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[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

[旧着] 'Solving the North Korean Nuclear Puzzle' 内容目次 を 5.6 地球観測関係に掲載

SIA 'State of the Satellite Industry Report' 2006 版 資料 pdf, 及び

Boeing 'Boeing Frontiers' 2006.8 の Cover と Archive Link 等 を 5.7 機関/団体、企業の出版物などにアップ

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[Reader's Voice] Mach の壁を突破する際の航空機の写真

いつも参考にしています。いろいろとご苦勞様です。すこし遅くなりましたが、フロリダのぼんゆうからの珍しい Aircraft with "shock wave" during her transonic flight(添付写真)を転送します。中国での宇宙葬却下の記事で、彼らにも宇宙葬希望者がいるとは! です。

- > HELLO, CHECK OUT THESE AMAZING PICTURES OF
- > AIRPLANE COMING THRU THE SOUND BARRIER. THIS IS
- > LIKE THE SHUTTLE COMING BACK TO EARTH AND YOU
- > HEAR THE BOOM, BOOM SOUN. RUSSELLD

[編注] 以前に F/A-18 の同じような写真を米海軍機関誌の表紙で見た記憶がありますね。6 枚のうち 1 枚のみ付けます。



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2006.08/09 Air & Space (Smithsonian) [編注] ずいぶん以前のパリエアショーでロシア戦闘機の同様の機動性が話題になった事がありましたね。

**Raptor はすごい、F-22 はエアショーのファンに機動性のデモを見せる**

**The Raptor Rocks, F-22s treat airshow fans to a maneuverability demo.**

By Linda Shiner

The Air Force calls them "aerial demonstrations." But the Oshkosh crowd transfixed by two F-22 Raptors that flew in from Langley Air Force Base in Virginia would call it one helluva show. I happened to be at the Cirrus aircraft sales pavilion at the Experimental Aircraft Association's annual Wisconsin avfest last month when the fighters showed up. Sales, along with all other activities on the airshow grounds (which are vast), were suspended for the 20 minutes or so that the F-22s flew. In fact, conversation was suspended; the grounds were spookily quiet except for an occasional collective gasp when one of the F-22s would fling itself around the sky.

We've all seen Air Force F-15s shoot straight up at airshows and

<http://www.airspacemag.com/issues/2006/august-september/FEATURE-raptor.htm>

disappear in the high-altitude distance. The Raptor doesn't disappear. The Raptor shoots upward, then stops. It hangs in the air. And while spectators on the ground are thinking they'd like to start breathing again, the pilot lowers the nose as if he's told the airplane, "Drop and gimme 20." And then it tears off, away from the show grounds, and disappears. (後略)



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2006.08/09 Air & Space (Smithsonian)

**ナノサットからフェムトサットへ、衛星はどこまで小さくできるのか、そしてなお機能するか?**

**From Nanosats to Femtosats, How small can satellites get and still be functional?**

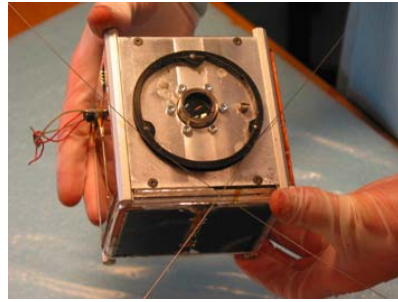
By Joe Pappalardo

Look around—everything containing electronics is shrinking. So too with satellites. Currently, nanosatellites weighing as little as a kilogram (2.2 pounds) are available for orbital missions. The

QuakeSat launched by Stanford University and QuakeFinder of Palo Alto, California, in 2003, for example, consists of three four-inch-wide "Cubesats" weighing a mere 10 pounds combined.

And picosatellites as light as a cell phone (0.1 – 1 kg) are on the drawing board, says Young K. Bae, founder of the Bae Institute, currently under contract with the NASA Institute for Advanced Concepts to study ways to shrink satellite size.

