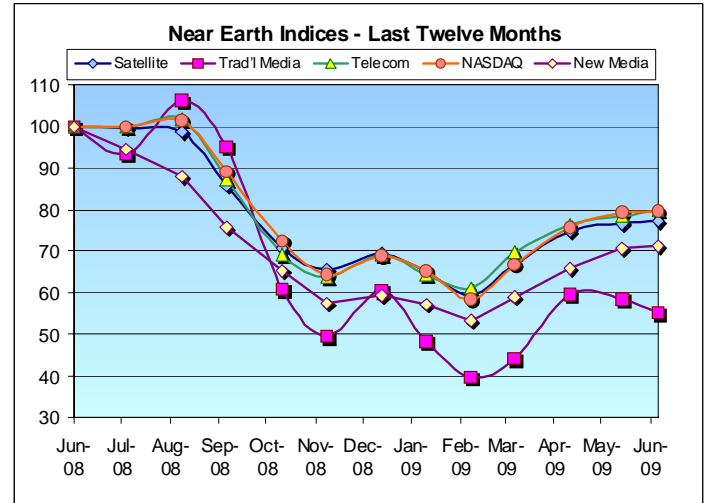


# FROM THE GROUND UP

July 2009

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## THE WAY WE SEE IT...

### Satellite:

TerreStar-1, the world's largest commercial satellite, was successfully launched July 1st. **TerreStar** plans to commence a nationwide service to its new handheld 3G smart phones, which are dual mode for roaming on **AT&T's** network. **Sirius XM** was able to refinance some of its debt through a \$525 million senior secured note offering. The new notes provide some breathing room through 2013, but came at a hefty cost of 11.25%. The first geostationary satellite in the Sirius fleet launched this week and is maneuvering into its proper orbit. **SES** places a five-year 650 million Euro bond deal, priced at 99.433 with a coupon of 4.875%. **Sea Launch** filed for Chapter 11 protection. The removal of **Sea Launch** from the market is expected to result in price increases from the remaining suppliers. July also marks the 40th anniversary of the initial Moon landing. *Moon 2.0* activities are heating up.

### Media/Telecom:

On June 25th, the FCC authorized the pending merger between **Embarq** and **Centurytel**, which subsequently closed on July 1st. This combination of fragmented rural carriers heralds the formation of a rural supercarrier, and if they achieve the \$400+ million in annual synergies that they project, this could lead to additional M&A in the sector. Signs of such M&A potential come as a welcome addition to a potentially rebounding IPO environment, as financial investors have started seeing public market signs of relief. The last three months have brought us six VC-backed IPO's – **Bridgepoint Education** ("BPI"), **DigitalGlobe** ("DGI"), **SolarWinds** ("SWI"), **OpenTable** ("OPEN"), **Medidata Solutions** ("MDSO"), and most recently **LogMeIn** ("LOGM") – matching last year's total for the sector. Concurrently, **Rosetta Stone** ("RST") has been a successful PE-backed IPO that should add to a positive exit outlook for financial investors. While it is too soon to know whether these signs of financial life are the beginning of a long-term trend or a temporary window, a healthier IPO and M&A environment for Media/Telecom should help to invigorate the private market, and facilitate new equity as well as debt financings for entrepreneurs and middle-market companies. Adding more fuel to that fire, serial entrepreneurs Marc Andreessen and Ben Horowitz (of **Netscape**, **Opware**, and **Ning** fame) have been able to raise a new \$300 million venture fund (**Andreessen Horowitz**), which plans to seed up to 80 early-stage tech ventures and invest in 15-20 later rounds.

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# ***The era of the option***

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Few sectors have reflected [the reality of change at increasing speed] more directly than Media and Telecom...

In his autobiography, Henry Adams commented on what he perceived to be the accelerating nature of history, and the inadequacy of an education in rapidly changing times. He formulated this perspective in the context of his own life experience, which spanned the youth of our nation into an industrial revolution and civil war and the scientific discoveries of the early twentieth century, leaving the old man to wonder if the learning he had picked up in his lifetime could really have prepared him for the times ahead. If he only knew! Leaving aside unprecedented global events that were to follow, succeeding one another at narrower and narrower intervals, the pace of technical evolution alone would have dazzled even this expectant prophet. Whether changes in living standards and public opinions and tastes have been the cause or the result of this accelerating history can be the subject of much debate, but change at increasing speed seems to be a robust enough truth, and one that can be relied upon to continue. Few sectors have reflected this reality more directly than Media and Telecom, and few aspects of this broad industry segment will be as completely affected by accelerating change as those related to finance, valuation, and successful investment.

... If equity value (and by extension, enterprise value) can be reduced to two components – one, the inherent business, and, two, option value ... then an environment of rapid change would speak to each separately

Many have already described and opined upon the shifts in communication modes and consumer behavior at length, so we will skip past these preliminaries. Besides, the revolutionary changes are evident at every turn for all to see, as newspapers become Internet blogs which become wireless tweets, which will undoubtedly seem as old-fashioned as a payphone soon enough. It may be just as interesting, especially to investors and other capital providers, to determine the impact of such change on valuation metrics and financial opportunity. If equity value (and by extension, enterprise value) can be reduced to two components – one, the inherent business, and, two, option value – which is not an inadequate analytic approach, then an environment of rapid change would speak to each separately, and in different ways.

