SATELLITE 2008
SHOW DAILY
DAY 2 » TUESDAY » 02.26.08

Industry CFOs
See Continued Need For Financial Discipline

BY MARK HOLMES

While many satellite industry CFOs understandably highlighted the strong fundamentals of the industry, not all are optimistic that investment conditions will improve any time soon.

"I think the optimism from the bankers (at this morning's panel) was slightly misplaced," Inmarsat CFO Rick Medlock said Monday during the "Future Financial Investments – Where Will the Money be Going Next?" session at SATELITE 2008. "I don't think we are going to see any changes in the credit markets for two years. I think it is going to be tough to get things funded. I think there will be a shortage of liquidity."

Medlock believed a return to a more disciplined financial environment is good for the business as a whole. "I think we have some elements of replication of the dot.com boom in recent years," he said. "From a competitive point of view, I welcome rational decision making from lenders."

Photo by Lisa Czaplicki

Satellite CFOs try to remain optimistic despite tougher financial conditions.

All the operators spoke about the need for continued financial discipline. Scott Macleod, CFO of Mobile Satellite Ventures, said the operator has had to be very "prudent" in its financial strategy. "We did do a financing into some strong headwinds," he said. "Prudence makes a lot of sense. I think competitors need to find a way to work together [to allay financial risk]. We entered into an agreement with Inmarsat. It gives us spectrum certainty."

SES CFO Mark Rigolle said that the operator was trying to be "boringly consistent" in terms of financial management and said joint ventures, such as the operator's work with Eutelsat to develop S-band services, is another way to watch finances. "We have reduced the risk," he said. "We think S-band is an exciting opportunity. It is a

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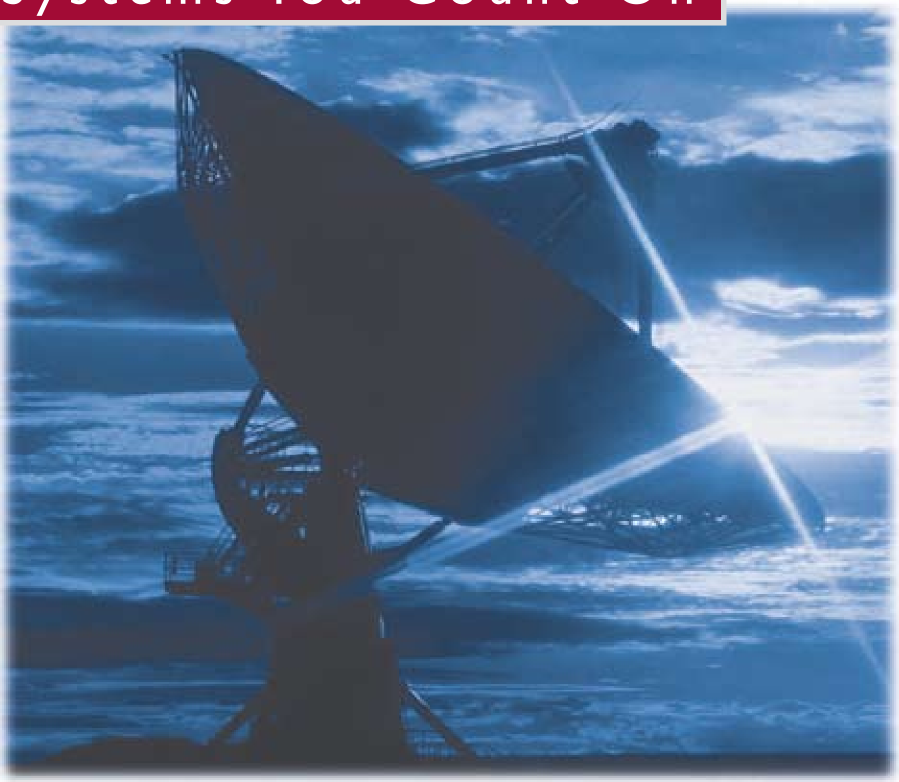

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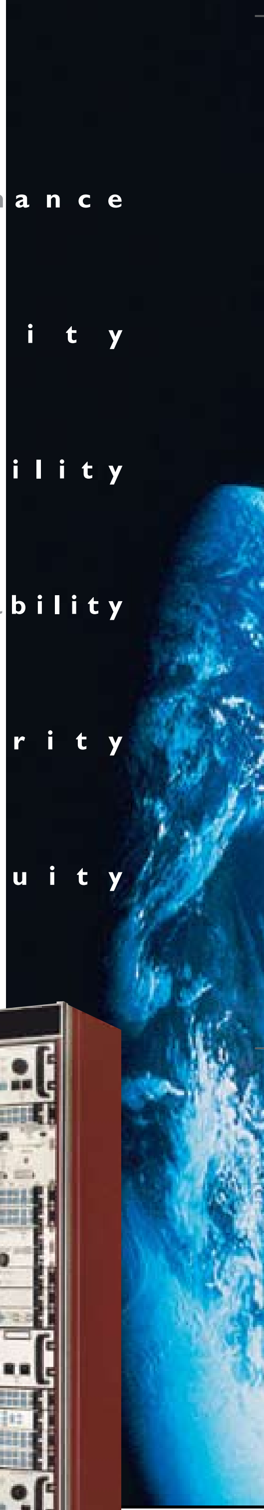

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What Role Will Satellite Play?

Welcome to SATELLITE 2008, where we celebrate 50 years of satellite technology and business accomplishments by looking at where the industry will go next.

Broadcasting remains the cornerstone of satellite revenues today, and the CEOs of the four largest fixed satellite services companies kick off the show with the Opening General Session, which will feature a discussion of their roles in the market, expansion plans and the new applications that will power future growth.

The afternoon is turned over to individual sessions, and in keeping with "The Sixth Decade" theme, the Teleport Forum offers a trio of panels that will continue the discussion on the future of the satellite industry, highlighted by the "Five For Five: Top Satellite Markets of the Next Half-Decade" session. Top executives from Intelsat, Hughes, ATCi and Arqiva will go into further detail on the applications that will drive revenue growth in the industry in the coming years, including hybrid business models and cutting-edge services such as digital signage. Two more sessions, "Why Satellite? Delivering Value in a Hybrid World" and "IP on the Edge: Media, Mobile, Networking and More," will delve further into the hybrid business models that are becoming more commonplace within the communications market.

The two-day Military Forum also kicks off this afternoon, beginning with the "Commercial Military Satcom 2008: Buy, Sell or Hold?" session. A panel of experts will examine the changes the Pentagon's commercial communications needs and the internal and external factors that will shape the market in the years to come. And as militaries around the globe see their dependence on commercial communications providers grow, panelists at the "Help Us Help You: Assuring Access to Satellite Communications," will discuss the strategies that will keep this beneficial relationship strong, including hosted payloads, pre-positioned capacity and public-private partnerships.

