Targeting U.S. Technologies: A Trend Analysis of Industry Reporting





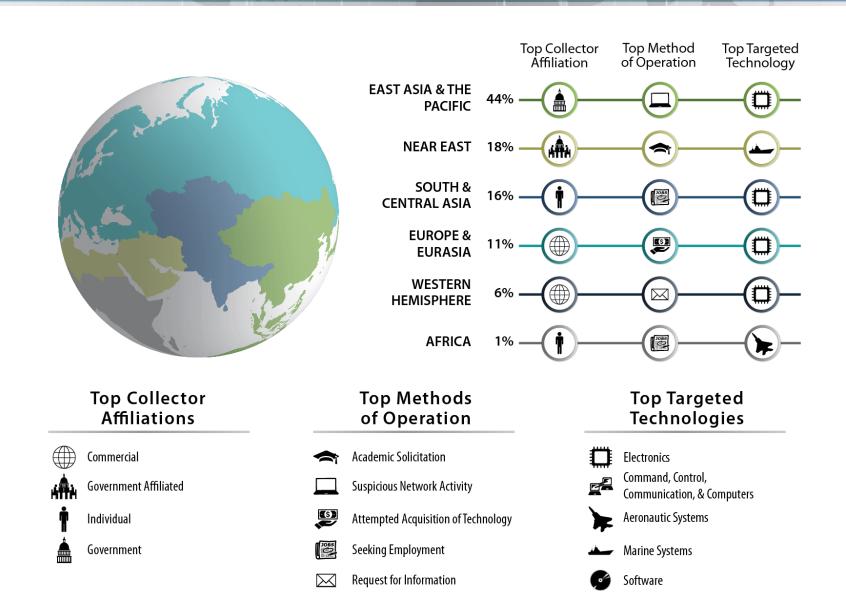
- Background & Purpose
- Regional Overview
- Technology Overview
- Collector Affiliation Overview
- Method of Operation Overview
- Special Focus Area
- Regional Assessments
 - East Asia & the Pacific
 - Near East
 - South & Central Asia
 - Europe & Eurasia
- Outlook
- Conclusion



Background & Purpose

- U.S. defense-related technologies and information are under attack from foreign entities
- Industry reporting assists the Defense Security Service (DSS), and our government partners, in detecting, deterring, mitigating and neutralizing the threat
- Each suspicious contact report (SCR) makes a difference
 - Over 30,000 reports from industry in FY13
 - Reporting led to identifying 717 subject
- The Trends is designed to help cleared contractors and their employees better recognize the threat

Regional Trends Overview



- Introduction of Industrial Base Technology List led to some changes in rankings
- Top Targeted Categories
 - Electronics
 - Command, Control, Communication, & Computers
 - Aeronautic Systems

	Electronics	8%
	Command, Control, Communication, & Computers	5%
*	Aeronautic Systems	5%
-	Marine Systems	4%
ø	Software	3%
\bigcirc	Radars	3%
	Space Systems	3%
Å	Armament & Survivability	3%
1	Materials: Raw & Processed	2%



Software Lasers Optics Information Systems Information Security Sensors (Acoustic) Radars Lasers, Optics, & Sensors **Ground Systems Ground Systems** Aeronautic Systems Aeronautic Systems Marine Systems Marine Systems Space Systems Space Systems Nuclear Systems

Biological Biomedical Armaments & Energetic Materials

Directed Energy Systems

Chemical

Militarily Critical Technologies List

Sensors (Acoustic)
Radars
Ground Systems
Aeronautic Systems
Marine Systems
Space Systems
Nuclear
Chemical
Biological
Medical
Armament & Survivability
Energetic Materials
Directed Energy

Industrial Base Technology List

Command, Control, Communication, & Computers

Militarily Critical Technologies List	Industrial Base Technology List
	Energy Systems
	Electronics
Energy Systems Electronics	Manufacturing Equipment & Processes
Processing & Manufacturing	Positioning, Navigation, & Time
Positioning, Navigation, & Time	Signature Control
Materials & Processes	Materials (Raw & Processed)
	Synthetic Biology
New Categories	Nanotechnology
	Agricultural
Weapons Effects*	Cognitive Neuroscience
reapons the co	Computational Modeling of Human Behavior
	Quantum Systems



