
[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

[What s New] 新着アップロード

NICT((独)情報通信機構)より、下記レポート等寄贈、感謝

第4回 情報通信研究機構 研究発表会、安全・安心のためのICT、予稿集、平成17年11月30日

第5回 成層圏プラットフォームワークショップ、講演前刷集、平成17年2月23-24日

成層圏無線プラットフォーム研究開発最終報告書、平成17年3月

DVD 成層圏プラットフォーム、定点滞空飛行試験 - 通信・放送ミッション試験の紹介 - (J & Eng.)

UNISEC 2005 Annual Report CD (活動レポート) 発刊



2006.07.17-23

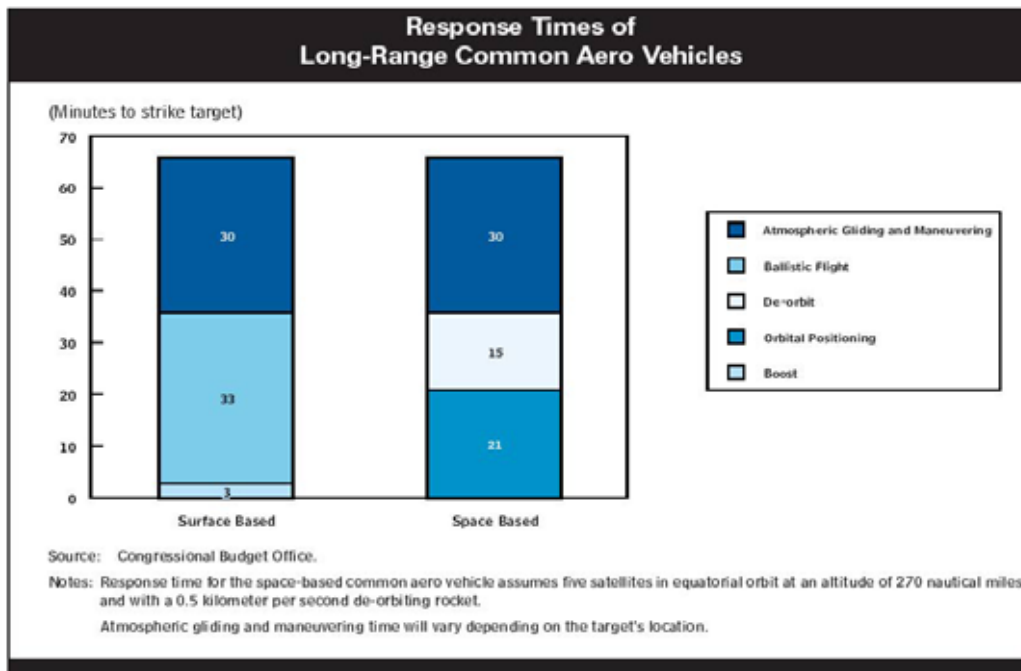
Farnborough Air Show

<http://www.farnborough.com/>



06.05.18 Aerospace Daily & Defense Report

長距離 CAV による地球上任意地点のグローバル攻撃のレスポンスタイム(地上版と宇宙配備版)



2006年5月22日 7:56 [CNET Japan 2006年05月22日]

マイクロソフト、米国防機関と「Virtual Earth」で協業

<http://japan.cnet.com/svc/nlt2?id=20117247>

【コラム】

[[連載] 華流 IT マーケットウォッチ] 中国版「黄教授論文ねつ造事件」が発覚—中国メディアや市民の反応は？

国をあげて独自技術の研究開発に取り組む中国で、国産の半導体として開発された「漢芯(hanxin)」が、ねつ造されたものであることが発覚し、大きな話題となっている。

<http://japan.cnet.com/svc/nlt2?id=20117487>

2006年5月19日 22:49 DAILY NEDO[2006/05/19]

技術戦略マップ(分野別技術ロードマップ)

<http://www.nedo.go.jp/roadmap/index.html>

航空機分野のロードマップ

http://www.nedo.go.jp/roadmap/2006/data/manu_rm2.xls

宇宙分野のロードマップ

http://www.nedo.go.jp/roadmap/2006/data/manu_rm3.xls

2006年5月19日 22:49 DAILY NEDO[2006/05/19]

産業技術研究助成事業の平成18年度第2回公募について(予告)(平成18年5月19日)

公募期間: 平成18年6月19日～平成18年7月21日(予定)

http://www.nedo.go.jp/informations/koubo/180519_2/180519_2.html

2006年5月19日 22:49 DAILY NEDO[2006/05/19]

研究評価委員会「次世代衛星基盤技術開発(衛星搭載用リチウムイオンバッテリー要素技術開発)」(中間評価)

第1回、第2回分科会資料掲載

<http://www.nedo.go.jp/iinkai/kenkyuu/bunkakai/17h/chuukan/5/index.html>

第2回「次世代衛星基盤技術開発(衛星搭載用リチウムイオンバッテリー要素技術開発)」(中間評価)分科会

平成18年3月4日(土) 13:00～16:30

<http://www.nedo.go.jp/iinkai/kenkyuu/bunkakai/17h/chuukan/5/2/index.html>

「次世代衛星基盤技術開発(衛星搭載用リチウムイオンバッテリー要素技術開発)」(中間評価)分科会 評価結果(案)確定用資料

<http://www.nedo.go.jp/iinkai/kenkyuu/bunkakai/17h/chuukan/5/2/2-b.pdf>

「次世代衛星基盤技術開発(衛星搭載用リチウムイオンバッテリー要素技術開発)」中間評価報告書(案)

<http://www.nedo.go.jp/iinkai/kenkyuu/bunkakai/17h/chuukan/5/2/1-b.pdf>

17-May-2006 Jane's international Defense Review <http://idr.janes.com/public/idr/index.shtml>

モルフィング UAV

BRIEFS - MORPHING UAV

Athena Technologies has been contracted to programme navigation and flight controls for Lockheed Martin Aeronautics' Morphing Unmanned Aerial Vehicle (UAV). The deal is part of ...

Posted 05/19/06 17:42 DefenseNews.com <http://www.defensenews.com/story.php?F=1814166&C=airwar>

北朝鮮はミサイル発射の準備中かもしれない： レポート

North Korea May Be Preparing Missile Launch: Reports

By GEORGE NISHIYAMA, REUTERS, TOKYO

North Korea may be preparing to launch a long-range ballistic missile that could reach parts of the United States, Japanese media reports said on May 19, but Japan's government said it did not believe a launch was imminent.

Quoting unidentified South Korean government officials, public broadcaster NHK said satellite pictures showed there had been signs since early this month around a site in northeastern North Korea that pointed to a possible firing in the near future.

Analysts have said, though, that development of a multiple-stage version of a ballistic missile that can take payloads deep into the continental United States is years away. Japan's top government spokesman, Shinzo Abe, said he could not comment on specific security issues, but added, "At the moment, we do not believe that a launch is imminent."

Asked by reporters if the situation posed a threat to Japan's national security, Prime Minister Junichiro Koizumi said, "Japan maintains its security through deterrence under the Japan-U.S. security alliance and I believe North Korea knows that." He added he did not believe the situation was serious.

The latest reports come amid a deadlock in six-party talks aimed at dismantling North Korea's nuclear programs, and ahead of a visit to China next week by the chief U.S. negotiator to the talks that involve the two Koreas, the United States, Japan, Russia and host China.

The United States said a missile launch could heighten worries over North Korea's weapons and expose an unwillingness in Pyongyang to heed international concern over its military programs. "If, in fact, North Korea did launch a long-range missile, it would be a real

source of concern to the international community," State Department spokesman Sean McCormack told reporters. The concern would be over "what it says about North Korea and North Korea's desire to engage with the rest of the world and to address some of the concerns that the rest of the world has had about their behavior," he added.

North Korea has said in numerous official media reports that it is building a nuclear deterrent to counter U.S. hostility. The United States believes North Korea has one or two nuclear bombs and the ability to build more.

The United States said on May 18 that Washington was open to discussions with North Korea on a peace treaty at the same time as the six-party nuclear talks, but that Pyongyang must return to the negotiating table first.

North Korea has long demanded a peace treaty to replace the armistice that ended the 1950-53 Korean War.

Some experts detected in the U.S. stance at least a slight change in emphasis designed to entice Pyongyang back to the table and keep Asian allies from blaming Washington for the moribund diplomacy. NHK said the missile appeared to be a Taepodong-2, which previous reports have said has a range of more than 4,200 miles (6,700 km), making it capable of hitting Alaska with a light payload.

Quoting Japanese government sources, Japan's Kyodo news agency also said a launch could be imminent and the missile was probably a Taepodong-2.

A report in March by the California-based Center for Nonproliferation Studies, a nongovernmental organization, said

North Korea did not have an operational missile that could hit the continental United States.

North Korea shocked the world in August 1998 when it fired a

Taepodong missile that flew over Japan before splashing down in the Pacific Ocean.

[Posted 05/19/06 17:50 DefenseNews.com http://www.defensenews.com/story.php?F=1814169&C=landwar](http://www.defensenews.com/story.php?F=1814169&C=landwar)

主要海洋国は船舶をテロから守るため衛星で追跡する規則に同意

Shipping Nations Agree to Satellite Tracking Rules

By REUTERS, LONDON

The world's top maritime body said on May 19 that major shipping nations had agreed to new rules to track ships by satellite to fight terrorism and prevent the transport of materials used in weapons of mass destruction.

The U.N. International Maritime Organisation (IMO) said governments party to the Safety of Life at Sea (SOLAS) convention had given initial acceptance to the new measures at a 10-day meeting at its headquarters in London.

A spokeswoman, Natasha Brown, said all the world's merchant fleets trading in international waters would have to comply with the new regulations that come into force under the SOLAS convention on January 1, 2008.

"It will mean that ships will have to fit systems and contracting governments to SOLAS will need to do the same shore side if they want to receive information," she said.

Under the new proposals, merchant ships would be required to transmit

through satellite-based technology their identity, location, date and time of their position.

The Long-Range Identification and Tracking of ships is the latest in a series of security measures adopted by the trillion-dollar industry since the September 11 attacks on the United States.

Al-Qaida has carried out at least three successful attacks against maritime targets since the bombing of the USS Cole in 2000.

Many more attacks by sea have been thwarted and intelligence on likely targets has been collected since Sept. 11.

Washington, which has pushed many of the tough marine laws, fears an attack using a WMD or infiltration by militants from the sea.

Port security has become a major issue in the United States after lawmakers revolted against the Bush administration's decision earlier this year to let a Dubai-based company take over operations

at several key U.S. ports.

Aerospace Daily & Defense Report May 22, 2006

国連のグループは海洋の船舶を衛星追跡することを議論中

U.N. group debating satellite tracking of ocean ships

SATELLITE SHIPS: The United Nations' International Maritime Organization says its Maritime Safety Committee is discussing the

proposed adoption of new regulations on satellite-based long-range identification and tracking . . .

[Aerospace Daily & Defense Report May 22, 2006](#)

ラムズフェルド長官は FAA/UAVs の論争の外にとどまる

Rumsfeld stays out of FAA/UAVs dispute

COLLISION AVOIDANCE: Donald Rumsfeld, diplomat. The Defense secretary declines to be dragged into a dispute about

whether the FAA is impeding application of UAVs to homeland security . . .

税関の国境防護の UAV は一旦、信頼性が評価されると急増するように設定された

CBP UAVs set for boost once reliability assessed

CBP PREDATORS: Customs and Border Protection's unmanned

aircraft efforts are set to get a dramatic boost under new attention to

border security. But the Homeland Security Department . . .

抜擢でノースロップグラマンの Bush 氏が明らかに Sugar CEO の後継に

Promotion makes NG's Bush heir apparent to Sugar

NEXT IN LINE: Wes Bush continues his rapid rise through the corporate ranks at Northrop Grumman. Last week's promotion of

the 45-year-old chief financial officer to president . . .

NASA の研究開発計画は企業のニーズと対応が取れているべき、NSA 委員会は述べる

NASA R&D program should match industry's needs, NSA panel says

NASA R&D: As NASA and the White House work to develop the aeronautics research and development policy that Congress has ordered, they should be careful to ensure the ultimate R&D program matches the needs of its potential users in industry, an ad hoc committee of the National Academies of Sciences recommends. The panel, set up at the request of NASA's aeronautics mission directorate, calls for "close relationships with external customers and users, engaging them very early" in planning. That will be a

delicate problem, as the NAS panel advises, because Administrator Michael Griffin has made clear to Congress that his agency's aeronautical research "cannot and will not directly subsidize work to specific corporate interests." NASA has turned away from demonstration programs in its dwindling aeronautics research effort, focusing instead on precompetitive system-level "revolutionary capabilities" that industry can flesh out if it so chooses.

NATO の TCAR 多国籍レーダ購入計画、障害にぶつかる

NATO's TCAR purchase plans hit snag

RADAR RUMBA: Cracks are beginning to emerge in NATO's plans to buy the TCAR multinational radar for its Allied Ground

Surveillance (AGS) aircraft system. That radar may . . .

GAO 政府説明責任局は基礎研究へ移行の NASA の変化が NGATS を害するかどうかを検討

GAO studies whether NASA change will harm NGATS

NGATS =the next-generation air transportation system,

NGATS GAP?: The Government Accountability Office is studying whether NASA's reorientation of its aeronautics program toward

fundamental research will leave a gap between the agency's work on . . .

