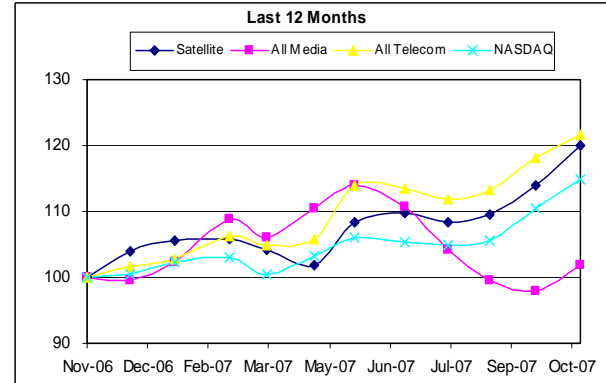


# FROM THE GROUND UP

October 2007

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## THE WAY WE SEE IT...

**Satellite:**

Equipment and service provider **Gilat Satellite Networks** has been rumored to be up for sale, with speculation that it could fetch as much as \$500 million. Both private equity and strategic buyers are reportedly looking.

**Media:**

**Microsoft** agreed to invest \$240 million in **Facebook** for a 1.6% share of the company, equating to an enterprise value of \$15 billion for the rapidly growing social networking site. While some industry observers dismissed the implied valuation as Microsoft's entry fee for its advertising sales agreement with Facebook, it will be interesting to see if the valuation holds up with more purely financial equity investors, with whom the company is rumored to be in discussions for an additional \$260 million. As some of the targeted parties in this additional transaction are rumored to be hedge funds, we wonder if an IPO of Facebook can be far behind.

**Telecom:**

**Cisco Systems** announced that it was buying **Navini Networks** for \$330 million in cash and assumed options. This represents a major commitment to WiMax by a company that heretofore had been associated more closely to the competing WiFi technology, and promises to strengthen that ecosystem.

**AT&T** acquired 12 MHz of wireless spectrum in the 700 MHz band from **Aloha Partners** in 72 of the largest 100 U.S. markets. The purchase equates to \$1.06 MHz-POP and underscore continued demand by wireless companies for additional spectrum. It's unclear how this will affect AT&T's bidding strategy in the upcoming 700 MHz auctions.

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## Finding value in turbulence and rapid change

In a whitepaper on the digital music sector that Near Earth recently added to its online library (<http://www.nearearthllc.com/analysis/Whitepapers.asp>), we argued that in this sector characterized by high fragmentation, volatility, and perpetual change, there is value to be found in “optionality”. By this we meant that as fragmentation facilitates the entry opportunity for new competition (in contrast to an environment dominated by a few well entrenched participants), volatility can enhance the value opportunity for such new entrants (and incumbent operators alike). With a nod to the commonly used Black-Scholes formula, in which option value increases in direct proportion to the volatility of an underlying asset, we suggested that the greater the swings in potential results, the greater the opportunity for industry competitors (in this case, in digital music) to come back from behind, or to be lifted by a rising wave. Which said, we presented our case that the competitors most likely to succeed in such an environment will be those demonstrating, among a number of characteristics, the greatest strategic and operating flexibility to change with changing circumstance, and the greatest potential to participate in eventual consolidation. While our case was made specifically with the digital music sector in mind, it seems that many of the same notions could as easily apply to other “new media” segments in the current investment environment. Below are two additional examples from among many, selected on the basis of recent experience and familiarity by Near Earth:

- Digital signage. (Please also refer to a prior overview article on digital signage in this newsletter (<http://www.nearearthllc.com/analysis/articles.asp>).) Perhaps even more than digital music, which does include a few well capitalized and publicly held companies in addition to numerous smaller competitors, the digital signage industry is fragmented in every direction. Not only are there hundreds of operators, who for the most part remain focused on isolated market verticals (e.g., elevators, supermarkets, taxicabs, etc.), but dozens of varying business models. While some companies are owner/operators of networks and try to sell advertising inventory to third parties, others instead act as network managers on behalf of network owners, while others still focus on individual aspects of the business (such as content creation, technical support, etc.). There are, in addition, a number of new technology providers and enablers that are enriching the consumer experience and business opportunity through new applications such as blue-tooth enabled impulse purchasing, music downloading, and similar features. Within this rapidly evolving and highly fragmented universe, revenue models are still being defined and the long term economics remain unclear. What seems to us certain, however, is that digital signs will in the years to come increasingly displace old-fashioned paper billboards, while outdoor advertising as a whole will probably not diminish. With this in mind, identifying platforms that are well positioned to participate in the sector’s evolution and eventual consolidation, and buying in at valuations reflecting such “optionality”, seems a reasonable idea.
- Wireless broadband. (Please also refer to another recent whitepaper by Near Earth, on wireless broadband, available in our online library (<http://www.nearearthllc.com/analysis/Whitepapers.asp>).) Driven by many of the same forces behind digital music, digital signage, and other “new

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## ***From the Deal Side (cont.)***

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media”, the wireless broadband segment is rapidly emerging as a result of technological advancement and growing consumer sophistication, both of which are paving the way for new and improved content delivery platforms. While individual business plans vary in their approach – some more reliant than others on spectrum ownership, capital investment, technical innovation, or for that matter consumer market penetration – it is not difficult to imagine a time when wireless (as opposed to wireline) broadband delivery will be the standard form of content distribution. With advantages including speed, mobility, and even cost, the only disadvantage of wireless broadband networks may be their relative upstart status, but communications history has shown that incumbency can sometimes be a fragile advantage. And even though a particular business model or even technical standard may be difficult to pin down at this stage (the emergence of WiMax notwithstanding), there should be high option value in this fragmented arena that is clearly on the rise.

