ENHANCING YOUR INTELLIGENCE AGENCY INFORMATION RESOURCES IQ

PART 5: INDIVIDUAL ARMED SERVICE BRANCHES INTELLIGENCE AGENCIES

Professor Bert Chapman
Purdue University Libraries
FDLP Academy
January 17, 2019
Located at Wright-Patterson AFB, Dayton, OH
DOD’s source for Air & Space Intelligence
Produces integrated, predictive air, space and specialized intelligence to enable military operations, force modernization and policymaking.
NASIC is a global intelligence enterprise which fulfills the needs of today’s and tomorrow’s warfighter, aids in shaping national and defense policy and guides the development of future weapons systems.
NASIC products and services play a key role in ensuring that United States forces avoid technological surprise and can counter existing and evolving foreign air and space threats.
• 1917 Army Signal Corps Engineering Department establishes Foreign Data Section at McCook Field also in Dayton. Evaluates foreign scientific and aircraft information.
• From Dec. 1942 Army Air Force’s Technical Data Lab executes scientific and technical mission.
• 1943 Captured German and Japanese aircraft arrive for technical exploitation
• Operation Paperclip (1945-1959) brings German scientists to Wright Field to enhance U.S. aeronautical expertise.
• By end of 1947 Wright Field personnel processed over 1,500 tons of documents adding to U.S. aviation knowledge and expertise in other scientific fields.
• April 21, 1951 Air Technical Intelligence Center (ATIC) established. Provides information on performance of Russian aircraft such as MiG-15 in Korean War.
• 1950’s see increasing emphasis on aircraft analysis and on spacecraft analysis after 1957 Sputnik launch.
• 1959 ATIC begins studying Chinese missile and space vehicles.
• July 1961-Air Force establishes Foreign Technology Division (FTD)
NASIC HISTORY

• FTD automates photo analysis process facilitating ability to provide information on foreign aerodynamic, ballistic missile, and space vehicle systems in 1963.
• Oct. 1, 1993 becomes National Air Intelligence Center
• February 2003-becomes National Air & Space Intelligence Center (NASIC)
• Various organizational changes and physical facility enhancements since then.

• Global personnel of over 3,200 military, civilian, reserve, Air National Guard, and contract personnel.
• NASIC also oversees Civilian Aircraft Intelligence Analysis Center at Bolling AFB, Washington, DC
• 50 USC 3001 et. seq.
• Mission Categories include the following:
**NASIC MISSION CATEGORIES**

- **Air & Counterair**: Assess the capabilities of foreign aircraft, air-launched weapons, unmanned aerial vehicles and the likelihood of their employment against US forces. Fuse IC air defense component analysis to produce a macro-level assessment of a country’s Integrated Air Defense System (IADS).

- **Ballistic Missiles**: Assess land-based foreign ballistic missile systems with a range of 1000 km and greater, their subsystems, operational capabilities, effectiveness, proliferation, and technology transfer.

- **C4ISR**: Assess the characteristics, capabilities, limitations, and vulnerabilities of foreign air and space Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance infrastructure, networks, systems and processes.

- **Cyberspace**: Assess foreign cyberspace system and network capabilities impacting air and space force employment. Determine computer network threats to USAF systems and operations.

- **Disruptive Technologies**: Assess emerging technologies that could potentially be used in an air, space, and/or cyberspace warfighting capacity against the US.

- **Integrated Assessments**: Assess foreign integrated warfighting capabilities, force structure, operational art and intent across the air, space and cyberspace domains, for both current and future forces. NASIC brings together the senior personnel, systems and concepts of operations to form a complete picture of adversary air and space capabilities.
• **National Tasking, Processing, Exploitation and Dissemination Node**: Process and analyze multiple intelligence data sources (signals, imagery, measurement and signature, open source, advanced geospatial, human and foreign materiel exploitation) on behalf of internal analytic requirements as well as part of broader IC responsibilities. Provide unique and innovative exploitation capabilities directly to operational customers and throughout the IC.

• Colonel Parker Wright NASIC Commander

• NASIC annual budget is $2.1 billion.
WAR DEPARTMENT,  
WASHINGTON, January 10, 1928.

AIR CORPS

AIR INTELLIGENCE REGULATIONS

Prepared under direction of the  
Assistant Chief of Staff, G-2

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(d) **Observation.**
1. Is it aggressive or cautious?
2. Areas covered, operating altitude, and time.
3. Nature of missions performed (reconnaissance, close or distant, visual or photographic, artillery, infantry).
4. Information probably obtained.
5. Pursuit support, if any.

(e) **Balloons and airships.**
1. Number, location, altitude, and time in ascension or flight.
2. Movements.
3. Kind of gas used.
4. Information probably obtained.

(f) **Antiaircraft weapons, including searchlights and sound locators.**
1. Locations.
2. Amount, kind, caliber, and efficiency.
3. Do they make a special effort to prevent penetration in any particular area?
BY ORDER OF THE
932D AIRLIFT WING COMMANDER

932 AIRLIFT WING INSTRUCTION
14-119

14 MARCH 2017

Intelligence

INTELLIGENCE SUPPORT TO FORCE
PROTECTION AND ANTITERRORISM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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(Lt Col Raymond A. Smith, Jr.)

Pages: 7

Supersedes: 932AWI14-119,
25 August 2009
2.1.3. Monitor global events that may impact the safety of assigned personnel at home station as well as deployed locations. The primary source of information is INTELINK-S. This information could include but is not limited to:

2.1.3.1. Known/Identified terrorist groups
2.1.3.2. Tactics, Techniques, and Procedures (TTPs)
2.1.3.3. Historical incidents/targeting
2.1.3.4. Country restrictions (travel, lodging, dining, etc.)
2.1.3.5. Local Force Protection Condition (FPCON) levels
2.1.3.6. In-place FP procedures, reporting directives, and communication means
AFSC 1A8X2
Airborne Intelligence, Surveillance, and Reconnaissance (ISR) Operator Specialty
8.1. The flow outlined in figure 2 (above) represents the formal training courses required for personnel entering and becoming fully qualified in the Airborne ISR Operator Specialty. The locations, course lengths, and titles are
Key Findings

Many countries view ballistic and cruise missile systems as cost-effective weapons and symbols of national power. These weapons present an asymmetric threat to US forces. Many ballistic and cruise missiles are armed with weapons of mass destruction. However, some countries, such as India, have developed ballistic and cruise missile systems to bolster their strategic deterrents.

China continues to have the most active and diverse ball offensive missiles, forming additional missile units, quality missile defenses. China's deployed ballistic missile force after being renamed - from the Second Artillery late last year of missiles. China continues to field conventionally armed and has developed a number of mobile, conventionally armed. In 2014, China deployed DF-21C and DF-21D and DF-26 are key components to prevent adversary military forces' access to regional centers.

China's nuclear-armed missile force is also expanding. China now has more than 50 ICBM's. The CSS-10 Mod 2 (DF-31A) and CSS-4 Mod 3 (DF-5B) are China's first ICBM with multiple independently-targetable reentry vehicles (MIRVs). The DF-5B is China's first ICBM with multiple independently-targetable reentry vehicles (MIRVs). The DF-5B is China's first ICBM with multiple independently-targetable reentry vehicles (MIRVs). The DF-5B is China's first ICBM with multiple independently-targetable reentry vehicles (MIRVs).

China's ICBM nuclear warheads capable of reaching the States could expand to well over 100 within the next 5 years. The CSS-N-14 SLBM gives China its first long-range, sea-launched nuclear capability. China is also developing a new road-mobile ICBM, the CSS-X-20 (DF-41), possibly capable of carrying multiple independently-targetable reentry vehicles (MIRVs).

