

LOST IN THE CLOUD

GOOGLE AND THE US GOVERNMENT



Consumer Watchdog's
**INSIDE
GOOGLE**

Executive Summary

An ambitious quest for influence with the US government is starting to pay off for search giant Google, a Consumer Watchdog investigation has found.

One of the most visible signs of Google's clout is the hangars at the National Aeronautics and Space Administration's Moffett Airfield, near Google's world headquarters, where a fleet of jets and helicopters stands ready to ferry the company's top executives near or far, for business or pleasure. When a deal between NASA and top Google executives to use the base was first disclosed in 2007, it called for only four jets to use the base.

But newly released government records show that the Google executive fleet has now grown to six jets and two helicopters, while at least 40 Google employees hold security badges at the base and all of the planes are supplied with Department of Defense jet fuel.

While the deal was originally struck between Google and NASA in the name of scientific research by the Google fleet, NASA documents show that precious little research has occurred. According to a set of emails obtained by freelance journalist and FOI specialist Russell Carollo, a fighter jet bought by Google executives in 2008 to perform the research was still being reviewed for air-worthiness in mid-2010.

Meanwhile, flight records show that the other jets parked by Google executives at the NASA field are often used for vacations or schmoozing, including at least

three wintertime trips to the Caribbean and a trip by Google chief executive Eric Schmidt to the Cannes Film Festival.

In recent years Google has landed contracts with at least 25 federal agencies, contracting databases show. While the value of those contracts is currently only a little over \$40 million, Google has made numerous inroads in Washington since the arrival of the Obama administration in 2008, positioning the company for major Inside-the-Beltway growth in the years to come.

Documents obtained by Consumer Watchdog also show that Google's close ties with the Obama White House have raised concerns about possible special treatment or conflicts of interest at the Department of Homeland Security, the US Patent & Trademark Office, the Federal Communications Commission and NASA.

In addition, officials at both DHS and the FCC have raised pointed concerns about weak privacy protections in Google products and whether Google's well-documented difficulties with privacy protection could create big problems for federal agencies that use its services.

With minimal notice, the FCC in August began using Google Analytics to monitor visitors to its website, even though one official wrote in an e-mail that its privacy protections are "rather weak."

Added the official:

"Given the FCC's recent statement regarding cybersecurity, and that we are proposing to outsource content analytics to Google, especially given Google's recent privacy breach

involving wifi data, I think we should double up on keeping our users' data private from Google.”

Yet one month later, the FCC began allowing Google Analytics to track all visitors to the FCC website unless they “opt out” by disabling the “cookies” in their browser. However, visitors to the site are never informed of the tracking -- unless they happen to first check the agency’s privacy policy at <http://www.fcc.gov/fccprivacypolicy.html>.

Brett Glass, one of the few people outside the FCC and Google who seems to be aware of the tracking, is sharply critical of the FCC-Google deal. “It is inappropriate for the Commission to allow a corporation with frequent business before the Commission, and an interest in the outcomes of its proceedings, to track activity on the Commission's Web site,” Glass recently complained in a post to the agency.

The comment echoes concerns expressed inside the agency about whether adoption of other services such as cloud computing applications supplied by a company that bids on spectrum licenses “creates a conflict of interest, or at a minimum a perceived conflict of interest, that competing bidders could point to as indicative of an unfair bidding process.”

When Google doesn’t get what it wants from the feds despite its connections, the company has resorted to legal action – it recently sued the Department of Interior for refusing to consider its products for a \$50 million contract.

Google is also pursuing close ties to the national security and law enforcement establishments, according to documents and interviews. Some of these arrangements are shrouded in secrecy at government behest.

Google's innovative products offer hope of improving government services for the public while saving the taxpayers money. And as a for-profit corporation with a fiduciary obligation to its shareholders, Google can serve the public while delivering benefits for its stockholders and the US government.

Yet as a repository -- and a funnel -- for vast reservoirs of private data on Americans, Google also has clear social and legal responsibilities for protecting the private data of its users from unwarranted intrusion by government agencies. How well Google manages this obvious and profound conflict is largely a mystery: the company's relationship with US intelligence and law enforcement agencies in key areas— including government surveillance and cybersecurity— remains shrouded in official secrecy and beyond review by citizens and watchdog groups, most members of Congress, and other policymakers.