As previously stated, the selected sectors are not the only “new media” or emerging communications fields in which investment opportunities based on “optionality” may be identified. While digital music, digital signage, and wireless broadband, are each forms of content distribution among many, it seems that the content side itself should be rich with opportunity. (Consider, for example, the rapid trajectory of Facebook as a source of inspiration.) Moreover, the case could perhaps even be made that traditional media also may be a breeding ground for such opportunities. As valuations in the traditional media sector continue to decline (see Near Earth’s market indices and corresponding data in this newsletter), reflecting some of the uncertainties and competitive factors described herein, certain assets may reach a valuation point where the concept of option value may not be inappropriate. At some price level, for example, newspapers may be attractive Internet investment candidates, and let’s not forget the enormous amount of wireless spectrum (and related tower infrastructure) owned by radio operators in perpetuity.

... the case could perhaps even be made that traditional media also may be a breeding ground for such opportunities as valuations in the sector continue to decline...

By Dan Ramsden  
Near Earth LLC

## Space Race 2

Recently, there has been plenty of talk and ink devoted to the 50th anniversary of Sputnik. That amazing event launched the Space Age and will forever be a dividing line in human history. It also led to a Space Race that put the first man on the Moon. Today, a new space race has begun, but this time with far more competitors and it seems the tortoises may pass the hare. In fact, this second space race is a new "inconvenient truth" for Americans to understand and address if they choose not to lose. Whoever decides to enter this race, the events unfolding in space are highly likely to result in significantly increased expenditures for space activities, which we at Near Earth strongly encourage. Here, for example, are a few recent headlines and news quotes to demonstrate the state of play:

Today, a new space race has begun, but this time with far more competitors

- "China celebrated the launch of its first lunar satellite, Chang'e One, yesterday as it followed Japan and India in a new space race to put the first Asian man on the moon." (The Scotsman, October 25, 2007)
- Seven nations, including India, the US, China, Japan, Germany, Britain and Italy, are planning to launch lunar missions in the near future, according to delegates at the 58th Astronautical Congress. (Source: Hindustan Times)
- India will develop its own technology to launch an astronaut into space rather than rely on outside support, the head of the country's space agency said. India's space program suffered in the past from sanctions imposed by the West, barring access to space material and technology transfers, after the country tested nuclear weapons in 1974 and in 1998. "We have learned the hard way that we should have indigenous capability," said ISRO's chairman. "Only then will anyone respect you." (Source: SpaceDaily.com)
- "In America, contrary to our self-image, we are no longer leaders but simply players," said Neil DeGrasse Tyson, the director of the Hayden Planetarium. "We've moved backward just by standing still." The numbers of new scientists in Asian countries are eclipsing those in the United States. According to the National Academy of Sciences, in 2004, around 500,000 engineers graduated in China, 200,000 in India and only 70,000 in the U.S.
- Experts warn that US-Russian post-Cold War space cooperation could crumble as Moscow recovers its economic and diplomatic strength, while tensions grow over Washington's missile defense plans in Eastern Europe.
- "The Chinese People's Liberation Army and Space Warfare," a report released Oct. 17 by the American Enterprise Institute, concludes that China is preparing for war in space and considers the United States a likely adversary. "They're very serious about developing means to attack targets in the atmosphere and on the Earth's surface from space," said Larry Wortzel, the report's author.

It should be acknowledged by all that this new space race does not necessarily have to be an adversarial one among sworn enemies, but can instead be a mix of friendly competition and even cooperation.

It should be acknowledged by all that this new space race does not necessarily have to be an adversarial one among sworn enemies, but can instead be a mix of friendly competition and even cooperation. After all, the amounts of money

## The Current Spot Beam (cont.)

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required to truly compete as a space faring nation are truly astronomical. Below are some indicative thoughts from the international community and the U.S.:

- "The biggest ethical question before the space-faring nations is whether mankind is looking at 'habitation or colonization' of Moon and Mars. The construction and occupation of bases should be fundamentally treated as habitations rather than colonies in the conventional sense," said the deputy director of ISRO.
- The U.S.'s International Traffic in Arms Regulations (ITAR) is a major hurdle in the growth of new space industry actors in the global market, said speakers from emerging space nations at the 58th International Astronautical Congress. The speakers were unanimous that both cooperation and healthy competition were necessary to ensure growth of the space industry, especially among emerging nations and new players. (Source: India PRwire)
- Michael Griffin reiterated that NASA "will be open to the idea of cooperating with India in human space flights. We hope that when we return to the moon, it will be done with our space station partners and others may be India." (Source: The Hindu)

But some how we think the stakes are just too high for friendly cooperation to rule the day and, if the International Space Station is such an example, perhaps it is not even desirable. No, friendly competition, perhaps from blocks of nations, is the best of the more likely outcomes to which we can aspire. So let's take a quick look at the three realms of space activities.