運動エネルギー迎撃機の契約者は提案した FY 07 予算の削減を元に戻してもらおう議員へロビー活動中

KEI contractors lobbying lawmakers to reverse proposed FY '07 cuts

KEI CUTS: Contractors working on the Missile Defense Agency's Kinetic Energy Interceptor (KEI) program are lobbying Capitol Hill

to stave off proposed cuts to its \$406 million . . .

より大きな提案タンクが NASA の RS-68 ロケットエンジン決定の鍵になった

Bigger prop tank was key to NASA's RS-68 decision

NASA opted for the Pratt & Whitney Rocketdyne **RS-68** engine to power its next-generation moon rocket in part because the factory that built the Saturn V can still handle the 33-foot diameter tankage that went into it.

Some retooling would enable the Michoud Assembly Facility in

New Orleans to once again produce the same diameter liquid oxygen and liquid hydrogen tanks it produced for the S-1C Saturn V first stage. With tanks of that diameter, instead of the 27.5 feet originally envisioned for NASA's proposed Cargo Launch Vehicle (CaLV), the RS-68 will deliver enough thrust to send humans on

their way back to the moon, according to Steve Cook, manager of NASA's Constellation Systems Launch Vehicles Project Office at Marshall Space Flight Center.

The agency originally planned to use a mass-produced, throwaway version of the reusable Space Shuttle Main Engine (SSME) that Pratt & Whitney Rocketdyne also builds. But those engines would have cost about \$40 million each, plus the upfront expense of a major engine redevelopment. The **RS-68**, flying in clusters of five engines on two lunar missions a year, will cost about \$20 million each in 2006 dollars (DAILY, May 19).

Substantial gain in performance'

With larger tankage, the **CaLV** can carry about 1 million pounds more propellant, which gives the RS-68 the performance it will need to get enough weight to low-Earth orbit to support trans-lunar injection, Cook said.

ロッキードはホームランドミサイル防衛テストを推進

Lockheed pushes homeland missile defense test

Lockheed Martin Corp. is hoping to conduct a test of a proposed defense system against cruise and ballistic missile attacks on the

"It was a pretty substantial gain in performance," he said. "What we're really trading off is additional thrust versus the lower isp [specific impulse]. Of course, the **SSME** has a much higher isp than the **RS-68**."

NASA has already opened discussions with Air Force Space Command on a potential cooperative effort on the RS-68 upgrades that will be needed to fly the engine in clusters of five. The newest large rocket engine in the U.S. inventory, the **RS-68** already powers the Boeing Delta IV evolved expendable launch vehicle managed by the Air Force.

Those talks are expected to continue for several months. Development of the **CaLV**, which is envisioned as a 100-metric-ton lift capability, won't begin in earnest until the human-rated Crew Launch Vehicle nears its first flight. - Frank Moring, Jr. (moring@AviationNow.com)

United States, but the window . . .

MDA ミサイル防衛局は空中発射迎撃機を追究するようレイセオンと\$6.7M の契約

MDA awards Raytheon \$6.7M to pursue air-launched interceptor

The Missile Defense Agency (MDA) has awarded Raytheon \$6.7 million to spend 12 months working on the Network Centric

Airborne Defense Element (NCADE), a new concept for . . .

高々度飛行船は UAV、衛星よりもすぐれている、ロッキードマーチンの Kier 副社長発言

Kier: high-altitude airship better than UAV, satellite

HAA BAMS: A high-altitude airship (HAA) is the best platform to provide persistent broad-area maritime surveillance, according to

David Kier, Lockheed Martin Corp. vice president and managing

衛星の問題が打上げを遅らすことはない、と Eumetsat 発言

Sat problem won't delay launch, Eumetsat says

SOUNDING UNIT: Eumetsat officials say they have been ensured that a problem affecting an advanced microwave sounding unit (AMSU) intended for the organization's first polar orbiting satellite, Metop-1, has been resolved, and should not prevent a scheduled launch atop a Starsem Soyuz Fregat booster on July 17. The problem, related to lubrication in the ball bearings, resulted in the

hardware being removed from the spacecraft, currently awaiting launch in Baikonur, Kazakhstan, and shipped back to supplier Northrop Grumman for modification. Officials say the equipment was due to be returned to the Cannes plant of prime contractor Alcatel Alenia Space on May 18 for shipment to Baikonur.

ロシアとドイツは緊急対応軍で連携協力

Russian, Germany to team for emergency response unit

SEARCH AND RESCUE: The Russian civil defense ministry has agreed to set up a joint emergency response unit with Germany to

provide search and rescue services using . . .

[Aerospace Daily & Defense Report](#) May 19, 2006

米政府は国境のセキュリティに\$1.9Bを求める

[White House seeks \\$1.9B for border security](#)

The White House on May 18 formally asked Congress for \$1.948 billion for boosted border security, a move that could derail

additional funds from the Coast Guard's . . .

NASAは公式にLRO月偵察オービタが次のフェイズに入ることを承認

[NASA formally approves LRO to enter next phase](#)

NASA formally approved its Lunar Reconnaissance Orbiter (LRO) to proceed into the next phase at the program's mission confirmation review May 17, the agency announced. The next major milestone is its critical design review later this year. The spacecraft is scheduled to launch in October 2008 to map the moon's surface in unprecedented detail and scout for resources that

could be used by future astronauts. Its mission will include sending two impactors down into a lunar crater to test the theory that ancient water ice lies buried there (DAILY, April 11).

The orbiter is being built at NASA's Goddard Space Flight Center in Greenbelt, Md. The six scientific instruments are being provided by various organizations throughout the U.S. and one in Russia.

同位元素の分析で彗星の源を洗い出した

[Isotope analysis to sort out comet's particle origins](#)

Researchers will analyze isotopes of oxygen and other elements found in the tiny fragments of the comet Wild 2 returned by NASA's Stardust mission to determine which originated in the solar system and which formed around other stars.

Preliminary data presented at a three-day workshop near San Francisco this month suggest the samples returned Jan. 15 contain grains of refractory materials formed at high temperatures near both the sun and other stars.

Donald Brownlee, Stardust principal investigator, said "the abundances of the isotopes of elements like oxygen is quite different in true stardust grains, formed around other stars, than it is for materials formed in our solar system."

The aerogel collectors on Stardust contained "a remarkable range of minerals," he said, but so far analysis hasn't turned up any of the carbonate and silicate minerals containing bound water that

were detected in the Deep Impact mission to Tempel 1.

The comet particles returned to Earth contained a mix of "large, strong rocks" and fine powder, loosely held together like terrestrial dirt clods. In the aerogel they separated, with the bigger pieces tunneling to the very bottoms of the carrot-shaped impact holes and the power left nearer the tops.

Analysis of the Stardust data will advance understanding of how the solar system was formed, while the mothership it left behind in space may be sent to take another look at the crater in Tempel 1 left by Deep Impact.

軍用機の退役が納入のペースを越える予定、当局述べる

[Military aircraft retirements to outpace deliveries, official says](#)

BERLIN - Military aircraft retirements will start outpacing deliveries in about three years and probably will continue doing

so for the next decade, Kevin Michaels, an AeroStrategy . . .

英国の軍は ScanEagle を UAV 実験計画に用いる

British military uses ScanEagle for UAV experimental program

The British Defense Ministry has used the ScanEagle unmanned aerial vehicle for a series of naval warfare trials as part of its Joint

UAV Experimentation Program (JUEP)...

NRC 委員会レポート: NASA の航空は基礎に再度焦点を絞り、リスクを抱える。

Panel: Refocusing NASA aero on fundamentals carries risk

A new report from the National Academy of Sciences warns that NASA's plan to refocus most of its aeronautics program on

fundamental research, while reasonable given budgetary ...

空軍は HLV 縮小模型のデモ機の詳細を提供

Air Force provides details on HLV subscale demonstrator

The U.S. Air Force provided details this week on the quarterscale Hybrid Launch Vehicle (HLV) demonstrator that the service hopes to develop as a follow-on to ongoing HLV trade studies. The suborbital demonstrator, tentatively scheduled to fly in fiscal 2012, will allow the service to "learn a lot about how to integrate the constituent technologies and a lot about the potential cost of a real system," according to Col. James Painter, director of strategic and developmental planning at the Air Force's Space and Missile Systems Center.

Powered by a liquid oxygen/kerosene rocket, the autonomous demonstrator will reach Mach 7 and 200,000 feet altitude before returning for a runway landing powered either by rockets or jet engines. It will not deploy an orbital payload. The reason for limiting the demonstrator to suborbital flight "is to avoid a very severe flight regime and to allow us to build a system that is very durable, and that's something you can't do if you have to put the entire mass into orbit," Painter said during a teleconference May 15.

The Air Force has requested \$19 million for the HLV in FY '07. The request for proposals (RFP) for the demonstration program could be released in the late fall or early next year, Painter said. The service is likely to award two contracts initially, followed by a downselect.

Lockheed Martin, Northrop Grumman, Orbital Sciences and Andrews Space are already at work on preliminary HLV concepts

under \$750,000 five-month Air Force study contracts with options for extensions (DAILY, May 9). Twenty-one companies originally submitted study proposals.

Nonetheless, the selection of the current four HLV contractors was not a "downselect," Painter said. "Any future follow-on work would be full and open competition, which all aerospace firms, including those that were not selected to participate in this particular study activity, will be invited to compete in." The operational HLV system, which the Air Force hopes to bring online by 2018, will feature a reusable first-stage booster and an expendable upper stage capable of orbiting payloads in the 10,000-15,000 pound range within two days of notice. Air Force studies have concluded that such a hybrid approach should be cheaper than a fully expendable or fully reusable rocket. - Jefferson Morris

jeff_morris@AviationNow.com

Johnson シミュレータは CEV のコックピット設計を支援中

Johnson simulator aiding CEV cockpit design

Johnson Space Center engineers are beginning to use a rudimentary Crew Exploration Vehicle simulator for rapid prototyping of CEV cockpit displays and window configurations. Responsibility for CEV cockpit design will remain with NASA, no matter whether the Lockheed Martin team or Northrop-Grumman/Boeing team wins the CEV competition. The Reconfigurable Orbital Cockpit (RCC) at Johnson is equipped with computer generated out-the-window views so astronauts can evaluate tradeoffs between various candidate CEV cockpit configurations. Astronauts have begun flying station docking profiles in the RCC to compare the window views with rendezvous and docking tasks.

Another key issue being addressed in the RCC is the tradeoff between close circuit television views versus actual out the window views. The CEV is being baselined for automatic rendezvous and docking but with crew intervention capability. And it is still to be

determined how much auto versus manual modes will be used during CEV test flights and initial docking operations with the International Space Station after the shuttle is retired.

Engineers are setting up the RCC with the flexibility to change window shapes and locations. Window and television tradeoffs will in turn tie directly to where key controls such as the rotational and translation hand controllers and flight instrumentation is positioned in the CEV cockpit.

NASA は CaLV 輸送用打上げビークルに Rocketdyne を選定

NASA picks Rocketdyne for CaLV

ROCKETDYNE: NASA has picked the Pratt & Whitney Rocketdyne **RS-68** engine to power its planned heavy-lift Cargo Launch Vehicle (CaLV) on future missions to the moon and beyond, rejecting a “ production ” version of the Space Shuttle Main Engine

(SSME). NASA says it picked an upgraded version of the engine, already used on Boeing’s Delta IV, because at \$20 million a copy it represents “ a dramatic cost savings ” over the SSME, which is also manufactured by Pratt & Whitney Rocketdyne.

Lockheed Martin Press Releases <http://www.lockheedmartin.com/wms/findPage.do?dsp=fneec&ti=111>

May 17, 2006

ロッキードは ICBM の再突入システムのアップグレードに \$28M を受領

[Lockheed Martin Receives \\$28 Million Contract For ICBM Reentry System Upgrade](#)

May 16, 2006

ロッキードは宇宙配備ミサイル警報システムの地上部分の主要マイルストーンを完了

[LOCKHEED MARTIN COMPLETES MAJOR MILESTONE ON TERRESTRIAL COMPONENT OF SPACE-BASED MISSILE WARNING SYSTEM](#)

VNPT はロッキードとベトナムの最初のターンキー通信衛星システムの契約を結ぶ

May 12, 2006

[VNPT AWARDS LOCKHEED MARTIN CONTRACT TO DELIVER VIETNAM’S FIRST TURNKEY TELECOMMUNICATIONS SATELLITE SYSTEM](#)

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

ボーイング JTRS チームは鍵となるネットワーク・セントリック波形を納入

[May 16, 2006 Boeing JTRS Team Delivers Key Network-Centric Waveform](#)

ボーイングは JEFX’06 でネットワーク・セントリック目標照準能力のテストをサポートする

May 11, 2006 Boeing Supports Test of Network-Centric Targeting Capability at JEFX '06

Northrop Grumman News Releases <http://www.irconnect.com/noc/press/index2.html>

JWST James Webb 宇宙望遠鏡の太陽覆い膜は、重要な宇宙レディネス試験を通過

May 15, 2006 [James Webb Space Telescope Sunshield Membrane Passes Critical Space-Readiness Tests](#)

ノースロップ・グラマンは ICBM 先進技術ロケットモータの試験に成功

May 15, 2006 [Northrop Grumman Successfully Tests ICBM Advanced Technology Rocket Motor](#)

2006 年 5 月 19 日 13:49 SpaceWar Express - May 19, 2006

MILITARY COMMUNICATIONS

タレスの軍用無線がオーストラリアの軍に受け入れられた

•Thales' Military Radio Accepted Into Australian Military Service

http://www.spacewar.com/reports/Thales_Military_Radio_Accepted_Into_Australian_Military_Service.html

Clarksburg MD (SPX) May 19, 2006 - Thales Communications has announced that its AN/PRC-148 Multiband Inter/Intra Team Radio, or MBITR, has been accepted by the Australian Defence Force

(ADF) as an in-service item within Australia's military inventory. Over two hundred MBITRs were originally procured to support the security infrastructure for the 2000 Sydney Olympic Games.