China attributed both nuclear and conventional missions to the DF-26 displayed for the first time during the Victory Day parade on September 3, 2015.

In September 2014, Russia surpassed the US in deploying more than 1,000 strategic nuclear warheads. Despite arms control limitations, Russia is expected to retain the larger nuclear warhead stockpile. Official statements, a new missile called the Rubezh, which
Missile Range

- **Medium-range ballistic missiles**
  1,000-3,000 km (621-1,864 mi)

- **Intermediate-range ballistic missiles**
  3,000-5,500 km (1,864-3,418 mi)

- **Intercontinental ballistic missiles**
  >5,500 km (3,418 mi)

- **Submarine and ship-launched ballistic missiles**
  Any ballistic missile launched from a submarine or ship

- **Air-launched ballistic missiles**
  Any ballistic missile launched from an aircraft

- **Close-range ballistic missiles**
  50-300 km (31-186 mi)

- **Short-range ballistic missiles**
  300-1,000 km (186-621 mi)

Trajectories are for illustration purposes only.
Warheads and Targets

Ballistic and cruise missiles can be armed with conventional or nonconventional warheads. Conventional warheads rely on the detonation of an explosive and can be designed for various effects. Nonconventional warheads include weapons of mass destruction (nuclear, biological, and chemical weapons) and nonlethal warheads designed to disable equipment rather than harm personnel. Conventional, biological, and chemical weapons can be packaged in unitary (single) warheads and in submunitions (multiple small bomblets that are released at altitude to disperse over a wide area).

Conventional warheads can be optimized for specific types of targets. For example, submunitions can be used to create craters in an airfield runway or destroy armored vehicles. A penetrator warhead, which uses a relatively small amount of explosive surrounded by a heavy metal casing, can pass through a hardened structure, such as a bunker, to destroy its contents.

Many ballistic missiles and several types of LACMs carry nuclear warheads. Most of these warheads have an explosive force that is tens to hundreds of times more powerful than the atomic bombs used in World War II.

Chemical and biological weapons are attractive to some countries because they are much easier to produce than nuclear weapons. Accuracy is not very important for these weapons when used against urban areas or large concentrations of military forces. Chemical and biological weapons can be packaged in submunitions to be dispersed over a wide area. They are capable of producing massive casualties, inducing panic and chaos in civilian populations, and severely degrading military operations.
Ballistic Missile Flight:

- **Power Phase (controlled)**
- **Coast Phase**
- **Reentry Phase (controlled or uncontrolled)**

(U) **Endoatmospheric**: Within the atmosphere (<120 km)

(U) **Exoatmospheric**: Outside the atmosphere (>120 km)

(U) **Apogee**: Maximum altitude

(U) **Surface Range**: Distance traveled along Earth’s surface
## Intercontinental Ballistic Missiles

<table>
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<tr>
<th>Country / Systems</th>
<th>Number of Stages</th>
<th>Warheads per Missile</th>
<th>Propellant</th>
<th>Deployment Mode</th>
<th>Maximum Range (km)</th>
<th>Number of Launchers*</th>
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<td></td>
<td></td>
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<tr>
<td>CSS-3</td>
<td>2</td>
<td>1</td>
<td>Liquid</td>
<td>Transportable</td>
<td>5,500+</td>
<td>10 to 15</td>
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<tr>
<td>CSS-4 Mod 2</td>
<td>2</td>
<td>1</td>
<td>Liquid</td>
<td>Silo</td>
<td>12,000+</td>
<td>About 20</td>
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<tr>
<td>CSS-4 Mod 3</td>
<td>2 + PBV</td>
<td>Multiple</td>
<td>Liquid</td>
<td>Silo</td>
<td>12,000+</td>
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<td>CSS-10 Mod 1</td>
<td>3</td>
<td>1</td>
<td>Solid</td>
<td>Road-Mobile</td>
<td>7,000+</td>
<td>5 to 10</td>
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<td>CSS-10 Mod 2</td>
<td>3</td>
<td>1</td>
<td>Solid</td>
<td>Road-Mobile</td>
<td>11,000+</td>
<td>More than 15</td>
</tr>
<tr>
<td>CSS-X-20</td>
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<td>Multiple</td>
<td>Solid</td>
<td>Road-Mobile</td>
<td>UNK</td>
<td>In Development</td>
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<tr>
<td>Taepo Dong 2</td>
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<td>Liquid</td>
<td>Fixed</td>
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<td>SS-18 Mod 5</td>
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<td>10</td>
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<td>Silo</td>
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<td>About 50</td>
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<td>SS-19 Mod 3</td>
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<td>6</td>
<td>Liquid</td>
<td>Silo</td>
<td>9,000+</td>
<td>About 50</td>
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<td>SS-25</td>
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<td>Road-Mobile</td>
<td>11,000+</td>
<td>About 100</td>
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<tr>
<td>SS-27 Mod 1</td>
<td>3 + PBV</td>
<td>1</td>
<td>Solid</td>
<td>Silo &amp; Road-Mobile</td>
<td>11,000+</td>
<td>About 80</td>
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<tr>
<td>SS-27 Mod 2</td>
<td>3 + PBV</td>
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<td>Solid</td>
<td>Silo &amp; Road-Mobile</td>
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<tr>
<td>SS-X-28***</td>
<td>At least 2</td>
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<tr>
<td>Sarmat</td>
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<td>Multiple</td>
<td>Solid</td>
<td>Silo</td>
<td>10,000+</td>
<td>In Development</td>
</tr>
</tbody>
</table>

*Note: All ranges are approximate.*

* The missile inventory may be much larger than the number of launchers; launchers can be reused to fire additional missiles.

** We have observed launches of the TD-2 space launch vehicle from both east (2006 and 2009) and west (2012) coast facilities.

*** The Russian press indicated the missile was initially tested to ICBM range. Russian officials quoted in the press have claimed the missile is “lighter and, consequently, has a shorter range” than the SS-27 Mod 2 ICBM on which it is based.
Submarine-Launched (SLBM) & Ship-Launched Ballistic Missiles (ShLBM)

Russia maintains a substantial force of nuclear powered ballistic missile submarines (SSBNs) with intercontinental-range missiles. Upgraded SS-N-23s are intended to replace older SS-N-23s on DELTA IV Class SSBNs. The SS-N-32/BULAVA is a new solid-propellant SLBM deployed on the new DOLGORUKIY class SSBNs. Russian SLBMs are capable of launch from surfaced and submerged SSBNs from a variety of launch locations.

China has deployed the new CSS-N-14 SLBM on new 12-tube JIN Class SSBNs. This missile will, for the first time, allow Chinese SSBNs to target portions of the United States from operating areas located near the Chinese coast.

North Korea is developing an SLBM, possibly designated the Bukkeukseong-1 or Polaris-1. According to North Korean press statements, the SLBM will be cold-launched, solid-fueled, will carry a nuclear warhead, and is intended for launch from the Sinpo-class submarine. North Korea conducted multiple flight tests of the developmental SLBM in 2016.

India is developing a new ballistic missile-capable submarine, the INS ARIHANT. The INS ARIHANT will carry either 12 SRBM-range K-15s or four IRBM-range K-4 SLBMs. The Dhanush, a liquid-fueled, ship-launched ballistic missile (ShLBM), is a naval variant of India’s Prithvi II CRBM.
Overall, the threats posed by ballistic missile delivery systems are likely to continue to increase and grow more complex. Adversary ballistic missile systems are becoming more mobile, survivable, reliable, and accurate while also achieving longer ranges. Hypersonic glide vehicles delivered by ballistic missile boosters are an emerging threat that will pose new challenges to missile defense systems. Pre-launch survivability is likely to increase as potential adversaries strengthen their denial and deception measures and increasingly base missiles on mobile platforms. Countries are adopting technical and operational ballistic missile defense countermeasures in their ballistic missiles.