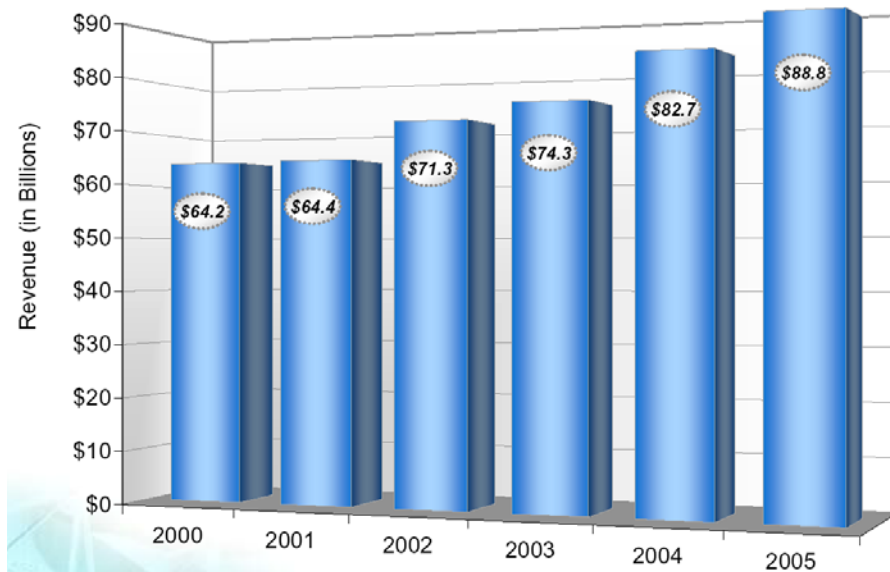
How tiny can they get and still work? (後略)



<http://www.airspacemag.com/issues/2006/august-september/NEED-smallsats.htm>

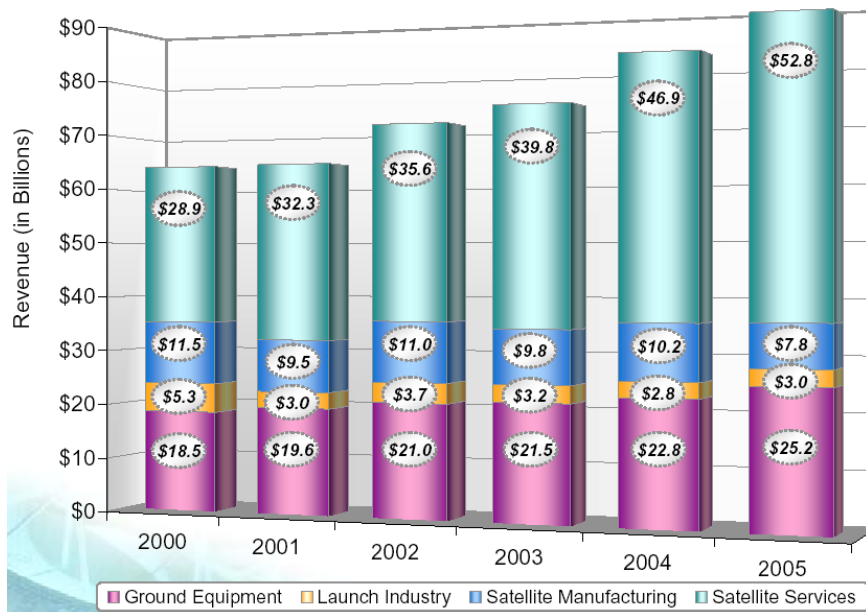
2006.6 SIA Satellite industry Association 資料全体は <http://www.space-library.com/> 5.7 機関/団体、企業の出版物など からダウンロード可

### 世界の衛星産業の売上げ World Satellite Industry Revenues



World satellite industry revenues had average annual growth of 6.7% for the period 2000–2005

### セクタ別の売上げ World Revenues By Sector



Satellite Services Are Becoming Increasingly Important

2006.06/07 AIA UPDATE VOL.10 NO.9 News Letter 全体は <http://www.space-library.com/> 5.7 機関/団体、企業の出版物などからダウンロード可

**[編注]** 米国は、航空宇宙産業への将来の人材確保のため、様々な施策を行なっている。AIA のロケット・チャレンジ後援もその1つ。

## INSIDE



Who Is Mackenzie Howell?

