

**STATEMENT OF  
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**ON  
THE PRIVACY AND CIVIL LIBERTIES IMPLICATIONS OF DOMESTIC SPY SATELLITES**

**BEFORE THE  
HOUSE COMMITTEE ON HOMELAND SECURITY**

**SEPTEMBER 6, 2007**

**Summary of Recommendations**

1. Congress should demand, and DHS should impose, a moratorium on the enactment of this program. The moratorium should not be lifted unless Congress receives answers to the key questions outlined above and raised by the Chair and Congressman Markey.
2. The moratorium should not be lifted until Congress authorizes it.
3. Congress should not authorize the enactment of this program before enacting statutory checks and balances to ensure the proper oversight of this potentially enormously powerful surveillance tool. Those measures should include clear rules for when domestic satellite use is permissible combined with judicial oversight of such use.
4. Congress should also strengthen and make truly independent the Chief Privacy Officer of the Department of Homeland Security, which, as Rep. Thompson pointed out in his letter to Secretary Chertoff, appears to have been marginalized by the department in the course of planning this initiative. Congress should also institute similar independent privacy officers for other arms of our national security establishment.

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My name is Barry Steinhardt and I am the director of the Technology and Liberty Program at the American Civil Liberties Union (ACLU). The ACLU is a nationwide, non-partisan organization with nearly 500,000 members dedicated to protecting the individual liberties and freedoms guaranteed in the Constitution and laws of the United States. I appreciate the opportunity to testify about the privacy and civil liberties implications of domestic spy satellites on behalf of the ACLU before the House Committee on Homeland Security.

## **A surveillance society?**

Government satellite technology is representative of a larger trend that has been underway in the United States: the seemingly inexorable drift toward a surveillance society.

The explosion of computers, cameras, sensors, wireless communication, GPS, biometrics, and other technologies in just the last 10 years is feeding what can be described as a surveillance monster that is growing silently in our midst. Scarcely a month goes by in which we don't read about some new high-tech method for invading privacy, from face recognition to implantable microchips, data-mining to DNA chips, electronic identity systems, access passes that record our comings and goings, and even plans for RFID radio computer chips in our clothing and other consumer goods. The fact is, there are no longer any *technical* barriers to the creation of the surveillance society.

While the technological bars are falling away, we should be strengthening the laws and institutions that protect against abuse.

Unfortunately, even as this surveillance monster grows in power, we are weakening the legal chains that keep it from trampling our privacy. We should be responding to intrusive new technologies by building stronger restraints to protect our privacy; instead, we are doing the opposite — loosening regulations on government surveillance, watching passively as private surveillance grows unchecked, and contemplating the introduction of tremendously powerful new surveillance infrastructures that will tie all this information together. (The ACLU has written a report on this subject, entitled *Bigger Monster, Weaker Chains: The Growth of an American Surveillance Society*, which is available on our Web site at [www.aclu.org/privacy](http://www.aclu.org/privacy).)

Given this larger context in which the plans for domestic deployment of our spy satellites are being made, several conclusions are clear:

- This step is part of a trend of turning our nation's surveillance capabilities inward upon our own population.
- If spy satellites are to be deployed domestically, it is vital that the most rigorous checks and balances and oversight mechanisms be put in place.
- There is much that we do not know about our nation's satellite surveillance capabilities.
- A moratorium should be placed on this program until Congress receives answers to the key questions about the program, enacts far-seeing statutory protections against its misuse, and explicitly authorizes the program.

The government's use of military spy satellites to monitor its own people represents another large step toward a surveillance society. Our response – and especially the Congressional response – to this new technology will serve as a test case for how wisely

we handle the introduction of a powerful new surveillance technology by the government.

Chairman Thompson and the Committee have taken an important first step in calling this hearing. But other steps must be taken before this program is allowed to go into effect.

There is much that we do not know about this classified system of spy satellites that was designed for military and foreign intelligence purposes. One fact seems plain:

The satellites have capabilities that far exceed those that are in commercial use.

- They have far better resolution. They can see much more clearly and in greater detail.
- While perhaps not as nimble as they have been portrayed in popular entertainment like *24* or *Enemy of the State*, they apparently do have advanced targeting capabilities.
- They can and do see far more than the human eye. There is much we do not know about their ability to pierce opaque objects, but there is every reason to believe they have some (and perhaps substantial) capacity to do exactly that with the power to convey information about how Americans live and work.
- The military and the intelligence community are at the cutting edge of technological change. The satellites are only going to grow more powerful and capable and change will occur quickly.

