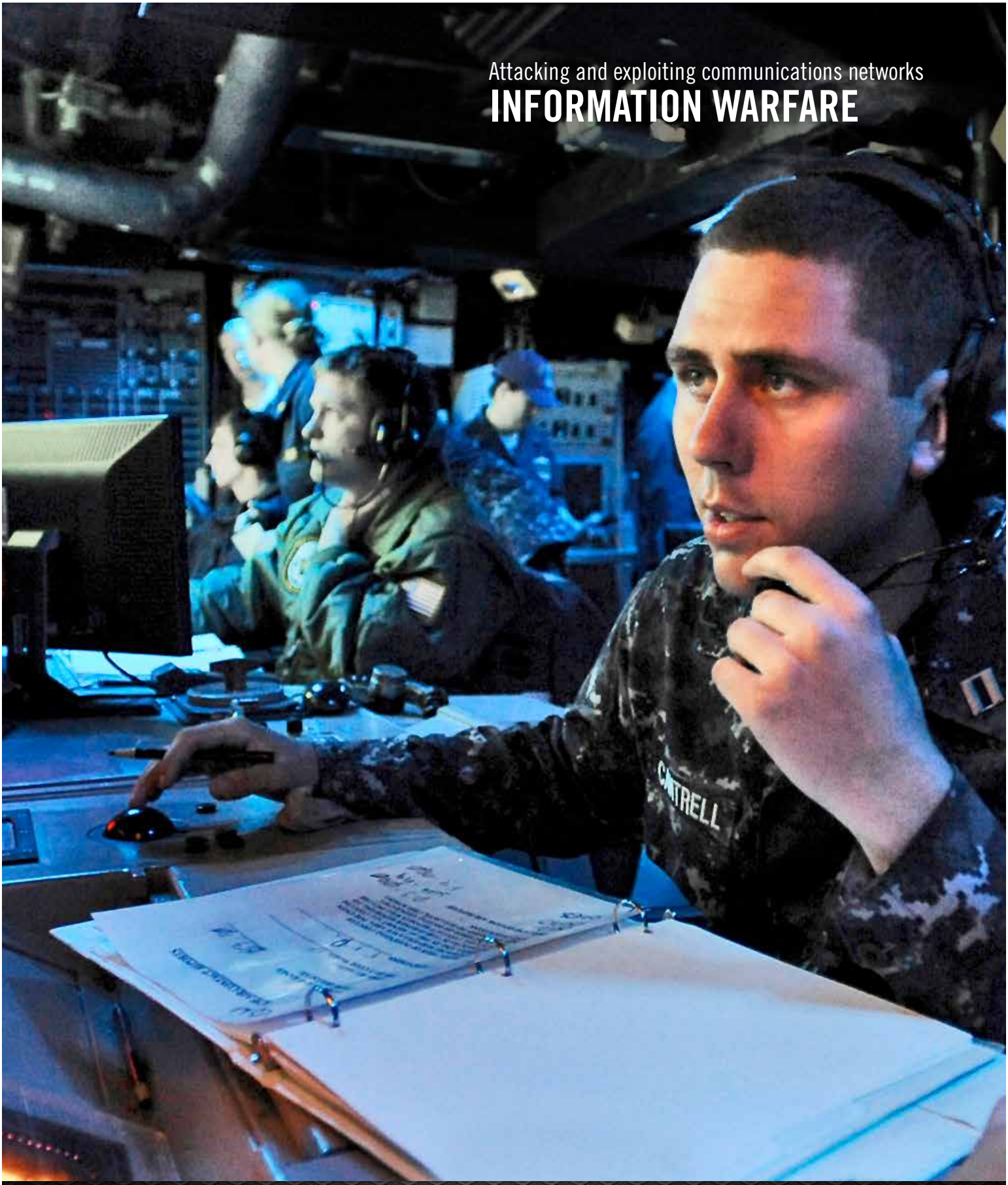
Attacking and exploiting communications networks

INFORMATION WARFARE



AMERICA'S NAVY

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INFORMATION WARFARE

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Conducting psychological operations. Managing the application of cryptography and cryptanalysis. Advising decision makers from the tactical level to the national level. Those leading information warfare efforts help ensure that we capitalize on the information vulnerabilities of our enemies.

