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[Virtual Space Library] <http://www.space-library.com/>

•[What's New] 新着出版物の追加/入替え

• [What's New] 12/22 Cambridge Encyclopedia of Space ボランティア ミーティング第1回開催

•[What's New] 12/24 Saturday Business Lunch スナップ追加(最下段 Album)

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14 December 2005 Orbital Press Release

**オービタル社は OBV ミサイル・ディフェンス・インターセプタのロケットの打上げ成功**

### **Orbital Successfully Launches OBV Missile Defense Interceptor Rocket**

Company's GMD Interceptor Booster Resumes Flight Testing with its Launch from Kwajalein Test Site in the Mid-Pacific Region (Dulles, VA 14 December 2005) - Orbital Sciences Corporation (NYSE: ORB) announced today that it successfully launched its Orbital Boost Vehicle (OBV) ground-based interceptor (GBI) as part of the Ground-Based Midcourse Defense (GMD) system industry team led by The Boeing Corporation (NYSE: BA). The mission, designated Flight Test-1 (FT-1), originated from the Ronald Reagan Missile Site at Kwajalein Atoll in the Marshall Islands at 10:04 p.m. (EST) on December 13, 2005. Following its launch from a silo, the OBV flew downrange over the Pacific

Ocean. A simulated target was used as the basis for this flight test. Following a preliminary post-flight analysis of the data collected from the mission, Missile Defense Agency (MDA) and the GMD team confirmed that all primary objectives for FT-1 were achieved. These included validating the GMD system's ability to track, acquire and provide the interceptor with data for a hit-to-kill intercept of an enemy ballistic missile warhead in the midcourse of its flight. Other FT-1 objectives were the demonstration of the integration of the various elements of the GMD system, engagement operations, pre-launch built-in-test functionality and further verification of the OBV's flight characteristics.

<http://www.orbital.com/Template.php?Section=News&NavMenuID=32&template=PressReleaseDisplay.php&PressReleaseID=538>

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December 19, 2005 Lockheed Martin Press Release

**ロッキードマーチンが製造した近代化 GPS 衛星の初号機が運用段階に入ったと声明**

### **FIRST MODERNIZED GPS SATELLITE BUILT BY LOCKHEED MARTIN DECLARED OPERATIONAL**

Upgrades to Provide More Power, Greater Accuracy for Navigation Users Worldwide

SUNNYVALE, Calif., , December 19, 2005 -- A joint U.S. Air Force/Lockheed Martin [NYSE: LMT] team announced today that the first modernized Global Positioning System (GPS) satellite has been declared fully operational for GPS users around the globe following extensive on-orbit testing of the spacecraft's new military and civilian signals.

Launched on Sept. 25 from Cape Canaveral Air Force Station, Fla. the GPS IIR-14 (M) satellite is the most technologically advanced GPS satellite ever developed. The spacecraft features a modernized antenna panel that provides increased signal power to receivers on the ground, two new military signals for improved accuracy, enhanced encryption and anti-jamming capabilities for

the military, and a second civil signal that will provide users with an open access signal on a different frequency.

"With this launch, we're truly launching a new era of GPS services for our military and civil users around the globe," according to Col Allan Ballenger, System Program Director for the Navstar GPS program at Los Angeles Air Force Base. "This modernized satellite will broadcast the first new GPS signals since the GPS constellation became fully operational over a decade ago."

The satellite was declared operational on Dec. 16 by Air Force Space Command's 2nd Space Operations Squadron (2 SOPS) at Schriever Air Force Base, Colo., which manages and operates the GPS constellation for both civil and military users. (後略)

<http://www.lockheedmartin.com/wms/findPage.do?dsp=fec&ci=17352&rsbci=0&fti=111&ti=0&sc=400>

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12/14/2005 # 318 **France In Space** a weekly synthesis of French space activities based on French press, provided by the CNES office in Washington D.C..

- 1 : フランスはインドと ALTIKA ミッションで力を合わせる

**- 1 : FRANCE JOINS FORCES WITH INDIA FOR ALTIKA MISSION**

**- 2 : ESA 欧州宇宙機関は 95%の要求した信頼度を得る**

**- 2 : ESA OBTAINS 95% OF CREDITS REQUESTED**

**- 3 : アルカテルアレニアはチリにおける ALMA プロジェクトの 25 のアンテナを供給する予定**

**- 3 : ALCATEL ALENIA TO SUPPLY 25 ANTENNAE FOR ALMA PROJECT IN CHILI**

**- 4 : インテグラル社と XMM 社の Newton ミッションは ESA 欧州宇宙機関の科学委員会が延長**

**- 4 : INTEGRAL AND XMM-NEWTON MISSIONS EXTENDED BY ESA SCIENCE COUNCIL**

**- 5 : ESA 欧州宇宙機関のマーズ・エクスプレスはメタンの神秘を解くために動作している**

**- 5 : ESA'S MARS EXPRESS WORKING TO SOLVE METHANE MYSTERY**

**- 6 :要 約 - 6 : IN BRIEF**

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**- 1 :フランスはインドと ALTIKA ミッションで力を合わせる**

**- 1 : FRANCE JOINS FORCES WITH INDIA FOR ALTIKA MISSION**

CNES' board of directors has approved a new ocean observation program that will be carried out in cooperation with ISRO (Indian Space Research Organization). France will provide a Ka-band radar altimeter for India's Oceansat-3 Earth observation satellite as part of the Altika (radar altimetry in Ka-band) mission. The altimeter will be built by a team led by Alcatel Alenia Space and including EADS Astrium and Thales. Onboard Oceansat-3 the instrument will precisely measure ocean surface levels, currents and wind speed on the sea-surface. Altika/Oceansat-3 will work

in unison with the French-American satellite Jason 2/OSTM (under construction at Alcatel Alenia) and will thus offer exact information on the state of the ocean for both civil and military applications. Both satellites are set to be launched in 2008. The total cost of the Altika/Oceansat-3 program, including 3 years of operation, is estimated at 400 million euros (\$468 million) of which CNES will invest 76 million euros (\$89 million). [Agence France Presse 12/10/05, Space News 12/12/05]

**- 2 : ESA 欧州宇宙機関は 95%の要求した信頼度を得る**

**- 2 : ESA OBTAINS 95% OF CREDITS REQUESTED**

The Ministers at ESA's ruling Council held last week in Berlin obtained, after only a day and a half of negotiations, 95% of the 8.4 billion euros they had requested. The final amount, 8.255 billion euros, includes 120 million euros for programs already in progress (such as PRODEX, PROgramme de Développement d'EXpériences scientifiques (Scientific experiments development program) and EGAS, the European Guaranteed Access to Space program). As covered in the previous edition of France in Space

(#317), the success at the ruling Council was not purely financial; the Ministers adopted the six resolutions that were brought before them which concerned the operation of the ISS, the launch industry and the funding of the Guiana Space Center (CSG) among other issues. The only program not to receive the credits requested is the Russian manned flight vehicle Klipper. [Air & Cosmos 12/9/05]

**- 3 : アルカテルアレニアはチリにおける ALMA プロジェクトの 25 のアンテナを供給する予定**

**- 3 : ALCATEL ALENIA TO SUPPLY 25 ANTENNAE FOR ALMA PROJECT IN CHILI**

Alcatel Alenia Space has signed a contract with the ESO (European Southern Observatory) to supply 25 antennae for the ALMA (Atacama Large Millimeter Array) project. The contract is reportedly worth 147 million euros (approximately \$172 million). The goal of the ALMA project is to create a network of radio-telescopes in northern Chili in order to study the origin of

galaxies and star formation. All of the project's 12 meter in diameter antennae dishes (25 in all) will work as one thus making ALMA the most sensitive telescope in the world. The ALMA project is an international collaboration between Europe and North America with Japan playing a supporting role. The installation of the antennae should be completed by 2011. [Alcatel 12/7/05]

**- 4 : インテグラル社と XMM 社の Newton ミッションは ESA 欧州宇宙機関の科学委員会が延長**

**- 4 : INTEGRAL AND XMM-NEWTON MISSIONS EXTENDED BY ESA SCIENCE COUNCIL**

The highly successful Integral and XMM-Newton missions have been extended for four years by ESA's Science Program Committee. The two missions will now run until December 16, 2010 and March 31, 2010 respectively.