Some of the hidden aspects of Google's embrace of the federal government emerge from numerous documents obtained by Consumer Watchdog. This report summarizes what consumers, taxpayers, and policymakers need to know about Google as a

government contractor, and the questions Google and the government do not want to answer.

Four issues highlight Google's ambitions as a government contractor.

- **NASA's cozy deal for Air Google:** The agreement with NASA for the use of Moffett Airfield in Mountain View grants the company executives landing rights in exchange for \$1.3 million in annual rent, and use of their aircraft in scientific experiments. While documents from the project indicate that the public has received little of the promised data about greenhouse gases, Google has gained a hub for its own kind of star-gazing. Last May, CEO Eric Schmidt flew one of the company's Gulf Stream V jets from Moffett to the Cannes Film Festival where he attended a party with Mick Jagger, Kevin Spacey, and Glenn Close. In July, two planes filled with company employees took off from Moffett to fly to Tahiti to view a solar eclipse. In July 2008, a plane full of Googlers flew from Moffett to Montana to attend the high-society wedding of then-San Francisco mayor Gavin Newsom.
- **Pentagon Spending:** In September 2010, Google landed its biggest Pentagon contract, inking a \$27 million deal with the National Geospatial Intelligence Agency (NGA) even

after media reports raising questions about favoritism. Contracts with Pentagon agencies for various forms of the Google Earth Enterprise software suite (starting at \$100,000) currently constitute the bulk of Mountain View's government revenues, according to government spending databases.

- **High-level support from the Obama administration:** In the summer of 2010, the search engine company outmaneuvered more established rival firms in the burgeoning cloud computing market to secure federal government certification for its Apps for Government software. That certification helped the company win a competitive \$6.5 million contract in December 2010 to provide email for 15,000 employees of the General Services Administration. In two instances complaints arose that Google received preferential treatment, while other officials raised concerns about privacy and conflicts of interest.
- **A secretive relationship with the National Security Agency.** The search giant has a legitimate need to cooperate with the government's mammoth and secretive code breaking agency in its efforts to defend the integrity of US computer networks. But NSA

also has legal power to force Google to hand over the private information of its users. How Google executives handle this potentially conflicted relationship is largely unknown: neither Google nor the NSA are talking.

1) Air Google

The relationship between Google and NASA blossomed in September 2005, when CEO Eric Schmidt and G. Scott Hubbard, director of the Ames Research Center where the Moffett Airfield is located, signed a no-cost memorandum of understanding calling for the joint development in the areas of data management, distributed computing, bio and nano-technology, and R&D for the entrepreneurial space industry. When the agreement was updated in March 2007, Google agreed to pay development costs incurred by NASA and to do environment testing on the site.

In July 2007, Schmidt persuaded NASA to do a side deal with a company called H211, which is controlled personally by Schmidt along with Sergey Brin and Larry Page. The Google execs promised to allow NASA to outfit H211's aircraft with scientific equipment to study global warming and greenhouse gases. H211 now pays \$1.3 million annually in return for the right to fly private planes in and out of the base. This spring, the contract was quietly extended by NASA to 2014, documents show.

Google doesn't get any special bargain on the lease. According to the HangerTrader.com, a classified advertising hangar service, Google is paying as much as one and a half times the average asking price for a hangar rental per month, as the NASA Ames lease with H211 agreement states they paid from August to

September \$226,731.48 for their hangar rental of 65,513 sq ft. This figure is almost as much as Google would have to pay all year to rent hangar space at two of California's premier airports, San Jose and San Francisco. NASA notes that rental rates are subject to a variety of factors, including comparable rates at the San Jose and San Francisco airports, gross weight of the aircraft, and other considerations. Tim Murray of Atlantic Aviation, based out of the San Jose Airport, provided a quote for two Gulfstream Vs at a total average cost per year of \$358,440. At the San Francisco Airport, Signature Flight Support's Jay Singh provided a quote of \$2.25 a sq/ft for two G5s – that averages close to \$486,840 per year, which is far less than what Google pays currently, even when taking into account their Boeings 767-200 and 757.

