



# **National Defense University**

## **Annual Report for Academic Year 2013-2014**

(July 1, 2013 - June 30, 2014)

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CAPSTONE

PINNACLE

KEYSTONE

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### **Institute for National Strategic Studies**

**INSS: Center for Complex Operations**

**INSS: Center for Strategic Research**

**INSS: Center for the Study of Chinese Military Affairs**

**INSS: Center for the Study of Weapons of Mass Destruction**

**INSS: Center for Technology and National Security Policy**

### **College of International Security Affairs**

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## Introduction

Threats to national security require innovative, critical strategists in key leadership positions to counter those threats. The surest way to safeguard the security of our nation is through education and leader development by engaging the best and brightest minds. This is the primary purpose of the National Defense University.

NDU is the nation's premier strategic leader development institution. Its unique academic environment supports the joint warfighter by providing rigorous Joint Professional Military Education (JPME) to members of the U.S. Armed Forces and select others to develop leaders who have the ability to operate and creatively think in an unpredictable and complex world.

NDU educates, develops, and inspires national security leaders to confront global security challenges by offering them a comprehensive and collaborative experience. NDU supports students with high-caliber faculty, rigorous curricula and programs, a rich mixture of professional backgrounds in each classroom, and superb resources to make the investment in their education as beneficial and productive as possible.

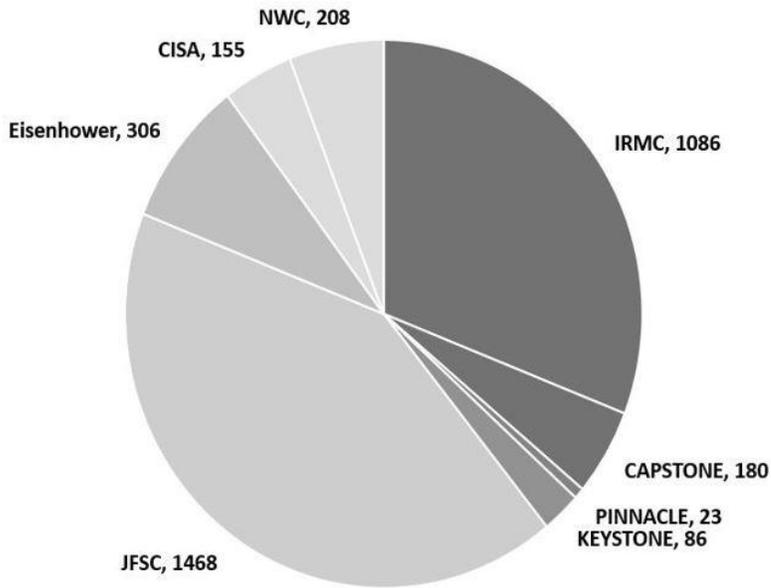
As the national security environment became increasingly complex over the last decade of war, NDU responded by evolving to meet emerging requirements and adjusting focus to meet the most pressing needs. As a result, NDU's educational programs remain relevant and vital to our nation in the constantly evolving and interdependent national and global security terrain.

The Academic Year 2013-2014 was one of change for NDU. We enacted the "One University" concept, whereby NDU functions as the national institution of higher learning, capable of creating, developing and disseminating knowledge focused on advanced joint education, leader development and scholarship. We also began implementation of the Joint Education Transformation (JET), certifying the inclusion of Desired Leader Attributes, lessons learned from a decade of war, and a reinvigorated approach to Joint Professional Military Education.

This annual report details our work in this effort during Academic Year 2013-2014, which covers the period of July 1, 2013 to June 30, 2014.

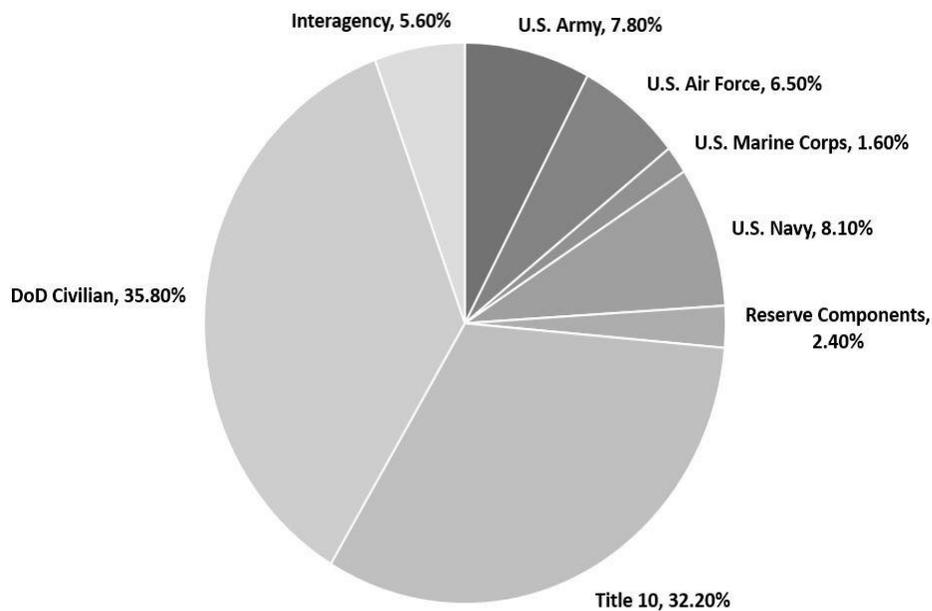
## NDU by the Numbers (AY 2013-2014)

**Figure 1. NDU Students**



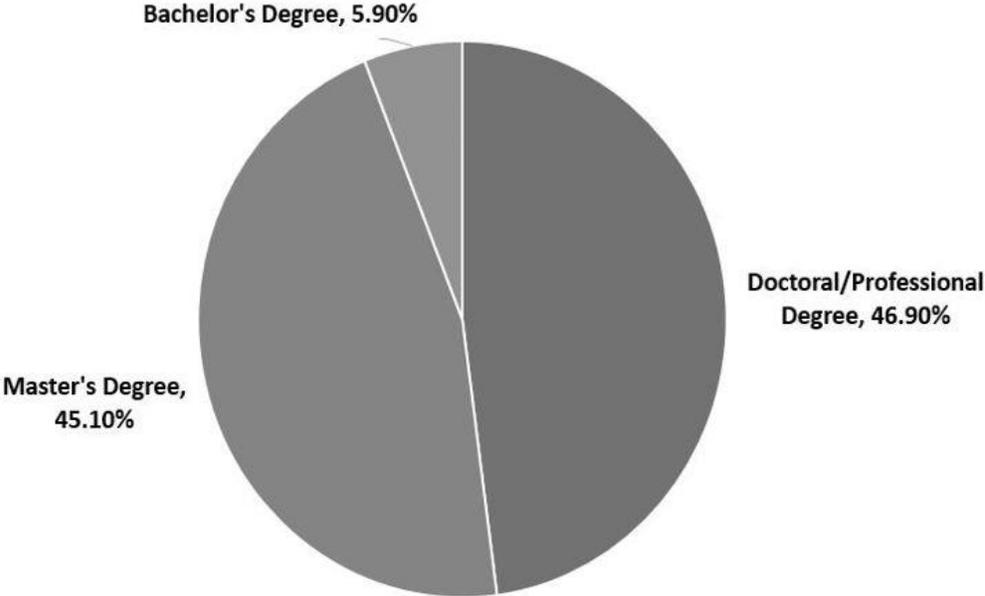
*NOTE: These students are in addition to the 11,435 noncredit students in JFSC programs.*

**Figure 2. NDU Personnel**



(754 total personnel)

**Figure 3. Title 10 Employees' Highest Level of Education**



**Table 1. FY2013 University Fiscal Resources**

Category	Direct	Reimbursable	Total by Expenditure Category
Education/Leader Development	\$29.60	\$14.10	\$43.70
Scholarship	\$6.10	\$11.90	\$18.00
Institution Enabler	\$41.30	\$7.90	\$49.20
<b>Total by Funding Source (millions)</b>	<b>\$77.00</b>	<b>\$33.90</b>	<b>\$110.90</b>

**Table 2. FY2014 University Fiscal Resources**

Category	Direct	Reimbursable	Total by Expenditure Category
Education/Leader Development	\$40.43	\$12.46	\$52.89
Scholarship	\$6.21	\$7.06	\$13.27
Institutional Enabler	\$41.37	\$9.34	\$50.71
<b>Total by Funding Source (millions)</b>	<b>\$88.01</b>	<b>\$28.86</b>	<b>\$116.87</b>

**Table 3. University Facilities**

Facility Name	Building Number	Campus	Square Footage
Lincoln Hall	64	Fort McNair	250,000
Marshall Hall	62	Fort McNair	243,000
Normandy Hall	SC-1	Norfolk	165,000
Eisenhower Hall	59	Fort McNair	144,000
Roosevelt Hall	61	Fort McNair	116,000
Okinawa Hall	SC-4	Norfolk	74,000
Marianas Hall	SC-400	Norfolk	40,000
Facilities Building	SC-401	Norfolk	22,000
Old Gym	SC-126	Norfolk	17,000
Grant Hall	20	Fort McNair	12,000
Davis Hall	21	Fort McNair	12,000
Other Owned & Leased Space	-	-*	37,000
<b>Total Square footage</b>			<b>1,132,000</b>

\*approximation

## Education

NDU executes its education mission via five colleges, each with a distinct focus that provides unique education and leader development opportunities. NDU's education programs offer a combination of rigorous graduate education and, in some cases, the ability to grant JPME II certification, a major requirement for the award of Joint Qualified Officer (JQO) status. Our students' educational experiences are enhanced by the university's research, scholarship and outreach programs. Additionally, they are supported by a network of educational and institutional enablers. The colleges are presented alphabetically:

### **College of International Security Affairs (CISA)**

CISA educates and prepares civilian and military national security professionals and future leaders from the U.S. and partner nations for the strategic challenges of the international security environment. Students come from across the international, interagency and inter-service communities; graduates include alumni from 90 countries and every major U.S. federal agency. As the Department of Defense (DoD) flagship for education and the building of partnership capacity in combating terrorism and irregular warfare at the strategic level, CISA prepares students for high-level policy and command and staff responsibilities through a graduate, interagency and joint professional military education program. CISA is led by Chancellor Michael S. Bell, Ph.D. (Colonel, USA, Ret.).

CISA offers a Master of Arts Degree in Strategic Security Studies to students enrolled in either a full-time or part-time basis, and collaborates with U.S. government agencies to tailor professional education programs to equip employees with the knowledge and skills needed to meet the growing and ever-changing demands of today's complex world.

In 2014, CISA's International Counterterrorism Fellows Master's program was approved for JPME Phase II (JPME-II) credit, making CISA the newest member of the JPME system.

CISA expanded faculty expertise to include the former Soviet republics of Central Asia by successfully recruiting two new faculty members for its Department of International Security Studies. Further strengthening the bench, Dr. Chuck Cushman also joined CISA's faculty as the new Dean of Academics. A graduate of the U.S. Military Academy, Cushman came to CISA after three years' service at Georgetown and ten at George Washington University, where he directed professional graduate programs and prepared Federal officials to work more effectively with Congress.

CISA also formalized a contract at the end of the academic year to provide extensive writing advice to its students in support of the required thesis project. CISA will assess the utility of this writing support throughout the coming academic year, measuring improvements in, and faculty evaluations of, the quality of student writing.

