

The Rising Threat

Scott McGaunn Special Agent Federal Bureau of Investigation

COUNTERINTELLIGENCE DIVISION



Espionage, Trade Secret, & Counterproliferation Headlines:

- Engineer Charged with Stealing \$120 Million in Trade Secrets from U.S. Companies, (Xiaorong You)
- Engineer Sentenced for Unauthorized Possession of Trade Secrets , (Wenfeng Lu)
- Turkish Businessman Charged with Exporting Marine Equipment from the United States to Iran , (Resit Tavan)
- California Resident Arrested for Allegedly Acting as an Illegal Agent of China, (Xuehua Peng)
- Chinese Government Employee Charged with Conspiracy to Fraudulently Obtain U.S. Visas, (Zhongsan Liu)
- China General Nuclear Power Group Added to U.S. Department of Commerce's Entity List
- University Researcher Indicted for Fraud for Conflict of Interest Involving Chinese University Feng "Franklin" Tao
- Ohio Man Sentenced to Prison for Illegally Exporting Goods to Iran, (Behrooz Behroozian)
- Elite U.S. school MIT cuts ties with Chinese tech firms Huawei, ZTE
- U.S. Navy Officer, His Wife, and Two Chinese Nationals Charged with Conspiring to Smuggle Military-Style Inflatable Boats and Outboard Motors to China, (Fan Yang and his wife, Yang Yang)
- Iranian Businessman Sentenced to 46 Months in Prison for Violating U.S. Sanctions by Exporting Carbon Fiber from the United States to Iran, (Behzad Pourghannad)
- DOJ Indicts Former Intel Officer for Helping Iran Hack Her Colleagues, (Monica Witt)
- Former CIA Officer Sentenced to Prison for Espionage, (Kevin P. Mallory)
- Former DIA Officer Sentenced to 10 Years in Prison for Attempted Espionage , (Ron Rockwell Hanson)
- North Carolina Man Guilty in Conspiracy to Steal Trade Secrets from Aircraft Manufacturers, (Craig German)



COUNTERINTELLIGENCE DIVISION FEDERAL BUREAU OF INVESTIGATION

The Rising Counterintelligence Threat: A China Primer

COUNTERINTELLIGENCE DIVISION FEDERAL BUREAU OF INVESTIGATION



FBI Counterintelligence Strategy

"I would say that there is no country that poses a more severe counterintelligence threat to this country right now than China. China is fighting a generational fight here. And when I say China, I want to be clear, this is not about the Chinese people as a whole, or the Chinese Americans in this country. What it is about, though, is a variety of ways the Chinese Communist Party is using government officials, private sector entities...to steal their way up the economic ladder at our expense. The threat is deep and diverse and wide and vexing. It affects basically every industry in this country."

FBI Director Christopher Wray

Investigative Priorities

- . Counterterrorism
- 2. Counterintelligence
- 3. Cyber
- 4. Public corruption
- 5. Civil rights
- 6. Organized crime
- 7. White-collar crime
- 8. Violent crime

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FBI Counterintelligence Priority Threats

Threat countries:

- China
- Russia
- lran
- North Korea
- Other countries



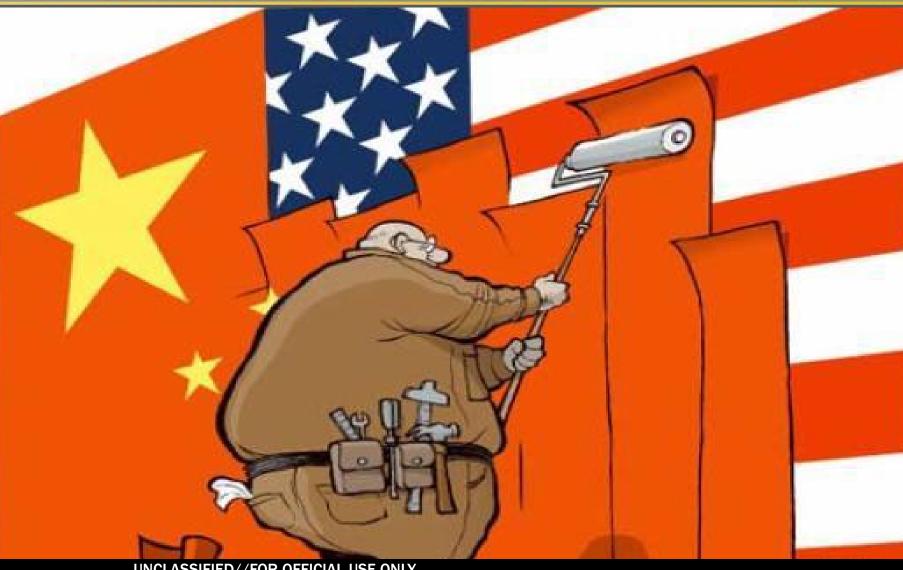
COUNTERINTELLIGENCE DIVISION FEDERAL BUREAU OF INVESTIGATION



The Future?