LAUNCH PAD

アリアンスペースが Eutelsat W2M を打上げる予定

Arianespace Will Launch Eutelsat W2M

http://www.spacedaily.com/reports/Arianespace_Will_Launch_Eutelsat_W2M.html

Paris, France (SPX) May 19, 2006 - Eutelsat and Arianespace announced Thursday they have signed a launch contract for the W2M satellite. The spacecraft will be carried into orbit by an

Ariane 5 rocket sometime in the second quarter of 2008 from Europe's Spaceport in Kourou, French Guyana.

SPACEDAILY

中国は恐らく来年 4 月に月探査機を打上げることに

China Likely To Launch Moon Probe Next April

http://www.spacedaily.com/reports/China_Likely_To_Launch_Moon_Probe_Next_April.html

2006 年 5 月 18 日 22:49 DAILY NEDO[2006/05/18]

「大学発事業創出実用化研究開発事業」の公募開始について(平成 18 年度第 2 回)

-「企業のニーズ」と「大学のシーズ」をマッチング 産学連携による実用化開発を支援- (情報更新)

http://www.nedo.go.jp/informations/koubo/180501_2/180501_2.html

2006 年 5 月 19 日 8:21 [CNET Japan 2006 年 05 月 19 日]

1.KDDI とグーグルが提携--「ケータイでググる時代がやって来る」

<http://japan.cnet.com/svc/nlt2?id=20115587>

2.ぶららの Winny 規制、総務省がストップ--「通信の秘密」侵害の可能性

<http://japan.cnet.com/svc/nlt2?id=20115448>

3.ソフトバンクとボーダフォン、合弁会社設立—ボーダフォンは「ソフトバンクモバイル」に

<http://japan.cnet.com/svc/nlt2?id=20115487>

4.NRI、2010 年度までのウェブ技術の進展を予測した IT ロードマップを発表

<http://japan.cnet.com/svc/nlt2?id=20116227>

5.「姿勢性症候群」が増加中--「同じ姿勢」に医療関係者が警鐘

<http://japan.cnet.com/svc/nlt2?id=20115347>

6.夏休みに宇宙旅行はいかが? --Future in Review カンファレンス開催

<http://japan.cnet.com/svc/nlt2?id=20115427>

海軍は企業に BAMS 広域海上監視計画はコストとスケジュールは守る必要があると警告

Navy warns industry BAMS must stay on cost, schedule

CALIFORNIA, Md. - When it gets under way next year, the Broad Area Maritime Surveillance (BAMS) program must meet its cost

and schedule requirements or risk cancellation . . .

下院予算歳出者は税関と国境警護の空と海の予算を大幅増強

House appropriators boost CBP Air and Marine funds

House appropriators have approved \$373.2 million for operations, maintenance and procurement by the Homeland Security

Department's newly consolidated Customs and Border Protection's Air and Marine (CBPA&M) . . .

GOES N 衛星は早くて 5 月 24 日打上げに設定

GOES N sat launch set for May 24 at earliest

The launch of the new Boeing/NOAA GOES N weather satellite from Cape Canaveral on a Boeing Delta IV will slip several days to no earlier than May 24 to allow Boeing to complete replacement of two actuators on the launch vehicle's first stage.

monitoring the Atlantic and U.S. East Coast and GOES 10 monitoring the Pacific Ocean and U.S. West Coast.

Technical problem

An actuator component at a vendor facility had a technical problem during acceptance testing, and when it could not be conclusively determined that the actuators on the launch vehicle were healthy, Boeing decided to remove and replace them as a precaution. The actuators provide thrust vector control for the vehicle's Boeing Rocketdyne RS-68 engine. The booster has been on Launch Complex 37 for 15 months in preparation for the flight of the new geostationary operational environmental satellite.

The current GOES backup spacecraft will then be moved to replace the aging western satellite, while GOES N/13 is checked out to eventually move east, where it is slated to replace GOES 12 as the primary hurricane monitoring spacecraft for the Atlantic and Gulf of Mexico.

The delays have had no effect on U.S. weather monitoring, as the current satellites aloft remain healthy.

The mission came within seconds of liftoff last fall before a technical problem forced a launch scrub. The flight then had to be delayed for spacecraft orbital lighting conditions and then again for resolution of a Boeing labor strike. Launch must occur by May 30 or be delayed again into the summer so the Boeing team could shift its support to the first flight of a Delta IV from Vandenberg Air Force Base, Calif.

Improved resolution

That flight, carrying a National Reconnaissance Office payload, is scheduled for launch June 27. The new GOES N satellite with improved resolution will be renamed GOES 13 and placed in a storage orbit over the equator halfway between the GOES 12



A400M はメンテの目標を達成しつつある

A400M establishing maintenance goals

BERLIN - The Airbus A400M program has established 10 Maintenance Working Groups for the transport aircraft that are “just about ready to start working,” Detlef Reiss, the ...

ラムズフェルド長官は空中給油機の代替機の RFP は 2007 年 1 月までにさねばならないと発言

Rumsfeld says RFP for replacement of tanker fleet should be out by Jan.'07

A final request for proposals (RFP) to replace the U.S. Air Force's aging KC-135 tanker fleet should be out in January 2007, Defense Secretary Donald Rumsfeld said ...

Oriskany 空母は用途廃止で、過去最大の人口岩礁として海中に沈められた

Ex-Oriskany sunk for diving, fishing

EX-ORISKANY SUNK: The ex-Oriskany, a decommissioned U.S. Navy aircraft carrier, became the largest ship intentionally sunk as an artificial reef on May 17 when the 32,000-ton ship ...

2006 年 5 月 18 日 8:25 【CNET Japan 2006 年 05 月 18 日】

モバイル位置情報サービスで浮上するプライバシーの懸念

<http://japan.cnet.com/svc/nlt2?id=20114447>

沖電気、H.264 対応ソフトコーデックで商用 IP 網経由の HD 映像伝送に成功

<http://japan.cnet.com/svc/nlt2?id=20114287>

買収のボーダフォン新社名「ソフトバンクモバイル」に

<http://japan.cnet.com/svc/nlt2?id=20113927>

2006 年 5 月 17 日 8:19 【CNET Japan 2006 年 05 月 17 日】

クレジットカード業界のセキュリティ規格改定案—暗号化の義務は緩和の方向 <http://japan.cnet.com/svc/nlt2?id=20113409>

NEC エンジニアリング、衛星画像処理システムに気象データ収集機能を追加 <http://japan.cnet.com/svc/nlt2?id=20113087>

2006 年 5 月 16 日 8:05 【CNET Japan 2006 年 05 月 16 日】

2. グーグルとノキア、共同で Wi-Fi 端末を提供か 米紙報道

<http://japan.cnet.com/svc/nlt2?id=20111927>

3. 東京工科大学とネットツーコム、Linux OS 搭載のオープンソース IP 携帯端末を限定発売

<http://japan.cnet.com/svc/nlt2?id=20111847>

4. NSA の通話データ収集、一部電話事業者が拒否

<http://japan.cnet.com/svc/nlt2?id=20112147>

日立 GST、同社初の垂直磁気記録方式 HDD を発表

<http://japan.cnet.com/svc/nlt2?id=20112289>

マイクロソフト、従業員に懸賞金 : 「バグ修正 1 件ごとに 100 ドル」

<http://japan.cnet.com/svc/nlt2?id=20111408>

2006 年 5 月 15 日 7:33 【CNET Japan 2006 年 05 月 15 日】

4. ブッシュ大統領、NSA による米国内の通話データ収集を擁護

<http://japan.cnet.com/svc/nlt2?id=20111027>

5.アップルがソフトバンクと携帯電話で提携？--広報は「ノーコメント」

<http://japan.cnet.com/svc/nlt2?id=20111067>

6.FCCの無線周波数帯競売に参加か 注目を集めるケーブル事業者やグーグルの動き

<http://japan.cnet.com/svc/nlt2?id=20110488>

7.三菱電機、NEC、東大生研が国内で初めて量子暗号システムの相互接続実験に成功

<http://japan.cnet.com/svc/nlt2?id=20110847>

DRAM 価格操作訴訟でサムスンなど3社が和解金支払いで合意

<http://japan.cnet.com/svc/nlt2?id=20110928>

グーグル、年次株主総会を開催—中国での検閲方針や検索情報開示問題に焦点

<http://japan.cnet.com/svc/nlt2?id=20110587>

東芝、中期経営計画を発表—半導体事業に注力、年平均7%成長へ

<http://japan.cnet.com/svc/nlt2?id=20110228>

Week of May 15, 2006 For the full text go to: [SatNews Weekly](#)

ESA 欧州宇宙機関は EADS Astrium を\$407M の Gaia 天文ミッションの主契約者に選定

... [ESA Selects EADS Astrium as Prime Contractor for \\$407-M Gaia Astrometry Mission](#)

シーロンチは新しい EchoStar 宇宙機の打上げ契約をする

... [Sea Launch Signs Launch Contract for New EchoStar Spacecraft](#)

ロッキードは米空軍向けにハイブリッド打上げロケットの作業を開始することに

... [Lockheed to Begin Work on Hybrid Launch Vehicle for U.S. Air Force](#)

レイセオンの VIIRS 宇宙配備気象センサが熱真空テストチャンバに入る

... [Raytheon VIIRS Space-Based Weather Sensor Enters Thermal Vacuum Test Chamber](#)

SES グローバルの利益は 2006 年第 1 四半期に 41%増加して\$149.797M になった

... [SES Global Net Profit Rises by 41% to \\$149.797 in 1Q 2006](#)

インテルサットは 2006 年第 1 四半期に\$90.1M の損失を計上

... [Intelsat Posts \\$90.1-M Loss in 1Q 2006](#)

インテグラル・システムズは米空軍の AEHF 衛星計画の CCS-C 契約修正を受けとる

... [Integral Systems Receives CCS-C Contract Modification for U.S. Air Force's AEHF Satellite Program](#)

5/15/2006 - 5/19/2006 AstroExpo.com Top Weekly News

Business News

[NASA Wants Your Innovative Ideas](#)

[U.S. Firm Wins Bid for Vietnam's First Satellite Project](#)

[EADS Astrium Wins First Contract for Latest Communications Payload Technology](#)

[SES AMERICOM Announces AMC-21 Spacecraft Procurement: New Ku-band Spacecraft Aimed at U.S. Broadcast, Education and Enterprise Markets](#)

[Global Relief Technologies Partners with GeoEye for Timely Satellite Image Delivery to Emergency Responders](#)

[Eutelsat Selects EADS Astrium to Deliver Hot Bird™ 9 Broadcast Satellite](#)

International Space News

[International Space Station Status Report SS06-024](#)

[Europeans Ready to Oversee ISS Space Lab - Russian Spacecraft Co.](#)

[NASA Finalizes Crews for Upcoming Shuttle Missions](#)

[Douglass: Report on Aeronautics Innovation Bolsters Need for Research and Development Enhancements](#)

[China Begins Development of Positioning and Navigation System for Lunar Probe](#)

[Democrats Call For NOAA Leadership's Removal](#)

[NASA to Take Part in Indian Lunar Mission](#)

Launch News

[NASA's Exploration Systems Progress Report](#)

[NASA Announces New Weather Satellite Launch Date](#)

[NASA's Space Shuttle Discovery Moves to Launch Pad](#)

[NASA Expendable Launch Vehicle Status Report: E06-015 - STEREO Launch](#)

[Russian Space Corporation Set to Double Sovuz Rocket Output -1](#)

[Russia to Develop New Rocket for Manned Spacecraft Launches](#)

5/1/2006 - 5/5/2006 AstroExpo. com Top Weekly News

Business News

[AAS Statement on Proposed FY2007 NASA Budget](#)

[Alliance Spacesystems to Merge with Vision Composites](#)

[Sea Launch Signs Launch Contract for Intelsat Americastm-9 Spacecraft](#)

[Systems/Loral Awarded Contract to Build AsiaSat 5 Satellite](#)

[SPACEHAB Begins Work on New NASA Business](#)

[International Rectifier Third-Quarter Revenue up 7 Percent and Orders up 27 Percent over Prior Quarter](#)

International Space News

[Thousands Sign Planetary Society Petitions to Save Our Science](#)

[Co-operation with US in Space Sector Welcomed](#)

[International Space Station Status Report: SS06-022](#)

[Ceremony for the Completion of the Columbus Laboratory](#)

[NASA Announces 14th International Space Station Crew](#)

Launch News

[Russia Launches Kosmos Military Satellite from Plesetsk Base](#)

[NASA'S Space Shuttle Processing Status Report: S06-015](#)

[Successful Launch of Maxus 7!](#)

[NASA Launches Satellites for Weather, Climate, Air-Quality Studies](#)

[KazSat Satellite Launch Set for June](#)

[Boeing Delta II Lifts NASA Spacecraft to Orbit](#)

Aerospace Daily & Defense Report May 17, 2006

ボーイングと司法省は\$615M で決着に

Boeing, Justice Department reach \$615M settlement

The Justice Department has reached an agreement with Boeing to pay \$615 million in penalties for its military acquisition blunders in

exchange for not pursuing criminal charges . . .

議員と当局は国境の監視にドローン、航空機に着眼

Lawmakers, officials eyeing drones, aircraft for borders

A conservative senator has called for increased use of unmanned aircraft and their sensors as Congress, and the country, debate

immigration reform - reflecting a growing sense . . .