Launched on October 17, 2002, the Integral gamma-ray observatory has been delivering a constant supply of detailed information on various phenomena such as the birth and death of stars, black holes, the annihilation of matter and anti-matter and gamma-ray bursts. With its four instruments: a gamma-ray

imager and spectrometer, an X-ray monitor and an optical camera, the Integral observatory is undertaking the first detailed gamma-ray mapping of the galactic plane. The X-ray observatory XMM-Newton, launched December 10, 1999, provides information on astronomical objects, from comets and planets to distant quasars. The X-ray observatory includes six instruments: three X-ray cameras, two spectrometers and a UV/Optical monitor which operate simultaneously. [ESA 12/8/05]

**- 5 : ESA 欧州宇宙機関のマーズ・エクスプレスはメタンの神秘を解くために動作している**

**- 5 : ESA'S MARS EXPRESS WORKING TO SOLVE METHANE MYSTERY**

ESA's Mars Express has been supplying scientists with a wealth of information but unfortunately it is still too early to determine if the methane in Mars' atmosphere is from volcanic activity or life forms. Scientists have cautiously deduced that the methane is the result of either underground volcanoes or a life form. At a November 30 ESA press conference, Mars Express Project

scientist Agustin Chicarro suggested that even volcanic activity on Earth, which is far greater than on Mars, would not account for the amounts of methane found on Mars. In addition, there seems to be an excess of methane in the morning. Scientists have another Martian year, or 687 days, to investigate. [Space News 12/5/05]

**- 6 : 要 約 - 6 : IN BRIEF**

EADS Space Services (ESS) has won a contract to supply the French Navy with satellite transmission capacity and telecommunication services which will be used for the training of their student-officers onboard the Jeanne d'Arc and Georges Leygues vessels. EADS Space Services, in cooperation with its partner London Satellite Exchange, will supply two-way satellite

telecommunication services in the Ku band between continental France and the two ships. As a result, the crew onboard will have access to the intranet and telephone networks of the French navy, as well as the Internet. [Air & Cosmos 12/9/05, EADS Space 11/28/05]

<http://www.france-science.org/home/print.asp?LNG=us&PUBLID=9&LIVRID=8491>

12月20日9時48分更新 共同通信

**防衛費4年連続マイナス ミサイル防衛を重点化**

2006年度予算財務省原案で、防衛関係費は05年度当初予算比0.9%減の4兆8,137億円となり、対前年度比で4年連続マイナスとなった。冷戦型装備とされる戦車調達やF15戦闘機改修などを抑制する一方、ミサイル防衛(MD)関連予算を本年度比201億円増の1,399億円計上するなど重点化、「新たな脅威」への対応重視が特徴。

来年3月に取りまとめ予定の在日米軍再編に伴う経費は、地元調整が必要なため予算計上を見送り、06年度補正予算などで対応する。ただ米軍普天間飛行場移転先となるキャンプ・シュワ

ブ沿岸部など6基地の調査費3億円は05年度補正予算案に盛り込んだ。

在日米軍駐留経費負担(思いやり予算)は米軍再編に伴う将来的な負担増を見込んで、06年度では提供施設整備費を過去最大の削減率で170億円圧縮、本年度比7.4%減の2,151億円とした。

12月20日14時16分更新 共同通信

### 打上げに向けリハーサル H2Aロケット9号機

宇宙航空研究開発機構は20日、種子島宇宙センタ(鹿児島県南種子町)から来年2月に運輸多目的衛星(MTSAT)2号機を載せて打上げ予定のH2Aロケット9号機で、エンジン点火直前までの作業や情報伝達確認を行うリハーサル「極低温点検」を実施した。宇宙機構は、リハーサルは良好に終了したとしている。

同日未明、液体燃料注入などを開始。点火想定時刻の6秒前

まで秒読みを行い、地上設備とロケット本体機能などに異常がないかを点検した。途中、冷却系統の一部に異常があり作業が1時間半遅れた。

MTSAT2号機は重さ約4・7トンと国内で打上げる衛星では最も重いため、H2A9号機固体補助ロケットは通常の2本から4本に増した。同衛星2号機は、1号機として稼働中の「ひまわり6号」とともに、航空管制と気象観測を担う。

12月20日9時0分更新 時事通信

### 冥王星探査機、年明けに打上げ=NASA

【ワシントン19日時事】NASAは19日、太陽系の第9惑星、冥王星を探査する無人機ニューホライズンズを来年1月17日から2月14日の間に打上げる計画を発表。順調に進めば、2015年に冥王星に

接近する。

探査機を使って冥王星を観測する試みは初。冥王星の詳しい観測はハッブル宇宙望遠鏡では困難なため、実態解明が期待される。

12/12/2005 to 12/16/2005

<http://www.astroexpo.com/news/TopNewsbyType.asp?PRTYPE=03LAUNCHES>

### NASA スペースシャトル進捗レポート

#### 12/16/2005 - [NASA's Space Shuttle Processing Status Report: S05-036](#)

Dec. 15, 2005 - NASA's space shuttle fleet is housed and processed at Kennedy Space Center, Fla. Mission: STS-121 - 18th ISS Flight (ULF1.1) - Multi-Purpose Logistics Module Vehicle:

Discovery (OV-103) Location: Orbiter Processing Facility Bay 3  
Launch Date: No earlier than May 2006 Launch Pad: 39B Crew: Lindsey, Kelly, Sellers, Fossum, -[Click here for more...](#)

### 12/16/2005 - NASA 使い捨てロケット進捗レポート

#### 12/16/2005 - [NASA Expendable Launch Vehicle Status Report: E05-021](#)

WASHINGTON, Dec. 16, 2005 - /PRNewswire/ - The following is being issued by NASA: MISSION: New Horizons LAUNCH VEHICLE: Lockheed Martin Atlas V 551 (AV-010) LAUNCH PAD: Complex 41, Cape Canaveral Air Force Station, Fla.

LAUNCH DATE: NET January 17, 2006 LAUNCH WINDOW: Jan. 11 to Feb. 14, 2006. \* The launch of Pluto - [Click here for more...](#)

### 12/16/2005 - ロシアは積荷輸送ロケット打上げの準備中

#### 12/16/2005 - [Russia Preparing to Launch Cargo Rocket](#)

MOSCOW, December 15, 2005 - /RIA Novosti/ - The Baikonur space center is continuing preparations to launch a Progress M-55 cargo space vehicle with the help of a Soyuz-U carrier rocket, the

Russian Space Agency said Thursday. "Simultaneous electrical checks of the Soyuz-U booster and the Progress M-55 cargo spacecraft were scheduled for December - [Click here for more...](#)

### 12/15/2005 - MSG-2 気象衛星第二世代: 打上げ生中継

#### 12/15/2005 - [Meteosat Second Generation-2: Watch the Launch Live](#)

December 14, 2005 - The second satellite in the Meteosat Second Generation family is due to be launched on 21 December at 23:33 CET onboard an Ariane 5 (generic version) from Europe's

spaceport at Kourou, French Guiana. The launch window will last 28 minutes. This is the second launch for the Meteosat Second Generation series of satellites oper - [Click here for more...](#)

12/15/2005 - ロシアのロケットは 12 月 26 日に欧州航法衛星を打上げ予定

**12/15/2005 - Russian Rocket to Launch European Satellite December 26**

MOSCOW, December 14, 2005 - /RIA Novosti/ - The launch of a Russian carrier rocket with a European navigation satellite on board has been scheduled for December 26 at the Baikonur space

center in Kazakhstan, a spokesman for the Russian Federal Space Agency said Wednesday. Vyacheslav Davidenko said a Soyuz-FG launch vehicle would take the first - [Click here for more...](#)

