

## In This Issue

### High Definition Update

#### **Intelsat's First 20 Years of Digital HD Transmissions**

### Media Services

#### **Focus on Media**

An Interview with Tim Jackson, VP, Media Product Management

### Feature

#### **Intelsat to Host Satellite Day at ITW 2009**

Conference Bigger and Better than Ever

### Connections Update

#### **Intelsat Interference Management Initiative**

### Calendar

Connections, Regional Seminars and Training

### Customer Profile

#### **Arqiva**

### OU Corner

#### **Superbowl XLIII**

Viewed by Millions via Satellite

#### **NBA All-Stars**

212 Countries in 41 Languages

#### **World Baseball Classic**

800 Hours of Baseball

### OU Calendar

### Focus on the Intelsat Network

#### **Intelsat 14**

Familiar Tracks, New Territory

#### **Napa Teleport**

Receives Perfect Report Card

### Mobility Update

#### **RaySat Joins with Intelsat**

To Launch AT&T CruiseCast Service

### Maritime Update

#### **Broadband Maritime Conference**

Cost-effective Solutions

### Events Calendar

#### **Intelsat Events**

### At the Podium

#### **Intelsat CEO Dave McGlade** SATELLITE 2009

### Fleet Legacy

#### **So Long, Intelsat 605**

10-year Design Life  
Extended to 17-year  
Service Life

### June INSIDER

## Celebrating Intelsat's First 20 Years of Digital HD Transmissions

### Intelsat Now Boasts More Than 115 HD Channels on Its Fleet

In 1989, we were dancing to *HammerTime*, Paula Abdul had the number one song, (Yes, she really had a career before American Idol!) and we were all glued to CNN witnessing history as the Berlin Wall crumbled.



Meanwhile, Intelsat engineers were hard at work, and on 12 April of that year, they performed the first international digital HD transmission between the United States and Japan. This marked the beginning of international digital HD technology. High Definition in analog form was already introduced and tested, but never considered viable, as it required far too much bandwidth to be commercially successful. The trial was a cooperative effort between Intelsat, COMSAT, KDD and AT&T introducing a broad, new application for satellite technology in commercial television. This date is considered the 'birth' of international digital HDTV. Little did everyone know what an important technology digital HD would eventually become.

Throughout the 1990s, we watched with rapt attention every NAB, NCTA and CES shows wondering and waiting for the next evolution of HD. Today, nearly everyone we know has an HD television or has at least experienced HD television in some way. And everyone agrees: once you have it, you can't go back! Can you imagine watching the Super Bowl in standard definition after seeing it in HD? Certainly every major programmer in the U.S. has now launched an HD channel; soon it will become the industry standard worldwide. Intelsat now boasts more than 115 HD channels on its fleet.



Intelsat is celebrating this technological milestone in 2009 with a campaign that was launched in April at this year's NCTA. Intelsat's campaign celebrates many of its HD programmers and features a series of print ads in conjunction with a number of video-centric shows and conferences.

Our **NAB campaign** will consist of an in-booth video wall, complete with live feeds and HD Cam footage from our programming partners, which include:  
HD feeds: **Fox Business News, HDNET, HDNET Movies, MLB HD and WEALTH TV**  
SD feeds: **TV Japan, MEGA TV, CaribeVision and BBC World News.**

Intelsat will continue to celebrate the 'First 20 Years of HD' throughout the year, promoting our leadership in HD transmissions, in our media messaging, booth graphics and events.

[back to top](#)

**Announcements**

- [Intelsat Blog](#)

**Feedback**

The "Intelsat INSIDER" team welcomes your comments and feedback. Please share your thoughts at [intelsatinsider@intelsat.com](mailto:intelsatinsider@intelsat.com).

# Intelsat on Media

## An Interview with **Tim Jackson**



**Tim Jackson** (pictured left), Intelsat's Vice President of Media Product Management, recently shared his industry insights and observations of Intelsat's first 20 years of providing digital high definition (HD) transmissions.

*Following Intelsat's first 20 years of international digital high definition content delivery, how do you foresee*

*high definition contributing to Intelsat's future growth, and what do you think is the next big satellite-based media application for the next 20 years?*

Interestingly, HD has been around for 20 years on our system, and now it's available on Intelsat satellites in all regions of the world.