All things equal, change is threatening to an established business, as we have seen in the case of traditional Media and Telecom operations, and rapid change can be gravely threatening. The fundamental valuation impact of instability will be some degree of magnitude negative, in direct relation to the gravity of the threat (i.e., the change that is taking place). In terms analogous to the education of Henry Adams, the traditional development of an established order will not prepare it for changes and tumult that follow, and may in fact be a hindrance to the extent that future flexibility is stifled.

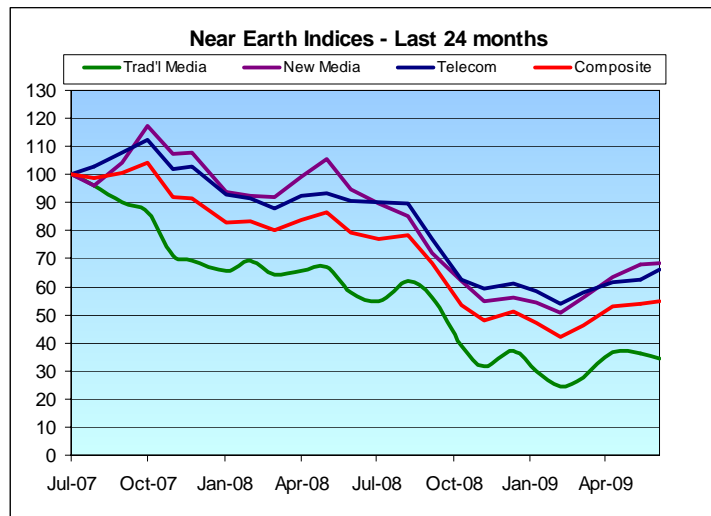
Option value, on the other hand, thrives on tumult and directly benefits from change. Black-Scholes technicalities aside, the notion can be observed practically every day. From a competitive perspective, volatility

## The era of the option (cont.)

enables new entrants to compete when a solid and stable environment would have kept new entrants out. From a financial perspective, volatility leads to the wild swings which may cause substantial upside opportunity. And option value emerges when choices can be made... to change or stay the course, to pursue or drop a business plan, to buy or sell an asset, or not to do either... all of which choices are presented with greater velocity and repercussions in a high volatility environment.

The fundamental valuation impact of instability will be negative... Option value, on the other hand, thrives...

As options, however, are just that and nothing more, the financial value of an option will ordinarily not be as high as that of the underlying business to which it is related, and the composition of optionality versus inherent business value in a given equity scenario will be a matter of proportion, magnitude, and timing. In the present time, marked by economic weakness and diminishing profits on one hand, (i.e., deterioration of business fundamentals), and increased volatility on the other, (i.e., threat to the established order, and enhanced optionality), equity values have fallen to a point where option value probably constitutes a greater percentage of the whole than has been previously the case. In the Media and Telecom sectors particularly, composite indices had started to fall long before the more general equities markets collapse last year, which is not surprising in light of the tremendous volatility experienced by the sector. In both cases, (i.e., the broad market index and the specific industry sector), one may look at the valuation decline and see this as a descent tending towards pure option value.



... In the broad market index one may look at the valuation decline and see this as a descent tending towards pure option value.

While the economic weakness will eventually cease and while profits will at some level find their equilibrium, the pace of technological change and shifts of consumer patterns are unlikely to slow. Henry Adams would in fact argue that this pace will continue to accelerate, and he will quite possibly be proven right for a long time to come. In such an era, regardless of individual business fundamentals, the optionality ingredient is thus likely to remain an increasingly important aspect of overall valuation. Whether it is the only value in a given circumstance, or whether there are also other aspects, will depend on the circumstance itself. It is safe to say that the earlier in its life-cycle and the more unproven a business concept, the more its value will reflect pure option value. It is

## ***The era of the option (cont.)***

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... the earlier in its life-cycle and the more unproven a business concept, the more its value will reflect pure option value...

...the phenomenal rate of change we are experiencing is making start-ups even out of companies that had unwittingly considered themselves mature.

increasingly safe to say, particularly in the world of Media and Telecom, that the phenomenal rate of change we are experiencing is making start-ups even out of companies that had unwittingly considered themselves mature.

From a financial perspective, whether as buyer/investor or seller/issuer, a thesis based on realities described may thus include the following ingredients:

- valuation targets/expectations reflecting sector volatility
- small investment size to reduce risk exposure, and the less capital intensity the better
- quick time-to-market targets for new projects or products... for strategics, buying may be better than building... for entrepreneurs, short lead times on new products
- exit/liquidity flexibility within short timeframe, ideally with multiple alternatives, but preparedness to hold if necessary
- portfolio/product diversification for both investors and sector competitors

While this recipe may not fit every circumstance, it should at the very least be worthy of consideration, and especially so in an environment marked by continuing acceleration. On this July 4, let us remember that visionary Adams, great grandson of John and grandson of John Quincy, who saw his times and the times to come with clarity, and who, in his own way, understood the value of the option.