As always, the Access Intelligence editorial team will keep you informed of all the latest events during SATELLITE 2008 through a variety of print and online publications. The Show Daily will be available at registration and throughout the exhibit hall as well as dropped outside your room at select hotels. Also be sure to check online for the SATELLITE 2008 Blog at SatelliteTODAY.com/blog. ■

Jason Bates

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The tempo of success

December 21 – Ariane 5	
INTELSAT / JSAT	Horizons-2
RASCOM	RASCOM-QAF1
December 14 – Soyuz	
MDA	RADARSAT-2
November 14 – Ariane 5	
paradigm	Skynet 5B
Star One	Star One C1
October 21 – Soyuz	
Globalstar	Four Globalstars
October 5 – Ariane 5	
INTELSAT	Intelsat 11
'yes' OPTUS	Optus D2
August 14 – Ariane 5	
HUGHES	SPACEWAY™ 3
B-SAT	BSAT-3a
May 30 – Soyuz	
Globalstar	Four Globalstars
May 4 – Ariane 5	
ASTRA	ASTRA 1L
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Schedule of Events At-A-Glance

Tuesday, February 26, 2008

Start Time	End Time	Room No.	Session
7:30 AM	5:45 PM		Registration Hours
7:30 AM	8:45 AM		Rise-n-Shine Coffee Service

GENERAL SESSION

9:00 AM	10:45 PM	Ballroom A	**Opening General Session:** Expanding Market Growth and Driving Applications
11:00 AM	5:45 PM		**Exhibit Hall Open**
12:00 AM	1:30 PM	143	**Washington Space Business Roundtable** Flagship Lunch and Silent Auction
12:00 AM	1:30 PM	144	**The WTA 2007 Teleport Awards Luncheon**

CONCURRENT SESSIONS

1.30 AM	2.45 AM	204AB	**Five for Five:** Top Satellite Markets of the Next Half-Decade
		207B	**WiMAX and Broadband Wireless Networks:** Opportunity or Threat for Satellite Communications?
		207A	**Commercial Military SatCom 2008:** Buy, Sell or Hold?
		204C	**Europe:** Setting a Pace for Continued Expansion
2:45 PM	3:15 PM		Refreshment Break
3:15 PM	4:30 PM	204AB	**Why Satellite?** Delivering Value in a Hybrid World
		207B	**Video Channel Growth:** The Outer Limits?
		207A	**Help Us Help You:** Assuring Access to Satellite Communications
		204C	**Launch Services:** Pressure to Perform

Schedule of Events At-A-Glance

Tuesday, February 26, 2008

CONCURRENT SESSIONS CON'T

4:30 PM	5:45 PM	204 AB	**IP on the Edge:** Media, Mobile, Networking and More
		207B	**Satellite Ground Segment CEO Session:** The Terrestrial Connection
		207A	**DSTS-G The Sequel:** Predictions, Insights And Anticipation For 2011
		204C	**Satellites, Broadcasting & Cable TV:** Still the Ones
6:30 PM	10:30 PM		**Society of Satellite Professionals International Gala**

Investments

from page 1

great way to get into a new business without betting too much."

Eutelsat CFO Catherine Guillouard said the operator had a strong balance sheet and is looking into new areas to boost its revenues, driven by partnerships to help spread the financial risk. "We are working very hard on the next growth driver for us, which is S-band, as well as broadband," she said. "We are very confident about the business we are developing with SES."

However, being successful in the mobile video market may not be so straightforward. Rigolle admitted that Tu Media's struggles in Korea act as a potential warning. "It is difficult (for Tu Media) as they are competing against essentially a free service," he said. "However, the opportunity is clearly there (in terms of mobile video). However, the business plan has not been validated. But I do see people wanting these services."

> **"I don't think we are going to see any changes in the credit markets for two years. I think it is going to be tough to get things funded."**
>
> **— Medlock, Inmarsat**

Jeff Freimark, Intelsat's CFO, also said strategic alliances are key in trying to extract extra value for the operator. "We are focused on top-line and cash flow growth," he said. "We need to instill financial discipline. I don't necessarily see more consolidation. I think there will be more responsibility and rational behavior. The types of transactions we have entered into such as partnerships and strategic alliances act as a strong creative vehicle for us."

For Telesat, with the Loral deal behind it, this year will be all about execution and maximizing the most from the synergies as a result of that deal. "The biggest opportunity is in the video business," Ted Ignacy, Telesat's CFO said. "The biggest challenge is to execute on our business plan. We are under the gun to increase revenues."

Ignacy admitted that any new bold expansion plans could be difficult for the operator to execute in 2008. "I would expect that if we were to try and launch a new program in these markets, we would have to demonstrate a solid business case," he said. ■

Via Satellite's
Satellite Executive Of The Year 2007

JASON BATES, MARK HOLMES

The satellite industry's use of C-band spectrum faced a serious threat in 2007, but a well-organized effort involving satellite players around the globe fended off terrestrial companies seeking a foothold in the band. The executives that led the industry's "No Change" campaign helped ensure that satellite operators will have unfettered access to this critical band for years to come.

The satellite industry scored a victory at the World Radiocommunication Conference 2007 (WRC-07), turning back efforts by international mobile telecommunications (IMT) players seeking a global allocation of C-band spectrum. At one point, the push by the well-funded terrestrial players looked like it would be successful, but led by Kengi Chen, director, spectrum management and operational planning for Inmarsat; Kalpak Gude, deputy general counsel at Intelsat; and John Lothian, vice president, space development at SES, the satellite industry argued successfully that the damage to satellite operations outweighed the benefit for terrestrial players.

The scope and complexity of this effort involved representatives from companies around the globe, and the task of keeping the different satellite-related companies unified in their message and organized through the months leading up to WRC-07 and throughout the meeting was a gargantuan one.

Chen, Gude and Lothian discussed the creation of the "No Change" campaign and the month-long effort at WRC-07 with Via Satellite Editor Jason Bates and Associate Editor Mark Holmes.

VIA SATELLITE*: When were you first aware of the potential threat posed to the industry's use of C-band?*

CHEN: We have known since WRC-03 when an agenda item aiming to identify new spectrum for terrestrial IMT was agreed for WRC-07. From the start of the process, C-band was one of the candidate bands put forward. The industry started working on the issue from the beginning; however, the efforts were stepped up closer to the WRC as it became clear that C-band was being seriously considered by the IMT industry.