Programmers are looking to use their satellite space segment resources in the most efficient ways possible, and through advanced compression schemes, higher order modulation, scalable video coding (SVC) and automatic format description (AFD) programmers can distribute one high-quality HD signal to the marketplace to be distributed across various technologies and various qualities and formats.

Going forward, we are going to see a migration of standard definition to high definition, which is going to change how we allocate bandwidth on our system and how we help our customers migrate over to HD.

HD does require more bandwidth than SD. So, over time, with compression, I believe we'll see an increase in capacity requirements to serve our customers. It is the same trend that we saw from analog to digital and digital to MPEG-2 to MPEG-4. The conversion is happening currently in North America, in certain countries in Latin America, certain countries in Asia and very slowly in Europe. As we work with our customers on their plans to migrate to HD, we'll be planning fleet adjustments so that we are prepared to support our customers.

The current prevailing format for HD is 1080i, but 1080p is here now with Blu-Ray DVDs, just not widely over satellite. Both 1080p and 3D TV are technologies that have bandwidth implications for us, so we're keeping a close eye on those.

*Customers are increasingly looking for ground support and managed services, in addition to space-segment capacity. What is Intelsat's approach to the demand for managed services?*

We want to establish an operational relationship with our customers that go beyond space-segment only. The Intelsat ground network, including our fiber and our teleports, has become an important value-add that we can offer to customers seeking to distribute content globally on an efficient "all-in-one" platform.

We have been very successful in providing managed solutions to companies such as NHK, the BBC, and Discovery, who use our single integrated platform to reach the globe.

We are also in discussions with some of our customers that operate their own teleports for disaster recovery scenarios to allow them to use our teleports as a backup in case they have issues with their own primary facility.

[back to top](#)

# Intelsat at ITW

## Intelsat Sponsors ITW to Create World's Largest Telecom Trading Forum



Intelsat will be a major sponsor of TelCap's International Telecoms Week (ITW) second annual conference at the Marriott Wardman Park Hotel, in Washington, D.C., 1-3 June. Intelsat's sponsorship will bring the company's Global Telecommunications Meeting (GTM) into ITW, resulting in the world's single largest bi-lateral trading forum for telecommunications carriers.

Intelsat and ITW are working together closely to ensure this year's conference becomes the "must attend" event in the telecommunications world. As in past years, Intelsat has reserved an entire hall at the Marriott Wardman Park Hotel that will house its pavilion, education theater and private meeting rooms. Intelsat will also host its annual evening gala for its customers and business

associates on Monday, 1 June.

On Tuesday, 2 June, delegates of ITW 2009 will have an opportunity to attend a full day of satellite-related panel discussions, hosted and sponsored exclusively by Intelsat, on today's hottest topics:

- The future of cellular backhaul
- Satellite-based pan-regional data networks
- How telcos are capitalizing on video distribution

The sessions will be moderated by Intelsat business leaders, and panelists will be comprised of manufacturers and Intelsat customers showcasing satellite-enabled solutions for many of the most pressing telecommunications issues facing today's global corporate network operators, carriers, wireless operators and governments.

In addition to the satellite conference panel track, Intelsat will be hosting several informational sessions in its educational theater inside the Intelsat pavilion. Intelsat customers will be informed of satellite fleet additions, terrestrial infrastructure enhancements, new product developments, and introduced to new customer tools and calculators.

Watch for future announcements regarding ITW 2009 and view the latest ITW updates on [MyIntelsat](#) and [www.intelsat.com](http://www.intelsat.com). We look forward to seeing you in Washington, D.C.

[back to top](#)

## Connections & Regional Seminars Update

### Intelsat Announces I3 to Address Creating an "Interference-free" Space Environment



At a 2008 Connections meeting the subject of interference mitigation was a concern that was raised and echoed by many of our customers. As a direct result of this feedback, Intelsat has developed an initiative to address the items highlighted at Connections meetings as well as other issues that will benefit the industry and reduce the time devoted to interference resolution. We have dubbed this initiative **Intelsat Interference Management Initiative**, abbreviated **I3**. In addition to a review of our own infrastructure tools and capabilities, this initiative will address three areas that are designed to benefit the industry as whole. These areas are:

- Support Development of Interference Information Exchange
- Increased Operations Uplink Training and Certification
- Carrier Identification (aka ATIS)



#### Customer Advisory Team

Earlier this year, Intelsat instituted a Customer Advisory Team with individuals who represent various market segments with geographic diversity. This team provides insight into the various aspects of RFI from their unique perspective. Additionally, the members have vast industry experience and are providing guidance and suggestions on addressing the issues.