And why is she important to the future of the U.S. aerospace and defense industry?

See Washington Pipeline on pg. 2.

キーワード: TARC, Team America Rocket Challenge

2006.08.14 Defense News

**日本は先制攻撃を考慮するかもしれない**

**Japan May Consider Pre-emptive Strike**

By Wendell Minnick and Sam Jameson, TOKYO

In the wake of North Korea's July missile tests, Japan is accelerating its ballistic missile defense(BMD) plans and openly discussing what has long been a taboo subject in the pacifist country - that it may someday soon be forced to launch pre-emptive strikes to defend its territory.

"Radically speaking, to defend our country; it might be more suitable for us to strike enemy bases," said Nobuki Kawamura, the director of planning and programming at the Japan Defense Agency's policy bureau.

"But right now, in the current situation, we don't have enough

capability to attack enemy bases. We do have the air in-flight refueling tanker, but our F-15s are mainly for defense and they don't have the capability to attack [North Korea]."

Kawamura cautioned that in the future, such wherewithal is possible.

"However, for the future, we should have such capabilities, not exactly prohibited by our Constitution but mainly due to policy selection. As of now, government policy is that we don't have such capability and it is too early to discuss this option." (後略)

2006年8月21日 22:33 DAILY NEDO[2006/08/21]

「MEMSの技術戦略マップのローリングに関する調査」に係る委託先の公募について

[http://www.nedo.go.jp/informations/koubo/180821\\_3/180821\\_3.html](http://www.nedo.go.jp/informations/koubo/180821_3/180821_3.html)

研究評価委員会「環境適応型高性能小型航空機研究開発」(中間評価)分科会 議事録、議事要旨掲載

<http://www.nedo.go.jp/iinkai/kenkyuu/bunkakai/18h/chuukan/4/index.html>

2006年8月21日 8:08 【CNET Japan 2006年08月21日】

NSA 監視プログラムは米国憲法に違反—連邦地裁判決

<http://japan.cnet.com/svc/nlt?id=20204947>

液体爆弾を判別するソフト、旅客機テロ対策で採用か

<http://japan.cnet.com/svc/nlt?id=20204907>

ボーイング、高速ブロードバンド接続サービスから撤退へ

<http://japan.cnet.com/svc/nlt?id=20205407>

米グーグル、シリコンバレー市内全域で無線 LAN 提供

<http://japan.cnet.com/svc/nlt2?id=20204787>

2006年8月18日 8:03 【CNET Japan 2006年08月18日】

デル、AMDとの提携拡大を発表へ—情報筋が明らかに

<http://japan.cnet.com/svc/nlt2?id=20203847>

ついにミクシィが9月14日に東証マザーズ上場

<http://japan.cnet.com/svc/nlt2?id=20200687>

インタースペース、9月19日に東証マザーズ上場へ

<http://japan.cnet.com/svc/nlt2?id=20204347>

カブドットコム、競売買方式の夜間取引市場「kabu.comPTS」を9月15日に開始

<http://japan.cnet.com/svc/nlt2?id=20204367>

1テラバイトの3.5インチHDD、2006年中に登場へ—日立GSTの幹部が明らかに

<http://japan.cnet.com/svc/nlt2?id=20201628>

グーグル、地図サービス「Google Maps」でクーポンを提供開始へ

<http://japan.cnet.com/svc/nlt2?id=20201607>

頑丈設計製品への需要が高まる—旅客機の警備態勢強化で

<http://japan.cnet.com/svc/nlt2?id=20203647>

アップル、「Boot Camp」の最新版を公開

<http://japan.cnet.com/svc/nlt2?id=20203407>

フォトレポート:デル、ノートPCのバッテリーをリコール—爆発や発火の恐れ

<http://japan.cnet.com/svc/nlt2?id=20202228>

デル、ノートPCのバッテリーをリコールへ—対象は業界最大規模の410万個

<http://japan.cnet.com/svc/nlt2?id=20201587>

**Space News** <http://www.space.com/spacenews/>

**Rocketplane KistlerとSpaceXがNASAのCOTS商業軌道輸送サービスの契約を得る**

**Rocketplane Kistler, SpaceX Win COTS Awards**

WASHINGTON — NASA has selected Space Exploration Technologies Corp. (SpaceX) of El Segundo, Calif., and Rocketplane Kistler of Oklahoma City to share \$500 million the

U.S. space agency intends to spend through 2010 to simulate development of new cargo delivery services to the international space station.