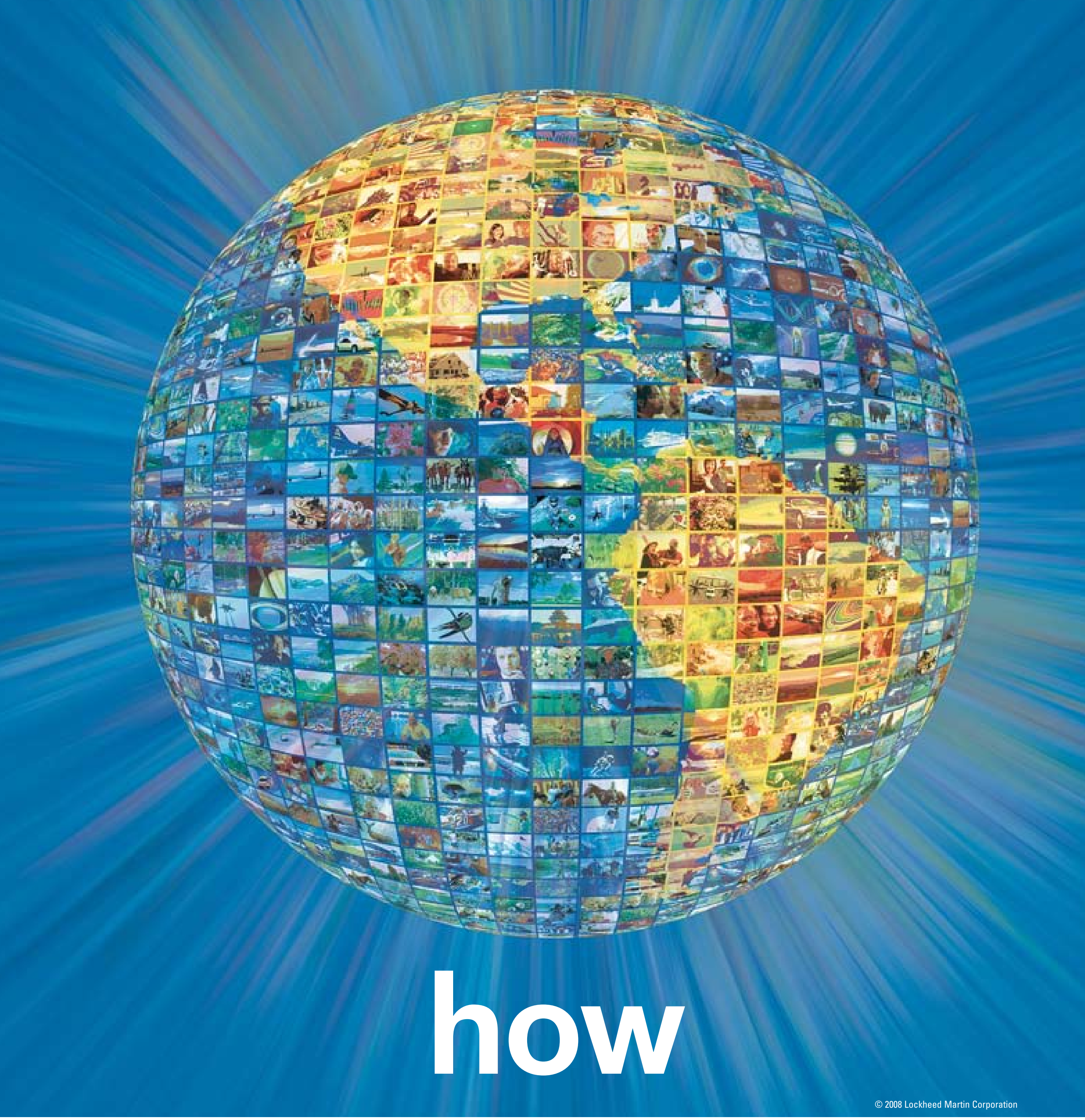
GUDE: To be honest, though, the industry as a whole did not take the issue too seriously because we thought that the terrestrial wireless industry was primarily focused on other bands and because we believed governments understood the implications of identifying C-band for IMT. We were wrong on both accounts. The lower portion of the C-band was seriously identified by IMT and some countries, particularly in Europe, Japan and Korea, had identified the entire C-band for IMT.

LOTHIAN: We were aware of the WRC agenda item since WRC-03. However, the responsibility for this issue had been placed in ITU Working Group 8F, which was dominated by supporters of IMT. Only a small number of satellite supporters were active in this committee. However the committee was responsible for

carrying out the sharing studies between mobile and satellite services. Soon the word spread around and other satellite operators joined us in this ITU activity.

VIA SATELLITE*: How hard was it to coordinate the efforts?*

CHEN: Individual efforts started soon after the WRC-03, although the industry effectively started working in a coordinated way one year prior to the WRC-07. Initial phase actions included coordinated active participation in ITU-R/Regional Study Groups and Regional Conference Preparatory Groups, individual discussions with key administrations and industry stakeholders, and detailed studies and testing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of IMT operation impact on the C-band. The magnitude of the challenge led the satellite players to conclude that only a coordinated effort would achieve a successful outcome at the WRC.

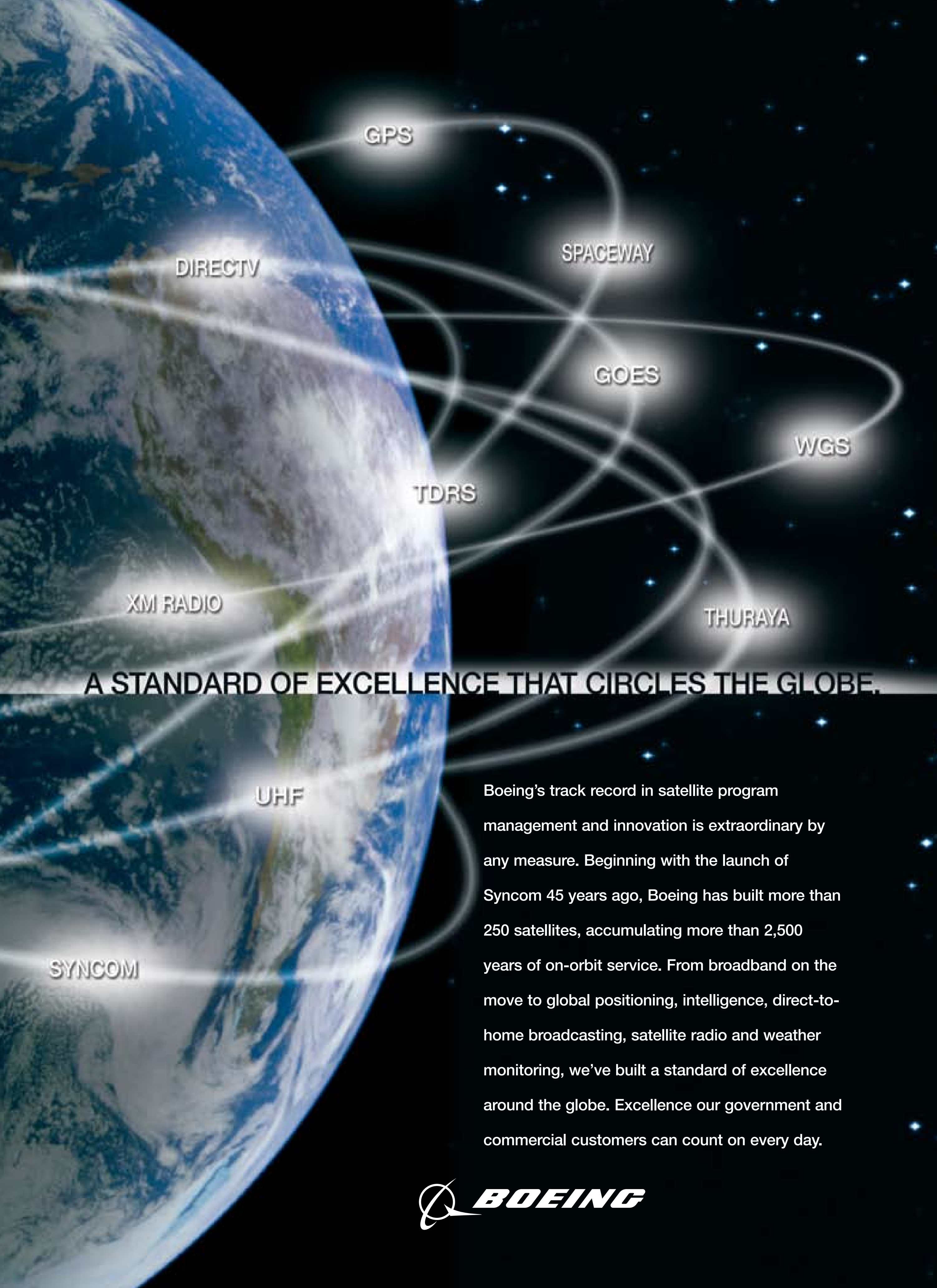
LOTHIAN: In January 2006, a meeting of Working Party 8F was held in Bangkok. There were 200 participants of which only four came from the FSS community — SES, Asiasat, and Alcatel (now Thales) Alenia Space. … At this time the main technical argument was about the sharing studies — whichever way you looked at it, sharing appeared to be impossible. However the response of IMT proponents seemed to be: "Don't confuse us with facts." I think this experience triggered the mobilization of our joint forces. It became very clear that we would need to embark on a lobbying campaign, in particular to warn administrations in Africa, Asia and Latin America — countries which depend very much on C-band FSS for their core infrastructure.