CISA continued to work closely with the Center for Applied Strategic Learning (CASL) on a series of exercises that support its academic programs. CASL developed a kick-off exercise focusing on

cyber threats, as well as regional scenarios for capstone exercises. At the end of the academic year, CISA students worked through CASL’s well-designed exercise on the regional security issues caused by the civil war in Syria.

**Table 4. CISA Overall Student Enrollment**

<b>Student Category</b>	<b>Active</b>	<b>Reserve</b>	<b>Guard</b>	<b>Total</b>
U.S. Army	56	0	0	56
U.S. Air Force	15	0	0	15
U.S. Navy	4	0	0	4
U.S. Marine Corps	10	0	0	10
U.S. Coast Guard	1	0	-	1
International Officers	-	-	-	46
International Civilians	-	-	-	8
DoD Civilians	-	-	-	4
Interagency Civilians	-	-	-	11
<b>Total Enrollment</b>	<b>155</b>			

Note: Active and Reserve components apply only to U.S. military Services; thus numbers may not sum to total across Active/Reserve status. In addition, 1 NDU faculty member enrolled in CISA courses is not included in the student enrollment table.

**Table 5. CISA Civilian Students by Executive-level Agency, Sub-Agency, Bureau, and Service**

	<b>Agency</b>	<b>Enrollment</b>
<b>DoD Agencies</b>	Department of Defense	1
	Defense Intelligence Agency	1
	National Counterterrorism Center	2
<b>Total</b>		<b>4</b>
<b>Non-DoD Agencies</b>	Department of Energy	2
	Department of Homeland Security	3
	Department of State	4
	Department of Transportation	1
	U.S. Congress	1
<b>Total</b>		<b>11</b>

**Table 6. CISA International Student Enrollment and International Faculty**

Country	Student International Officer	Student International Civilian	Faculty International Civilian
Afghanistan	1	2	0
Bahamas	1	0	0
Bangladesh	2	0	0
Belize	1	0	0
Brazil	1	0	1
Bulgaria	0	1	0
Burundi	1	0	0
Colombia	2	0	0
Croatia	0	1	0
Dominican Republic	2	1	0
Egypt	1	0	0
Georgia	0	1	0
Hungary	2	0	0
India	1	0	1
Indonesia	1	1	0
Jordan	1	0	0
Kenya	1	0	0
Lebanon	3	0	0
Malaysia	1	0	0
Maldives	1	0	0
Mexico	1	0	1
Morocco	2	0	0
Nepal	1	0	0
Niger	1	0	0
Nigeria	3	0	0
Pakistan	3	0	1
Peru	1	0	0
Philippines	1	0	0
Russian Federation	0	0	1
Saudi Arabia	2	0	0
Senegal	1	0	0
Serbia	1	0	0
Sri Lanka	1	0	0
Sweden	0	0	1
Thailand	1	0	0
Tunisia	1	0	0
Turkey	0	1	0
Uganda	2	0	0
United Kingdom	0	0	2
Yemen	1	0	0
<b>Total</b>	<b>46</b>	<b>8</b>	<b>8</b>

Note: International Civilian Faculty members are considered also as DoD Civilian (Title 10).

**Table 7. CISA Faculty Educational Background**

<b>Faculty Category</b>	<b>Bachelor's Degree</b>	<b>Master's Degree</b>	<b>Doctoral/ Professional Degree</b>	<b>Total**</b>
U.S. Army	0	1	1	2
U.S. Air Force	0	1	1	2
U.S. Navy	0	2	0	2
U.S. Marine Corps	0	0	0	0
U.S. Coast Guard	0	0	0	0
International Officer	0	0	0	0
International Civilian*	0	1	7	8
DoD Civilian (Title 5)	0	0	0	0
DoD Civilian (Title 10)	0	2	15	17
Contractor	0	0	2	2
Interagency Civilian	0	5	1	6
Private Sector	0	0	0	0
<b>Total</b>	<b>0</b>	<b>12</b>	<b>27</b>	<b>39</b>

\*8 International Civilian faculty members are considered DoD Civilian (Title 10) faculty, however they are not included in the DoD Civilian (Title 10) total count.

\*\*Total represents the unduplicated faculty headcount.

## **Eisenhower School**

The Dwight D. Eisenhower School for National Security and Resource Strategy (ES) prepares selected military officers and civilians for strategic leadership and success in developing national security strategy and in evaluating, marshaling and managing resources in the execution of that strategy. In this capacity, the Eisenhower School provides senior resource strategy education for policy and awards its graduates a Master of Science degree in National Resource Strategy. It is accredited by the CJCS as a JPME-II senior-level college.

The Eisenhower School, led by Commandant Brigadier General Thomas A. Gorry (USMC), fully reflects the joint and interagency perspective, with 58 percent of the student body composed of military representatives from the land, sea and air services, 32 percent from DoD and the Department of State and 10 other federal agencies, 8 percent international military officers, and 2 percent from the private sector. Like the student body, the faculty is composed of military officers from all five services and civilian academics who are experts in their fields. Military faculty members normally hold the rank of colonel/captain and are highly qualified subject matter experts with specialized experience. Civilian faculty members, who typically hold doctorates, include full-time academicians, State department representatives, and visiting professors from selected federal agencies.

This year, the Eisenhower School continued to pursue the highest levels of academic excellence, while adapting its curriculum to meet new strategic resource challenges and complexities in the international security environment. To better examine resourcing in a constrained environment and evaluate the challenges of aligning budgets, strategies and defense priorities, ES created a multidisciplinary National Security and Resourcing Strategy course. ES also created a new International Comparative Business Environment course to focus on examining the global economic and security environment.

In addition to these new courses, the Eisenhower School also refined its capstone National Security Strategy Exercise to focus on President Obama's vision to rebalance toward the Asia-Pacific region. Each seminar crafted a strategy to achieve that vision with a focus on the "ways" and "means" of implementing the rebalance, outlining domestic and foreign policy initiatives, as well as the supporting changes to the federal budget, force structure and acquisition programs.

The Industry Study program enables students to analyze and synthesize national security imperatives along with real world resourcing challenges in business, industry and government. The field studies experience helps create graduates who can bridge the government-industry gap via first-hand experience with government and business leaders around the world. During this academic year, ES students conducted domestic and international industry field studies, which offered a unique and valuable opportunity to interact with government leaders, business executives, trade associations and interagency partners.

Eisenhower's faculty scholarship is focused on the construction of the curriculum and direct preparation for the teaching mission. Every lesson in every course demands considerable

research effort by the faculty member responsible for the lesson, amounting to a full literature survey on the subject. This effort is then built upon by faculty members tasked with teaching the lesson. Many faculty are active participants in professional associations and publish articles in their areas of expertise.

With a continued focus on strengthening, sustaining and improving the core education mission, ES continues to comprehensively review the curriculum to ensure alignment to mission requirements, stakeholder expectations and fiscal realities. This work continues by identifying potential enhancements of curriculum content, structure, evaluation methodologies and delivery techniques for AY14-15 and beyond.

The **Senior Acquisition Course (SAC)** is the pre-eminent course for members of the DoD Acquisition Corps. SAC is conducted in partnership with the Defense Acquisition University (DAU) and is designed to prepare select experienced military officers and civilians for senior positions throughout the defense acquisition community. This program capitalizes on a longstanding core competency, as education in “procurement” was explicitly cited in the Eisenhower School’s original 1924 charter, then known as the Industrial College of the Armed Forces. SAC consists of the entire 10-month ES core curriculum, complemented by selected elective courses that address senior-level contemporary and future acquisition policy issues, and is supported by completion of an acquisition-related research project.

The **Program Managers Course**, executed in collaboration with DAU, has been offered since AY2007. Following the Harvard Business School’s case-study method, this course focuses on real-world acquisition-related dilemmas faced by program managers, program executive officers, and senior stakeholders engaged in defense acquisition. This provides the basis for a profound, practical learning experience. Students apply a variety of analytical tools and conceptual frameworks to evaluate defense acquisition problems from a program manager’s perspective and to evaluate, synthesize, select and defend possible courses of action. Team projects and simulations round out and enrich the course.

Launched in 2010, the **Long-Term Strategy Program** provides students the opportunity to learn how to assess the strategic implications of trends shaping the future security environment and to understand the link between long-term strategy and defense investments. It also provides a cross-disciplinary approach to strategy development and resourcing, focusing on international affairs, business strategy and technology, and places special emphasis on “competitive strategies” concepts with an Indo-Asia-Pacific geographic application focus. Courses include Diagnostic Net Assessment, Long-Term Defense Strategic Planning; Military Technology Diffusion and Asian Defense Market Dynamics; and Long-Term Strategy Research, in which students undertook research projects sponsored by OSD Office of Net Assessment.

Effective supply chain management is a driving force behind America’s economic growth and effective defense logistics, so it is important to understand the critical role supply chains play in supporting American industry and national security. The **Supply Chain Management Program** creates understanding of integrated logistics systems and prepares students to apply supply chain management concepts and practices within DoD’s Logistics Transformation to create

efficiencies while effectively supporting the warfighter. The classroom experience uses case studies and experts from industry and government. This is augmented by field studies with organizations such as USTRANSCOM, Boeing, Huntington-Ingalls Shipbuilding, Naval Stations Norfolk and Oceana, Defense Depot Susquehanna and Letterkenny Army Depot.

The Eisenhower School uses the **Executive Assessment and Development Program (EADP)** to assess students' capabilities, strengths and weaknesses, particularly geared toward skills they will need to succeed at the strategic level. Department of Strategic Leadership faculty conduct feedback sessions with each student to discuss the findings and implications for developmental work to be done at Eisenhower (e.g., elective courses) and follow-on development the student will undertake on his/her own. This program was recognized as an institutional best practice by the most recent DoD Process for Accreditation of Joint Education (PAJE) inspection.

**Table 8. Eisenhower Overall Student Enrollment**

<b>Student Category</b>	<b>Active</b>	<b>Reserve</b>	<b>Guard</b>	<b>Total</b>
U.S. Army	60	1	2	63
U.S. Air Force	55	3	3	61
U.S. Navy	39	0	0	39
U.S. Marine Corps	17	0	0	17
U.S. Coast Guard	2	0	-	2
International Officers	-	-	-	28
International Civilians	-	-	-	0
DoD Civilians	-	-	-	53
Industry Civilians	-	-	-	5
Interagency Civilians	-	-	-	38
<b>Total Enrollment</b>				<b>306</b>

Note: Active and Reserve components apply only to U.S. military services; thus numbers may not sum to total across Active/Reserve status.

