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For U.S. Satellite Makers, a No-Cost Bailout Bid

By [WILLIAM J. BROAD](#)

Officials in Washington are moving to revitalize yet another faltering American industry: the business of making the communications satellites that hover above Earth and knit the planet into a global community.

But this rescue would not cost taxpayers hundreds of billions of dollars. In fact it could be virtually free — if Congressional Democrats succeed in lifting export controls that classify satellite technology as weapons and have handicapped American manufacturers since the last days of the Clinton administration.

House hearings on the controls are to begin Thursday. Proponents of change are optimistic, pointing to a campaign pledge by [President Obama](#) and the support of respected figures like [Brent Scowcroft](#), national security adviser to Presidents [Gerald R. Ford](#) and George Bush.

But the export revision is by no means a sure thing. The national security arguments cited in imposing the limits still resonate with conservatives who believe strict regulation is needed to keep China and other countries from stealing secret technology.

Since the rules took effect in 1999, the legal complications involved in selling commercial communications satellites and components abroad have contributed to a sharp decline in American companies' share of the market, from nearly 90 percent to about 50 percent. The drop in sales has coincided with a reversal in America's balance of trade in high technology, which went negative in 2002 and has stayed there.

During the presidential campaign, Mr. Obama issued [a policy statement](#) that faulted the rules as having "unduly hampered the competitiveness of the domestic aerospace industry" and cost the nation billions of dollars. As president, he said, he would push for change.

Now the administration is tapping a leading proponent of export revisions, Representative Ellen O. Tauscher, a California Democrat who is chairwoman of the centrist, 67-member [New Democrat Coalition](#). Ms. Tauscher recently announced that she would give up her House seat to become under secretary of state for arms control and international security — a key post

overseeing the export bureaucracy.

Before her nomination, Ms. Tauscher said the issue was one of her top priorities. "It's an enormously big deal," she said in an interview.

But some lawmakers still have jitters about putting satellites into the hands of Washington's adversaries, and in particular those of Beijing.

"In the political environment we operate in, China is the third rail," Thomas C. Moore, a satellite export specialist for the Senate Foreign Relations Committee, told a Washington conference in November. "We have members who know China tests weapons in space, and they don't want to be accused of giving them any assistance."

Advocates of easing the export rules say they have damaged rather than enhanced national security and hobbled a field that was once a proud symbol of American innovation.

The [first communications satellite](#) to soar into stationary orbit was invented by [Harold A. Rosen](#), then an engineer at Hughes Space and Communications. It flew in 1964.

Once as small as wash tubs, the satellites now can rival a truck in size, weigh tons and cost \$200 million. In space, their solar panels can unfurl to half the length of a football field. Each year, 10 to 30 are sold.

From a height of 22,300 miles, the spacecraft beam signals over vast distances, relaying trillions of phone calls and linking ships to shore and soldiers to families. They send electronic school lessons to rural Africa, the Olympic Games live around the globe and convey TV shows to broadcasters, cable operators and homes equipped with dish antennas.

The spacecraft have been [honored as quiet forces](#) promoting development and democratic values.

Jonathan McDowell, a Harvard astronomer who tracks satellites, [said the United States had built](#) 428 of the craft launched successfully into orbit — the vast majority. It sold one-third to other nations, which typically used the satellites as stepping stones to development.

In 1984, a [European rocket lofted](#) one of the American craft, starting a trend to launcher globalization.

The strict export controls arose from a political fight over how far to open the field to China, which in the 1980s began offering cheap rides into orbit on low-cost rockets. A main issue was whether Beijing could be trusted, like a letter carrier, to make deliveries without peeking inside.

President [Ronald Reagan](#) approved three satellite transfers to China. The first President Bush permitted nine more.

President [Bill Clinton](#) sought to regularize such exports. In early 1996, [he directed](#) that the licensing shift from the State Department to the Commerce Department, signaling the importance of economics.

Starting in early 1998, a series of upsets brought the expanding trade to a halt.