By Dan Ramsden  
Near Earth LLC

...Cloud computing is at the convergence of many technologies and concepts by combining the operational benefits of virtualization, ...grid computing and ... service oriented architecture

Cloud computing has the potential to transform the enterprise IT landscape by offering a variety of benefits such as reduced capital costs, data center efficiencies, on-demand computing resources, faster and cheaper software development capabilities, and even environmental benefits. IDC, a market research firm, estimates that global IT cloud services spending will increase from \$16 billion in 2008 to \$42 billion in 2012, representing a compound annual growth rate (CAGR) of 27%.

Cloud computing is at the convergence of many technologies and concepts by combining the operational benefits of virtualization, scalability benefits of grid computing and system design benefits of service oriented architecture (SOA). As such, many companies not only view cloud computing as a useful technology, but also a potential market opportunity. Attracted by its growth prospects, web-based companies (Amazon, eBay, Salesforce.com), hardware vendors (HP, IBM, Cisco), telecom providers (AT&T, Verizon), co-location sites (SAVVIS, Rackspace), software firms (EMC/VMware, Oracle/Sun, Microsoft) and others are all jockeying for position in the cloud. Therefore, we must ask, "What role will satellite companies play?"

From a vendor's perspective, satellite based networks will be significantly impacted by cloud computing and its virtualized ecosystem. Satellite communications is sometimes the only wide area networking (WAN) option for multi-national corporations with branch offices in remote or rural areas. As these corporations embrace virtualization and cloud computing as part of their IT strategy, they need to make sure their branch offices continue to have access to the same IT resources. Vendors like Expand Networks have WAN optimization solutions that integrates with virtualization products and Space Communication Protocol Standards (SCPS) to improve the speed and performance of applications over satellite links to remote sites. Expand Networks recently worked with IPSTAR to optimize their broadband offering particularly for their banking and corporate customers, placing remote users in virtual proximity of critical business applications. WAN optimization and application acceleration technologies are also being used by TeleCommunication Systems (TCS) for its World-Wide Satellite Systems (WWSS) contract with the U.S. Army. TCS partnered with Citrix to use their branch optimization solution to seamlessly deliver data and applications to troops on the ground. Therefore, we expect satellite vendors to continually adopt and develop new technologies to better integrate with cloud based applications.

From a user's perspective, GeoEye was one of the early adopters of cloud computing. GeoEye processes large amounts of raw image data through a series of proprietary, compute-intensive applications for image

... Satellite communications is sometimes the only wide area networking (WAN) option for multi-national corporations with branch offices in remote or rural areas.

## Satellites in the clouds (cont.)

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... The cloud solution allows GeoEye's developers to focus on algorithms rather than IT and reduces their hardware and software costs

sharpening, geocorrection, etc. According to GeoEye, traditional approaches to develop software applications at the scale required by the business was a growing challenge for their developers. Moreover, the company was concerned with the rising cost of building, operating and maintaining expensive IT infrastructure. GeoEye partnered with Appistry, a cloud computing application platform, to help offload its infrastructure requirements to the cloud. Now, GeoEye is able to quickly develop new imaging applications by leveraging the cloud infrastructure without being concerned about scalability and cost. The cloud solution allows GeoEye's developers to focus on algorithms rather than IT and reduces their hardware and software costs by an estimated 77% versus the traditional approach.

... Whether these ideas are realistic or not is not really the point, the point is that IT infrastructure is rapidly evolving

The cloud computing industry is in the early stages of the technology adoption cycle as many products are still "vaporware" that faces major hurdles particularly in the area of data security. However, we expect cloud computing in one form or another will eventually be part of most IT organizations due to its significant cost savings. The environmental benefits of cloud computing is also a key driver as many technology companies are going to great lengths to make eco-friendly data centers. As an extreme example, Google was recently awarded a patent for a floating data center that would be located 3 to 7 miles off shore that incorporates wave energy machines to create electricity from ocean waves to power its servers. Whether Google will actually build these floating data centers is debatable, but if Googlers can build a data center in the ocean, why can't the satellite industry build one in space? This was Jim Grady's concept when he presented the idea of "Cloud Computing On Orbit" which uses on orbit satellites powered by solar energy as space based server farms (see <http://satcom.nict.go.jp/English/e-50/SJOpinion.Web2.E.pdf>). Whether these ideas are realistic or not is not really the point, the point is that IT infrastructure is rapidly evolving with cloud computing and the satellite industry is uniquely positioned to be a part of some very innovative technology solutions in the future.

By Kuni Takahashi  
Near Earth LLC

## ***Guest column: Oops...I just lost my local newspaper***

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...They still have strong brands, and according to most research, people still believe that the printed word has more credibility ... [yet] local newspapers are nevertheless dropping like flies...

It's almost like hitting the delete button on your computer. One second it's here, and the next it's gone. That's how fast local newspapers across the United States are evaporating into thin air. Here's the latest scorecard for the major players who have either already filed for bankruptcy or continue to face financial woes. New York Times & Daily News... LA Times... Minneapolis Star Tribune... Chicago Sun Times & Chicago Tribune... The Detroit News... San Francisco Chronicle... Miami Herald... Philadelphia Daily News & Inquirer... Rocky Mountain News... Seattle Post Intelligencer... The Boston Globe... So what went wrong? Do we really need to discuss the obvious reasons? Classified dollars go to the Internet. The spiraling costs of home delivery. Diminishing interest in the printed word among the younger demos. Giant overhead expenses. You know the story. Yet newspapers still generate giant gross revenues compared to other local media forms. They still have strong brands, and according to most research, people still believe that the printed word has more credibility than the broadcast word. And as local newspapers are nevertheless dropping like flies, I think there is more to it than the obvious.