警備隊/予備軍の委員会は機器の不足の程度に驚く

Guard/Reserve panel chair 'surprised' by extent of equipment shortfalls

Retired Marine Corps Maj. Gen. Arnold Punaro says he was "surprised" at the extent of equipment shortages within the National

Guard and Reserve, where even basic items . . .

伊フィンメカニカは第1四半期の業績改善

Finmeccanica improves in first quarter of '06

Italian aerospace and defense giant Finmeccanica is continuing its positive financial development, confirming expectations for sales

and operating earnings for all of 2006 and 2007 as part . . .

ブッシュ大統領の国境のスピーチはUAV利用促進になろう、と当局述べる

Border speech likely to spur UAV access, official says

President Bush's May 15 speech calling for 6,000 National Guard troops to be sent to the southern border of the U.S. to back up the

Border Patrol . . .

武器輸出規制が失敗したDARTプロジェクトの妨げに

ITAR regs hampered failed DART project

International Traffic in Arms Regulations (ITAR) restrictions hampered communications between Orbital Sciences Corp. engineers working on NASA's Demonstration of Autonomous Rendezvous Technology (DART) spacecraft and Britain's Surrey Satellite Technology Ltd., which provided a key piece of equipment implicated in the eventual failure of the mission.

The mishap investigation board that reviewed the April 15, 2005, failure also found insufficient oversight of the development process at Orbital by NASA's DART project office at Marshall Space Flight Center, and poor performance by engineers at both the company and NASA. In a public summary of a final report that was itself withheld because of ITAR concerns, the review board attributed the "human errors" in the spacecraft design to a lack of relevant training and experience within the design team.

Root causes

The panel was able to pinpoint a number of root causes for the mishap, which sent DART crashing into its target satellite with enough force that it raised the target's orbit by 1-2 nm. They included a high-risk, low-budget procurement; an "inadequate" approach to guidance, navigation and control (GN&C) software

development; similar inadequacies in the systems integration approach, and a failure to use available experts on the payroll.

DART's mission failed when it consumed all of its gaseous nitrogen thruster propellant because its GN&C software generated incorrect position data, which triggered excessive and unnecessary thruster firings and eventually sent the spacecraft on a collision course with its target, a disused military communications satellite known as Multiple Paths, Beyond-Line-of-Sight Communications (MUBLCOM). The mishap board found the GN&C software ordered navigation resets when its estimated and measured positions differed significantly, dumping the old position data and starting over again with a position provided by its primary GPS receiver. But that receiver, supplied by Surrey Satellite, had a 0.6 meter-per-second bias that wasn't accounted for in the software even though the "bug" was known. The problem was compounded because, as a British firm, Surrey was off-limits to receiving the same sort of satellite-navigation data that were removed from the board's report because of ITAR restrictions.

"In the case of DART, the [board] concluded that insufficient technical communication between the project and an international

vendor due to perceived restrictions in export control regulations did not allow for adequate insight,” the redacted summary of the board’s report stated.

Scott Crooms, the review panel’s chairman, stressed that there was no single root cause of the failure, and that the mission might have worked had the various issues not lined up as they did. For example, the panel found that **DART** was within four feet of passing through an imaginary “gate” in space that would have switched its **GN&C** to the laser ranging hardware that was a primary technology to be demonstrated, and that probably would have worked well.

“A number of things did go well; they actually worked as planned,” Crooms said yesterday. “This was the first time that the United States had attempted an autonomous rendezvous mission like this, and throughout the launch, the early on orbit checkout and the rendezvous up to the proximity of the **MUBLCOM** spacecraft, things worked. What didn’t work were a number of things. There was not one single cause. It was a combination of causes.”

The panel found that circumstances catapulted the **DART** mission from an appropriately high-risk “experiment” to an early and highly visible demonstration of the kind of robotic technology that will be needed to achieve President Bush’s goals of moving the U.S. space

exploration program out of low-Earth orbit, without the necessary upgrading of its technical oversight. It criticized the NASA research announcement (NRA) procurement approach, which minimized agency oversight, as inappropriate for the missions upgraded importance. But the panel also found the lessons of the failed mission will serve the exploration effort if they are applied in the future.

“In response to the Vision for Space Exploration to the Moon, Mars and beyond, NASA has entered a new and exciting period in its history where exploration is a primary objective,” the panel concluded. “Autonomous spacecraft rendezvous, proximity operations, and capture capabilities will continue to be critically important to successful space exploration. As the **DART** project evolved, its planned mission clearly supported that vision. While **DART’s** transition to such a high-visibility and important project did not proceed as planned, the lessons learned from the mishap will help enable the future development of autonomous capabilities.” - Frank Moring, Jr. (moring@AviationNow.com)

Global Hawk の Nunn-McCurdy 再認定のデッドラインが近づく

Deadline looming for Nunn-McCurdy recertification of Global Hawk

DEADLINE: The Pentagon has until June 5 to recertify the U.S. Air Force’s Global Hawk program, which breached Nunn-McCurdy

cost growth caps last year. The U.S. Air . . .

Datapath 社は Joint Network Node Network の \$72.9M の契約を獲得

Datapath wins \$72.9M contract for Joint Network Node Network

NODE NETWORK: Datapath Inc. of Duluth, Ga., has been awarded a \$72.9 million contract to provide equipment and support

services for parts of the Joint Network Node . . .

[Aerospace Daily & Defense Report](#) May 16, 2006

2名の議員がホワイトハウスに NOAA のリーダーシップを代えるように頼む

Two lawmakers ask White House to replace NOAA leadership

House Science Committee Ranking Member Bart Gordon (D-Tenn.) and David Wu (D-Ore.) sent a letter to the White House May 12 urging President Bush to replace the management of the National Oceanic and Atmospheric Administration (NOAA) due to its mishandling of the over budget National Polar-orbiting

Operational Environmental Satellite System (NPOESS). “We passionately believe that public service should require competence and personal accountability,” the letter says. “At NOAA, the evidence is in that a monumental failure of leadership and management has occurred.”

The lawmakers blast NOAA Administrator Vice Adm. Conrad Lautenbacher for what they call his lack of candor concerning the program's problems. "We were never sure whether he was purposely obfuscating or was legitimately ignorant of the problems," the letter says.

However, a new report on NPOESS from the Commerce Department's inspector general (DAILY, May 12) "suggests that he and other top managers at NOAA simply did not pay attention to

information pulsing through the NPOESS system that the cost and schedule were perilously at risk," the lawmaker said.

The letter also calls for the replacement of Gen. John J. Kelly, NOAA's deputy undersecretary for oceans and atmosphere, who is most directly charged with the day-to-day oversight of NPOESS. "He has been as forthcoming with the Congress and our committee as has been his boss; in other words, we can never get a straight answer out of him either," the let-

海軍:米国の海上における状況認識の乏しさは脆弱

Navy: Poor U.S. maritime awareness a 'vulnerability'

The U.S. Navy, and the nation as a whole, suffer "poor capability" to detect, identify, track and understand small ships in global littoral

waters, including off the . . .

Credit Suisse 投資コンサルティング:航空宇宙-防衛の分野は強気含み

Credit Suisse: aerospace-defense sector strong

BRIGHT PROSPECTS: U.S. aerospace and defense companies had a fairly strong earnings season, according to Credit Suisse analysts.

Defense firms with Army exposure tend to be top . . .

レイセオンは防空警備隊の F-15C 向けに AESA レーダのフライト・テストを開始した

Raytheon flight-testing AESA radar for Guard F-15Cs

Raytheon has begun flight-testing its APG-63 V(3) active electronically scanned array (AESA) radar, which the company is

producing for Air National Guard F-15C fighter jets. . . .

ハリス社は研究開発の予算を 50%近く増加

Harris Corp. boosts spending on R&D by nearly 50 percent

Harris Corp. has boosted its research and development spending by nearly 50 percent over the past two years to \$870 million in fiscal

2005 from about \$600 . . .

ノースロップ・グラマンは空軍の LAIRCM 大型機赤外線ジャマの契約で\$50M を得る

Northrop Grumman gets \$50M Air Force LAIRCM award

AIR FORCE LAIRCM: Northrop Grumman Corp. has received a \$49.5 million contract for delivery of large aircraft infrared

countermeasure (LAIRCM) system hardware, support equipment and services for . . .

韓国の企業 C&SPACE はメタンを燃料にしたロケット・エンジンで飛躍的技術を公表

S. Korean firm claims breakthrough on methane-fueled rocket engine

C&SPACE, a South Korean company, claims it has built and ground tested a 20,000- pound, force-thrust, methane-fueled rocket engine, leapfrogging U.S. efforts to do the same. Company officials said the regeneratively cooled, liquid oxygen/methane power plant is ready for production, and units can be delivered nine months

after receipt of an order. The development effort started as a Korean-government program in the mid- 1990s, but it was dropped when a new administration decided to use a kerosenefueled engine for its new sounding rocket. The project's principal researcher, Kyoungho Kim, started C&SPACE to continue development of the

methane rocket engine and brought it to production-ready status, he said. Ground tests in mid-March demonstrated a full-up version of the C&SPACE

“CHASE-10” methane engine, including a turbopump, gas-generator and regeneratively cooled combustion chamber. The engine ran at full power for 10 seconds producing 20,000 pounds of thrust with a nonoptimized nozzle.

NASA and the U.S. Air Force have been interested in developing a methane-fueled engine for some time because it offers higher performance, is a cleaner-burning power plant and offers the potential for quick-turnaround missions. However, budget constraints have derailed previous methane rocket programs, and

engine contractors have been reluctant to invest heavily in the technology. But all that could be changing. NASA recently awarded a \$10.4-million contract to Alliant Techsystems (ATK) for development of a 7,500-pound thrust LOX/methane propulsion system. On May 8, ATK subcontracted with XCOR Aerospace to assist with that project. XCOR has built and tested a 50- pound LOX/methane engine and is working on a 10,000-pound class version. NASA planned to use a methane-burning engine for its Crew Exploration Vehicle service module and lunar ascent module, but dropped that requirement early this year. So far, NASA has shown little interest in using the C&SPACE engine.

海軍は\$36.9M でさらにレイセオンのレーダ受信機を発注

Navy orders \$36.9M more Raytheon radar receivers

The U.S. Naval Air Systems Command has ordered \$36.9 million worth of Raytheon Co.’s ALR-67(V)3 radar warning receiver

systems for its F/A-18E/F aircraft, the company said May . . .

NDIA 米国防衛工業会: 国防省はセキュリティ・クリアランスをまもなく再スタート

NDIA: DOD to restart security clearances soon

CLEARANCES: The National Defense Industrial Association has told its members that the Defense Department is attempting to

restart the contractor security clearance process, and will prioritize requests . . .

ノースロップ・グラマンは Webb 宇宙望遠鏡の太陽光シールドのテストを完了

NG completes tests on Webb Telescope sunshield

Northrop Grumman has completed a long series of tests to prove that the James Webb Space Telescope’s five-layer sunshield will be able to protect the observatory’s sensitive cryogenic instruments from solar heat.

The 26 exacting tests took place all over the U.S. during a seven-year period starting in 1999. Each layer of the sunshield is about as thick as a human hair and is made of a polymer-based film. The sunshield is about the size of a tennis court and will have to endure extreme temperatures ranging from 400 degrees Kelvin (260 degrees Fahrenheit) to 30 degrees Kelvin (minus 406 degrees Fahrenheit).

The sunshield now has reached a Technology Readiness Level of 6, according to Northrop Grumman. Newport Beach, Calif.-based SRS Technologies built the sunshield at its Huntsville, Ala., facility. NASA’s follow-on to the Hubble Space Telescope, Webb will use

its 6.5-meter (21.3-foot) primary mirror to image the first galaxies that formed in the early universe. The telescope will orbit the sun at the L2 Lagrange point nearly 1 million miles from Earth.

The next major milestone for the program, which recently was rebaselined to compensate for an estimated \$1.5 billion cost overrun, is a nonadvocate review early next year. The review will bring together a group of experts with no connection to the program to provide an unbiased assessment of its readiness to proceed, according to Northrop Grumman spokeswoman Sally Koris. Preliminary design review is scheduled for March 2008 and launch will take place no earlier than June 2013 aboard an Ariane 5 rocket (DAILY, Sept. 26, 2005).

LM ロッキード・マーチンはベトナムの国家の最初の衛星を開発することに

LM to develop Vietnam's first national satellite

Vietnam is to get its first national satellite in 2008 under contract with Lockheed Martin signed by the Vietnam Posts and Telecommunications Group, which has been charged with implementing high-speed broadband services for the Southeast Asian nation.

Called Vinasat-1, the spacecraft is to be a C/Ku-band hybrid based on the A2100A platform and be delivered in a turnkey operation that calls for Lockheed Martin to handle all development aspects until the spacecraft is in a working orbit at 132 degrees east. Launch

is set for 2008. A launch provider has not been announced.

While it will serve all of Vietnam with radio, telephone and television services, one of its main goals is to bypass ground networks to allow Vietnam's rural communities and hamlets to receive telephone and television services.

Lockheed Martin's win caps a long-running competition that included bids from Alcatel/Astrium and NPO PM of Russia. Vietnam had hesitated for so long that it was in jeopardy of losing its ITU (International Telecommunications Union) orbital slot.

下院、上院の航空のリーダが外国のオーナーシップの規則の緩和でひざを突き合わせて議論

House, Senate aviation leaders see eye to eye on foreign ownership rules

BIRDS OF A FEATHER: Republican and Democratic aviation leaders from the House visited a Senate Commerce subcommittee

hearing May 9 on loosening foreign ownership rules and - ...

