

What About the Next Next-Generation Imaging Satellites?

By Edward A. Jurkevics, Chesapeake Analytics Corp. (www.chesanal.com), Arlington, Va.

During the last few months, geospatial industry analysts have been watching ORBIMAGE CEO Matt O'Connell digest his wallowing catch, Space Imaging. Between gulps, O'Connell is keen to teach the new remote sensing math: ORBIMAGE + Space Imaging = GeoEye.

Company insiders report that the integration is progressing well, and spirits are high at the newly merged entity. And why shouldn't they be? The company sits in a sweet position, with Orbview-3 and IKONOS on orbit and the NextView bird GeoEye-1 on the integration bench. By the middle of 2007 GeoEye will have three high-resolution cameras plying the heavens. Add to that a clutch of fat National Geospatial-Intelligence Agency (NGA) contracts in hand, the massive IKONOS archive and Space Imaging's international groundstation network, and the company looks set for the future.

But this is no time for complacency. NGA's industry-making contract vehicles ClearView and NextView expire in 2008, and there are no replacement programs in sight. That puts more than half of GeoEye's and industry rival DigitalGlobe's revenues in jeopardy. The uncertainty for the industry multiplies because NGA's director, retired Air Force Lt. Gen. James R. Clapper, Jr., announced he is departing the agency this summer. According to the Baltimore Sun, he fell out with Defense Secretary Donald H. Rumsfeld about the issue of National Intelligence Director John D. Negroponte's oversight of NGA's activities. Rumsfeld's view of NGA as a combat support agency convinced him there's only one proper chain of command for NGA, and that is to the Pentagon. Ah, a good old Washington turf war!

Funding Concerns

Yes, the dust-up between Negroponte and Rumsfeld seems to have caught Clapper in a crossfire, and he will be missed by the remote sensing community. The White House's U.S. Commercial Remote Sensing Space Policy of 2003 directed the NGA to "rely to the maximum practical extent on commercial

remote sensing space capabilities for filling imagery and geospatial needs." Clapper readily complied, ultimately establishing ClearView contracts with all three commercial satellite owner/operators, and issuing NextView contracts totaling \$1 billion dollars to GeoEye and DigitalGlobe.

The industry's worry is that any new NGA director will take too long to settle in and develop and secure follow-on contracts to ClearView and NextView. And any NGA commercial imagery funding gap in 2008 and afterwards would cause havoc in the two-company industry, sending shivers down the spine of Wall Streeters who have invested in this technology.

The optimal business model for industry and NGA would be an arrangement with the firms in which NGA makes a multiyear commitment to acquire data of agreed quantity, quality and price. With this commitment in hand the companies would be able to finance the construction and launch of an appropriate ongoing constellation that meets the NGA's

When it comes to long-term federal budgeting, the time is now for the U.S. government to lay the groundwork for important commercial imagery follow-on programs.

geospatial data requirements. NGA wouldn't need to cost share for construction as it has with NextView, but NGA must provide a multiyear guarantee. Cocktail-napkin analysis of the owner-operator financial models shows that NGA's long-term commitment is required to sustain a healthy supplier base in the commercial high-resolution remote sensing industry.

FIA Fiasco

The U.S. government's alternatives to supporting the commercial remote sensing industry look grim indeed. The ongoing fiasco in the National Reconnaissance Office's Future Imagery Architecture (FIA) program makes you want to weep. In 1999, Boeing unseated Lockheed Martin for this lucrative contract to build the next-generation imagery reconnaissance satellites, a role Lockheed held for several decades. The ensuing litany of horrors, according to GlobalSecurity.org, has the government spending \$10 billion

on FIA between 1999 and 2005, of which \$4 billion to \$5 billion was cost overruns. The keyboard's exclamation mark is altogether too frail for what is needed here. Trite will have to suffice—a few billion here, a few billion there, and pretty soon you're talking about real money.

In September 2005, the House, the Senate and antagonists Rumsfeld and Negroponte had enough "FIA'sco" and transferred the electro-optical satellite construction back to—you guessed it—Lockheed. The pink slips are flying at Boeing, and it's a safe bet that the program's original schedule is useful only for comic relief. FIA's projected first launch has been slipping almost a year per year and is now somewhere around 2009, according to GlobalSecurity.org. One has to wonder just how assured NGA's imagery sources from NRO systems really are.

Meanwhile, reports are that GeoEye's and DigitalGlobe's NextView satellites for NGA are on budget and reasonably close to schedule. There is every expectation that these new birds will, as contracted, meet a significant

portion of NGA's geospatial data requirements by 2007. The Commission to Assess U.S. National Security Space Management and Organization, chaired by Rumsfeld prior to his Secretary of Defense appointment, opined that commercial imagery providers will be able to satisfy approximately half of NGA's requirements for information on the location of objects on Earth.

Reason dictates that the NGA should increase its reliance on the commercial remote sensing industry. When it comes to long-term federal budgeting, the time is now for the U.S. government to lay the groundwork for important commercial imagery follow-on programs. At a Naval Academy speech in 2001, President George Bush said, "The future of the military will require innovation and entrepreneurial leadership." The new NGA leadership must exhibit these qualities when it comes to imagery. But what will actually occur in the rarefied air inside the Beltway is anyone's guess. EJ