- Academic solicitation increased 80% over last year making it the top method of operation (MO)
- Suspicious network activity (SNA) dropped to the second most identified MO
- Attempted acquisition dropped in percentage of total but still placed third
- Seeking employment rose by a factor of five

	Academic Solicitation	22%
	Suspicious Network Activity	19%
	Attempted Acquisition	15%
1085 00	Seeking Employment	14%
\bowtie	Request for Information	11%
\$	Solicitation or Marketing	11%
Υ.	Foreign Visit	6%
††	Exploitation of Relationships	2%
*	Potential Espionage Indicators	1%



- Commercial remained most common affiliation
- Government affiliated & individual affiliations rose to second and third most identified
 - Likely related to increase in academic solicitations
- Government fell in the number of identified cases

	Commercial	27%
HÎT H	Government Affiliated	27%
Ť	Individual	<19%
	Government	17%
?	Unknown	<11%



Inertial Navigation Systems

- Reporting of foreign interest in advanced inertial navigation systems (INS) technologies grew 60% over last year
 - Very few countries can produce higher end laser gyroscopes

East	Asia & the Pacific 74%						
♥⊕.	Commercial 51%	😰 Attemp	ted Acquisi	ition	32%		
, ARA	Government Affiliated 34%	🚗 Academ	ic Solicitat	ion	20%		
	Near East 9%						*
		56%	Attempt	ed Acquisi	ition 39%		0
	Government 1	17%	Academi				
		S	Solicitati	ion or Mar			
	South & Central Asia	7%					
	Government Affiliat	ed 54%		Attempt	ed Acquisition	38%	
	Commercial	23%	(Academi	ic Solicitation	31%	
	Europe & Euro	asia 7%					
	Commerci	al	77%	9	Attempted Acc	quisition	779
	Governme	nt Affiliated	15%	\bowtie	Request for In	formation	159

Special Focus Area Outlook Inertial Navigation Systems

Case Study

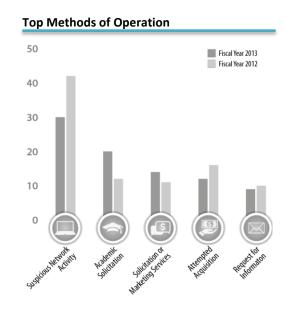
- In FY10, a citizen of an East Asia and the Pacific country attempted to purchase dynamically tuned gyroscopes from cleared contractor
 - These items are controlled under the International traffic in Arms Regulations (ITAR)
- In FY12, authorities arrested him as he tried to enter the United States
- In FY13, a U.S. district court sentenced him to prison for his role in a conspiracy to illegally export defense articles

- Several regions interested in advanced INS technology
 - East Asia & the Pacific, Near East, South & Central Asia, and Europe & Eurasia will all almost certainly continue to target INS
- General intent to reverse engineer and then incorporate INS acquired into indigenous products
- Interest in advanced INS technology will likely remain of significant interest

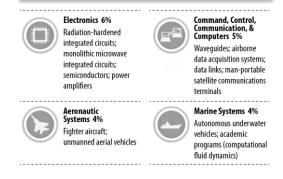
East Asia & the Pacific



- Government
- Commercial
- Government affiliated
- Top MOs
 - SNA
 - Academic solicitation
 - Solicitation or marketing services
- Top Targeted Technology
 - Electronics
 - Command, control, communication, & computers (C4)
 - Aeronautic systems
 - Marine systems



Top Targeted Technologies



East Asia & the Pacific Outlook

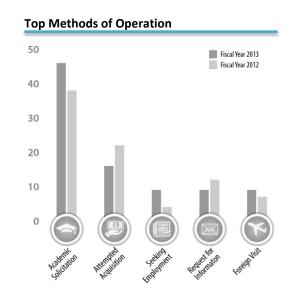
Case Study

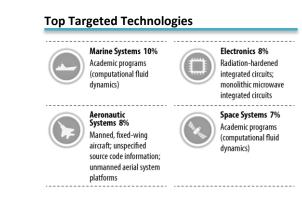
- A cleared contractor producing modeling and simulation software received four requests in a single month
 - One request resolved back to a East Asia & the Pacific student studying in the United States
 - Student claimed the request was on behalf of an East Asia & the Pacific company
- A month later, the company received 3 additional requests for the same software
 - Each of these incidents resolved back to East Asian & the Pacific companies