Russia probably will retain the largest force of strategic ballistic missiles outside the United States. The development of new ballistic missile systems is a high priority for Russia. Russian officials have claimed that a new class of hypersonic vehicle is being developed to allow Russian strategic missiles to penetrate American and Chinese defensive systems.

China is producing technologically advanced ballistic missiles, has sold ballistic missile technology to a large force of ballistic missiles in the vicinity of Taiwan, and is expanding the reach of its ballistic powers from becoming involved in any future regional conflict. China can already target the United States with ICBMs, and its ICBM force is growing quantitatively and qualitatively.

North Korea has had two successful flights of the TD-2 SLV, has unveiled road-mobile ICBMs, has a new solid-propellant SLBM and MRBM, and maintains a large SRBM inventory. The pace of North Korea has increased dramatically in recent years.

Iran has ambitious ballistic missile and space launch development programs and continues to build a missile force. Iranian ballistic missile forces continue to train extensively in highly public Iranian ballistic missile forces to hone wartime operational skills and evolve new tactics. Iran is also upgrading its existing inventory, and is developing technical capabilities to produce missile and SLV programs.

The cruise missile threat to US forces is increasing. The majority of LACMs will still be subsonic and will be deployed in the future. LACMs will also have increased survivability by minimizing radar decoys.
• Fort Huachuca, AZ
• Military Soldier Heritage Learning Center (Open to the public.)

Served in military intelligence roles in Far East and Philippines before being assigned to War Dept. in 1916.

Advocated formation of Army intelligence organization, but rejected by Army Chief of Staff Hugh Scott who thought Britain and France could handle this.

Deman appealed to Secretary of War Newton Baker who accepted the concept and on May 3, 1917 the Military Intelligence Section was established in the War Dept. with Van Deman as its first chief.
1916 Capt. Parker Hill writes *Manual for the Solution of Military Ciphers* which is the Army's first cryptology publication.

**Manual for the Solution of Military Ciphers**

_by Parker Hitt_

Captain of Infantry, United States Army

**Introduction**

The history of war teems with occasions where the interception of dispatches and orders written in plain language has resulted in defeat and disaster for the force whose intentions thus became known at once to the enemy. For this reason, prudent generals have used cipher and code messages from time immemorial. The necessity for exact expression of ideas practically excludes the use of codes for military work although it is possible that a special tactical code might be useful for preparation of tactical orders.
SELECTED U.S. ARMY INTELLIGENCE HISTORY

• 1916 Punitive Expedition into Mexico sees Army successfully tap Mexican leaders telephone, telegraph, and wireless messages.

• 1922-William Friedman becomes Signal Corps chief Cryptanalyst. He and his team solve Japanese Purple Code system in 1940.

• During WWII Counterintelligence Corps seizes over 70 tons of uranium and radium projects which are shipped to the U.S. to facilitate U.S. nuclear program.

• During one month in 1943 over 200 Army aerial reconnaissance missions flown delivering over 500,000 prints.

• Over 6,000 Nisei and Kibei serve during World War II in the Pacific. Douglas MacArthur asserted they saved over 1,000,000 American lives and shortened the war by two years.

• Unmanned aerial vehicles initially used between 1957-1961.

• During Vietnam War, ground surveillance radar and side-looking airborne radars were employed, and various night observation devices were used taking advantage of infrared and image-intensification technology.

• Imagery analysis providing detailed analysis of objects, weapons systems, enemy activity, and terrain features becomes more prevalent.
• A three man Ground Surveillance Radar Team gives a maneuver battalion commander highly mobile, nearly all-weather, round-the-clock battlefield surveillance.

• The AN/PPS-5 can detect people moving up to three miles and can spot vehicles at over six miles, making it useful for detecting enemy movements and provide early warning.

• The Spaceborne Direct-View Optical System, an optical sensor allows commanders to view preselected sites from 200 miles up in space, traveling at 17,500 miles per hour. The program was intended to determine military applications of man's unique powers of observation and decision-making in space.

• Some instructional material followed in the following videos as part of IKN’s educational mission.
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INTL440 - Cyber Warfare  
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BA Intelligence Studies | 3 SH |
| 231-35P3LXX-C45 | Cryptologic Linguist Supervisor Advanced Leader | INTL303 - Introduction to Intelligence  
INTL421 - Signals Intelligence and Security  
OMNI399 - Omnibus Credit* (only applies to the program below)  
BA Intelligence Studies | 3 SH |
| 232-35N30-C45 | Signals Intelligence (SIGINT) Analyst Advanced Leader | INTL303 - Introduction to Intelligence  
INTL421 - Signals Intelligence and Security  
OMNI399 - Omnibus Credit* (only applies to the program below)  
BA Intelligence Studies | 3 SH |
| 233-35S30-C45 | Signals Collector / Analyst Advanced Leader      | INTL303 - Introduction to Intelligence  
INTL421 - Signals Intelligence and Security  
OMNI399 - Omnibus Credit* (only applies to the program below)  
BA Intelligence Studies | 3 SH |
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Joint Intelligence
The product resulting from the collection, processing, integration, evaluation, analysis, and interpretation of available information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. The term is also applied to the activity which results in the product and to the organizations engaged in such activity.

- As a function, intelligence is inherently joint, interagency, intergovernmental, and multinational.
- Unified action partners provide cultural awareness as well as unique perspectives and capabilities that reinforce and complement Army intelligence capabilities.

Unified Land Operations
How the Army seizes, retains, and exploits the initiative to gain and maintain a position of relative advantage in sustained land operations in order to create the conditions for favorable conflict resolution.

Intelligence in Unified Land Operations
The Army synchronizes its intelligence efforts with unified action partners to achieve unity of effort and to meet the commander's intent. Intelligence unity of effort is critical to accomplish the mission. Intelligence reduces operational uncertainty—

By facilitating...

Commanders' and Decisionmakers' Situational Understanding
Executed through the...

Intelligence Warfighting Function
The related tasks and systems that facilitate understanding of the enemy, terrain, and civil considerations.

Tasks:
- Support to force generation.
- Support to situational understanding.
- Conduct information collection.
- Support to targeting and information capabilities.

Which leverages the...

Intelligence Enterprise
- Intelligence community.
- Intelligence architecture.
- Intelligence professionals.
Chapter 4

Army Intelligence Capabilities

EMPLOYING ARMY INTELLIGENCE CAPABILITIES

4-1. The intelligence warfighting function executes the intelligence process by employing intelligence capabilities. All-source intelligence and single-source intelligence are the building blocks by which the intelligence warfighting function facilitates situational understanding and supports decisionmaking. The intelligence warfighting function receives information from a broad variety of sources. Some of these sources are commonly referred to as single-source capabilities. Single-source capabilities are employed through intelligence operations with the other means of information collection (reconnaissance, surveillance, and security operations). The intelligence produced based on all of those sources is called all-source intelligence.

ALL-SOURCE INTELLIGENCE

4-2. Army forces conduct operations based on all-source intelligence assessments and products developed by the G-2/S-2 staff. All-source intelligence is the integration of intelligence and information from all relevant sources in order to analyze situations or conditions that impact operations. All-source intelligence is used to develop the intelligence products necessary to aid situational understanding, support the development of plans and orders, and answer information requirements. Although all-source intelligence normally takes longer to produce, it is more reliable and less susceptible to deception than single-source intelligence.