The Congress needs to act before our military satellites are deployed domestically. You must act before they are turned on our own people.

It is vital that the most rigorous checks and balances and oversight mechanisms be put in place. The domestic use of spy satellites represents a potential monster in the making, and we need to put some chains on this beast before it grows into something we cannot control.

### **Our laws aren't strong enough**

The Department of Defense ("DoD") and Department of Homeland Security ("DHS") have strongly implied in media reports that there is no legal guidance available to them regarding the use of spy satellites. Nothing could be further from the truth. Congress has thought long and carefully about this issue. Beginning in 1981 and steadily updated over the subsequent two and a half decades, Congress has passed detailed statutory guidance as to how the military is to act when involved with civilian law enforcement. Currently embodied by Title 10 Sections 371 through 382 of the U.S. Code and military regulations such as DoD Directive 5525.5, federal law controls everything from the use of military equipment and facilities to emergency situations like those involving weapons of mass destruction.

Military involvement in civilian law enforcement is something that Americans have always regarded with deep unease and the Posse Comitatus Act reflects those concerns. When Congress updated the Posse Comitatus Act it did so with careful deliberation. Authorizations for military involvement were limited, originally only allowing the military to operate directly in one area: suppression of the drug trade at the border. Congress generally limited the military to indirect assistance – loaning equipment and training civilian police. Direct action by the military could only be undertaken outside the United States.

These laws have been updated over the years, but the basic prohibitions (currently embodied in 10 USC 374) have remained intact: direct assistance by the military is permitted only for a limited number of crimes, and monitoring of individuals is largely limited to the area outside the continental United States. DoD and DHS simply cannot be allowed to step in and pretend that none of these rules apply and that this substantial body of law does not exist.

While there is substantial law to be applied in this situation, it may not be sufficient to contend with the new reality of military spy technology stationed miles above the earth, rather than soldiers with their boots on the ground.

Unfortunately, given uncertainties about the precise technical capabilities of the spy satellites and the applicability of the Posse Comitatus Act in this context, Congress cannot regard the act as a reliable legal bulwark against the abuse of satellite technology. In addition, it is certainly conceivable that a domestic law enforcement agency could in the future launch its own spy satellite, or that one of the spy satellite agencies could be transferred out of the Pentagon and into a civilian branch of government. In either of those cases, Posse Comitatus would lose all relevance – and yet it would still be crucial that the use of spy satellites be subject to checks and balances.

In any case, permitting domestic spying by the military using powerful high-technology spy satellites certainly runs contrary to the spirit of the act and the concerns that prompted its passage: the fact that the might of the military is a dangerous thing in a democracy – a tiger in our midst – and must be carefully bounded and restricted in light of the experience of so many societies throughout history where the military has become a political force with power that comes not from the ballot box but from the barrel of a gun – or the lens of a camera.

Aside from the Posse Comitatus Act, another apparent restriction on the use of satellites domestically is the U.S. Supreme Court decision Kyllo v. United States, in which Justice Antonin Scalia, writing for the majority, found that police could not peer inside a private home using a thermal imaging device without a warrant.<sup>1</sup> That ruling should prevent some hypothetical uses of satellites, such as the scanning of entire neighborhoods for the presence of heat sources.

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<sup>1</sup> 533 U.S. 27 (2001)

## The need for oversight

Of course, without proper checks and balances there is no guarantee that appropriate limits would be observed. Whenever we contemplate the introduction of tremendously powerful new technologies into our domestic arena, our current generation and the current Congress needs to think like Founding Fathers, and Mothers. It was not clear in 1776 what the threats to freedom and democracy would be as the new nation developed, but the Founders were wise enough to put in place a robust system of checks and balances that has withstood the full range of human folly and perfidy for over 200 years. When it comes to spy satellite technology, we may be living in the equivalent of the year 1789 right now. Put another way, we may be looking at a potential monster is still in its infancy. And if this technology is going to be permitted to be turned inward upon the American people, we need absolute certainty we have the right kind of restraints in place to ensure that, as it grows and evolves in ways we cannot predict, it will not trample on Americans' privacy or other rights.

