

8. **New Russian military satellite**

9. **きりり、軌道上のレーザ通信のテストが成功**

9. **Orbital laser communications test a success**

10. **三菱は H-IIB ロケットの開発を開始**

10. **Mitsubishi begins development of H-IIB rocket**

11. **FALCON プロジェクトで小型打上げロケットの輸送機後部からの落下試験**

11. **FALCON drop test of Small Launch Vehicle**

1. **EELV 計画、初の西海岸打上げ**

First West Coast launch for EELV program

Boeing held the first launch of its Delta 4 rocket for the Evolved Expendable Launch Vehicle (EELV) program on June 27, 2006, from Vandenberg AFB, Calif. This was the first time an EELV rocket was launched from the West Coast: previously, it had been done entirely from Cape Canaveral, Fla. However, the launches were split between the two coasts as a punishment for

Boeing’s misuse of competitor Lockheed Martin’s proprietary information when first bidding on the EELV contract in 1998. Tuesday’s launch was carrying undefined cargo for the National Reconnaissance Organization. Its orbit is unknown, but it is thought to be heading toward a highly elliptical Molniya orbit. (SpaceFlightNow.com, June 28, 2006)

2. **中国はガリレオタイプの衛星システムを製造計画**

China to build Galileo-type satellite system

China has announced plans to build the Compass satellite navigation system, believed to be similar in form to the European Galileo satellite. Compass’s use of GPS and Galileo communications frequencies has European and American

authorities concerned about potential signal jamming— accidental or otherwise— within their own networks as a result. It is not clear whether the Compass program is slated only for military use or could become a commercial competitor to Galileo. Swiss

firm Temex Neuchatel Time has confirmed a Chinese order of 18–20 rubidium atomic clocks of sufficient quality and precision for satellite navigation use. The announcement of Compass comes after the European Union’s decision to exclude China from the new Galileo Supervisory Authority, membership in which

is open only to E.U. states. As a result, China, along with India and Israel, now has no legal standing with Galileo despite its previous financial investments into the Galileo Joint Undertaking. (Space News, June 14, 2006)

3. DARPA マイクロサテライトが GEO 静止軌道に打上げられた

DARPA microsattellites launched to GEO

On June 18, a Delta II 7925 rocket launched a pair of **MiTex microsattellites** to geostationary orbit. The **MiTex** program, a joint program between the Defense Advanced Research Projects Agency (DARPA) and the Air Force, is to demonstrate new technologies. The specific roles of these satellites, each weighing 225 kilograms, have not been disclosed. Their specific orbital slots in GEO are also not known. Details have been released about the new upper stage built by the Naval Research

Lab. The upper stage is equipped with solar panels, a star tracker, and thrusters using a special long life alloy. Combined with the potential for additional fuel to be carried high-volume, Inconel-composite wrapped tanks, the upper stage is designed to last a lot longer, and do a lot more, than simply take the **microsatellites** from their transfer orbit to GEO. (Space Daily, June 20, 2006; Air Force Print News, June 22, 2006)

4. 中国は月通信を実証

China demonstrates lunar communications

China successfully tracked Europe’s **SMART-1** lunar spacecraft in a practice run for its own future lunar missions. A network of four radio telescopes, the primary of which is in Shanghai, enabled the Chinese to track and communicate with spacecraft much further away than what was previously possible. The first of such spacecraft, Chang’e-1, is slated to launch next April. Chang’e-1 paves the way for a volley of Chinese lunar missions, with a robotic sample return mission in 2017 and manned

landings by 2024. The practice session with **SMART-1** couldn’t have come sooner – with its xenon propellant depleted, **SMART-1** is to crash into the lunar surface on Sep. 3, 2006. The impact will be on the near side in the southern hemisphere, and observatories are hoping to glean some scientific insight from the impact.

(Space Daily, June 14, 2006; AP, June 20, 2006)

5. 空軍と偵察局は宇宙資産の連携を改善する

Air Force and NRO improve coordination of space assets

Additional liaisons between the Air Force Space Command and the National Reconnaissance Office (**NRO**) have been created. According to the statement of intent, the new arrangement also improves ties to U.S. Strategic Command so that space assets can respond “in a more unified real-time manner” to emerging threats. An example of this real-time response is the Joint

Space Operations Center, which can take over both Air Force and NRO satellites in the event of an emergency. Lastly, best practices and operational lessons learned will be shared between the two agencies, which traditionally do not collaborate on such matters. (Defense Daily, June 20, 2006)

6. 宇宙兵器を排除しないのか？

Not ruling out space weapons?

The United States has again opposed attempts to ban space weapons by the UN Conference of Disarmament. Strong

international support for the ban exists including countries with space assets, like China and Russia. Russian Defense Minister

Sergei Ivanov is especially concerned, stating, “It would be difficult to imagine the consequences of their possible deployment.” While asserting that “the United States does not have any weapons in space, nor do we have plans to build such weapons,” John Mohanco of the State Department insists that “as long as the potential for such attacks remains, our

government will continue to consider the possible role that space-related weapons may play in protecting our assets.” Information regarding the potential for attacks, and potential attackers, were not provided. Mohanco concluded, “There is no – repeat, no – problem in outer space for arms control to solve.” (Reuters, June 13, 2006; UPI, June 6, 2006)

7. 小惑星が地球をかすめる

Asteroid to miss Earth

Scientists are anxiously awaiting the July 3, 2006, flyby of asteroid 2004 XP14. Somewhere between 410 and 920 meters in diameter, the “potentially hazardous asteroid” will be only 10 percent further away from the Earth than the Moon is. Its closest approach will be at 4:25 a.m. Universal Time at a distance of 432,308 kilometers, making observation impossible to the

naked eye. NASA’s Goldstone facility will use radar to get more precise information on its orbit, allowing for more accurate predictions of future flyby distances. The asteroids mass and density can also be inferred from the radar data, providing insight into XP14’s structure. (SPACE.com, June 26, 2006)

8. 新しいロシアの軍事衛星

New Russian military satellite

A **Tsiklon-2** rocket successfully launched a new Russian military satellite on June 23, 2006. The **Tsiklon rocket** family almost exclusively launches **naval signal intelligence satellites**, of which 60 are currently on orbit. Through the Russian news agency Itar-Tass, Alexei Kuznetsov, a military spokesperson, reports

that “Stable telemeter communication was established and is maintained with the spacecraft. Solar panels unfolded, while onboard systems of the satellite were put into a working condition and are functioning normally.” (Space Daily, June 25, 2006; UPI, June 25, 2006)

9. きらり、軌道上のレーザー通信のテストが成功

Orbital laser communications test a success

The Japanese Kirari satellite successfully maintained a laser communications downlink on June 7, 2006. While space-borne laser communications have been conducted before, this test is the first with a mobile ground station. The German ground station, built by DLR, held communication for three minutes at a

distance of 600 kilometers from the Kirari satellite. The Japanese Aerospace Exploration Agency (JAXA) has more tests in the works, including a laser uplink and a satellite-to-satellite link with the European Advanced Relay and Technology Mission. (Space Daily, June 12, 2006)

10. 三菱は H-IIIB ロケットの開発を開始

Mitsubishi begins development of H-IIIB rocket

Japan is taking the next evolutionary step in their domestic rocketry family. The **H-IIIB** will be 14 percent taller (56 meters) and 25 percent wider (5 meters) than the H-IIA currently in use. The **HII-B** will also use domestic manufacturing facilities for the domes of the fuel tanks, one of the last remaining critical components that are imported for the H-IIA. The increased fuel capacity will allow for double the payload capacity and yet only

cost an estimated \$114 million per launch, about 30 percent more than the H-IIA. The new rocket will also feature the ability to launch two satellites at the same time, finally allowing launch costs to drop to U.S. and European levels. This is the first time that Japanese rockets will be able to provide commercially competitive launch services. (Space Daily, June 14, 2006)

11. FALCON プロジェクトで小型打上げロケットの輸送機後部からの落下試験

FALCON drop test of Small Launch Vehicle

The Small Launch Vehicle program, part of DARPA's **FALCON** program, plans to drop rockets out of the back of a C-17. The goal is to quickly launch **small satellites** into LEO, and mockups of the rocket are being tested to verify whether it's even possible. The test on June 14, 2006, dropped a full size mockup that weighed 80 percent of the actual rocket's mass. At 65,000

pounds, "This is the heaviest single item airdropped from a C-17 to date," according to **FALCON** program manager Kristen Pearson. Future tests will drop the full weight of the rocket from the C-17's max service ceiling of 31,600 feet. (Defense Daily, June 20, 2006)

2006.6 科学技術動向 No.63

トピクス 欧州の微小重力応用研究への取組み

キーワード: ESA、欧州宇宙機関、MAP、微小重力応用プログラム

06.06.30 Astro News (Los Angeles AFB, Calif.) 全文は、<http://www.space-library.com>バーチャル書架からダウンロード可

最初の Delta IV, EELV 西海岸打上げで NRO 偵察局の衛星を軌道に、打上げの記録を記す

First Delta IV, EELV West Coast launch places NRO satellite on orbit, sets launch record

SMC(Space&Missile Command)の連続 45 回の打上げ成功

06.06.30 Northern Light (Misawa) page 3 全文は、<http://www.space-library.com>バーチャル書架からダウンロード可

三沢基地の居住者には AFN 空軍ネットワーク・デコーダとアンテナが借用利用できる (衛星放送)

AFN decoders, dishes available for off-base residents



Photo by Master Sgt. Brad Sprague

06.06.29 Satellite Flyer 全文は、<http://www.space-library.com>バーチャル書架からダウンロード可

元宇宙飛行士が AFSPC の司令官に

Former astronaut takes command of AFSPC AFSPC= Air Force Space Command 空軍宇宙コマンド



Gen. Kevin P. Chilton (right) became the 13th commander of Air Force Space Command in a ceremony at Peterson Air Force Base, Colo., Monday. Gen. T. Michael Moseley, chief of staff of the Air

Force, presided, and Chief Master Sgt. Ron Kriete, AFSPC's command chief, stood ready to present the flag during the change of command ceremony.