4-3. In joint doctrine, all-source intelligence also refers to intelligence products and/or organizations and activities that incorporate all sources of information, most frequently including human resources intelligence, imagery intelligence, measurement and signature intelligence (MASINT), SIGINT, and open-source data in the production of finished intelligence. (See JP 2-0.)

4-4. Fusion facilitates all-source production. For Army purposes, fusion is consolidating, combining, and correlating information together. Fusion occurs as an iterative activity to refine information as an integral part of all-source analysis.

4-5. All-source intelligence production is continuous and occurs throughout the intelligence and operations processes. Most of the products resulting from all-source intelligence are initially developed during planning and updated as needed throughout preparation and execution based on information gained from continuous assessment.
Measurement and Signature Intelligence

4-33. *Measurement and signature intelligence* is intelligence obtained by quantitative and qualitative analysis of data (metric, angle, spatial, wavelength, time dependence, modulation, plasma, and hydromagnetic) derived from specific technical sensors for the purpose of identifying any distinctive features associated with the emitter or sender, and to facilitate subsequent identification and/or measurement of the same. The detected feature may be either reflected or emitted (JP 2-0).

4-34. MASINT collection systems include but are not limited to radar, spectroradiometric, electro-optical, acoustic, radio frequency, and seismic sensors, as well as techniques for collecting CBRN signatures and other materiel samples.

4-35. MASINT requires the translation of technical data into recognizable and useful target features and performance characteristics. Computer, communications, data, and display processing technologies now provide MASINT to support operations.

4-36. MASINT provides intelligence to the commander to facilitate situational understanding and support targeting. Many sensors can defeat many of the camouflage, concealment, and deception techniques currently used to deceive information collection systems. Specifically, MASINT sensors have unique capabilities to detect missile launch; detect and track aircraft, ships, and vehicles; perform noncooperative target identification and combat assessment; and detect and track fallout from nuclear detonations. Often, these sensors provide the first indicators of hostile activities.
Features

Accelerating Multi-Domain Operations: Evolution of an Idea
- GEN Stephen Townsend

Resetting Intelligence Doctrine
- Ms. Terri Lobdell

Assembly Required: The Building Blocks of ISR and PED Architectures
- Mr. John DellaGiustina
- Mr. William Donner
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Improving Intelligence Sharing
- Mr. Donald Beattie
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Military Intelligence Training Strategy Update
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Adapting Multifunctional Intelligence and Electronic Warfare to Support Maneuver
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The Future of Intelligence Analysis, Analytics, and Distribution
- COL Robert Collins
- Ms. Lindsay Yowell
- Mr. Greg Hartman

Army Signals Intelligence Deep Dive: Developing a Strategy for the Future
- CPT Jason Boslaugh
- Mr. Bryan Lasater

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Chief of Staff: COL Douglas R. Woodall
Chief Warrant Officer, MI Corps: CW5 David J. Bassili
Command Sergeant Major, MI Corps: CSM Warren K. Robinson
Editor: Ms. Tracey A. Remus
Introduction
Warfare is becoming more challenging with each passing generation. In no facet of warfare is this more relevant than in our struggle to maneuver in today’s cyberspace domain, specifically in the electromagnetic spectrum (EMS). Increasingly contested and congested with more complex and numerous signals, the EMS has become an essential component of our peer adversaries’ attempts to present operational dilemmas to the U.S. Army. Operating in this complex environment has created challenges for intelligence collection within a net-dependent force. To address some of these challenges, the Chief of Staff of the Army directed the U.S. Army Intelligence Center of Excellence (USAICoE) and U.S. Army Cyber Center of Excellence (USACCoE) to integrate their signals intelligence (SIGINT) collection and electronic warfare (EW) capabilities. These efforts are currently under way.

2018 Joint Operational Integration Assessment
In February and early March 2018, Army and Marine on three of the most significant DOTMLPF-P findings of the assessment:
✦ Army and USMC lack the necessary materiel to face the full complement of threat signals of interest.
✦ Army needs to reevaluate how it staffs its SIGINT and EW forces.
✦ Current facilities are not conducive to realistic operations in the EMS.

Lack of Necessary Materiel. First, the Army and USMC lack the necessary materiel to face the full complement of threat signals of interest. Currently fielded materiel solutions are not state of the art and the basis of issue is not adequate, leaving commanders without the organic equipment densities required to fight and win in the EMS.

The military does not have the capability required to fight and win in the EMS. Given the changing nature of our threats and the capabilities of our peer competitors, the military needs reinvigorated SIGINT and EW systems that can detect
USSR-Afghanistan: Perspectives on the Conflict

by Mr. Jim Hansen

This article has been reviewed by the CIA to assist the author in eliminating classified information; however, that review neither constitutes CIA authentication of factual material nor implies CIA endorsement of the author's view.

Author

The conflict in Afghanistan is a landmark episode of counterinsurgency since it involves a direct intervention by Soviet combat troops. As such, the Soviet campaign against the Afghan rebels warrants close study by US specialists. If the Soviets succeed in the major goal of pacifying the countryside, the future role of the Soviet contingent in Afghanistan deserves even more scrutiny.

The Soviet View

In February 1976, General Secretary Leonid Brezhnev addressed the 25th Congress of the Soviet Communist Party and stated, "Literally before our very eyes the world is changing—and is chang-

military forces—now decimated by the conflict—steadily received Soviet military aid and a substantial advisory contingent. Moscow's "brotherly" aid has since assumed a vastly different form. It is likely that there are not enough Soviet troops now stationed there to pacify the countryside, and many more may be sent in. An eventual upper limit of 200,000 is not implausible, considering they will be operating against rebels supported by an alienated population of 20 million.

Counterinsurgency Experience: Direct and Indirect

Contrary to some published reports, the USSR has substantial experience in counterinsurgency-type warfare, practiced within its own borders. In the 1920s, the Red Army was called upon to crush the Moslem rebellion led by the basmachi movement in the Soviet Central Asian republics. During the late 1940s, the Soviets faced stiff guerrilla opposition in the western Ukraine as well as in the Baltic states (Estonia, Latvia, and particularly Lithuania). In all

in Afghanistan, where the Soviets must mount a comprehensive effort. If anything, the campaign against the Moslem rebels there should point out to at least some Soviet leaders the great costs (in terms of human and financial resources) necessary to wage an effective counterguerrilla campaign.

The Soviet force currently in Afghanistan, as seen by Moscow’s planner, is above all a counterinsurgency force. It has the military mission of eliminating a stubborn and resilient rebel force in the mountains, and also the more symbolic mission of representing a counterweight to the instability in Iran and in other Moslem nations in Central Asia. The symbolic mission cannot be credible to other countries without the successful completion of the anti-guerrilla campaign.

It will be most informative to see how the Soviet forces tailor their operations to fit this type of conflict. The current campaigns will give US specialists an in-depth look at Soviet capabilities for conducting mountain operations. Indeed, Soviet military literature abound with references to mountain warfare.
• January 1, 1977 Organized at Arlington Hall Station, VA. Provides Army with a single instrument to conduct multi-discipline intelligence and security operations and electronic warfare at the level above corps and to produce finished intelligence tailored to the Army’s needs.

• Intelligence and Threat Analysis Center established January 1, 1978.

• 1982-513th Military Intelligence Group established. Supports Central Command created that year to address contingency operations in Southwest Asia.
• 1986-INSCOM multidiscipline intelligence groups designated as brigades.
• Summer 1989-INSCOM relocates to Fort Belvoir, VA
• 1995-Most human intelligence operations transferred to Defense Intelligence Agency (DIA).
• Later 1990s-Regional Signals Intelligence (SIGNINT) Center established at Fort Gordon, GA.
• 2001-National Ground Intelligence Center established at Charlottesville, VA. New mission sites established at Aibling, Germany, and Menwith Hill, UK.