It is not simply a matter of whether we believe rogue agencies will flout the law (though in the absence of oversight that would certainly be a possibility over time). Often, it is not clear what the law says, and the issue is whether that will be decided in secret or hashed out in public. For example, take the Supreme Court's Kyllo ruling against thermal imaging inside a home. When satellite use includes non-visible spectrum technologies, questions must inevitably arise about the interpretation and limits of that ruling and how it applies to specific uses. For example, scientists use satellite images outside of the visible spectrum to study the earth and environment; that would not seem to be a violation. But it is not clear where the boundary between that application and the one struck down in Kyllo would lie.

The question of oversight is partly the question of who gets to decide such questions and make such interpretations. If satellite surveillance is permitted to take place completely within the shadows, then those interpretive decisions will be made unilaterally by the military itself, and will almost certainly be made in a manner that is as generous as possible to the military.

We believe that the first step in imposing the needed oversight over this program is for a moratorium to be placed on its commencement. The second step is for Congress to ask all the key questions that need to be asked in constructing proper systems of oversight of this program – and for answers to be provided by the National Reconnaissance Agency, the National Geospatial-Intelligence Agency (formerly the National Imagery and Mapping Agency), the Department of Homeland Security, or whatever other agency might be appropriate.

Only with the answers to those key questions can Congress begin the task of writing legislation to impose checks and balances on this program, and only with the passage of such legislation should Congress authorize the start of this program.

## Key questions for Congress to ask

Two members – Congressmen Thompson, the chair of this committee, and Rep. Edward J. Markey, a member of this committee – deserve our thanks for raising the right questions and beginning the process of vigorous oversight.

Chairman Thompson has done so not only by calling this hearing, but also through his August 22 letter to Homeland Security Secretary Michael Chertoff (attached for reference). In that letter, Rep. Thompson requests regular briefings on the status of the project, and expresses well-deserved dismay at DHS's decision to launch a program such as this without making use of DHS's own Chief Privacy Officer and Officer for Civil Rights and Civil Liberties, and the president's Privacy and Civil Liberties Oversight Board.

We share Mr. Thompson's concerns; the failure of the government to avail itself of even those weak oversight institutions that now exist does not bode well for how oversight will be conducted over this program by the government in the absence of more serious oversight mechanisms enacted into law. It also serves as a reminder of how important it is that true checks and balances include truly independent countervailing institutions that cannot simply be written out of the process at will.

A good start to Congressional oversight of this program has also been provided by Rep. Markey in his capacity as Chair of the Subcommittee on Telecommunications and the Internet of the House Energy and Commerce Committee. In his August 16 letter to Mr. Chertoff (attached), sought the answers to a number of vital questions about this program, including:

- **Privacy and Civil Liberties.** What DHS has done to ensure that the program would not violate privacy? In particular, what current policies and procedures govern the domestic use of satellites? Have inadequacies been found in those processes? Have or will new policies be developed before the program is launched? Will any agencies retain any of the output from spy satellites after it has been evaluated? What privacy and security safeguards will be used for the storage of the information? How will the Department handle complaints from individuals subject to surveillance under this program?
- **Legality.** Has DHS conducted an assessment of the legality of the program?
- **Science.** Might the surveillance efforts erode the current scientific mission of the satellite program?
- **Commercial alternatives.** Why has DHS not turned to commercial satellite providers to meet the objectives it is seeking with this program?

All of those questions, like those posed by Rep. Thompson, must be answered before this program can be allowed to go into effect. In addition, I would like to add several more questions that we believe Congress must obtain answers to.

*What are the capabilities of today's spy satellites?*

The striking thing about our spy satellites is just how much we do not know about them. And it's difficult to draw conclusions about the domestic use of spy satellites when we don't know what they're capable of. In order to craft the right restraints, we need to know just what this monster looks like – and how it is likely to grow.

For example, we do not even know the answer to perhaps the most basic question: what resolution they are capable of. We know Google can go to half a meter, and experts outside the intelligence community say that government satellites exceed that. But, we do not know by how much.