**Table 9. Eisenhower Civilian Students by Executive-level Agency, Sub-Agency, Bureau, and Service**

	<b>Agency</b>	<b>Enrollment</b>
<b>DOD Agency</b>	Department of the Army	9
	Department of the Air Force	12
	Defense Acquisition University	1
	Defense Intelligence Agency	3
	Defense Information Systems Agency	2
	Defense Logistics Agency	3
	Department of the Navy	11
	Joint Staff	1
	Military Sealift Command	1
	National Geospatial-Intelligence Agency	4
	National Security Agency/Central Security Service	3
	Office of the Secretary of Defense	3
<b>Total</b>		<b>53</b>
<b>Non-DOD Agency</b>	Central Intelligence Agency	2
	Department of Homeland Security	5
	Department of Commerce	1
	Department of Energy	3
	Department of Justice	2
	Department of State	18
	Department of Transportation	1
	General Services Administration	2
	Office of Management and Budget	2
	Agency for International Development	2
<b>Total</b>		<b>38</b>

**Table 10. Eisenhower International Student Enrollment and International Faculty**

<b>Country</b>	<b>Student Int'l Officer</b>	<b>Student Int'l Civilian</b>	<b>Faculty Int'l Officer</b>	<b>Faculty Int'l Civilian</b>
Afghanistan	1	0	0	0
Algeria	1	0	0	0
Australia	0	0	0	1
Botswana	1	0	0	0
Brazil	1	0	0	0
Canada	2	0	1	0
Croatia	1	0	0	0
Egypt	1	0	0	0
Finland	1	0	0	0
France	1	0	0	0
Guatemala	1	0	0	0
Indonesia	1	0	0	0
Israel	2	0	0	0
Japan*	0	1	0	0
Jordan	1	0	0	0
Kazakhstan	1	0	0	0
Lebanon	1	0	0	0
Malaysia	1	0	0	0
Mexico	1	0	0	0
Morocco	1	0	0	0
New Zealand	1	0	0	0
Norway	1	0	0	0
Oman	2	0	0	0
Pakistan	1	0	0	0
Philippines	1	0	0	0
Saudi Arabia	1	0	0	0
Ukraine	1	0	0	0
<b>Total</b>	<b>28</b>	<b>1</b>	<b>1</b>	<b>1</b>

\*Includes 1 international civilian counted as an industry student.

**Table 11. Eisenhower Faculty Educational Background**

Faculty Category	Joint Qualified Officer	SLC* Graduate	Bachelor's Degree**	Master's Degree**	Doctoral/ Professional Degree**	Total***
U.S. Army	4	8	0	8	4	12
U.S. Air Force	6	8	0	8	2	10
U.S. Navy	6	6	0	8	0	8
U.S. Marine Corps	1	1	0	2	0	2
U.S. Coast Guard	0	0	0	1	0	1
International Officer	0	1	0	1	0	1
International Civilian	0	0	0	0	1	1
DoD Civilian (Title 5)	0	0	0	0	0	0
DoD Civilian (Title 10)	10	17	0	7	27	34
Contractor	0	0	0	0	0	0
Interagency Civilians	4	7	1	9	4	14
<b>Total</b>	<b>31</b>	<b>48</b>	<b>1</b>	<b>44</b>	<b>38</b>	<b>83</b>

\*SLC: Senior-Level College

\*\*Professional Military experience/highest level of education are not mutually exclusive. Professional military experience refers to Joint Qualified Officer and SLC Status.

\*\*\*Total unduplicated faculty.

## **Information Resources Management College (iCollege)**

The Information Resources Management College (IRMC), commonly known as iCollege, prepares military and civilian leaders to optimize information technology management and secure information dominance within cyberspace. The iCollege, now led by Chancellor Janice Hamby (Rear Admiral, USN, Ret.), offers a Master of Science Degree in Government Information Leadership (with over 330 students in the program and 120 graduates to date). The iCollege also conducts the Advanced Management Program (AMP), a flagship resident program for rising senior-level leaders responsible for attaining national and international security goals through the strategic use of information and information technology. In addition to graduate degrees and the AMP, iCollege also provides these graduate certificate programs:

- Chief Information Officer
- Chief Financial Officer
- Cyber Security
- Cyber Leadership
- Information Technology Program Management
- Enterprise Architecture

The iCollege piloted a 10 month resident Master's Program in Cyber Leadership. Conferring more than 160 certificate graduates in April 2014 and then 54 master's degrees in June, the iCollege continued to meet the DoD and wider federal community's information leadership and cyber education needs.

The iCollege earned a renewed Committee on National Security Systems CNSS/NSTISSI 4011, 4012, 4015, 4016 curriculum validation certificate from the NSA. This means that iCollege's Cyber Security programs were successfully mapped to the criteria and reviewed by information assurance subject matter experts. The iCollege's 40XX-series programs meet the CNSS cyber training standards (June 2013 - June 2018).

The college's CFO Academy, which grew enrollment by over 50%, worked with the DoD Comptroller to deliver continuing education workshops to SES staff and computer-based training workshops for federal financial managers. The CFO Academy and iCollege faculty taught over 90 financial management students in workshops for the Office of the Under Secretary of Defense (Comptroller), the Chief Financial Officer's Council Fellows program, Department of Veteran's Affairs, and other DoD organizations. CFO Academy and iCollege faculty also supported educational requirements for financial management certification as mandated by the National Defense Authorization Act of 2012.

Throughout the year, there was higher interest globally for iCollege courses, illustrated by a greater number of International Fellows (IFs) in AMP and more global requests for cyber-related education. The iCollege is working with Thailand, Portugal, Czech Republic and Serbia - all engaged in the Cyber Security or Cyber Leader program using a hybrid approach with resident and online courses. Additionally, the governor of Hawaii requested iCollege's help with cyber education and outreach projects. The iCollege also continues to provide education

programs tailored to the unique needs of critical stakeholders, such as the DISA executive leader development program, and Air Force cyber courses. The iCollege collaborates with USCYBERCOM, the Army Cyber Institute at West Point, and others.

Lieutenant General Atanas Zapryanov of Bulgaria was the iCollege’s first graduate to be inducted into the NDU International Hall of Fame.

Professional development for faculty and cyber laboratory upgrades remain a priority, as the college works to obtain funding in these areas.

Looking ahead to AY15, iCollege continues to collaborate across NDU and the federal government on developing cyberspace leaders. The college is responding to the current fiscal reality, trying to better meet the needs of customers and stakeholders. By updating and reorganizing its curriculum, the iCollege Master of Science degree and most certificate programs were able to reduce the number of courses required for completion. With the August 2014 implementation of the new NDU curriculum model, the iCollege is shaping itself to become a JPME accredited institution.

**Table 12. IRMC Student Enrollment**

<b>Student Category</b>	<b>Active</b>	<b>Reserve</b>	<b>Guard</b>	<b>Total</b>
U.S. Army	93	2	3	<b>98</b>
U.S. Air Force	89	1	3	<b>93</b>
U.S. Navy	63	1	0	<b>64</b>
U.S. Marine Corps	15	0	0	<b>15</b>
U.S. Coast Guard	19	0	-	<b>19</b>
International Officers	-	-	-	<b>10</b>
International Civilians	-	-	-	<b>2</b>
DoD Civilians	-	-	-	<b>663</b>
Interagency Civilians	-	-	-	<b>104</b>
Private Sector	-	-	-	<b>18</b>
<b>Total Enrollment</b>	<b>1,086</b>			

Note: Active and Reserve Components apply only to U.S. military Services; thus numbers may not sum to total across Active/Reserve status. In addition, five IRMC faculty/staff members enrolled in NDU courses who are not included in the student enrollment table.

**Table 13a. IRMC Civilian Students by DOD Agency, Sub-Agency, Bureau and Service**

<b>Agency</b>	<b>Enrollment</b>
Defense Commissary Agency	1
Defense Contract Audit Agency	4
Defense Contract Management Agency	1
Defense Finance and Accounting Service	4
Defense Health Agency	2
Defense Human Resources Activity	3
Defense Information Systems Agency	145
Defense Intelligence Agency	17
Defense Logistics Agency	7
Defense Media Activity	1
Defense Prisoner of War/ Missing Personnel Office	1
Defense Security Cooperation Agency	2
Defense Security Service	8
Defense Threat Reduction Agency	1
Department of Defense	20
Department of Defense Inspector General	2
Department of the Air Force	246
Department of the Army	12
Department of the Navy	117
DoD Education Activity	2
Enterprise Information Technology Svc Dir	1
Joint Staff - J6	4
Joint Staff - J7	2
Joint Staff - J8	1
Missile Defense Agency	1
National Geospatial-Intelligence Agency	2
National Security Agency/Central Security Service	14
Office of the Chief Information Officer	1
Office of the Secretary of Defense	10
Pentagon Force Protection Agency	2
U.S. States Cyber Command	1
U.S. European Command	3
U.S. Special Operations Command	20
U.S. Strategic Command	1
U.S. Transportation Command	3
Washington Headquarters Services	1
<b>DoD Total</b>	<b>663</b>

**Table 13b. IRMC Civilian Students by Non-DOD Agency, Sub-Agency, Bureau and Service**

	<b>Agency</b>	<b>Enrollment</b>
<b>Federal Agency</b>	American Battle Monuments Commission	1
	Bureau of Citizenship and Immigration Services	3
	Bureau of Customs and Border Protection	2
	Department of Agriculture	2
	Department of Commerce	2
	Department of Energy	11
	Department of Homeland Security	10
	Department of Housing and Urban Development	1
	Department of Justice	1
	Department of Labor	1
	Department of Public Works	1
	Department of State	23
	Department of the Interior	6
	Department of Transportation	1
	Department of Treasury	3
	Department of Veterans Affairs	8
	Environmental Protection Agency	1
	Federal Aviation Administration	10
	Federal Law Enforcement Training Center	1
	Federal Trade Commission	1
	Fleet Readiness Center East	1
	General Services Administration	1
	Nuclear Regulatory Commission	1
	Office of the Director of National Intelligence	3
	Office of Personnel Management	1
	Securities and Exchange Commission	1
	Small Business Administration	1
	U.S. Court of Appeals for Veterans Claims	2
U.S. House of Representatives	2	
U.S. States Federal Agency	1	
US Agency for International Development	1	
<b>Non-DoD Total</b>		<b>104</b>
<b>Private Sector</b>	Acuity, Inc.	1
	Binary Group, Inc.	1
	L-3 Communication	1
	Lockheed Martin Corporation	11
	MITRE Corporation	1
	Private Practice	1
	Science Applications International Corporation	1
	Venom Data	1
<b>Private Sector Total</b>		<b>18</b>

**Table 14. IRMC International Student Enrollment**

Country	Student International Officer	Student International Civilian
Algeria	1	0
Bulgaria	1	0
Burundi	1	0
Canada	0	1
Czech Republic	1	0
Jamaica	1	0
Korea	1	0
Morocco	1	0
Republic of Armenia	1	0
Saudi Arabia	0	1
Serbia	1	0
Taiwan	1	0
<b>Total</b>	<b>10</b>	<b>2</b>

**Table 15. IRMC Faculty Educational Background**

Faculty Category	Bachelor's Degree	Master's Degree	Doctoral/ Professional Degree	Total*
U.S. Army	0	3	3	<b>6</b>
U.S. Air Force	0	1	0	<b>1</b>
U.S. Navy	0	1	0	<b>1</b>
U.S. Marine Corps	0	0	0	<b>0</b>
U.S. Coast Guard	0	0	0	<b>0</b>
International Officer	0	0	0	<b>0</b>
International Civilian	0	0	0	<b>0</b>
DoD Civilian (Title 5)	0	0	0	<b>0</b>
DoD Civilian (Title 10)	0	15	16	<b>31</b>
Contractor	0	1	0	<b>1</b>
Interagency Civilian	0	2	0	<b>2</b>
Private Sector	0	0	1	<b>1</b>
<b>Total</b>	<b>0</b>	<b>23</b>	<b>20</b>	<b>43</b>

\*Total represents unduplicated faculty count.