**EchoStarとDirecTVは周波数オークションから撤退**

**EchoStar, DirecTV Quit Spectrum Auction**

WASHINGTON — A joint venture between DirecTV and EchoStar has dropped out of a U.S. Federal Communications Commission (FCC) auction of spectrum for wireless services, meaning the

companies will have to find another way to package broadband with their satellite television offerings.

**ボーイングはConnexionをキャンセル**

**Boeing Cancels Connexion**

WASHINGTON — Citing a market that never materialized as expected, Boeing Co. of Chicago is discontinuing its high-speed

broadband communications business for airlines.

ただ1つの EELV が必要とされる、と専門家は述べる

**Only One EELV Needed, Expert Says**

WASHINGTON —The U.S. government policy that effectively requires the Pentagon to maintain separate lines of launch vehicles for redundancy’s sake is unnecessary, according to the

leader of a congressionally mandated study of U.S. national security launch requirements.

KEI 運動エネルギー迎撃機コストは\$6.5B に上昇

**KEI Cost Rises to \$6.5 Billion**

HUNTSVILLE, Ala. — A Pentagon decision to defer certain work on a new high-speed missile interceptor to save money in the

near term has driven up the program’s total cost by \$1.5 billion, according to a Missile Defense Agency (MDA) official.

衛星攻撃の脅威はさらに大きな警戒を要す、と米空軍の宇宙のトップは述べる

**Anti-Satellite Threat Requires Greater Vigilance, General Says**

HUNTSVILLE, Ala. — U.S. military officials monitoring rocket launches around the globe need to determine more quickly

whether launch vehicles might be carrying anti-satellite weapons, according to the U.S. Air Force’s top space officer.

Week of August 21, 2006 **Sat News** <http://www.satnews.com/>

TerreStar Networks は Terrestar-2 衛星を製造する契約を SS/L スペース・システム・ロラルと結ぶ

… **TerreStar Networks Awards Space Systems/Loral Contract to Build Terrestar-2 Satellite**

DirecTV, EchoStar のジョイントベンチャは周波数オークションから引き下がる

… **DirecTV, EchoStar Join Venture Bows out of Spectrum Auction**

ボーイングは\$1B の損失の後、Connexion サービスを中止することに

… **Boeing to Discontinue Connexion Service After \$1-B Loss**

アリアンスペースの次の複数ペイロードミッションのための衛星の確認試験が始まる

… **Satellite Check-out Begins for Ariespace’s Next Multiple-payload Mission**

インテルサットは 2006 年上半期に\$132.8M の損失を計上

… **Intelsat Posts Net Loss of \$132.8-M for 1H 2006**

米国の衛星保護計画案はグローバル通信に影響を与えることになるかもしれないと英リサーチ・カウンシルの部門は述べる

… **US Satellite Protection Scheme Could Affect Global Communications, Says British Research Council Unit**

Comcast Media Center と SES Americom から6つのネットワークグループがデジタル・ソリューションに参加

… **Six Network Groups Join Digital Solution from Comcast Media Center and SES Americom**

ADC の Andrew は CommScope から提案された買収を拒否、M&A は御破算に

… **Andrew Rejects Acquisition Proposal from CommScope; Terminates Merger Deal with ADC**

**Sat News** <http://www.satnews.com/>

Ariane 5 は JCSAT-10 と Syracuse 3B を軌道に投入成功

**Ariane 5 Successfully Delivers JCSAT-10 and Syracuse 3B to Orbit**

KOUROU, French Guiana, August 12, 2006/Satnews Daily/ —

Arianespace’s Ariane 5 rocket successfully delivered on Friday

evening Japan's JCSAT-10 telecommunications spacecraft and the European Syracuse 3B secure military relay platform into geostationary transfer orbit. Lift-off occurred at 7:15 p.m. from Europe's Spaceport in French Guiana (6:15 p.m. EDT) from Europe's Spaceport in French Guiana.