2006-06-22 spaceobserver page4 全文は、<http://www.space-library.com>からダウンロード可

AFSPC は GPS 誘導を利用した JDAM(Joint Direct Attack Munition)により直接ザルカウィ攻撃の能力を遂行

AFSPC delivers capability for direct Zargawi strike

Air Force Space Command delivered space combat effects for the precision strike that resulted in the death of terrorist leader Abu Al-Zarqawi, head of al-Qaeda in Iraq. A Global Positioning

System aided **GBU-38 Joint Direct Attack Munition** was one of the two munitions used in the bombing of Zargawi's last safe house.(後略)

06.06.26 Defense News **Defense TOP-100** 抜粋 単位 [Million \$]

#	企業名	国名	前年順位	2005年防衛売上	2005年総合売上	防衛売上割合
1	Lockheed Martin	U.S.	1	36,465.0	37,213.0	98.0
2	Boeing	U.S.	2	30,791.0	54,845.0	56.1
3	Northrop Grumman	U.S.	3	23,332.0	30,700.0	76.0
4	BAE Systems	U.S.	4	20,935.2	26,500.2	79.0
5	Raytheon	U.S.	5	18,200.0	21,900.0	83.1
6	General Dynamics	U.S.	6	16,570.0	21,244.0	78.0
7	EADS	Netherlands	7	9,120.3	40,508.2	22.5
8	L-3 Communications	U.S.	13	8,549.2	9,444.7	90.5
9	Thales	France	9	8,523.3	12,176.1	70.0
10	Halliburton	U.S.	10	7,552.0	20,994.0	36.0

以下、23(MHI), 43(KHI), 47(MELCO), 53(NEC), 88(Toshiba), 100(IHI)

全体は、<http://www.space-library.com>の Defense News 06.06.26 のところからダウンロード可

2006年6月28日 22:42 DAILY NEDO[2006/06/28]

ロボット技術戦略マップ2006 成果報告会の開催

平成18年7月20日(木)13:00~17:30(受付:12:30~)

経済産業省 本館 地下2階 講堂

<http://www.nedo.go.jp/informations/events/180720/180720.html>

2006年6月22日 23:38 DAILY NEDO[2006/06/22]

NEDO 成果報告書 96冊を技術情報データベースに追加

http://www.nedo.go.jp/database/newlist/new_list20060622.html

「4発ティールウイング型多目的 VTOL 無人機事業化に関する事前調査」

<p>(1)現在検討を進めている無人航空機について、2005 年 9 月と 11 月の 2 次にわたって JAXA の風洞試験において取得したデータを基に、性能推定を行った。同機の主要諸元・性能は、離陸重量：30～100kg、滞空時間：1.5～2.5 時間、行動半径：100～125km である。これに対し米において検討が進められている同規模の最新 UAV の諸元・性能は、離陸重量：45～68kg、滞空時間：2 時間、行動半径：16km である。このことから現在開発を進めている UAV は性能的な面で十分な競争力を有している。加えて現在検討中の UAV が垂直離着陸能力を有していることを考慮すると、機能的競争力は十分高いものと判断される。(2)今後の UAV に採用される技術レベルに関して、2005 年 8 月に DOD が発表した「UAV システムのロードマップ (2005-2030)」を中心とした文献調査を行った。(3)無人航空機に想定される用途について米の DFI International 及び国内のシンクタンクと専門家に対するヒアリング(電話もしくは訪問面談)を基にして検討した結果以下の 10 種の用途が想定される。軍事(偵察・監視・連絡任務等)、災害(被災状況把握・鎮火出動任務等)、農業(農薬・種子散布任務等)、環境(大気収集・植生観察任務等)、警備(領海監視・密漁船摘発任務等)、通信(通信中継任務等)、報道(空撮・データ通信任務等)、輸送(人貨輸送任務)、衛星(地球観測任務等)、発射(ロケット発射任務)。これらの用途に対応する UAV ユーザと、それらのユーザが有人機によって行っている任務の約 10%程度が UAV に代替されると仮定し、年間市場規模(億円)を推定した。防衛庁(320)、海上保安庁(2.5)、警察(1)、消防(1.7)、農家(16)、空撮会社/マスコミ(1.8)、その他(25)である。結論として英米の調査会社(Teal Group Corp.及び Frost & Sullivan)の調査結果と合わせると、海外を含めた年間市場規模は、軍事市場：5,700 億円(国内：320 億円)、民間市場：425 億円(国内：48 億円)である。(4)全備重量 100kg の VTOL-UAV について適用可能なエンジン・動力系について調査した。試算によると想定した機体の VTOL に必要な出力は 30kW 程度である(エンジン一基あたりの出力は 7～8kW となる)。この出力帯においては 2サイクルエンジンが主流であり、その他のタイプのエンジンは存在しない。</p>	<p>Preliminary research concerning QTW type multipurpose VTOL uninhabited aircraft business making (FY2006) Final Report:(1)Performance estimation of the UAV under development was done based on wind tunnel test data that was conducted in JAXA last September and November. Performance is as follows; 30-100kg of takeoff gross weight, 1.5-2.5 hours of endurance and 100-125km of radius. Performances of same size UAV under designed in US are 45-68kg of takeoff gross weight, 2 hours of endurance and 16km of radius. According to the performance estimation, our UAV have high competitiveness with regard to performance.(2)Technology level adopted to future UAV are investigated based on references mainly " Unmanned Aircraft Systems Roadmap" published last summer by DoD. (3)Usages were investigated by hearing to some research organizations. As result 10 usages were listed up as military, disaster, agriculture, environment, patrol, communication, reporting, transportation, satellite and launch. Users of these missions and these market size per year (100 million yen) are estimated as defense agency (320), maritime safety agency (2.5), police (1), fire fighting (1.7), farmers (16), media (1.8), others (25). Finally our conclusion is that the total global military market per year is 570 billion yen (including 32 billion yen of Japan) and civil market size of 42.5 billion yen (including 4.8 billion yen of Japan).(4)The engine and the power system that was able to apply VTOL-UAV of 100kg in weight were investigated. A necessary output for VTOL is about 30kW according to the trial calculation. (One engine output becomes 7~8kW). In this output belt, two-cycle engine is a main current, and the engine of other types doesn't exist.</p>
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http://www.tech.nedo.go.jp/servlet/TopPageServlet?KENSAKU=HOKOKUSYO&kensakuHoho=Barcode_Kensaku&db=n&SERCHBARCODE=100007214

2006.6.21 NEDO海外レポート NO.980,

米国におけるロボティクス研究開発状況 (抜粋)

ロボティクス研究開発の特徴を国別に見る場合、米は、野外向け輸送型ロボット(Outdoor Vehicular Mobility)に特徴を持ち、日・韓は室内向け人間型ロボット、欧は地図情報とナビをベースとしたセンサ技術を生かした都市近郊型移動型ロボット(Mobility in Urban)に特徴をもっている。国が支援する研究開発予算には、各国間で大きな開きがあり、米は、NSF 米国科学財団が支援する年間開発予算が US\$10M 以下であり、DARPA(国防総省国防高等研究事業局)の支援は軍事用に限定されている。一方、韓国では経済を引張る基幹産業としてロボティクス研究開発を位置づけ、研究開発予算は年間 US\$80M 規模で行われている。欧州は、「Advanced Robotics」というプログラムを策定し、3 年間で US\$100M 規模の研究開発が行われている。したがって、ロボットの各分野における研究開発は、いずれも日、韓、欧が米国より先んじているが、そうした中で米が研究開発に力を注いでいる分野は、輸送用ロボット(Robotic Vehicles)である。防衛・宇宙

用への需要が背景にある。
例えば、米軍は軍事用アプリとして地上、空、水面下で使用する輸送用ロボットの開発に力を注いでいる。多くのシステムは、遠隔操作を採用しており、コントローラを通じ双方向で位置情報、ビデオ画像、その他のセンサによる情報収集を行うことができる。加えて、自律的に他の(軍事用)システムを認識する機能を有している。複雑なコンピュータとの統合、コミュニケーションアーキテクチャは、これらのシステムで必要不可欠な機能であり、SLAM アルゴリズムなどを使用し実現に成功している。宇宙環境下での組立、建築、メンテ等のサービスを行うことを目的に開発されている「Space Robotics」は、ローカルのコントロールコンソールから操作するタイプのロボット(例えば、宇宙船内からの操作)と地球から人間がオペレータとなり操作するリモートタイプに分かれている。その他、フィールド用ロボット(農業、採掘、建築、有害物質処理、海中作業等)も開発継続されている。

<http://www.nedo.go.jp/kankobutsu/report/980/980-18.pdf?nem>

米国は中国のミサイル技術輸出に警鐘を鳴らし、CGWICの現地法人の米国資産を凍結

Blowing The Whistle

2006年6月28日 人民網日本語版

米のハイテク品輸出制限 中国は「緩和を期待」

外交部の記者会見が27日に行われ、姜瑜報道官が質問に答えた。

——米商務長官が中国へのハイテク製品輸出制限を強化することを示唆した。中国はこれをどう受け止めるか？

中米の経済貿易関係は両国関係の重要な柱であり、利益共有は常に、中米の経済貿易協力関係の主たる流れであり続けている。両国

http://j.peopledaily.com.cn/2006/06/28/jp20060628_60954.html

[編注] 中米= 中国と米国のこと。うっかり読み違えてしまう。

の経済・貿易関係がスピード発展する中で問題が発生するのは避けられず、交渉と対話を通じて穏当に解決すべき。米側が適切な措置をとって、ハイテク製品の対中輸出の制限を緩めることにより、中米貿易の不均衡問題をより適切に解決するよう、われわれは期待する。(編集ID)

6/19/2006 – 6/23/2006 [AstroExpo.com](http://www.astroexpo.com) <http://www.astroexpo.com/gateway.asp>

Business News

[Intelsat-PanAmSat Merger Approved by FCC](#)

[NASA Enters Agreement to Attract High-Tech Companies to Maryland](#)

[Mobile Satellite Ventures Accelerates North American Build Of Next Generation Satellites](#)

[DigitalGlobe's European Partner to Supply Satellite Imagery to European Commission](#)

International Space News

[International Space Station Status Report: SS06-029](#)

[Russian Spaceship Set for Fiery End in Pacific After Leaving ISS](#)

[First ESA Long-Duration Mission Onboard the ISS Given 1 July Start](#)

[Communications Satellites: Emergency Response](#)

[Putin, Nazarbayev Agree to Develop Space Cooperation](#)

Launch News

[250th Flight of Aerojet-Assisted Boeing Delta 2 Rocket a Success!](#)

[Arianespace to Launch First Vietnamese Telecommunications Satellite](#)

[Russia to Launch Unique Space Observatory](#)

[Russia Set to Orbit South Korean Satellite in July-1](#)

[Russian Rocket Delivers Kazakh Satellite into Orbit](#)

[NASA Gives 'Go' for Space Shuttle Discovery's Launch](#)

Week of June 26, 2006 For the full text go to: [SatNews Weekly http://www.satnews.com/](http://www.satnews.com/)

FCC 米国連邦通信委員会は Intelsat-PanAmSat の合併を承認

... [FCC Approves Intelsat-PanAmSat Merger](#)

シーロンチは Galaxy 16 衛星を軌道に投入

... [Sea Launch Delivers Galaxy 16 Satellite to Orbit](#)

アリアンスペースはベトナムの最初の衛星の打上げ契約を獲得

... [Arianespace Wins Launch Contract of First Vietnamese Satellite](#)

アルカテル・アレニア・スペースは Soyuz-Fregat 打上げロケットの搭載機器を提供する予定

- … [Alcatel Alenia Space to Provide Onboard Equipment for Soyuz-Fregat Launchers](#)
ボーイング Delta II ロケットは DARPA 向けの技術実証機を軌道に投入
- … [Boeing Delta II Carries Technology Demonstrator into Orbit for DARPA](#)
JWST ジェイムズ・ウェブ宇宙望遠鏡のミラーバックプレーン・プロトタイプが試験のため納入された
- … [Mirror Backplane Prototype for James Webb Space Telescope Delivered for Testing](#)
NGA 米国地理情報庁は GeoEye と \$3.7M の空港マッピング・データベースの契約を結ぶ
- … [NGA Awards GeoEye \\$3.7-M Airport Mapping Database Contract](#)
101 カ国が 2015 年までにデジタル放送に移行することで合意
- … [101 Nations Agree to Switch to Digital Broadcasting by 2015](#)