## **Joint Forces Staff College**

The Joint Forces Staff College (JFSC) educates national security professionals to plan and execute joint, multinational and interagency operations. JFSC, led by Commandant Rear Admiral John W. “Boomer” Smith, Jr. (USN), is the premier military institution for educating and acculturating mid- to senior-level officers and selected civilians in joint operational-level planning and warfighting. The college seeks to instill a primary commitment to joint, multinational and interagency teamwork.

JFSC addresses the needs of the 21st-century warfighting environment by educating and graduating 1,343 JPME II students annually, including 937 active duty officers, 327 reserve officers, 53 international fellows and 26 civilians via resident, distance or satellite classroom venues. The college offers a service-balanced learning environment located in the joint military epicenter of Hampton Roads, Virginia, where students live, learn and socialize together.

Despite the fiscal challenges of sequestration, JFSC obtained even greater levels of efficiency by saving more than six million dollars without sacrificing student throughput or the quality of the joint education experience.

The following five schools comprise JFSC:

- Joint Advanced Warfighting School (JAWS)
- Joint and Combined Warfighting School (JCWS)
- Advanced Joint Professional Military Education (AJPME)
- Senior Enlisted Joint Professional Military Education (SEJPME)
- Joint Command, Control, and Information Operations School (JC2IOS)

The Joint and Combined Warfighting School (JCWS) sets the international standard for JPME-II by preparing joint operational planners to solve complex problems in their joint assignments. JCWS piloted a Non-Resident Satellite Program (NRSP) with United States Central Command and United States Special Operations Command to augment the Virginia-based in-residence program. NRSP is a fully seminar-based offering of the JCWS curricula and has been exceptionally well-received by the host Combatant Commands. Additional satellites are projected in Academic Year 2016, culminating with up to three rotating satellite locations to provide support to all Combatant Commands. The nearly 1,100 annual JCWS graduates meet approximately two-thirds of the joint community’s demand for officers with JPME-II certification.

Graduates of Joint Advanced Warfighting School (JAWS) earn the Master of Science in Joint Campaign Planning and Strategy. They are master campaign planners, able to lead joint planning efforts in developing comprehensive campaign and contingency plans. Each year, JAWS graduates immediately take on demanding combatant command planning staff responsibilities. The rigorous curriculum focuses on the theory of war, applications in strategy and decision-making, adaptive planning in deliberate and crisis situations, combined with extensive writing and research.

Advanced Joint Professional Military Education (AJPME) and Senior Enlisted Joint Professional Military Education (SEJPME) comprise the Joint Continuing and Distance Education School (JCDES). The AJPME program graduated 289 Reserve Component officers, who filled critical joint billets alongside their active duty colleagues. AJPME received full JPME accreditation by the Chairman's Process for Accrediting Joint Education, and was lauded for innovation and being a leading distance education program for DoD. Each class includes 37 weeks of web-enabled and interactive distance learning, with 2 in-residence periods that develop planners in joint and combined warfighting.

Senior Enlisted Joint Professional Military Education (SEJPME) is a CJCS-directed, 100% on-line course designed to prepare non-commissioned officers for joint duty. It produced over 11,000 graduates this academic year. For next academic year, an advanced version (SEJPME II) will be developed to produce a more in-depth experience for senior NCOs in demanding joint assignments. Additionally, the popular SEJPME program will be migrating to Joint Knowledge Online (JKO) to afford greater global access, along with automated registration and certification processes.

Joint Command, Control, and Information Operations School (JC2IOS) continues to support the Joint Staff J6 and J39 Directorates with myriad short courses to meet operational needs, including information operations (IO), operational security, cyber-warfare, military deception, and command, control, communications, computers and intelligence (C4I). JC2IOS recently took responsibility for teaching the Defense Military Deception Training Course (2 week) and the Defense Operational Security Planning Course (1 week). Over 400 students received specialized joint education that directly supports the joint warfighter. The Information Operations (IO) Division conducts a four-week Joint IO Planners Course and a one-week Joint IO Orientation Course. The Command, Control, Communications, Computers, and Intelligence (C4I) division conducts a three-week Joint C4I Staff and Operations Course covering C4I policy, doctrine, systems and capabilities.

JFSC is accredited by both the Middle States Commission on Higher Education and by the Process for Accreditation of Joint Education (PAJE) under the Chairman of the Joint Chiefs of Staff Officer Professional Military Education Policy (OPMEP). During this academic year, both the JAWS and JCWS programs passed a rigorous PAJE accreditation visit, reaffirming their authorization to grant JPME II certification to their graduates, a major requirement for the award of Joint Qualified Officer (JQO) status.

**Table 16. JFSC Student Enrollment**

Student Category	Active	Reserve	Guard	Total
U.S. Army	323	98	75	<b>496</b>
U.S. Air Force	360	65	55	<b>480</b>
U.S. Navy	254	41	0	<b>295</b>
U.S. Marine Corps	77	21	0	<b>98</b>
U.S. Coast Guard	3	1	-	<b>4</b>
International Officer	-	-	-	<b>57</b>
International Civilian	-	-	-	<b>0</b>
DoD Civilian	-	-	-	<b>34</b>
Interagency Civilian	-	-	-	<b>4</b>
<b>Total Enrollment</b>				<b>1,468</b>

Note: Active and Reserve Components apply only to U.S. Military Services; thus, numbers may not sum to total across Active/Reserve status. This table includes unduplicated counts of only those students who completed at least one credit-bearing academic program/course during the academic year. Enrollment in non-credit courses is captured in Table 16.

**Table 17. JFSC Civilian Students by Executive-level Agency, Sub-Agency, Bureau, and Service**

	Agency	Enrollment
<b>DoD Agencies</b>	Department of the Army	1
	Department of the Navy	1
	Defense Intelligence Agency	15
	Defense Information Systems Agency	1
	Defense Logistics Agency	1
	Defense Threat Reduction Agency	1
	National Intelligence University	1
	National Geospatial-Intelligence Agency	2
	Office of the Secretary of Defense	1
	U.S. Central Command	2
	U.S. special Operations Command	2
	U.S. Southern Command	1
	U.S. Strategic Command	3
	U.S. Transportation Command	2
<b>Total</b>		<b>34</b>
<b>Non-DoD Agencies</b>	Department of State	3
	Department of Energy	1
<b>Total</b>		<b>4</b>

**Table 18. JFSC International Student Enrollment**

<b>Country</b>	<b>Student International Officer</b>
Australia	4
Brazil	1
Bulgaria	4
Egypt	3
Finland	1
Germany	2
Indonesia	2
Italy	2
Japan	2
Korea	11
Kuwait	1
Lebanon	2
Morocco	2
Pakistan	1
Philippines	2
Romania	2
Saudi Arabia	5
Turkey	4
United Kingdom	4
Uruguay	2
<b>Total</b>	<b>57</b>

**Table 19. JFSC Noncredit/Program Course Enrollment**

<b>Course/Program</b>	<b>Total Enrollment</b>
Joint C4I Staff and Operations Course	52
Joint Information Operations Orientation Course	2
Joint Information Operations Course	0
Defense Military Deception Training Course	16
Homeland Security Planners Course	190
Joint Interagency Multinational Planners Course	87
Senior Enlisted Joint Professional Military Education	11,088
<b>Total Enrollment</b>	<b>11,435</b>

Note: Enrollment is unduplicated within a course/program but may be duplicated across courses/programs

**Table 20. JFSC Faculty Educational Background**

Faculty Category	Joint Qualified Officer	SLC* Graduate	Bachelor's Degree**	Master's Degree**	Doctoral/ Professional Degree**	Total***
U.S. Army	18	7	3	23	0	26
U.S. Air Force	20	19	0	21	2	23
U.S. Navy	15	3	3	21	0	24
U.S. Marine Corps	3	3	1	6	0	7
U.S. Coast Guard	0	0	0	0	0	0
International Officer	0	0	0	0	0	0
International Civilian	0	0	0	0	0	0
DoD Civilian (Title 5)	0	0	0	0	0	0
DoD Civilian (Title 10)	13	8	0	13	10	23
Contractor	3	0	0	3	0	3
Interagency Civilians	2	3	0	2	2	4
<b>Total</b>	<b>74</b>	<b>43</b>	<b>7</b>	<b>89</b>	<b>14</b>	<b>110</b>

\*SLC = Senior-Level College.

\*\*Professional military experience/highest level of education are not mutually exclusive; professional military experience refers to Joint Qualified Officer and SLC graduate status.

\*\*\*Total unduplicated Faculty.

Note: Data collected represents a JFSC Faculty snapshot. This information represents a snapshot as of 30 June 2014

## **National War College**

The National War College (NWC), led by Commandant Brigadier General Guy “Tom” Cosentino (USA), continued to fulfill its mission of educating future leaders of the Armed Forces of the U.S. and partner nations, State Department and other civilian agencies for high-level policy, command, and staff responsibilities by conducting a senior-level course of study in national security strategy.

The current mission was approved in 1990 by General Colin Powell, while serving as CJCS. This mission has been reaffirmed five times by subsequent Chairmen. Historically, this is NWC’s fourth mission statement. However, all have had the same essential thrust, which flows clearly from the original conception of the National War College as a joint school focused on the realm of grand strategy. According to LTG Leonard Gerow, then president of the board that recommended its formation, "The College is concerned with grand strategy and the utilization of the national resources necessary to implement that strategy ... Its graduates will exercise a great influence on the formulation of national and foreign policy in both peace and war."

NWC accomplishes this by providing a JPME program that features a professional, rigorous, multi-disciplinary curriculum emphasizing active learning and immersion in a joint environment. This joint experience is further enriched by the inclusion of interagency and multinational partners in all aspects of the program. The NWC program is accredited by the Middle States Commission on Higher Education. Qualified graduates are awarded a Masters of National Security Strategy.

This year, NWC graduated 208 leaders from all U.S. military services, more than 10 federal agencies and 31 partner nations.

Although sequestration disrupted teaching during a portion of the fall semester (students and civilian faculty were not able to attend classes, depending on the policy of their individual agencies), NWC faculty made adjustments to the curriculum to ensure the quality of education remained extremely high.

Careful stewardship of financial resources and crafting of an innovative approach to link a strategy problem to a specific U.S. government agency or office enabled the resumption of overseas travel. Student feedback on the centrality of this aspect of the curriculum to validate the seminar learning overcame the logistical challenges that cooperation with some of the agencies presented.

The advent and evolution of the Joint Education Transformation led to the faculty crafting a new curriculum for AY2014-2015. This presented some challenges in translating the new concept into an executable, integrated and top quality curriculum that retains the learning objectives required by the OPMEP (Officer Professional Military Education Policy; CJCSI 1800.01D).

The decision to incorporate an Individual Strategic Research Project (ISRP) codified a process underway to allow students more practice in developing strategy, rather than studying it in the abstract. In doing so, NWC also incorporated more study across the curriculum on strategic leadership and the challenges of the complex and dynamic international security environment. The college implemented a highly successful luncheon discussion series, “Timely Topics in National Security,” for university wide discussions that focused on the pressing issues in the field, with sessions on energy, NATO cooperation, Ukraine and Russia, and some two dozen other topics.