**Military/Intelligence:** We think most nations now understand the critical importance of the truly high ground of space as well as the need to protect space assets ever more critical to the global economy. At present, the U.S. and its allies have a lead in the military space race and appear to be trying very hard to maintain that lead. Unless there is a major change of U.S., EU and NATO strategy, we would expect to see continued and even increased expenditures (e.g. comms-on-the-move) to maintain this lead. Luckily for the aerospace/defense contractors of these nations, Russia, China, India and others have no intention of ceding the high frontier to the West and are ramping up their own activities and investments.

**Commercial:** On the commercial front, the U.S. seems to have temporarily checked its massive market share loss to Europe and elsewhere brought on largely by the ITAR related export issues of the last decade or so. According to an October Futron report, the U.S. manufactured 12 of the 19 commercial satellites launched year to date (63.2%) thanks to (i) continued technology leadership (those military R&D dollars do filter down), (ii) a weakening dollar, and (iii) capital markets more friendly to satellite financing. Of course a much smaller percentage of these U.S. made satellites were actually launched on U.S. launch vehicles. While satellite technologies have advanced remarkably since Sputnik, a rocket is largely still a rocket and sufficient quality can sometimes be achieved with much lower production costs.

When you add the four European manufactured satellites launched year to date, the total goes to 16 of 19 (84.2%), mostly launched on European or Russian launch vehicles. The real question is what happens in a few years when India

Most nations now understand the critical importance of the truly high ground of space as well as the need to protect space assets ever more critical to the global economy.

## The Current Spot Beam (cont.)

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and China ramp up their production. We suspect it will become very difficult for U.S. and European manufacturers to stay competitive on the more commodity-like satellite applications such as bent-pipe fixed satellite services or on launch services in general without meaningful government subsidies. Even Russia might find future price points hard to reach. Here are some examples of emerging competition:

- China Great Wall Industry Group, the marketing arm for China's space industry, said customers from Africa and Latin America are looking to China to build, launch and operate satellites. "We are cheaper compared to Europe's Arianespace," said Hua Chongzi, Great Wall's vice-president. China has launched 33 foreign satellites since 1980.
- India and China are wooing nations in Europe, Asia and Latin America to build and launch satellites aboard their homegrown rockets, as they aim for a larger share of the market. India is offering its Polar Satellite Launch Vehicle at nearly 75% of the price charged by companies such as International Launch Services (ILS), which offers Russian Proton rockets. (Source: Wall Street Journal)

**Civil.** Civil space may not directly affect a nation's security or its citizens' bank accounts, at least not in the near term, but accomplishments in space do say a lot about a country's will to lead and its position among nations. It's as much about national psychology and self esteem as it is about money and markets. For China, India and Japan it is about who will lead Asia, and perhaps the world, in technology and manufacturing in the 21st century. Ultimately, it is a question of which country will join, or replace, the U.S. as a super power. The U.S. should clearly not feel so smug about its current "hyperpower" status and dominance of space. Recall that at one point the New World was split between Spain and Portugal because of their advanced ships and superior navigation skills, yet England starting much later eventually caught up, producing more and better ships and many would argue surpassing the first movers in colonization. History is replete with such examples.

According to the same Futron report cited above, only 21 of 59 non-commercials satellites launched year to date (35.6%) have been manufactured in the U.S. This percentage grows to only 45.8% when European manufactured satellites are included. When it comes to non-commercial space, the west already has lots of competition. Here is a summary of what several major space faring nations are saying about their near term ambitions in space:

- **China.** Just launched first lunar orbiter. Plans a space lab by 2010, a lunar rover by 2012, a lunar sample return mission by 2017 and a manned lunar base by 2020 done independently.
- **Japan.** Recently launched Kaguya, its first lunar orbiter, beating both China and India. Plans landing a robot on the moon's surface in 2012, followed by one in 2018 that will seek to return successfully to Earth. For human exploration and colonization of the Moon they expect international collaboration modeled on the international space station.
- **Russia.** The Federal Space Program for 2006-2015 stipulates the construction of a reusable "Clipper" spacecraft jointly with European partners, and two carrier rockets for manned spaceflight, the Angara and

The U.S. should clearly not feel so smug about its current "hyperpower" status and dominance of space.

## The Current Spot Beam (cont.)

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the Soyuz-2. Soyuz-2 is already operational. Mock-up models of Angara boosters will be exhibited at the Dubai AirShow Nov. 11, 2007.

- **U.S. (NASA).** The United States has pledged to colonize the Moon by 2020 and send astronauts to Mars by 2037. However, Michael Griffin has publicly stated that we may very well not be the first to return to the Moon.