12/14/2005 - ガリレオ衛星のファミリの最初のメンバが 12 月 26 日に打上げ予定

**12/14/2005 - First Member of Galileo Satellite Family to be Launched on December 26 - Follow the Launch Live**

December 13, 2005 - Galileo, Europe's global navigation satellite system, will start becoming concrete reality the day after Christmas with the launch of Galileo In-Orbit Validation Element

GIOVE-A on top of a Soyuz-Fregat rocket from the Baikonur cosmodrome in Kazakhstan. The complete constellation of 30 satellites, specifically designed for c - [Click here for more...](#)

12/14/2005 - アリアンスペース・ミッション・アップデート: ペイロードの準備中

**12/14/2005 - Ariespace Mission Update: Preparing the Payload**

Dec. 13, 2005 - The INSAT-4A satellite has been installed atop its Sylta multi-payload dispenser system as a first step creating the payload "stack" for Ariespace's December 21 mission with an

Ariane 5 Generic launcher. INSAT-4A will be joined by Europe's MSG-2 second-generation meteorological satellite on another of Ariespace's dual-satelli - [Click here for more...](#)

12/13/2005 - ギアナでのソユーズ打上げの建設が 12 月に開始する予定

**12/13/2005 - Construction for Soyuz Launches in Guiana to Start in December**

PARIS, December 12, 2005 - /RIA Novosti, Andrei Nizamutdinov/ - Construction of infrastructure for launches of Souyz spacecraft from the Kourou space center in French Guiana will start in

December and are expected to be completed in July 2008, the French Space Agency (CNES) said Monday. The contract on the approximately 135-million euros project - [Click here for more...](#)

12/13/2005 - アリアンスペース・ミッション・アップデート - アリアン 5 は最終組立棟に進む

**12/13/2005 - Ariespace Mission Update - Ariane 5 Rolls Out to the Final Assembly Building**

Dec. 9, 2005 - Ariespace's final Ariane 5 mission for 2005 took another step closer to liftoff with the launcher's transfer to the final assembly building at Europe's Spaceport in French Guiana. The

transfer occurred December 7, and the launcher is now ready to receive its Indian INSAT-4A telecommunications satellite and the European MSG-2 met - [Click here for more...](#)

12/13/2005 - NASA は高等学校の「ロケット科学者」を支援する

**12/13/2005 - NASA Helps High School "Rocket Scientists"**

Dec. 9, 2005 - High school teams from California to Virginia are hard at work on plans for space travel, designing rockets they will build and launch toward the heavens next spring with the help of

NASA's Marshall Space Flight Center in Huntsville, Ala. The students are meeting a unique challenge through NASA's Student Launch Initiative - an ed - [Click here for more...](#)

12/13/2005 - SpaceX 打上げアップデート

**12/13/2005 - SpaceX Launch Update**

Dec. 9, 2005 Launch Date The new launch date is approximately December 20, depending on when the Missile Defense Agency testing is complete. As soon as we have a firm time, it will be

posted on the SpaceX website. Liquid Oxygen Regarding liquid oxygen (LOX) supplies, we expect to have enough on hand this time to fill the rocket four o - [Click here for more...](#)

SpaceX は 12 月 打上げに向けて段取りを進める

[12/13/2005 - SpaceX Takes Steps Toward December Launch](#)

New York - December 12, 2005 - /Greg Zsidisin/ - Space Exploration Technologies (SpaceX) says that it is ready to reattempt the launch of its first Falcon-1 vehicle around December

20, and has taken steps to avoid a repeat of the problems that led to a scrub of the first attempt over Thanksgiving Day weekend. In a statement released Friday, Spa - [Click here for more...](#)

12/12/2005 - ロシアのロケットは 12 月 26 日に欧州の衛星を打上げ予定

[12/12/2005 - Russian Rocket to Launch European Satellite Dec. 26](#)

MOSCOW, December 9, 2005 - /RIA Novosti/ - A Russian rocket will launch a European communications satellite into orbit on December 26, Europe's space chief said Friday. Jean-Jacques

Dordain, the head of the European Space Agency, said a Soyuz carrier rocket would launch the first Galileo satellite from the Baikonur space center, which Russia lea - [Click here for more...](#)

2005 年 12 月 13 日 15:50 AstroExpo.com Monthly e-newsletter

AstroExpo 月刊 e-Newsletter 特集 軍事宇宙セクター

## Military Space

Welcome to our annual Holiday edition Monthly e-Newsletter. This issue focuses on the Military Space Sector, and a brief article on the latest developments on NASA's future launch vehicle plans. With

DoD solicitations starting to be accepted for SBIR/STTR the 13th of this month, we included a resource article for anyone wishing to submit a proposal.

1. 軍事宇宙プログラム [Military Space Programs](#)
2. 宇宙の近傍における新しい防衛応用 [New Defense Applications in Near Space](#)
3. DoD 国防省の SBIR/STTR の提案要求 [Department of Defense \(DoD\) SBIR/STTR Solicitations](#)
4. 開発中の新しい宇宙打上げビークル [New Space Launch Vehicles in Development](#)

### 1. 軍事宇宙プログラム [Military Space Programs](#)

Military activities in space have been conducted by the Department of Defense (DoD) since the 1958 National Aeronautics and Space Act. These activities are divided between the Air Force, Navy and Army. In addition, the intelligence community makes significant use of military space-based capabilities. The National Reconnaissance

Office (NRO), an agency within the DoD, builds and operates intelligence collection satellites, collects and processes the data, and provides it to users such as the National Geospatial-Intelligence Agency (NGA) and the National Security Agency (NSA). [To read the entire Feature Article. Click here](#)

### 2. 宇宙の近傍における新しい防衛応用 [New Defense Applications in Near Space](#)

"Near Space" is a region between 65,000 feet (20 kilometers) and 325,000 feet (100 kilometers) above sea level. Near Space is becoming an attractive alternative for both Civil and Defense Applications to the high launch costs for satellites operating in space.

Near Space is the seam between what had traditionally been regarded as 高 altitude 域 (10-20 Km) and low Earth orbit (LEO) and is of interest to the military for several reasons including the tremendous potential cost savings. [To read the entire Feature Article. Click here](#)

### 3. DoD 国防省の SBIR/STTR の提案要求 [Department of Defense \(DoD\) SBIR/STTR Solicitations](#)

It's that time of year again where Small Business' are burning the

midnight oil preparing for the next round of Small Business

Innovative Research Contracts (SBIRs). The purpose of DoD's SBIR and STTR programs is to harness the innovative talents of U.S.'s small technology companies for U.S. military and economic strength. Company's do not have to wait for the end deadline to submit proposals, working through the Holidays, but can begin

submitting proposals as of December 13 th . If your not familiar with SBIR's and the Opportunities that exist in this area, we have extracted some key statistical information and the important links for the current solitication for your convenience. [To read the entire Feature Article. Click here](#)

#### 4. 開発中の新しい宇宙打上げビークル [New Space Launch Vehicles in Development](#)

There are two types of launch vehicles: Expendable Launch Vehicles (ELVs, which can only be used once) and Reusable Launch Vehicles (RLVs). There have been recent developments for both types of

launch vehicles, including a recent announce that long time rivals Boeing and Lockheed Martin would drop their litigation against each other and now work together on the EELV program. [To read the entire Feature Article. Click here](#)

2005 年 12 月 20 日 1:52 AIA dailyLead December 19, 2005 -

インテルサットによる PanAmSat の買収は最初の法律のハードルを越える

#### [Intelsat's PanAmSat purchase passes first regulatory hurdle](#)

[Intelsat's](#) proposed purchase of [PanAmSat](#) passed its first round of regulatory scrutiny. Antitrust issues are expected to be addressed next year. The regulatory agencies, which include the Department of

Homeland Security and FBI, accepted Intelsat's promise to keep one separate unit to handle some government communications contracts, including classified work. [The Wall Street Journal](#) (12/19)