**Table 21. NWC Student Enrollment**

Student Category	Active	Reserve	Guard	Total
U.S. Army	39	3	3	45
U.S. Air Force	41	1	1	43
U.S. Navy	25	0	0	25
U.S. Marine Corps	14	1	0	15
U.S. Coast Guard	2	0	-	2
International Officers	31	-	-	31
International Civilians	-	-	-	0
DoD Civilians	-	-	-	17
Industry Civilians	-	-	-	0
Interagency Civilians	-	-	-	30
<b>Total Enrollment</b>				<b>208</b>

Note: Active and Reserve components apply only to U.S. military Services; thus, numbers may not sum to total across Active/Reserve status.

**Table 22. NWC Civilian Students by Executive-level Agency, Sub-Agency, Bureau, and Service**

	Agency	Enrollment
<b>DoD Agencies</b>	Defense Intelligence Agency	3
	Department of Defense*	1
	Department of the Army*	1
	Department of the Navy*	1
	National Geospatial-Intelligence Agency	2
	National Security Agency/Central Security Service	3
	Office of the Director of National Intelligence	2
	Office of the Secretary Defense (1)*	4
<b>Total</b>		<b>17</b>
<b>Non-DoD Agencies</b>	Central Intelligence Agency	2
	Department of Homeland Security	3
	Department of Justice	1
	Department of State	21
	Department of Treasury	2
	U.S. Agency for International Development	1
<b>Total</b>		<b>30</b>

\*Includes (1) student as part of the Defense Senior Leader Development Program

**Table 23. NWC International Student Enrollment**

<b>Country</b>	<b>Student International Officer</b>
Australia	1
Belgium	1
Bulgaria	1
Canada	1
Colombia	1
Czech Republic	1
El Salvador	1
Ethiopia	1
France	1
Georgia	1
Germany	1
Greece	1
Indonesia	1
India	1
Italy	1
Japan	1
Nigeria	1
Pakistan	2
Poland	1
Qatar	1
Romania	1
Saudi Arabia	1
Senegal	1
Serbia	1
South Korea	1
Taiwan	1
Turkey	1
United Kingdom	1
United Arab Emirates	1
Vietnam	1
<b>Total</b>	<b>31</b>

**Table 24. NWC Faculty Educational Background**

Faculty Category	Joint Qualified Officer	SLC** Graduate	Bachelor's Degree***	Master's Degree***	Doctoral/ Professional Degree***	Total****
U.S. Army	8	9	0	9	0	9
U.S. Air Force	6	7	0	6	2	8
U.S. Navy	2	3	0	4	0	4
U.S. Marine Corps	2	2	0	2	0	2
U.S. Coast Guard	0	0	0	1	0	1
International Officer	0	0	0	0	0	0
International Civilian	0	0	0	0	0	0
DoD Civilian (Title 5)	0	0	0	0	0	0
DoD Civilian (Title 10)	2*	4	0	1	19	20
Contractor	0	0	0	0	0	0
Interagency Civilians	0	5	0	11	5	16
<b>Total</b>	<b>20</b>	<b>30</b>	<b>0</b>	<b>34</b>	<b>26</b>	<b>60</b>

\*JQO status earned while on active duty.

\*\*SLC = Senior-Level College.

\*\*\*Professional military experience/highest level of education are not mutually exclusive; professional military experience refers to Joint Qualified Officer status.

\*\*\*\*Total unduplicated faculty.

## **Flag Officer and Senior Enlisted Education**

### **CAPSTONE**

The CAPSTONE course provides unique executive education for newly appointed flag officers and senior civilian national security leaders. More than 180 uniformed officers and senior civilians were given a robust exposure to the joint force and military services, combatant commanders, and senior leaders in the broader U.S. government interagency environment. Created to give new flag officers an enhanced understanding of service capabilities in combined military operations, CAPSTONE has evolved to include an appreciation for “whole of government” approaches to complex national and international challenges and the interagency process that pursues such solutions. CAPSTONE receives outstanding access and support from the military services, the Unified Commanders and the Intelligence Community.

The CAPSTONE overseas field study program provides an opportunity to interact with interagency country teams and exposure to the regions of potential future engagement or conflict. This also allows Combatant Commanders and Chiefs of Mission to leverage CAPSTONE delegation visits to enhance engagement programs.

In April of 2014, Capstone added “Five Eyes” Allied Fellows (Australia, Canada and the United Kingdom) to the first two weeks of CAPSTONE.

### **PINNACLE**

The weeklong PINNACLE course is for select two and three-star officers most likely to be called upon to command a joint force in a military or humanitarian assistance/disaster relief contingency. Attendees come from all five military services, DoD, the CIA and the State Department. To enrich the exploration of global and transnational issues, senior military officers from partner nations are also invited to participate in PINNACLE. PINNACLE graduated 23 Fellows in AY13-14.

### **KEYSTONE**

The two-week KEYSTONE course provided 86 Command Senior Enlisted Leaders going to joint billets an enhanced understanding of the joint military environment, the defense establishment, and the broader U.S. interagency environment. The Joint Staff-run Joint Operations Module and visits to several Unified Commanders and selected Joint Task Forces provide relevant information on joint operations.

Attendance is based on a prioritized listing of the joint and service senior billets most likely to benefit from KEYSTONE attendance. Two KEYSTONE courses each year provide this executive education to Senior Enlisted Leaders from all five military services, their reserve components, the National Guard, and selected interagency organizations.

## **Research, Outreach and Strategic Partnerships**

### **Institute for National Strategic Studies**

The Institute for National Strategic Studies (INSS) was established in 1984 by the Secretary of Defense as a focal point for analysis of critical national security policy and defense strategy issues. The INSS mission is to conduct research in support of NDU's academic and leader development programs, to provide strategic support to the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, and the Unified Combatant Commands, and to interact with other U.S. governmental agencies and the broader national security community. The Institute oversees and coordinates the activities of NDU research centers and its academic press.

INSS conducts research that supports senior leader needs and the Joint Professional Military Education program at NDU. INSS' "holistic" brief is the primary vehicle for coordinating the NDU research program with Pentagon offices, including the Joint Staff's Directorate for Joint Force Development, which oversees military education for the Chairman of the Joint Chiefs of Staff. The briefing provides periodic updates on all research conducted by the University's research centers. INSS also coordinates cross-cutting research activities to support senior leader research priorities and outreach objectives. For example, over the past year INSS conducted briefings and roundtable discussions for the Pacific Fleet Commander, ADM Harry Harris; the U.S. Army Pacific Commander, GEN Vince Brooks; Commander of EUCOM and SACEUR, GEN Philip Breedlove; and numerous other senior civilian and military leaders.

INSS also organized and hosted regular high-level symposia for civilian and military officials and students on topical issues, such as Ukraine and ISIS. These and other events drew upon experts from across the INSS domain and frequently included faculty from NDU's colleges as well. This past year, INSS researchers also provided direct support to NDU's President and Provost as they forged the University's Joint Education Transformation, an initiative that is currently being implemented and that will continue throughout the coming academic year. INSS personnel also continue to teach core courses and electives, in addition to lecturing regularly in all NDU colleges.

### **INSS: Center for Complex Operations**

Established in 2009, the Center for Complex Operations' (CCO) mission is to foster unity of effort among DoD and interagency personnel in complex operations, to collect and analyze lessons from military and civilian personnel, and to incorporate those lessons into policy, doctrine, education, training and exercises. CCO supports the educational and professional development of national security leaders through analysis and distribution of lessons learned and emerging issues of concern across U.S. defense, diplomatic, and development communities. During the 2014 academic year, CCO conducted a broad range of research and

support activities to help multiple OSD and Joint Staff entities consider, integrate and institutionalize cross-organizational lessons from the last decade of war.

Completing its fourth year of publication, CCO's quarterly professional journal, *PRISM*, continues to gain recognition as a forum for sharing lessons and new concepts captured by CCO and other research efforts. It encompasses current and emergent conflict, civil-military engagement in stabilization and reconstruction, and irregular warfare operations. This year, *PRISM* also issued a supplemental special issue focused on Syria.

CCO also played a leading role in the examination of the nature and interactions of networked asymmetrical adversaries - or illicit global networks - with its book, *Convergence: Illicit Networks and National Security in the Age of Globalization*. This CCO publication has become a standard text in joint professional military education throughout the U.S., and has influenced both combatant command and service strategies.

CCO maintains close relationships with relevant OSD and Joint Staff functional activities. During the past year, the Joint Staff J7 Joint Education and Doctrine Division leveraged CCO expertise by involving CCO staff in the Joint Doctrine Development process. CCO was the lead author for more than half of the revised Joint Publication 3-24 "Counterinsurgency." In 2014, CCO was designated as the Technical Review Authority for Joint Publication 3-08 "*Interorganizational Coordination During Joint Operations*" and Joint Publication 3-07, "*Stability Operations*." CCO also made substantial contributions to other joint doctrine revision efforts, most notably Joint Publication 2-01.3 "Joint Intelligence Preparation of the Operational Environment" and Joint Publication 3-XX "Security Cooperation."

CCO supports Service lessons learned programs and the Joint Lessons Learned Program by posting and disseminating interagency lessons learned and best practices on the Joint Lessons Learned Information System. In conjunction with the JS J7 Chairman's Exercise Program Division, U.S. Army Africa, and the United States Institute of Peace (USIP), CCO assisted in the development, execution and assessment of a joint military-civilian Inter-organizational Tabletop Exercise that focused on critical issues related to actual civ-mil interface in AFRICOM's theater of operations. CCO also cohosted with USIP a conflict prevention workgroup at the 2014 Peace and Stability Operations Training and Education Workshop in support of institutional PME programs.

CCO's research program focused on interagency roles and activities during complex operations, as well as multinational efforts to support complex operations. CCO completed the following reports this year:

- "An Initial Framework for Transitional Public Security"
- "Building Civilian Stabilization Capabilities"

- “The Trans-Sahara Counter-Terrorism Partnership: Building Partner Capacity to Counter Terrorism and Violent Extremism”
- “New Perspectives for NATO Partnerships: Toward an Inclusive NATO Security System”
- “The Future NATO Response Force and the Alliance’s Southern Imperative”

Of special note, CCO was deeply involved in the analysis of intelligence tradecraft associated with sociocultural analysis and is a preeminent thought-leader in development of a new Joint Operating Concept for human aspects of military operations (HAMO).

### **INSS: Center for Strategic Research**

The highest priority for the Center for Strategic Research (CSR) continues to be support of the Chairman’s mission statement for NDU. The research goal demands analytical rigor and innovative thinking applied to objective assessments of the emerging global and regional security environments and the strategic choices facing the nation. Maintaining these standards and focus enhances the development of senior leaders and produces cutting-edge research and analysis that is in demand within NDU, the Office of the Under Secretary of Defense for Policy, the Joint Staff, and the national security interagency process.

During this academic year, two senior CSR research fellows taught in the core curriculum of the Eisenhower School and the National War College. Several CSR fellows offered electives and most lectured in both schools and the College of International Security Affairs, as well as at other PME institutions and several DoD regional centers. In addition, CSR personnel initiated and organized four major symposia and workshops, held a recurring seminar and conducted numerous policy related roundtable discussions with interagency representation, both classified and unclassified, for OSD, the Joint Staff, DIA, combatant commands and other U.S. Government partners.

In addition to producing 20 INSS staff analyses on regional and functional issues of strategic importance, CSR publications this year also included 3 long analyses in the Strategic Perspectives series and 6 shorter analyses in the Strategic Forum series, which were published by NDU Press. There were essays in Joint Forces Quarterly and PRISM, as well as more than 50 articles, op-eds and book reviews published outside of NDU (these are detailed in the “NDU Faculty Research and Publications” section below).