#### Rallying Industry Support

Following the Satellite 2009 opening session where Intelsat CEO, Dave McGlade and SES CEO Romain Bausch pledged support to address the RFI issue, Intelsat hosted a meeting of FSS operators at its Washington D.C. office. Intelsat and SES collaborated to develop the agenda and material to present to the gathering of operators. Seven operators were represented. In addition to **Intelsat** and **SES**, **JSAT**, **Inmarsat**, **Eutelsat**, **Telesat** and **Hispasat** participated in the meeting.

The purpose of the meeting was to garner support from participants to address the RFI issues. The meeting met that goal and follow up sessions were scheduled. Intelsat's Director of RF Operations, **Patty Constantino** said, "The level of participation by the operators and the enthusiasm expressed to actively address the issues going forward outstripped our expectations. It was a historic event and I was pleased to be a part of it."

#### Taking the Message to Industry

Meeting Customers - Intelsat has also been active in meeting customers at events to outline our initiative and garner support. Intelsat representatives attended a meeting of the US Broadcaster community in early March where the concept of an RFI Alert network was discussed in detail.

#### Moving Forward

Intelsat will be taking the message on the road and will be addressing the topic at meetings around the world. Hear Intelsat representatives discuss our efforts at SatCom in Johannesburg, South Africa (6-9 April), or NAB in Las Vegas, Nevada (20-23 April).

Also, stay current with our progress on the I3 initiative via MyIntelsat, in future Intelsat INSIDER newsletters and at the following Intelsat-sponsored events:

### Connections, Regional Seminars, and Training

Meeting	Location	Dates
Asia-Pacific Regional Seminar	Mongolia	7-8 May
Asia-Pacific Regional Seminar	Seoul, South Korea	11-12 May
Europe-Middle East Customer Training	Paris, France	15-16 June

Connections Americas	New York City, New York, USA	15-17 July
Western and Central African Regional Seminar	Dakar, Senegal	22-25 July

For information about these and other customer events, please contact: [Thomas Johnson](#)

[back to top](#)

## Customer Focus

### An Intelsat Customer Profile on Arqiva



One of Intelsat's largest customers, **Arqiva Limited**, an international distributor of content for the broadcast and mobile communications industry, utilizes Intelsat's global satellite network to distribute sports, entertainment and news content for its customers, including major international broadcasters and channel owners.

#### Providing Custom Solutions

Throughout the years, Intelsat has provided a diverse range of custom services to Arqiva so the company could meet the changing needs

of its customers. With Intelsat, Arqiva has expanded its services, ensured customer milestones were met, and forged new ground into next-generation media applications.

In April 2007, Arqiva required Intelsat satellite capacity to fulfill transmission obligations after a digital switch over was complete for one of its clients, the British Broadcasting Corporation (BBC). Intelsat provided capacity on the IS-907 satellite that Arqiva used as part of its distribution solution to approximately 90 main terrestrial transmitter sites in the United Kingdom. Arqiva was not only pleased with Intelsat's technical solution, based on the satellite's high-power UK coverage, but also took note of the "flexible approach" Intelsat took during the development of this contract which further helped Arqiva meet the commercial and technical needs of the BBC.

As Arqiva's broadcaster customers sought to expand their distribution to key markets in Europe, Arqiva signed on for Intelsat capacity at 1° West. The 1° West neighborhood, one of the fastest growing platforms for video distribution in Central and Eastern Europe, is becoming one of the most popular distribution points for standard and high definition programming. Arqiva will use the capacity to distribute DTH and cable programming throughout Europe, as well as to support new MPEG-4 HD channel distribution.

"We recognize the value of the 1° West neighborhood, which provides access to the leading platforms within Romania, Hungary, the Czech Republic, Slovakia, Serbia and Croatia, as well as the Nordic region," said **David Owen**, Head of Product Management for Arqiva Satellite Media Solutions. "The combination of the 1° West neighborhood and Intelsat's satellite coverage provides us with an ideal location to serve our broadcaster customers, meeting their needs for European HD channel distribution."