China's Goal:

Usurp the United States as the world's #1 superpower by 2049



"All the News That's Fit to Print"



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Late Edition

VOL. CLXIV ... No. 56,654

China's Satellite Defense System Completed Maiden Test Destroys Two U.S. Satellites for Violating Chinese Airspace

Communications, GPS Systems Suffer Reductions in Coverage

By NATE TILLER

Marking the culmination of seven years of development, China demonstrated its new anti-satellite network in a stunning display on Monday, destroying two U.S. satellites that it claimed had infringed on its sovereign airspace.

With 40 to 50 satellites passing over the Chinese mainland at any given time, China's selective destruction of two U.S. satellites was therefore taken more as a political and technological statement than as an indicator that all such satellites would be destroyed. Nonetheless, the U.S. government has scrambled to reroute as many of its satellites as possible, as have private U.S. companies such as SpaceX and Bigelow Aerospace. Other Western nations have followed suit.

The resulting patchwork of rerouted satellites has, at least for the near term, led to severe shortfalls in communications and GPS services. Emergency services and civil aviation were especially affected.

Experts noted the irony that much of the technology had been developed by Western nations. "Parts of their design are identical to work done by Lockheed Martin and Airbus, among others. There's no way that's a coincidence," said NASA analyst Carol Watkins.

China had formally repudiated the 1967 Outer Space Treaty, a long-standing agreement that enshrined the nonmilitarization of space, the limitation of national airspace to sub-orbital altitudes,



and non-interference with satellite traffic. Still, few observers had been expecting such rapid progress in China's anti-satellite network, called Jade Tiger, nor such a provocative confrontation to mark its debut on the world stage.

Continued on Page A6

Iran's Latest Nuclear Test Stokes Fears Israel, Saudi Arabia Attempt to Keep Up in Arms Race

By TYRONE SLOTHROP

Yesterday Iran tested a nuclear weapon for the third time in nine months, spurring greater concerns about the Mideast nuclear arms race and raising doubts about the ability of other nations to keep pace.

The detonation occurred at Iran's usual test site in the Dasht-e Kavir desert. U.S. experts estimated the device at 15 to 20 kilotons, slightly larger than the device tested in August.

"This successful test marks a glorious day for the Islamic Republic of Iran and the



Global Internet Crackdown 63 Nations, Reliant on Chinese Backbone, Face Renewed Censorship from Beijing

By MAXINE TARNOW

From Mexico to Kenya to Indonesia, dozens of nations are feeling the impact of a new censorship regime imposed by the Chinese government.

It had once seemed like a bargain: Chinese telecom firms offered to build modern Internet backbones, underwritten by loans from Chinese state banks. But today, 63 nations face the consequences of this decision, including strict Internet control from Beijing.

When Nairobi schoolteacher Linah Karua assigned her class to research their heroes, one boy chose the Dalai Lama, but Karua soon found that all references to the Buddhist leader had been blocked by Chinese

BALTIC NATIONS EXIT NATO, SIGN NEW PACT WITH RUSSIA

Russia Lifts Ban on Imports as Pro-Russia Parties Take Power

By OEDIPA MAAS

Capitulating to nearly two years of unrelenting economic and political pressure, Estonia, Latvia, and Lithuania formally withdrew from NATO on Sunday and announced their intention to sign a friendship pact with Russia.

As part of its ongoing effort to exert influence in the region, Russia had banned the importation of all agricultural and manufactured goods from the three Baltic nations. This had the effect of devastating the nations' economies, which relied on their much larger neighbor as the export market for nearly 90% of their agricultural goods and nearly 85% of their manufactured goods. Factories closed while unemployment soared, reaching levels above 30% in all three republics.

Widespread unrest led to the recent defeats of pro-Western governments in all three countries, beginning with the resignation of Estonian prime minister Mart Tarand in April. This was soon followed by no-confidence votes that toppled the governments of Latvia and Lithuania in May and August, respectively.