The US Senate recently passed an appropriations bill that gives NASA \$18.5 billion

That the U.S. will meet these bold initiatives on its stated schedule is widely doubted. The US Senate recently passed an appropriations bill that gives NASA \$18.5 billion, thanks in part to an amendment the Senate approved earlier this month that adds \$1 billion to the agency's budget. The Senate version of the bill must be reconciled with the House version, which lacks the extra \$1 billion, and also faces a threatened veto from the president. Many believe that to really achieve these bold initiatives will require substantially higher civil space budgets not just an extra billion dollars here and there or a truly surprising level of contribution from private enterprise and space entrepreneurs.

Others, including many scientists, are outwardly opposed to a more aggressive and manned space program sighting the huge diversion of scarce budget dollars from other "more worthy" scientific endeavors. There is also a growing argument that intelligent robots and satellites employing tele-presence are a cheaper and less fragile way of exploring space and can do more than an adequate job. Yet some experts, such as Steve Squyres, an astronomy professor at Cornell University and principal investigator of the Mars Exploration Rover Mission, claim that "We are many decades from robots that can match humans, even in the lab, and laboratory robotics is about 20 years ahead of space robotics."

So who is right? Will the U.S., perhaps with its European, Indian and/or Japanese allies (maybe even Russia), pick up the gauntlet thrown down by China or will the collective will devolve into budgetary battles and bureaucratic foot shuffling? In the end, we suspect (or at least hope), many participants from both the West and the East will find the "Right Stuff" and compete on a friendly basis for space. For those that choose to sit this race out, at least they can console themselves that it will be someone else's citizens who will one day complain at every available opportunity "If we could put a man on the Moon, why can't we \_\_\_\_\_ (fill in the blank)."

In the end, we suspect (or at least hope), many participants from both the West and the East will find the "Right Stuff" and compete on a friendly basis for space.

By Hoyt Davidson  
Near Earth LLC

With special thanks to Edward Ellegood of FLORIDA SPACErePORT for many of the news quotes cited above.

## Got Satellite?

At this writing, firefighters continue work to contain the last of the recent bout of California wildfires. While the property losses from this one incident are indeed staggering, the loss of life has been mercifully small. When we consider why this is the case, it's also a good time to consider the role satellite technology plays in preparing, responding and recovering from natural and man made disasters – and helping to minimize these losses. And, given Near Earth's position in the capital markets, we also consider the ramifications this technology can have for investors.

Even before disaster strikes, satellites help us by predicting the onset of the disaster itself.

Even before disaster strikes, in many cases satellites help us by predicting the onset of the disaster itself. Consider that before floods, hurricanes or Santa Ana wind storms happen, meteorological satellites help us forecast the disaster itself, providing critical time to prepare and, when needed, evacuate. While today's techniques have already reduced loss of life from weather related disasters, new satellites like the NPOES series now in development promise to improve the quality of these forecasts further. Companies like ITT, Ball, Lockheed Martin and others help make this happen. New techniques like GPS occultation (GPS occultation combines purpose built meteorological satellites with the Global Positioning Satellites already in service to measure atmospheric properties) will soon magnify to an even greater extent our ability to measure and predict our global climate. This new technology was sponsored and tested by NASA and the Jet Propulsion Lab and is now being explored by NOAA and commercialized by GeoOptics and Broad Reach.

After the onset of a disaster, satellites swing into action in a variety of ways. One of the main consequences of many disasters is failure of the terrestrial communications infrastructure due to destruction, damage or loss of power. For example, flooding and wind damage from hurricane Katrina not only destroyed broadcast, microwave and cell towers, subsequent failure of the power grid silenced much of the equipment that did survive the storm. Likewise, when the tsunamis ravaged the Indian Ocean, many of the locations devastated by the waves had little communications infrastructure to begin with. Thus, when first responders arrive, in many instances there are no local communications capabilities. But thanks to portable satellite terminals from providers like Globalstar, Inmarsat, MSV, Thuraya and Iridium (soon to be joined by ICO, Terrestar and others) they can bring their communications with them.

Improved mapping and navigation from imaging satellites and GPS satellites are used for fighting fires, tracking assets and planning responses. Companies like GeoEye, Digital Globe, ORBCOMM, ESRI, Garmin and Trimble lead here.

Within hours of a disaster, thanks to the rapid deployment capability and independence from terrestrial infrastructure that satellite communications provide, broadband communications can be in place. Combined with deployable WiFi mesh networks, VOIP and other technologies, satellites can provide the full communications capabilities that speed and optimize recovery efforts. Companies like Freedom For Wireless, Agiosat, Spacenet, Artel, DataPath, Americom Government Services and Globecom fill this need.

When first responders arrive, in many instances there are no local communications capabilities... but thanks to portable satellite terminals, they have instantaneous capability.

## ***Terra Bytes (cont.)***

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Given the increasing success satellite equipment and services have brought to disaster planning, management and response, we expect this area to enjoy growth well above the industry average.

Finally, through monitoring land use, resources and the environment itself, satellites can play an important role in planning for the next disaster.

Most of the applications above are in an early stage of adoption, and the industry landscapes have yet to evolve. However, given the increasing success satellite equipment and services have brought to disaster planning, management and response, we expect this area to enjoy growth well above the industry average. In turn, we expect the capital markets to allocate capital to finance this growth, and that this will present opportunities for those who provide the capital.

So the next time your government is facing fires, floods, storms, earthquakes, terrorists or tidal waves, make sure the answer to “Got Satellites?” is YES.