2006 年 6 月 29 日 7:36 【CNET Japan 2006 年 06 月 29 日】

世界スパコンランキング--AMD の Opteron 搭載システムが躍進

<http://japan.cnet.com/svc/nlt2?id=20154067>

3Wi-Fi 対応携帯電話の売り上げが大幅に増加へ--米調査結果

<http://japan.cnet.com/svc/nlt2?id=20153547>

インテル、コミュニケーションズ部門を 6 億ドルで売却

<http://japan.cnet.com/svc/nlt2?id=20152907>

ウイルス作成容疑者、英国とフィンランドで逮捕--コンピュータ犯罪組織「M00P」に所属

<http://japan.cnet.com/svc/nlt2?id=20153908>

総務省、「次世代ブロードバンド戦略 2010(案)」に対する意見を公募

<http://japan.cnet.com/svc/nlt2?id=20153149>

上院商務委員会、アダルトサイトに警告表示を義務付ける法案を可決

<http://japan.cnet.com/svc/nlt2?id=20153887>

2006 年 6 月 28 日 8:29 【CNET Japan 2006 年 06 月 28 日】

RFID チップに代わる独自の認証方法をイスラエル企業が開発

<http://japan.cnet.com/svc/nlt2?id=20152668>

米富豪バフェット氏、ゲイツの財団に 300 億ドル寄付--両氏が記者会見

<http://japan.cnet.com/svc/nlt2?id=20152187>

インテル、「Xeon 5100」シリーズプロセッサを正式発表

<http://japan.cnet.com/svc/nlt2?id=20151807>

2006 年 6 月 27 日 7:40 【CNET Japan 2006 年 06 月 27 日】

仏政府、Google Earth 似のサービス「geoPORTAIL」を立上げ

<http://japan.cnet.com/svc/nlt2?id=20150147>

AT&T の NSA 監視プログラム訴訟--米地裁が審理開始

<http://japan.cnet.com/svc/nlt2?id=20150668>

W・バフェット氏、ゲイツ財団に 300 億ドルを寄付

<http://japan.cnet.com/svc/nlt2?id=20150607>

インテル、65 ナノメートル対応工場をアイルランドに開設

<http://japan.cnet.com/svc/nlt2?id=20150367>

AMD、32nm プロセッサ工場をニューヨークに建設へ

<http://japan.cnet.com/svc/nlt2?id=20150268>

2006年6月26日 8:18 【CNET Japan 2006年06月26日】

ネット検閲国家への協力を罰則を――米下院小委員会が規制法案を可決

<http://japan.cnet.com/svc/nlt2?id=20149208>

薄膜太陽電池の新興企業、大量生産に向け資金獲得

<http://japan.cnet.com/svc/nlt2?id=20148767>

ISS ツアー幕開けへ 米スペースハブ 商用宇宙船 CG 公開

<http://japan.cnet.com/svc/nlt2?id=20148930>

2006年6月23日 8:26 【CNET Japan 2006年06月23日】

フォトレポート: NASA が宇宙へ送るハ工たち―スペースシャトルで健康問題調査

<http://japan.cnet.com/svc/nlt2?id=20148289>

NASA、ハ工を使って宇宙実験へ―無重力が人体に与える影響を調査

<http://japan.cnet.com/svc/nlt2?id=20148347>

シスコ、重要課題は「モビリティ」―今後の展望を明らかに

<http://japan.cnet.com/svc/nlt2?id=20147927>

地雷にほえるロボット「ブルドック」―カンボジアで地雷除去の実証実験へ

<http://japan.cnet.com/svc/nlt2?id=20148427>

2006年6月22日 7:46 【CNET Japan 2006年06月22日】

チェンバース CEO: 「シスコはプラットフォーム企業に変貌する」

<http://japan.cnet.com/svc/nlt2?id=20147127>

フォトレポート: 松下のプレミアムな一眼レフ「LUMIX DMC-L1」

<http://japan.cnet.com/svc/nlt2?id=20147407>

Aerospace Daily & Defense Report Jun 28, 2006

シャトルディスカバリのカウントダウンが 6 月 28 日に開始する

Discovery's countdown will start June 28

NASA will begin the countdown for the launch of shuttle Discovery on mission STS-121 at 5 p.m. Eastern time June 28. The countdown includes nearly 28 hours of built-in hold time, leading to a scheduled launch at 3:49 p.m. July 1. The launch window for liftoff from Kennedy Space Center in Florida lasts nearly five minutes. STS-121 will be the 115th shuttle flight and the 18th U.S. flight to the International Space Station (ISS). The

mission is expected to last 12 days and end with a 10:45 a.m. landing back at Kennedy on July 13. The second return-to-flight test mission following the 2003 Columbia accident, STS-121 will test new safety equipment and procedures, deliver supplies and a third crewmember to the ISS, and make repairs to the orbiting outpost.

Cannon 空軍基地は CV-22 の駐留設備となる予定

Cannon Air Force Base to be staging facility for CV-22s

The snake eaters are moving to New Mexico. Cannon Air Force Base, N.M., was designated for shutdown by last year's Base

Realignment and Closure Commission, and it . . .

ボーイングはエジプトに Avenger 対空防衛システムを提供する予定

Boeing to provide Egypt with Avenger air defense systems

Boeing Co. said June 27 that it has been awarded a \$50 million Foreign Military Sales contract to provide Egypt's military with

Avenger short-range air defense fire . . .

海軍はオーストラリアのイージス・レーダの作業をレイセオンに与える

Navsea awards Australian Aegis radar work to Raytheon

The U.S. Navy has awarded a \$72.8 million contract to Raytheon Integrated Defense Systems of Sudbury, Mass., for long-lead

material items and critical work center efforts for . . .

パトリオットミサイルの出荷を保留されていた複合材料が解除に向かって動き出す

Halted shipment of Patriot missile materials moving toward release

PATRIOT GAMES: U.S. and Japanese officials are working to release a halted shipment of composite materials needed for the

Patriot theater missile defense system following Japan's decision

技術者が電源の問題を診断する間、ハッブル宇宙望遠鏡のカメラはオフラインに

Hubble camera offline while engineers diagnose power supply problem

HUBBLE TROUBLE: The Hubble Space Telescope's Advanced Camera for Surveys remains offline as engineers try to diagnose a problem with its power supply. On June 19 the power supply voltages went above acceptable limits and the camera shut down.

NASA says it is "very close" to understanding the issue, and managers plan to meet at Goddard Space Flight Center on June 29 to decide on corrective action. NASA hopes normal observations can resume by July 3.

Aerospace Daily & Defense Report Jun 27, 2006

ISS はディスカバリの到着に備える、新鮮なサプライを得る予定

ISS prepares for Discovery's arrival, gets fresh supplies

The International Space Station (ISS) crew welcomed an *unmanned Russian Progress* vehicle carrying fresh supplies on June 26 and continued preparations for the anticipated arrival of space shuttle Discovery.

The Progress brought about 2.5 tons of equipment and supplies, including propellant, oxygen, water and other cargo. The crew will start unloading items on June 27. Rather than being filled with trash after being emptied, this Progress will provide additional stowage space while it is docked to the station.

ISS astronauts Pavel Vinogradov and Jeff Williams prepared for Discovery's visit throughout last week, according to NASA. On June 20 they reviewed the timeline of activities for the shuttle

mission and conferred with mission experts on the ground.

On June 21 Williams installed the centerline berthing camera system in a window of the station's Unity module. The camera will be used during the transfer of the Leonardo pressurized logistics module, which is coming up on Discovery. Leonardo will be attached to the Unity module while Discovery is docked and then returned to the shuttle's cargo bay for the trip home.

Williams spent more than three hours June 22 exercising the station's robotic arm and rehearsing the motions that will be required during Discovery's visit. He left the arm parked in the proper position for the shuttle's arrival.

While working with the arm, flight controllers noticed elevated

spin motor command currents and vibrations in one of the station's four control moment gyroscopes, which are used for propellantless attitude control. The indications returned to normal several hours later, and the gyroscope appears to be okay, NASA said.

On June 23 the crew continued to prepare U.S. spacesuits that will be used during the shuttle's visit. They also continued

packing equipment that will be returned to Earth on Discovery.

The shuttle is scheduled to launch on July 1. Among its crew is European Space Agency astronaut Thomas Reiter, who will remain onboard the station as its third crewmember. The size of the ISS crew was reduced from three to two during the shuttle's flight hiatus because of the loss of the orbiter's cargo delivery capability.

陸軍は AeroVironment との RQ-11A の契約に \$10M を加える

Army adds \$10M to AeroVironment's RQ-11A contract

RQ-11A WORK: The U.S. Army Aviation and Missile Command tacked on \$9.6 million to AeroVironment Corp.'s contract for

depot level maintenance and repair for the RQ-11A small ...

MDA ミサイル防衛庁とボーイングは ABL 航空機の中の低出力代替レーザを発射

MDA, Boeing fire surrogate lasers inside ABL aircraft

The Missile Defense Agency (MDA) and an industry team led by prime contractor Boeing have successfully fired surrogate lasers inside the Airborne Laser (ABL) aircraft, the company announced June 26.

The lasers used in the late April tests were low-power stand-ins for ABL's high-energy laser and its two illuminator lasers. During recent ground tests at Boeing facilities in Wichita, Kan., the team placed the lasers in the ABL aircraft, a modified Boeing 747-400F freighter, and fired them repeatedly into a measuring device called a range simulator.

The tests verified the proper alignment of the optical beam train, steering and deformable mirrors, and the sensors that guide the lasers to their targets, Boeing said. Lockheed Martin provides the beam control/fire control system for ABL.

The program plans to install the actual laser illuminators in the jet for ground and flight tests later this year.

During the flight tests the illuminators will be fired at a missile-shaped image painted on a test aircraft.

The high-energy laser that will actually destroy enemy missiles is being refurbished after achieving lethal power levels and run-times in a ground laboratory in December 2005. The Northrop Grumman-built laser will be installed in the aircraft in 2007 to prepare for the program's first missile shoot-down test in 2008.

ABL is being developed to destroy missiles in their boost phase. MDA is delaying development of a second ABL aircraft until after the 2008 shoot-down test (DAILY, Feb. 7).

ベルは H-1 の契約を維持; 海軍は代替機を目指す

Bell keeps H-1 contract; Navy eyes 'alternatives'

Defense officials finally confirmed June 26 that they have decided to continue with Bell Helicopter Textron Inc. and its

embattled H-1 helicopter upgrades program, although they also ...

Altair は CAE ソフト事業を拡大するため仏の会社を買収

Altair acquires French company to expand its CAE software

Altair Engineering Inc. of Troy, Mich., is buying France's Mecalog Group to bring impact analysis capability to Altair's suite of

computer-aided engineering (CAE) software. ...

オーストラリアの防衛当局は JSF を守る

Australian defense officials defend Joint Strike Fighter

On the heels of criticism over the Joint Strike Fighter (JSF), Australian defense officials have defended the massive aircraft

program and said they have "full confidence that . . .

リトアニアの C-27J 購入は Alenia の確信を強化

Lithuania C-27J purchase boosts Alenia's confidence

FLYING HIGH: Alenia Aeronautica has signed a contract with Lithuania for 3 C-27J Spartan tactical transport aircraft. The

company said June 26 that the selection "confirms that . . .

ロッキードマーチンは Arrowheads の \$386M の注文を受ける

Lockheed Martin receives \$386M order for Arrowheads

APACHE EYES: The U.S. Army Aviation and Missile Command has awarded Lockheed Martin Corp. the Lot 3 follow-on

production contract for **Arrowhead**, the **AH-64** Apache attack helicopter's. . .

Aerospace Daily & Defense Report Jun 26, 2006

最新のシャトル RTF 復帰のコスト見積りは \$1.267B

Latest cost estimate of shuttle return at \$1.267B

SHUTTLE COSTS: NASA's latest published estimate sets the cost of making the space shuttle fleet safe to fly after the Feb. 1, 2003, Columbia accident at \$1.267 billion. That number includes expenses only through January, and not the cost of upcoming wind tunnel tests and other work on modifications to the external tank's ice/frost ramps. The latest installment of NASA's shuttle return-to-flight-implementation plan, which tracks the agency's responses to the Columbia Accident Investigation Board's recommendations, says the total return-to-flight cost actually

dropped \$125 million from earlier estimates of fiscal 2006 spending. It terms future expenses as "minimal" and says they will be handled in shuttle operations accounts beginning in fiscal 2007. The handapplied ice/frost foam ramps triggered top-level disagreement during the STS-121 Flight Readiness Review, and will be closely watched when the STS-121 mission lifts off in July. Ultimately they will be redesigned in the years to come to reduce the danger they might fall off and damage the orbiter's fragile thermal protection system.