JCSAT-10 was installed in the upper payload position on Ariane 5, and was released approximately 27 min. into the mission. This was followed some 5 minutes later by the separation of Syracuse 3B, which occupied the lower slot in the payload "stack."

Arianespace has now launched a total of 237 satellites during the past 26 years – which, by far, is a world record, said Arianespace chief executive officer Jean-Yves Le Gall in post-launch comments at the Spaceport's Jupiter control center. Arianespace said the successful launch marks Ariane 5's 14th consecutive success.

Le Gall noted that JCSAT-10 is the sixth satellite entrusted by Japan's JSAT Corporation to Arianespace for launch. It follows the recent orbiting of JCSAT-9 within the framework of the Launch Services Alliance mission industrial grouping – in which Arianespace is a founding member.

JCSAT-10's liftoff mass was approximately 4,050 kg. and it will be operated from an orbital slot of 128 deg. East to provide fixed satellite services (FSS) for Japan, the Asia-Pacific region and Hawaii. Based on Lockheed Martin's A2100AX satellite bus, JCSAT-10 is a high-power hybrid satellite consisting of 30

active Ku-band transponders and 12 active C-band transponders. JCSAT-10 is designed for a minimum service life of 15 years.

Lockheed said the A2100's modular design features a reduction in parts, simplified construction, increased on-orbit reliability and reduced weight and cost.

Built by Alcatel Alenia Space, Syracuse 3B will operate nine SHF (super high frequency) and six EHF (extremely high frequency) secure relay channels, providing communications with defense forces and upgrading the relay links between French political and military authorities and operating units deployed worldwide. It will be positioned at an orbital slot of 5 deg. West, becoming part of France's Syracuse III third-generation military communications system – joining the Syracuse 3A satellite launched by an Ariane 5 last October.

Le Gall announced that Arianespace will keep up its 2006 mission pace by performing the next Ariane 5 launch on September 19. This Ariane 5 ECA will carry the DirecTV 9S television broadcast satellite for DirecTV of the U.S., along with the Optus D1 telecommunications spacecraft for Australia's Optus. An auxiliary payload also will be carried on the flight: the LDREX deployable antenna demonstrator from JAXA (the Japan Aerospace Exploration Agency).

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

**ロッキードマーチンは米海軍の DDG-1000 計画のためのボリューム・サーチ・レーダのアンテナのデモに成功**

**August 17, 2006 LOCKHEED MARTIN SUCCESSFULLY DEMONSTRATES VOLUME SEARCH RADAR ANTENNA FOR U.S. NAVY'S DDG-1000 PROGRAM**

<http://www.lockheedmartin.com/wms/findPage.do?dsp=fec&ci=17833&rsbci=0&fti=111&ti=0&sc=400>

MOORESTOWN, NJ, August 17, 2006 -- Lockheed Martin [NYSE: LMT] successfully completed an on-time demonstration of the new Volume Search Radar (VSR) antenna for the U.S. Navy's DDG-1000 next generation destroyer program. The demonstration represents the completion of a key milestone

qualifying the antenna to move on to the next phase of radar testing, which includes interfacing the VSR antenna with the separate Dual-Band Radar signal/data processor and receiver/exciter cabinet that Raytheon is developing for DDG-1000. . (後略)

**ロッキードマーチンはマルチセクタ危機管理コンソーシアムと共に SBI-net ソリューションを洗練化予定**

**August 17, 2006 Lockheed Martin Works with Multi-Sector Crisis Management Consortium to Refine SBI-net Solution**

<http://www.lockheedmartin.com/wms/findPage.do?dsp=fec&ci=17839&rsbci=0&fti=111&ti=0&sc=400>

Rockville, MD, August 17, 2006 -- Lockheed Martin [NYSE: LMT] has linked with the Multi-Sector Crisis Management Consortium (MSCMC) in Arlington, VA, as part of the company's ongoing

effort to shape its SBInet solution. The Secure Border Initiative (SBInet) is a comprehensive multi-year plan to secure America's borders and reduce illegal immigration. (後略)