VIA SATELLITE*: When did you settle on a unified message?*

CHEN: I don't think the message was unified from day one. Our interest was in a specific part of the C-band since we don't operate in the complete band. However, as we progressed, it became clear that even having part of the band allocated for global IMT could potentially impact the entire band.

GUDE: It was not always clear that "No Change" across the entire band was going to be the correct strategy to use or the one most likely to be successful. I think we realized that if we didn't hang together, we would hang alone. That was very much the case in terms of keeping a strong African voice on our side and keeping Vietnam and other Asian companies within the satellite coalition. The "No Change" campaign was really the result of our collective effort to find common ground and a common purpose.

LOTHIAN: Several times people would ask, "Are we asking for too much to defend the whole band — 3.4 to 4.2," but I think it was right to do that. It kept everybody on board the satellite side. As we learned during the conference, the new C-band entrants in Africa were going to operate in the extended band, so if we had drawn a line and parti-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tioned the lower part, we would have lost that support.

VIA SATELLITE***: Was there a point where you felt the terrestrial players would win?***

CHEN: Throughout the campaign we recognized the huge influence and financial strength of the telecom players supporting the identification of the C-band for IMT, but we also knew that the significant contributions made by satellite communications in many different areas was a compelling reason to vote for a "No Change" in C-band allocation.

GUDE: I think there was some concern that this may be the case but there were three things that were strongly in our favor: First, the technical studies strongly supported our view that sharing of the band was not technically feasible. Second, the services provided by the satellite industry in the C-band are critical services that could not be provided using any other technology or frequency band. Third, and finally, we had no other choice but to carry the fight forward. This band is critical to the satellite industry and our customers and we felt that our backs were against the wall. We did everything we could to get our message out to government regulators, our customers and others.

VIA SATELLITE: When did the tide turn in your favor?

GUDE: It became most apparent at the Conference Preparatory Meeting in February of 2007. At that point it was clear that the satellite industry had established a beachhead with many countries in Africa and Asia who were highly dependant upon C-band satellite services due to either their high rain zones, their sparse and distributed populations, or both. This support gave the satellite industry a sense that we were starting to get our message across and that we had a chance to save satellite services in the C-band.

LOTHIAN: I would say that we entered the conference knowing we had a strong case but aware that four weeks is a long time and all kinds of unexpected things can happen. As the C-band issue filtered down from the plenary meeting to the committees and subcommittees a number of administrations were actively supporting the "No Change" position, and halfway through the conference there was still no agreed terms of reference for a drafting group on C-band. … An advisory group made it quite clear that there was no possibility of reaching agreement on a global, or even regional, identification for IMT in C-band. The only way out of the impasse would be for administrations to accept country footnotes and for such footnotes to be limited to an upper frequency of 3.6 gigahertz. This compromise was based on a very constructive African proposal led by Senegal and illustrates the crucial role played by a small number of key administrations. This I would say was the turning point.

> "The satellite industry has always had to argue for and justify its spectrum usage, and we will continue to do so in the future."
>
> — Chen, Inmarsat

VIA SATELLITE***: Has the C-band episode been a wake-up call to the industry?***

CHEN: We have never been complacent about the threat of loss of spectrum for satellite. There has always been pressure on regulators to squeeze more users into the radio spectrum and the satellite industry has always had to argue for and justify its spectrum usage, and we will continue to do so in the future. The outcome of the WRC has probably been more of a wake-up call for the terrestrial mobile industry than for the satellite industry.

LOTHIAN: I would say there is quite a history of collaboration among satellite operators in the spectrum and regulatory field, and the various industry associations do a marvelous job in lobbying for better licensing conditions and generally enhancing the role of satellite in the world. What happened with the C-band campaign was that we were able to leverage all those resources on a high-profile issue. It has been a wake-up call in the sense that the message is now loud and clear — we are fighting for spectrum in competition with emerging terrestrial wireless services, both to keep our existing operations intact as well as to grow our own new services including mobile and broadband. ■


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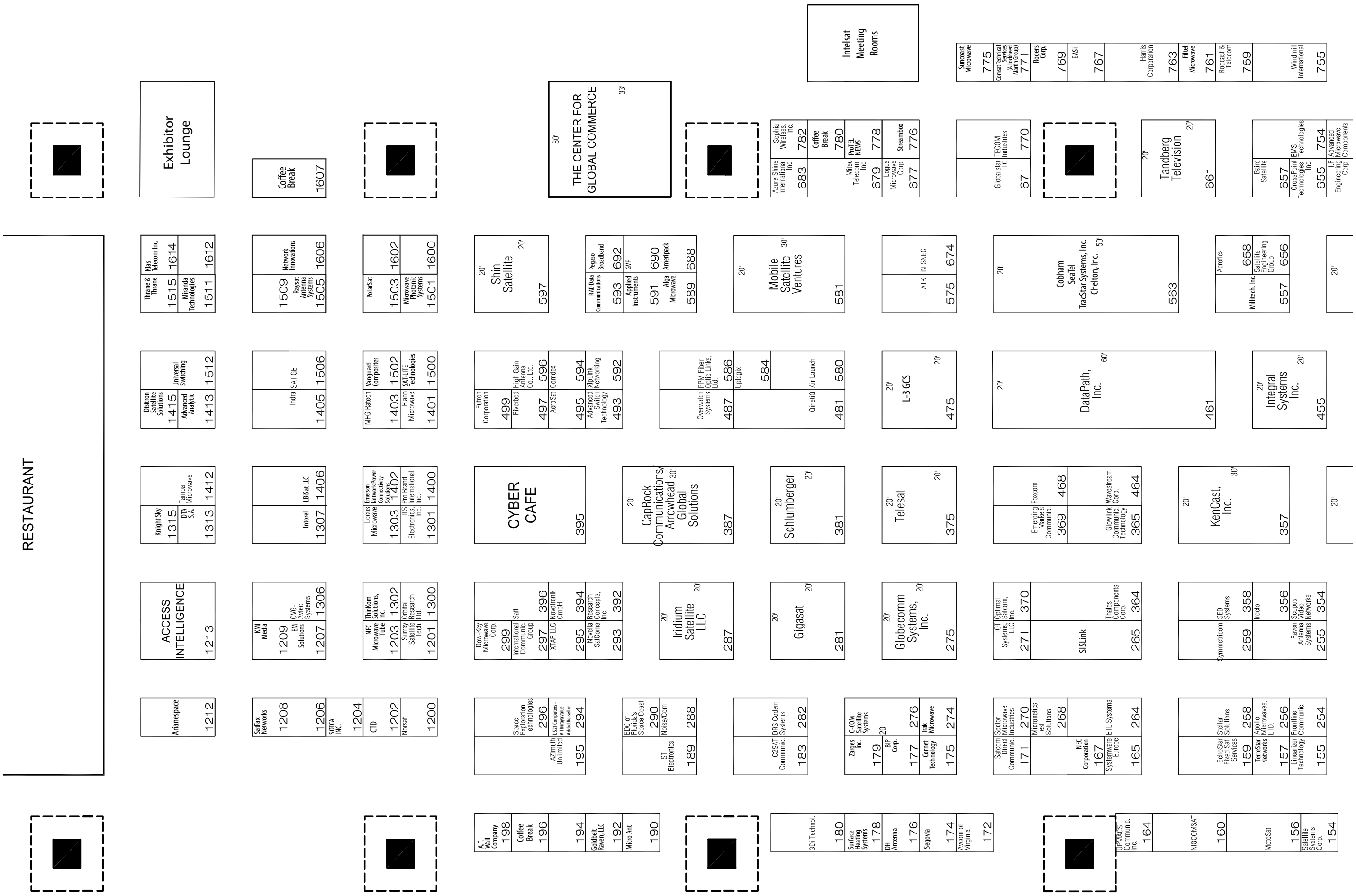