By John Stone  
Near Earth LLC

# Conference Round-Up

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## SATCON, HD World and IPMedia Expo (New York City)

The SATCON, HD World and IPMedia Expo conferences and exhibitions were held this month in New York City. Going into its sixth year, the conference once again addressed the major trends and challenges facing the rapidly changing digital media and communications industry.

The opening day keynote was presented by Mr. David Neal, Executive Producer, NBC Sports and Executive Vice President, NBC Olympics. Mr. Neal portended that the 2008 Beijing Olympics could be HDTV's "Debutante Ball" as all of the excitement and passion of next year's Olympic Games will be captured in High Definition (HD). While working at Intelsat in the summer of 2004, I remember being in the control center watching the video feeds of the Athens' Olympic Games. During these Olympics, the coverage was captured mostly in standard definition (SD) while HD was used in only 5 sporting venues. Four years later, the 2008 Summer Olympics to be held in China will be the first Olympic Games being captured and distributed solely in HD, covering all 37 sporting venues. With these Olympic Games as a backdrop, in addition to the 2009 "analog cutoff", recent announcements by major retailers like Best Buy to pull analog television products from their shelves, rapidly declining TV prices, and the satellite television and cable industry's push to add more and more HD channels to their lineups, will undoubtedly continue to drive HDTV into the U.S. mainstream market.

The heightened attention to HDTV was not lost on the IPMedia crowd, as many companies and panels addressed the need for delivering video content more efficiently and effectively over IP. Content delivery networks (CDNs) such as Limelight and IP routing experts like Juniper Networks were key sponsors of the event. Limelight Networks recently introduced LimelightHD, a service to deliver HD media and digital content over the Internet. Juniper sponsored a forum titled "New advertising models for IPTV: Unlocking value, delivering measurability". As we have discussed in a previous whitepaper<sup>1</sup> on IPTV, savvy marketers can use IPTV as an opportunity to efficiently target consumers. One benefit of IPTV is its ability to create niche marketing programs to benefit specific target markets at a much more granular level than is currently implemented today.

Having these various yet inevitably linked sectors within digital media and communications all under one conference provides a unique insight into how each one influences the other. The attendance at this once satellite-only conference should continue to increase as these industry sectors also continue to converge.

The 2008 Beijing Olympics could be HDTV's "Debutante Ball" as all of the excitement and passion of next year's Olympic Games will be captured in HD.

... addressed the need for delivering video content more efficiently and effectively over IP.

By Kuni Takahashi  
Near Earth LLC

<sup>1</sup> Near Earth LLC's whitepaper titled, "IPTV – The Future of Television?" can be located at <http://www.nearearthllc.com/analysis/whitepapers.asp>

# NEAR EARTH ANALYSIS: MARKET COMPARABLES

## Public Market Valuation Analysis of Selected Companies in the NEAR EARTH TELECOM INDEX

(\$ in millions, except per share data)		Stock Price:		Enterprise Value as a Multiple of:			Price as a Multiple of:		
Company	10/26/07	Market Value of Equity	Enterprise Value (a)	LTM Sales	LTM EBITDA	LTM EBIT	LTM EPS	2007E EPS (b)	2008E EPS (b)
<b>Satellite Capacity Leasing (FSS)</b>									
LORL	Loral Space & Comm	\$ 41.68	\$1,275.2	\$1,398.2	1.6x	17.6x	n/m	n/m	n/m
SESG.PA	SES Global S.A. (c)	\$ 23.57	\$10,392.8	\$14,826.0	6.1x	9.2x	16.6x	17.2x	22.0x
				Mean	5.1x	12.8x	23.7x		
<b>Satellite Equipment Manufacturers &amp; Integrators</b>									
GILT	Gilat Satellite Networks	\$ 11.02	\$456.4	\$352.8	1.3x	9.6x	21.9x	25.9x	22.0x
GCOM	Globecom	\$ 15.72	\$262.1	\$252.4	1.7x	23.6x	34.2x	31.5x	21.2x
VSAT	ViaSat	\$ 30.82	\$992.8	\$880.8	1.7x	12.7x	27.3x	33.9x	21.1x
ORB	Orbital Sciences	\$ 25.54	\$1,535.7	\$1,453.6	1.6x	16.1x	19.6x	29.6x	29.4x
RADN	Radyne Comstream Inc.	\$ 9.84	\$185.1	\$151.9	1.1x	8.3x	10.2x	17.0x	15.4x
CMTL	Comtech Telecommunications	\$ 55.03	\$1,519.0	\$1,281.1	2.9x	13.5x	15.1x	23.3x	15.3x
GDV	COM DEV International (d)	\$ 1.03	\$305.7	\$297.7	1.8x	15.0x	23.3x	n/m	n/m
				Mean	1.7x	14.1x	21.7x	26.9x	20.7x
<b>Towers</b>									
AMT	American Tower	\$ 45.28	\$19,463.4	\$23,194.9	16.8x	27.1x	n/m	n/m	n/m
CCI	Crown Castle	\$ 41.20	\$11,619.4	\$15,236.2	14.2x	28.2x	n/m	n/m	n/m
SBAC	SBA Communications	\$ 36.38	\$3,844.1	\$5,550.3	14.2x	29.5x	n/m	n/m	n/m
				Mean	15.1x	28.3x			
<b>General Telecom</b>									
AT	Alltel	\$ 71.00	\$24,956.5	\$27,284.1	3.3x	9.8x	18.8x	30.1x	24.5x
T	AT&T	\$ 41.46	\$257,052.0	\$316,153.0	3.5x	9.6x	18.4x	26.1x	15.0x
VZ	Verizon Communications, Inc.	\$ 45.60	\$132,559.2	\$192,930.2	2.1x	6.6x	12.9x	24.1x	19.3x
S	Sprint Nextel Corporation	\$ 17.38	\$50,436.8	\$70,910.8	1.7x	6.4x	44.2x	n/m	20.7x
				Mean	2.7x	8.1x	23.6x	26.8x	19.9x
<b>TELECOM SERVICES INDEX (excludes Towers stocks)</b>									
				High	7.5x	23.6x	44.2x	33.9x	29.4x
				Mean	2.4x	12.7x	26.7x	23.5x	20.5x
				Low	1.1x	6.4x	10.2x	17.0x	15.0x