CSR research on critically important strategic issues this year also included projects on grand strategy and international law, the implications of the U.S. rebalance in the Asia-Pacific region, irregular threats and terrorist organizations in Africa and South Asia, transnational organized crime, strategic deterrence, defense cooperation, energy geopolitics, counterinsurgency and the future of conflict. CSR fellows analyzed numerous regional strategic issues in the Americas, the Middle East with a focus on Syria, the Horn of Africa, Southeast and East Asia, Japan and Korea, Europe, and Russia.

## **INSS: Center for the Study of Chinese Military Affairs**

In fulfilling its Congressional mandate to “to study and inform policymakers in the Department of Defense, Congress and throughout the Government regarding the national goals and strategic posture of the People's Republic of China and the ability of that nation to develop, field and deploy an effective military instrument in support of its national strategic goals,” the Center for the Study of Chinese Military Affairs (CSCMA) conducted an active program of research, outreach and support for policymakers and joint education.

A major focus this year was on China’s regional strategy and the tensions caused by stepped-up Chinese efforts to expand control of disputed maritime territories in the East and South China Sea. CSCMA Director Dr. Phillip Saunders published a chapter on China’s regional strategy in the updated edition of the widely used textbook, *International Relations of Asia*, along with several shorter articles on China’s efforts to balance its desire for regional stability with aggressive steps to pursue its maritime claims.

CSCMA staff briefed research on claimant tactics in the South China Sea and on alternative U.S. policy options for Asian maritime disputes widely within the U.S. government, spoke at major international conferences on maritime disputes, collaborated with the Defense Intelligence Agency to conduct several seminars on Asian maritime disputes for members of the U.S. intelligence community, and supported student simulation exercises at the National War College and the College of International Security Affairs. This work demonstrates the synergy between CSCMA research, policy support, and outreach activities and its contributions to NDU’s JPME mission.

Another highlight was publication of an authoritative assessment of Chinese cruise missiles, in the form of the book, *A Low-Visibility Force Multiplier: Assessing China’s Cruise Missile Ambitions*. This book, and related online and *Joint Force Quarterly* articles, described China’s progress in developing and deploying indigenous and foreign anti-ship and land-attack cruise missiles; the range of air, ground, surface and submarine platforms that the Chinese military can use to employ them; and their potential impact in a Taiwan scenario. CSCMA staff also completed major research projects on Chinese naval logistics options, China’s future relationship with the international system, and Chinese military efforts to use “selective transparency” about increased capabilities to shape the Asia-Pacific security environment.

CSCMA continued to work with various U.S. government agencies, Federally Funded Research and Development Centers (FFRDC), and international partners to expand its impact in a cost-effective manner. Its ongoing collaboration with DIA became a model for other research centers to emulate: CSCMA and DIA co-sponsored a major symposium on China’s Strategic Engagement in South Asia and a series of training seminars for members of the intelligence community. DIA’s secure VTC capability allowed staff from USPACOM and its components to benefit from these activities, including the Seventh Fleet command ship, USS Blue Ridge.

CSCMA co-sponsored a roundtable on the Chinese defense white paper with the Center for Naval Analyses' China Studies program. CSCMA also co-sponsored a major conference on the People's Liberation Army (PLA) with the Chinese Council of Advanced Policy Studies and the RAND Corporation. Books from past conferences will be published by Stanford University Press, NDU Press and RAND. CSCMA also conducted a strategic dialogue with the PLA's National Defense University, participated in annual dialogues with Japanese and Korean counterparts, and supported senior U.S. military officers visiting China, including the CJCS, Secretary of Defense, Chief of Naval Operations, and Chief of Staff of the Air Force.

CSCMA staff supported the NDU educational mission by lecturing in NDU courses, facilitating NDU student travel to Asia, hosting PLA delegations as part of NDU-NDU and broader U.S.-China military-military ties, and providing advice and support for NDU students conducting research on China. Dr. Saunders also took the lead in establishing a new "USPACOM Scholars" program that will support NDU students researching topics of interest to USPACOM as part of their required Individual Strategic Research Projects.

### **INSS: Center for the Study of Weapons of Mass Destruction**

The Center for the Study of Weapons of Mass Destruction (CSWMD) was established as an independent entity in 1994 to prepare the joint warfighter and select others to address the challenges posed by weapons of mass destruction (WMD) through education and leader development, scholarship and outreach activities. CJCS designated CSWMD, now part of NDU, as the focal point for WMD education in the Joint Professional Military Education system. CSWMD also provides direct support to policymakers and commanders on a wide range of WMD matters.

CSWMD had a productive AY 2013-14. Faculty taught three NDU electives with 60 students, and lectured and led tabletop exercises in other courses at NDU and across the Professional Military Education system. A record 21 NDU students studied the Weapons of Mass Destruction Studies Concentration. The Program for Emerging Leaders inaugurated its seventh class with 25 members from across DoD and the interagency community. The Countering WMD Graduate Fellowship program matriculated its second cohort of 12 DoD professionals. The center held 5 WMD Spotlight seminars, supporting more than 265 participants. It also resumed the annual symposia, with the most heavily subscribed event to date, which distilled lessons from the first 20 years of DoD's countering WMD mission and assessed future challenges.

CSWMD faculty undertook two major research projects, one on escalation challenges in conflicts with nuclear-armed adversaries and the other on alternative futures for North Korea's nuclear weapons program. Faculty also published a groundbreaking paper on the future of WMD. The center provided direct support to senior officials across the range of WMD challenges, including a Biological Threats Strategic Stock-take, a tabletop exercise for the U.S.-

Republic of Korea Extended Deterrence Policy Committee, a multilateral workshop on advanced chemical threats, and multilateral activities under the Proliferation Security Initiative.

### **INSS: Center for Technology and National Security Policy**

The Center for Technology and National Security Policy (CTNSP) helps national security decision-makers and their staffs understand emerging impacts of technology and how to integrate these impacts effectively into policies. The center supports OSD, military services, Joint Staff, defense agencies and the intelligence community. Through this strategic support, CTNSP research complements JPME. CTNSP research is organized around the areas of emerging technologies, civil-military activities integration (CMAI), science and technology (S&T), and advanced learning technology.

The Emerging Challenges Seminar Series continued its tradition of providing insight into leading-edge and just-over-the horizon national security challenges. Over the past year, seminar topics included space challenges, mini-satellites to autonomous systems, human interface, European-Phased Adaptive Approach and ballistic defense, robotics, the dark web, cyber, and Eurasian energy security. CTNSP also provided workshops on Syria/Iraq and Islamic State of Iraq and Syria (ISIS) for the Defense Intelligence Agency (DIA) and the Joint Warfare Analysis Center (JWAC).

Regarding CMAI, the center continued to support the Deputy Assistant Secretary of Defense for Cyber Policy and issues related to NATO cyber, whole-of government approaches, and strategic leadership. The center explored public-private partnership policy and process in partnership with the Joint Staff. The center continued its support of the development of civil-military engagement materials for the COCOMs, which include a public health approach. CTNSP also is working collaboratively with medical communities on human hardiness and resilience as they relate to the joint force. Center projects also continued to address the role of social media and disaster relief that help organizations work with increasing information volume and velocity.

The TIDES (Transformative Innovation for Development and Emergency Support) knowledge-sharing project continued to leverage global talent, via the STAR-TIDES network, to pursue integrated approaches to support stressed, postwar, post-disaster and impoverished populations.

Science and Technology (S&T) projects this year provided synthesis of trends and expert advice to the White House's Office of Science and Technology; Office of the Assistant Secretary of Defense for Research and Engineering; Office of the Assistant Secretary of the Army for Acquisition, Logistics, and Technology; the Office of Naval Research; the Defense Science Board; National Ocean Council (26 agencies); and a number of other individual agencies. Examples of this support included:

- CTNSP supported the Response to Unforeseen Chemical and Biological Hazards (RUCBH) 2013 linked studies by creating an integrated RUBCH integrated report and playbook.
- The JRO-CBRND (Chemical, Biological, Radiological, or Nuclear Defense) commissioned a follow-on CTNSP study to assess how to best achieve such capabilities within existing organizations, authorities and procedures to improve the U.S. Government's capability for response to CBRN events.
- CTNSP responded to a request by DASD (CBD—Chemical-Biological Defense) to provide an expert consultant to provide expertise, counsel and advice to the DASD and the CAPE director and staff, as well as the JRO-CBRND, on a study to evaluate the performance, effectiveness and investment strategies of Chemical, Biological Defense Program.
- CTNSP also supported the J7 Future Joint Force Development support series by submitting research papers and support materials regarding S&T and Human Geography, conducting three World Order symposia and providing background materials for the Iron Crucible exercise.

Advanced learning technologies is the newest CTNSP mission line of effort. The team conducted and briefed to the J7 lead for Doctrine and Education a study assessing the distance learning potential of the J7's Joint Training Schools. The International Transformation Chairs published a book in conjunction with a conference on "Changing Mindsets to Transform Security: Leader Development for an Unpredictable Complex World" that supports approaches and changes that should be made in leadership development. CTNSP also supported a Massive Multiplayer Online War Game Leveraging the Internet (MMOWGLI) event; work on the evaluation report and support for courses and communities of interest continues.

### **College of International Security Affairs**

The College of International Security Affairs (CISA) maintains a network of its graduates in support of the Combating Terror Fellows (CTF) program, now with more than 600 members globally. This network ensures that U.S. allies around the world have access to fellow counter-terrorism experts as a means of continuing the professional development of CTF program participants. In support of this effort, CISA publishes a monthly compendium of key news items and articles in its *Eagle Eye* newsletter, which is shared via email to all alumni. For many graduates operating in other countries and far from major media centers, this publication is a one-stop source for updates, current news on CT efforts, and key journal articles.

CISA also supports the professional development of the reserve components through the Reserve Component National Security Course (RCNSC), held three times every year for about 60 personnel each cycle. RCNSC brings reserve personnel up to date on emerging national security topics, U.S. national security strategy and ongoing U.S. operations. Graduates receive Joint Education points for their participation in the program. CISA is reviewing the program to identify means of adding graduate credit for the program in the future.

CISA provides pre-deployment strategic and regional education for personnel preparing to the report to Joint Task Force – Horn of Africa (JTF-HOA). This two-week program is offered twice a year to some 20 participants in each cycle. The course prepares participants to operate effectively by deepening their understanding of the cultural, economic and security environment in which JTF-HOA operates.

### **Eisenhower School**

The Eisenhower School's Research and Technology (R&T) Policy course (ES-6104) provides a uniquely valuable outreach opportunity. The R&T Policy course is a key elective within Eisenhower's Senior Acquisition Course (SAC) program and is unique among SAC electives, in that it is carried out jointly with a committee of French military officers attending the Institute for Higher Education in National Security (IHEDN), a war college managed by the French Defense Procurement Agency (DGA), located at the École Militaire in Paris. Together, the students from both schools conduct collaborative research on a topic of common interest related to the effective management and sustainment of innovation and technology within the trans-Atlantic defense industrial bases. Budget permitting, each year's course also involves a one-week field study by the U.S. students to Europe for collaborative meetings and a one-week field study by the French students to the United States. The course deliverable at the end of each year is a joint-school policy options paper, which the students brief to senior leaders in the defense department of each respective nation.