I would like to suggest that newspapers forgot what business they were in. Let's go back in time and recall the original premise for a newspaper. Here it is: Current and up to date information. That is correct. The original newspaper brand promise was: "we will deliver you up to the minute breaking news that is accurate, in-depth, and complete." But once the press found out that their product could be sourced out on a computer screen, they went into the deep freeze of brand management. Instead of using the Internet and/or other media forms to deliver "up to the minute information", they just recreated their newspapers on the Internet. Worse yet...they gave it away for FREE!

... If instead they had worked hard to use the Internet, texting, twittering, and ANY form of media to provide the hands down most up to the minute ...information, they would still be in business

If instead they had worked hard to use the Internet, texting, twittering, and ANY form of media (including radio and TV) to provide the hands down most up to the minute and, depending on the medium, most in-depth information, in the market, they would still be in business. But no...they panicked and thought the Internet was their enemy and not a competitive advantage that could leverage their brand. They thought about the object and not the consumer benefit.

Need proof? Let's take a look at the latest marketing campaign from the Miami Herald: <http://www.youtube.com/watch?v=871d6Tf8YeQ> What marketing genius came up with this non-relevant campaign that focuses on the newspaper's financial stability rather than any consumer benefit? As a consumer, I don't really care if the Miami Herald weathers the economic storm. I want a quality news source, and I want the best information in my local market. The positioning line itself, ("Then, Now, and Always"), has nothing to do with a consumer benefit other than an empty promise that the Miami Herald is not going out of business. What

## ***Guest column: Oops...I just lost my local newspaper***

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... Show me how I can get this information through multiple media sources, and then WOW me with superior writing and reporting that I should be willing to pay for

does that have to do with my news information? Nothing! And finally, where's the proof in this spot that the Herald is going to deliver important information to me more efficiently than any of my other options?

Stop the presses and roll the credits. The Miami Herald is going to be toast if they continue to spend money on this nonsense. Want more proof of a completely lost Miami Herald brand promise? Take a look at this current TV spot, vaguely reminiscent of the '90s, focused as it is on the paper edition on the doorstep in the morning as if the news was still news by that point: <http://www.youtube.com/watch?v=lkuu4OWRB8U> Clueless, utterly clueless. Tell me about breaking news information. Talk to me about comprehensive local coverage. Show me how I can get this information through multiple media sources, and then WOW me with superior writing and reporting that I should be willing to pay for.

I really don't care if the Miami Herald is there "Then, Now, and Always." That sounds like something that should be on a Valentine's Day card. All I care about is information that I can rely on, and that I can access in any variety of formats and ways. Not just an electronic duplicate of the Herald online, but a state-of-the-art multimedia platform that I can take with me everywhere.

"Fast, Accurate, and Immediate...The Miami Herald." Does that work? I think so. Now they just have to deliver on the brand promise.

By Dr. Ted Bolton  
Bolton Research Corporation

Ted Bolton, PhD, is president of Bolton Research Corporation. He has advised media outlets, owners and financial institutions for over 20 years. Dr. Bolton has also owned, operated and sold 30 media properties across the United States.

If you are interested in his marketing seminars on Ratings, Ownership and Audience Marketing Strategies, he can be reached at [brcted@aol.com](mailto:brcted@aol.com) or at 305-343-9999.

This article was originally published in Dr. Bolton's blog, Media Bait, <http://mediabait.com>

## Guest column: Satellites today and tomorrow

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When Arthur C. Clarke submitted his groundbreaking satellite paper, *Extra-Terrestrial Relays — Can Rocket Stations Give Worldwide Radio Coverage* in October of 1945, the copy people at *Wireless World* tossed it. The Editor found it, took it home, worked through it, and the next day came in and to his staff's surprise announced that "this could work."

... change in the satellite business has been incremental... compression has added capacity and the same with ...antennae, but no change has disrupted the industry on the scale of Clarke's work

Since then, change in the satellite business has been incremental. True, digital compression has added capacity and the same with improved antennae, but no change has disrupted the industry on the scale of Clarke's work. There is the incremental change in the satellite world which improves "what is" and then there is change and innovation which re-defines "what can be". That's where we must increasingly place our focus.

Global consumers have demanded more efficient, environmentally friendly, and smaller cars, and they are getting them. But the companies that build them often haven't changed – with the result that upstarts like Tata Motors of India now own glamorous old brands like Jaguar and Range Rover while also making the cheapest car in the world --- the Nano. Chinese car companies with names like BYD (Build Your Dreams) and Brilliance Auto are manufacturing electric cars. Together, India and China are growing global market share while GM and Chrysler have declared bankruptcy.