DOD 国防省は中国を演習に招待した返礼を期待している

DOD hoping for reciprocal offer after inviting Chinese to exercise

CHINESE OBSERVERS: The Defense Department hopes that inviting Chinese military observers to attend the Valiant Shield

exercise in the Pacific Ocean will encourage a reciprocal invitation for . . .

DOD 国防省は上院の修正法案の下で宇宙と UAV に関するレポートを提出

DOD to deliver reports on space, UAVs under Senate amendments

SPACE, UAVs: The Department of Defense will have to conduct an independent review of its management of military space and

deliver the results to Congress, according to . . .

SI インターナショナル社は NORAD 北アメリカ航空宇宙防衛コマンドと米空軍宇宙コマンドをサポートする

SI International supporting NORAD, USAF Space Command

NORAD C2: SI International Inc. said June 23 that it received a 2.5-year, \$14 million Air Force Space Command (AFSPC) contract to provide life-cycle planning, management and engineering and technical assistance to the North American

Aerospace Defense Command (NORAD) and AFSPC. The company said it will help define, develop, field, test and sustain their command and control capabilities, including space, air missile, and command and control elements.

空軍はボーイングと Navstar 衛星 3 機を契約

Air Force awards Boeing for three Navstar satellites

GPS AWARD: The U.S. Air Force's Space and Missile Systems Center in Los Angeles awarded the Boeing Co.'s Navigation and Communication Systems division a \$138.3 million contract modification for the NAVSTAR Global Positioning System (GPS) Block IIF, the Defense Department said June 22. The contract

provides for the "next generation" of advanced GPS satellites with navigation enhancements for both military and civilian users. The modification exercises the fiscal 2006 option to begin production of three satellites, Space Vehicles 10 through 12. The satellites will be complete by January 2010.

MDA ミサイル防衛庁のディレクタは長距離ミサイルに対抗する能力に確信

MDA director 'confident' of capability against long-range missiles

With the possibility of a long-range missile test by **North Korea** looming, the director of the Missile Defense Agency (MDA) said

June 23 that he is "confident" . . .

米国はイランへのミサイル支援に対し中国の宇宙企業の資産を凍結

U.S. freezes Chinese space company assets for Iranian missile aid

The U.S. Treasury Dept. has frozen the U.S. financial assets of **China's Great Wall Industry**, along with another Chinese space exporter, in response to charges that they and the Chinese government are aiding Iranian ballistic missile development.

"The companies targeted have supplied Iran's military and Iranian proliferators with missile-related and dual-use components," said Stuart Levey, under secretary for terrorism and financial intelligence at the Treasury Dept. The asset freeze will affect China's international commercial space business and could also affect developing U.S./Chinese space cooperation.

The Chinese government and the companies deny the charge. In addition to the Treasury Dept., the Federal Bureau of Investigation (FBI) has been gathering evidence against Great Wall.

The Iranian missile programs involved in the Great Wall accusations also are tied to development of the thirdstage solid rocket motor for the North Korean Taepodong-2 ballistic missile, according to analysis by Globalsecurity.org. Iran has specifically aided the North Korean Third stage design. A Taepodong is poised on its North Korean launch pad for a possible flight test

that raised international alarm even before liftoff.

The concern is that the upper stage could eventually be armed with a nuclear weapon capable of striking **Japan**, part of the continental U.S. or American sites around the Pacific, such as Alaska, Hawaii and Guam. The Chinese also have provided extensive Taepodong rocket technology help to the North Koreans. As happened in a 1998 test, Globalsecurity.org believes the North Korean flight could be couched as a satellite launch. But in reality it would be a "wolf in sheep's clothing" attempt to develop a 5,000-7,500 mile range intercontinental ballistic missile. The U.S. government's Iranian accusations are aimed as much at the Chinese government, which owns Great Wall (**GWIC**), as they are at its company representatives. Chinese officials reacted angrily to the asset freeze.

The Treasury Dept. said the Chinese space companies sanctioned have specifically provided missile technology to Iranian programs, such as the 800-1,000 mile range upgraded **Shahab-3** intermediate range ballistic missile. It is capable of striking southern Europe and most areas of the Middle East. The **Shahab-3** is believed to be nuclear-capable.

In addition to **Great Wall Industry**, the assets of its U.S.-based subsidiary, **G.W. Aerospace Inc.** of Torrance, Calif., were frozen, along with the U.S. assets of the China National Precision Machinery Import/Export Corp., which also does space technology export business in U.S. currency.

The flap comes as NASA Administrator Michael Griffin has accepted an invitation to visit China in the fall to discuss U.S./Chinese space cooperation. If the U.S. views this as a company problem, the cooperation will not be directly affected. But if the Bush administration views it as more of a Chinese government problem, then it could cool the administration's recent cooperative tone. **Great Wall** managers accused the U.S.

NASA はハッブル宇宙望遠鏡の保守に関し秋の決定を計画

NASA plans fall decision on Hubble servicing

NASA managers will wait until October to decide whether to launch a final space shuttle mission to service the Hubble Space Telescope, gaining time to analyze data from the upcoming STS-121 flight to the International Space Station.

The previous NASA administrator, Sean O'Keefe, cancelled the Hubble servicing mission after the Columbia accident because the crew of another debris-damaged orbiter would not be able to use the ISS as a "safe haven" while awaiting rescue.

Current administrator Michael Griffin rescinded that order, saying he would await results of STS-121 testing to validate post-Columbia safety measures before making a final decision. But now Griffin has cited the safe-haven capability at ISS in authorizing STS-121 over the concerns of top safety officials

DARPA は新しい衛星と上段技術を飛行実証

DARPA flight demonstrating new satellite, upper-stage technologies

The Defense Advanced Research Projects Agency (DARPA) launched a dual-spacecraft technology demonstration mission from Launch Complex 17A at Cape Canaveral, Fla., June 21 aboard a U.S. Air Force/Boeing Delta rocket. The **Micro-Satellite Technology Experiment (MITEx)** consists of two 500-pound U.S. military spacecraft that will demonstrate new technologies and formation flight in geosynchronous orbit. One spacecraft was built by Lockheed Martin and the other by Orbital Sciences Corp. As is standard for the Delta 7925 rocket, the vehicle had nine solid rocket boosters, a liquid core and second stage and a

of taking the action to give U.S. companies an advantage over the Chinese. "The true purpose of such an action is known to all," **Great Wall** said caustically. The comments were given strong play in the People's Daily, the Chinese Communist Party's mouthpiece to the outside world.

"By applying its domestic laws, the U.S. Government is seriously [interfering] in the normal business activities of [a] Chinese company engaged in peaceful causes, resulting in severe damage to [GWIC's] reputation and economic interests. **GWIC** strongly demands that the U.S. government make correction to its wrong action," the company said.

worried about continuing debris danger from ice/frost ramps on the external tank.

William Gerstenmaier, associate administrator for space operations, says the upcoming mission will give engineers flight data about the performance of the ramps in the latest tank configuration, which will feed into the decision on the Hubble mission.

NASA safety chief Bryan O'Connor, who raised the STS-121 concerns, expects that data will clear the ramps as an acceptable risk or point the way to a redesign. "By the time we get to the Hubble telescope, I don't think we're going to be making a decision that shows a difference between loss of vehicle and loss of crew," O'Connor says.

solid-motor third stage. For the DARPA mission, it was augmented with a new fourth stage developed at the Naval Research Laboratory (NRL) near Washington, D.C. The mission is demonstrating the capability for a new small propulsion system to place small military payloads into geosynchronous orbit. The system is powered by monomethylhydrazine and nitrogen tetroxide. The Navy system is using a 90-pound thrust main engine and six five-pound thrust engines to maneuver the two satellites from a transfer orbit into geosynchronous orbit.

New technologies in the upper stage include platinum/ rhodium (cq) bi-propellant attitude control thrusters; lightweight Inconel-718 composite pressure vessels, lightweight titanium propellant tanks with internal propellant management devices, triple junction solar cells, lithiumion batteries and a low-cost/high-performance star tracker. Low-cost, small geosynchronous military spacecraft do not exist currently and **MiTeX** is developing the technology to deploy them. The two spacecraft, each with a oneyear design life, also are demonstrating advanced space technologies such as lightweight power and propulsion systems, avionics, and spacecraft structures; commercialoff-the-shelf processors; and single-string components.

The Delta placed the vehicle initially in a 103 x 154-mile orbit for a 10-minute coast across the central Atlantic Ocean. The

second stage was then ignited to raise apogee to 1,380 miles before the solid-motor third stage was ignited off the West Coast of Africa to place the fourth stage and payload into a 22,490 x 115-mile transfer orbit. The NRL stage with the satellites then separated over Africa and began several days of maneuvers to take the satellites to geosynchronous altitude. The spacecraft have some classified elements, and the actual payload names and geosynchronous parking location were not announced. There also are indications the satellites are demonstrating military spacecraft defense technologies such as space surveillance/situational awareness sensors and miniature radio systems, including crosslink communications. Part of the flight's research program is covered under the Defense Dept.'s **MidStep** (**Microsatellite** Demonstration Science and Technology Experiment Program).

General Aviation グループは UAV に厳しい基準を望む

General Aviation group wants strict standards for UAVs

A General Aviation group wants the International Civil Aviation Organization (ICAO) to set strict standards for unmanned aerial

vehicles (UAVs) before their use expands from the military . . .

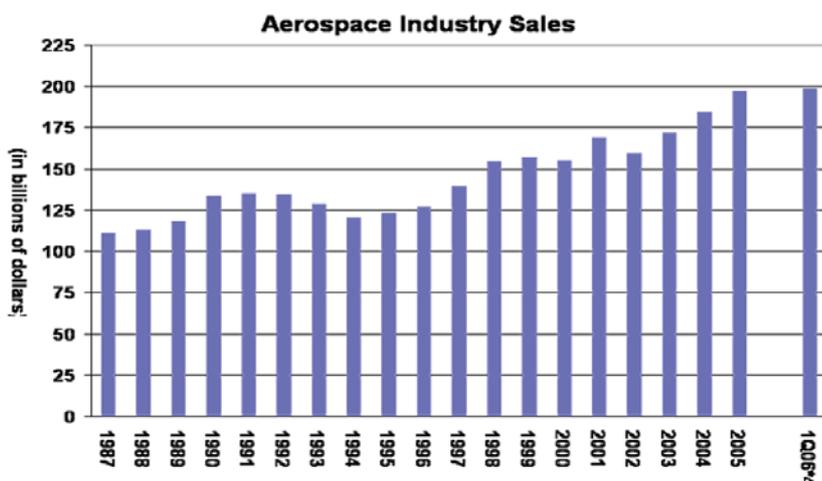
DARPA はリソグラフ技術に関し KLA-Tencor 社を選定

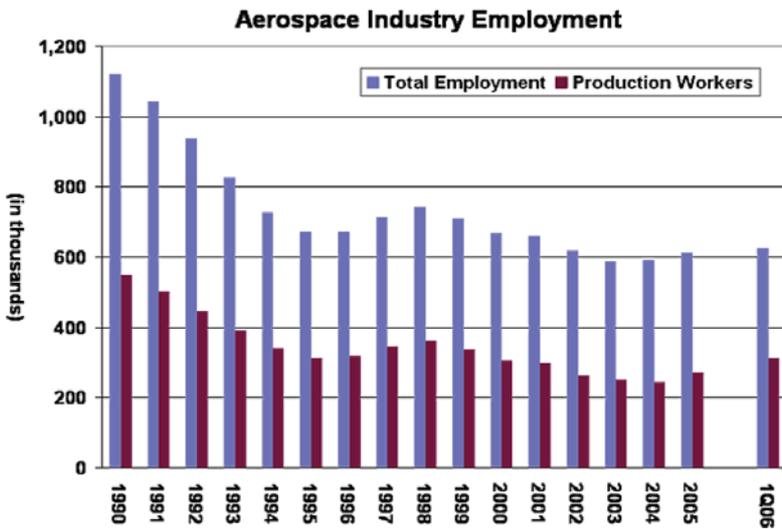
DARPA chooses KLA-Tencor for lithography technology

DARPA AWARD: The Pentagon's Defense Advanced Research Projects Agency (DARPA) has signed KLA-Tencor Corp. of San

Jose, Calif., to a \$5.44 million cost-share and technology-investment agreement to . . .

