

Securing the Geospatial State of the Union

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Last issue in this space the National Reconnaissance Office's Future Imagery Architecture (FIA)—fondly known here as the FIASco program—was deservedly pilloried because it has, to mix metaphors, become a runaway train wreck of governmental proportions. With no launch in sight, more money has been wasted on FIA cost overruns than has been spent in the entire history of civilian land remote sensing. I am reminded of Mel Brook's comedy *The History of the World Part II*, where Brooks, playing King Louis the XVI, keeps repeating "It's good to be the King!" Well, at NRO and Boeing, when you're bungling away \$5 billion, "It's good to be classified."

Ah, but there is bungling on the civilian side, too. The 2003 Presidential Directive PDD-23 authored by Gil Klinger wisely placed the military and intelligence community's responsibility for commercial remote sensing in the nest of retired Air Force Lt. Gen. James R. Clapper, Jr., director of the National Geospatial Intelligence Agency (NGA). Clapper hatched a brood of Clearview programs that are maturing nicely, and Nextview birds are set to take flight next year. But on the civilian side PDD-23 split commercial remote sensing's egg among a troika of civilian agencies: the U.S. Geological Survey (USGS), the National Oceanic and Atmospheric Administration (NOAA) and NASA, and no one has yet cooked up any coherent civil government programs for commercial remote sensing.

Further Setbacks

And it's not for lack of need. In civil government applications, remote sensing demand is derived from geospatial drivers. And to put it plainly, the U.S. civilian geospatial infrastructure needs investment. To let Klinger off the hook, the state of the geospatial union was set onto a miserable path with OMB Circular A-16: Coordination of Geographic Information and Related Spatial Data Activities and its revisions. A-16, in

what can only be seen as an attempt to prepare the country for invasion by foreigners, sprayed the responsibility for disregarding the U.S. geospatial infrastructure among—count 'em—17 federal agencies.

So what has A-16 wrought? A tower of federal geospatial Babel so tangled and unfathomable that it can't be unraveled by any number of meetings of the Federal Geographic Data Committee (FGDC), nor the Esperanto of the Geospatial One-Stop, nor even by the issuance of further stern OMB Circulars A-11, A-119 and A-130, and Executive Order 12906 and the E-Government Act of 2002, section 216 (Common Protocols for Geographic Information Systems).

The USGS National Mapping Division, which one might think maps the nation, has seen its budgets erode steadily in the face of growing national geospatial needs. To side-step the appearance of responsibility, National Mapping was renamed to the benign-sounding "Geography," and is now so emasculated that the president's 2007

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budget proposes to move The National Map to the USGS Enterprise Information department. The president proposes to reduce Geography's budget from the pitiful \$119 million it was in 2005 to a mere \$77 million in 2007, and believe me, that's just walking-around money here inside the beltway. At USGS Enterprise the apparent business plan is "partnering," i.e., hope that state and local agencies will make nice maps and pass them onto USGS.

Not that the geospatial infrastructure can get much worse. The nation's flagship 1:24,000 map series, which should form the national base map, is woefully out of date. Of the 825 1:24,000 maps the USGS lists for the state of Virginia, 611, or 74 percent, carry a date prior to 1970. The oldest was made in 1938. President Bush's Texas is no better, with a median map vintage of 1968. In fact, your taxpayer dollars have made more recent topographic maps of the moon, Venus and Mars than the USGS has

of much of the interior lands of our own nation. The United States is by far the worst-mapped of the OECD nations, which commonly maintain accurate, up-to-date digital large-scale base maps.

Are We Turning a Corner?

OMB's E-Gov folks, acting decisively, have been flashing slides and graphics that elevate geospatial to a "horizontal crosscutting line of business" that can help government agencies manage their own resources and serve citizens. There aren't any mandated geospatial budgets yet, though. A task force to study the matter is promised. A fortiori, OMB's Deputy Director for Management Clay Johnson III has issued a memorandum to 27 selected agency heads, requesting that they appoint a Geospatial Information Officer (GIO), at the Assistant Secretary level, within 45 days. The GIO is to "oversee, coordinate, and facilitate the agency's implementation of the geospatial-related requirements, policies and activities."

What is needed is a powerful mapping agency with the money to map the nation—and no, not the Census Bureau. What is money enough? To map 9 million square kilometers of land with a base-map series from 1:12,000 to 1:100,000, and to keep it updated, it's going to take sustained expenditures well in excess of \$200 million per year just for out-sourced collection and compilation.

No amount of reshuffling of other agencies' geodata will replace a proper national mapping program. Vital for homeland security, a geospatial infrastructure is also a public good like the highway networks—just watch what the entrepreneurs will make from it! It is time for federal leadership to lead with budgets. Our geospatial infrastructure dangerously atrophies each day by budgetary neglect. Leadership must not be like King Louis XVI, who, on the day the Bastille was stormed, wrote in his diary at day's end that "nothing happened."