2005 年 12 月 20 日 1:52 AIA dailyLead December 19, 2005 -

下院-上院の調整者は\$453B の防衛予算承認

#### [House-Senate negotiators approve \\$453B defense bill](#)

Negotiators for the House and Senate approved a Defense Department budget that dedicates \$8 billion to new procurement. The bill fully funds initial procurement of the

Navy's new DDX destroyer. It cuts the Army's Future Combat Systems by \$280 million. [The Wall Street Journal](#) (12/19)

2005 年 12 月 20 日 1:52 AIA dailyLead December 19, 2005 -

シャトルは新しいより強度のあるタイルのセットを受領する計画

#### [Shuttle to get a new set of stronger tiles](#)

New, stronger tiles will soon protect the space shuttle from the heat of re-entering the atmosphere, NASA scientists said. The previous tiles were vulnerable to damage from debris and pieces of foam

falling from the shuttle's external fuel tank. [Florida Today \(Melbourne\)](#) (12/19)

14 December 2005 [Jane's Intelligence Digest] <http://jid.janes.com>

行方不明のプルトニウムが関心の対象に

#### ['Missing' plutonium in spotlight](#)

A report in late November claiming that at least 270 kg of weapons-grade plutonium had gone missing from the US's premier nuclear weapons laboratory at Los Alamos is a stark reminder that poor security and accounting of radioactive materials may not be

confined to Russia and other countries of the former Soviet Union. JID's nuclear correspondent reports on rising concerns over security and the accuracy of inventories.

16-Dec-2005 <http://jdw.janes.com/>

## F-22 は戦闘に向けて準備完了と宣言

### [\\*F-22 declared ready for combat](#)

The US Air Force's newest fighter aircraft, Lockheed Martin's stealthy F-22 Raptor, is ready for combat after more than two

decades of develop- ment, the ...

16-Dec-2005 <http://jdw.janes.com/>

## シンガポールは 12 機の F-15SG の取引に調印

### [\\*Singapore signs deal for 12 F-15SG fighters](#)

Singapore will acquire 12 Boeing F-15SG fighters for delivery in 2008/09 under a contract concluded on 12 December, with the

option to order a further ...

16-Dec-2005 <http://jdw.janes.com/>

## 米国はトラブルの衛星プログラムをリストラ

### [US restructures troubled satellite programme](#)

The US Air Force has restructured its next- generation missile warning satellite programme to mitigate the impact of lingering

technical complexities and burgeoning costs that ...

16-Dec-2005 <http://jdw.janes.com/>

## 日本は AIRBOSS の試行に成功

### [Japan successfully trials AIRBOSS](#)

Japan successfully trialed its Advanced Infra-red Ballistic Missile Observation Sensor System (AIRBOSS) on 17 November by

conducting an SM-3 interception test at a US Navy ...

2005 年 12 月 15 日 17:10 時事通信社「世界週報」 12 月 27 日号目次抜粋

<シリーズ>

今週の軍事情報／誰も話題にしようしない北朝鮮原子炉の安全性(江畑謙介)

日本と世界の安全保障／中国と対外情報収集活動に目を向けよ(西原 正)

知られざる自衛隊／統合運用視野に邦人輸送訓練(風間 實)

2005 年 12 月 17 日 2:55 AIA dailyLead December 16, 2005 -

## 米空軍はロケットベンチャの決定をまもなく公表、当局発言

### [Air Force will issue decision on rocket venture soon, official says](#)

Deputy Air Force Secretary Ronald Segal said the Air Force and the Department of Defense will soon decide whether they will recommend approving [Lockheed Martin](#) and [Boeing's](#)

rocket-launch joint venture. The Federal Trade Commission needs the recommendation before it can decide if the venture meets antitrust laws. [The Denver Post/Bloomberg](#) (12/16)

2005 年 12 月 17 日 2:55 AIA dailyLead December 16, 2005 -

## 国防省は\$12.6B に上る武器を外国に売却

### [DOD sells \\$12.6B worth of weapons to other nations](#)

The Department of Defense sold weapons worth at least \$12.6 billion to other nations in 2004, down slightly from sales of \$13.6

billion in 2003, according to Pentagon records. The weapons included fighter jets, ships, missiles, machine guns and



ammunition. The figure does not include additional sales made to

foreign countries from U.S. manufacturers. [Defense News](#) (12/15)

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2005年12月17日 2:55 AIA dailyLead December 16, 2005 -

米空軍はF-15を延命させるかもしれない

#### Air Force may extend life of the F-15

The Air Force is reconsidering its plan to retire the F-15 over the next decade, according to Gen. Ronald Keys, chief of Air Combat Command. The Air Force might need the jets longer because it

may receive only half of the F-22A Raptors it originally expected. [Defense News](#) (12/15)

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2005年12月17日 2:55 AIA dailyLead December 16, 2005 -

NASAは問題を起こす断熱材をシャトルから取り除くことに

#### NASA to remove problematic foam from shuttle

NASA says it will remove a section of insulating foam from future space shuttle fuel tanks. The foam broke loose when Discovery

launched in July. Computer tests show the foam is no longer necessary, NASA said. [The New York Times](#) (12/16)

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Aerospace Daily & Defense Report Dec 16, 2005

国防総省はSBIRS Highを新しい計画で前進させることを保証

#### Pentagon certifies SBIRS High, moves forward with new plan

The Pentagon once again has certified the over-budget Space Based Infrared System (SBIRS) High program and is moving forward with a new plan that would keep prime contractor Lockheed Martin but shift some funds to explore alternative technologies in the event that satellites under development experience further problems. Acquisition Chief Ken Krieg signed off on **SBIRS High** in a Dec. 12 letter to satisfy Nunn-McCurdy legislation that requires the Pentagon to recertify any program that experiences greater than 25 percent unit cost growth in a single year. It was the third such breach for the program since 2001. Originally budgeted around \$4 billion, **SBIRS High** has ballooned to an estimated \$10 billion price tag due to development problems. **SBIRS High** will be a constellation of early missile-warning satellites in highly elliptical orbit (HEO) and geostationary orbit (GEO). Under the new plan, Lockheed will proceed with the construction of GEO birds 1-3, which essentially would be identical, but the money for the proposed GEO 4 and 5 satellites would be diverted to look at new approaches. Many of the technologies within **SBIRS** are out-of-date, given the program's

origins in the mid 1990s. The alternate technology effort will explore how improvements in sensors, focal plane arrays and computer processor technology could help the program, according to Air Force Undersecretary and DOD Executive Agent for Space Ron Sega. "Those are the kinds of things that you would look at if you started 10 years later," Sega said at the Pentagon Dec. 15. "You would look across the field and see what's now available." The Air Force's strategy is to "look at the work and the performance of the GEO satellites, 1 and 2 ... and you look at the parallel [technology] effort, and you do an assessment of where you're at and what the best course of action would be to take," Sega said. The alternative technology effort is internal to the government and not open to competition at this point, he said. Meanwhile, an independent program review of **SBIRS High** is under way that will examine the program's cost and performance in the current engineering and manufacturing development (EMD) phase. That review is expected in late spring/early summer 2006. The launch of the first GEO satellite is expected in fiscal 2009, Sega said. - Jefferson Morris (jeff\_morris@AviationNow.com)

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Aerospace Daily & Defense Report Dec 16, 2005

議会の調整者はNASAの5年間の最初のお墨付きに同意

#### Congressional negotiators agree to NASA authorization

House and Senate negotiators have agreed on the first authorization measure for NASA in five years, which endorses President Bush's

manned moon-Mars exploration vision, as well as . . .

**NASA はシャトルを突起した Air Load ramp なしで飛ばすことを決定**

**NASA decides to fly shuttle without Protuberance Air Load ramp**

NASA has decided to remove the Protuberance Air Load ramp from the space shuttle's external tank before its next flight, according to

Associate Administrator for Space Operations . . .