Despite these setbacks, the United States remains a strong competitor in battles for global market share in most industries. But in the global fixed service satellite communications business American owned and operated companies have declined in market share - all the way down to zero. This isn't just satellite to home TV, either. We're talking about national security as well as guidance and protection of troops on the ground wherever they may need to be.

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When General Electric sold its fixed service satellite business to Luxembourg-based SES in 2001 and Intelsat was sold to London-based BC partners in 2007, that was the last of the global US owned and operated satellite communications companies. While each have domestic subsidiaries that supply capacity to the US Department of Defense, at the end of the day, they are foreign controlled. Sometimes this is financial engineering to avoid American taxes – with palpable irony. Consider that a foreign based company gets its business revenue from the American taxpayer - while locating off shore for the purpose of avoiding the taxes that fund the same revenues.

While defense use of commercial satellites has grown and contracting vehicles have been put in place, additional problems remain unresolved, including the abiding possibility that a foreign domiciled satellite company could refuse service to the US based on *policy disagreements*. In some

## ***Guest column: Satellites today and tomorrow (cont.)***

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cases, government entities hold “Golden shares” or substantial equity is held by state-run banks. In addition, the US government has had its own set of difficulties in maintaining schedule and budget for the complex array of advanced satellite systems.

While it is becoming painfully obvious how fiscally dangerous it is to rely heavily on foreign ownership of general US government debt, it is barely noticed that virtually 100% of our communications satellite capacity related purchases are from foreign owned or domiciled companies.

U.S. Space LLC was created, in part, to rectify this situation. U.S. Space is, uniquely, 100% American-owned and operated and its sole customer will be the United States government. While having a reliable home based satellite communications provider is an important step, ownership is only one part of the puzzle.

The space business is a “mature industry.” It is old in nearly every respect. Satellites are aging and the engineering force upon which we rely is also aging and the industry, as stodgy as it sometimes seems, is failing to attract and excite new, young engineers. And finally, the political and bureaucratic challenges of dealing with the Federal government, when it comes to changing habits, can make the idea of turning a battleship on a dime and backing into its berth seem a snap.

For example, the General Accounting Office (GAO) reports that due to GPS replenishment delays “some military operations and civilian users could be adversely affected.” While the Global Position System was created initially for military use, today’s usage is much more widespread. GPS systems are used for everything from first responders who depend on them when minutes count, to people using them to discover backroad short cuts to the cleaners or to grandma’s place.

In all likelihood, in-orbit spares will mitigate the potential problem. But the point is, if a satellite program is three years behind schedule and the typical time for conventional government satellite procurement and launch is 5-7 years, then we are facing problems in deploying new systems to meet our needs.

One of the unique elements of U.S. Space LLC includes the creation of a smaller, nimble class of satellite which can be launched on “operationally responsive” timetables. Standardization and the “plug and play” nature of the design enables mission flexibility, reduced time to market, and economic efficiency while maintaining a high degree of reliability. Using commercial financing and commercial business practices will help lower system costs as well.

... The space business is a “mature industry.” It is old in nearly every respect. Satellites are aging and the engineering force upon which we rely is also aging

...if a satellite program is three years behind schedule and the typical time for conventional government satellite procurement and launch is 5-7 years, then we are facing problems

## ***Guest column: Satellites today and tomorrow (cont.)***

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... we are starting the process with small satellites designed to respond quickly and to augment existing US Government needs and programs

The other aspect of change for the federal Government is when change is finally seen as imminently necessary, it is wanted NOW. Hungarian scientist Theodore von Karman, who immigrated to the United States in 1930, said: "Everyone knows it takes a woman nine months to have a baby. But, you Americans think that if you can get nine women pregnant, you can have a baby in a month!"

On the road to dramatic change, at U.S. Space we are starting the process with small satellites designed to respond quickly and to augment existing US Government needs and programs. But great change is coming whether we implement it or merely observe it.

What we know is that the future will be vastly different. It is estimated that within the next 25 years, science and technology will advance by a factor of 4 – 7x beyond the advancements over the *last* 25 years. While we may *hear* this in stride - it is absolutely stunning in its business and social implications. It means that where we stand today on the technology and science scale versus where we will be in the next 25 years - is a moment equivalent to being in the year 1650.

There is no way the satellite industry can simply lumber along during this upcoming period of drastic change – and we intend to play our part to ensure it doesn't.

... There is no way the satellite industry can simply lumber along during this upcoming period of drastic change – and we intend to play our part to ensure it doesn't

It has been a mere 50 years since Sputnik and today companies like Nevada's SpaceDev and the U.K's Surrey Satellite Technology are working on development of a nano satellite the size of a credit card - which would give a new meaning to Space Awareness.

Look at the development of the computer. The first commercial use of a computer was UNIVAC 1 purchased by the US government in 1951, a mere six years before Sputnik was launched. The first computers operated with 5,200 vacuum tubes and weighed 29,000 pounds (13 metric tons). It typically cost between \$1.2 and \$1.5 million in 1950 dollars. And remember that \$1.00 in 2008 had about the same buying power as \$0.11 in 1950. It also processed at 2.25 MHz per second.

We have indeed come a long way. Change beyond our imagination is a rule of nature and is central to the joy of mind as it is to scientific, social and political challenges. For engineers present and future, I paraphrase Scottish poet Robert Browning, "Ah, but an engineer's reach should exceed his (or her) grasp, or what's a heaven for?"