Arqiva continues to innovate by offering its customers new platforms for emerging media applications. One such initiative is Arqiva's launch of its European digital cinema network, which will utilize satellite capacity from Intelsat. Stay tuned for more news on how satellite transmission of films to cinemas is evolving on a global scale.

[back to top](#)

## OU Corner

### Intelsat Completion at Super Bowl XLIII



In one of the most exciting Super Bowls in recent memory, Ben Roethlisberger and Santonio Holmes connected to bring the Pittsburgh Steelers its sixth Lombardi Trophy. Millions watched Super Bowl history, thanks in large part to Intelsat.

The Intelsat Special Events team provided unilateral services for one of its major customers in Mexico, which included an on-site, three-camera production, an uplink truck and space segment for the customer's use from 29 January to 1 February, 2009.

Additionally, Intelsat's Special Events team offered services for non-rights holding broadcasters via a live-shot position outside Raymond James Stadium.

#### Behind the Scenes

Intelsat provided a 53-foot production truck and brought in a C-band flyaway for uplinking to Intelsat's Galaxy-19. The actual transmission was approximately eight hours of 9 MHz power.

On-site transmission management included one four-channel MCPC for Standard Definition (SD) transmitting to approximately 80 broadcasters from across the globe.

Intelsat scored a touchdown by successfully transmitting another historic event for its customers.

### Intelsat Scores a Three-Pointer with NBA All-Star Fans



Shaquille O'Neal and Kobe Bryant were laughing like the best of pals after being selected co-MVPs of the NBA All-Star game on Sunday, 15 February 2009, in Phoenix, Arizona (pictured left). Intelsat again managed the international distribution of the NBA All-Star weekend events and game.

#### A Global Presence

Seven satellites and four teleport facilities within Intelsat's global network distributed the NBA All-Star games, in standard and high definition, to nearly 80 broadcast

organizations around the world. The NBA estimates that Intelsat's signal directly or indirectly was received by over 212 countries in 41 languages.

Intelsat operations and engineering staff were onsite prior to the weekend event to set up the necessary equipment, which consisted of the encoding, multiplexing monitor and control equipment that transmitted the international signals from within the NBA All-Star broadcast compound. Throughout the weekend, Intelsat's onsite team and teleport operations joined forces along with Intelsat's **Global Scheduling Center (GSC)** and **Video Operations Center (VOC)**, both in Ellenwood, Georgia, to manage every aspect of the international distribution for this event.

### World Baseball Classic: A Triple Play for Intelsat and Fans Around the World



The **World Baseball Classic** is truly a global sporting event, now becoming synonymous with football (that's soccer for our U.S. readers) on the world sporting stage. This global series came to life with the hard work and technical expertise of Intelsat employees around the world in March 2009.

#### The Technology Lineup

Intelsat presented a "dream team" infrastructure of satellite, teleport and fiber to deliver the games to a worldwide audience.

Four High Definition (HD) and 11 Standard Definition (SD) feeds circumvented the globe via the Intelsat network, delivering more than 800 hours of the 39 games to baseball fans around the world. Intelsat pulled in the games from all seven venues, which spanned global locations from Tokyo, Toronto and Mexico City, to Puerto Rico, San Diego, Miami and Los Angeles. Intelsat utilized satellite capacity on its Galaxy 16 satellite, located at 99° W, and its Galaxy 19 satellite, located at 97° W, to receive the live programming from Puerto Rico and Mexico. It downlinked the games to its **Atlanta Teleport** in Ellenwood, Georgia, before transporting the signals to the World Baseball Classic's International Broadcasting Center (IBC) in Long Island, New York. Intelsat also backhauled contribution feeds from the other venues to the IBC via Intelsat's terrestrial fiber network.

Upon completion of the post-production feeds with digital signage at the IBC, the games were transported back to Intelsat's Atlanta Teleport and Napa Teleport. From there, the programming was uplinked to the Galaxy 19, Intelsat-3R, located at 43° W, and Intelsat-8, located at 166° E, which host some of Intelsat's leading video distribution neighborhoods within the Americas and Asia.

Events like the World Baseball Classic resemble a massive jigsaw puzzle. Our valued customers come to Intelsat to ensure that the complex pieces of the puzzle are assembled for a winning conclusion.