**国境警備の無人機と衛星の予算推進不足**

**Push for UAVs, satellites in border bill comes up short**

House Democrats tried unsuccessfully to include planning regarding unmanned aerial vehicles (UAVs) and satellites in efforts to secure

the U.S. borders with Mexico and Canada, while a . . .

**GD 社の Anteon の買収は防衛 IT 分野で勢力の変化になり得る**

**Anteon deal could be game changer in defense IT**

General Dynamics' deal to buy fast-growing defense information technology (IT) contractor Anteon International could alter the

landscape in the defense IT business, creating a new top-tier challenger . . .

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**Aerospace Daily & Defense Report Dec 15, 2005**

**ホブソン議員は核バンカーバスタ計画に抵抗を続ける**

**Hobson to keep 'kicking at' nuclear bunker-buster program**

Rep. David Hobson (R-Ohio), a major thorn in the side of Robust Nuclear Earth Penetrator (RNEP) advocates, warned mid-level Bush

administration personnel to drop any future efforts . . .

**調達リフォームは予算削減を正当化するのに使われてはならない、米空軍 Kadish 中将警告**

**Acquisition reforms shouldn't be used to justify budget cuts, Kadish warns**

The defense acquisition reform panel led by retired Air Force Lt. Gen. Ron Kadish released the executive summary of its final report

Dec. 14, with Kadish warning . . .

**NASA グリフィン長官は Worden 氏を Ames 研究センターの所長に任命**

**Griffin seen naming Worden as Ames director**

NASA Administrator Michael Griffin is on the verge of naming retired USAF Brig. Gen. Simon P. "Pete" Worden director of the

Ames Research Center in Mountain View, . . .

**軍用航空機の販売のオフセットで民間航空機の売上げが激増**

**Civil aircraft revenue surge seen offset by military aircraft sales**

The aerospace industry's recovery remains on course, but real sales growth is expected to slow in 2006 as a surge in civil aircraft

revenues is partially offset . . .

**MDA ミサイル防衛局は GMD 地上配備ミサイル・インターセプタの試験に成功と報告**

MDA reports successful test of GMD interceptor The Missile

Defense Agency successfully tested an operationally configured

Ground-based Midcourse Defense (GMD) interceptor missile, MDA

said late Dec. 13. . . .

**GD 社は Anteon を \$2.2B の取引で買収**

**General Dynamics to acquire Anteon in \$2.2B deal**

General Dynamics will acquire information technology and systems integration company Anteon for about \$2.2 billion, including the

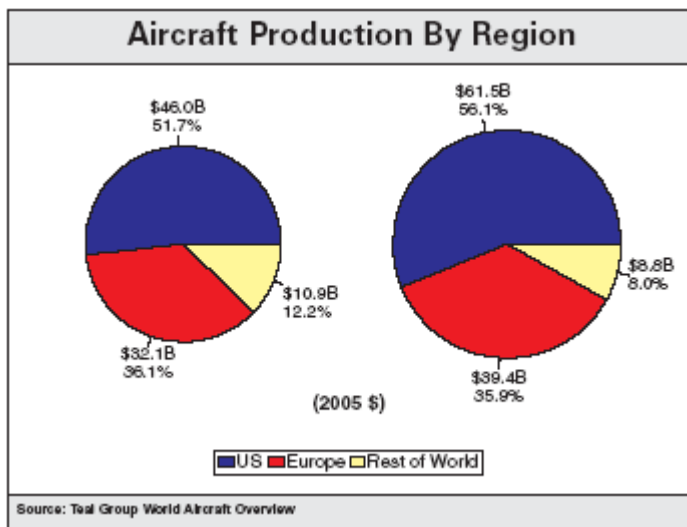
assumption of Anteon's \$100 million debt. . . .

**レイセオンチームは APKWS II の風洞試験の作業を完了**

**Raytheon team completes work on APKWS II wind-tunnel tests**

A Raytheon-led team competing for the U.S. Army's Advanced Precision Kill Weapon System II (APKWS II) said Dec. 14 that it has

conducted successful wind-tunnel tests of . . .



**NASA Missions (NET indicates a tentative launch date)**  
**Kennedy Space Center - Cape Canaveral Air Force Station, Fla. Vandenberg Air Force Base, Calif.**

Date / 2006	Mission	Vehicle	Pad
Jan. 11	New Horizons NASA / Applied Physics Lab Launch Window: 2:11 p.m. to 4:07 p.m. EST	Atlas V Lockheed Martin	41 CCAFS
February	CALIPSO / CloudSat NASA-Jet Propulsion Laboratory/ Langley Research Center	Delta II Boeing	SLC-2 VAFB
Feb. 6	GOES-N NASA-Goddard Space Flight Center/NOAA	Delta IV Boeing	37 CCAFS
Feb. 28	SpaceTechnology 5 NASA-Jet Propulsion Laboratory/ Goddard Space Flight Center Launch Window: 5:57:21 a.m. to 7:19:21 a.m. PST 8:57:21 a.m. to 10:19:21 a.m. EST	Pegasus XL Orbital Sciences	VAFB
May 26	STEREO NASA-Goddard Space Flight Center Launch Time 6:21 a.m. EDT	Delta II Boeing	17 CCAFS
May	STS-121	Space Shuttle Discovery	39B KSC
Sept. 29	AIM NASA-Goddard Space Flight Center	Pegasus XL Orbital Sciences	VAFB
Oct. 19	THEMIS NASA-Goddard Space Flight Center	Delta II Boeing	17 CCAFS
Nov. 17	Dawn NASA-Jet Propulsion Laboratory	Delta II Boeing	17 CCAFS
Dec. 15	Block 2010 Spacecraft Risk Reduction U.S. Air Force	Delta II Boeing	SLC-2 VAFB

**NASA Kennedy Space Center, Fla.**

2005年12月15日 「チャイナネット」

### 向こう十年間に 中国は科学・技術面で 10 の突破を目指す

先般、中国科学・技術部所属の「技術発展の展望」研究プロジェクトの実施グループの指導者である程家瑜氏は「瞭望」新聞週刊に最新の研究成果である「中国の技術発展の展望レポート」を発表した。同グループは 1000 余人のエキスパートからなり、向こう 10 年間の中国の経済・社会発展の趨勢および科学・技術分野に対する要求について 3 年間にわたって研究を行い、情報、バイオロジー、新材料など三つの分野の国内外における研究の現状と展望について系統的な調査を行った。

情報、バイオロジー、新材料は 21 世紀初頭の 30 年間に発展が最も早く、人気も最も高い三つの科学・技術の分野とも言える。現在、これらの分野には世界で最も先端的な研究をしている人たちが集まっている。しかし、将来の発展にかかわるこの三つの分野においては、中国はまだ数多くのコアテクノロジーを握っておらず、国外の先進的なテクノロジーに対する追跡、模倣、導入に頼り、基盤となるイノベーション能力の不足は歴然としている。より幅広い角度から見れば、「中国自らのイノベーション能力」に対する自信と勇気が必要となるのはこの三つの分野だけではない。実は、中国の科学・技術分野は全体としてこれまでにないプレッシャーを耐えている。つまり、国外では、世界的範囲で科学・技術分野の競争に巻き込まれ、国内では、経済・社会の発展が

もたらす戦略的な、重要なニーズを満たさなければならないということである。一方、基盤となるイノベーション能力および技術のイノベーション能力の低下は現在、ひいては将来の長い期間における中国のトータルな競争力の発展の障害となっている。

向こう 15 年間に向けての「中長期にわたる中国の科学・技術の発展要綱」が発表されることになっている。中国科学・技術部などの関連部門は科学・技術分野の「第 11 次五年企画」の策定に取り組んでいる。2005 年に、中国の科学・技術の発展は注目の的となっている。苛立ち、期待、自信。このような模索の雰囲気の中で、「自主的なイノベーション」は「中国の科学・技術の発展」に対する共通認識と見なされるに至った。