- Will almost certainly continue to represent most prolific threat to industry
- SNA will likely remain the top MO
- Academic solicitation will likely increase
- Will almost certainly collect on a broad spectrum of technologies
- Will primarily focus on marine systems, electronics, C4 & aeronautics systems



- Top Collector Affiliations
 - Government affiliated
 - Commercial
- Top MOs
 - Academic solicitation
 - Attempted acquisition of technology
- Top Targeted Technologies
 - Marine systems
 - Electronics
 - Aeronautic systems
 - Space systems





Near East Outlook

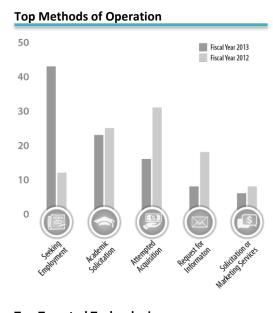
Case Study

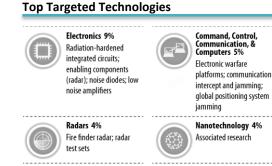
- Near East language document found at an unmanned aerial vehicle conference
 - Translated, the document title referred to "Information collection during the ... Conference and Exhibition"
- Document text indicated it was prepared for a specific Near East company
 - It tasked the company to collect specific information on prioritized U.S. companies and technologies

- Students and government-affiliated researchers will likely continue to exploit academic community
- Continued emphasis on soliciting business partnerships with cleared industry
- SNA will likely increase as the region increases computer network exploitation skills

South & Central Asia

- Top Collector Affiliations
 - Individual
 - Government affiliated
 - Commercial
- Top MOs
 - Seeking employment
 - Academic solicitation
 - Attempted acquisition
- Top Targeted Technologies
 - Electronics
 - C4
 - Radars
 - Nanotechnology





South & Central Asia Outlook

Case Study

- An individual identifying himself as a journalist photographed and interrogated a cleared contractor employee
- The cleared employee is a works with an aircraft that is beginning foreign sales
 - Customers include some countries in South & Central Asia
 - Regional rivals' budget constraints may preclude them from purchasing the aircraft and they are likely attempting to acquire information to upgrade their own aircraft

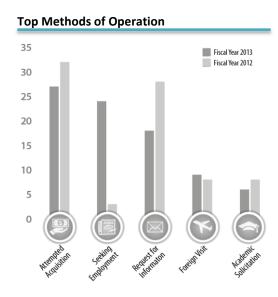
- The region will almost certainly continue to target wide range of sensitive & export-controlled technologies
- The number of resume submissions will likely continue to increase
- Incidents of commercial entities acting as procurement agents will likely increase
- Likely increase in foreign visit MO
- Increased risk of technology transfer

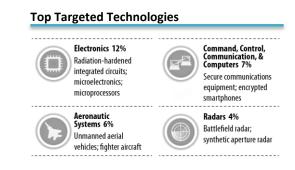
Europe & Eurasia



Top Collector Affiliations

- Commercial
- Individual
- Top MOs
 - Attempted acquisition
 - Seeking employment
 - Request for information
- Top Targeted Technologies
 - Electronics
 - C4
 - Aeronautics systems
 - Radars





Europe & Eurasia Outlook

Case Study

- A Europe & Eurasia company contacted a cleared contractor and requested an exportcontrolled amplifier on behalf of another company
 - The second company identified the end user as a third entity
- The same representative contacted the same cleared contractor again and asked for export-controlled electronics components, on behalf of the second company
- Limited information available to substantiate the identity of the purported end users

- Continued reliance on commercial entities
- Attempted acquisition of technology and requests for information will likely continue as preferred MOs
- Region will likely remain prominent source of individuals seeking employment and/or academic placement
- Entities from the region will continue to target electronics
- Continued risk of technology transfer to third countries

- Foreign entities will continue to increase their targeting of U.S. technologies
- SNA will remain significant threat
- Will likely see an increase in targeting of emerging technologies



- Number of reports increased by 33% and will likely continue to rise
- Continued vigilance from cleared industry is critical
- Top Affiliation: Commercial
- Preferred MO:Academic solicitation
- Top Targeted Technology: Electronics