空軍は飛行船の AESA レーダでレイセオンを選定

Air Force taps Raytheon for airship AESA radar

AIRSHIP AESA: The U.S. Air Force Research Laboratory awarded Raytheon Systems Co. an \$8 million contract to develop

Lightweight, Low-Power Density Active Electronically Scanned Array (AESA) technology ...

ボーイングは Frankenplane 用に Hornet の部品を組合わせる

Fins, Boeing combine Hornet parts for 'Frankenplane'

'FRANKENPLANE': With an engineering feat that will create the world's only aircraft of its kind, the Finnish Air Force is

constructing its newest two-seater F-18D Hornet by ...

製造企業グループと国防総省は PPP(官民パートナーシップ)の NGMTI 次世代製造技術構想に 17 のプロジェクトを選定し\$430M を投資

Manufacturing group lists 17-project, \$430M effort

NGMTI PROJECTS: The Next Generation Manufacturing Technology Initiative, a Pentagon-sponsored public-private partnership focused on breakthrough manufacturing technologies,

has identified 17 strategic investment plans. These projects involve more ...

ノースロップ・グラマンは ICBM の先進技術ロケットのテストに成功

NG successfully tests ICBM advanced technology rocket

TEST SUCCESSFUL: Northrop Grumman Corp. said May 15 that it has successfully completed a static test fire of a Minuteman III

Intercontinental Ballistic Missile technology-demonstrator motor. The ...

JEFX は 2008 年に実 UAV、バーチャル UAV を特出しに

JEFX to feature real, virtual UAVs in '08

MACHINE TO MACHINE: The biannual **Joint Expeditionary Force Experiment** held at Nellis Air Force Base, Nev., focused on

networking and rapid targeting for manned aircraft, but saw . . .

国防総省は ACS 航空共通センサ・ミッションを有人と無人に分けることを思いめぐらす

Pentagon mulls dividing ACS mission between manned, unmanned systems

REINCARNATION: When the Army and the Navy both backed out of the **Aerial Common Sensor** intelligence gathering aircraft

program, it was a big blow to the signals . . .

NASA は延長寿命マーズ・ミッションに予算を継続する決断

NASA decides to continue funding extended-life Mars missions

STILL GOING: NASA has decided to continue funding the Mars Global Surveyor, Mars Odyssey, and the **Mars Exploration Rovers**, all of which are well past their originally planned duration and have been funded with periodic mission extensions.

Continued operations are expected to cost \$47 million in fiscal 2007. The **MER** rovers, which landed on Mars in early 2004, have lasted nearly 10 times their original 90-day design life. Spirit is now

parked on a north-facing slope in the Gusev Crater region to ride out the Martian winter, while Opportunity is heading for the 800-meter (2,624-foot) wide Victoria crater in Meridiani Planum. The mission team's goal for Opportunity is to "book it" across the remaining 1.5 kilometers (0.93 miles) to Victoria to try to ensure that the rover gets there before it dies, says Mars Program Lead Scientist Michael Meyer.

米国と豪州はデータ・シェアリングの協定を更新する予定

U.S., Australia to renew data-sharing agreement

DATA SHARING: The U.S. and Australia are set later this month to renew a data-sharing agreement for work on over-the-horizon radar.

The agreement coincides with renewed emphasis . . .

訂正: SBSS パスファインダ・プログラムでノースロップ・グラマンは空軍のミッション・エリア・プライム・インテグレータ契約者にとどまる

CORRECTION: The May 10 story "Air Force completes restructuring of SBSS Pathfinder program" contained an error.

Northrop Grumman remains the Air Force's Mission Area Prime Integrator Contractor . . .

下院軍事委員会の会長は NATO が空母 JFK を引継ぐことを示唆

Hunter suggests NATO take over JFK flattop

The chairman of the House Armed Services Committee is suggesting NATO take over the USS John F. Kennedy aircraft

carrier, which the U.S. Navy and the Bush . . .

下院科学委員会の民主党リーダーは NASA に予算増加を促す

House Science Democrats urge more money for NASA

Democratic leaders of the House Science Committee are urging the chairman and ranking member of the House Appropriations

subcommittee that oversees NASA to increase the agency's fiscal

シャトル・オービタは外部タンク、ブースタと結合された

Shuttle orbiter mated to external tank, boosters

The shuttle orbiter Discovery is being mated to its external tank and solid rocket boosters in the Kennedy Space Center Vehicle assembly building following its move May 12 from Orbiter Processing Facility Bay 3.

The rollover had been planned for May 11, but the need to replace a bolt in the harness used to lift Discovery in the VAB forced a one-day delay.

Discovery is scheduled for rollout to Launch Complex 39B on May 19, aiming toward a liftoff on the STS-121 mission as early as July 1. The mission's launch window for a flight to the International Space Station extends to July 19. The preparation of Discovery's cargo for the ISS is also proceeding. The flight's Leonardo Italian Multipurpose Logistics Module has been loaded with station supplies and moved from the Kennedy Space Station Processing Facility into the vertical cargo transporter that will load it into Discovery on the launch pad. In addition to food, clothing and other

supplies for the ISS Expedition 13 crew, Leonardo also contains a new station oxygen generation system.

Discovery will also carry a pallet loaded with a 1.5-ton pump module about the size of a Mini Cooper automobile. STS-121 astronauts Piers Sellers and Mike Fossum will mount the module to the exterior of the ISS during their second planned extravehicular activity (EVA). The module is a spare pump for the ISS cooling system. Discovery will also be carrying about a 300-pound replacement umbilical reel for the station's mobile base system. Sellers and Fossum will also install the reel to replace one of two existing reels rendered inoperative after the failure of an umbilical safety inhibit. The mobile base system is critical to moving the station's manipulator arm to different work sites to complete ISS assembly over the next several years. Leonardo and the pallet with the spare pump and replacement reel are scheduled for transfer to the launch pad and placement in Discovery around June 6.

米とカナダは NORAD を延長、拡大する方向に動く

U.S., Canada move to extend, expand NORAD

The U.S. and Canada on May 12 took the final step toward extending and expanding the North American Aerospace Defense

Command (**NORAD**), exchanging diplomatic notes that renew

[Aerospace Daily & Defense Report](#) May 12, 2006

下院は 2007 年度防衛予算\$513B を通す

House passes \$513B FY '07 defense authorization bill

The House chose May 11 to authorize \$5 billion for the U.S. Air Force's **High Altitude Airship (HAA)** Program, offset by an equal

amount taken from the . . .

NPOESS 極軌道環境観測衛星の管理は警告兆候を繰り返した

NPOESS management ignored repeated warning signs, IG says

The National Oceanic and Atmospheric Administration (NOAA) and the tri-agency committee charged with overseeing the National

Polar-orbiting Operational Environmental Satellite System (**NPOESS**) were not hands-on enough and . . .

テキサス州出身の共和党下院議員 DeLay 氏は宇宙輸送協会の朝食会でワシントン宇宙業界のメンバに別れを告げる

DeLay bids goodbye to space community

Former House Majority Leader Tom DeLay (R-Texas) bid goodbye to members of the Washington space community at a Space Transportation Association breakfast on Capitol Hill May 11, . . .

MDA ミサイル防衛局は第2次 THAAD のフライト・テストに喜んだ

MDA pleased with second Thaad flight-test

The second test of Lockheed Martin's Theater High-Altitude Air Defense system since a major overhaul was "successful" in meeting

all objectives, according to Missile Defense Agency Director . . .

インドは民事、軍事空域のリソースの統合に向けて動く

India works to integrate civil, military airspace resources

With India's skies getting crowded as its aviation sector continues to grow - more than 12 percent over the past year - efforts are under

way to . . .

空軍はインテグラル社と AEHF C2 契約を 1 つにまとめる\$21M の契約を行なう

Air Force gives Integral \$21M to consolidate AEHF C2

AEHF CCS-C: Integral Systems Inc. announced May 10 that the U.S. Air Force awarded it a \$21.5 million contract modification for

the Advanced Extremely High Frequency (AEHF) . . .

2006年5月19日 19:10 時事通信社「世界週報」 5月30日号 [\[目次抜粋\]](#)

検証・ライブドア事件(上)

エンロン、ワールドコム事件との類似性(東条正美)

特集・放送改革と政治

NHK改革と日本の電波行政(服部孝章)

米国の電波行政とデジタルへの移行(金山 勉)

BBC、受信料制を10年維持 英放送白書(高橋篤史)

日本国際フォーラム第26政策提言

国際エネルギーの安全保障体制の構築(上)

<シリーズ>

座標/「虎の威を借る狐」症候群(山本卓眞)

ワシントン・レポート/幻の金正日総書記訪米(大熊良明)

日本と世界の安全保障/日本はイランの核開発阻止に積極関与を(西原 正)

今週の軍事情報/ロシア・ウクライナの輸送機を使い始めた NATO(江畑謙介)

知られざる自衛隊/海自独特の物件費節約作戦(風間 實)

[\[平山ニュース 2006年5月15, 19, 22日\]](#) <http://www.wikihouse.com/space/>

[NEWS]

5/20 ISAS 山下教授「宇宙農場構想」火星で養蚕 蛹を食用に(時)

5/12 シャトル Discovery 号が組立棟へ移動(NASA,共)

[予定]

5/26 2109-2154GMT 打上:(通信衛星 SATMEX 6,通信衛星 THAICOM 5),Ariane5ECA,Kourou

5/25 0600-0630JST 放球:気球 BVT60-2 号機(高度記録に挑戦),JAXA 三陸

5/24 2211-2311GMT 打上:静止気象衛星 GOES N,Delta 4,Cape Canaveral

[EVENT]

6/30 応募締切:第1回子ども衛星アイデアコンテスト>YAC

5/20 JAXA 地球観測センター一般公開,埼玉県鳩山町

5/17 JAXAi マンスリートーク「防災と宇宙開発」新山司氏

[学会]

6/22 陸域観測技術衛星(ALOS)データ利用シンポジウム

「だいちが変える地球観測」,銀座フェニックスプラザ

6/21-22 IEICE 宇宙・航行エレクトロニクス研究会 宇宙応用シンポジウム,JAXA 筑波

6/15 地球環境変動観測ミッション(GCOM)シンポジウム,品川三菱ビル

6/3 申込締切:The 2nd Hayabusa Symposium,7/12-14,東大(浅野キャンパス)

5/26 IEICE 宇宙・航行エレクトロニクス研究会,高知工科大学

5/14-18 日本地球惑星科学連合 2006年大会,幕張メッセ

[TV]

ディスカバリーチャンネル

- ・5/25 2100-2200 未来に向かって:宇宙探検
- ・5/24 2100-2200,5/26 0100-0200,0800-0900 土星探査機カッシーニ
- ・5/24 1600-1700 火星を目指して:火星への夢
 - 5/24 2000-2054 BS-i (再)人類、月に立つ(6)
- 「人類の偉大な躍進 アポロ 11 号月面着陸」
- ・5/23 2100-2200,5/25 0100-0200,0800-0900 彗星探査機ディープインパクト
- ・5/22 2100-2200,5/24 0100-0200,0800-0900 火星移住計画
 - 5/22 2100-2200 ディスカバリーチャンネル 火星移住計画
 - 5/21 2210-2300 NHK-BS1 未来への提言(2)
- 「理論物理学者 リサ・ランドール 異次元を語る」インタビュアー 若田光一氏
 - 5/18 2100-2254 テレビ東京 映画「アポロ 13」
 - 5/17 2000-2054 BS-i (再)人類、月に立つ(5)
- 「月着陸船スパイダー 技術者たちの挑戦」
 - 5/15 2000-2054 NTV 世界まる見え!テレビ特捜部 ロケットおやじ ほか

[etc.]