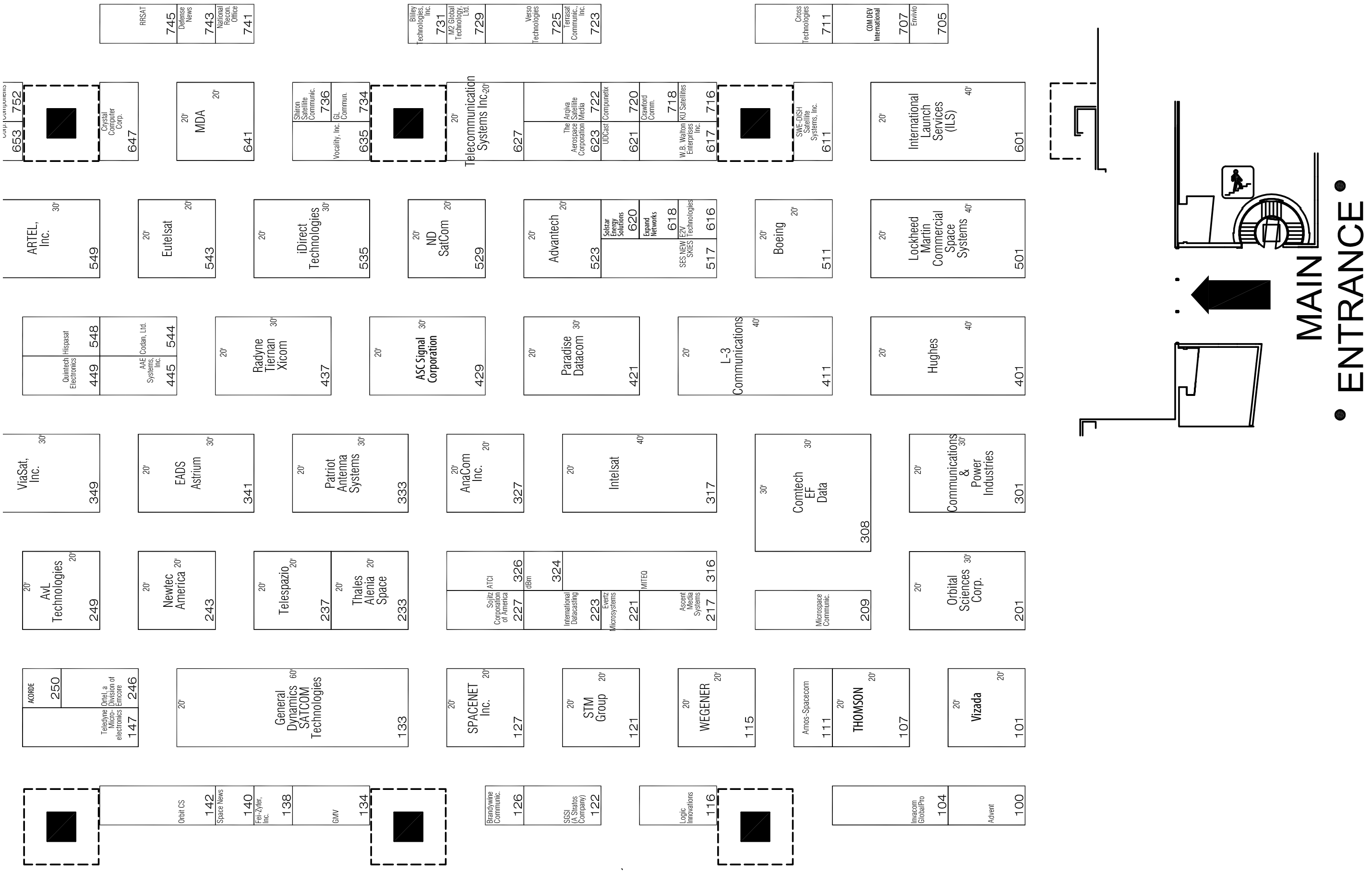
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Satellite Industry in Good Shape
Despite Overall Economic Conditions

BY MARK HOLMES

SATELLITE 2008 got off to a vibrant start with the "Financial State of the Industry: Positioning for Growth" session, as panelists agreed that the satellite industry remains a good industry from the financial standpoint, but the credit crunch that is taking hold in the overall economy is triggering investor concerns and could impact deals in the satellite sector.

This message was somewhat different from a year ago, when there was more overall optimism and fewer concerns about a global recession that could hamper growth in the satellite industry.

The economic climate has changed significantly from the first half of 2007 to the second half of the year, said Hoyt Davidson, managing partner, Near Earth LLC. There is now a lot of "volatility" in the public capital markets, and investors now are being "very cautious" when looking to invest in the satellite sector. "The credit crunch seems to have worsened," he said. "No one is trading. We think U.S./Europe [leveraged buyout] activity will drop 30 percent in 2008 and another 20 percent in 2009."