• 513th Brigade relocated to Fort Gordon.
• Utilizing the resources of the Information Dominance Center, INSCOM became the Army’s critical information conduit, compressing, processing, and analyzing huge amounts of raw data gathered by national and service sources into actionable intelligence that could be funneled to commanders and national law enforcement agencies in near real time.
Major General Gary W. Johnston was appointed as Commanding General, U.S. Army Intelligence and Security Command (INSCOM), Fort Belvoir, Virginia, on June 11, 2018.

MG Johnston received his commission from Arkansas Tech University in 1987.

MG Johnston most recently served as Deputy Chief of Staff, Intelligence, Resolute Support Mission, North Atlantic Treaty Organization/Director, J-2, U.S. Forces-Afghanistan, OPERATION FREEDOM'S SENTINEL. He previously commanded at the Company, Battalion and Brigade levels, including 504th Battlefield Surveillance Brigade, III Corps; 5th Military Intelligence Battalion, 205th Military Intelligence Brigade; and A Company, 302d Military Intelligence Battalion, 5th Military Intelligence Brigade. He has deployed in support of operations DESERT SHIELD, DESERT STORM, JOINT ENDEAVOR, DURING FREEDOM, and FREEDOM'S SENTINEL.

He has held positions as Director of Intelligence, J-2, U.S. Special Operations Command; Deputy Commanding General (Operations), U.S. Army Intelligence and Security Command; Assistant Chief of Staff, G-2, XVIII Airborne Corps; Deputy J2, International Security Assistance Force Joint Command (ISAF-J) Command; and Missouri Army National Guard Director of Intelligence.
INSCOM Virtual Museum

Welcome to the US Army Intelligence and Security Command’s Virtual Museum. INSCOM traces its heritage to the beginning of modern military intelligence in World War I. An important means of preserving that history is through the keeping and displaying of actual artifacts—physical reminders of important milestones and accomplishments. As you walk the hallways of our museum, we hope you will find these selected items both interesting and informative, and that through them, you will gain a greater appreciation of the contributions of the men and women, soldiers and civilians, who have served proudly in the field of military intelligence.

Please come again, the Virtual Museum is continuing to evolve and will be adding new exhibits in the future.
General Hideki Tojo’s .25 Caliber Pistol: This Belgian-made handgun was found fully loaded on a coffee table beside Tojo after he tried to take his life.
**Miniature Camera:** This “matchbox” shaped camera was used by the CIC in Austria after WWII.
Strip Cipher M-138-A: The M-138-A consists of a hinged aluminum board with 30 grooves designed to hold removable paper strips containing disarranged alphabets. The strips are inserted in the grooves in the order designated by the predetermined key. The strip cipher was used both prior to and during World War II.
Wood Carving of Cobra: The cobra was adopted as the symbol of the 7th Radio Research Field Station, Udorn, Thailand (1966-1976). It is carved from a single piece of teak wood and has a separate base that reads “Welcome to the 7th RRFS.”
Knife Disguised as a Ball Point Pen: Purchased near Clark Air Force Base in the Republic of the Philippines in 1967. Local Communists sold such items outside the gates of most military bases both to raise funds and encourage serious incidents among military personnel.
AvengerCon III: the hacker training event for today's cyber warrior

By Mr. Steven P Stover (INSCOM)  November 27, 2018

RELATED STORIES

DECEMBER 10, 2018
Post plans events to rin in the holiday season

DECEMBER 7, 2018
Koreans, Americans join together in friendship, honor Veterans at annual event

DECEMBER 5, 2018
Family and MWR events, activities
MISSION STATEMENT

The Intelligence Department is responsible for policy, plans, programming, budgets, and staff supervision of Intelligence and supporting activities within the United States Marine Corps. The Department supports the Commandant of the Marine Corps (CMC) in his role as a member of the Joint Chiefs of Staff (JCS), represents the service in Joint and Intelligence Community matters, and exercises supervision over the Marine Corps Intelligence Activity (MCIA). The Department has Service Staff responsibility for Geospatial Intelligence (GEOINT), Advanced Geospatial Intelligence (AGI), Signals Intelligence (SIGINT), Human Intelligence (HUMINT), Counterintelligence (CI), and ensures there is a single synchronized strategy for the development of the Marine Corps Intelligence, Surveillance, and Reconnaissance (ISR) Enterprise.
• Compile and disseminate finished intelligence to the Commandant, principle staff officer and other designated officers.
• Conduct liaison with the JCS, DIA, NSA, CIA, DoS and other national and departmental intelligence services and organizations in matters pertaining to intelligences estimates and planning.
• Under the cognizance of the DIRINT, serves as the direct-support intelligence staff for PP&O to assist in the daily operation of the Marine Corps, as well as PP&O joint responsibilities.
• Participate in the formulation of JCS papers concerning both current and estimative intelligence matters.
• Corps has had Intelligence Director since 1939
• Marine Corps Intelligence Activity established 1987.

**Director Intelligence Reading List**

**Organization**. The list has books recommended by ranges of enlisted and officer ranks as well as for the civilian grades. A good goal is to read at least one to two books from the list for the rank/grade of the member per year -- this is in addition to the Marine Corps Professional Military Education Reading List for the uniformed Marines. For lateral move officers coming into the 0202 MOS and for enlisted Marines into the 0231, 0211, 0241, and 0261 MOSs, the DIRINT recommends reading at least one additional book per year from the selections for the ranks below the one currently held.

**Often there are questions whether one should read books for higher ranks/grades than that currently held by the Marine or Civilian. Ideally one has read all the books for one's current and previous ranks/grades before selecting works intended for higher ones, but this should not be a "hard and fast" rule. Reading ANY book from ANYWHERE on this list is preferable to reading nothing.**

• There is a great deal of overlap in book recommendations between the enlisted and officer selections, but not completely so. The selections for Marine Civilians are all represented in the lists for the military members. This is to assure a common body of knowledge regarding the intelligence craft that will better facilitate shared background and ready communication of ideas.

**Intelligence -- History and Legacy**

This is the "historical analysis" category, comprised of books that analyze the role of intelligence in major historical battles or events.

This history is important to understand the roots of the profession, early challenges and opportunities, and threads of continuity that run through American military legacy to this very day.

**Intelligence -- The Professional's Library**
**Books for Privates and Private First Class**
- *The Great Game: The Myth and Reality of Espionage*, Frederick P. Hitz. *(History and Legacy)*
- *The Psychology of Intelligence Analysis*, Richard Heuer *(The Professional's Library)*

**Books for Lance Corporals**
- *The Secrets of Inchon*, Eugene Clark *(History and Legacy)*

**Books for Corporals**
- *How to Lie with Statistics*, Darryl Huff. *(The Professional's Library)*

**Books for Sergeants**
- *Forecasting Terrorism*, Sundri Khalsa *(The Professional's Library)*
- *Intelligence In War*, John Keegan *(History and Legacy)*

**Books for Gunnery Sergeants**
- *Intelligence and Military Operations*, Michael Handel *(History and Legacy)*
- *Military Geography*, John Collins *(The Professional's Library)*
- *Intelligence Analysis: How to Think in Complex Environments*, Wayne Michael Hall and Gary Citrenbaum *(The Professional's Library)*