Two American satellite makers — Hughes and Loral — [were accused](#) of illegally giving China advice about making not only commercial rockets, but also military missiles.

As a federal grand jury investigated, the Republicans, who controlled Congress, held hearings. They warned that satellite exports threatened a hemorrhage of secret materials and information, and [said that](#) China might have already stolen encryption secrets.

“It’s critical that safeguards are in place,” Senator [John McCain](#) of Arizona, chairman of the Senate commerce committee, [said at a hearing](#) in September 1998.

A month later, the Republicans attached to a defense bill a rider that sought to license commercial satellites as weapons and give Congress authority to supervise the exports.

Mr. Clinton, weakened by calls for his impeachment, signed the [bill into law](#). But [he called](#) the move unnecessary, saying it threatened to “hamper the U.S. satellite industry.”

Many Democrats and aerospace experts agreed.

“They were out to get Clinton,” said James A. Lewis, a former Commerce Department official now at the [Center for Strategic and International Studies](#) in Washington. “It really didn’t have anything to do with export controls or national security.”

The new regulations quickly hurt American satellite makers. [Boeing](#) lost a \$450 million order. [Canadian firms pulled out](#) of at least four projects.

In June 2000, William A. Reinsch, then an under secretary of commerce, [told the Senate](#) that, from 1998 to 1999, satellite export sales had fallen by 40 percent. The drop, Mr. Reinsch said, harms “the high-tech industries upon which our military and intelligence agencies depend.”

The decline accelerated as other countries, driven by pride and the allure of profits, joined the business. Around 2002, Alcatel Space, based in France, started building communication satellites free of American parts and thus free of American export restrictions. It soon [landed a \\$145 million order](#) from China. Other satellite makers joined the de-Americanizing trend.

The “anachronistic restrictions,” [Manmohan Singh](#), India’s prime minister, [told his nation’s space scientists](#), have “spurred you to greater heights.” India now has many communications satellites in orbit, and a science probe circling the Moon.

In 2003 — as American [satellite exports fell](#) to \$215 million from \$1.05 billion in 1998 — the [Commerce Department reported](#) that the nation's annual balance of trade in high technology goods had declined for the first time. Hughes, the satellite pioneer (now a unit of Boeing), had 11 commercial satellite orders in 1998 and none in 2007, according to Futron, an aerospace consulting firm in Washington.

“The United States invented this industry,” said Peggy Slye, director for space and telecommunications at Futron. “To see that lead eroded because of regulatory policy is very regrettable.”

The losses are even potentially risky. [Congressional investigators examined](#) the military's growing reliance on foreign communication satellites and warned that technical and political upheaval “could affect the availability.” Some commercial satellites had already suffered intentional disruption, the report said.

In January, the [National Research Council](#), an arm of the [National Academy of Sciences](#), called relaxation of the export policies a matter of urgency. The rules, [it said in a report](#), weaken national security and discourage innovation, isolating domestic industries in “a self-destructive strategy of obsolescence and declining economic competitiveness.”

Mr. Scowcroft, the former national security adviser who is the report's co-chairman, said the government should reverse itself and assume that technology and information are harmless unless proven otherwise.

“Instead of saying, ‘Is it all right to let this bit of information out?’ we should say, ‘Is there any compelling reason why we should not?’ ” he said in an interview. “Our default position ought to be openness.”

Some analysts still urge extreme caution. Baker Spring, a national security analyst with the [Heritage Foundation](#), a conservative research group in Washington, advocates a [country-by-country approach](#) in which close allies could buy or launch satellites but not nations like China.

The hearing on Thursday, before the House Foreign Affairs trade subcommittee, features supporters and critics. But its chairman, Representative Brad J. Sherman, a California Democrat, told a satellite conference in Washington last week that the hope of new jobs could spur regulatory change.

Dr. Rosen, the technology's inventor, who at 83 still consults for Boeing, said he believed that the policy would shift and that the industry would rebound.

“I'm an optimist,” he said. “The reason I keep consulting is that I enjoy interacting with the young engineers, and they're as good as ever.”

Cornelia Dean contributed reporting.

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