By Edward D. Horowitz  
Co-Founder of US Space LLC

# NEAR EARTH ANALYSIS: MARKET COMPARABLES

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

		Stock Price:		Enterprise Value as a Multiple of:			Price as a Multiple of:			
		7/6/09	Market Value of Equity	Enterprise Value (a)	LTM Sales	LTM EBITDA	LTM EBIT	LTM EPS	Trailing EPS (b)	Forward EPS (b)
<b>Satellite Broadcast (DBS and DARS)</b>										
BSY.L	British Sky Broadcasting (f)	£ 4.65	\$13,264.85	\$16,755.41	2.0x	9.2x	12.2x	28.7x	29.4x	23.6x
DISH	Dish Network Corp	\$ 15.46	\$6,916.80	\$10,881.30	0.9x	3.5x	5.1x	7.2x	6.5x	6.8x
DTV	DirecTV Group Inc.	\$ 23.72	\$24,293.55	\$28,329.55	1.4x	5.8x	11.5x	18.1x	16.4x	11.5x
SIRI	Sirius XM Radio	\$ 0.44	\$1,592.54	\$4,547.29	2.3x	35.1x	n/m	n/m	n/m	n/m
	Mean				1.7x	13.4x	9.6x	18.0x	17.4x	14.0x
<b>Cable Television</b>										
CMCSA	Comcast Corporation	\$ 13.90	\$40,040.90	\$70,431.90	2.0x	5.1x	9.6x	14.1x	13.5x	12.1x
MCCC	Mediacom Communications Corp.	\$ 4.56	\$432.24	\$3,779.83	2.7x	7.3x	13.1x	n/m	7.9x	6.9x
TWC	Time Warner Cable Inc.	\$ 30.62	\$9,971.71	\$33,033.71	1.9x	5.2x	10.2x	4.4x	10.2x	8.7x
CVC	Cablevision Systems Corp	\$ 18.33	\$5,446.39	\$17,390.24	2.3x	9.1x	22.0x	n/m	19.7x	13.3x
	Mean				2.2x	6.7x	13.7x	9.3x	12.8x	10.2x
<b>Television</b>										
TVL	LIN TV Corp.	\$ 1.47	\$75.60	\$746.26	2.0x	5.6x	9.4x	n/m	9.8x	3.8x
SBGI	Sinclair Broadcast Group	\$ 1.98	\$160.38	\$1,492.17	2.1x	5.0x	10.1x	6.4x	n/m	7.6x
FSCI	Fisher Communications Inc	\$ 11.10	\$97.01	\$160.99	1.0x	5.1x	n/m	1.1x	n/m	n/a
	Mean				1.7x	5.2x	9.7x	3.7x	9.8x	5.7x
<b>Radio</b>										
CMLS	Cumulus Media Inc.	\$ 0.73	\$30.22	\$667.58	2.3x	8.5x	10.0x	n/m	4.9x	n/a
ETM	Entercom Communications	\$ 1.45	\$54.90	\$862.46	2.1x	7.0x	8.2x	3.1x	1.3x	1.2x
	Mean				2.2x	7.7x	9.1x	3.1x	3.1x	1.2x
<b>NewsPrint</b>										
MNI	The McClatchy Company	\$ 0.47	\$38.80	\$2,071.58	1.2x	6.7x	12.2x	n/m	n/m	n/m
NYT	New York Times	\$ 5.07	\$729.07	\$1,995.07	0.7x	8.3x	19.7x	n/m	n/m	n/m
WPO	Washington Post	\$ 355.00	\$3,326.35	\$3,144.15	0.7x	5.6x	12.5x	39.5x	33.3x	13.4x
	Mean				0.9x	6.9x	14.8x	39.5x	33.3x	13.4x
<b>New Media</b>										
MSFT	Microsoft Corporation	\$ 23.20	\$206,224.80	\$182,883.80	3.0x	7.4x	8.2x	11.5x	13.6x	12.7x
AAPL	Apple Inc.	\$ 138.61	\$123,419.73	\$98,406.73	2.9x	13.6x	14.8x	24.8x	25.1x	21.8x
YHOO	Yahoo! Inc.	\$ 14.91	\$20,748.16	\$17,321.67	2.5x	12.7x	30.1x	n/m	n/m	35.5x
GOOG	Google Inc.	\$ 409.61	\$128,175.16	\$110,390.23	5.0x	14.8x	16.6x	31.1x	19.4x	17.0x
IACI	Interactive Corporation	\$ 16.14	\$2,269.45	\$355.97	0.3x	8.4x	n/m	19.1x	39.4x	25.6x
ERTS	Electronic Arts Inc.	\$ 21.16	\$6,789.82	\$4,269.82	1.0x	n/m	n/m	n/m	22.0x	16.5x
	Mean				2.4x	11.4x	17.4x	21.6x	23.9x	21.5x
<b>Satellite Imagery</b>										
GEOY	GeoEye	\$ 23.11	\$428.92	\$580.91	3.7x	15.5x	27.6x	15.8x	22.2x	16.0x
DGI	DigitalGlobe Inc.	\$ 18.07	\$785.32	\$993.92	3.6x	5.7x	11.1x	15.6x	20.3x	23.2x
	Mean				3.7x	10.6x	19.4x	15.7x	21.3x	19.6x

### MEDIA SERVICES INDEX

High	5.0x	35.1x	30.1x	39.5x	39.4x	35.5x
Mean	1.8x	8.1x	11.9x	13.4x	15.7x	12.6x
Low	0.3x	3.5x	5.1x	1.1x	1.3x	1.2x

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

n/m Not Meaningful.