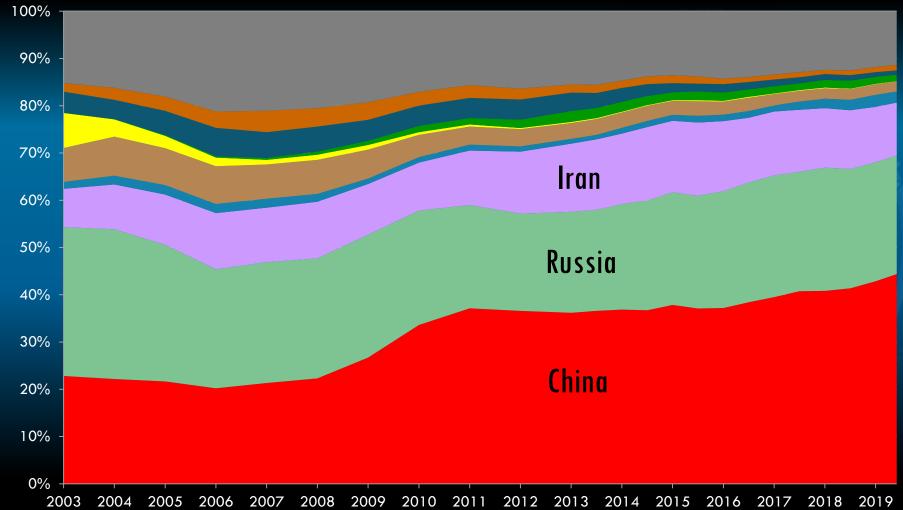
Many observers believe the unrest was at least partly instigated by Russian provocateurs, who may have turned otherwise peaceful street protests into violent riots. Journalists in the region sought to investigate and expose financial links to the Kremlin, such as Russian bankrolling of anti-Western political parties, but clear-cut evidence remained elusive.

Russia has been exerting similar pressures on other Eastern European nations, such as Poland and Hungary, albeit with lesser success to date. "Smaller nations are the most vulnerable to

COUNTERINTELLIGENCE DIVISION FEDERAL BUREAU OF INVESTIGATION

How Our Caseload Has Evolved

More and more of our counterintelligence caseload involves the Chinese government and its proxies.



COUNTERINTELLIGENCE DIVISION FEDERAL BUREAU OF INVESTIGATION

100% How Our Caseload 90% Has Evolved 80% 70% 60% More and more of our 50% counterintelligence 40% caseload involves 30% protecting U.S. 20% technology and other 10% trade secrets. 0%

All other counterintelligence cases

(e.g., espionage, targeting the U.S. Government/U.S. Intelligence Community, foreign influence, unauthorized public disclosures)

Cases on technology transfer

(economic espionage, counterproliferation)

2018

2019

2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

COUNTERINTELLIGENCE DIVISION

CHINA, INC.

"The Chinese government is a company disguised as a country engaged in economic warfare."

> John Ferriola Chairman and CEO, Nucor Corp, *The Wall Street Journal*, October 17, 2017



UNCLASSIFIED



COUNTERINTELLIGENCE DIVISION FEDERAL BUREAU OF INVESTIGATION



China's Growing Telecom Dominance

Share of global smartphone market: 2018

Rank	Company	Market Share	Nationality	
1	Samsung	19.5%	South Korea	
2	Apple	13.8%	USA	
3	Huawei	13.7%	China	*)
4	Xiaomi	8.1%	China	*)
5	Орро	8.0%	China	*0
6	Vivo	6.9%	China	*)
7	LG	2.7%	South Korea	
8	Lenovo	2.6%	China	*0
9	Nokia	1.2%	Finland	
10	Tecno	1.2%	China	*0

Combined market share of the Chinese companies in the top ten: **40.5%** (Increased from 30.0% in 2015, 33.8% in 2016, and 37.8% in 2017)



Stealing Technology with Striking Similarities



American F-35 fighter Maiden flight: 2006

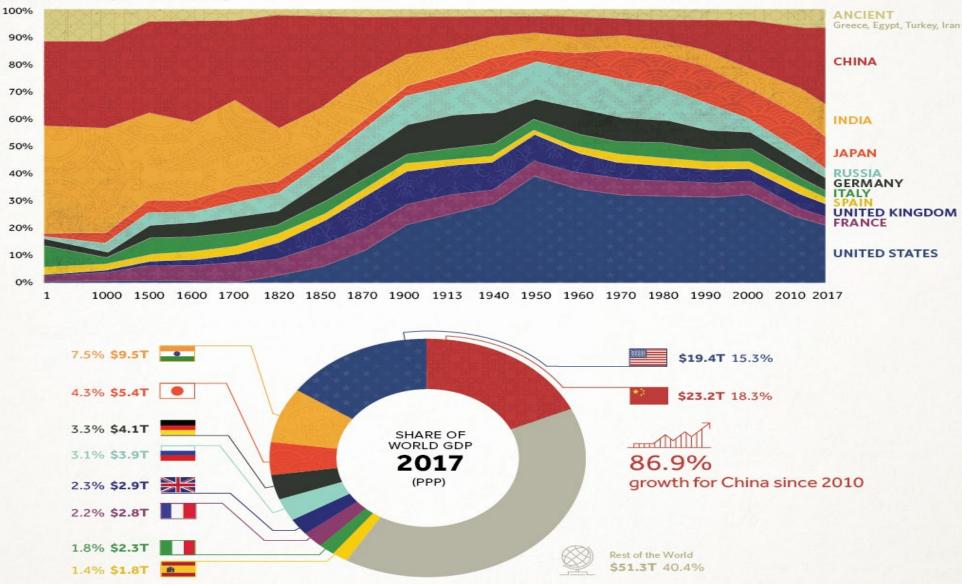


Chinese J-31 fighter Maiden flight: 2012



2,000 YEARS OF ECONOMIC HISTORY IN ONE CHART All major powers compared by GDP from the year 1 AD

SHARE OF GDP (WORLD POWERS)







China's Dream

- The Chinese government has a long-term plan to make China the world's sole superpower by 2049.
- Right now, they appear to be on track to succeed, and this would have horrific consequences for the world.