7/14 公募締切:第9回宇宙環境利用に関する地上研究の公募>JSF

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

-
- 宇宙服 デザインコンテストで上位 10 作品発表 (毎日新聞) (25 日 10 時 9 分)
 - <宇宙服> デザインコンテストで上位 10 作品発表 (毎日新聞) (24 日 20 時 17 分)
 - 米探査機ボイジャー、「太陽圏」のゆがみを発見 (読売新聞) (24 日 12 時 49 分)
 - 韓国初の宇宙飛行士に 2 万人以上が応募、CEO も (YONHAP NEWS) (23 日 18 時 22 分)
 - 赤外線天文衛星 「あかり」の初観測画像を公開 JAXA (毎日新聞) (23 日 10 時 7 分)
 - 赤外線天文衛星 「あかり」の初観測画像を公開 JAXA (毎日新聞) (23 日 10 時 7 分)
 - 「あかり」が観測した渦巻き銀河 (時事通信) (22 日 21 時 21 分)
 - <赤外線天文衛星> 「あかり」の初観測画像を公開 JAXA (毎日新聞) (22 日 21 時 2 分)
 - 渦巻き銀河の姿くっきり 衛星「あかり」の初画像 (共同通信) (22 日 18 時 35 分)
 - 【中国】中国のロケット開発、「スペースシャトル」も視野 (サーチナ・中国情報局) (22 日 13 時 27 分)
 - 火星で養蚕、サナギを食料に (時事通信) (20 日 17 時 20 分)
 - 火星で養蚕、サナギ食料に = 手軽な動物たんぱく源 - 「農場」を構想・宇宙機構教授 (時事通信) (20 日 15 時 1 分)
 - シャトル飛行再開、最終段階 (時事通信) (20 日 11 時 27 分)
 - ディスカバリーが発射台へ 1 年ぶり飛行再開目指し (共同通信) (20 日 10 時 12 分)
 - 北、ミサイル発射準備か テポドン 2 号 直前の兆候はなし (産経新聞) (20 日 2 時 52 分)
 - 北朝鮮 テポドン発射準備の兆候 金融制裁緩和狙い再び恫喝外交 (産経新聞) (19 日 16 時 25 分)
 - 宇宙旅行の桜が開花 シャトルに積んだ種 (共同通信) (18 日 17 時 59 分)

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

-
- 米原子力空母佐世保入港 横須賀配備後継艦同型 (共同通信) (25 日 10 時 23 分)

- 尹国防長官、韓日米国防3者会談の開催を希望 (YONHAP NEWS) (25日10時13分)
- 中国の軍拡路線警告 米国防総省年次報告書 「軍事均衡崩す恐れ」(西日本新聞) (25日10時1分)
- 軍事力を故意に過大視 = 米報告に「強烈な不満」 - 中国 (時事通信) (25日1時0分)
- 中国軍事費、公表の3倍超 英戦略研が報告書で試算 (共同通信) (25日0時38分)
- 米軍再編の閣議決定、来週中で調整...沖縄県と交渉難航 (読売新聞) (24日22時15分)
- 中国の軍拡危険視 米国防総省報告 (産経新聞) (24日16時0分)
- 中国の軍拡路線警告 米国防総省年次報告書「均衡崩す恐れ」(西日本新聞) (24日15時12分)
- 改正防衛庁設置法が成立、装備の調達機能を一元化へ (読売新聞) (24日11時42分)
- 北朝鮮 テポドン発射準備の兆候 金融制裁緩和狙い再び恫喝外交 (産経新聞) (19日16時25分)
- <北朝鮮>テポドン発射の兆候 示威行動の可能性も (毎日新聞) (19日10時52分)
- 米空母余生は最大人工魚礁 メキシコ湾 (産経新聞) (18日16時25分)
- <米海軍>退役空母を爆破、海底の人工岩礁に (毎日新聞) (18日13時44分)
- 治安権限移譲可能な州なし イラク、米軍トップ証言 (共同通信) (18日13時26分)
- 次官の2兆円発言は遺憾 米軍再編経費で額賀長官 (共同通信) (18日12時26分)
- イラク駐留米軍の縮小は約束できない = 国防長官 (ロイター) (18日10時39分)
- 国連のイラク北部事務所開設 空白が輸送支援 (産経新聞) (18日3時42分)
- 宿毛寄港米艦は空母護衛 西太平洋で警戒任務 - 高知新聞 (17日18時25分)
- 米同時テロ 激突の瞬間 国防総省が映像公開 (西日本新聞) (17日16時58分)
- ペンタゴン 激突の瞬間 米中枢同時テロ (産経新聞) (17日16時21分)
- 米軍再編、振興策協議を確認 内閣府が知事と意見交換 (琉球新報) (17日16時9分)
- 「多数は再編支持」 沖縄クエスチョンシンポ開幕 (琉球新報) (17日16時6分)

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

- イラン核問題、一定の進展か = 協議継続で妥協点模索へ - 6カ国 (時事通信) (25日7時0分)
- 核融合炉計画で仮署名 来年中に正式始動へ (共同通信) (24日21時39分)
- イラン、核問題で米国との直接協議を希望 = 米紙 (ロイター) (24日13時50分)
- <中国>日本との資源紛争で軍備拡大か 米防総省が年次報告 (毎日新聞) (24日11時28分)
- イラン核問題は外交的解決目指す = 米大統領 (ロイター) (24日11時19分)
- 西岸撤退計画に理解、イランへ警告 = イスラエル首相と会談 - 米大統領 (時事通信) (24日9時0分)
- 地域紛争に対応、「確かな脅威」に = 「中国の軍事力」 - 米報告 (時事通信) (24日9時0分)
- イラン核 米、安保理枠外で圧力 (産経新聞) (24日3時36分)
- ロシアの核ミサイル、市民団体が廃棄へ = 1基1100万円で買い取り調印 (時事通信) (23日7時1分)
- 対イラン制裁、溝深く 独中首脳会談 中国、反対を堅持 (産経新聞) (23日3時10分)
- イラン核 濃縮原料 中国製か B B C報道 技術の確立早める (産経新聞) (19日16時25分)
- 北朝鮮 テポドン発射準備の兆候 金融制裁緩和狙い再び恫喝外交 (産経新聞) (19日16時25分)
- テポドン2号発射準備の兆候 = 北朝鮮、対米けん制狙いか (時事通信) (19日11時2分)
- 中国へ武器密輸計画 巡航ミサイルも 台湾人被告罪状認める (産経新聞) (19日3時2分)
- 核不拡散で協調体制訴え アナン国連事務総長が講演 (共同通信) (18日17時42分)
- 米、中国の参加受け入れ ミサイル発射の情報拠点に (共同通信) (18日17時5分)
- 「核の恐怖」も話題に = 両陛下、国連事務総長と会見 (時事通信) (18日17時2分)

- 南北関係の発展が核問題解決に、李統一部長官 (YONHAP NEWS) (18日 15時 24分)
- 湾岸諸国、イランに核兵器保有断念説得で特使派遣へ (ロイター) (18日 13時 11分)
- 湾岸諸国、イランに核兵器保有断念説得で特使派遣へ (ロイター) (18日 13時 11分)
- カットオフ条約案提示へ = 対印原子力協力にらみ - 米 (時事通信) (18日 13時 1分)
- 検証措置設けず国連付託も 米がカットオフ独自条約案 (共同通信) (18日 11時 17分)
- 専門家交え集中討議開始 カットオフ条約で軍縮会議 (共同通信) (17日 20時 36分)
- <駐日イラン大使> 核問題、欧州の見返り案は受け入れられぬ (毎日新聞) (17日 18時 53分)
- 包括的見返り案を拒否 イラン大統領 (共同通信) (17日 17時 53分)
- イラン大統領、ウラン濃縮めぐり欧州の提案を批判 (ロイター) (17日 17時 31分)
- I E A、イラン原油供給停止でも4年間補える = 米エネルギー省高官 (ロイター) (17日 10時 25分)
- 軽水炉技術提供を検討 イラン核で欧州3カ国 (共同通信) (17日 9時 8分)
- 米、テロ情報提供評価 26年ぶり国交正常化 リビア、協力は不透明 (産経新聞) (17日 4時 8分)
- エジプト外相、イラン核問題「安保理で平和に解決を」 (読売新聞) (16日 19時 39分)
- イラン核問題でEUの方針を支持 = 中国外務省 (ロイター) (16日 17時 30分)

[\[ASAGUMO NEWS\]](http://www.asagumo-news.com/) 朝雲新聞社 <http://www.asagumo-news.com/>

5/18 「コラム」更新

・朝雲寸言 /// ・在日米軍再編 /// G8前に米露確執

5/15 「ニュース」更新

普天間移設 海兵隊移駐

2014年までに完了へ 2プラス2で最終合意 在日米軍と自衛隊 再編へロードマップ

同盟の深化を示す新文書を

防衛首脳会談で額賀長官が提案

露など4カ国と防衛当局間協議

施設庁解体後の組織改編

監査・監察部局を新設 総務・人事や企画立案

護衛艦部隊など出発へ

ハワイ周辺海域で「リムパック06」

<イラク復興支援>

10次群クウェート着 12旅団主力の500人 イラク・ドキュメント (2006.4.25~5.8)

那覇基地

航空機洗機場が完成 101飛、陸自部隊で初めて

防衛関連資料

2プラス2 (日米安保協議委員会) 共同発表

再編実施のための日米ロードマップ

[新刊紹介] 「国際軍事データ2006」 数字で読む明日の世界
 財団法人 ディフェンス リサーチ センター 編著

http://www.asagumo-news.com/Military_DATA/ISD.html

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特別付録 : 米国防総省年次報告書、 『中国の軍事力』 2005 年版 (全訳)



[\[民間航空機関連 \(ex-SJAC 三輪さん\)\]](#)

2006 年 5 月 20 日 0:20 AIA dailyLead May 19, 2006 -

「一方の話を聞いただけでは闇に入ります。両方の意見を聞いて初めてクリアに見えてきます。」

カナダ作家 トーマス C ハリバートン

"Hear one side and you will be in the dark. Hear both and all will be clear."

--Thomas C. Haliburton, Canadian author

2006 年 5 月 19 日 1:11 AIA dailyLead May 18, 2006 -

「問題は金だけじゃない、ピッチ (試合場) での成果である。」

ロナルディージョ

"It is not just about the money, it is about what you achieve on the pitch."

--[Ronaldinho](#), soccer player

2006 年 5 月 18 日 1:00 AIA dailyLead May 17, 2006 -

「人間 80 歳にもなれば大体の事は何でもわかっている。問題はどれだけ覚えているかだ。」

米国コメディアン ジョージ・バーンス

"By the time you're 80 years old you've learned everything. You only have to remember it."

--[George Burns](#), American comedian

2006 年 5 月 17 日 1:27 AIA dailyLead May 16, 2006 -

「考えが変わるのは自由の証」

"The clash of ideas is the sound of freedom."

--[Lady Bird Johnson](#) Former first lady of the U.S.

2006 年 5 月 16 日 1:04 AIA dailyLead May 15, 2006 -

「地球が回っている限り、我々は気持ち悪くなり間違いを犯すことも当然だ。」

メル ブルック 米国コメディアン

"As long as the world is turning and spinning, we're gonna be dizzy and we're gonna make

mistakes."

--[Mel Brooks](#), comedian

2006年5月20日 0:20 AIA dailyLead May 19, 2006 -

エアバス スーパージャンボ機 ヒースロ空港にはじめて到着

Airbus superjumbo jet touches down at Heathrow



The Airbus A380 superjumbo jet landed at London's Heathrow Airport Thursday for the first time. The plane features twin decks and is 240 feet long. The plane arrived to test the airport's facilities, and

onlookers said the plane was quieter than expected. [Seattle Post-Intelligencer/Associated Press](#) (5/18), [Forbes](#) (free registration) (5/18)

ボーイング 737の米海軍向け多目的機

Boeing will build 737s for Navy program

Boeing will start building 737 jetliners for the Navy in 2007 as part of the Multimission Maritime Aircraft program. The program could become a model

program to build tankers for the Air Force. Boeing is competing for that contract now. [Seattle Post-Intelligencer](#) (5/19)

ジェットブルー航空のCEO 次4半期は利益を予想

JetBlue CEO sees profits for next three quarters

JetBlue Chief Executive David Neelman said the carrier will post profits for the next three quarters. However, Neelman did not change JetBlue's forecast

for an annual loss in 2006. [Newsday \(Long Island, N.Y.\)](#) (5/18), [Airwise/Reuters](#) (5/18)

フィラデルフィア国際空港 改善プロジェクト この夏から

Runway project starts this summer in Philadelphia

A project aimed at reducing delays at Philadelphia International Airport will begin this summer and take a year to complete. Officials plan to extend the

airport's north-south Runway 17-35. [The Philadelphia Inquirer](#) (free registration) (5/18)

燃料費高騰にもかかわらずエアラインの航空客増えている

Airlines attract travelers despite fuel costs

Airlines may post gains during the summer season, and bookings for international flights are up from last

year, according to AAA. "They just keep booking; it's really amazing," said Terry Trippler, an airline expert

with Cheapseats.com. "We're looking at a summer of 2000 almost -- back to record levels." [Pittsburgh](#)

[Post-Gazette](#) (5/19), [The Wall Street Journal](#) (subscription required) (5/19)

AIA 宇宙開発に関する情報集(トピックスも含め) 準備

AIA preparing space exploration information toolkit

AIA's space and legislative departments are producing a topical guide to the nation's space exploration initiatives for briefing Congress, industry and trade press on the long-term economic and national security benefits generated by key NASA

programs. AIA plans to circulate the kit among a broad congressional audience to deepen legislators' understanding of why the nation explores the galaxy beyond our universe. [Read more in the AIA Update](#)

2006年5月19日 1:11 AIA dailyLead May 18, 2006 -

ノースロップ 新社長指名

Northrop names Wesley Bush president

[Northrop Grumman](#) has named Wesley Bush to the post of president. The announcement is expected today. Bush previously was Northrop's chief financial officer, and his appointment comes as the company

seeks hurricane relief and partners with [EADS](#) to compete for an Air Force contract. [The Wall Street Journal](#) (subscription required) (5/18)

政府助成をめぐる論争 膠着状態

Negotiations stall in aircraft subsidy dispute

The U.S. and EU do not appear poised to resolve a dispute over aircraft subsidies soon. EU trade chief Peter Mandelson said the U.S. is unwilling to

negotiate; U.S. officials have called launch aid for the [Airbus](#) A350 "unacceptable." [The New York Times/Reuters](#) (free registration) (5/17)

US エア航空 アメリカ ウェスト航空との合併 検討継続

US Airways optimistic about future merger challenges

[US Airways](#) will continue working through challenges related to its merger, CEO Doug Parker said at the company's shareholders meeting. Unresolved issues include the combination of the US Airways and

America West reservation systems, contract negotiations and seniority integration, he said. [The Arizona Republic \(Phoenix\)](#) (5/18)

アメリカン航空 CEO コスト削減が生き残りの策と

American CEO focuses on lowering costs

Cutting costs is the key to surviving in the airline industry, [American Airlines](#) Chief Executive Gerard Arpey said. Arpey said the company continues to

make improvements that will restore profitability. [The Washington Post/Reuters](#) (free registration) (5/17)

UPS(航空貨物) ケンタッキー州ルイヴィル空港ハブ基地拡充に10億ドル

UPS plans \$1 billion expansion for Louisville hub

[UPS](#) said it will spend \$1 billion to expand its hub in

Louisville, Ky. The company will add 5,000 jobs and

1.1 million square feet to the hub. "We anticipate strong growth in global trade to continue for years to come," UPS Chairman and CEO Mike Eskew

said. [Airwise/Reuters](#) (5/17), [The Cincinnati Enquirer/Associated Press](#) (5/18), [Air Transport World](#) (5/18)

2006年5月18日 1:00 AIA dailyLead May 17, 2006 -

ボーイング CEO 政府との和解案を妥当と評価

Boeing CEO says settlement is "fair"

Boeing President and CEO Jim McNerney called the company's \$615 million tentative settlement with the government "fair." The agreement stipulates that the

government will not prosecute Boeing after an ethics investigation. [Fort Worth Star-Telegram \(Texas\)/Associated Press](#) (free registration) (5/16)

FAA 航空管制自動化プログラムに NICE システム採用

NICE Systems will provide technology for FAA project

Lockheed Martin has picked digital recording technology **NICE Systems** to provide systems for monitoring and analyzing telephony voice interactions between pilots and flight service specialists. The

contract is part of Lockheed's project to manage the Federal Aviation Administration's Automated Flight Service Stations. [Globes \(Israel\)](#) (5/16)

エアバス A350 新計画を 7 月に発表

Airbus will present new plan for A350 in July, CEO says

Jetmaker **Airbus** may make changes to its A350 aircraft and present a new plan for the plane in July.