## Public Market Valuation Analysis of Selected Companies in the NEAR EARTH MEDIA INDEX

(\$ in millions, except per share data)		Stock Price:		Enterprise Value as a Multiple of:			Price as a Multiple of:		
Ticker	Company	10/26/07	Market Value of Equity	Enterprise Value (a)	LTM Sales	LTM EBITDA	LTM EBIT	2007E EPS (b)	2008E EPS (b)
<b>Satellite Television (DBS)</b>									
BSY	British Sky Broadcasting (f)	\$ 10.99	\$19,451.53	\$18,955.68	2.0x	9.2x	11.4x	17.0x	15.6x
DISH	EchoStar Communications	\$ 49.72	\$22,662.4	\$26,229.4	2.5x	9.5x	17.4x	28.1x	20.1x
DTV	DiracTV Group Inc.	\$ 25.70	\$31,611.0	\$33,026.0	2.1x	8.4x	12.9x	21.1x	18.0x
				Mean	2.2x	9.0x	13.9x	22.1x	17.9x
<b>Television</b>									
TVL	LIN TV Corp.	\$ 14.31	\$775.4	\$1,648.4	3.8x	10.4x	17.1x	n/m	19.1x
SBGI	Sinclair Broadcast Group	\$ 11.96	\$1,035.7	\$2,418.0	3.4x	8.1x	19.1x	24.9x	13.9x
YBTVA	Young Broadcasting Inc.	\$ 2.33	\$47.1	\$795.5	3.6x	11.8x	33.3x	n/m	n/m
				Mean	3.6x	10.1x	23.2x	24.9x	16.5x
<b>Satellite Radio (DARS)</b>									
SIRI	Sirius Satellite Radio	\$ 3.58	\$5,225.7	\$6,111.7	7.7x	n/m	n/m	n/m	n/m
WRSP	Worldspace	\$ 4.16	\$163.1	\$220.9	14.7x	n/m	n/m	n/m	n/m
XMSR	XM Satellite Radio	\$ 15.02	\$4,602.4	\$5,880.2	5.7x	n/m	n/m	n/m	n/m
				Mean	9.4x				
<b>Radio</b>									
CCU	Clear Channel	\$ 37.85	\$19,318.3	\$26,817.5	3.7x	11.3x	15.3x	26.7x	23.8x
CMLS	Cumulus Media Inc.	\$ 10.40	\$458.1	\$1,027.8	3.1x	12.7x	15.7x	n/m	52.0x
CXR	Cox Radio Inc.	\$ 12.51	\$1,196.0	\$1,528.2	3.4x	9.6x	10.4x	16.9x	16.2x
EMMS	Emmis Communications Corp.	\$ 5.23	\$196.3	\$876.1	2.5x	12.7x	15.7x	n/m	n/m
ETM	Entercom Communications	\$ 18.80	\$763.8	\$1,447.7	3.2x	16.6x	20.3x	39.2x	14.9x
ROIA	Radio One Inc.	\$ 3.52	\$347.5	\$1,260.8	3.5x	25.2x	37.2x	n/m	n/m
				Mean	3.2x	14.7x	19.1x	27.6x	26.7x
<b>NewsPrint</b>									
DJ	Dow Jones	\$ 59.74	\$5,100.7	\$5,465.2	2.8x	20.6x	35.4x	39.3x	32.1x
MNI	The McClatchy Company	\$ 16.58	\$1,360.2	\$4,012.2	1.7x	6.4x	8.6x	11.3x	12.0x
NYT	New York Times	\$ 20.32	\$2,928.1	\$4,271.3	1.3x	9.2x	15.6x	20.9x	17.4x
TRB	Tribune	\$ 29.65	\$6,641.6	\$15,004.0	2.8x	12.8x	16.0x	18.3x	21.3x
WPO	Washington Post	\$ 801.51	\$7,643.2	\$7,824.6	1.9x	10.4x	15.2x	27.4x	24.3x
				Mean	2.1x	11.9x	18.1x	23.4x	21.4x
<b>MEDIA SERVICES INDEX (excludes Satellite Radio (DARS) stocks)</b>									
				High	3.8x	25.2x	37.2x	39.3x	52.0x
				Mean	2.6x	12.1x	18.6x	19.4x	21.5x
				Low	1.3x	6.4x	8.6x	11.3x	12.0x

(a) Calculated as Market Value of Equity plus total debt, minority interest and preferred stock, less cash & equivalents

(b) EPS estimates from Thompson First Call. Near Earth does not estimate EPS and does not condone or validate these estimates.

