

Rationality in Space-Imaging
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The U.S. Senate's adoption of the amendment prohibiting release of satellite imagery relating to Israel and other areas has increased the attention focused on the negotiations between Washington and Jerusalem. Unfortunately, some advocates of commercial space ventures have launched an emotional crusade that distorts the legitimate security concerns. It is time to take a cold look at the facts and cost/benefit considerations on this issue.

Israel is a very small country, (even if the areas of the West Bank and Golan Heights are included) -- the size of New Jersey. In that area, the IDF maintains all its military assets, the exact locations and details of which are highly classified. Some countries in the region states are still preparing for war, and terrorism is a continuing threat.

One of Israel's major military assets is the uncertainty in the calculations and intelligence capabilities of hostile forces. While some states (not Iran) might have flown occasional reconnaissance sorties along Israel's eastern borders (the 1979 Treaty keeps the Egyptian Air Force 200 miles from the southern border), this does not provide the type of coverage and intelligence information available from frequent 1m real-time digital satellite imaging. For most military purposes, digital data, which can be analyzed directly with advanced software and provides coordinates for targeting, is preferred over photographic imaging.

American-made commercial imaging systems will give Iraq, Iran, Syria, Libya, and the terrorist organizations an inexpensive reconnaissance satellite capability, and a major increase in targeting and intelligence capabilities. Do US firms really want to provide terrorist groups with precise coordinates of its installations in Saudi Arabia?

In his recent Space News commentary, Scott Pace ("Senate Does Not Get It", July 15, page 25) compares the pictures of Israel published in National Geographic and "high resolution images taken by tourists on the ground" to real-time satellite imaging. Why would anyone pay hundreds of millions of dollars for shares in a satellite if the same information is contained in a home movie or popular magazine? And is Pace suggesting that Israeli and American security officials are simply wasting their time on a problem that really does not exist?

A prohibition on high-resolution space imaging of Israel, as required in the Senate amendment, would blackout a very small fraction of the earth's surface, and would have no impact on the profitability of these services. Israel is too small to find on most maps, as my children have discovered. Yet Pace claims that the economic viability of

the commercial imaging business would be destroyed by denying the Saudis (and no one knows who control run Riyadh next year), Iraq, and Iran coverage of Israel. The Senate amendment, he claims, means that "US remote-sensing firms should be in second place forever".

Second place? No other country has the technology or realistic programs to provide commercial 1m digital high-resolution (almost) real-time images. The Russian economy is unable to develop a reliable commercial system for anything, including programmable real-time digital space imaging. The other proposed systems are paper satellites, and even if they are built, their resolutions will be 5 meters or more. The US is building a fleet of Cadillacs to beat motorcycles.

The only potential competition in the next five years may come from France, and Helios is, at least for now, a military system. If the French go commercial, they can be expected to impose blackouts on areas far larger than the territory of Israel. The argument that without a blackout of a tiny speck of land on the Eastern shore of the Mediterranean, American firms will be unable to defeat the competition is simply wrong. The same is true for the claim that a blackout on Israel will create a niche for competitors. That niche already exists, and if Iraq, Syria, Iran, or Libya could purchase reconnaissance satellites from France or Russia, they would have done so.

Finally, the attempt to wrap the debate in the flag by using inflated language on "prior restraint" and "international censorship" is also an irrelevant diversion. Sensitive national security information has always been classified, and the proposed blackout is no more of a constitutional issue than any other legitimate classified intelligence data. There is a vast middle ground between a total ban on high-resolution systems and unfettered commercial remote imaging.

Pace is correct on one point, however. The US Congress should not impose security-based limitations on commercial satellite systems. This is the job of the Executive Branch. The recent progress in developing a practical policy that allows the commercial exploitation of space assets to the maximum extent possible, consistent with the maintenance of international stability and the vital national security interests of the US and its allies, is a good sign. This will also pave the way for Israeli firms to extend their cooperation with American industry in developing commercial space technologies.