JOB DESCRIPTION

Executing the full spectrum of cyber, cryptology and signals intelligence; information operations; computer network operations; and electronic warfare missions across the cyber, electromagnetic and space domains, Information Warfare Officers (IWOs) play a vital role. Their mission: to deter and defeat aggression, to provide warning of intent, and to ensure freedom of action while achieving military objectives in and through cyberspace.

Serving as Officers (four-year degree required), IWOs are leaders in the Information Dominance Corps (IDC) – a group of highly specialized information experts fully integrated across surface, subsurface, air, space and cyberspace domains. With shared functions, capabilities and resources, IDC members leverage their skills to optimize decision making and to maximize the use of sensors, weapons, network communications and control systems for purposes of national security and warfighting.

SPECIFIC RESPONSIBILITIES

Information Warfare Officers are directly involved in every aspect of Naval operations – delivering information to decision makers by attacking, defending and exploiting networks to capitalize on vulnerabilities in the information domain. As an IWO, you will employ a thorough understanding of sensors and weapons, strategy and tactics, as well as national systems' capabilities and limitations. This role may include:

- Qualifying as an Operations Watch Officer, responsible for real-time signal intelligence collection, processing, analysis and reporting
- Conducting computer network operations
- Developing and acquiring cutting-edge exploitation and defense systems
- Planning and delivering information warfare effects during exercises and operations
- Leading Information Dominance personnel across the spectrum of military operations
- Overseeing the work of Cryptologic Technicians – Enlisted Sailors (no degree required) who serve as specialists in different areas of cryptology

WORK ENVIRONMENT

Information Warfare Officers serve in challenging roles of increasing scope and responsibility both afloat and ashore. This often includes an initial assignment serving at one of the National Security Agency Cryptologic Centers and typically involves rotations between sea, shore and educational tours. Settings could also include service aboard ships, submarines and aircraft, in support of Naval Special Warfare, anywhere from the National Security Agency to the Pentagon.

MAINTAINING SUPERIORITY IN THE INFORMATION AGE INFORMATION & TECHNOLOGY

In a highly networked world, information is everywhere – easier to access and increasingly exploitable. Today's technological advancements make information both a formidable weapon and a constant threat – to the point that it has evolved into a type of warfare all its own. With this in mind, America's Navy has the **Information Dominance Corps (IDC)** – a community charged with mastering the capabilities, tools and techniques required to effectively collect, process, analyze and apply information.

Gathering data through sources ranging from advanced cyberspace operations to unmanned surveillance systems. Converting data into effective and actionable intelligence. Maintaining cutting-edge communications networks that effectively share and safeguard information. It's all part of the mission for those who serve in the professional areas of information and technology in America's Navy – for those warriors who do battle within the cyberspace domain and the electromagnetic spectrum.

Made up of both Enlisted Sailors and Officers, IDC members specialize in information-intensive fields that include **Information Management, Information Technology, Information Warfare, Cyber Warfare, Cryptology, Intelligence, and Meteorology & Oceanography.** Collaboratively, they develop and defend vital intelligence, networks and systems. Managing the critical information that supports U.S. Navy, Joint and national warfighting requirements. Maintaining the Navy's essential technological edge.

Visit **facebook.com/NavyCryptologyAndTechnology** to ask questions. Get answers. And connect with others just like you.

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TRAINING AND ADVANCEMENT

Those pursuing an Information Warfare Officer position are required to attend Officer Candidate School (OCS) in Newport, R.I. Upon completion, they attend an eight-week IW Basic Course of instruction in Pensacola, Fla. – learning the fundamentals of everything from Electromagnetic Theory to Tactical Cryptology to Signals Intelligence Reporting.