(c) Converted to US \$ from Euro at an exchange rate of 1.43 US \$ per Euro

(d) Converted to US \$ from CS at an exchange rate of 0.967 US \$ per CS

(f) Converted to US \$ from British Pound at an exchange rate of 2.05 US \$ per British Pound

n/m Not Meaningful

Member of NEAR EARTH SATELLITE INDEX

# NEAR EARTH ANALYSIS: M&A TRANSACTIONS

## Selected Satellite, Telecom & Media Transactions (US\$ in millions)

Date	Announced	Acquiror	Target	Equity Value (a)	Transaction Value (b)	Transaction Value/	
						LTM Sales	LTM EBITDA
<b>Satellite Operators</b>							
04/21/04		KKR	PanAmSat Corporation	\$3,532.0	\$4,300.0	5.2x	7.7x
06/06/04		Blackstone Group	New Skies Satellites NV	956.0	956.0	4.5x	7.7x
08/17/04		Zeus Holdings	Intelsat Ltd.	3,100.0	5,000.0	5.2x	7.6x
08/29/05		Intelsat Ltd.	PanAmSat Holding Corporation	3,065.0	6,271.1	7.5x	9.7x
12/14/05		SES Global	New Skies Satellites NV	760.0	1,160.0	5.0x	8.0x
12/05/06		Abertis Telecom	EutelSat (32% share)	1,000.0	1,838.0	7.3x	9.7x
12/18/06		Telesat (new)	Telesat (old)	2,800.0	2,940.0	7.1x	12.0x
12/18/06		Telesat (new)	Loral Skynet	691.0	1,050.0	7.1x	19.6x
					Mean	6.1x	10.3x
<b>Ground Equipment</b>							
12/06/04		SkyTerra / Apollo	HNS (Hughes' VSAT, Broadband)	\$110.0	\$415.0	0.8x	n/d
03/03/05		Radyne Comstream	Xicom Technology	41.0	46.0	1.1x	n/d
08/15/05		Stratos	Xantic	191.0	191.0	1.1x	n/d
11/11/05		SkyTerra / Apollo	HNS (Hughes' VSAT, Broadband)	155.0	460.0	0.8x	n/d
11/21/05		Viasat	Efficient Channel Coding Inc.	25.5	25.5	n/d	n/d
08/03/06		Thrane & Thrane	Nera's Mobile Satellite Communications	89.6	89.6	1.1x	n/d
					Mean	1.0x	n/d
<b>System Integrators</b>							
05/03/07		Globecomm	GlobalSat	18.4	18.4	0.9x	n/d
					Mean	0.9x	n/d
<b>Video Distribution Equipment</b>							
09/29/05		International Datacasting	Proflin (c)	4.5	3.9	1.1x	n/d
11/18/05		Cisco	Scientific Atlanta	6,900.0	5,300.0	2.7x	13.2x
02/08/06		Tandberg Television	Skystream	80.0	80.0	2.6x	n/d
07/25/06		Motorola	Broadbus Technologies	181.0	181.0	n/d	n/d
08/21/06		Cisco	Arroyo Video Solutions, Inc	92.0	92.0	n/d	n/d
08/22/06		Harmonic	Entone Tech.	45.0	45.0	n/d	n/d
12/21/06		Motorola	Tut Systems	39.0	39.0	1.0x	n/d
					Mean	1.9x	13.2x
<b>Towers</b>							
07/04/04		Global Signal	Lattice Communications	\$115.0	\$115.0	9.4x	n/d
05/04/05		American Tower	Spectrasite	3,100.0	3,800.0	10.2x	17.0x
03/17/06		Crown Castle	Trintell Communications	145.0	145.0	10.1x	n/d
03/17/06		SBA Communications Corp	AAT Communications Corp	1,002.0	1,002.0	12.0x	17.9x
05/08/06		Crown Castle	Mountain Union Telecom LLC		309.0	11.9x	n/d
10/06/06		Crown Castle	Global Signal	4,000.0	5,800.0	12.1x	26.6x
					Mean	10.9x	20.5x
<b>General Telecom (Wireless)</b>							
02/17/04		Cingular	AT&T Wireless	\$40,770.0	\$47,105.0	2.8x	10.7x
12/15/04		Sprint Corp	Nextel Communications Inc	28,449.0	36,200.0	2.7x	7.1x
01/05/05		Alltel	Western Wireless	4,300.0	6,181.0	3.2x	10.7x
07/01/05		Sprint Nextel Corporation	US Unwired, Inc.	1,000.0	1,266.0	2.9x	13.2x
03/06/06		AT&T (new)	Bell South	67,000.0	89,000.0	4.3x	10.7x
					Mean	3.2x	10.5x
<b>Television</b>							
03/31/05		Lin TV Corp.	WNDY-TV, WWHO-TV	\$85.0	\$85.0	4.3x	12.9x
05/10/05		Various Acquirors (d)	Emmis Comm TV Portfolio	1,350.0	1,350.0	5.2x	14.6x
06/30/05		Univision Communications	WLII (2 TV Stations in Puerto Rico)	190.0	190.0	4.0x	16.7x
03/29/07		Umbrella Holdings LLC	Univision Communications	12,300.0	13,700.0	6.3x	18.1x
					Mean	4.9x	15.6x
<b>Radio</b>							
09/29/04		Capital Radio	GWR Group	\$611.0	\$728.0	3.1x	13.4x
06/21/05		Emap PLC	Scottish Radio Holdings	713.0	793.0	4.5x	17.7x
11/01/05		Cumulus Media Inc.	Susquehanna Radio	1,200.0	1,200.0	n/d	15.0x
02/07/06		Citadel Broadcasting	Disney (ABC Radio)	1,500.0	2,700.0	4.7x	13.5x
					Mean	4.1x	14.9x
<b>New Media</b>							
02/17/05		New York Times	About, Inc	410.0	410.0	10.0x	30.0x
03/21/05		IAC	AskJeeves	1,850.0	1,850.0	5.8x	19.0x
06/06/05		E.W.Scripps Co.	Shopzilla Inc.	525.0	525.0	4.0x	15.9x
07/18/05		News Corp.	Intermix (MySpace.com)	580.0	571.0	6.4x	n/m
3/6/2006		NBC Universal	iVillage Inc.	600.0	550.0	6.0x	32.4x
3/15/2007		Cisco	WebEx	2,900.0	2,900.0	7.6	29.3
					Mean	6.0x	22.7x