Economic Indicators, AIA





Source: Aerospace Industries Association

Aerospace Daily & Defense Report Jun 23, 2006

上院側は企業と共に多年次の F-22A ラプタを認める

Senators side with industry, approve multiyear Raptor

The Senate on June 22 sided with Lockheed Martin Corp. and its F-22A Raptor industry team by approving a multiyear acquisition

contract for the increasingly expensive fighter . . .

上院は実際の BMD テストを加速するため\$45M を追加

Senate adds \$45M to speed up "realistic" BMD tests

Senate defense policy makers have gone along with an effort by missile defense advocate Sen. Jeff Sessions to boost the

ballistic missile defense system's ground-based midcourse testing, . . .

新しい米空軍と NRO 偵察局の取決めで人員の削減が可能に

Cuts in personnel possible under new USAF/NRO accord

As part of their new interagency agreement, the U.S. Air Force and the National Reconnaissance Office (NRO) will be performing

a "systematic" review of their respective space . . .

米空軍は小型衛星による潜在的脅威に注目

USAF eyeing potential threat posed by small satellites

The U.S. Air Force is paying close attention to the proliferation of **small satellite** technology that it fears could one day be applied to attacking U.S. military spacecraft in orbit, according to the deputy commander of U.S. Strategic Command (STRATCOM).

this week.

The service is concerned about "this proliferation of . . . **small satellites** and **microsatellites** and where that may take us," Lt. Gen. Robert Kehler told members of the House Armed Services Strategic Forces subcommittee at a hearing in Washington earlier

"We'll have to be very vigilant there," he said. "We've seen, of course, some countries have had anti-satellite weapons in the past, and some are interested in anti-satellite weapons today. We're watching that very carefully." Michael O'Hanlon, senior fellow at The Brookings Institute, testified that **microsatellites** represent "latent anti-satellite weapons" even if they weren't originally developed for that purpose. "The same **microsatellite** of 100 kilograms that can carry a sensor or a probe can also

have 10 kilograms of explosive on board and you would never know,” he said during the hearing. Such systems could be launched and tested under the guise of a scientific mission, he said. “And then all of a sudden, without you knowing it, the next one they put up could in reality be targeted on your KH-12 imaging satellite.” The Air Force is taking a broad look at the potential vulnerabilities of its space systems. Kehler said the first lesson the service has learned is that it must improve its situational awareness in space to be able to determine whether a given satellite disruption is an accident, springing from natural phenomena, or the result of hostile action.

“We are entering an era here where ... we do not view space as a U.S. sanctuary,” Kehler said. “We know we’re going to be challenged. And we’re taking what I believe are measured steps to address those challenges.” Satellites in low-Earth orbit (LEO) already are at risk from nuclear weapons, O’Hanlon said. “Any country that has an ICBM with a nuclear weapon on top already has an anti-satellite weapon,” he testified. “I think most countries could probably pull off an anti-satellite strike on the

first try, never having tested a weapon in that capacity, because you don’t have to get that close with a nuclear weapon.”

Missile defense technology also could target LEO satellites, according to O’Hanlon. “You can’t easily distinguish an anti-satellite weapon from a ballistic missile defense weapon,” he said.

To counter the threat, the Air Force is focusing on satellite redundancy, replenishment, hardening, and integration with airborne and ground systems, Kehler said. The service also has taken a “hard look” at the susceptibilities of its ground infrastructure.

“In some cases, we’ve had to deal with fences and hardening and those kinds of things,” he said. “But you can only build so many fences ... and so the next step really is to have sufficient redundancy in your system.”—Jefferson Morris

(jeff_morris@AviationNow.com)

ESA 欧州宇宙機関は Dordain 氏を理事長に再任命

ESA reappoints Dordain as director general

REAPPOINTED: The European Space Agency has reappointed Director General Jean-Jacques Dordain for a new four-year term. Dordain was named to the head post in December 2002.

Launcher Chief Antonio Fabrizi and Human Spaceflight Director Daniel Sacotte were also reappointed.

FCC 連邦通信委員会は Intelsat/PanAmSat の合併を最終承認

FCC gives final approval to Intelsat/PanAmSat merger

The Federal Communications Commission (FCC) has given final approval to the merger of former satellite competitors Intelsat and PanAmSat, and the companies expect the **\$3.2 billion** deal to close by July 3.

No other regulatory approvals are required in the U.S. or elsewhere, Intelsat said. The Justice Department closed its antitrust investigation of the proposed merger in May. The merged company will have a combined fleet of **53 communications satellites**.

Intelsat and PanAmSat announced their merger agreement in August 2005. Intelsat will acquire PanAmSat for \$25 per share, or roughly \$3.2 billion.

An additional \$3.2 billion in debt from PanAmSat and its subsidiaries will remain outstanding or be refinanced, the companies said. The final closing of the deal is in part dependent on the receipt of financing by Intelsat.

Intelsat itself was acquired last year for \$5 billion by a group of private equity investors led by Zeus Holdings Ltd.

DARPA は KLA-Tensor 社をリソグラフィ技術で選定

DARPA chooses KLA-Tencor for lithography technology

The Pentagon’s Defense Advanced Research Projects Agency has signed KLA-Tencor Corp. of San Jose, Calif., to a \$5.44 million

cost-share and technology-investment agreement to investigate the feasibility . . .

[Lockheed Martin Press Releases](http://www.lockheedmartin.com/wms/findPage.do?dsp=f nec&ti=111) <http://www.lockheedmartin.com/wms/findPage.do?dsp=f nec&ti=111>

June 27, 2006 **ロッキードマーチン分散型開口撮像技術は望遠鏡の限界を広げる**

[LOCKHEED MARTIN DISTRIBUTED APERTURE IMAGING TECHNOLOGY EXPANDS THE HORIZON ON TELESCOPE CAPABILITY](#)

June 27, 2006 **ロッキードマーチンは AFSS 契約をサポートするため先行評価の情報ウェブポータルを立上げ**

[Lockheed Martin Launches Pilot Information Web Portal To Support AFSS Contract](#)

June 26, 2006 **ロッキードマーチンは\$385.6M の Arrowhead 製造契約を得る**

[Lockheed Martin Awarded \\$385.6 Million Arrowhead Production Contract](#)

June 23, 2006 **ロッキードマーチンは将来輸送システムのビジョンを描く**

[LOCKHEED MARTIN SHAPES VISION FOR FUTURE TRANSPORTATION SYSTEM](#)

June 22, 2006 **イージス弾道ミサイル防衛ウェポン・システムはミサイルを誘導して、7回目の目標迎撃に成功**

[AEGIS BALLISTIC MISSILE DEFENSE WEAPON SYSTEM GUIDES MISSILE TO SEVENTH SUCCESSFUL TARGET INTERCEPT](#)

June 21, 2006 **ロッキードマーチンはバイエリアの科学と数学教育を振興する役割を担う**

[Lockheed Martin On A Mission To Enrich Science And Math Education In Bay Area](#)

June 16, 2006 **ロッキードマーチンは Burlington 郡の学生をスペースキャンプに送る**

[LOCKHEED MARTIN SENDS BURLINGTON COUNTY STUDENT TO SPACE CAMP](#)

June 27, 2006 Lockheed Martin Press Releases

ロッキードマーチン分散型開口撮像技術は望遠鏡の限界を広げる

[LOCKHEED MARTIN DISTRIBUTED APERTURE IMAGING TECHNOLOGY EXPANDS THE HORIZON ON TELESCOPE CAPABILITY](#)

PALO ALTO, Calif., June 27, 2006 -- Engineers at the Lockheed Martin (NYSE:LMT) Advanced Technology Center (ATC) have designed and built a prototype nine-aperture wide-field imaging telescope that overcomes the increase in mass, volume and cost associated with large single-optics telescopes for space-based applications. The ability of a telescope to resolve fine detail is a direct function of its light-gathering power. Larger apertures - mirrors or lenses - gather more light and provide greater resolution of detail.

“The key to making a distributed aperture optical system work is to properly phase the individual modules. Phasing means that all telescopes present an equal path length, to tolerances considerably less than the wavelength of light,” said Peter Dean, the Star-9 program manager at the ATC. “We have demonstrated the fundamental feasibility of this approach with the Star-9 test bed and quantified performance with subsequent test bed activities.”

The ATC prototype, called Star-9 due to the number and

arrangement of apertures, uses multiple small telescope modules that yield a system with a much larger effective aperture. This distributed aperture imaging approach provides a new path to affordable high resolution by packaging the modules in a smaller envelope thus reducing the size, weight and cost of the system.

Multiple apertures also provide a multifunctional capability unavailable with a single monolithic mirror. A distributed-aperture approach could be incorporated in space-based remote sensing instruments that might use individual telescope modules, or groups of modules, to simultaneously view a scene at several different wavelengths or polarizations. On subsequent orbits the system could be reconfigured through software to make completely different sets of observations. Adaptability and flexibility is a key feature since several small apertures can be grouped as a sub-array to image multiple objects on a single pass. The Star-9 telescope could easily serve as the imaging front end for an entire suite of space-based instruments.

Distributed aperture imaging technology also provides

redundancy, reliability and thus lower-risk. A single point failure in a monolithic mirror system could doom a mission to failure, while the loss of a single aperture in a multiple aperture system could be overcome through reconfiguration of the system.

The Star-9 performance demonstrations done at the ATC used off-the-shelf focal planes, electronics and mirror actuators. The experiments show clearly that high-quality imagery can be acquired over a useful field of view for an Earth-imaging or an astronomical-distributed-aperture imaging system.

Lockheed Martin Space Systems Company, a major operating unit of Lockheed Martin Corporation, designs, develops, tests, manufactures and operates a variety of advanced technology systems for military, civil and commercial customers. Chief products include a full-range of space launch systems, including heavy-lift capability, ground systems, remote sensing and communications satellites for commercial and government

customers, advanced space observatories and interplanetary spacecraft, fleet ballistic missiles and missile defense systems.

Headquartered in Bethesda, Md., Lockheed Martin employs about 135,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The corporation reported 2005 sales of \$37.2 billion.