### OU Calendar

Watch your inbox for Intelsat Occasional Use Special Events Rate Cards for the following events:

Event	Location	Dates
Indonesian Presidential Elections	Indonesia	9 April 2009
XIII S.A. Sub-17	Iquiqui, Chile	16 April - 8 May
Summit of the Americas	Trinidad & Tobago	17-19 April
French Open Tennis	Roland Garros, Paris	24 May - 7 June
Panamanian Presidential Elections	Panama	3 May
Asia-Europe Foreign Ministers	Hanoi, Vietnam	25-26 May
Wimbledon 2009	England	June
FIFA Confederations Cup	South Africa	14-28 June
Copa Sudamericana	Various	July-September

For more information, please contact: [Intelsat Special Events](#)

[back to top](#)

## MyIntelsat Update

### G/T Measurement Calculator Added to MyIntelsat Tools Suite



#### Purpose

To measure the ratio of receive gain of an earth station antenna to the total noise temperature of the earth station.

#### Method

From the satellite source, the equipment under test (EUT) will acquire the test signal. Using a spectrum analyzer, the EUT will record the peak of the signal. The EUT will then point off the source to measure the noise.

[back to top](#)

## Focus on the Intelsat Network

### Intelsat 14: Familiar Tracks, New Territory



Although a replacement of the IS-1R, the upcoming Intelsat 14 satellite launch is far from a routine campaign. The IS-14 will feature a hosted payload, an Internet Router in Space (IRIS), managed by Intelsat General Corporation for a U.S. Government test. The mission also marks Intelsat's return to Cape Canaveral - its first launch from U.S. soil in more than a decade.

#### Internet Router in Space (IRIS)

A unique feature of the IS-14 is its IRIS payload. IRIS is part of a U.S. Department of

Defense (DoD) Joint Capabilities Technology Demonstration (JCTD) initiative. The program is a test to determine the utilization of a space-based computer processor, and is being touted as the next generation of satellite communications.

Intelsat General's **Don Brown**, Vice President of Business Development, said, "The IRIS architecture allows direct IP routing over satellite, eliminating the need for routing via a ground-based teleport, thereby dramatically increasing the efficiency and flexibility of the satellite communications link. IRIS is to the future of satellite-based communications what ARPANET was to the creation of the Internet in the 1960s."

Following the planned three-year program, which will support voice, video and data communications, the payload will be released for commercial applications.

#### The Return to Cape Canaveral

After more than a decade, Intelsat will again launch from Cape Canaveral, Florida. The launch will be conducted by Lockheed Martin from Space Launch Complex 41 (SLC-41) on an Atlas V rocket. The maiden launch from SLC-41 was in 1965, the same year as Intelsat's first satellite launch.

Intelsat's last launch from Cape Canaveral was the Intelsat 806 satellite, which lifted off on 27 February 1998. At the time considered a milestone event in providing customers around the world instant access to Intelsat events, the IS-806 launch was the debut of live launch video coverage on Intelsat's Internet homepage.

#### Intelsat 14 Construction and Testing Milestones

The IS-14 was constructed by Space Systems/Loral in Palo Alto, California, and was the 44th satellite Loral built for Intelsat. The spacecraft will host 40 C-band and 22 Ku-band transponders that will ultimately serve customers in the Americas, Europe and Africa. The Intelsat 14, replacing the Intelsat 1R at 315°E, has a design life of 15 years. The IS-14 spacecraft is currently undergoing testing, prior to being shipped to the launch site.

#### The Next Steps

- Antenna compact range tests (March-April 2009)
- Final performance tests (April-May 2009)

*(Photo courtesy of Space Systems/Loral)*

### Intelsat's Napa Teleport Receives Perfect Report Card from Lockheed Martin for Federal Aviation Administration Uplink Contract

When Lockheed Martin Operations Manager,



**John Lacey**, was preparing one of his many reports to the Federal Aviation Administration (FAA), he came across an interesting statistic that he passed along to Intelsat: For the time period of October 2007 – October 2008, there were 13 unplanned, critical RFU failures at various uplink sites. However, Intelsat's **Napa Teleport**, the only Intelsat teleport involved in the project, had a perfect record during that time period – **zero failures** – and is the only site able to make this claim!

In a letter written by Mr. Lacey, he stated, 'I believe this is due in no small part to the high level of professionalism and competence with which your staff maintains our uplink equipment and your site facilities. Congratulations and thanks for a job well done.'