From there, IWOs are required to complete specific qualifications as part of their operational training during Fleet tours and are expected to pursue advanced education opportunities. In the course of service, specialized training received could lead to credentialing, certification and/or licensure opportunities from a number of national boards and organizations. Promotion opportunities are regularly available but are competitive and based on performance.

EDUCATION OPPORTUNITIES

Beyond professional credentials and certifications, Information Warfare Officers can advance their education through the Servicemembers Opportunity Colleges Navy (SOCNAV) Degree Program, by pursuing opportunities at institutions such as Naval Postgraduate School (NPS) or Navy War College (NWC) and by completing Joint Professional Military Education (JPME) at one of the various service colleges.

Postgraduate education is very important to the success of those serving as Information Warfare Officers. Many IWOs will attend the Naval Postgraduate School (NPS) to complete a master's degree in electrical engineering, cyber systems and operations, computer science, or space systems.

PAY RANGE

Like most positions, promotions depend upon your performance and time in service. Navy Officers are rewarded with excellent benefits – including a competitive salary and opportunities to earn additional pay for special duty (such as sea pay, hazardous duty incentive pay and foreign language proficiency pay).

BENEFITS

When it comes to financial advantages, the Navy amounts to much more than a competitive paycheck. As a Navy Officer, you can look forward to:*

- Supplemental/bonus pay
- Scheduled pay raises and regular promotions
- Postgraduate education, fully funded by the Navy
- Post-9/11 GI Bill – funding for you or your family to use for school
- 30 days' vacation with pay earned every year
- Outstanding retirement benefits, plus a 401(k)-like thrift savings plan
- Comprehensive medical and dental coverage
- Tax-free allowances for housing and meals
- Tax-free shopping privileges at military stores
- Free or low-cost travel opportunities
- Access to military clubs and Navy recreational facilities

*Benefits and training may vary for Navy Reserve. Contact a Navy Reserve Recruiter for details.

READY TO TAKE THE NEXT STEPS?

Once you're inspired, better informed and seriously interested, here's how to proceed:

1. TALK TO YOUR RECRUITER

- Ask questions
- Discuss your long-term goals
- Review your qualifications
- Go over relevant financial incentives and bonuses

2. APPLY FOR THE POSITION

- Provide personal information that includes birth certificate, social security card and professional details (if applicable)
- Take the Armed Services Vocational Aptitude Battery (ASVAB) to help assess your skills and interests
- Pass a full medical examination
- Participate in a precommitment interview

3. BEGIN YOUR TRAINING

- If you have a college degree, attend **Officer Candidate School (OCS)**
- If you have a college degree and you're joining the Navy Reserve, attend the **Direct Commission Officer Development Course** in Newport, RI, where you'll learn the history, traditions and structure of the Navy and Navy Reserve

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QUALIFICATIONS

A four-year degree is required to work as an Information Warfare Officer. Candidates seeking an Officer position in this community must have a bachelor's degree from a regionally accredited institution in a technical field, preferably in areas of study related to math, computer science and engineering.

All candidates must also be U.S. citizens willing to serve worldwide and eligible for a Top Secret/ Sensitive Compartmented Information (SCI) security clearance.

AFTER THE NAVY

The specialized training and expertise you gain as an Information Warfare Officer, coupled with your security clearance, may prepare you for a wide range of job opportunities available within the U.S. Intelligence Community, including future employment with the Central Intelligence Agency (CIA), Federal Bureau of Investigation (FBI) or National Security Agency (NSA).

Other career opportunities in the civilian sector include work as Computer and Information Systems Managers, Computer Systems Analysts, Database Administrators, Management Analysts, and Network and Computer Systems Administrators.

SERVICE OPTIONS

Active Duty Officers serve full-time. This allows you to take full advantage of the available career and leadership opportunities. Enjoy the broad range of benefits. And experience incredible possibilities for travel and adventure.

Reserve Officers serve part-time. This way you can maintain a civilian career while serving as few as two days a month and two weeks a year, with opportunities for additional service and pay. Additionally, you'll have the possibility of flexible drilling options to better meet service requirements. While enjoying many of the same advantages and benefits of full-time service.

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