<http://www.lockheedmartin.com/wms/findPage.do?dsp=fec&ci=17743&rsbci=0&fti=111&ti=0&sc=400>

Boeing News Releases <http://www.boeing.com/news/releases/index.html>

ボーイングは B-52H ウェポン・インテグレーション契約を得る

[Jun. 28, 2006](#) Boeing Awarded B-52H Weapons Integration Contract

ボーイングは最初の Delta IV 西海岸打上げを完了

[Jun. 27, 2006](#) Boeing Completes First Delta IV West Coast Launch



ボーイングは Connexion by Boeing のビジネスの評価を加速

[Jun. 26, 2006](#) Boeing Accelerates Evaluation of Connexion by Boeing Business

ボーイング主導のチームはエアボーン・レーザ機から代替レーザを発射

[Jun. 26, 2006](#) Boeing-led Team Fires Surrogate Lasers from Airborne Laser Aircraft

ボーイングはイージス弾道ミサイル防衛の迎撃テストの成功をサポート

[Jun. 22, 2006](#) Boeing Supports Successful Intercept Test of Aegis Ballistic Missile Defense

ボーイングはテロに対抗するインテグレートド戦術ソリューションを実証

[Jun. 22, 2006](#) Boeing Demonstrates Anti-Terrorism Integrated Tactical Solutions

ボーイング Delta II は DARPA 向けの技術実証機を軌道に投入

[Jun. 21, 2006](#) Boeing Delta II Carries Technology Demonstrator into Orbit for DARPA



卓越した性能によりボーイングの気象衛星は早期引渡しに

[Jun. 21, 2006](#) Outstanding Performance Leads to Early Handover of Boeing Weather Satellite

ボーイングは女性が所有のミサイル防衛のサプライヤ(ベンダ企業)を訓練指導する合意書にサイン

[Jun. 20, 2006](#) Boeing Signs Agreement to Mentor Woman-Owned Missile Defense Supplier

ボーイングは TSAT 次世代プロセッサ・ルータの性能を実証

[Jun. 20, 2006](#) Boeing Demonstrates TSAT Next-Generation Processor Router Capability

June 20, 2006 Boeing News Releases

ボーイングは TSAT 次世代プロセッサ・ルータの性能を実証

Boeing Demonstrates TSAT Next-Generation Processor Router Capability

ST. LOUIS, June 20, 2006 -- The Boeing Company [NYSE: BA] successfully completed a series of live tests demonstrating the interoperability of the Transformational Satellite Communications (TSAT) Next-Generation Processor Router (NGPR) with a government reference ground terminal, marking another achievement for the TSAT Space Segment development program.

The tests, conducted at the Massachusetts Institute of Technology's Lincoln Laboratory (MIT/LL) through the government's TSAT Radio Frequency Universal System Test Terminal, verified Boeing's initial compliance and compatibility with the XDR+ anti-jamming waveform, developed for TSAT ground-to-satellite connections. The tests also demonstrated a first step toward ensuring the delivery of "communications on the move" for TSAT military users.

"The flawless execution of the tests at MIT validates the technology readiness of key elements in the team's processor-router design," said Michael Gianelli, Boeing vice president of Navigation and Communications Systems. "Since the team finished the planned testing three days early, we completed additional functionality and performance demonstrations, such as the communications waveform and resource control protocols in key risk reduction areas. Harris Corporation and the rest of the NGPR team played a key role in the tests' success."

The NGPR is designed to provide high-speed Internet protocol-based capabilities to meet the communication

requirements of today's agile warfighter. Prior to the tests at MIT/LL, the team demonstrated functional performance of the NGPR at Harris Corporation on a high-fidelity test bed.

Sheldon J. Fox, Harris vice president and general manager of U.S. Department of Defense Programs, said, "It's no surprise the demonstration went so well. We utilized our high-fidelity computer simulations and hardware test bed to simulate every test, so we knew the system would work as required. The success of the planned tests at MIT reflects the team's hard work and engineering rigor."

The NGPR demonstration follows other recent program accomplishments, including an on-orbit test of similar digital processing technology on a commercial satellite and a laser communications laboratory test.

"Our continued success in these extensive demonstrations confirms the technologies are mature and ready for operational use," said Gianelli. "These tests provide a solid foundation for more comprehensive tests planned later this year."

The Boeing team is working under a \$514 million U.S. Air Force contract for the risk reduction and system definition phase of the TSAT Space Segment program. The Air Force plans to select a primary TSAT Space Segment contractor in fiscal year 2008.

The NGPR team includes Boeing; Harris Corporation, Melbourne, Fla.; and Innovative Communications Engineering, Inc. (ICE), North Chelmsford, Mass. Harris' Government Communications Systems Division conducts advanced research studies, develops

prototypes, and produces and supports state-of-the-art, assured communications™ solutions and information systems that solve the mission-critical challenges of its military and government customers. ICE, winner of the 2005 Boeing Air Force Space Systems Small Business Supplier of the Year Award, offers its government, military and commercial customers terrestrial and space-based Internet protocol and optical networking solutions. ICE delivers superior system engineering services as well as innovative hardware and software product realizations across a wide range of advanced communications

technologies.

The Boeing **TSAT** team includes Raytheon, Ball Aerospace, General Dynamics, IBM, L-3 Communications, Cisco Systems, BBN Technologies, Hughes Network Systems, Lucent Technologies, Harris, EMS Technologies, ICE and Alpha Informatics.

The results contained in this submission were generated in whole, or in part through work supporting the Military Satellite Communications Joint Program Office.

France in Space <http://www.france-science.org/home/page.asp?target=nfo-let&PUBLID=9&LNG=us>

6/28/2006 #345 **France In Space**, a weekly synthesis of French space activities based on French press, provided by the CNES in Washington D.C..

ESA の加盟国はロシアと共に衛星の設計を研究するプログラムを承認

- 1: **ESA MEMBER STATES OK PROGRAM TO EXPLORE SPACECRAFT DESIGNS WITH RUSSIA**

Dordain 氏は ESA 理事長に再選任された

- 2: **JEAN-JACQUES DORDAIN REELECTED AS ESA'S DIRECTOR GENERAL**

欧州委員会は Galileo の軍事利用に関してなお揺れる

- 3: **EUROPEAN COMMISSION STILL WAIVERING ON USE OF GALILEO BY DEFENSE FORCES**

仏と伊は軍事ブロードバンド衛星の潜在性のスタディを実施する計画

- 4: **FRANCE & ITALY TO STUDY MILITARY BROADBAND SATELLITE POTENTIAL**

アルカテル・アレニア・スペースは SOYUZ-FREGAT の搭載機器を提供予定

- 5: **ALCATEL ALENIA SPACE TO PROVIDE ONBOARD EQUIPMENT FOR SOYUZ-FREGAT**

2つのルクセンブルグの企業が Galileo のアンテナ・システムを供給予定

- 6: **TWO LUXEMBOURG COMPANIES TO SUPPLY GALILEO ANTENNA SYSTEM**

要約

- 7: **IN BRIEF**

- 1: **ESA の加盟国はロシアと共に衛星の設計を研究するプログラムを承認**

ESA MEMBER STATES OK PROGRAM TO EXPLORE SPACECRAFT DESIGNS WITH RUSSIA

At the June 22nd ESA Council, member states voted in favor of conducting a two-year joint study with Russia, and most likely Japan, to examine crew-transport vehicle designs for future missions to the ISS, the Moon, and elsewhere. Russia's proposed crew-transport vehicle design, previously called Clipper, has been toned down to a simpler, evolved and enlarged Soyuz capsule. ESA member states, led primarily by France and Germany, have agreed to invest approximately 15 million euros in

the technical investigation, which might result in a program development phase provided that some outstanding issues with Russia, such as the division of labor for the development of key systems, are resolved. It is believed that by 2008 the partners will be able to decide if a full-scale development effort should go forward. This summer, the Russian space agency, Roskosmos, will be selecting a Russian prime contractor for the ACTS studies; Europe will then bring together its proper consortium to

work with the Russians. It is likely that an ACTS agreement would include the possibility of launching the vehicle from both

the Guiana Space Center and Russia's Baikonur Cosmodrome. [Space News 06/26/06]

- 2: **Dordain 氏は ESA 理事長に再選任された**

JEAN-JACQUES DORDAIN REELECTED AS ESA'S DIRECTOR GENERAL

ESA's Director General, Jean-Jacques Dordain, has been reelected for another four years by the agency's Council. Dordain was first nominated as Director General in December 2002 and subsequently took office in July 2003. The Council was unanimous in their decision and also took the occasion to

voice the confidence they have in Dordain's leadership. The Council also renewed the mandates of Antonio Fabrizi for four years as Director of Launchers (first nominated in 2003), and Daniel Sacotte for two years as Director of Human Spaceflight (first nominated in 2004). [Agence France Presse 06/22/06]

- 3: **欧州委員会は Galileo の軍事利用に関してなお揺れる**

EUROPEAN COMMISSION STILL WAIVERING ON USE OF GALILEO BY DEFENSE FORCES

The European Commission has yet to come to a decision as to whether it will allow European defense forces access to the encrypted, jam-resistant Public Regulated Service (PRS) signal that will be part of the Galileo satellite navigation system; France and England continue to be at odds in regards to this point. The British government maintains that Galileo should be reserved for civilian uses and has insisted that its military forces will not use the signal. Furthermore, the British government has sought to deny military use of the signal by its European counterparts. France, on the other hand, has announced that they plan on arming their defense forces with PRS, in addition to the U.S. GPS military code, a similar service to that offered by PRS. GPS, owned and operated by the U.S. Department of Defense, has agreements with NATO and its allies for access to the GPS

military code; allied nations are given "keys" to gain access to the system. In a recent pole of 15 of its member countries, the European Commission found that all except two, Britain and Germany, plan on using PRS if pricing and other conditions are acceptable. French government officials have gone as far to say that France would be forced to rethink its involvement in the Galileo system if the European Commission decided to ban PRS use by defense forces. At this time, PRS use will be restricted to government and emergency-services agencies such as police and ambulances; this may pose a problem in countries such as France and Italy where the line between civil and military is unclear, i.e. local police forces are legally a part of the nations military. [Space News 06/19/06]

- 4: **仏と伊は軍事ブロードバンド衛星の潜在性のスタディを実施する計画**

FRANCE & ITALY TO STUDY MILITARY BROADBAND SATELLITE POTENTIAL

CNES and the Italian space agency, ASI, agreed on June 22nd to carry out a joint study on the potential of a Ka-band broadband satellite to be used by the two nations' defense forces and by civil government agencies. According to CNES, the Athena-Fidus satellite would be launched in 2010 and would be capable of data output speeds higher than 2 gigabits per second.

CNES and ASI have agreed to co-finance the preliminary studies. If the project goes through to development, it may permit the French and Italian defense ministries to abandon their plans for a French Syracuse 3C military communications satellite and a future Italian Sicral spacecraft. [Space News 06/26/06]

- 5: **アルカテル・アレニア・スペースは SOYUZ-FREGAT の搭載機器を提供予定**

ALCATEL ALENIA SPACE TO PROVIDE ONBOARD EQUIPMENT FOR SOYUZ-FREGAT

CNES and Arianespace have awarded Alcatel Alenia Space a contract for the development and manufacturing of subsystems

for the safeguard chain of the Soyuz-Fregat rockets that will be launched from the Guiana Space Center in Kourou. The

contract stipulates that Alcatel Alenia Space will develop and build the BCA, "Boîtier de Commutation et d'Alimentation" or the switching and power feeder unit, as well as electronic ground equipment for tests. In the event of an emergency, the BCA

ensures the neutralization of the launcher by cutting the engine thus leaving the Soyuz in a ballistic trajectory. The first Soyuz-Fregat launch from Kourou is scheduled for 2008. [Alcatel 06/22/06]

- 6: **2つのルクセンブルグの企業が Galileo のアンテナ・システムを供給予定**

TWO LUXEMBOURG COMPANIES TO SUPPLY GALILEO ANTENNA SYSTEM

SES ASTRA announced last Tuesday, June 20th, that its subsidiary SES ASTRA TechCom has been chosen to work on Europe's Galileo satellite navigation system. In cooperation with its Luxembourg partner HITEC Luxembourg, SES ASTRA TechCom has been named lead partner to provide two large telemetry, tracking and control antenna systems which will permit the ground control of the Galileo satellite fleet once in

orbit. SES ASTRA TechCom and HITEC Luxembourg will participate in the design, manufacturing, engineering and on-site installation of the antennas as well as the related training of the personnel. The two full motion, 13 meter diameter, TT&C antennas will be placed at two different geographical locations, one above the polar circle and one close to the equatorial rim. They should be operational by 2007. [GSPDaily.com 06/21/06]

http://www.gpsdaily.com/reports/Luxembourg_Companies_To_Build_Galileo_Antenna_System.html