The extraordinary aspect of the deal isn't the money, it's the fact that only certain organizations with a very good reason get access to Moffett.

“Not everyone can nor should use this airfield,” says the NASA policy. “NASA has specific criteria to determine who can partner with us and whether they may use their aircraft at Moffett. All requests by a private entity undergo a rigorous review process and every request must demonstrate a relationship to NASA missions.”¹

But the claim that NASA obtains substantial hard-to-obtain scientific data in return for hosting Google's executive jets is hard to sustain. As reported in 2008,

¹ <http://www.spaceref.com/news/viewsr.rss.spacewire.html?pid=25413>

NASA engineers discovered they could not easily modify the company's largest aircraft, a Boeing 757, to hold scientific equipment. So in 2008, H211 arranged to obtain an experiment fighter plane, called the Alpha Jet, that could be rigged to collect data for atmospheric investigation project known as Cal-Nex. But documents show the project ran into problems last year when H211 was denied Pentagon permission to land its jet at Miramar air base in San Diego. A schedule of six Cal-Nex aerial research programs from April to July 2010 does not include any Google aircraft.² In addition, a June 25, 2010 email by NASA scientist Laura T. Iraci discloses that the jet had yet to undergo NASA's Airworthiness and Flight Safety Review. Iraci also discusses how NASA is "starting small" with the new jet, attaching "very small self contained environmental sensors."

NASA's public relations office did not respond to questions about Google's contribution to Cal-Nex but a brief summary of the project by Iraci can be found here: <http://o3.arb.ca.gov/research/calnex2010/Afternoon/LauraIraci.pdf>

Flight data obtained from the Flightaware.com web site and other sources show that the Alpha Jet is not used nearly as often as the company's three Gulfstream V planes or the Boeing 757 and 762. Some of the Alpha Jet's flights have been as short as 6 minutes (on April 7, 2010) and 11 minutes (on July 18, 2010).

Lately, H211 has been able to block Flightaware from releasing data on the travels of the three

² http://www.esrl.noaa.gov/csd/calnex/2010platforms_v7.pdf

Gulfstreams -- notwithstanding the oft-repeated commitments of Google leadership to transparency in all things (particularly politics and government). Fortunately, a volunteer army of aviation buffs around the world, known as plane spotters, often manages to catch the Google fleet in action.

The flights tracked by Consumer Watchdog leave little question that Google's leadership is living out the lifestyles of the rich and famous courtesy of Uncle Sam.

Air Google flights in pursuit of less scientific objectives include:

--On May 13, 2010 an H211 Gulfstream V departed Moffett at 11:30 at night, headed for the Nice-Cote d'Azur airport in southern France. That week, Google held an event for advertisers at the nearby Cannes Film Festival. On the night of May 18, CEO Eric Schmidt attended [a party for Mick Jagger](#) in Cannes. On June 26, an H211 Gulfstream V flew from Mountain View to Nice-Cote d'Azur for a second time.

--On July 9, the company's Boeing 762 took off for Tahiti where a near-total solar eclipse was visible on July 11. [Among the sun worshippers](#) were billionaire co-founders Larry Page and Sergey Brin. The 762 and a Gulfstream V returned to Tahiti on July 15, according to flight records, presumably to pick up straggling Googlers.



Sailing blogger Frank Taylor with the Google founders in Tahiti.

<http://www.tahinaexpedition.com/2010/07/successful-eclipse-and-big-surprise.html>

--Last January 3, an H211 Gulfstream V flew overnight from the Caribbean island of Tortola to Mountain View, according to flight data. In December 2007, an H211 Gulfstream was spotted in Tortola for the wedding of Larry Page at mogul Richard Branson's privately owned Necker Island.

