Focus on Technology

Facilities developing, applying, or modifying highly sought after technologies are at a higher risk from foreign collectors. These facilities must consider the volume and persistence of foreign collection when conducting risk management and risk mitigation.

**Methods of Operation**

- **Academic Solicitation:** Applications for admission to advanced science, technology, engineering, and math degree programs associated with cleared facilities, and requests for peer and board review of academic papers.
- **Attempted Acquisition of Technology:** Attempts to purchase targeted technology, via purchase requests, marketing and sales related websites, and email.
- **Criminal Activities:** Usually exploiting lapses in physical security to obtain protected information or products with no pretense of legitimate acquisition.
- **Exploitation of Relationships:** Exploiting a connection such as joint ventures, business arrangements, and foreign military sales to obtain information or materials outside the scope of the agreement.
- **Foreign Visit:** Attempts to access information or technology during visits to cleared facilities, incidents include use of unauthorized devices, asking for information outside the scope of the visit.
- **Request for Information:** Requests, often submitted via email or web card, for technical information or specific capabilities of restricted or export controlled technologies.
- **Search/Seizure:** Airport or customs officials using entry/exit inspections to access or seize hard-copy files, or electronic devices, also includes searches of cleared employees' hotel rooms.
- **Seeking Employment:** Applications/resumé from foreign applicants submitted to human resource offices or employment websites for positions requiring U.S. citizenship or security clearances.
- **Solicitation or Marketing Services:** Offers to provide goods or services to a cleared company, or to act as a cleared company's representative/agent overseas to gain access to restricted information or technology.
- **Surveillance:** Visual, aural, photographic, or electronic systematic observation of a cleared facilities, sites, or personnel.
- **Suspicious Network Activity:** Cyber actors attempt to gain access to or introduce malware on a cleared company's network, common exploits include phishing/spear phishing, whaling.

**FY15 Top Targeted Technologies by Region**

- **Electronics**
  - East Asia & Pacific
  - South & Central Asia
  - Near East
  - Europe & Eurasia
  - Others


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<tr>
<th>Targeted Technologies (in order of precedence)</th>
<th>Top Targeting Regions</th>
<th>Methods of Operation Details and Likely Targets (Cyber domain is the most frequent vector for contact)</th>
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| **Electronics**: Radiation-hardened ICs, Monolithic Microwave ICs, Gallium Nitride Amplifiers | East Asia & the Pacific | **Academic Solicitation**  
Target university, government, and private research facilities: Admissions Department; Subject Matter Experts (SMEs); Professors or Faculty Members  
- Applications for admission  
- Requests for review of academic papers  
- Requests to study/consult |
| **C4**: Antenna, Digital Receivers, Microwave Filters, Airborne and Tactical Radios, SIGINT Systems | East Asia & the Pacific | **Attempted Acquisition of Technology**  
Target entities involved in business development/sales or management: Senior Management, Business Development (BD); Sales Office; Web Team  
- Inquiries to purchase company or business units  
- Attempts to acquire protected/controlled technologies  
- Purchase of equipment, schematics, or plans |
| **Aeronautic Systems**: Unmanned Aerial Systems Enhanced Flight Vision Systems, Collision Avoidance Systems | East Asia & the Pacific | **Seeking Employment**  
Target human resource departments: Human Resources; Security Office  
- Resumes & Applications  
- Attempts to introduce persons to cleared facilities to gain access to protected information |
| **Energy Systems**: Propulsion Systems (gas turbine engines, turbofan engines), Gas Dynamics, Bipropellant Rocket Engines, Solid Oxide Fuel Cells | East Asia & the Pacific | **Foreign Visit**  
Individual/offices hosting foreign delegation visits: Public Relations; Security; Escorts; SMEs; BD; Sales  
- Unauthorized photography or recording  
- Last minute changes to delegation  
- Engaging in discussion outside of scope of visit  
- Known or suspected intelligence officers |
| **Software**: Modeling and Simulation, Facial Recognition, Computer-aided Design (CAE), Wide Area Surveillance | East Asia & the Pacific | **Request for Information**  
Direct request for protected information: BD; Sales; Marketing; SMEs; Web Team  
- Under the guise of price quotes, marketing surveys, technical specifications  
- Telephone, web card, and email contact |
| **Radars**: Radars for Anti-Access/Area Denial (A2/AD), Phase Adaptive Radars, Electronically Steered Radars, Ground Penetrating Radars | Near East |  |
| **Optics**: Fast Steering Mirrors, Night Vision Devices, Infrared Interference Filters, Thermal Imaging Cameras, Wide Area Optical Systems | East Asia & the Pacific |  |
| **Armaments & Survivability**: Missile Systems, Rail Gun, Mine Protected Vehicles, Mine Detectors, Hostile Fire Detector Systems | East Asia & the Pacific |  |
| **Materials: Raw & Processed**: Composite Materials, Radar Absorbing Composites, Metallurgy Engineering, Piezoelectric Materials | Near East |  |