Tom Watts, managing director of Cowen and Co. also sees a situation where a stable satellite sector is facing pressure from a less stable overall

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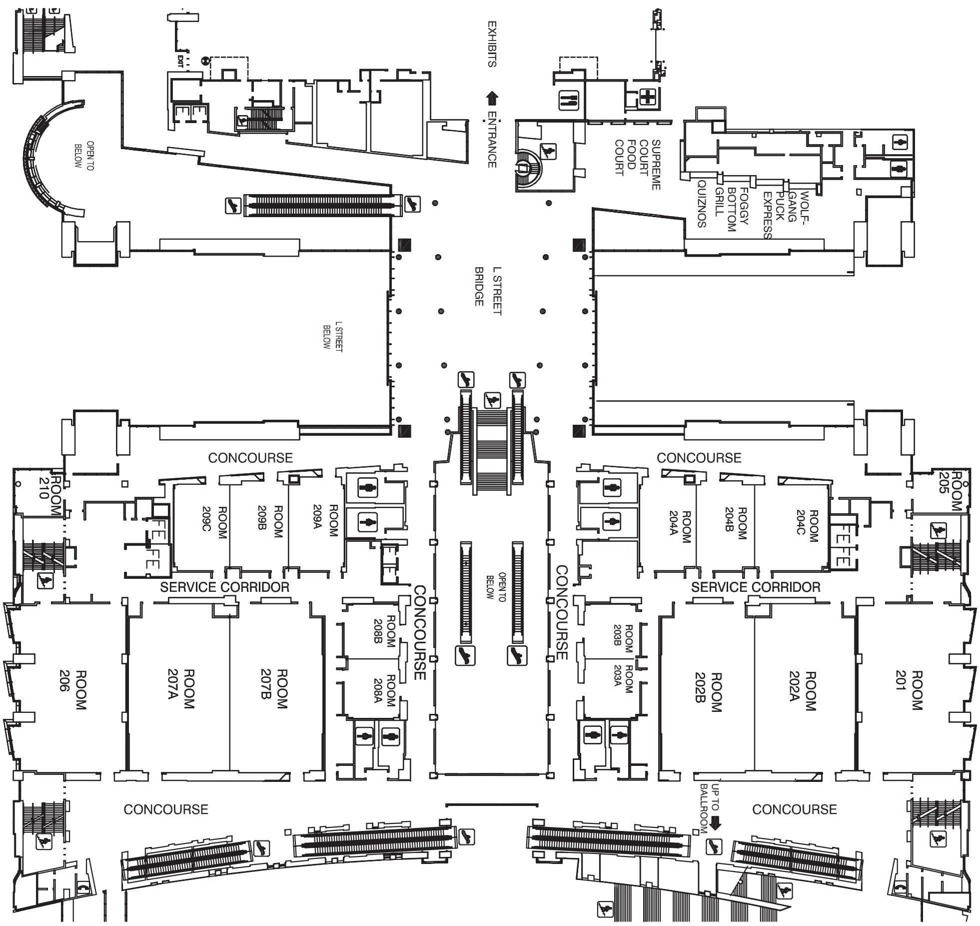
Meeting Room Floor Plan



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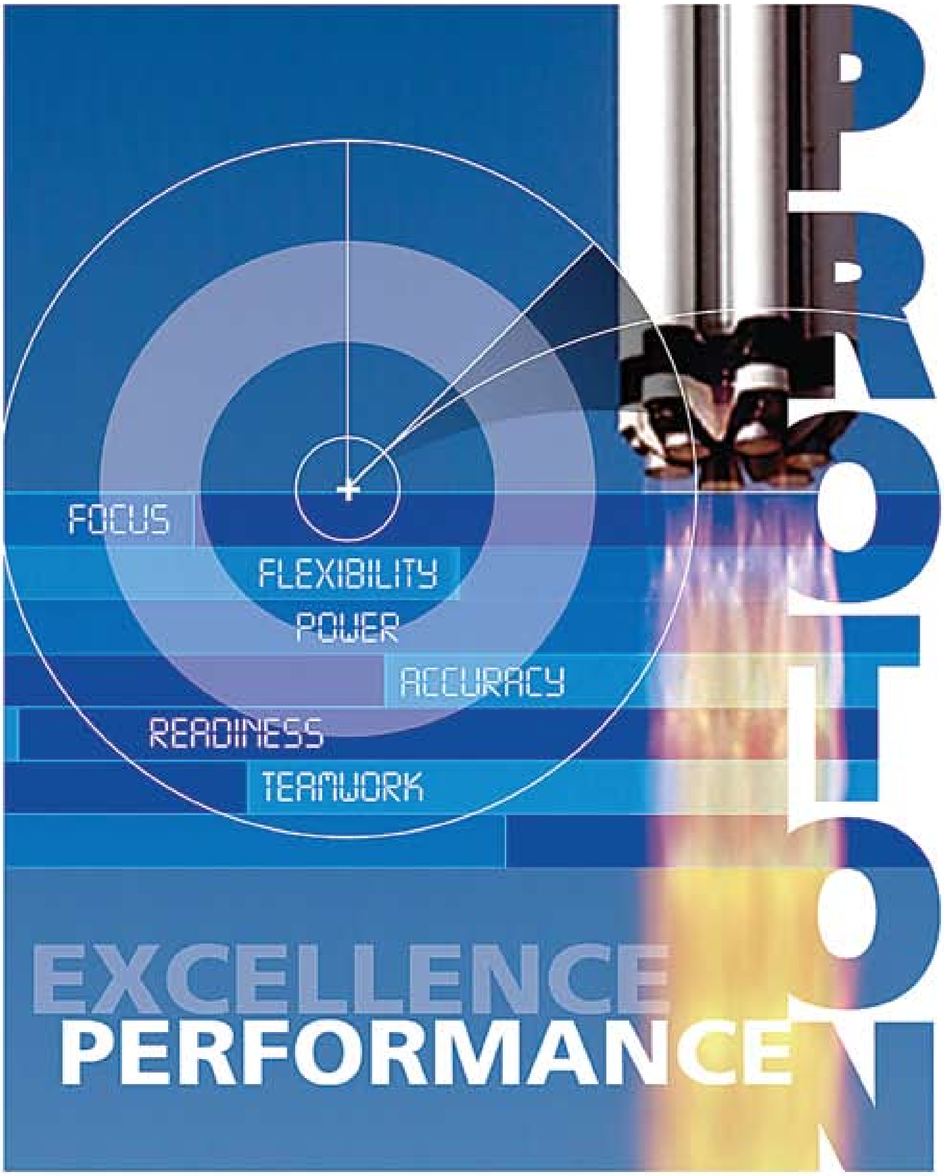
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Satellite Industry

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financial environment. "The satellite industry is very healthy and doing well," he said. "The public capital markets are not."

The tougher current credit conditions mean there is likely will be a return to traditional lending, said Dara Panahy, a partner with Milbank, Tweed, Hadley and McCloy. "Depending on what happens with the U.S. economic growth, there could be further investor concern. Satellite financings will be in line with traditional lending fundamentals. You will see lenders exert more control," he said.

Davidson and Watts also see hedge funds becoming more interested in the satellite sector. "I have never seen so much interest from hedge funds," Davidson said, while Watts added that he expects hedge funds to become a "major force" when doing deals in the satellite industry.

Among individual satellite segments, the satellite TV segment is in good shape, said Watts. "Satellite TV appears to be at a turning point," he said. DirecTV and EchoStar "are generating strong cash flows. Free cash flow is taking off at both companies." The satellite broadband segment is potentially a buoyant market and operators are "selling capacity as fast as it is going up." There also generally are good prospects in areas such as mobile satellite services (MSS) and geospatial applications, citing companies such as Inmarsat and GeoEye that have performed strongly, he said.

An unusual factor affecting the satellite industry is the proposed merger of Sirius Satellite Radio and XM Satellite Radio, said Maury Mechanick, counsel with White & Case LLP. More than a year after the satellite radio operators announce their intention to combine operations, the two companies still await a decision from U.S. government on whether the deal will be allowed.