-- On January 7, a Gulfstream V flew from St. Maarten, another resort island, to Mountain View. An H211 Gulfstream also landed in St. Maarten in February

2008. The same Gulfstream was photographed again in St. Maarten on April 27, 2009.³



Google executive jet flies over beach at St. Maarten in February 2008 (<http://jetphotos.net/viewphoto.php?id=6184441&nseq=75>)

Two years ago, the Mountain View Voice editorialized about “the NASA-Google connection,” saying “If NASA just wants the money, and doesn’t really care about ‘scientific experiments,’ it should dispense with the pretense.” (Mountain View Voice, December 7, 2008). NASA officials say that they are examining whether Moffett Airfield is “an under-utilized asset” that should be sold off. Such a sale could save NASA millions

³ <http://www.airport-data.com/aircraft/photo/312964.html>

of dollars a year in maintenance costs and open the airfield to other private aircraft.

It turns out the scientific research is basically a fig leaf so that NASA can justify doing deals with private companies. NASA's Moffett leadership also claims that the agency does research on environmental conditions in San Francisco Bay aboard a 246-foot long zeppelin airship that's parked at Moffett.⁴ But the craft happens to be owned by Airship Ventures Inc., a private company which charges \$495 per person for one-hour tours of the Bay aboard their zeppelin.⁵ The company's board includes Silicon Valley investor Esther Dyson, who has various ties to Sergey Brin and his wife Anne Wojcicki. (Both Dyson and Google are investors in Wojcicki's genetics company 23andMe.)

While these deals are unusual, they're not totally unprecedented. A firm named Zero Gravity (<http://www.gozerog.com>) also has a deal with NASA to use Moffett.

However, one NOT for profit outfit, Humanitarian Air Logistics, has so far been unable to obtain access to Moffett even though the group is clearly a charity. Strangely, documents show that when the group asked NASA to use the field, NASA insisted the group obtain permission from the nearby city of Mountain View even though it did not impose a similar requirement on H211. The City of Mountain View declined to get involved.

⁴ <http://www.nasa.gov/centers/ames/news/releases/2009/09-130AR.html>

⁵ <http://www.airshipventures.com/tours.php>

According to a 2007 memo by the chief of NASA's Ames Research Center at Moffett, Pete Worden, "Not everyone can nor should use this airfield. NASA has specific criteria to determine who can partner with us and whether they may use their aircraft at Moffett. All requests by a private entity undergo a rigorous review process and every request must demonstrate a relationship to NASA missions."⁶

One person with knowledge of the matter said a complaint regarding alleged favoritism toward Google has been filed against Ames with NASA's inspector general based on the different treatment received by H211 and other applicants.

NASA apparently charges the Google executives a better rate for supplies of jet fuel than is available from private suppliers. While the Defense Department charges H211 market rates for fuel, it does not collect any state or local excise taxes on the sales, according to the fuel contract between H211 and NASA. That means H211 pays less than full freight - unless H211 voluntarily turns over these tax payments to the state of California.

2) Google's Washington Revenue Stream: Think Pentagon, not the Cloud

On September 24, 2010, Google landed its largest government contract ever: a \$26.7 million dollar renewable sole-source contract for Google Earth spatial

⁶ <http://www.spaceref.com/news/viewsr.html?pid=25413>

imaging software with the secretive National Geospatial-Intelligence Agency (NGA).

With that decision, the Internet search giant multiplied nine-fold the total of \$3.02 million in direct purchase orders that it has received from 25 federal government agencies since its founding in 1998.

The contract was essentially handed to Google. “Google is the only identified source that can meet the Government's requirement for compatible capability across networks, global access, unlimited processing and software licenses, and access to the Google Earth hosted content through widely-used Open Geospatial Consortium service interfaces,” the agency explained.⁷

Initially, the agency simply announced Google would get the contract without competition. After Fox News ran a story critical of the deal, the agency extended the deadline and invited proposals from others.

The agency also added new language disclosing that the choice of Google was pretty much inevitable -- because the Pentagon already has a deep, classified investment in Google technology:

NGA has made a significant investment in Google Earth technology through the GEOINT Visualization Services (GVS) Program on SECRET and TOP SECRET government networks and throughout the world in support of the National System for Geospatial (NSG) Expeditionary Architecture (NEA). This effort augments the current NSG architecture by expanding the GVS and NEA investments to the unclassified network in support of Department of Defense (DoD) Geospatial Visualization Enterprise Services (GV-ES) standardization.