- 7: **要約 IN BRIEF**

The German aerospace agency, DLR, successfully completed an experiment with the Japanese space agency, JAXA, in which a link was established between laser beams from Kirari, the Japanese Optical Inter-orbit Communication Engineering Test Satellite, and a mobile ground station in Bavaria operated by DLR. The test took place on June 7th and the optical communication downlink was successfully maintained for three minutes. The rate of transmission of information between the two was 50 megabits per second; in the next trials, engineers from the two agencies will try to augment the speed to the gigabit range. [Les Echos 06/28/06]

services to Europe, North America and the Middle East. Hot Bird 9 will offer video distribution and direct television services to Europe. Both satellites are set to launch in 2008. [Space News 06/26/06]

Saab Ericsson Space of Gothenburg, Sweden, will provide Astrium Satellites almost 50 Ku-band frequency converters for the W2M and Hot Bird 9 satellites Astrium is currently building for Eutelsat. The W2M satellite is being built by Astrium and Antrix Corp., the commercial arm of the Indian Space Research Organization, and will provide television broadcast and broadband

ESA engineers and controllers have begun maneuvering the Smart-1 lunar orbiter in preparation for the end of its 16 month scientific exploration mission. The satellite's mission is scheduled to end on September 3rd when it will impact the lunar surface in a disposal plan similar to that of many earlier missions. The current maneuvers are essential to keeping Smart-1 on track and avoiding an early impact on the Moon. The remaining time will allow the satellite to carry out more low-altitude scientific observations as it moves closer to the planet's surface. [ESA 06/23/06]

2006年 6月 30日 時事通信社「世界週報」 7月 11日号 [目次抜粋]

日本と世界の安全保障 /// 「テポドン2」発射情報の戦略的背景(志方俊之)

北朝鮮情勢の現況と展望 /// 核・ミサイル放棄せず米国と対決姿勢 /// 過熱する「外国頼み」の北朝鮮経済開発(富田共和/李 庚)

<シリーズ>

今週の軍事情報／「普通に」ザルカウイを殺害した米空軍(江畑謙介)
知られざる自衛隊／原子力空母配備を横須賀市長容認へ(風間 實)

[平山ニュース 2006 年 5 月 25, 29 日] <http://www.wikihouse.com/space/>

[NEWS]

6/28 JAXA らが 3 次元フォトニック結晶生成宇宙実験の成果を報告(JAXA,共)
6/28 北京宇宙飛行管制センターが外国の報道機関に初公開(毎)
6/28 0333GMT 打上成功:偵察衛星,Delta 4,Vandenberg
6/27 まいど 1 号は 2007 年秋頃完成予定 打上は 08 年度以降(朝)
6/27 JSAT と鹿児島大学が離島へのブロードバンド提供実験へ(JSAT,共)

[予定]

7/1 1948GMT 打上:STS-121,ISS ULF1.1,Discovery,KSC

[EVENT]

7/5 応募締切:種子島スペースキャンプ 2006,8/7-11,小 4-高 3,60 名>YAC
7/4 JAXA シンポジウム 2006,よみうりホール,有楽町,申込先着 1000 名
7/3 申込締切:水ロケット競技会 2006,7/17,相模原>YAC
6/30 申込締切:スペースフレンズ 2006 愛知,8/25-27,小 4-高 3,150 名>YAC
6/30 応募締切:第 1 回子ども衛星アイデアコンテスト>YAC

[学会]

7/5 第 4 回宇宙ミッションシンポジウム,東京大学生産技術研究所
6/30 申込締切:第 39 回月・惑星シンポジウム,8/7-9,ISAS 相模原

[TV] ディスカバリチャンネル他

7/1 2000-2100 ヒストリーチャンネル 20 世紀のファイルから宇宙に咲いた“ひまわり”
7/1 1310-1500 NHK-BS1 (再)BS 世界のドキュメンタリー検証・チャレンジャー爆発事故

[etc.]

6/20 新刊: 明石和康「アメリカの宇宙戦略」岩波新書

[宇宙開発] http://dailynews.yahoo.co.jp/pc/science/space_exploration/

- <NASA>ディスカバリー、打ち上げ準備整う(毎日新聞) (1 日 12 時 4 分)
- 次世代ロケット名はアレス NASA、「火星」の意味(共同通信) (1 日 10 時 19 分)
- 打ち上げ間近の米シャトル(時事通信) (6 月 30 日 17 時 53 分)
- 中国 宇宙飛行管制センターを公開(毎日新聞) (6 月 29 日 10 時 11 分)



- 世界初、宇宙で人工結晶 宇宙機構が作製に成功(共同通信) (6月28日 20時13分)
- <中国>宇宙飛行管制センターを公開(毎日新聞) (6月28日 18時53分)

[米軍動向] http://dailynews.yahoo.co.jp/fc/world/us_armed_forces/

- 米軍訓練移転、北海道千歳市受け入れへ…協定を評価(読売新聞) (1日 12時38分)
- キティホークが小樽入港 歓迎式典や、反対デモ(共同通信) (1日 11時34分)
- 「地元の理解必要」 パトリオット配備計画で重家沖縄大使(琉球新報) (1日 10時32分)
- 米軍パトリオット 嘉手納に年内配備 地元議会 撤回求める決議(西日本新聞) (1日 10時7分)
- 千歳市が国と協定締結へ F15の訓練制限盛り込む(共同通信) (6月30日 21時44分)
- 海自護衛艦が米空母に同行 護衛との指摘も(共同通信) (6月30日 19時23分)
- パトリオット撤回要求 嘉手納町議会が抗議決議(琉球新報) (6月30日 16時7分)
- ミサイルに備え、Xバンド・レーダーを配備(読売新聞) (6月30日 14時54分)
- ピンラディン容疑者、米国とその同盟国との戦いを「あらゆる場所で」継続宣言(ロイター) (6月30日 14時5分)
- <米軍事法廷>大統領が新立法措置検討へ 米最高裁判決受け(毎日新聞) (6月30日 13時28分)
- ピンラディン容疑者と思われる人物、テープでザルカウィ容疑者称える(ロイター) (6月30日 13時22分)

[核兵器] http://dailynews.yahoo.co.jp/fc/world/nuclear_weapons/

- 巡航ミサイルをイランに違法売却＝ウクライナが中国にも－ロシア国防相(時事通信) (6月30日 19時1分)
- 北朝鮮が兵器13個分の核物質保有、米下院議員(YONHAP NEWS) (6月30日 10時7分)
- 現時点での北朝鮮訪問は問題＝米国務次官補(ロイター) (6月30日 10時5分)
- 小泉－プッシュ会談 テポドン発射阻止 拉致解決へ緊密連携(産経新聞) (6月30日 3時12分)
- G8外相会合 イラン・北で連携強化 声明採択 包括案、来週中回答を(産経新聞) (6月30日 3時12分)
- <日米首脳会談>「21世紀の同盟」宣言 対米最重視を強調(毎日新聞) (6月30日 2時2分)
- 【中国】核事故など想定 of 緊急対応体制確立へ、五輪対応も(サーチナ・中国情報局) (6月29日 11時52分)
- <米爆発物管理>ずさん、安全性の確認も不十分 米政府調査(毎日新聞) (6月29日 11時11分)
- ドイツ国防相、国連監視下でのイランの平和的ウラン濃縮を容認(ロイター) (6月29日 10時54分)
- G8で北問題協議 日露外相一致「拉致解決を」(産経新聞) (6月29日 3時4分)
- 「米朝対話の実現に向け説得する」李統一部長官(YONHAP NEWS) (6月28日 14時34分)

[民間航空機関連 (ex-SJAC 三輪さん)]

2006年6月30日 0:22 AIA dailyLead aia@dailylead.com June 29, 2006 -

ハマをやるんじゃないかとヒヤヒヤしている奴にはいつでも勝てる

プロ野球選手 ルー・ブルック

"Show me a guy who's afraid to look bad, and I'll show you a guy you can beat every time."

--Lou Brock, American baseball player

2006年6月28日 23:58 AIA dailyLead aia@dailylead.com June 28, 2006 -

誰かこんなの持ってない？ 男女辞典というようなものを、英仏辞書のように。

コメディアンティム アレン

"Someone should come out with a man-woman dictionary, like those English-French ones."

--Tim Allen, American actor, comedian

2006年6月28日 0:18 AIA dailyLead aia@dailylead.com June 27, 2006 -

ダイヤモンドも 仕事するとなれば 石炭の塊である

雑誌創刊者 B.C.フォーブス

"Diamonds are only lumps of coal that stuck to their jobs."

--B.C. Forbes, founder of Forbes Magazine

2006年6月27日 0:35 AIA dailyLead aia@dailylead.com June 26, 2006 -

インスピレーションと天才 -- それはまったく同一のものだ

フランス作家

ヴィクトル ユーゴ

"Inspiration and genius -- one and the same."

--Victor Hugo, French novelist, playwright, essayist and statesman

2006年6月24日 1:35 AIA dailyLead aia@dailylead.com June 23, 2006 -

抵抗ばかりして悪いものに対して遠吠えといった無駄をするより、よきものの美しさを賛美しよう

作家・詩人・哲学者 ラルフ ワルド エマーソン

"Don't waste yourself in rejection, nor bark against the bad, but chant the beauty of the good."

--Ralph Waldo Emerson, American author, poet and philosopher

2006年6月30日 0:22 AIA dailyLead aia@dailylead.com June 29, 2006 -

ロッキード ヘリコプター搭載用アローヘッドセンサ受注

Lockheed lands \$385.6M contract for Arrowhead sensors

Lockheed Martin received a \$385.6 million contract to continue making Arrowhead sight and night vision sensors for the Army's AH-64 Apache attack helicopter. The contract calls for 219 Arrowhead kits, plus spares, for the U.S. and foreign militaries. American City Business Journals/Orlando (6/28)

豪州政府 ポーイング737-700 偵察機へ改造計画の遅れを批判

Australia "very disappointed" with Boeing military contract

Australia's defense minister criticized Boeing's delays in converting commercial planes into military surveillance aircraft. Boeing is 18 months behind schedule on delivering 737-700 jetliners for the conversion. A Boeing spokesman said the company is discussing scheduling delays with Australia. Chicago Tribune/Bloomberg (6/29)

機内ブロードバンドサービス 本格化まで暫くかかりそう

Travelers still waiting for in-flight Wi-Fi

Airline travelers are still at least a year from having in-flight Wi-Fi access. Boeing wants to sell its Connexion unit, and Verizon Airfone has withdrawn from the market. Newcomers Air Cell and JetBlue hope to eventually launch service. USA TODAY (6/28)

ボーイング787 複合材の主胴部分のほとんどがサウス・カロライナで生産

Boeing 787 composite construction a major step forward

Most of the fuselage for Boeing's 787 -- the first airliner with a composite fuselage -- will be built in Charleston, S.C. The company will fly the parts to Everett, Wash., using modified 747s known as Large Cargo Freighters. Boeing is also building part of the 787 in Europe, home to its rival Airbus. Seattle Post-Intelligencer (6/28), Seattle Post-Intelligencer (6/28)

航空機安全性 50年前の事故教訓から生まれた現体勢の再構築

50 years ago, crash reshaped aviation safety

A midair collision over the Grand Canyon on June 30, 1956, prompted creation of the air traffic control system and the Federal Aviation Administration. A half-century later, the FAA is looking to modernize the ATC system with more sophisticated and accurate satellite technology to add capacity and advance safety performance. St. Petersburg Times (Fla.) (6/28)