Airbus has not yet made a final decision on the A350, CEO Gustav Humbert said. [The Wall Street Journal/Dow Jones Newswires](#) (subscription required) (5/17), [Airwise/Reuters](#) (5/17)

空港プロジェクト 費用面での圧力から 縮小化余儀なし

Airports feel effects of cost-cutting efforts

Airlines are pressuring airports to lower their costs and fees. Some airports have also scaled back large expansion projects because airlines cannot afford

them, while other airports have lured new carriers with low operating costs. [The Wall Street Journal](#) (subscription required) (5/17)

破産宣言法がエアライン再生にどの程度役立っているか疑問視

Bankruptcy's role uncertain, analysts say

It is unclear if bankruptcy filings will help carriers return to profitability, analysts say. However, **Delta Air Lines** and **Northwest Airlines** reported smaller

losses in the first quarter. Both carriers currently operate under bankruptcy protection. [The Street.com](#) (5/17)

2006年5月17日 1:27 AIA dailyLead May 16, 2006 -

ボーイング 係争中の 2 件(天降りおよび競合書類不正使用) 妥結に向かう

Boeing reaches settlement to end two investigations

Boeing said it will pay \$615 million to end three

years of federal investigations into two cases. The

investigations involve the illegal hiring of an Air Force official and the use of a competitors documents to win a contract. [The Washington Post](#) (free

registration) (5/15), [MSNBC](#) (5/16), [The Sun \(Baltimore\)](#) (free registration) (5/16)

民間機需要に支えられ EADS 社 第一 4 半期業績アップ

Demand for jetliners helps EADS Q1

Stronger aircraft deliveries helped [EADS](#) post a 26% jump in first-quarter profits. EADS is the parent of

jetmaker Airbus, which expects to deliver 430 planes this year. [Bloomberg](#) (5/16)

論評：(ジョージア大教授) デルタ航空の硬化した経営姿勢が業績悪化の原因

Opinion: Rigid policies hurts Delta, fliers

Some of [Delta Air Lines'](#) financial problems are the result of poor customer service and fare management, writes University of Georgia economics professor Jeffrey H. Dorfman. Dorfman writes that some

policies that restrict the number of free or discounted seats offered actually hurt the airline. [Journal and Constitution \(Atlanta\)](#) (free registration) (5/15)

ノースウェストと荷物ハンドリング下請会社との紛争めぐり仲裁始まる

Contract hearings start for Northwest, baggage handlers

[Northwest Airlines](#) and its baggage handlers still have not reached a contract agreement. Hearings to determine whether the carrier can void the current contract began Monday. [The Wall Street](#)

[Journal/Dow Jones Newswires](#) (subscription required) (5/15), [The Washington Post/Associated Press](#) (free registration) (5/15)

論評：US エア航空、ユナイテッド航空の顧客満足度改善

Study: Customer satisfaction improves at US Airways, United

Customer satisfaction has improved at United Airlines and [US Airways](#), according to a study by the University of Michigan. Satisfaction decreased for the

industry overall. [Pittsburgh Tribune-Review](#) (5/16), [Chicago Sun-Times](#) (5/16)

2006 年 5 月 16 日 1:04 AIA dailyLead May 15, 2006 -

米空軍 原油以外の代替燃料を検討

Air Force searches for alternative to oil-based fuel

The Air Force is looking for alternative fuel for its jets and is testing a blend of traditional crude-oil-based jet fuel and synthetic liquid. The synthetic liquid will

eventually be made from coal. [The New York Times](#) (free registration) (5/13)

旧型航空機 燃料費高騰で 再登場の機会殆どなし

Older jetliners are likely to stay parked

Experts say there is little chance that many of the

2,000 jetliners parked in New Mexico, California and

Arizona will fly again. High fuel prices have made the older planes less efficient to operate. [The Boston](#)

[Globe/Reuters](#) (5/15)

米国航空会社にとって、需要とともに価格も上昇が見込まれる

Demand, fares rise for U.S. carriers

Demand for airline travel is rising as the number of available seats decline. Fares in the U.S. climbed 10.5% in the first quarter from year-ago levels, and the cost of fuel, and less competition have reduced

available tickets out of Indianapolis to a 5-year low. [The Street.com](#) (5/15), [The Indianapolis Star](#) (5/14)

ボーイング社 787購入者に対して整備サービスパッケージを提供

エアラインは運航に専念

Boeing to offer maintenance chain for 787

Boeing will provide a maintenance and supply chain to airlines that purchase the 787. The product, dubbed GoldCare, will allow the airline to concentrate

on flying the jetliner, Boeing said. [Air Transport World](#) (5/15)

アメリカン航空 整備事業拡充

他の航空会社の仕事も取り込む

American expands maintenance program

American Airlines expects its maintenance program to generate \$400 million in revenue and cost savings by 2008. The carrier is expanding its maintenance

program, which involves doing work for other airlines. [The Wall Street Journal/Dow Jones Newswires](#) (subscription required) (5/12)

[1] ロッキードが、ベトナム初の衛星を受注 (AFP 5月12日)

入札結果は、1 ロッキード、2 住友商事(=ペイロード NT-Space + 衛星バスOrbital Science)、3 Alcatel + EADS-Astrium だそうです。直前までNT-Space +Orbitalで決まるかと思われていたのに、米の驚に油揚げをさらわれた格好です。しかし、納期もあまりないのに、米は本当にちゃんと衛星を造って、打上げてくれるのでしょうか。興味深々です。

[2] やはり平和利用が原則だ 宇宙開発新法 (西日本新聞 2006/05/15 朝刊)

このような論調が、日本ではまだ一般的なのだなあ、あらためて嘆息。

[3] インド初の月探査、米が協力 宇宙分野で“蜜月” (産経新聞)

ISRO だけで宇宙技術者が 15,000 人もいるのですね。

[4] 最後のF1視界不良 引退後進路決まらず...「鉄くず」の危機も (2006/05/12 東京朝刊)

[1] ロッキードが、ベトナム初の衛星を受注 (AFP 5月12日)

ベトナム人の職員が金曜に米防衛大手ロッキード・マーチン(LM)がベトナム初の衛星を組立てると述べた。米にとって、最初の共産主義国での通信事業の受注。

LM 商業宇宙システムは、欧州の EADS アストリウムとアルカテルエスパス連合と、日本の住友商事と組んでいた別の米企業と競争していた。匿名を条件に、ベトナム郵政省職員が、AFP に漏らしたところでは、「米グループ LM が安値を付けました」彼は、この取引は、金曜遅くに行われる署名式で決着すると発言。

ベトナム政府と LM との契約詳細はまだ入手できていないが、地元新聞によれば、契約金額は 1 億 6800 万ドルで、ハノイ政府が用意した 1 億 8000 万ドルに収まっている。「外国メーカ選定にあたっては、技術と金額の両方に基づいて選択が行われた。」と、ベトナム人職員は述べた。

Vinasat と呼ばれる 20 の通信モジュールからなる衛星は、2008 年第 2 四半期までに打上げられなければ、何年も前に予約した軌道権益が失われる。このプロジェクトが大幅に遅れたのは、隣接軌道に衛星をもつ諸国との間の周波数権益調整に時間がかかったためである。

ハノイ政府は Vinasat を、主権と技術力の重要なシンボルであるとなしている。衛星運用寿命は 15 年間で、テレビ/ラジオ放送、民間航空信号を、全国に送信する。しかし、また、それには、主要な防衛上の意味がある、昨年、国営メディアは「国防通信とベトナムの公共テレビ放送に役立つ地上管制局」の工事が必要と述べた。

また、ベトナムが、米の会社に衛星製造を発注したという事実も米との相互関係の改善を象徴している。昨年、ファン・バン・カイ首相は、1975 年にベトナム戦争が終わって以来初の、ベトナム人指導者によるワシントン訪問を行った。

「契約はベトナムが変化したという非常に強い信号です。」と、アラン・ケイニー、ヨーロッパ商工会議所長はベトナムで発言。彼は、欧州連合が契約をとれなかったことで、大変に失望したと述べた。「だが、数年前に、ベトナムが、衛星調達を米に頼むと想像したでしょうか？ 衛星は、極めて重大な話である。それは国家安全保障のための監視装置である。」と、彼は発言。

この取引は、米のビジネスが、ベトナムで広範囲な成功を遂げつつあり、かつての敵同士の政治的結びつきが変わったことを意

味している。ハノイと米政府は、ベトナムが WTO 加盟を可能にするために協定を取決めるべく、最終調整中であり、米ブッシュ大統領は今年 11 月にハノイで開かれるアジア太平洋経済協力会議サミットに参加すると予想されている。

「ベトナムと、WTO 加盟調印とブッシュ訪問の前には、米の非常に強い利害の後押しがあります。」と、欧州のビジネスマンは述べた。彼は、「それ自体は良いものです。しかし、欧州の企業は、公正な競争と透明性が厳密に尊重されることを、確実にしてもらわなければならない。」とつけ加えた。

<http://uk.news.yahoo.com/12052006/323/lockheed-martin-build-vietnam-s-first-satellite.html>

<http://uk.news.yahoo.com/12052006/323/lockheed-build-vietnam-s-first-satellite-official.html>

[2] やはり平和利用が原則だ 宇宙開発新法 (西日本新聞、2006/05/15 朝刊)

日本の宇宙開発・利用をめぐる状況が大きく変わろうとしている。自民党が「防衛目的」の軍事利用に道を開く「宇宙基本法案」を来年の通常国会に提出する方針を決めたからだ。

宇宙開発を「非軍事目的」に限定してきたこれまでの日本の宇宙政策では国際的な技術開発競争、宇宙産業ビジネス競争に後れを取りかねないため、政策を転換しようというもの。

自民党の宇宙平和利用決議等検討小委員会では、立法の趣旨を宇宙関連産業の育成と、日本の安全保障や危機管理への宇宙技術の活用と説明している。

だが、この新法ができれば、情報収集(偵察)衛星や早期警戒衛星など「防衛目的」の宇宙利用が初めて法的根拠をもつことになる。

しかも、日米が共同で取組むミサイル防衛(MD)計画が動き出すなかでの政策見直しである。「防衛目的」が拡大解釈される恐れはないのか。国民や日本の軍事動向に敏感な近隣諸国の理解は得られるのか。

宇宙政策だけでなく、わが国の安保政策の転換にもつながる新法である。法案化にあたっては、丁寧な説明と国民的な議論を求めたい。

先月、世界の最も大きいチップ・メーカー・インテルが、ベトナムで半導体組立運転プラントを建設すると発表する数週間後、ビル・ゲイツ・マイクロソフト会長はハノイでロックスター並の歓迎を受けた。彼の訪問記事は、地方紙では、共産党の 5 年に一回の全国大会の記事があったにも関わらず、一面トップであった。

アナリストは、衛星取引が将来同様の取引につながるかもしれないと述べた。

宇宙の開発と利用については、国連宇宙条約で軍事利用は制限されている。日本は同条約を受けて 1969 年に国会で「宇宙利用は平和目的に限る」とする平和利用決議を全会一致で採択した。この決議は以来、40 年近く日本の宇宙政策の原則となってきた。

当時のわが国は初の国産衛星打ち上げを目指していた時代だ。宇宙の利用が通信や気象・環境などの情報収集にまで広がったいま、宇宙開発の目的を「平和」に限定し「非軍事」と解釈した国会決議に縛られているのは、わが国の宇宙開発技術や宇宙関連産業の国際競争力が削(そ)がれるというのが自民党の言い分だ。

高度の性能をもつ衛星による情報収集は地球規模の環境破壊や災害、テロ、海賊の防止に役立ち、国際貢献にもつながるといふのも、新法制定の理由だ。

宇宙条約の軍事利用制限は「自衛の範囲の軍事利用は禁じていない」というのが国際的な解釈となっていることも、新法制定の動きを後押ししている。

既に情報収集衛星を導入し、MD 計画を推進していることを考えれば、わが国は軍事利用に踏み込んでいたと言った方が正確かもしれない。その意味では宇宙利用を「非軍事」に限定した国会決議の解釈は破綻(はたん)しているともいえる。