⁷ https://www.fbo.gov/index?s=opportunity&mode=form&tab=core&id=482ab868878ecd0bd81d978216718820&_cview=0

The NSG, DoD, and Intelligence Community have made additional investments to support client and application deployment and testing that use the existing Google Earth services provided by NGA.⁸

All of this makes sense in light of the history of Google Earth, which started out as an independent company called Keyhole that received some of its initial capital from the Central Intelligence Agency.

A review of Google's other deals and federal consulting contracts for use of Google products shows that the company's mapping products are among its hottest wares with the feds.

In the defense sector, Google's two biggest accomplishments are:

--Contracts with the National Geospatial Intelligence Agency and the Air Force Weather Agency, both of which directly support US military efforts in Iraq, Afghanistan, and elsewhere.

--Growing business with licensed vendors. Google's licensed vendor business in the government sector is growing fastest at the Department of Defense, according to government contracting databases.

So while cloud computing will almost certainly become Google's most lucrative government service, Pentagon contracts currently comprise the bulk of its federal government business.

⁸ https://www.fbo.gov/index?s=opportunity&mode=form&id=20a4743fb3588bdc88465bef87074218&tab=core&_cview=1

What Pentagon offices want most from Google and its vendors, it seems, are more sophisticated and costly versions of Google Earth, the company's popular Internet-based aerial viewing service. Google's free services have proved useful and compatible with existing computing systems.

In September 2008, the National Air and Space Intelligence Command hired a Google vendor to provide Google Earth at the cost of \$217,630. NASIC assesses the missile forces of other countries. Last September, NASIC issued a no-bid \$90,322 contract to another Google vendor.

"Google software is part of NASIC's infrastructure and had proven to be reliable, dependable and compatible with various external users of the NASIC facility," said a contracting officer as justifying the sole-source contract.

3) How Google went to the head of the cloud

No small part of Google's influence on government contracting decisions is the company's proven ability to capture markets once dominated by others. Just as Google has come to play a dominant role in the US advertising industry, so it envisions capturing a large share of the federal government's computing budget, estimated at \$76 billion annually.

Welcome to the world of cloud computing, in which government dollars drizzle down on those high-tech firms that can best manage the government's

information technology needs with secure off-site data storage and reliable service. Cloud computing is both a sensible idea—there are real economies of scale that can save taxpayers lots of money—and a huge potential market for the most trusted vendor in the market. But cloud computing also raises huge privacy and security concerns, and evidence is surfacing about concerns that the Obama administration has at times rushed into deals with Google.

Google now has a head start on its rivals in the fiercely competitive cloud computing market, thanks in part to deals inked with the US Patent and Trademark Office and the General Services Administration in the past year. In both cases, Google enjoyed the benefits of support from federal chief information officers. In both cases, a few people involved in the process voiced objections.

Google's successes started in November 2009 when the USPTO announced its intention to give a sole-source contract to the search engine to make patent and trademark information available to the public for free.

Google's rivals in the field of patent and trademark publishing complained in writing about the contract. The USPTO then opened the contract to bidding -- on the condition the service be provided for free. USPTO CIO John Owens continued to push for approval of Google telling company officials in an email in December 2009, "I have quite a bit of pressure to get this deal signed." Owens didn't explain from where that pressure was coming.

None of the publishing firms bid on the contract. The no-cost nature of the contract would have an “anti-competitive effect,” said an industry group, the Coalition for Patent and Trademark Information Dissemination. The arrangement, said a spokesman in a letter to USPTO, would give Google “inequitable advantages in timing, branding and inside technical information” that “are clearly in violation of existing statutes, and would result in unfair competitive advantage over other resellers of patent and trademark information.”