この共通認識を通じて、中国の科学・技術の発展が耐えているプレッシャーをかえりみれば、これは将来に向けての重要なチャンスとも言えよう。向こう 10 年間に、中国の科学・技術分野がこの三つの分野でどんなイノベーションのコアテクノロジーをつかみとることになるだろう。また、限りのある研究経費はいったいどれだけの突破口に投下すべきか。

同グループの研究によると、向こう 10 年間に、中国は前述の三つの分野で、科学と技術面の突破を達成する可能性が最も高い学科は次の通り。

1. 次世代モバイル通信技術 ///
2. 次世代ネットメカニズム ///
3. ナノ・チップ技術 ///
4. 中国語情報処理技術 ///
5. 人類機能遺伝子組み換え学 ///
6. バイオロジー製薬技術 ///
7. バイオロジー情報学 ///
8. プロテオーム学 ///
9. 農産物新品種育種技術
10. ナノ材料とナノテクノロジー

[http://j.peopledaily.com.cn/2005/12/16/jp20051216\\_55954.html](http://j.peopledaily.com.cn/2005/12/16/jp20051216_55954.html)

2005年12月14日 人民網日本語版

### 中国が完全自主開発の旅客機、3年後に路線投入へ

中国が自主研究開発中のコピュータ旅客機「ARJ 型」は、2008 年に初飛行、09 年に営業飛行が実現する可能性が高まっている。13 日に開かれた 2005 年上海航空宇宙飛行電子設備国際展覧会で分かった。

ARJ 型旅客機は、中国がすべての知的財産権を所有しており、中国の自然環境に合わせた仕様を持つ初の飛行機。中国航空

商用飛行機公司(ACAC)の関係者によると、ARJ21 型の客室内には 70 から 90 席が設けられ、09 年には商業路線に正式に投入される見通しという。(編集 CS)

2005年12月15日 19:05 WIRED NEWS (2005/12/15)

### 「2017年から月への有人飛行」——中国の宇宙計画

<http://hotwired.goo.ne.jp/news/20051215301.html>

中国国営の新華社通信は月探査プログラムの関係者の発言を

引用し、中国は 2017 年までに月への有人飛行の取組みを始め、

いずれ月面に人を送込む計画と報じた。

2005年12月14日 10:04 [JAXA PR:0181]

### 「はやぶさ」探査機の状態について

[http://www.jaxa.jp/press/2005/12/20051214\\_hayabusa\\_j.html](http://www.jaxa.jp/press/2005/12/20051214_hayabusa_j.html)

「はやぶさ」探査機は、燃料漏洩に起因するガスの噴出と推定される姿勢変動を生じたため、12月9日以

「はやぶさ」探査機は、燃料漏洩に起因するガスの噴出と推定される姿勢変動を生じたため、12月9日以来、運用ができない状態が続いており、現在、復旧作業を行っています。長期的には復旧で

きた2007年6月に地球に帰還させることは難しくなり、飛行を3年間延長して、2010年6月に帰還させる計画へと変更することとなりました。(後略)

2005年12月15日 19:05 WIRED NEWS (2005/12/15)

### 二酸化炭素を地中に注入する技術

<http://hotwired.goo.ne.jp/news/20051215302.html>

温室効果ガスである二酸化炭素を、ポンプで油田の油層に注入するという実験プロジェクトが進んでいる。カナダの油田ではすでに500万トン

取率の向上にも貢献しているという。さらに、玄武岩層に貯留させる場合、気体が固体の炭酸カルシウムに変化し地上に漏洩しにくくなるという研究もある。

2005年12月15日 19:05 WIRED NEWS (2005/12/15)

### ナノテクの健康と環境への影響は？ 研究に資金難の壁

<http://hotwired.goo.ne.jp/news/20051215303.html>

歯磨き粉から日焼け止めまで、ナノテクを利用した新製品が続々と登場しているが、肺や脳などの細胞に簡単に入り込むほど小さなナノ粒子がもたらす、健康や環境上の危険性についての知識不

足を危惧する声もある。ナノテク研究推進に投じられる資金と比べて、健康や環境に与える影響の研究にあてられる資金は圧倒的に少ないという。

2005年12月15日 19:05 WIRED NEWS (2005/12/15)

### テロや災害等、緊急時に備えるシミュレーション・ゲーム

<http://hotwired.goo.ne.jp/news/20051215205.html>

バイオテロや原発事故、伝染病といった緊急事態に備え、医療従事者などが短期間で対策訓練を受けられるシミュレーション・ゲームが、米イリノイ大学で開発中だ。プレイヤーは臨時医療施設の開

設、各医療現場への医薬品分配などの行動をとり、迅速さと適切さの面から評価される。

2005年12月分 DSPACE Vol.1

### 宇宙で楽しむ「お食事タイム」ライター 林 公代 Kimiyo Hayashi

アメリカでは、11月第4週の木曜日は「サンクスギビングデイ(感謝祭)」の休日。だから11月24日(木)は宇宙ステーションも休日。NASAのウェブサイトでは、ウィリアム・マッカーサーとヴァレリー・トカレフの二人の飛行士が、サンクスギビングディナーを動画で一つ一つ紹介している。七面鳥、インゲン、マッシュポテト、クランベリーとりんごのデザート。また、新作映画「ハリー・ポッターと炎のゴブレット」

を地上から送ってもらい、楽しんだそう。

大型バス二台ぐらいのスペースがある宇宙ステーションは、二人で暮らすにはかなり広い。米国人一人、ロシア人一人のクルーは、作業はそれぞれ自国のモジュールですることが多く、食事は大切なコミュニケーションの時間でもあるからだ。サービスモジュールにはダイニングテーブルがあって、きちんと時間をとって食べる。(後略)

[http://www.mitsubishielectric.co.jp/dspace/column/c0512\\_1.html](http://www.mitsubishielectric.co.jp/dspace/column/c0512_1.html)

## [国際関係・一般]

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米空軍 F22ステルス機 対中国念頭に新配備予定

読売新聞 05年12月18日 朝刊 7面 3段 1399

米空軍 新型主力戦闘機 16機を実戦配備

フジサンケイビジネスアイ 05年12月17日 朝刊 11面 1段 写 1064

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台湾の国防予算GDP比3%へ 中国に対抗、増額表明

朝日新聞 05年12月18日 朝刊 4面 1段 1254

台湾総統、対中軍備増強訴え 08年度防衛予算GDP比3%に拡大

産経新聞 05年12月18日 朝刊 6面 4段 写 1906

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フランス・電子機器タレス 軍艦建造DCN 軍艦事業を統合 業界再編促す

日経産業新聞(日経テレコン21) 05年12月19日 朝刊 4面 3段写 2439

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発信箱=ロッキード事件30年

毎日新聞 05年12月19日 朝刊 2面 2段 写 1607

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## [宇宙・航空・科学]

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2005年の業績・地震を振り返る 宇宙開発大きな成果

産経新聞 05年12月19日 朝刊 13面 5段 写 2005

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## [宇宙利用・宇宙からの観測・宇宙環境利用・宇宙実験]

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EU 難民対策部隊創設へ 衛星で不正流入を監視

毎日新聞 05年12月17日 朝刊 11面 3段 0496

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## [防災・環境・資源・エネルギー・リスクマネジメント]

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都心のヒートアイランド対策 「風の道」解明へ一歩 海風通せば4度下がる？ビルの影響調査

朝日新聞 05年12月18日 朝刊 38面 4段 1282

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アンテナ=NHK、危機遺産を集中放送 保全考える契機に

日本経済新聞 05年12月17日 朝刊 207面 2段 写 0779

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## [技術・産業]

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浜松ホトニクス バー型静電気除去装置 微弱X線照射方式 フィルム製造など最適

化学工業日報 05年12月19日 朝刊 9面 2段 0293

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2005年ヒット商品特集 今年はこれが売れました 翼システム デュボン 三協リール アトムテックス

日刊自動車新聞 05年12月19日 朝刊 7面 8段 写 0420

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富士重工 P-X主翼初納入 試験機用に

日刊工業新聞 05年12月19日 朝刊 6面 2段 写 0040

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東京エレクトロン 米国製テープ式ストレージ発売 記憶容量の拡大対応