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

**ボーイングは C-Map を買収、ジェップセンの海上ビジネスを拡大**

**Aug. 18, 2006 Boeing to Acquire C-Map to Grow Jeppesen Marine Business**

[http://www.boeing.com/news/releases/2006/q3/060818d\\_nr.html](http://www.boeing.com/news/releases/2006/q3/060818d_nr.html)

**ボーイングは Connexion を中止予定**

**Aug. 17, 2006 Boeing to Discontinue Connexion by Boeing Service**

[http://www.boeing.com/news/releases/2006/q3/060817a\\_nr.html](http://www.boeing.com/news/releases/2006/q3/060817a_nr.html)

**ボーイングは EA-18G Growler ('うなる動物') を初飛行**

**Aug. 16, 2006 Boeing Flies EA-18G Growler for First Time**

[http://www.boeing.com/news/releases/2006/q3/060816a\\_nr.html](http://www.boeing.com/news/releases/2006/q3/060816a_nr.html)

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

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**AstroExpo.com** <http://www.astroexpo.com/News/TopNews.asp>

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**JDW, Jane's Defence Weekly** <http://jdw.janes.com/public/jdw/index.shtml>

**ボーイングは TSAT 運用能力をデモ**

**18-Aug-2006 Boeing demonstrates TSAT operational capabilities**

In a statement on 9 August, Boeing said the demonstration – the latest in a series of reviews of the technologies underpinning the

space segment...

**米国ミサイル防衛計画者は欧州の迎撃サイトを探す**

**18-Aug-2006 \*US missile defence planners seek European interceptor site**

The US Missile Defense Agency (MDA) is expected to make recommendations in the next few months on stationing

ground-based interceptors for ballistic missile defence in...

**サウジは欧州の Typhoon 戦闘機の発注間近かに**

**18-Aug-2006 \*Saudi Arabia moves closer to Typhoon order**

Saudi Arabia edged closer to ordering 72 Eurofighter Typhoon fighter aircraft on 18 August with the announcement of the

signing of a new agreement with...

**プーチン大統領は脆弱なチタニウムの共同会社を支援**

**18-Aug-2006 \*Putin backs fragile titanium joint venture**

Boeing and VSMPO – the world's largest supplier of titanium with a 33 per cent global market share – signed a joint venture on 11...

### オーストラリアは新しい情報収集分析の本部を計画

#### 18-Aug-2006 Australia plans new intelligence headquarters

The purpose-built building will be situated within Canberra's security precinct, near other intelligence and law-enforcement

agencies. It will house the Australian Security Intelligence Organisation (ASIO)...

### 米国防省は宇宙プロジェクトで予定計画通り進捗、とレポートは述べる

#### 18-Aug-2006 US DoD is on track with space projects, says report

RAND said the Atlas V and Delta IV, the two launch vehicles under development as part of the DoD Evolved Expendable

Launch Vehicle (EELV) programme,...

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**2006年 月 日 時事通信社「世界週報」 月 日号 [目次抜粋]**

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

#### [NEWS]

8/19 NASA が民間宇宙船委託先に SpaceX 社と Rocketplane-Kistler 社を選定(NASA,読)

#### [予定]

8/22 0327-0427GMT 打上:通信衛星 Koreasat5(無窮花 5号), Sea Launch(Zenit3SL),太平洋上

#### [EVENT]

9/17 JAXA 沖縄宇宙通信所 一般公開

9/9 JAXA 角田宇宙センター 一般公開

8/23-24 JAXAi キッズデー2006

8/22-9/1 宇宙航空研究開発機構 特別展 II(航空分野),未来科学技術情報館,新宿

#### [学会]

9/19-21 Space 2006, San Jose, California

8/25 IEICE 宇宙・航行エレクトロニクス研究会,機械振興会館,港区

#### [TV]

8/23 1600-1700 ディスカバリーチャンネル 火星を目指して:火星探査技術

8/22 2300-2350 NHK-HV (再)未来への提言「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