Any decision, particularly a favorable one, could have an impact on operations of the MSS industry, where the U.S. Federal Communications Commission has taken a duopoly approach to awarding spectrum. "If they allow the merger to go through, you could see MSS consolidation in the same band. The message is get a decision out there so there is some certainty," said Mechanick. ■

Bankers:

Satellite Stocks To Rebound In 2008

BY JESSICA PEARCE

Investment in the satellite industry was divided into two phases in 2007: The period before the subprime market collapse brought down the rest of the stock market and the ensuing credit crunch that resulted from the mortgage crisis. But satellite stocks should be able to avoid the prolonged problems that may hit the overall market, a panel of bankers said Monday at SATELLITE 2008.

"We have to recognize that there are fault lines running down the middle of 2007," Jim Murray, managing director for Morgan Stanley said during the "Investment Perspective: What the Global Bankers Think" session. "Before, deals were transformational, and the availability of capital was enormous. Capital was available very freely on very loose terms. The market was wide open, and now it has slammed shut," he said.

Although the overall market took a downturn, the outlook for 2008 is not entirely hopeless. "With a large portion of the leveraged buyout backlog expected to launch in the coming months, we expect the market supply/demand to take time to stabilize," said Niraj Shah, director of investment banking for Citigroup Global Markets Inc.

The satellite broadband sector might be able to weather the market downturn as well as the predicted recession due to the fact that it increasingly is seen as a necessity rather than a luxury, said Osvaldo Ramos, managing director for global communications and media investment banking for Lehman Brothers Inc. "Demand is met in urban areas by a combination of DSL, cable and fiber," he said. "There are 20 million underserved rural households in the U.S., and that demand is not likely to be met anytime soon."

According to Ramos, there were 670,000 U.S. satellite broadband customers at the end of 2007, up from 212,000 in 2006. The United States has reached

> **We have to recognize that there are fault lines running down the middle of 2007. […] The market was wide open, and now it has slammed shut.**
> **— Murray, Morgan Stanley**

about 50 percent broadband penetration, but worldwide penetration is only about 20 percent. The biggest challenge for satellite broadband operators is having enough capacity to meet demand, which was illustrated by WildBlue running out of capacity in certain markets early last year.

Another sector poised for success in 2008 is satellite entertainment, including XM Satellite Radio and Sirius Satellite Radio. "Audio in the car was the primary driver of early success," said Omar Jaffrey, managing director for UBS Investment Bank. "The technological evolution supports the demand for mobile entertainment applications," he said.

"There is increasing competition for mobile applications, such as wireless/[mobile virtual network operators], digital audio, iPods, [mobile satellite services/ancillary terrestrial components] and satellite broadcast," Jaffrey said. "But satellite radio players have a strategic advantage with spectrum as well as a significant lead. Having the spectrum and assets gives you the ability to make you the standard."

Overall, the general consensus of the panel was that the market will be slow for a while but not forever. "Recent events have made me believe that success is possible," said Tracy Mehr, managing director for media and telecom investment banking for Credit Suisse. "Even for the biggest underdogs in satellite land there is hope." ■

U.K. MoD Official
Talks About Skynet Possibilities

BY MARK HOLMES

The United Kingdom, in particular with its Skynet program, remains one of the main military forces worldwide. Playing an active role in Iraq and Afghanistan means the U.K. Ministry of Defence (MoD) is at the cutting edge when it comes to military space technology, particularly when compared to other European nations. Commander David Burns, J6 Operations, Director Command and Battlespace Management and Defence J6, at the U.K. MoD talks about Skynet as well as give his view on the latest military space developments.

SHOW DAILY: ***As we enter a new era of warfare, what is the importance of having a competitive advantage in terms of space capabilities?***

BURNS: If by a 'new era' you mean one defined by the concept of Net Centric Warfare, or Network Enabled Capability as it is know in the U.K., space capabilities are both ubiquitous and indispensable. A competitive advantage in these capabilities is therefore essential. Space not only provides capabilities that support the delivery of the network into every part of the battlespace, it also hosts capabilities that generate a substantial proportion of the mission critical information that flows over the network. This is hardly a recent revelation. What is becoming evident very rapidly is that maintaining such a competitive advantage is going to require considerable application and investment across all lines of development, from the technical and operational, through to the diplomatic and economic. There are competitive advantages to be maintained in gaining access to space and in operating there safely, in the technology that is placed there and in how that technology is exploited, and in ensuring that space based capabilities are protected from both intentional and unintentional action. It is not enough simply to be able to place a capability into space, be it civil or military. Ultimately, capabilities must be operated within a framework that recognizes the critical importance of space to the global economy and to the civil and military sectors, and establishes behavioral norms that fully reflect this importance.

SHOW DAILY: ***In the areas you work in, could you tell us about the space capabilities being developed? Has the importance of space capabilities increased in recent years?***

BURNS: The Directorate of Command and Battlespace Management and Defence J6 has the U.K. Ministry of Defence lead on Network Enabled Capability and the provision of communications and information systems in support of operations. As such, it takes the strategic view and performs the function of what is known as 'Joint User' for satellite communications, pulling together the lessons and requirements generated on operations and feeding them in to inform the equipment programme. We also exercises strategic control of the U.K. MoD's Satcom assets. With U.K. military demand for Satcom increasing as rapidly as it is everywhere, the introduction of the Skynet 5 capability has been the focus of much of our activity.

SHOW DAILY: ***Could you give us an update on the Skynet program?***

BURNS: Skynet 5 is about to achieve full operating service at the end of March. The Skynet 5A and 5B have been successfully launched by Ariane 5 from Kourou and have joined the legacy 4C, 4E and 4F satellites sill in orbit. Both launches were a tremendous success with the satellites delivering communication services to front line forces astonishingly soon after launch. The maritime program has successfully replaced obsolete Satcom equipment in major surface units with SCOT 5,

providing both increased capacity and an improved baseband capability; I was one of the happy customers as I recently commanded the first ship to receive that capability. The Reacher satellite ground terminal program will deliver similar enhancements in the Land environment from March. The upgrade of the U.K. Satcom ground segment will complete early this following a complete rebuild of obsolete systems.

SHOW DAILY*: What do you see as the real benefits of the project?*

BURNS: From the operational point of view it is has been the generation of a genuinely military communications capability with a range of services that combine high capacity with high assurance. That gives the U.K. operational independence, flexibility and reach. From the acquisition perspective it has generated the stability of a long-term contract with a single supplier. The Skynet PFI arrangements with Paradigm offer significant flexibility and also allow them the ability to work at risk within a long term, exclusive contract. Those arrangements promote innovation and capability evolution, something we are already seeing in a range of additional services offered beyond the core contract. Especially important against a background of high tempo enduring operations is the shortening of procurement times for urgent requirements.

SHOW DAILY*: Can you give us a timeline as to what will happen this year with the program?*

BURNS: Skynet 5C will be launched in May. The Paradigm anti-jam modem has already begun installation in maritime units and will achieve its full capability by December. By the end of the year we will begin to see Reacher deploying on operations. A new Press to Video Service will be introduced into service 2Q08 and the Information Dissemination Services, the Skynet DVB-RCS service which is already supporting operations, will continue to roll-out throughout 2008.