**Books for Master Sergeants/First Sergeants**
- *G2: Intelligence for Patton*, Oscar Koch *(History and Legacy)*
- *Surprise Attack: The Victim's Perspective*, Ephram Kam *(The Professional's Library)*
- *The Tet Offensive: Intelligence Failure in War*, James Wirtz *(History and Legacy)*
- *Who the Hell are We Fighting? The Story of Sam Adams and the Vietnam Intelligence Wars*, By C. Michael Hiam *(History and Legacy)*

**Books for Master Gunnery Sergeants/Sergeant Majors**
- *Secret War for the Union*, Edwin Fishel *(History and Legacy)*
Posner, Richard A. (2005). *Preventing Surprise Attacks: Intelligence Reform in the Wake of 9/11*. Rowman & Littlefield Publishers. Despite the title, there's only a thin but very concise chapter on the problem of preventing surprise attacks; of far more importance is Posner's critique of the 9/11 Commission Report and the resulting Intelligence Reform Act. His advice on how the latter can be leveraged by the executive branch to achieve real reform will transcend the partisan political debates currently raging on the issue. (Col/GO, IA5/DISL/SES)


Bell, J. Bowyer, Whaley, Barton. (1991). *Cheating and Deception*. New Brunswick, NJ, Trasaction Publisher, The sin qua non primer on its topic, providing a comprehensive lexicon, logical model, and advice to intelligence analysts trying to minimize the influence of aggressive deception by adversaries on their intelligence analysis. Examples provided are readily grasped as they not only deal with war and intelligence, but also everyday life. (LtCol, CW05, IA4)

Godson, Roy, Wirtz, James (Editors). (2002). *Strategic Denial and Deception, The Twenty-First Century Challenge*. Transaction Publishers, New Brunswick, NJ. As foreign denial and deception threaten the interests of contemporary democracies, these strategic measures have emerged as a little understood challenge to the intelligence community. To gain advantages, adversaries seek to deny critical information about their own activities and capabilities and to deceive foreign governments. In recent years, Iraq, India, Somalia, Colombian criminal groups and terrorists have all used denial and deception successfully against the United States. Denial and deception is a low cost, potentially high impact way to level the military playing field. (Col/GO, IA5/DISL/SES)

### Intelligence

The Marine Corps places major emphasis on its ability to produce timely and accurate combat intelligence. In recent years, the means for gathering information, both air and ground, have increased in capacity to a point at which the manual methods used to produce combat intelligence are becoming saturated.

In order for Fleet Marine Force units to properly process, store, update, correlate, and retrieve the vast amounts of intelligence data required, the automation of many steps in combat intelligence processing is becoming a necessity. To fulfill this requirement a new concept for a Marine Corps Air-Ground Intelligence System has been developed [deleted] and will enable the Marine Corps to keep pace with the other members of the U.S. worldwide intelligence community in the introduction of automatic data-processing equipment. [Deleted.]

The Marine Corps intelligence effort, whether in the form of a computer output or a patrol report, is now and will always be aimed at satisfying the needs of the Fleet Marine Force commanders.
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**Figure 3-1.** A chart showing the structure of developing intelligence. The chart includes sections on intelligence requirements, planning and direction, collection, and processing and exploitation. Each section is broken down into specific components and their respective pages are indicated.
Figure 3-1 shows the six steps of the Marine Corps intelligence cycle. These steps define a sequential and interdependent process for the development of intelligence. Intelligence operations are conducted within the framework of the intelligence cycle; the entire cycle or a specific step within the cycle may be the focus of a particular intelligence activity. Moreover, all intelligence, regardless of the scope of the requirement or level of command, is developed by following these steps. (See figures 3-2 and 3-3, page 3-2.)

No single phase of the cycle is more important than the others. All of the phases are interdependent. Without proper direction, the other phases will not
IPB provides a means to interpret information and understand the battlespace that can be applied in any operational situation. Through the IPB process, information that has been collected and processed is analyzed, synthesized, and used to estimate possible outcomes that can affect mission accomplishment. The result is knowledge-based intelligence that is incorporated into a variety of intelligence products.

Although IPB is fundamentally an intelligence process, successful application of the process to support planning and execution depends on the participation of the commander and the entire staff. The commander is responsible for intelligence production and IPB. The commander focuses the IPB effort by defining the area and key factors to be studied. The commander’s guidance provides the basis for determining how IPB is applied and what products are needed.

discern patterns as they are emerging and to conduct intuitive decisionmaking, thereby increasing operational tempo.

Levels of Production

Intelligence production can be extremely simple or incredibly complex. At the MAGTF CE level, particularly during deliberate planning, production normally entails developing detailed, all-source estimates and studies through the combined efforts of several intelligence support elements. During tactical execution, time constraints and the demands of the ongoing battle require rapid processing and production, with an emphasis on developing simple, mission-focused intelligence products such as a hand-annotated image of a helicopter landing zone (HLZ), a target description or an overlay depicting current and future enemy dispositions. An enlisted intelligence specialist on duty in an infantry battalion command post may develop dozens of intelligence products during his watch.
Figure 3-10. Graphic Climatology Study.
Figure 3-11. Graphic Intelligence Estimate.
OFFICE OF NAVAL INTELLIGENCE (ONI)

- Located in Suitland, MD - Part of National Maritime Intelligence Center
- Established in 1882
- ONI collects, analyzes, and produces relevant maritime intelligence and disseminates that intelligence rapidly to key strategic, operational, and tactical decision-makers to meet Navy, Department of Defense, and national requirements. ONI’s integrated workforce of active duty and Reserve naval and civilian professionals supports combat operations and provides vital information for planning America’s defense against maritime threats at home and around the world. ONI produces maritime intelligence on naval weapons and technology proliferation, transnational threats in civil maritime counter-proliferation, counter-narcotics and the global maritime environment, and other activities that directly support the U.S. Navy, joint warfighters, and national decision-makers and agencies.
**SELECTED ONI HISTORY**

- During World War II created first naval human intelligence organization providing intelligence on German U-boat technology, operations, and personnel.
- Newly established intelligence schools produced personnel trained in operational intelligence and photo interpretation to meet Fleet and theater commander needs.
- Specialized field organizations stood up in the 1950s and ’60s while information technology transformed the collection, production, and dissemination of intelligence.
- By the 1970s and ’80s, a unique combination of talent, technology, and innovative organizational constructs empowered U.S. naval intelligence to achieve a deep understanding of its principal adversary, the Soviet Navy, and fundamentally recast the U.S. Navy’s strategy to contain and deter it. The collapse of the Soviet Union in the late 1980s prompted another round of reassessment and reorganization for ONI.
- Field activities were physically consolidated as ONI directorates at the new headquarters complex in Suitland in 1993. Conflict in the Middle East and adjacent waters in the late 1980s increased demand for civil maritime intelligence for the Navy and national leaders.
- The need for intelligence support to enforce international sanctions, prevent weapons proliferation, combat narcotics trafficking and counteract maritime piracy led ONI to further expand its mission set.
- The terrorist attacks of 9/11 accelerated changes already in progress across the Intelligence Community. Established capabilities at ONI were realigned, revitalized and refocused as new ones evolved.
MEDITERRANEAN SEA (Aug. 6, 2016) Ensign Andrew Lafave, front, and Lt. j.g. Denise Baumeister track contacts in the combat information center aboard the amphibious dock landing ship USS Whidbey Island (LSD 41). (U.S. Navy photo by Mass Communication Specialist 2nd Class Nathan R. McDonald/Released)
Rear Admiral Robert D. Sharp
Director, National Maritime Intelligence-Integration Office
Commander, Office of Naval Intelligence

Rear Admiral Bob Sharp assumed command of the Office of Naval Intelligence (ONI) and became Director, National Maritime Intelligence-Integration Office (NMIO) in April 2016. ONI and NMIO are the leading providers of global maritime intelligence and intelligence integration, respectively, for the U.S. Navy, the Department of Defense, and the national interagency policy community.