ノースウェスト航空 エアバス A330 を欧州路線に投入

Northwest switching to Airbus A330s on Europe routes

Northwest Airlines will start flying new Airbus A330s on some European routes in October. The airline will retire most of its DC-10s. The more fuel-efficient A330s will feature modern entertainment systems and more comfortable seats. Star Tribune (Minneapolis-St. Paul) (6/29)

NASA ディスカバリ打上げ 天候不良で延期

Storms may postpone Discovery launch

Storm clouds could force NASA to postpone the launch of Discovery, forecasters say. They expect afternoon thunderstorms Saturday, Sunday and Monday. "Obviously these forecasts, while they sound a little bit gloomy, we've certainly launched with higher predictions than this," NASA Test Director Jeff Spaulding said Wednesday. Florida Today (Melbourne) (6/29)

2006年6月28日 23:58 AIA dailyLead aia@dailylead.com June 28, 2006 -

ディスカバリ宇宙へ 秒読み開始

Countdown begins for Discovery launch

A countdown to the launch of the shuttle Discovery starts today at Kennedy Space Center. The shuttle's crew will participate in final training for the launch scheduled for 3:49 p.m. Saturday. This is NASA's second shuttle mission since the Columbia tragedy. Florida Today (Melbourne) (6/28)

パトリオット 北朝鮮からのミサイルにたいする 迎撃能力に疑問

Patriot may be unable to intercept N. Korean missile, experts say

Some experts question whether Patriot missiles offer adequate protection against powerful, high flying missiles that could be fired by North Korea. U.S. and Japanese officials have jointly decided to place Patriot missiles in Japan. The Patriot shoots down incoming ballistic and cruise missiles or aircraft at a relatively close range. Chicago Tribune (6/27)

EADS フランス側 CEO 辞任を否定

EADS co-CEO says he will not resign

EADS co-Chief Executive Noel Forgeard told a French parliament finance committee that he will not resign, but some German shareholders want him to leave his post. Regulators are investigating whether Forgeard knew about A380 production delays before selling EADS shares in March. The Washington Post/Reuters (6/28)

エアライン 今年の夏期シーズン中 運行遅延・減便が危惧される

Airlines delay, cancel fewer flights this summer

Airlines are experiencing fewer delays and cancellations so far this summer, a recent study found. Air traffic controllers are using a new foul-weather tool, which has cut by half the number of storm-delayed flights. Airlines and airports are facing the busiest summer since 2000. The Detroit News/The Wall Street Journal (6/28)

ホワイトハウスは年金改訂議案を凍結

White House aims to stall pension bill

The White House hopes to stall a pension reform bill that includes a funding break for several airlines. It opposes a proposal to let carriers choose an interest rate for projecting the value of pension liabilities. The airlines say the provision would not completely eliminate their annual pension contributions. The Wall Street Journal/Dow Jones Newswires (6/27)

2006 年 6 月 28 日 0:18 AIA dailyLead aia@dailylead.com June 27, 2006 -

オーストラリア国防省大臣 ロッキード JSF を採用検討

Australian defense minister praises Lockheed JSF

Lockheed Martin's Joint Strike Fighter is the right plane for Australia's military, Australian Defense Minister Brendan Nelson said. Nelson recently toured the Lockheed plant in Texas where the planes are assembled. Australia plans to order as many as 100 of the warplanes. [Fort Worth Star-Telegram \(Texas\)/Associated Press](#) (6/26)

エアバス A380 遅延 米国のエアラインには影響殆ど無し

Airbus A380 delays of little concern for U.S. carriers

The **Airbus** A380 superjumbo jet is not designed for North American airlines, industry analyst say. The plane's primary customers are Middle Eastern and Asian airlines. Airbus recently said it would delay deliveries of the A380. A French shareholders group is suing Airbus parent EADS over the delays. [The Street.com](#) (6/27), [The Wichita Eagle \(Kan.\)](#) (6/27)

デルタ航空 アトランタ空港 中国来訪者を歓迎

Delta, Atlanta airport host Chinese visitors

Delta Air Lines and Atlanta airport officials gave Chinese visitors a guided tour of Hartsfield-Jackson Atlanta International Airport as part as an effort to win direct service to China. "China is growing exponentially," said Christine Floistad, Delta's general manager of international network planning. "It's the one area of the world where you can expand and grow and be very profitable." [USA TODAY](#) (6/26)

ノースウエスト航空乗員組合 会社役員の賞与限定を提言

Northwest union proposes limiting management bonuses

Northwest Airlines' flight attendants union wants the carrier to limit management bonuses, raises and stock options. The union has proposed that management receive those incentives only when union members receive similar incentives. The company declined to comment on the negotiations. [Detroit Free Press](#) (6/27)

コムエア航空 乗員組合との争議が経営に大いに問題あたえる

Comair's labor troubles hurting business, top exec says

Comair's contract dispute with its flight attendants is shutting it out of new flying, President Don Bornhost said. The airline, a unit of **Delta Air Lines**, is trying to win concessions from the workers. "There's no secret to why we're being excluded -- we cannot bid competitively," Bornhost said. [The Cincinnati Enquirer](#) (6/27), [The Cincinnati Enquirer](#) (6/27)

2006 年 6 月 27 日 0:35 AIA dailyLead aia@dailylead.com June 26, 2006 -

運輸省ミネタ長官 辞任

Mineta resigns as transportation secretary

Transportation Secretary Norman Mineta is stepping down. Mineta's resignation is effective July 7, White House press secretary Tony Snow said Friday.

ボーイング 空軍 GPS 衛星 受注

Boeing wins Air Force satellite contract

Boeing landed an Air Force contract to build three global positioning satellites. The contract is worth \$138 million. [Chicago Tribune](#) (6/24)

A380 用に空港改造のための出資 議会の航空小委員会が反対

Lawmaker opposes upgrading airports for A380

The chairman of a House aviation subcommittee says the U.S. should not spend any money upgrading airports to accommodate the Airbus A380. "Until a U.S. airline chooses to acquire and operate the passenger version of the A380, foreign airlines that operate A380 passenger service to and from the U.S. should pay for any needed infrastructure improvements at the airports they serve," Rep. John Mica, R-Fla., said. [MSNBC/Financial Times](#) (6/23), [International Herald Tribune/Reuters](#) (6/25)

ボーイング 787の生産量 少なくとも 月産 10 機 と発表

出荷開始を 2008 年 5 月・6 月と予定

Boeing to build at least 10 787s monthly, executive says

Boeing will roll out the 787 at a rate of at least 10 per month once production begins, said Scott Carson, Boeing's vice president of commercial airplanes. Boeing hopes to deliver the first jetliner in May or June 2008. [The Seattle Times](#) (6/24)

ボーイング エアバス のマーケット・シェア 過去数年 拮抗

Boeing, Airbus shares post gains over several years

Shares of **Boeing** and Airbus have performed well in recent years. Despite production setbacks related to the A380, shares of Airbus parent EADS are still higher than they were in 2000, before it introduced the plane. [The New York Times](#) (6/23)

ヴェリゾン エアフォン社 機内の電話サービス 終了

Verizon Airfone to end seatback phone service

Verizon Airfone will eliminate its in-flight phone service on commercial airlines before the end of 2006. The company has decided to focus on its broadband, wireline and wireless businesses. [Chicago Tribune/Associated Press](#) (6/24), [The Age \(Melbourne, Australia\)](#) (6/24)

シャトル ミッション(7 月 1 日)に向けて準備

Astronaut prepares for first shuttle mission

Astronaut Mike Fossum will make his first shuttle flight on July 1 with six other astronauts. Fossum will carry out two spacewalks. The mission is risky because NASA is not sure changes to the shuttle's external fuel tank will prevent the shedding of foam chunks. [Florida Today \(Melbourne\)](#) (6/26)

民間機安全性チーム(CAST) 航空機安全性改善項目発表

Commercial aviation safety team identifies safety enhancements

The Commercial Aviation Safety Team has identified safety enhancements to reduce the leading causes of commercial aviation accidents in the United States. By implementing 47 of the most promising improvements, CAST experts believe they can reduce the fatality risk of commercial air travel in the United States by 73% by 2007. Thirty-one safety enhancements have been completed, and 16 are under way. [Read more on the safety enhancements identified by CAST.](#)

2006 年 6 月 24 日 1:35 AIA dailyLead aia@dailylead.com June 23, 2006 -

ボーイング コネクション・インターネット事業の今後を検討

航空機からのインターネット接続事業は過去6年間利益の出していない。存続か見直しか検討中。

Boeing mulls future of Connexion Internet business: **Boeing's** Connexion in-flight Internet venture has not generated a profit in six years. The company is studying the future of the business but says it has not made a decision yet. "We know we have a good product. We're trying to determine if we have a good business," a Boeing spokesman said. [Network World](#) (6/22), [Los Angeles Times/Bloomberg](#) (6/23)

コラム: 欧米間のオープンスカイ政策、年末までに調印と期待

Column: EU official hopes Open Skies passes this year

The EU-U.S. Open Skies agreement would lead to the creation of new flights and routes, wrote John Bruton, ambassador of the Delegation of the European Commission to the U.S. in a column in the Seattle Times. Fears of foreign investment in the U.S. are stalling the agreement, he noted. Bruton hopes "common sense and clear thinking will prevail so we can strike an agreement before the end of this year." [The Seattle Times](#) (6/23)

デルタ航空、ジェットブルー航空、フロンティア航空 暫定的にメキシコ便の就航

Delta, JetBlue, Frontier to provide service to Mexico

Delta Air Lines, **JetBlue Airways** and **Frontier Airlines** were tentatively selected to provide new service between the United States and Mexico. The decision was based on the result of amendments to the U.S.-Mexico air services agreement signed last December. [Airwise/Reuters](#) (6/22)

航空運賃(国際便価格)いぜん上昇傾向と分析

Analysts expect international fares to continue climbing

Prices for international air travel will continue climbing, despite an investigation into fuel surcharges, analysts said. U.S. carriers expanded their international capacity, the number of seats for sale, by 5.1% in May, according to the Air Transport Association. [Airwise/Reuters](#) (6/22)

エアライン 売上上昇が続く(ATA)

Airlines could continue posting higher unit revenue

Unit revenue could continue climbing for U.S. airlines, according to industry analysts. The Air Transport Association said mainline unit revenue climbed 12.6% in May for seven major carriers, and the average airplane had 80.7% of its seats filled in May. [Aviation Daily](#) (6/21), [The Street.com](#) (6/23)

デルタ2 ミニ衛星二機を 今週打上げ成功

Delta 2 launches two mini-satellites

A **Boeing** Delta 2 rocket carrying two mini-satellites successfully launched this week. The satellites are now in orbit and will test new technologies to determine how they perform in orbit. [Florida Today \(Melbourne\)](#) (6/22)

A350 向けの GE エンジンの開発費10億ドル 検討中

GE engine for revised A350 could cost \$1B to develop

General Electric is mulling whether to design a new engine to power the revised version of the Airbus A350. The new engine could cost up to \$1 billion to design. [Aviation Daily](#) (6/22)

米国の技術系学生にとっての人気就職先企業

大学生就職専門誌調査によると第1位ロッキードマーチン、2位ボーイング、3位 GE と航空関連企業が上位独占

AIA member companies are top choices for engineering students

AIA member company Lockheed Martin has been ranked by undergraduate engineering students as their most "ideal" employer, according to the 2006 Universum Ideal Employer Survey. The Universum study, conducted

annually since 1999, polled more than 37,000 students at 207 leading universities, including 7,642 engineering majors. Lockheed Martin ranked number one. Boeing and General Electric came in number two and three respectively. [Read more](#).