SHOW DAILY*: What are the major challenges for the U.K. in the military space arena? How would you like to position the U.K. on the global military space landscape?*

BURNS: As far as Satcom goes, it's the pace of change and the costs that are the biggest challenge. No sooner has Skynet 5 delivered than we have to address the big question – where to next? Clearly, when that question is answered, I'd like to see us staying where we are now, innovating, out with the leading pack, and setting the pace. ■

AD INDEX

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Timing, Technology and Finance Key To Success
Says Industry Leader

BY LINDA THORNBURG

Those who are ignorant of the past are doomed to repeat it, and for the satellite industry, this means avoiding the financing, technology and regulatory errors that have doomed some efforts in the past, said Richard Dorfman, chairman of ProtoStar Ltd.

Dorfman, a former CEO of Hughes Space and Communications who joined ProtoStar in 2005, has seen a lot of money made and lost in the satellite industry throughout the last 25 years. And while applications for satellites grew beyond what anyone could have imagined in 1982, when the first meeting of the satellite industry was held, often there were problems with the timing of applications, Dorfman said.

Direct broadcast was first introduced by Comsat in the late 1970s, but Comsat could not manage to get the right programming, even though it invested $100 million. A similar thing happened with Prudential Ventures, which invested $50 million in USBI and also failed. Hughes had applications for two satellites in 1984, one for direct-to-home and one for local service. The satellites did not get launched for 10 years due to various financial and technology roadblocks, and by then the technology had evolved to another level.

Technology development also has been critical to the successes and failures of the industry, Dorfman said. A lot of value was lost in the industry by companies that balanced poor assessments with bad timing, such as Globalstar and Satellite Business Systems, a satellite networking venture funded by IBM in coordination with Aetna. IBM wanted to marry mainframes with satellite and got the technology wrong. Federal Express had the idea of transmitting information on satellites but that also failed.

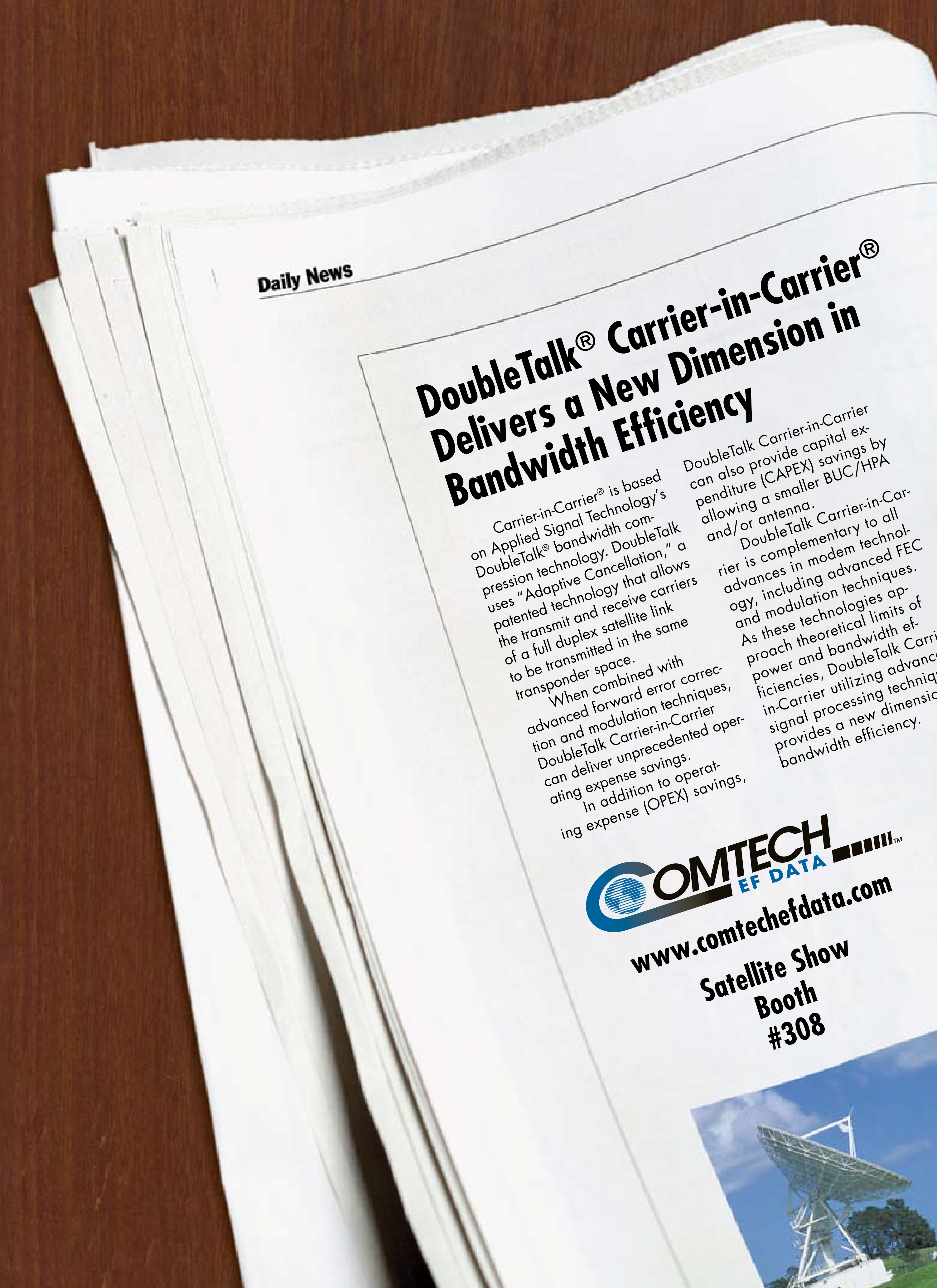
There were also success stories. SES repurposed a satellite and launched it in a time when the international communications environment deregulated. Thus it thrived. PanAmSat had a similar success story. It is those who have focused on the ability to do broadcasting to multiple sites that have done well.

"Remember, the golden goose is the satellites themselves," Dorfman said. "The industry needs to nourish the satellite manufacturers and to make sure they have incentives to deliver high quality satellites. Satellite failures hurt our business."

It is these lessons that are driving ProtoStar as the company looks to develop a direct-to-home satellite business in the Asia-Pacific region. The ProtoStar-1 satellite, acquired from China Telecommunications Broadcast Satellite Corp. and China National Postal and Telecommunications Appliances Corp., is being refurbished by Space Systems/Loral and is scheduled to be placed in orbit this summer. ProtoStar also has ordered a second satellite from Boeing Co.

ProtoStar has customers for both spacecraft and growing affluence in Asia will help fuel the direct-to-home market, said Dorfman. "Multipoint transmission is the most solid foundation for business, and that's the kind of satellite we have," he said. "There is a lot of customer interest and I'm feeling really good about it," New applications such as audio and video streaming become addictive and also will help fuel the demand for service.

When asked when countries like India will open their markets to the global economy, he reminded the audience of what happened in Japan. The government invited U.S. companies to enter the market because Japan needed the services — deciding that was more important than protecting Japanese businesses. A series of joint ventures sprung up, which Dorfman said he suspects will happen in other Asian countries eventually. ■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