Program Manager Dennis Boiter of Intelsat General stated, '**George Williams** and the entire **Napa Teleport team** recognize the significance of the services we provide for the FAA and always go the extra mile to maintain the integrity of this critical piece of the nation's air traffic control system.'

Lockheed is one of more than 50 customers with co-located equipment at the Napa Teleport. Intelsat's customer, **Lockheed Martin**, is the prime contract winner for the FAA's Geostationary Communications and Control Segment (GCCS) program, which is a critical part of the Wide Area Augmentation System (WAAS), which provides satellite-based navigation to make air traffic management safer, more reliable and more accurate. In addition to providing uplink services from Napa Teleport, Intelsat is flying a Lockheed Martin L-band Hosted Payload on **Galaxy 15** in support of the FAA's navigation system.

The 28-acre Napa Teleport is located 50 miles northwest of San Francisco, and currently houses 25 antennas ranging from .75 to 16.4 meters. Napa Teleport has diverse fiber connectivity from both AT&T and Quest, including two OC-12 and two OC-48 fiber rings with connections to the Internet backbone from both entities. The teleport is also part of the Intelsat GlobalConnex<sup>SM</sup> (GXS) terrestrial network. As a result of this onsite infrastructure, the Napa Teleport is well-positioned to provide co-located circuit connectivity to other major points-of-presence (POPs) that accommodate Intelsat's customers and partners.

The Napa Teleport supports full-time video (analog and digital), data, Internet and ad-hoc turnaround services via fiber and satellite. Napa Teleport offers remote control and monitoring status of MCPC equipment and provides primary and back-up Telemetry, Tracking & Control (TT&C) for the Intelsat fleet.

[back to top](#)

## RaySat Broadcasting Corporation is Joining with Intelsat to Launch the AT&T CruiseCast Service

By **Winston V. Guillory, Jr.**, President, RaySat Broadcasting Corporation



Picture this. You're on a long drive (or even a short trip to the mall) and in the back seat the kids are getting crankier by the minute. Or, you're with your buddies in the stadium parking lot for a tailgate party before the big game, but first you all want to watch another game.

What's a parent or superfan to do? Simple: Just tune in to the AT&T CruiseCast service for the kids' or your buddies' favorite satellite TV channels, quenching the boredom or sports fever.

Not surprisingly, Intelsat figures into the solution as the satellite broadcasting provider for RaySat Broadcasting Corporation (RBC), which is launching AT&T CruiseCast Service, an exciting new form of in-vehicle entertainment that's due for commercial launch later this spring.

The AT&T CruiseCast service will let passengers enjoy 42 entertainment channels... **22 satellite TV and 20 radio channels**... beamed to vehicles in the continental United States by **Intelsat Ku-band FSS commercial spacecraft** -- giving families, commuters and mobile professionals the same type of television experience in the rear seat entertainment systems of their vehicles that they now have in their homes.

The service will deliver a variety of kids and family, documentary, music, comedy, news and sports programming. The initial AT&T CruiseCast channel lineup is still being finalized and the targeted monthly consumer subscription will be \$28 a month.



The service features a compact, low-profile antenna for use on cars, non-commercial trucks and SUVs, and a breakthrough buffering technology that helps to overcome line-of-sight obstacles such as overpasses, buildings, trees or tunnels. The service was developed by RBC in collaboration between RaySat, Inc., a leading manufacturer and supplier for the mass market of cost-effective, low-profile satellite antennas that enable communication on the move, and AT&T Services, Inc.

The AT&T CruiseCast service is made consumer-friendly by the unique scaling down of satellite

technology into the small pod-like antenna that affixes to the roofs of vehicles. The antenna is paired with a receiver mounted in the vehicle and provides all video and audio connections to the appropriate vehicle systems, such as the Rear Seat Entertainment or Vehicle Audio System.

The AT&T CruiseCast service will be available from select auto dealers and after-market accessory shops. The price of the antenna and receiver equipment for the vehicle may vary by dealer but the suggested retail price is \$1,299.

The service will rely primarily on transponders aboard Intelsat's **Galaxy 25 satellite** located at 93° West longitude. Inclined-orbit satellites also can be used.