During his initial flag assignment he served as Director for Intelligence (J2), U.S. Special Operations Command.

A native of San Jose, California, RADM Sharp graduated from the University of the Pacific with a B.A. in English and was commissioned through Officer Candidate School in 1988. He holds a Naval War College diploma, and earned a Master of Science in National Resource Strategy from the Industrial College of the Armed Forces (ICAF) in 2008.
ONI ORGANIZATIONAL STRUCTURE

- **Nimitz Operational Intelligence Center** is the U.S. Navy’s pre-eminent Center of Excellence for operational and strategic analysis of events associated with the maritime domain. The center supports fleet commanders and national policymakers, and provides timely and relevant analysis tailored to meet customer requirements. Nimitz is one of four Centers of Excellence that are distinct commands under the Office of Naval Intelligence (ONI).

- **Mission:** The Nimitz Operational Intelligence Center conducts all-source and geospatial operations in support of Fleet and Joint warfighting operations and national decision makers’ requirements. It is the leading center for Global Maritime Intelligence Integration and Maritime Domain Awareness.

- **The Fleet Intelligence Support Department (FISD)** integrates geographically oriented cells (GeoCells) into the Navy’s premiere 24/7/365, all-source/geospatial intelligence watch floor, the Global Maritime Collaboration Center (GMCC). The GeoCells provide deep, penetrating foundational military intelligence analysis to operational forces, the Intelligence Community (IC), U.S. agencies, and allies on naval strategy, doctrine, capabilities, operations, and plans of potential adversaries.

- **Naval Warfare Department (NWD)** provides detailed analysis of naval warfare threats posed by foreign weapons systems and countries of interest by leveraging the tactical expertise of Fleet experienced submarine, air, surface warfare and information warfare officers, Sailors, as well as a cadre of civilians and contractors. NWD supports operational commanders, mission planners, naval warfare development centers, and the national IC with unique and penetrating analysis covering naval adversary capabilities, tactics, techniques, and procedures (TTP).

- **NWD provides this dedicated, Fleet focused support via four functionally aligned divisions –** SABER (surface warfare), SPEAR (air warfare), SWORD (undersea warfare), and SPECTRUM (cyber/electronic warfare/C4ISR).

- **Transnational Threat Department (TNT)** provides Fleet and national decision makers with in-depth knowledge of the maritime domain and the unique issues associated with it. Overlaying extensive maritime industry experience with cutting-edge operational intelligence analytic capabilities, TNT analysts are the community leaders in maritime counterproliferation, global maritime environment awareness, and counternarcotics analysis. Analysis of maritime strategic trade, infrastructure, cargo, and the Arctic environment enable superior decision making by some of the most senior-level leaders in the U.S. government. Responsible for maintaining the nation’s databases on merchant shipping, TNT supports the Navy, its partners, and the entire IC on all issues related to the positional data, physical characteristics, and history of more than 100,000 merchant ships operating worldwide.
ONI ORGANIZATIONAL STRUCTURE

• Maritime Domain Awareness and Advanced Analytics

  The Integrated Maritime Domain Awareness (iMDA) element of the command includes the ONI Maritime Domain Awareness (MDA) program, Advanced Analytics (A2), and Nimitz Plans and Policy. Focusing on mitigating MDA data and capability gaps (cargo, people and vessels), the MDA program office coordinates collaboration and conducts outreach to expand and optimize MDA data sources and analysis. The team partners with other IC, interagency, international, and foreign organizations to maximize information sharing and analysis. ONI’s MDA program office also develops and provides Maritime Activity Based Intelligence (MABI) tradecraft training for fleet analysts. The team forms a “bridge” between basic intelligence “A” school tradecraft and advanced Intelligence Community tradecraft.

• Farragut Technical Analysis Center

  U.S. Navy’s Center of Excellence for strategic scientific and technical intelligence (S&TI) analysis of foreign technologies, sensors, weapons, platforms, combat systems, C4ISR, and cyber capabilities.

  In addition to its all-source capabilities, the Farragut Center conducts ONI’s foreign materiel exploitation, signal intelligence analysis, modeling and simulation, and is home to the national maritime acoustic intelligence laboratory.

  The Farragut Center is responsible for analyzing and publishing ONI positions on the following analytical topics:

  • In-depth term analysis of foreign navies, platforms and weapons
  • Naval platform capabilities, signatures, performance assessments and projections
  • Geophysical signature measurements, modeling and projections
  • Acoustic and non-acoustic sensor capabilities
  • TechELINT analysis
  • C4ISR assessments
  • Foreign materiel exploitation
  • Foreign weapon system and engineering assessments, modeling and projections
  • Acoustic Intelligence
• Hopper Information Services Center provides mission-related information technology and services to the Office of Naval Intelligence (ONI), its subordinate commands, the Fleet, and Joint Forces by enabling the rapid delivery of intelligence to customers via an architecture that employs new technologies and applications capable of moving intelligence in an open, mission-enabling and information-sharing environment. The Hopper Center is one of four Centers of Excellence that are distinct commands subordinate to ONI.

• Mission: The Hopper Center delivers responsive, reliable and adaptable intelligence mission systems, applications and services in support of sustained global maritime and joint intelligence operations.

• Kennedy Irregular Warfare Center- Navy’s pre-eminent Center of Excellence for delivering Irregular Warfare-centric intelligence and to support operations and planning to meet the growing needs of Navy, Department of Defense, national, Naval Special Warfare (NSW), and Navy Expeditionary Combat Command (NECC). The command blends a unique, all-source analysis reach-back capability with an ability to deploy intelligence analyst operators alongside naval forces confronting asymmetric challenges around the globe.
THE YEAR'S NAVAL PROGRESS.

ANNUAL OF THE OFFICE OF NAVAL INTELLIGENCE.

JULY, 1891.

NAVY DEPARTMENT,
OFFICE OF NAVAL INTELLIGENCE.
The scope of naval superintendence in the coast defense of Germany was defined by the Emperor's Decree of March, 1884:

It is the express will of His Majesty, the Emperor, with regard to the coast defense, that hereafter the Navy is to be intrusted not only with the defense of the two great dockyards, but also with the maritime defense of Prussian fortresses on the coast and seaports. It is considered that for a thorough defense the Army and the Navy should work together according to clearly laid down rules, and to the Navy should be given supreme control of all maritime operations. From this time forward all harbor entrances must be in a condition to be immediately protected by mines and torpedoes. Moreover, all this work having been intrusted to the Army, the engineers during the operation of mobilization were overburdened. In the future, however, the Navy, through its interest and technical skill, can readily keep harbors and channels open for the passage of friendly vessels up to the last moment and close them quickly and certainly when necessary. Again, the introduction of torpedoes proper into the calibers of army weapons reduces the general efficiency of the service, as has been shown in operations with mines. The army commanders of a coast place would find it difficult to properly control the naval personnel which in any case is necessary for the service, and he could but ill superintend the movements of torpedo boats. Finally, in order to establish communications with the naval outposts, extra steamer under army control would be necessary, which would complicate the service. Requisitions for merchant vessels and materials could not be wisely filled under army superintendence, and a harbor once blocked by mine all movements, no matter how urgent, of naval vessels could only be undertaken after arriving at a special understanding between the Army and the Navy.