8/22 2130-2215 放送大学 特別講義:宇宙環境の科学

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**[宇宙開発]** [http://dailynews.yahoo.co.jp/fc/science/space\\_exploration/](http://dailynews.yahoo.co.jp/fc/science/space_exploration/)

- <地球温暖化対策>宇宙からCO2観測 日米、08年に衛星(毎日新聞)(21日3時1分)

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**[米軍動向]** [http://dailynews.yahoo.co.jp/fc/world/us\\_armed\\_forces/](http://dailynews.yahoo.co.jp/fc/world/us_armed_forces/)

- 米韓が21日から合同軍事演習、北朝鮮は「核戦争の準備行為」と非難(ロイター)(21日9時36分)

- きょうから韓米合同軍事演習、米軍8千人が参加(YONHAP NEWS)(21日9時20分)

- <アフガン>各地で戦闘、多数の死傷者…独立記念日(毎日新聞)(20日22時36分)



- 国際治安支援部隊と激しい戦闘、タリバン兵71人死亡(読売新聞) (20日 19時 31分)
- <英テロ計画>アルカイダ幹部関与か パキスタン紙など報道(毎日新聞) (19日 19時 2分)
- 米大統領「核実験は北朝鮮の脅威再確認する行為」(YONHAP NEWS) (19日 17時 54分)
- 対米聖戦目指しパキスタンに=航空機爆破未遂の主犯格が供述(時事通信) (19日 7時 0分)

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**[核兵器]** [http://dailynews.yahoo.co.jp/fc/world/nuclear\\_weapons/](http://dailynews.yahoo.co.jp/fc/world/nuclear_weapons/)  
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- 露の元少将…「北」は核爆発装置と地下核実験能力保有(読売新聞) (21日 11時 51分)
- 北朝鮮の核実験、政府が24時間体制で密着監視(YONHAP NEWS) (21日 9時 19分)
- 北朝鮮核実験、韓国が24時間態勢で監視(読売新聞) (21日 8時 55分)
- <韓国>北朝鮮の核実験監視強化へ、24時間態勢を始める(毎日新聞) (20日 19時 3分)
- 北朝鮮の核実験で監視強化=地震観測所に兵士派遣-韓国(時事通信) (20日 17時 0分)
- 「核実験カード」利用か=テポドン失敗で手詰まり-北朝鮮(時事通信) (20日 15時 0分)

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**[ASAGUMO NEWS]** 朝雲新聞社 <http://www.asagumo-news.com/>  
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#### 8/21 「ニュース」更新

防衛庁 人事制度 抜本改革へ /// 「後方職種 65歳」など検討 自衛官定年 委員会設置して見直し  
 参事官級異動など発令(8月21日付) /// 飯原経装局長、増田人教局長、横山装備本部長  
 日・インドネシア防衛首脳会談 /// 友好協力を確認 /// マラッカ海峡 安全確保で意見交換  
 東京で「安保戦略会議」 /// 日米議員らが討議  
 <日米安全保障戦略会議詳報> /// ミサイル防衛 運用体制の構築急務 /// 発射権限、現場に 時間ロスの排除が重要  
 PAC2実射 /// 14日から空自高射部隊など派米訓練  
 露情報収集艦を確認  
 18年版「防衛白書」要約  
 弾火薬類 取扱い要領徹底へ /// 呉の誘導弾落下事案 /// 再調査結果を公表

#### 8/20 「コラム」更新

・朝雲寸言 /// ・雪崩うって安倍支持に /// ・イラク内戦の可能性

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**[民間航空機関連 (ex-SJAC 三輪さん)]**  
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**[旧刊紹介]** スペースデブリ関連 AAS (American Astronautical Society) <http://www.astronautical.org/>

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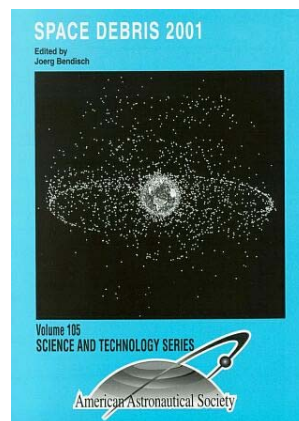
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