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U.S. Completes Satellite Network for Internet Traffic Constellation of 12,000 Satellites Will Triple the World's Internet Bandwidth

System Will Reduce Costs, Expand Worldwide Access

By NATE TILLER

A consortium of NASA and three private companies announced the completion yesterday of a constellation of 12,000 satellites, forming a space-based Internet communication system that is projected to triple the world's Internet bandwidth overnight. The new system, known as Eagle Bridge, is also expected to reduce global data costs and bring Internet access to previously underserved areas worldwide.

"This is a milestone in the peaceful use of space, and it illustrates the power of collaboration between government and business," said NASA spokesperson Pat Barr. The system will be brought online in three stages, beginning on Wednesday and ending on Saturday.

The Eagle Bridge network, launched into space over the course of four years, is orders of magnitude larger than any satellite constellation that preceded it. The only comparable effort had been a Chinese government project called Jade Tiger, whose purpose remained unclear. However, that program was ultimately scuttled last year amid technical failures and evidence of technology theft, including the arrests of four Jade Tiger procurement agents and one Chinese intelligence officer.

Law enforcement investigations in the United States, Europe, Japan, and South Korea had repeatedly exposed the Chinese government's attempts to steal classified and proprietary technology in support of Jade Tiger. Some of these attempts dealt



with targeting systems and high-powered lasers, leading experts to conclude the project was a space-based defense system. When announcing the abandonment of the project, the Chinese government denied such reports but failed to clarify the intended purpose of *Continued on Page A6*

Iran Abandons Enrichment Program Announcement Cites Sanctions, Lack of Technology

By TYRONE SLOTHROP

A surprise announcement by Iran's Foreign Ministry today signaled an apparent end to that country's goal of developing nuclear weapons. Iran's secret stockpiling of weapons-grade uranium had been unmasked by U.S. and Israeli security agencies, vindicating experts' longtime skepticism of Iran's intention to adhere to multilateral accords from 2016 and 2027.

Tehran cited a lack of technology, after several front companies were shut down due to the arrests of their leaders and dis-



China's Telecom Isolation Data Collection by Chinese Firms Exposed, Causing Exclusion from Global Networks

By MAXINE TARNOW

Investigative agencies and privacy watchdog organizations have repeatedly exposed China's hardware and software firms for passing users' private communications to the Chinese government. The ensuing outcry has led to grass-roots boycotts and legislative blacklisting in all but a handful of nations. By international consensus, these firms, most openly or covertly state-owned, have also been excluded from the world's present-day 5G and future 6G architectures.

In one especially egregious case in May, a Chinese government server farm in Shenzhen was found to be collecting 120 terabytes per day from a relay in Van-

UKRAINE AND GEORGIA JOIN NATO, EXPANDING ALLIANCE

Nations Rebuff Economic and Political Pressure from Russia

By OEDIPA MAAS

Ukraine and Georgia formally joined NATO on Sunday, expanding the alliance's membership to 33 nations from the Pacific to the Caucasus. Their admission marked the end of a decadelong and often turbulent campaign between pro-Russia and pro-NATO factions in each country.

As part of its ongoing effort to exert influence in the region, the Russian government had banned the importation of Ukrainian wheat and Georgian wine among other goods, pledging to revoke the bans if the nations rescinded their NATO applications. Further economic pressure from Moscow, culminating in the shutoff of the Druzhba natural gas pipeline to Ukraine, ultimately appeared to backfire as it only hardened the resolve of the Ukrainian and Georgian public and increased their energy reliance on the European Union and the United States.

The period was not without bloodshed, especially in the last few weeks, as massive gatherings in Kyiv and Tbilisi devolved into chaos. Many observers suspected the unrest in this period was at least partly the work of Russian government provocateurs who sought to turn otherwise peaceful protests into violent riots. Investigations by some Western law enforcement agencies had also exposed financial links to the Kremlin, such as Russian bankrolling of anti-NATO political parties and Russian government exploitation of non-government organizations.

The admission was memorialized at a signing ceremony in Brussels. "Today we welcome two more nations into a strong, peaceful alliance of equals," said NATO Secretary General Annegret