Naturally the Navy has a great interest in keeping open as long as possible ports which, in case of need, would serve as places of shelter, and therefore must desire that the obstacles to the ports shall be disposed in such a manner as to delay the entry and exit of its own ships as little as possible. Moreover, no commandant of a maritime stronghold can do without a seafaring personnel, who are well qualified to recognize an enemy's ships, and to keep watch on their movements. In order to afford proper aid to torpedo boats, to take advantage of their
EARLIER GERMAN OCEAN-GOING SUBMARINE WITH TWO 22 PR. GUNS (MASTS UP).
Understanding Soviet Naval Developments
A FOXTROT SS ploughs through an arctic sea.
In their rediscovery of the use of ships to support state interests, the capabilities of the Soviet Navy have expanded greatly, and the tasks and missions assigned to the Navy also have increased in scope and number.

D. Expanding Naval Missions

Over the last two decades the Soviet Navy has been transformed from a basically coastal defense force into an ocean-going fleet designed to extend the defenses of the U.S.S.R. well to sea, and to perform most of the traditional functions of a naval power in waters distant from the Soviet Union. Multi-ocean exercises, such as OKEAN-70 and 75, and the continued naval presence in distant seas, supported by the construction of larger, more powerful warships manifest this evolution of the role of the Soviet Navy in world affairs.

Recent Soviet military writings also reflect the evolution of naval missions. An example of this is the 1976 article on the Soviet Navy signed by Admiral Gorshkov in the Soviet Military Encyclopedia, which characterized the Navy as:

*The branch of the armed forces intended to carry out strategic and operational missions...*
THE
PLA NAVY
New Capabilities and Missions for the 21st Century
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improving its antisurface warfare (ASUW) capabilities, both in surface and submarine development. Subsequent efforts to improve antiair warfare (AAW) capabilities were evident with the surface force, along with modest improvements in antisubmarine capability.

early warning, carrier aviation, and unmanned aerial vehicles. As a whole, although some older platforms remain in the inventory, the PLA(N) is clearly shifting to a force employing assets that are able to execute a wide variety of missions both near and far from home.
ONI WEBSITE ALSO HAS RECENT STUDIES OF IRANIAN AND RUSSIAN NAVIES
(U) HORN OF AFRICA/GULF OF GUINEA/
SOUTHEAST ASIA: Piracy Analysis and Warning
Weekly (PAWW) Report for 29 November – 5 December 2018

6 December 2018

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1. (U) Horn of Africa - Piracy Events Over the Past Week
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7. (U) Appendix

1. (U) Horn of Africa - Piracy Events Over the Past Week

(U) Pirate and maritime crime activity in East Africa waters is at a low level. No piracy events were reported this past week.

A. (U) Details:

(U) Vessels Hijacked: No incidents to report.

(U) Vessels Boarded: No incidents to report.

(U) Vessels Fired Upon/Attempted Boardings: No incidents to report.
3. (U) Gulf of Guinea - Piracy Events Over the Past Week

(U) Pirate and maritime crime activity in West Africa waters is at a low level. One boarding event was reported this past week.

A. (U) Details

(U) Vessels Hijacked: No incidents to report.

(U) Hijacking/Kidnapping Combination: No incidents to report.

(U) Kidnapping: No incidents to report.

(U) Vessels Boarded:

1. (U) NIGERIA: On 4 December, the offshore supply vessel SAAVEDRA TIDE was attacked and boarded by pirates near position 03:08N – 006:20E, 22.5 nm west-northwest of the EGINA Floating Production and Offloading Vessel (FPSO). SAAVEDRA TIDE was on its way from the Abo oil field to the EGINA FPSO. The vessel and crew are now safe. (MDAT-GOG; www.offshoreenergytoday.com)

(U) Vessels Fired Upon/Attempted Boarding/Attack: No incidents to report.

(U) Other Activity: No incidents to report.

B. (U) Incident Disposition
1. (U) Scope Note

1. (U) The Worldwide Threat to Shipping (WTS) message provides information on threats to merchant vessels, the shipping industry, and other maritime stakeholders worldwide in the last 30 days. This report is produced primarily to inform merchant mariners and naval forces.

2. (U) Warnings and Advisories:

A. (U) MDAT-GOG Warning 001/DEC/2018: Category: Attack. Description: A vessel is under attack in position 03°08N - 006°20E at 1800Z. Mariners are advised to exercise extreme caution in this area. Source: Phone call. Any queries regarding this Warning Notice ring 0033 296 22 88 88 for further information. MDAT-GOG Watchkeeper email: watchkeepers@mdat-gog.org, emergency tel: +33(0) 296 22 88 88.

3. (U) Summary:

A. (U) MALAYSIA: On 5 December, four armed men boarded a tug boat at Pegasus Reef near Pulau Tambisan in Lahad Datu.
(U) BRAZIL: On 2 December, five armed men boarded the container ship CAP SAN MARCO in Santos outer anchorage. The ship was waiting for berth at Santos when the boarding occurred. A deckhand on watch was taken by surprise and went up. Criminals stayed on board for 45 minutes, and then fled. Police suspected the boarding was another attempt to load cocaine in containers. After the ship was berthed, she was thoroughly checked, one broken container found, with no drugs in it. Another container was found inside a hold stacked among many others, which couldn't be accessed by the criminals without moving other containers. 402 kilos of cocaine were found hidden in this container. (www.fleetmon.com)

(U) VENEZUELA: On 1 December, two robbers boarded a product tanker anchored near position 10°32N - 067°21W, Puerto La Cruz Anchorage. The robbers attempted to open the forward store room door. Duty watch keeper spotted the robbers and raised the alarm. Hearing the alerted crew, the robbers escaped without stealing anything. Incident reported to local authorities. (IMB)
OPNAV INSTRUCTION 3880.6A

From: Chief of Naval Operations

Subj: SCIENTIFIC AND TECHNICAL INTELLIGENCE LIAISON OFFICER (STILO) PROGRAM AND INTELLIGENCE SUPPORT FOR THE NAVAL RESEARCH, DEVELOPMENT, TEST & EVALUATION, AND ACQUISITION COMMUNITIES

Ref: (a) Director of Central Intelligence Directive 6/6 (DCID), Security Controls on the Dissemination of Intelligence Information of 11 Jul 01 (NOTAL)
3. Background and Definitions

   a. The Naval acquisition community must have current, validated intelligence to support Naval program developments. The complexity and speed of technological developments demand the insertion of threat information at the earliest phase of the system development cycle. The cost and complexity of design, research, development, test, evaluation, procurement, installation, maintenance, and modification of modern Naval systems require continued intelligence support throughout the life cycle of those systems. The STILO Program is a “community of interest,” specifically designed by the Navy to provide consistent intelligence support, liaison, and coordination among the acquisition, research, development, test, and evaluation (RDT&E) and intelligence communities. The program incorporates a wide range of collaborative techniques and methodologies to ensure effective interagency networking. Efficiencies are gained through identifying, sharing, leveraging, and expanding collaborative relationships and best practices between participating STILO activities. This instruction has been
BENEFITS OF STUDYING MILITARY SERVICE INTELLIGENCE AGENCY RESOURCES

• Understanding military intelligence is NOT an oxymoron.
• Gaining enhanced awareness of the historic, contemporary, and emerging roles of intelligence operations and analysis by U.S. armed service branches.
• Increasing awareness and understanding of how science and technology influence military intelligence.
• Understanding the critical importance of military intelligence in conducting and evaluating military operations.

• Understanding how military intelligence influences global geopolitics.
• Understanding that military intelligence is both an art and science that must be conducted in continually evolving diplomatic and military environments.
• Gaining enhanced understanding of the critical role military intelligence plays in impacting international trade and economics.
• Understanding the emergence of information security in military intelligence operations.

Questions?