(a) When Equity Value was not disclosed, Transaction Value was used

(b) Calculated as Value of Equity plus interest bearing liabilities and preferred stock, less cash & equivalents

(c) Values reflect closing figures. Converted at 1.1757 C\$ per US\$

(d) Transaction includes the divestiture of Emmis' TV portfolio to: Lin TV (\$260M), Journal Comm (\$235M), Gray (\$186M), Blackstone (\$259M)

It also includes estimated transaction value of \$410M for the final sale of 3 TV stations. This is predicted to occur sometime in 2005.

n/d Not Disclosed

n/m Not Meaningful

# **NEAR EARTH ANNOUNCEMENTS**

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**Near Earth LLC professionals will be at the following conferences. If you would like to schedule a meeting during one of these events, please email John Stone at [John@nearearthllc.com](mailto:John@nearearthllc.com)**

November 6-8                      Streaming Media West, San Jose, CA  
February 26-28                  Satellite 2008, Washington D.C.

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**Near Earth LLC runs an investment club called The Near Earth Investment Club and serves as the Club administrator/organizer as well as the primary sourcer and screener of investment opportunities. The Club periodically offers participations in primarily media, telecom and satellite industry-related, often uniquely structured, investments to its members. It is designed to provide active accredited investors with significant deal flow and issuers with access to "smart" and relatively "fast" capital.**

- Diverse pool of Satellite, Media and Telecom-related investment opportunities from seed capital rounds to late stage capital and from restructurings and distressed opportunities to private investments in public companies. Club investment opportunities come from a variety of sources including transactions Near Earth LLC is engaged to complete and opportunities Near Earth or Club members find through their extensive industry contacts.
- Investments are screened by Near Earth LLC professionals and sometimes by Advisory Board or Club members with highly relevant backgrounds, before being presented to the full Club for investment consideration.
- Low minimum investment amounts (typically \$25,000 - \$50,000).
- Each member makes his or her own independent investment decisions on each investment opportunity and holds and votes their own shares.
- Near Earth charges no fund management fees and does not take any percentage of the investment upside. However, Near Earth may charge a 2% sourcing fee in certain cases where it receives no other compensation from the transaction. In no cases, will investors be charged a fee without notification in advance of making an investment decision.

**If you would like to be considered for membership in this fund, please contact Dan Ramsden at [dan@nearearthllc.com](mailto:dan@nearearthllc.com).**

# **ABOUT NEAR EARTH LLC**

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Near Earth is a specialized Investment Bank which brings the highest quality senior level attention to companies in the greater commercial satellite/space, telecom, media, entertainment, and technology industries.

Near Earth provides a full range of capital raising, advisory and consulting services to companies and their Boards. We also provide financial advisory services, valuation, structuring, and due diligence support to private equity, hedge and distressed debt funds. Please contact us if you would like our assistance with a contemplated satellite, telecom or media investment or portfolio divestment.

## ***Featured Transaction***



Dominion Video Satellite Inc.

Sale of DBS licenses to

EchoStar Satellite Operating  
Corporation

Near Earth LLC acted as financial  
advisor to Dominion

For more information about our current transactions or about Near Earth LLC, please visit our website at [www.nearearthllc.com](http://www.nearearthllc.com) or contact us at our location below:

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