The beauty of joining with Intelsat for transponder capacity is that scores of channels can be added because there is no limitation on the number of video or audio channels we can deliver using existing Ku-Band satellites. This is an enormous economic benefit for RBC, unlike other 'Direct-To-Vehicle' Service Providers who rely on expensive special-purpose satellites that have limited space-based bandwidth and can require extensive, costly terrestrial networks.

Another big plus RaySat saw in joining with Intelsat is that the RBC network operations center is co-located with Intelsat's Super Headend in Hagerstown, Maryland. There, the video and audio feeds are downlinked from origin satellites, processed by RBC and then uplinked to the Intelsat spacecraft for delivery to AT&T CruiseCast subscribers.

[back to top](#)

## All Things Maritime

### New Communications Networking Offshore & the High-Seas 2009



The Global VSAT Forum (GVF) **Broadband Maritime Conference** took place in Singapore from 18-19 February 2009. Intelsat, in partnership with KT Corporation, were key sponsors of the event. Inmarsat, Sea Mobile and Comtech EF Data were also sponsors. The conference was attended by Intelsat customers, partners and end-users.

The conference addressed a range of topics that are at the forefront of satellite broadband communications in the maritime environment. The first day of the conference focused on the

overall maritime satellite communications market, with a particular emphasis on the nature of current shifts in the demand for different types of applications. The second day focused on the ship board terminal, shared bandwidth & SCPC VSAT technologies (HNS HX, Vipersat & CnC, Gilat etc.) and regulatory issues.

Furthering Intelsat's Southeast Asia maritime presence, representatives, **David Ball**, Regional Vice President, Asia-Pacific Sales; **Rick Abbasi**, Senior Regional Marketing Director, Asia-Pacific; and **Keith Ramsay**, Senior Key Account Director, participated in various panel and conference sessions, presenting Intelsat's cost-effective solutions for broadband maritime services, focusing on our Global, Regional and Coastal Maritime offerings, market segmentation and the maritime service applications.

**Martin Jarrold**, Chairman of the conference, commented in his speech to the audience, "The only way to communicate effectively while at sea is via satellite, and the satellite technologies and services to support the increasingly sophisticated information and communications applications solutions required - just as much afloat as on land - are becoming more widely evident in the maritime communications marketplace."

Please visit [www.uk-emp.co.uk/MA.Sg.2009](http://www.uk-emp.co.uk/MA.Sg.2009) to review the presentations from Broadband Maritime 2009.

[back to top](#)

## Announcements

### Intelsat Blog



In conjunction with **SATELLITE 2009**, Intelsat launched its first customer-facing blog.

The **Intelsat Blog** will be continuously accessible from MyIntelsat, the company's customer extranet, and via the Intelsat public website during major industry and Intelsat events.

[back to top](#)

# Intelsat Events

Join Intelsat **Around the World: April-July 2009**

Event	Location	Dates
SatCom Africa	Johannesburg, South Africa	6-9 April
NAB 2009	Las Vegas, Nevada, USA	20-23 April
SVIAZ/Expo Comm 2009	Moscow, Russia	12-15 May
ITW	Washington, D.C., USA	1-3 June
CommunicAsia	Singapore	16-19 June

[back to top](#)

## At the Podium

### Interference-free Space a Topic of Discussion at SATELLITE 2009



Intelsat commanded a strong presence at SATELLITE 2009, with nine Intelsat executives participating in the three-day conference. Senior Intelsat management representing the company's video, regulatory, network, regional and government services discussed the industry drivers that are increasing the need for satellite-related services. In addition, many spoke to the more than 5,000 conference attendees on the obstacles hindering business growth and the opportunities they see in the near- and long-term that will shape the satellite industry in the ever-changing communications landscape. The conference began with the marquee event, the CEO roundtable, where **Dave McGlade**, Intelsat's CEO, joined three other executives representing the global satellite operators and identified some of the key issues the industry will face in 2009 and beyond to an audience of more than 1,500 attendees. Based upon the comments of the CEOs, three topics took center stage this year.

The launcher discussion morphed into the second area of discussion, and that was the need for an ITAR regulatory review. Panelists agreed the time has come to lift the restrictions U.S. manufacturers, operators and launchers face from accessing technology from other countries (China was the main point of discussion). As McGlade pointed out, there are ITAR-free satellites being built and launched every day—i.e. with no U.S. content. In an environment where every technical job should be saved, it seems appropriate to review the original intent of ITAR and perhaps re-think what is currently a very broad application of the regulation.