だからといって、平和利用の原則を捨てて現憲法の下で軍事利用を法的に認知するというのでは、短絡的すぎる。

平和利用が果たしてきた利点を検証し今後、平和利用の原則はどうあるべきかから議論すべきではないか。「始めに軍事利用ありき」では、平和憲法をもつ国としては、あまりにお粗末だ。

http://www.nishinippon.co.jp/nnp/column/syasetu/20060515/20060515_001.shtml

[3] インド初の月探査、米が協力 宇宙分野で“蜜月” (産経新聞)

【シンガポール＝藤本欣也】米とインドの協力関係が宇宙分野に広がっている。来年打上げ予定のインド初の月探査衛星に、米が最新鋭の観測機器を提供することになった。協力背景には、米自身の有人月探査計画に向けた調査の意味合いだけでなく、露の支援を得て米優位宇宙開発にくさびを打込もうとする中国を牽制(けんせい)する狙いもある。来年は中国や日本も月探査衛星を打上げる計画で、米、露に続く“宇宙大国”の座を目指し競争が激しさを増している。

インドが来年末にも打上げ、上空からの月面探査を計画しているのが無人衛星「チャンドラヤーン1号」。NASAは、搭載する観測機器のうち鉱物分布観測機器と、水の存在などを調べる合成開口レーダを提供することになり、九日、インド南部バンガロールで調印式が行われた。

インドは1962年に宇宙開発研究をスタート。75年、旧ソ連のロケットで初の人工衛星を打上げ、4年後には国産ロケットによる人工衛星打上げに成功。指揮をとるインド宇宙研究機構(ISRO)は約15,000人の技術者らを抱え、NASAに匹敵する規模を誇る。

これまでは主に通信や地表観測、遠隔医療といった「農村などに住む国民生活向上のために宇宙利用を進めてきた」(ナイール ISRO 理事長)が、近年の経済発展により方針を転換、各国がしのぎを削る月探査競争に名乗りを上げた。

月探査では、69年にアポロ11号が月面着陸し、米が旧ソ連との一番乗り競争に勝利。その後、宇宙探査の焦点は火星に移った。しかし、火星への中継地として月の存在が再び脚光を浴びようになり、プッシュミ政権は月面基地建設に向け、2018年をめぐりに有人宇宙探査再開方針を決めている。

国威発揚などを目的に宇宙開発で米に対抗しようとしているのが中国だ。90年代に宇宙船ソユーズを購入するなど露との間で宇宙協力を推進し、有人宇宙飛行に成功。現在、07年に無人探査衛星を月に打上げる計画を進めている。

当初は08年以降の打上げ予定だったインドが、それを前倒しして07年末までの打上げを目指す背景には、「ライバル中国への対抗意識が働いているのは間違いない」(外交筋)。今年3月、民生用の核協力でインドと合意した米が宇宙分野に対印協力を拡大するのも、中国をにらんだ布石とみられている。

日本も来年夏、延び延びになっていた月探査衛星を打上げる計画だ。JAXAでは、「インドはロケットの打上げや衛星の運用実績をみてもレベルは高い。月探査でも米の協力を得て中国よりは性能がいい」とみている。

<http://www.sankei.co.jp/news/060512/kok039.htm>

[4] 最後のF1視界不良 引退後進路決まらず...「鉄くず」の危機も (2006/05/12 東京朝刊)

国産初の超音速ジェット戦闘機として昭和52年から防空の任に当たり、今年3月9日に福岡県・築城基地でのラストフライトを終えて現役を引退した航空自衛隊の最後のF1支援戦闘機七機の

うち、3機の今後の身の振り方が決まっていない。F1パイロットや航空ファンから解体を惜しむ声が高まる中、地方自治体や博物館・学校などの教育機関、関連企業での展示の道が見つからないと、3機は解体され鉄くずとして売却される運命となる。

最大時 77 機が実戦配備されていた F1 も順次飛行時間が規定の 4,000 時間を超えたため、次世代戦闘機に活躍の場を譲り、最後まで活躍していたのは築城基地の 7 機となっていた。ラストフライト終了後、現在は同基地格納庫で空自が国有財産から登録抹消する「用途廃止」の手続きを待っており、5 月中にも手続きは終了見込み。

引退後の“進路”は 3 つあり、空自の施設や基地で「広報展示機」となるか、地方自治体や教育機関での展示用の「無償貸付け」、そしていずれからも声がかからない場合の「解体後売却」。売却は特定業者が対象で個人には売却しない。

F1 はこれまで大半が解体されてきたが、空自各基地内での「広報展示機」となるケースも多く、北海道えりも町の襟裳分屯基地から長崎県五島市の福江島分屯基地まで、全国各地の基地で余生を送っている。一方で、青森県三沢市のおおぞら広場や防衛関連企業への「無償貸付け」の実績もある。

<http://www.sankei.co.jp/news/060512/sha046.htm>

May 15, 2006 MEDIA ADVISORY: M06-081

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NASA は事故のレポート要約を公表

NASA RELEASES ACCIDENT REPORT SUMMARY

NASA released a summary Monday of the findings about why its Demonstration of Autonomous Rendezvous Technology spacecraft did not complete its mission and collided with the intended rendezvous satellite on April 15, 2005. Because the official mishap investigation board report contains information protected by U.S. International Traffic in Arms Regulations, it will not be publicly released. Instead, NASA has prepared a summary of the report, which omits the protected information. The summary is available at: <http://www.nasa.gov/dart> or <http://www.nasa.gov/formedia> Scott Croomes, the chairman of the mishap investigation board, will be available for telephone media queries Tuesday at 2 p.m. EDT. To

最後の 7 機も、4 機が築城基地 (2 機)、茨城県・百里基地、東京都・府中基地での展示が決まっているが、残る 3 機は未定という。

「用途廃止」の手続きが終わると F1 の武器類やエンジンは外されるが、迷彩塗装や翼の日の丸、機番、所属部隊マークなどは現役時代そのまま、静かに「無償貸付け」か「解体」を待つことになる。

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participate reporters must call the Marshall Space Flight Center, Huntsville, Ala., newsroom at: (256) 544-0034 by 1:30 p.m. EDT. Audio of the teleconference will be available at:

<http://www.nasa.gov/newsaudio>

This NASA craft was a low-cost, high-risk technology demonstrator, designed to establish autonomous rendezvous capabilities and proximity operations for the U.S. space program. It was successfully launched from Vandenberg Air Force Base, Calif., on April 15, 2005.

The spacecraft was to autonomously rendezvous with and perform a series of maneuvers in close proximity to a communications satellite no longer in use. The NASA spacecraft performed

nominally during the first eight hours of the mission ? launch, checkout, and rendezvous phases. It accomplished all objectives up to that point, though ground operations personnel noticed some anomalies with the craft's navigation system.

During proximity operations, the spacecraft began using more propellant than expected. Approximately 11 hours into the mission, the craft detected its propellant supply was depleted and began a series of maneuvers for departure and retirement. Although not known at the time, it made contact with and boosted the rendezvous satellite's orbit 1.2 nautical miles higher. The rendezvous satellite was not damaged.

Both satellites are in low-Earth orbits that will not be a hazard to other spacecraft. They will eventually burn up upon re-entry into the Earth's atmosphere.

The spacecraft and the Pegasus launch vehicle were developed by Orbital Sciences Corp., Dulles, Va. NASA's Exploration Systems Mission Directorate funded the project.

The mishap investigation report was the result of an investigation by an eight-member board established by NASA on April 21, 2005. The summary of the report was produced by the Exploration Systems Mission Directorate. For information about NASA and agency programs, visit: <http://www.nasa.gov/home>

Mon May 15, 10:26 PM ET

レポート: 宇宙機が衛星に突っ込む

Report: Spacecraft Crashes Into Satellite

By ALICIA CHANG, AP Science Writer

A robotic NASA spacecraft designed to rendezvous with an orbiting satellite instead crashed into its target, according to a summary of the investigation released Monday.

Investigators blamed the collision on faulty navigational data that caused the DART spacecraft to believe that it was backing away from its target when it was actually bearing down on it.

"The inaccurate perception of its distance and speed ... prevented DART from taking effective action to avoid a collision," the summary said.

The 800-pound Demonstration for Autonomous Rendezvous Technology spacecraft was supposed to rendezvous with a defunct Pentagon satellite during a 24-hour period last year.

DART successfully located the target satellite orbiting 472 miles above Earth and moved within 300 feet of it. But problems arose when DART tried to circle the satellite.

Investigators concluded that DART spent too much fuel steering itself toward the satellite. The excessive firings of its engines were caused by inaccurate navigational data from its on-board computer.

Determining that it wouldn't have enough reserve fuel to complete the mission, DART began shutting down about 11 hours into the mission, but not before crashing into the satellite.

Unbeknownst to engineers at the time, DART's main sensor mistakenly believed it was flying away from the satellite when it was actually moving 5 feet per second toward it, investigators

found.

The collision pushed the target satellite into a higher orbit. NASA said neither spacecraft pose a threat to other satellites and both will burn up upon re-entry into the atmosphere.

In addition, the investigation also concluded that DART overestimated how much fuel it consumed, although the remaining amount would not have been enough to complete the mission.

Investigators also raised issues with the mission's management style, saying that lack of training and experience caused the DART design team to shun expert advice. They also found that internal checks and balances were inadequate in uncovering the mission's shortcomings.

The 10-page document summarizing DART's failure comes a year after the spacecraft was launched from Vandenberg Air Force Base in California.

Last month, NASA said it won't release the investigative board's full 70-page report, citing sensitive information protected by International Traffic in Arms Regulations. The summary was prepared by the space agency's exploration systems mission directorate.

Robotic technology plays a critical role in NASA's plan to send humans back to the moon and Mars. The \$110 million DART mission was meant to test whether robots can perform some of the tasks astronauts currently must do.

DART was managed by NASA's Marshall Space Flight Center in Huntsville, Ala. It was built by Orbital Sciences Corp. Copyright ©

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Mon May 15, 10:00 PM ET

NASA は DART ミッションの事故の要約を公表

NASA Releases Summary of DART Mission Mishap

Tariq Malik Staff Writer SPACE.com

A software glitch, subsequent navigation errors and excessive fuel use led to the failure of an automated NASA spacecraft designed to rendezvous with a Pentagon satellite without human help last year, according to an investigation summary released late Monday.

In the 10-page summary, NASA investigators said the robotic DART spacecraft "repeated a pattern of excessive thruster firing in response to incorrect navigational data onboard..." leading to its failed rendezvous.

A lack of training and expertise among DART's design team also contributed to the spacecraft's failure, the investigation summary stated.

The summary wraps up a 70-page report by NASA's Mishap Investigation Board (MIB) that will not be released because the document contains sensitive material protected by the International Traffic in Arms Regulations (ITAR), NASA has said. A teleconference on the mishap summary with NASA's Marshall Space Flight Center engineer Scott Croomes, who chaired the MIB, is set for Tuesday at 2:00 p.m. EDT (1800 GMT).

The 800-pound (362-kilogram) DART spacecraft - short for Demonstration for Autonomous Rendezvous Technology -launched from California's Vandenberg Air Force Base on April 15, 2005 atop an Orbital Sciences- built Pegasus XL rocket. The spacecraft was expected to rendezvous with MUBLCOM, or Multiple Path Beyond Line of Site Communication; a small communications satellite launched for the U.S. military in 1999.

DART's \$110-million mission called for the spacecraft to approach within 16 feet (five meters) of MUBLCOM and perform a series of intricate maneuvers near the older satellite, all without human intervention. The mission was to occur throughout a 24-hour period. But while DART ultimately found and approached the MUBLCOM satellite, it apparently closed to within 300 feet (91 meters) and ran out of

fuel, bumping into the target spacecraft while both vehicles were

472 miles (760 kilometers) above Earth.

"Less than 11 hours into the mission, DART collided with MUBLCOM," the investigation summary states. "MUBLCOM did not appear to experience significant damage, and the impact actually pushed it into a higher orbit."

According to the mishap summary, DART's velocity measurements by its primary global positioning system (GPS) receiver were off by about 1.9 feet per second (0.6 meters per second), an inaccuracy that persisted in the spacecraft despite a computer reset because the needed software patch was never installed. DART's main computer repeatedly detected its velocity anomaly, reset itself, then again detected the same glitch, the summary stated.

An initial mismatch between expected and actual position appears to have started the continuous cycle - which forced the excessive thruster firings - but it was still not enough to lead DART into failure, according to the summary report. A computer logic setting that regulated how much weight the spacecraft gave its estimated and measured orbital speed and positions was set too high, allowing the initial glitch to continue, the summary stated.

Many of DART's failings could have been avoided if the mission's team members thoroughly reviewed and applied data and experience from previous NASA projects, investigators found.

NASA approved the DART mishap investigation board's report in February, but said last month that the document will be only released entirely internally as needed. NASA's Marshall Space Flight Center in Huntsville, Alabama managed the DART mission for the space agency.

DART Mission Mishap Report Won't be Released, NASA Says
Fender Bender: NASA's DART Spacecraft Bumped Into Target Satellite
NASA Tracks Navigation Errors, Fuel Shortage in DART Rendezvous Mission
NASA's Robotic DART Mission Ends in Mishap

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[新刊紹介] **Into the Unknown Together** The DOD, NASA, and Early Spaceflight MARK ERICKSON Lieutenant Colonel, USAF

米空軍の筆者になる米宇宙開発の歴史。宇宙も歴史物が増えてきたようで。