The reason for the group’s concern boils down to the way Google seems to be copying tactics pioneered by Microsoft in order to gain advantages in certain markets. When a company gives away something for free, it is obviously subsidizing the product or service. If that free good or service is obtained on an exclusive basis, it could constitute an illegal advantage. In the case of the PTO, the arrangement seems to raise questions about whether Google, by subsidizing access to certain government information, could ultimately gain a monopoly over that information as other companies find it impossible to compete.

The USPTO officials pushed to get the contract signed before a scheduled meeting between Secretary of Commerce Gary Locke, Director of Patents David Kappos, and Google CEO Eric Schmidt in February 2010. When the contract was announced, PTO procurement chief Kate Kudrewicz told her contracting officer, “President Obama will be very pleased to hear this

news.” Also copied on the e-mail were Google executives Andrew Young and John Orwant.

Google gained another advantage over its rivals in July 2010, when the General Services Administration announced that Google’s Apps for Government service was judged to have met the standards of the Federal Information Security Management Act (FISMA) ahead of rivals such as Amazon, Microsoft, and Salesforce.com. Microsoft claimed at the time it would also receive certification “very soon,” but ended up receiving its FISMA certification in early December, about five months behind Google.

FISMA certification is a key first step in the Obama administration’s campaign to move federal computing services out of government offices and into the cloud. Certification can spare each agency the daunting task of evaluating the privacy and security standards of each different vendor.

The writing of the FISMA standards was driven by the Obama administration’s chief information officer, Vivek Kundra. Formerly the chief technology officer for the District of Columbia, [Kundra is known to admire Google’s products](#). In a September 2008 promotional video for Google, accessible on YouTube, Kundra touted the virtues of Google’s Government for Apps software.

“We were looking for something that was easy-to-use from the end user perspective, and we’re also looking for a technology that can be scaled immediately. And based on those metrics, and just the economic value of being able to

roll out a technology super-fast at a low cost, we decided to go with Google Apps”⁹

Flash forward to September 2009: Obama had been elected president and Kundra had been named chief CIO of the entire federal government. Aiming to do nothing less than “changing the way business is done in Washington,” Kundra sought to achieve big savings by moving government computing services to offsite vendors, “to the cloud.”

There are several indications Kundra’s office sought to hurry things along with Google. By November 2009, Kundra’s office and the GSA were seeking to hold a meeting on “Google Accreditation,” according to an email obtained under FOIA.

Efforts to get Google certified received a further boost in February 2010 when the Senate confirmed technology executive Martha Johnson as GSA administrator. Johnson came from Computer Sciences Corp., which has an alliance on cloud computing with Google in both Los Angeles and Australia.

A month later, in March 2010, Kundra pressed two interagency committees to finish writing the FISMA standards.

At the time, Google representatives wanted to show its Apps for Government software to government contractors for their approval but was insisting that the government’s IT specialists sign non-disclosure agreements.

⁹ Kundra endorses Google’s government products: See http://www.youtube.com/watch?v=-JZus5bvC3M&feature=player_embedded

While the CIO seems to have been prepared to go along, the demand triggered a protest from the Department of Homeland Security.

This condition “is very troubling,” wrote Toby Levin, Director of Privacy Policy at DHS in a March 2010 email.

The documents indicate that in the wake of Levin’s concerns, the agency participants declined to sign non-disclosure agreements. Google then backed off its demand.

But Levin had many other serious concerns about the lack of an adequate privacy review prior to the Google deal. “Now that I give this more thought, I have concerns that this review with Google may violate federal contracting rules of impartiality,” she warned. “The mere selection of Google for a pilot review, could be viewed by competitors as favoritism and give Google an unfair advantage in the approval process.”

“When the government is doing due diligence to understand practices and policies of a company,” Levin, now retired, said in an interview with Consumer Watchdog, “there should be no barrier or any limitation.”

At around the same time, Levin wrote another email lamenting Kundra’s effort to rush through the cloud program with little regard for privacy considerations. One key official “is under much pressure from Kundra to get this out in the next two weeks,” she wrote.

In another email, Levin noted that the privacy issue seemed to be getting short shrift. “The plan only mentions privacy on the last page in a parenthetical,” she complained. “The pressure to move quickly in this area does raise concerns for the Privacy Committee.”