The last topic centered on a call to arms in creating an interference-free space environment. McGlade and Romain Bausch, the President and CEO of SES Global, made a joint declaration for action across the industry for users to take responsibility for inaccurate installations that create interference for users. Creating interference—unintentionally—creates cost for satellite users, operators and even installers—since they may need to revisit a site to correct the offending issue. The industry-wide interference management initiative continued to gain traction at SATELLITE Week, with many of the regional operators meeting with Intelsat and SES at Intelsat's offices for a global forum on the topic.

[back to top](#)

## So Long, Intelsat 605

### IS-605 Maintained a Fully-operational Payload During Its 17-year Lifetime



In the early 1980s, Intelsat contracted with Hughes Aircraft Company to develop a series of workhorse commercial communications satellites that were destined to become the most advanced, most powerful satellites of their time.

The Intelsat VI series satellites were, at that time, the most complex and massive ever built. Each spacecraft in the series brought a more sophisticated digital evolution to the world. Intelsat sponsored a new technology for these satellites in which the transponders

were interconnected using either static switch matrices or a network that provided satellite switched/time division multiple access (SS/TDMA) capability, giving additional capacity and enabling greater efficiency in the use of power and bandwidth.

Each satellite housed 48 transponders. Thirty-eight operated over the C-band portion of the frequency spectrum and 10 in Ku-band. The solar panels had an output that provided 2,600 watts of DC power. A single Intelsat VI satellite could carry 33,000 voice channels and several television programs. Although modest by today's standards, this increase in capacity was 170 times greater than Intelsat's first satellite, **Early Bird**.

On 14 August 1991, the Intelsat VI F-5, commonly known as the **Intelsat 605**, was launched on an Ariane-44L H10 rocket and was soon thereafter put into service over the Pacific Ocean. It weighed approximately 4,200 pounds and was 17 feet 5 inches in height and 11 feet 10 inches in diameter.

After reaching its celestial home and the solar drum was fully deployed, the Intelsat 605 measured nearly 39 feet. The Intelsat VI series satellites were a one-series return to the spin-stabilized configuration, a characteristic of the Intelsat I-IV series satellites.

The Intelsat 605 satellite had a fully operational payload during its entire lifetime -- a time frame that extended seven years beyond its design life of 10 years. In its 17 years of service the satellite provided broadcasting, corporate networking, direct-to-home TV broadcasting, and telecommunications to the Pacific Ocean, Indian Ocean and Atlantic Ocean regions. In late 2008, Intelsat submitted an application to the FCC to start the de-orbit process for the satellite as the satellite's useful life came to an end. The request was granted and in early January 2009 the satellite was de-orbited to a perigee 135 km above synchronous altitude.

On 3 February 2009, the final commands in the de-orbit process were sent to the Intelsat 605 spacecraft by **Gerry Kircher** and **Susan Tabor** (pictured above). A few of the many Intelsat engineers responsible for the operation of the Intelsat 605 satellite were present including, **Joe Chan**, **Charlie Hostetler**, **Vijayakumar Krishnamurthy**, **Vince Nguyen**, **Robert Prickett**, **Loid Saillard** and **Knut Tjonneland**. After reaching its final destination, and performing beyond expectations to the very end, the Intelsat 605's remaining fuel and battery energy were discharged before it came to a quiet rest.

[back to top](#)

## In the Next Intelsat INSIDER

### The ITW/CommunicAsia Edition

The ITW/CommunicAsia Edition is scheduled for delivery on Tuesday, 2 June 2009.

- NAB Update
- CommunicAsia Update
- Executive Interview: Intelsat's Most Aggressive Satellite Campaign in Its History
- Globalization of Media
- Asia Strategy



[back to top](#)

[Home](#) | [About Us](#) | [Services](#) | [Network](#) | [Resources](#) | [Press](#) | [Investors](#) | [Careers](#) | [Contact Us](#)

This email message is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message. Any views expressed in this message are those of the individual sender, except where the sender specifically states them to be the views of Intelsat, Ltd. and its subsidiaries.

To be removed from the mailing list, [click here](#). Please allow 10 business days to be removed from this list. View our [privacy policy](#).