日刊工業新聞 05年12月19日 朝刊 11面 2段 写 0064

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ハスク技研 車両ナンバ認識装置を量産 月30-50台目標

日刊工業新聞 05年12月19日 朝刊 20面 3段 写 0114

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タイコエレクトロニクスの特収縮製品技術(上)＝優れた性能と信頼性

電波新聞 05年12月19日 朝刊 5面 3段 写 0183

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新製品ウイークリ 自動車＝住友ゴム工業 トヨタ自動車 いすゞ自動車

日経産業新聞(日経テレコン21) 05年12月19日 朝刊 5面 1段 写 2446

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石川島播磨重工業 呉第二工場 航空機エンジン部品増産 加工設備新設へ需要回復に対応

中国新聞 05年12月16日 朝刊 8面 4段 写 1264

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## [通信・放送・IT・セキュリティ]

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マンデーワイド＝RFID普及へ 日本HPなど4社が実証施設ノイジーラボ・ジャパン 先導役になれる！？

日刊工業新聞 05年12月19日 朝刊 8面 6段 写 0048

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福岡・山口県のJ:COMグループ4社 デジタルハイビジョン2chの放送開始

電波新聞 05年12月19日 朝刊 7面 3段 0197

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コードレス電話盗聴にご注意 「デジタル」なら高い防止効果 危険な「アナログ」今も主流

朝日新聞 05年12月17日 朝刊 22面 5段 写 0298

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## [経営・人]

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私の苦笑い＝宇宙飛行士 日本科学未来館館長 毛利衛氏 食事で油断、NASAの健康数値悪化

日本経済新聞 05年12月19日 朝刊 17面 4段 写 1842

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ナノテク便り＝京都大学大学院工学研究科の川原村敏幸氏ら 低コストで酸化物薄膜を製造

日経産業新聞(日経テレコン21) 05年12月19日 朝刊 15面 2段 2537

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BSデジタル新参3社こう戦う(下)＝三井物産 メディア事業部デジタル放送事業室 三輪圭輔室長

日経産業新聞(日経テレコン21) 05年12月19日 朝刊 2面 4段 写表 2427

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法務インサイド＝楽天・TBS騒動から学ぶ M&Aの作法 攻撃側資金計画万全に 守る側念入りに防衛策

日本経済新聞 05年12月19日 朝刊 16面 4段 写表 1839

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買収防衛で東証が方針 毒薬導入相談制に 黄金株は条件付き容認

フジサンケイビジネスアイ 05年12月17日 朝刊 5面 4段 1015

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聞きたい＝北九州エアターミナル社長 奥野照章さん 開港まで3カ月新空港どうアピール

西日本新聞 05年12月16日 朝刊 7面 6段 写 1299

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## [航空輸送・エアライン]

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フィリピン郵船航空サービス 3年連続ベスト・フォワード

日本海事新聞 05年12月19日 朝刊 2面 1段 0826

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特派員メモ＝ナイジェリア 空飛ぶ「年代物」

朝日新聞 05年12月17日 朝刊 9面 1段 0261

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インドの航空会社エア・インディア 客室乗務員、地に落ちる？

東京新聞 05年12月17日 朝刊 6面 2段 0929

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エミレーツ航空 中部ードバイ線正式発表 来年6月まず週4便

中日新聞 05年12月16日 朝刊 11面 3段 1226

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北九州空港 駐機場来年度増設へ 乗入れ増加受け拡充

西日本新聞 05年12月16日 朝刊 3面 4段 1294

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スターフライヤ日本上陸 異彩放つ「黒い衣」

西日本新聞 05年12月16日 朝刊 37面 2段 写 1328

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## [民間航空機関連 (ex-SJAC 三輪さん)]

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2005年12月20日 1:52 AIA dailyLead December 19, 2005 -

### Smart Quote

「ビジネスで成功するには訓練、信念、勤勉が必用である。しかし、これらにひるむ事さえなければ、むかし以上に現代では成功の確率は高い。」

**"Success in business requires training and discipline and hard work. But if you're not frightened by these things, the opportunities are just as great today as they ever were."**

**--David Rockefeller, businessman**

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2005年12月17日 2:55 AIA dailyLead December 16, 2005 -

### Smart Quote

「人生で大切なのは生きる事そのもので、生きた結果ではない。」



"What is important in life is life, and not the result of life."

--Johann Wolfgang von Goethe, German writer, scientist

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2005年12月20日 1:52 AIA dailyLead December 19, 2005 -

### ロッキードがIT企業アスペンを買収

防衛部門での事業拡大を図るため Web サイト・コンピューターネットワークの専門会社アスペンを買収を計画中と発表

#### Lockeed to aquire information technology firm

[Lockheed Martin](#) said it will purchase [Aspen Systems](#), an information technology company. Aspen designs and manages Web sites and computer networks for the Justice and Health and Human

Services departments. The acquisition is an attempt by Lockheed to diversify its defense business. [The Washington Post](#) (12/19)

### 航空会社が旅行者向け秘訣

適切な防疫接種、プレゼントの包装禁止、出発1,2時間前の空港到着励行など

#### Airlines offer holiday tips for travelers

Many travelers will visit third-world countries this holiday season, and they are encouraged to get proper immunizations. The Air Transport Association also notes that holiday travelers should not wrap presents before

they arrive at the airport, and they should arrive one to two hours before their plane departs. [The Times \(Gainesville, Ga.\)](#) (12/19)

### 香港の航空会社ボーイング機(737-800、787等)購入

Hong Kong airline says it plans to buy Boeing jets

**CR Airways** of Hong Kong said it will purchase [Boeing](#) 737-800 and 787 jetliners. The airline confirmed its plan to buy the planes, but would not

elaborate on the number of jetliners. [Seattle Post-Intelligencer](#) (12/19)

### サウスウェスト航空会社 CEO がエアライン成功への挑戦をインタビューで

Q-and-A with Southwest CEO: Airline faces challenges, competition

Discounter [Southwest Airlines](#) is known for its low fares and consistent profits. Now, other airlines are slashing costs, imitating its formula for success and creating a challenge for CEO Gary Kelly. In a Q-and-A with [The Wall Street Journal](#), Kelly says the

company's strong customer service gives it an advantage. He also said the airline has ample growth opportunities and has about half a dozen cities where it is seriously considering adding service. [The Wall Street Journal](#) (12/19)

### ニューヨークJFK空港の旧TWAターミナルがジェットブルー航空で復活をはかる

Vacant Kennedy TWA terminal may get new life with JetBlue

**TWA's** old terminal at New York's Kennedy Airport has been empty for the past four years. Soon construction will start on a new terminal for [JetBlue Airways](#). The

new structure will incorporate part of the empty terminal, which is considered a modern architectural masterpiece. [The New York Times](#) (12/18)

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2005年12月17日 2:55 AIA dailyLead December 16, 2005 -

### ボーイング受注増に沸く現場

## Flood of orders pushes up production at Boeing plant

**Boeing** has booked record orders in 2005, which will push up production rates at its plant in Everett, Wash. The company has booked 127 firm orders for its 777,

the largest widebody airplane at the plant. The company is hiring more workers to meet production goals. [Seattle Post-Intelligencer](#) (12/16)

## ボーイング787用部材をエバーグリーン航空社が日本・欧州から搬送担当

### Evergreen International to ship Boeing 787 parts

**Evergreen Holdings'** Evergreen International Airlines unit will transport parts of **Boeing's** 787 from Japan and Europe to the U.S. Evergreen, based in Oregon, flies 747 cargo jetliners. It will subcontract the service

between Europe and the U.S. to Luxembourg-based **Cargolux**. [Seattle Post-Intelligencer](#) (12/16), [The Seattle Times](#)(12/16)

## シカゴ・ミッドウェイ空港の事故原因調査継続

### NTSB continues probe of Chicago Midway accident

The National Transportation Safety Board is continuing its investigation of the **Southwest Airlines** accident last week at Chicago Midway Airport that killed a young boy. A NTSB report said the pilot overshot the landing zone, losing feet of runway that would have helped stop

the plane during a heavy snowstorm. The board also is examining Southwest's policies and training for landing during adverse weather. [The Wall Street Journal](#) (12/16), [The New York Times/Associated Press](#) (12/16), [Chicago Tribune](#) (12/15)

## 新生 US エア航空ハワイ線運航開始

### US Airways launches flights to Hawaii

**US Airways** will start daily flights to the Hawaiian islands today. The airline, formed earlier this year by the merger of US Airways and **America West Airlines**, will fly 757s to Hawaii, and it says its East Coast network will give it a large pool of connecting travelers.