The R&T Policy course is celebrating its 20th anniversary in Academic Year 2014-2015. Shortly after the inception of Eisenhower's SAC Concentration Program as a Defense Acquisition Workforce Improvement Act (DAWIA) workforce development initiative, the college initiated the French-U.S. collaborative SAC elective course in Academic Year 1994-1995. This collaboration was by agreement between the Under Secretary of Defense and the Director of the French DGA. Course capacity each year is variable based on budgets and other factors, but averages around 10 students. Over the twenty-year course history, more than 150 acquisition professionals have enhanced their education by focusing on a joint collaborative research effort with their counterparts in the French DGA, creating critical senior-leader networks and building the capacity to effectively manage and sustain innovation and technology within the trans-Atlantic defense industrial bases.

## **Information Resources Management College (iCollege)**

In July 2013, the iCollege conducted the first-ever Cyber Beacon senior thought leader meeting with executives from DoD, Federal Government and select private sector organizations. Through Cyber Beacon, these thought leaders explored the availability and effectiveness of cyber education; the knowledge, skills and abilities that senior leaders and decision makers should possess. Based on positive feedback from the initial event, the iCollege collaborated this year to plan Cyber Beacon 2.

The iCollege faculty also engaged in a wide range of outreach efforts, including:

- Working with more than 35 academic partner universities to form and maintain agreements for credit transfer.
- Conducting briefings and tours for domestic and international leaders of iCollege programs and cyber labs.
- Launching a new website, hosted by the Defense Media Activity, and actively engaging on Facebook and Twitter.
- An iCollege staffer served as Jury Member, Producer and Chair-Elect of the 2013-14 SIGGRAPH (Special Interest Group on GRAPHics and Interactive Techniques) conference and Emerging Technologies group.
- CFO Academy faculty engaged the American Society of Military Comptrollers via multiple presentations at the society's annual meeting.

## **Joint Forces Staff College**

JFSC deployed a teaching team consisting of instructors from JAWS, JCWS and JCDES to support the International Security Assistance Force (ISAF) in Kabul, Afghanistan. The team taught a national strategy development and strategic planning concepts course to Afghan government officials. They employed a broad array of instructional methods to meet the ISAF requirements and prepare the Afghan students for the strategic challenges confronting their government. JFSC also hosted visiting dignitaries from the Republic of Korea and the United Arab Emirates to learn more about U.S. JPME institutions and programs.

The Homeland Security Planner's Course (HLSPC) provided Mobile Training Team support to the National Guard Bureau, FEMA/Defense Coordinating Officer Region IV and U.S. Coast Guard Sector Lake Michigan.

Additional JFSC outreach activities this year included:

- Joint Interagency, Multinational Planner's Course (JIMPC) in conjunction with JCWS supported USSOUTHCOM with a Mobile Training Team in July.

- Dr. Robert M. Antis served as the Academic Co-Lead for the U.S./NATO Defense Education Enhancement Program in the Republic of Georgia, providing a workshop on assessment and evaluation techniques at the Georgian National Defense Academy in February.
- JC2IOS Military Deception Theater Operations Courses for USCENTCOM in March and April.
- JC2IOS supported USEUCOM with a Baltic States Mobile Training Team in Riga, Latvia.
- JCWS hosted a Joint Planning Orientation Course for USEUCOM's Reserve Component officers in March.
- In April, JAWS participated in the Society for Military History's Annual Conference, at which two faculty members led panels and four students, who had been selected by the Society, gave presentations.
- JFSC supported the U.S. Army Training and Doctrine Command's Yorktown Staff Ride with six subject matter experts in June.
- JFSC supported USCENTCOM by hosting the U.S.-Pakistani Senior Officer's Program in June.
- JCWS conducted Mobile Training Teams for the 353rd Civil Affairs Brigade in March.
- JCWS supported USNORTHCOM's Joint Training Education Academic Workshop (JTEAW).
- JFSC engaged the Naval War College and other military academic institutions by sharing the internally developed Joint Force Deployment Estimator (JFDE).

JFSC is a member of the Virginia Tidewater Consortium (VTC) consisting of 13 institutions of higher education located within the Tidewater region. The VTC also coordinates cooperative educational partnerships among its members. This year, 32 JFSC instructors completed the VTC Certificate on College Teaching program, which included completion of seven workshops.

JFSC faculty members received recognition for their outstanding work, including:

- CDR Michael Posey (JC2IOS), CDR Stephen Firestone (JCDES), Assistant Professor William Marlowe (JCWS) and Dr. Keith Dickson (JAWS) earned the John A. Williamson, Sr. Faculty Award, presented by the NDU Foundation.
- The Military Officers Association of America (MOAA) awarded the Joint Educator of the Year Award to Lt Col Kristi Church (JCWS).
- COL Stephen Rogers won the Army War College Foundation's Award for Outstanding Strategy Research Project for Academic Year 2014 for his work, *Learning Trust: A Leadership Lesson from Twelve Years at War*.
- The Joint Continuing and Distance Education School (JCDES) was awarded the Federal Government Distance Learning Association's Five Star Award in September 2013 for excellence in providing enterprise-wide distant learning solutions within the federal government.

## **National War College**

In addition to teaching, NWC faculty also conducted research and published widely throughout the year. Examples include:

- Dr. Richard Andres published “Cyber-Gang Warfare” in Foreign Policy and “Recapitalizing the U.S. Air Force” in The American Interest.
- Dr. David Auerswald published “The Future of American Air Power” in Defense Dossier, along with Dr. Mark Bucknam.
- Dr. Bernard Cole published Asian Maritime Strategies (U.S. Naval Institute Press, 2013); “Space-Based Information and Communications systems: U.S. Navy’s Force Multipliers, From Sextant to Satellite” (KW Publishers, New Delhi), and “The History of the Twenty-First-Century Chinese Navy” in Naval War College Review.

NWC faculty were also heavily involved with the policy community in activities supporting the U.S. Pacific Command, U.S. Central Command and U.S. Africa Command, along with OSD Policy and various other agencies. Additionally, faculty also responded to many media and academic requests, including from the NATO Defense College, George C. Marshall Center, Near East and Africa Center, New York Times, Defense News, and others.

This year, three NWC alumni were inducted into NDU’s International Fellows Hall of Fame in recognition of their professional military accomplishments. These officers include:

- MG Saliou Ndiaye, senior defense advisor to the President of Senegal. Prior to this position, MG Ndiaye served as Army Chief of Staff of the Senegalese Armed Forces from 2008 to 2011. He graduated from NWC in 2007.
- BG Dobran Božič of the Slovenian Armed Forces, who serves as Chief of the General Staff. Before assuming this position in February 2012, BG Božič was Commander of the Slovenian Contingent International Security Assistance Force 15 in Afghanistan. He graduated from NWC in 2009.

RADM Mohamed Sane, who serves as Deputy to the Senegalese Chief of Defense Staff. He has served in a number of United Nations missions and graduated from NWC in 2011.

## NDU Research and Publications

Conducting focused research and sharing the findings are key elements of creating and disseminating knowledge that strengthen the defense community and its ability to prepare for and respond to security threats. In addition to the publications and presentations mentioned in the preceding sections, the NDU team added to the quality and robustness of the educational experience for the university's students, shed light on key strategic issues, and enhanced strategic relationships via the following publications.

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## Educational and Institutional Enablers

### **Accreditation**

The National Defense University is accredited by the Middle States Commission on Higher Education, an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation. The University's initial accreditation was granted in 1997.

NDU's Joint Professional Military Education (JPME) Programs are accredited by the Process of Accreditation for Joint Education, a specialized accrediting agency recognized by the Department of Defense through the Chairman of the Joint Chiefs of Staff.

The Senior Acquisition Course (SAC) Program is accredited by the Under Secretary of Defense for Acquisition, Technology and Logistics through a specialized accrediting process that is recognized by the Department of Defense.

The Information Assurance (IA) Programs are accredited as Centers of Academic Excellence in Information Assurance Education by the Secretary of Defense through the National Security Agency.

### **Distinguished Leader Program**

The National Defense University's Distinguished Leader Program (DLP) complements the JPME curricula by providing students with uniquely valuable opportunities to see, hear and engage with distinguished senior leaders, policy makers and innovative strategic thinkers. In the DLP, guest lecturers discuss with students a wide variety of timely issues related to national security and foreign policy issues in an unpredictable and complex world. Based on their personal experiences, NDU's distinguished speakers share their insights on strategic leadership, the development and implementation of strategy, and the challenges and importance of effectively operating in joint, interagency and multinational environments.

This academic year, NDU's students benefited from engaging with these distinguished speakers:

- Mr. Toomas Hendrik Ilves, President, Republic of Estonia
- ADM William McRaven, USN, Commander, USSOCOM
- Mr. Steve Forbes, Chairman and CEO *Forbes Magazine*
- Command Sergeant Major Chris Faris, USA, USSOCOM
- ADM Samuel Locklear III, USN, Commander, USPACOM
- Gen Peter Pace, USMC (Ret), Former CJCS
- Mr. Toomas Hendrik, President of Estonia
- GEN Colin Powell, USA (Ret), Former CJCS and Secretary of State
- AMB Ryozo Kato, Former Japanese Ambassador to the United States

- Gen Mark Welsh, USAF, Chief of Staff of the Air Force
- Secretary of the Navy, Ray Mabus
- Gen William Shelton, USAF, Commander, USAF Space Command
- ADM Jonathan Greenert, USN, Chief of Naval Operations
- Gen James Amos, USMC, Commandant, USMC

## **NDU Press**

NDU Press, an integral part of INSS, continued to adapt its product line to better support the University's missions of teaching, scholarship, and engagement. This year, the press published four issues of the Chairman's flagship journal, *Joint Force Quarterly*. The Press also continued its support of the Joint Electronic Library, as all of the journal's content is resident in the library's data storage for instant access by personnel worldwide.

The press remains committed to serving JPME and providing an intellectual platform for joint matters. JPME school participation in the Secretary of Defense and CJCS essay competitions increased again this year, aided by support from both the NDU Press and the NDU Foundation.

NDU Press this year published *A Low-Visibility Force Multiplier: Assessing China's Cruise Missile Ambitions*, sponsored by CSCMA. The press also reprinted *The Noncommissioned Officer and Petty Officer: Backbone of the Armed Forces*, due to high demand from the Services; this was sponsored by SEAC, INSEL and the NDU Press. NDU Press also published nine policy briefs and four occasional papers.

All books are available at the NDU Press web site in PDF and/or multiple e-book formats. NDU Press is at the forefront of NDU's social media and virtual outreach. The press' website has attracted more than 54,775 new visitors this year, with some 120,053 overall visitors viewing more than 5,510 pages of defense and security related content. NDU Press is also active in the social media realm, with 2,824 followers on Twitter, 1,816 "likes" on Facebook and 786 "pins" on Pinterest.

## **Center for Applied Strategic Learning (CASL)**

CASL contributed significantly to NDU students' JPME, furthered the overall advancement of U.S. defense policy goals, and facilitated a better understanding of national security issues for DoD, interagency and select academic institutions. CASL also supported the NDU's mission to support the joint warfighter by delivering experiential education through the development of challenging exercises tailored to meet the student curricula requirements of the NDU colleges: CISA, the Eisenhower School, IRMC, JFSC, and the National War College.