She also noted that one of the key privacy issues was the need for “no servers outside the US given the conflict of law issues,” a reference to the fact that it’s impossible for the US to protect privacy of data if the data is stored in another country.

Google, however, has always refused to disclose where its servers are located and refuses to say whether they are all in the continental United States.

Mysteriously, the GSA later changed its rules to no longer require that the data centers reside in the continental United States, stating that “while GSA prefers a location within the United States, we recognize we may have equated location with security and excluded other factors that could also ensure the security of our data, which unduly restricted offerors.”

One well-connected media outlet has since reported that “Vendor sources say that was specifically for Google.”¹⁰

In communications with US officials seen by Consumer Watchdog, Google simply says the servers are “on US soil,” which means they could actually be in the Caribbean, the South Pacific, the Arctic, or some

¹⁰ <http://federalnewsradio.com/index.php?nid=110&sid=2189864>

other distant part of the world where the US has possessions that technically qualify as US soil.

Levin's dismay only increased when her office discovered that Google was already promoting its Google Analytics product as a federally-approved application.

"Google is saying we approved their analytics tool for cloud computing!" wrote DHS Privacy Office Associate director Steve Richards. "This doesn't look good."

The announcement, noted Levin to federal cloud initiative leader Peter Mell, overlooked the fact that Google Analytics collects IP addresses of users. "Not a good privacy practice," she pointed out.

The episode prompted a caustic comment from Levin to Mell: "Frankly, we need to enter into contracts that reflect federal requirements," she wrote.

"Agreed," replied Mell.

And yet, the government would soon change its requirements on server locations to allegedly accommodate Google despite privacy concerns.

In July 2010, Google announced it had received certification from the GSA for its apps. At the time of Google's approval, Microsoft and Salesforce.com were also under consideration for FISMA approval, according to other agency emails.

The GSA declined to respond to written questions about the FISMA process, and some observers say there may be valid reasons why Google got through first.

“Why did Google get certified first?” asked one federal contractor familiar with the FISMA process who asked not to be named. “When you say Google I think of agility and adaptability. I think of Microsoft as the bureaucracy.”

Google executive David Mihalic told [Federal News Radio](#) that the FISMA review process had been “extremely thorough.” He said Google had made changes that exceeded the government standards. He said Google now assures agencies their data will be stored only on servers in the continental United States and those servers will not be used by non-governmental customers.

DHS was not the only federal department where the push to adopt Google sparked major privacy and conflict of interest concerns. At the FCC, these worries and Google’s penchant for extreme secrecy completely derailed a 2009-2010 effort to move the FCC email system over to Google, documents show.

Toby Levin of DHS stops short of accusing the Obama administration of outright favoritism toward Google and said she does not fault CIO Kundra for pressing for action. But she says she was concerned that the process was “moving too quickly.”

“I wasn’t comfortable with it, but you can argue it made sense to start with one of the big guys” in the industry, she said.

Yet the privacy and security implications of cloud computing should not be rushed, Levin said.

“There’s a reason government goes slow. We need to work out policies for all personally identifiable information [put] into a cloud. Once you set that criteria, those are the rules that will apply so they need to be adequate and tight.”

“In my view, the government needs to examine all of the services under consideration in a neutral and unbiased manner,” Levin said. “No favoritism.”

5) Federal law enforcement agencies rely on Google for surveillance technology.

As Consumer Watchdog reported earlier this year, the [FBI has spent \\$600,000](#) on Google Earth Enterprise software since 2007. The Drug Enforcement Administration has spent more than \$67,000.

The DEA’s contracting records say that Google Earth is being used in connection with the agency’s High Intensity Drug Trafficking Area program, which targets specific geographic domestic regions of the United States.

The FBI has not disclosed exactly how it is using Google Earth. However, the FBI’s Domestic Investigations and Operations Guide encourages agents to use digital mapping technologies like Google Earth for assembling dossiers on local communities.

If the FBI merges ethnic data it has gathered onto Google Earth maps, it raises the possibility of unfair racial profiling.