Earlier efforts by America West to fly 747s to Hawaii failed. US Airways believes flying smaller planes will improve the chances of profitability. [The Arizona Republic \(Phoenix\)](#) (12/16)

December 16, 2005 © EADS Astrium News Release

## MSG-2 気象衛星第2世代 - SEVIRI イメージャによる予想を上回る気象予測精度

### Meteosat Second Generation 2 – Unprecedented weather forecasting accuracy thanks to the SEVIRI imager

EADS Astrium has produced the most important measuring instrument on board the Meteosat Second Generation (**MSG**) satellite, the **SEVIRI** (Spinning Enhanced Visible and Infra Red Imager) Imager. In addition to **SEVIRI**, EADS Astrium has supplied the subsystems for power supply, attitude and orbit control, thermal control and propulsion.

The Meteosat Second Generation (**MSG**) has been established in cooperation between EUMETSAT and ESA. Designed in response to requirements addressed by users of EUMETSAT Member States, it serves the needs of Nowcasting applications and Numerical Weather Prediction in addition to providing important data for climate

monitoring and research. The total programme including four satellites, launchers, ground segment and operations costs €2 billion, of which €1.7 billion financed by EUMETSAT and €0.3 billion by ESA. The total envelope for the satellite development is about €0.5 billion.

The second **MSG** satellite will be launched on 21 December 2005 by an Ariane 5 from Kourou, French Guyana. The launch is scheduled on Wednesday night from 23:33 pm French time.

The Meteosat Second Generation fleet consists of four satellites. The contract for development of the four instruments and the sub-equipment is worth €350 million. **MSG-1** was launched in

August 2002, **MSG-3** has been built and put into storage, and **MSG-4** is in production.

**SEVIRI** has significantly enhanced the accuracy of weather forecasting and the understanding of the Earth's atmosphere:

It produces images of the Earth every 15 minutes - twice as often as previously

It offers double the geometric resolution - 1 km instead of 2.25 km

It provides data in 12, instead of 3, different wavelengths within the visible to infra-red spectrum

Data transmissions are 10 times faster

Data provided by **SEVIRI** is used in mathematical weather forecasting models and in atmospheric and environmental research.

This enables all the necessary parameters to understand our environment to be seen: the temperature of the surface and atmosphere, atmospheric water vapour content, cloud formations, storms, hurricanes, heavy rain and fog.

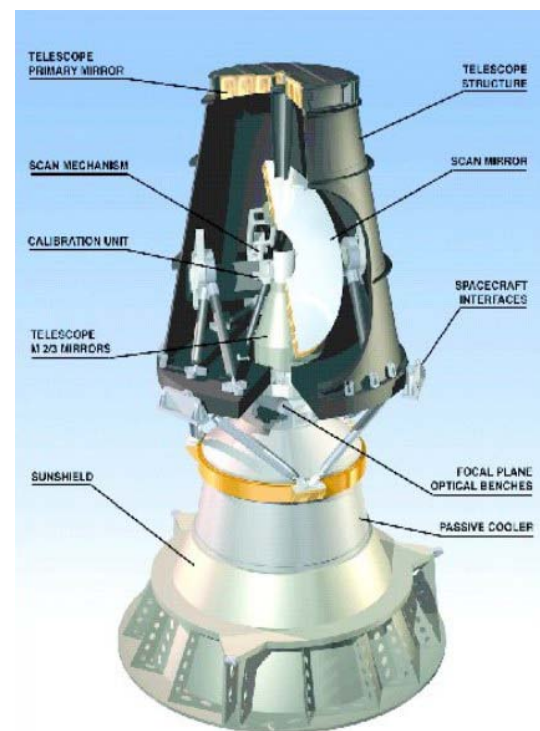
In addition to the **SEVIRI** instrument built in Toulouse, further subsystems for the **MSG** satellites were supplied by EADS SPACE in Germany and Spain. The solar generator was produced in Ottobrunn by EADS Astrium. The two advanced nickel-cadmium batteries were manufactured at the Friedrichshafen plant of EADS Astrium, as well as the associated Power Control Unit (PCU). The attitude and orbit control electronics, which ensure that the meteorological satellite maintains its precise position and alignment, were also manufactured in Friedrichshafen. The thermal control subsystem for the spacecraft was supplied by EADS Astrium in Madrid.

The satellite's propulsion system is from the EADS SPACE Transportation plant at Lampoldshausen. The system consists of two apogee motors each delivering a thrust of 400 Newton to manoeuvre the satellite into geostationary orbit and six attitude control systems, each delivering 10 Newton thrust for fine attitude corrections.

On the ground, EADS Astrium is providing the Image Processing Facility (IMPF) which is the link between the instrument in space and the end user. The contract for IMPF software included the design, code development, test and installation onto hardware platforms procured by EADS Astrium and installed in EUMETSAT's ground station in Darmstadt, Germany. EADS Astrium is also responsible for the provision of training courses for EUMETSAT engineers and warranty support for the software for two years after acceptance.

Technically, **SEVIRI** is a light-weight and compact telescope and scan assembly plus a complex focal plane. The scan assembly itself consists of an additional movable mirror which is positioned in front of the telescope; it performs a linear scan of the Earth's surface from south to north. The telescope sends the collected radiation to the focal plane where it is divided into twelve different channels of the electromagnetic spectrum and transferred to 42 sensors. The sensors transmit the recorded data to the Functional Control Unit (FCU), the interface to the data transmission system of the **MSG** satellite. Thus, a new multispectral satellite image is produced every 15 minutes.

The compact structure of the telescope and the scan assembly enables the use of a large passive cooler which improves the performance of the infrared measuring systems by lowering their operating temperature up to  $-188^{\circ}$  Celsius. The total weight of the **SEVIRI** telescope is 260 kg and its power consumption amounts to approximately 150 watts.



#### Technical characteristics of the SEVIRI Radiometer

MSG-SEVIRI

METEOSAT

**MISSION**

<b>Imaging Cycle</b>	<b>15 min</b>	<b>30 min</b>
<b>Visible Channels</b>	<b>4 (1 HRV) [0.4 – 1.6 <math>\mu\text{m}</math>]</b>	<b>1 (broadband) [0.5 - 0.9 <math>\mu\text{m}</math>]</b>
<b>IR Channels (including water vapour)</b>	<b>8 [ 3.9 – 13.4 <math>\mu\text{m}</math>]</b>	<b>2 for <math>\lambda=6.4\mu\text{m}</math> and <math>\lambda=11.5\mu\text{m}</math></b>
<b>Resolution – visible</b>	<b>1 km (HRV)</b>	<b>2,25 km (Visible)</b>
<b>IR and water Vapour</b>	<b>3 km</b>	<b>5 km (IR+WV)</b>
<b>Number of detectors</b>	<b>42</b>	<b>4</b>

**IMAGING INSTRUMENT**

<b>Mass</b>	<b>260 kg</b>	<b>65 kg</b>
<b>Power</b>	<b>150 W</b>	<b>17 W</b>
<b>Height</b>	<b>2.43 m</b>	<b>1.35 m</b>
<b>Diameter</b>	<b>1.5 m</b>	<b>0.72 m</b>
<b>Data rates</b>	<b>3.26 Mbit/s</b>	<b>0.33 Mbits</b>