Government satellite images presumably differ in several ways from publicly available online images provided by Google, Microsoft and other Web providers. Online images are merely snapshots taken at most once every few months. Spy satellites may have or gain the capability of producing live, moving images like that from a video camera. Satellites may also be capable of sweeping through much greater geographical areas, and/or of quickly moving their lenses to examine a particular spot within a much greater area at a moment's notice. And they also have capabilities such as radar and infrared imaging. And of course, they can observe ground activities silently and invisibly.

We do not know what they can do in terms of penetrating roofs or other structures, live monitoring, the scanning of large geographical areas, the use of artificial intelligence to guide imaging, or other capabilities that we might not even think of. Without knowing the answers to such questions, we cannot even begin to evaluate their potential threat to our privacy.

There is a lot of discussion and speculation about this topic on the Internet and elsewhere, and many experts have ideas of what the limits of this technology are. Undoubtedly, many will emphasize those limits to you in trying to downplay the privacy threat of this technology.

But Americans have the right not just to be free of secret government spying of their innocent activities, but also to have *confidence* that they are not susceptible to the constant possibility of being invisibly observed. So in our view the government must completely declassify and disclose publicly the full extent of the technological capabilities of any satellites that will be aimed at the American people, and you, Congress, must think like Founding Fathers and institute checks and balances that would be strong enough to protect Americans' privacy even in the face of every gee-whiz satellite capability that Hollywood has ever imagined.

*What might spy satellites be capable of in the future?*

The Congress also needs to know how satellite technology is likely to develop in coming decades given how rapidly technology is advancing. A reasonable forecast of future progress might be made based on factors such as:

- The continuing exponential growth in computing power and data transfer rates
- The similar rapid growth in the power of digital imaging that we have all seen in the prices and capabilities of consumer digital cameras

- The continuing development of imaging technologies outside the visual spectrum, such as infrared, ultra-wideband, various kinds of radar, etc.
- The possible solution to research problems that are currently being worked upon.
- The amount of resources that are likely to be devoted to the development of our spy satellite technology in coming years

Of course a wise policymaker will institute checks and balances that account not only for reasonably foreseeable developments, but also the possibility for the sudden emergence of new inventions that are today completely unanticipated.

*Just what uses does our security establishment envision putting these new satellites to? Are there really serious advantages that spy satellites can provide to police and Homeland Security agencies that cannot be provided by commercial satellite images of the type available on the Internet or elsewhere? If so, what are those uses? Are the advantages provided by this program substantial enough to counterbalance its threat to our privacy? Or is this just another example of an arm of our security establishment seeking to find new missions and new reasons for being in order to expand its budgets and bureaucratic reach? Or is law enforcement being seduced by the siren call (to which many of us are susceptible) of really cool toys?*

If this new program does not actually show substantial promise in making people safer, the matter should end there. There is no need to engage in detailed balancing tests or evaluations of a program's effect on privacy if it is not going to increase security.

## **Recommendations**

We recommend 4 basic steps in response to this situation.

1. Congress should demand, and DHS should impose, a moratorium on the enactment of this program. The moratorium should not be lifted unless Congress receives answers to the key questions outlined above and raised by the Chair and Congressman Markey.
2. The moratorium should not be lifted until Congress authorizes it.
3. Congress should not authorize the enactment of this program before enacting statutory checks and balances to ensure the proper oversight of this potentially enormously powerful surveillance tool. Those measures should include clear rules for when domestic satellite use is permissible combined with judicial oversight of such use.
4. Congress should also strengthen and make truly independent the Chief Privacy Officer of the Department of Homeland Security, which, as Rep. Thompson pointed out in his letter to Secretary Chertoff, appears to have been marginalized by the department in the course of planning this initiative. Congress should also institute similar independent privacy officers for other arms of our national security establishment.

Satellites are but one of many powerful new technologies that are entering our lives at this exciting point in our history. Many of those new technologies promise wonderful new innovations and conveniences – but many, in the absence of due concern and care over their effect on privacy, and in the absence of strong privacy regulations, threaten to become an out-of-control monster that moves us closer than ever to a genuine surveillance society. Congress needs to craft sufficiently strong restraints on this program to ensure that it does *not* go out of control – to protect Americans against the potential for unacceptable uses of satellite surveillance. And it should treat military spy satellites as a test case for how other technologies should be handled, ideally backed up by an overarching privacy law that will create more clarity and stability of expectations for Americans living in an era of constant change.