6) Unnecessary Secrets: Google's Relationship with the National Security Agency Remains Hidden

When Google senior executive Vint Cerf visited Washington in June 2009, one of his stops was the [National Security Agency](#) at Fort Meade in Maryland. There he discussed cybersecurity with General [Keith B. Alexander](#), chief of [US Cyber Command](#), who oversees the Pentagon's network defense system.

Cerf's visit embodied the ongoing collaboration between Google and NSA, which monitors global communications networks. That relationship is now shrouded in official secrecy because of the NSA's two-fold mission: 1) the "protection of US information systems," and 2) the "production of foreign signals intelligence information."

Google, like the entire US economy, depends on NSA fulfilling its first cybersecurity mission. So it made sense that [Google and NSA worked together](#) in January 2010 when twenty-four US corporations found themselves under a sophisticated cyber attack, apparently from China. The attackers were apparently seeking private data held by the companies.

What concerns civil liberties and privacy advocates about the Google-NSA relationship is the other half of NSA's mission: "the production of foreign signals intelligence information." In plain language, NSA intercepts and decodes private communications of people around the world. Despite the use of the official modifier "foreign," NSA is authorized under certain

circumstances to collect intelligence on American citizens on US soil.

As a corporate entity, Google must manage a conflict of its interests.

“The problem Google faces is that its whole business could be terminated at any time if its network gets infected or hit by a denial of service attack,” said James Bamford, author of a number of books about the NSA. “There’s a feeling among experts in the area that there is only one repository of experts on the subject and that’s NSA.”

Bamford cited the tension between NSA’s domestic surveillance mission and Google’s desire to assure users their private data is secure and private.

“NSA loves secrecy and loves being able to penetrate communications technologies,” he said in an interview. “The question is, could NSA’s relationship with Google give it more access to private domestic communications than it already has?”

Experts say there’s no evidence of that.

“Google does what every telecommunications company does,” says William Arkin, a defense consultant who co-authored the recent Washington Post series [Top Secret America](#).” “They comply with national security letters and other requests for information.”

National Security Letters, known as NSLs, are an extraordinary search procedure which gives the government the power to compel the disclosure of

customer records held by banks, telephone companies, Internet Service Providers, and others.

Such communications between Google and NSA are shrouded in official secrecy. So is the Google-NSA relationship on cybersecurity.

This summer the [Electronic Privacy Information Center](#) (EPIC), a Washington-based non-profit, [sued the NSA](#) for records of its dealings with Google in the wake of the January 2010 cyber attack. In response to an EPIC request under the Freedom of Information Act, NSA refused to confirm or deny any relationship with Google.

John Verdi, an attorney for EPIC, says it would be “unusual” for NSA to take such a stance if the Google-NSA relationship was merely a “garden-variety cyber security arrangement.” Verdi says EPIC has no information that Google has compromised its security standards in its dealings with NSA.

Experts say that official secrecy makes it impossible to know the nature of the Google-NSA relationship, even if it is benign.

“It makes sense for NSA to share with Google the signatures of malicious code that it detects. That information would help Google defend itself against attacks,” said Gregory Nojeim of the [Center for Democracy and Technology](#), a non-profit group that advocates industry, not government, take the lead in cyber-security.

“What complicates the situation is that those signatures are classified information,” Nojeim said in an

interview. “Presumably Google has people who have the clearances and can receive that information.”

Whether the Google-NSA relationship on cybersecurity raises civil liberties issues is unknown.

“From a civil liberties point of view, it is much more important to know about the flow of information from Google to NSA, than NSA to Google,” Nojeim says. “It is incumbent upon Google to disclose more about its relationship with NSA.”

The Google-NSA relationship goes back at least to August 2003 when the search engine entered into a \$2.07 million contract with the agency. According to documents obtained under FOIA, NSA paid Google for a search appliance capable of searching 15 million documents in twenty-four languages. The arrangement was apparently congenial to Google. In April 2004, Mountain View extended its services for another year at no cost to the government, according to contract records.

An NSA spokesperson told Consumer Watchdog that the agency does not currently have any contracts with Google.