(c) Converted to US \$ from Euro at an exchange rate of 1.3974 US \$ per Euro.

n/a Not Available

(d) Converted to US \$ from C\$ at an exchange rate of 0.8627 US \$ per C\$.

(f) Converted to US \$ from British Pound at an exchange rate of 1.6273 US \$ per British Pound.

Member of NEAR EARTH SATELLITE INDEX

# 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:			
	7/6/09	Market Value of Equity	Enterprise Value (a)	LTM Sales	LTM EBITDA	LTM EBIT	LTM EPS	Trailing EPS (b)	Forward EPS (b)	
<b>Satellite Capacity</b>										
ETL.PA	Eutelsat Communications ( c)	€ 18.58	\$5,702.67	\$9,163.82	7.2x	8.9x	20.7x	32.5x	25.5x	25.2x
SESG.PA	SES Global S.A. ( c)	€ 13.60	\$7,593.91	\$12,462.73	5.4x	7.9x	13.8x	14.0x	16.4x	15.7x
ISAT.L	Inmarsat (f)	£ 5.38	\$4,016.22	\$5,504.82	5.5x	10.4x	17.4x	11.3x	23.7x	18.4x
	Mean			6.0x	9.0x	17.3x	19.3x	21.9x	19.8x	
<b>Satellite Ground Segment</b>										
CMTL	Comtech Telecommunications	\$ 31.39	\$778.79	\$651.24	1.1x	5.8x	5.7x	10.0x	18.4x	15.6x
GCOM	Globecom Systems Inc.	\$ 6.88	\$141.59	\$97.45	0.5x	7.9x	14.3x	20.2x	n/m	21.5x
GILT	Gilat Satellite Networks	\$ 4.76	\$189.92	\$97.30	0.4x	7.5x	n/m	n/m	n/m	n/a
HUGH	Hughes Communications, Inc.	\$ 23.10	\$496.88	\$890.27	0.8x	6.7x	14.1x	n/m	n/m	10.6x
ISYS	Integral Systems Inc.	\$ 7.99	\$137.83	\$132.31	0.8x	5.5x	6.3x	10.0x	18.6x	14.5x
VSAT	ViaSat Inc.	\$ 26.03	\$805.63	\$742.14	1.2x	10.3x	16.8x	21.0x	15.1x	13.6x
	Mean			0.8x	7.3x	11.4x	15.3x	17.4x	15.2x	
<b>Satellite Space Segment</b>										
ORB	Orbital Sciences	\$ 14.49	\$833.18	\$625.26	0.5x	6.6x	8.3x	15.2x	20.4x	13.7x
CDV.TO	COM DEV International (d)	\$ 3.04	\$178.97	\$195.91	1.0x	8.0x	12.9x	13.5x	n/a	n/a
MDA.TO	McDonald Dettwiler and Associates (d)	\$ 27.15	\$1,096.32	\$1,462.33	1.5x	8.9x	11.3x	17.4x	n/a	n/a
OHB.DE	OHB Technologies (c)	€ 8.08	\$167.78	\$95.66	0.3x	2.8x	3.5x	13.3x	15.3x	13.8x
	Mean			0.8x	6.6x	9.0x	14.9x	17.8x	13.7x	
<b>Towers</b>										
AMT	American Tower	\$ 30.67	\$12,175.38	\$16,203.91	10.0x	15.7x	26.0x	n/m	n/m	35.3x
CCI	Crown Castle	\$ 23.41	\$6,752.85	\$12,960.18	8.3x	14.9x	38.1x	n/m	n/m	n/m
SBAC	SBA Communications	\$ 22.90	\$2,691.44	\$4,955.56	9.9x	17.9x	n/m	n/m	n/m	n/m
	Mean			9.4x	16.2x	32.0x	n/m	n/m	35.3x	
<b>General Telecom</b>										
S	Sprint Nextel Corporation	\$ 4.47	\$12,770.79	\$29,855.79	0.9x	4.0x	n/m	n/m	n/m	n/m
T	AT&T	\$ 24.80	\$146,146.65	\$217,088.65	1.8x	5.0x	9.3x	11.4x	12.0x	11.2x
VZ	Verizon Communications, Inc.	\$ 30.36	\$86,238.19	\$189,723.19	1.9x	5.6x	10.8x	13.0x	12.0x	11.3x
	Mean			1.5x	4.9x	10.0x	12.2x	12.0x	11.2x	
<b>TELECOM SERVICES INDEX (excludes Towers stocks)</b>										
	High	7.2x	10.4x	20.7x	32.5x	25.5x	25.2x			
	Mean	1.8x	6.2x	11.0x	13.5x	13.6x	15.4x			
	Low	0.3x	2.8x	3.5x	10.0x	12.0x	10.6x			

(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 1.3974 US \$ per Euro.

(d) Converted to US \$ from CS at an exchange rate of 0.8627 US \$ per CS.

(f) Converted to US \$ from British Pound at an exchange rate of 1.6273 US \$ per British Pound.

n/m Not Meaningful.

n/a Not Available

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	
12/18/06	Telesat (new)	Telesat/Skynet Combined	3,491.0	3,990.0	7.1x	13.4x	
06/19/07	BC Partners	Intelsat	5,000.0	16,400.0	7.7x	11.3x	
08/02/07	Abertis Telecom	Hispasat (28.4% share)	199.0	199.0	5.8x	7.9x	
				Mean	6.3x	10.4x	
<b>Ground Equipment &amp; Systems Integrators</b>							
08/03/06	Thrane & Thrane	Nera's Mobile Satellite Communications	89.6	89.6	1.1x	n/d	
03/19/07	CIP Canada Investment Inc.	Stratos Global Corporation	293.3	621.5	1.2x	2.9x	
05/12/08	Comtech	Radyne	201.9	223.6	1.5x	16.0x	
07/10/08	Nokia	Naveq	7,719.0	8,100.0	8.8x	29.5x	
05/09/09	Rockwell Collins	Datapath	130.0	130.0	0.5x	n/d	
06/01/09	Globecomm Systems	Telaurus Communications LLC	6.5	6.5	0.5x	n/d	
				Mean	2.3x	16.1x	
<b>Aerospace and Defense</b>							
04/23/07	Kratos	SYS Technologies	49.3	49.3	0.6x	n/m	
05/03/07	Globecomm	GlobalSat	18.4	18.4	0.9x	n/d	
07/31/07	LMI Aerospace, Inc.	D3 Technologies, Inc.	65.0	65.0	1.0x	7.2x	
11/29/07	Finmeccanica SPA	VEGA Group PLC	59.2	56.2	0.9x	9.6x	
05/12/08	Finmeccanica SPA	DRS Technologies Inc	3,358.0	4,930.0	1.4x	11.0x	
05/13/08	Cobham plc	M/A-COM	425.0	425.0	0.9x	6.8x	
06/04/08	Cobham plc	Sparta Inc	416.0	416.0	1.4x	12.1x	
12/16/08	Sierra Nevada Corporation	SpaceDev, Inc.	31.7	26.6	0.7x	23.3x	
				Mean	1.0x	11.7x	
<b>Video Distribution</b>							
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	
12/21/06	Motorola	Tut Systems	39.0	39.0	1.0x	n/d	
04/23/07	Motorola	Terayon Communication Systems Inc.	139.7	127.2	1.9x	n/m	
12/07/07	Macrovision Corp	Gemstar-TV Guide Intl Inc	2,842.1	2,325.1	3.7x	21.9x	
03/12/09	Harmonic	Scopus Video Networks	78.3	47.6	0.8x	n/m	
				Mean	2.1x	17.6x	
<b>Towers</b>							
05/04/05	American Tower	Spectrasite	3,100.0	3,800.0	10.2x	17.0x	
03/17/06	Crown Castle	Trintel 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	309.0	11.9x	n/d	
10/06/06	Crown Castle	Global Signal	4,000.0	5,800.0	12.1x	26.6x	
07/21/08	SBA Communications Corp	Optasite Towers	253.2	428.2	14.8x	n/m	
				Mean	11.8x	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	
01/18/07	Citadel Investment Group LLC	ION Media Networks Inc	98.8	1,654.3	7.1x	16.9x	
03/29/07	Umbrella Holdings LLC	Univision Communications	12,300.0	13,700.0	6.3x	18.1x	
				Mean	5.4x	15.8x	
<b>Radio</b>							
07/29/08	Sirius Satellite Radio Inc.	XM Satellite Radio Holdings Inc.	2,301.7	3,957.7	3.4x	n/m	
07/30/08	Bain Capital	Clear Channel	17,923.8	23,724.1	3.5x	10.8x	
05/29/09	Cox Enterprises, Inc	Cox Radio	381.5	704.3	1.8x	6.2x	
				Mean	2.9x	8.5x	
<b>New Media</b>							
03/15/07	Cisco	WebEx	2,900.0	2,900.0	7.6x	29.3	
01/31/08	Amazon.com	Audible	280.7	257.0	2.4x	n/m	
02/11/08	Microsoft	Danger	-	500.0	8.9x	n/m	
03/04/08	Demand Media	Pluck	-	75.0	7.5x	n/d	
03/11/08	Google	DoubleClick	3,100.0	3,100.0	10.3x	62.0x	
05/28/08	comScore	M:Metrics	-	44.3	4.0x	n/d	
05/15/08	CBS	CNET	1,800.0	1,800.0	4.4x	n/m	
07/02/08	Hellman & Friedman LLC	Getty Images Inc.	2,028.1	1,977.1	2.3x	7.0x	
03/05/09	Barnes and Noble	Fictionwise	15.7	15.7	8.7x	n/d	
				Mean	5.8x	27.0x	

(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) 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.

n/d Not Disclosed

n/m Not Meaningful

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