CASL supported more than 2,300 NDU students by developing 65 strategic and high-operational exercises and classroom events, which led to an enhanced understanding of current and emerging national security issues. The center also supported 18 Joint Staff, Office of the

Secretary of Defense and White House exercises, enhancing the national security dialogue within DoD, across the interagency environment, and with coalition partners and allies.

High-profile exercise support included Iron Crucible and the Joint Land Air and Sea Strategic (JLASS) Exercise. CASL provided training and education support for the CJCS-directed, Iron Crucible exercise, which included the staffs from six combatant commands. The center also served a critical role in the development and execution of the JLASS Exercise, educating more than 140 students from DoD's five senior service colleges. The center also participated in numerous gaming forums, symposia and exercises at various U.S. academic institutions and taught an elective course on the art of facilitation. These opportunities allowed CASL to explore innovative approaches to national security education, as well as network with national security experts and students interested in national security studies.

### **Conflict Records Research Center (CRRC)**

This year, the CRRC operated in a caretaker status while awaiting a determination on its future. Staffed by one person, the center continued to support, albeit minimally, NDU's mission of educating joint warfighters and select others, and providing research support to the Office of the Secretary of Defense for Policy. Although far fewer records were translated and transitioned into the CRRC research database, the center continued to make its captured records on Saddam Hussein's regime, as well as al Qaeda and Associated Movements (AQAM), available to JPME faculty and students and other scholars through the center's research database and website. These scholars continued to publish new policy-relevant studies based on the center's records. The CRRC also made available to faculty, students, researchers and policymakers the numerous publications produced using CRRC resources on subjects including: the Iranian military, deterring Syria, the efficacy of economic sanctions, the functioning of authoritarian regimes, Iraq's pursuit of nuclear weapons, and other issues of importance.

### **Facilities**

NDU's Facilities Directorate aligns the core capabilities of supply, engineering, installation support, contracted support and logistics services to support the missions of the university with the effective and efficient use of human and capital resources. Accomplishments this year include:

- **Library Study:** The Facilities Directorate completed a comprehensive library study for both campuses (i.e., Fort McNair in Washington, DC and the JFSC campus in Norfolk, Virginia). This study provides a strategic path forward by defining the operating and facility changes needed to leverage technology and support NDU's core educational mission into the future. The first phase of the plan will rework the circulation desks for both libraries. The design work is scheduled to start in late 2014.
- **Roosevelt Hall:** The directorate completed acoustic improvements in National War College's Hill Conference Room. The directorate also restored Roosevelt Hall's historic

south-facing windows, improving the high-level conference capabilities of the facility. The directorate also improved student support by repairing and renovating the men's shower and restroom.

- Eisenhower Hall: The directorate replaced the entire roof of Eisenhower Hall, which has dramatically improved the learning environment for all students and faculty.
- Enterprise Service Support: The directorate placed service support specialists in two colleges as a first step in providing a one-stop shop approach to provide the best possible support to NDU faculty, staff and students.
- Enterprise Service Support: The Facilities Projects Board was created to determine the capital program budget prioritization and approval for university projects to ensure critical needs are addressed first and aligned with the strategic plan.

On-going and future initiatives include:

- Renovations for Marshall Hall and Eisenhower Hall: The directorate continues to make progress with the A/V modernization and renovations of the McNair Room and the Marshall Hall 155 conference space complex. This project will significantly increase the capabilities of both areas to support university events and international visits. In addition, energy efficient lighting improvements that will create an atmosphere more conducive to learning continue in numerous assembly spaces throughout Eisenhower Hall; completion is expected mid-year for AY14-15.
- Eisenhower Hall HVAC improvements: A project to replace the failing cooling towers that serve Eisenhower Hall is expected to be awarded mid-year for AY14-15. Additionally, an Energy Savings contract was awarded to replace the existing boiler with a more efficient unit. The reliability of the HVAC system that supports the educational mission in the building will be dramatically improved.
- Roosevelt Hall security system: The project to install a mass notification system in Roosevelt Hall continues through the design phase, with a construction award expected mid-year for AY14-15. The system will increase student and staff safety and security by provided emergency communications capability to the facility. To continue improving support provided to the students and staff, a contract to repair and renovate the women's shower and restroom is also expected to be awarded in the same timeframe.
- Electrical infrastructure improvements at JFSC: An engineering study and design is underway to correct deficiencies in the overstrained JFSC power system to eliminate classroom power disruptions and equipment damage. A contract to repair the identified problems is projected for early 2015.

- NDU classroom standards: A contract to synthesize education and technology requirements into an NDU-wide standard is underway. This effort will not only include classroom standards, but conference, meeting and office standards. Additionally, it will include space, educational technology and IT infrastructure, with an expected benefit of creating efficiencies and reducing operating costs across the university. A design concept will be produced to advance the first prototype renovation.
- Enterprise-wide support: The directorate continues to expand its support to the university as the Logistics functions at JFSC are consolidated under a newly created lead position in Norfolk.
- Continuity of Operations: A contract will be awarded early in AY14-15 to revise and update the university Continuity of Operations Plan (COOP). This effort will assist the colleges and components in preparing a comprehensive and coordinated plan with consistent testing and training requirements.

## **Health and Fitness**

The Health and Fitness directorate supports NDU's strategic goals by enhancing Joint Total Fitness through health, fitness and wellness initiatives that optimize performance across the Joint Total Force structure.

The intent is to help the strategic leader use the full range of their capacities to thrive in the most difficult circumstances and to emerge from stressful periods stronger, healthier and eager for the next challenge. In a strategic leadership environment that is changing at warp speed, performing consistently at a high level is more difficult and more necessary than ever. High performance depends as much on how people renew and recover energy as on how they expend it, and on how they manage their lives as much as on how they manage their work. We define resilience as the ability to sustain, enhance and quickly recover optimal levels of human performance.

The directorate's goals include:

- Assessing individuals through a comprehensive Executive Health Assessment to identify potential health risks and provide strategies to reduce risks.
- Providing effective wellness intervention and prevention initiatives that include nutrition, tobacco cessation, exercise prescription, physical therapy, vaccination support and mental wellness.
- Inculcate an appreciation for resiliency in senior leaders so they will promote wellness among those they lead.

During this year, the Health and Fitness directorate's accomplishments include:

- Coordinating a comprehensive health awareness program through sound nutrition, daily activity and preventive medicine for more than 1,400 NDU students, faculty and staff. This includes over 100 international students representing 70 countries. The directorate performed more than 200 executive health screenings.
- The physical therapist and athletic trainer provided 1,685 on-site appointments, greatly reducing time away from work and classes. The directorate developed over 400 personal fitness programs to help lower the modifiable risk factors of heart disease, including incorporating a university wide pedometer program for individuals who are unable to run. The Registered Dietician provided nutrition counseling and ongoing support to approximately 520 students, faculty and NDU staff.
- The directorate supported 12 international CAPSTONE and 15 domestic International Student Management Office trips with qualified medical expertise. Two of the directorate's staff members are certified CPR instructors. The team also provided medical coverage for all NDU functions.
- The directorate also provided a brown-bag lunchtime lecture series. This included a six-week Spiritual Fitness class series treating spiritual and ethical dimensions of strategic leader competencies and skills; a ten-week weight management course designed to provide education on proper nutritional habits; a six-week series of behavioral health education classes; and a "Biking in the DC Area" program. Additionally, group classes included Combat Jujutsu, Zumba, exercise, Breast Cancer Awareness, and CPR.

The key strengths of the Health and Fitness Directorate are the highly qualified providers, the proximity of the staff to the students and also the staff's passion to discuss and fulfill the health, wellness, and fitness needs of the NDU community. HF provides the senior leaders of our military and civilian agencies with the capability to maintain optimum health and fitness in a sustained, operational environment.

## **Human Resources**

Working in close collaboration with stakeholders and partners, the Human Resources directorate (HRD) provides customer-focused professional civilian and military human resources (HR), manpower analysis and management, and selected administrative services to support to NDU leaders, managers, faculty, staff and students.

The 20-person HRD staff (14 civilian and 6 military) supports a workforce of 800 employees and several thousand military students annually. They provide full employee support to the civilian Title 5 (GS) and Title 10 (AD) workforce, from recruiting and retention, to training and workforce management. The directorate's military staff serve as liaisons with the military service personnel providers to ensure a full range of support to military personnel assigned as students, faculty and staff.

Prominent manpower and personnel challenges this year included:

- Civilian FTE manning reductions of roughly 20% from FY11-FY15.
- Military manpower reductions: 15 total military positions, including 2 Navy, 4 Air Force and 9 Army. While devastating, these reductions are a marked improvement over an original, uncoordinated cut of 38 billets, which was rolled back with assistance from the J7 and OSD. Cooperation from the Services was vital to the outcome.
- Service Selective Early Retirement Boards (SERB): Early retirement selections and military officers leaving early rather than face a SERB resulted in the military faculty turnover rate increasing from roughly 33% to almost 50% (in one year) - significantly impacting academic requirements. The Eisenhower School (ES) was notably impacted losing 6 Air Force Officers earlier than expected – several of whom could not complete the academic year, requiring the ES to find qualified substitutes.

Major Human Capital Initiatives & Accomplishments included:

- NDU established a Human Capital Council (HCC) with component representatives in April 2014. The council charter was approved and signed in May 2014, with the council beginning work immediately thereafter. The HCC is chaired by the Chief Operating Officer (COO).
- Upon formation, the HCC established a Talent Management (TM) working group to develop and refine the policies and procedures for each component to conduct a holistic work force analysis and a TM review of their military personnel, Title V (GS) personnel, and Title X (AD) faculty. The goal of the TM review process was to effectively and efficiently execute the NDU strategic plan relative to recruiting, retaining and developing the best faculty and staff that NDU can afford.

- Since January 2014, HRD enabled the successful recruitment and onboarding of an unprecedented number of senior positions at NDU including: ISMO Deputy Director; CTNSP Director; NWC Dean of Faculty; CISA Dean of Faculty; ES Dean of Faculty; Capstone Senior Director; iCollege Chancellor; Strategic Communications Director; Chief Operating Officer (COO); and AA Deputy Provost. HRD also assisted DSCA in recruiting and onboarding three new Regional Center (RCs) Directors, who are co-located with NDU at Fort McNair. During this same period, HRD helped the RCs plan workforce restructuring to comply with a mandated downsizing.
- HRD led the way in the re-establishment of a new employee orientation program. This program provides overview information on resources, programs and processes available at NDU; fosters connection with the larger NDU enterprise; and enriches understanding of the multi-faceted missions of NDU.

## **Information Technology**

As a government institution with an academic mission, NDU must balance the need for security and connectivity to the DoD enterprise, with the open communication and collaboration required for a challenging and rewarding academic experience. NDU has addressed this dichotomy by developing systems that will allow us to leverage DoD business systems, while still maintaining an effective academic environment for our students.

The IT directorate (ITD) addressed significant network infrastructure performance and security issues this year by using the processes and organizational transformation executed in the previous year to implement many technical changes. NDU excelled on two major network security inspections and is now officially DoD certified to operate its own network. The resulting infrastructure meets or exceeds security requirements to protect faculty, students and staff, while operating in the modern cyber-environment. The resulting infrastructure provides a strong foundation on which to implement the tools required to enhance NDU's academic mission and connect the university's business operations to the rest of the DoD.

With the DoD compliance requirements met, ITD has begun implementing multiple online and cloud-based tools to enhance the academic and business operations of the university. We implemented a campus-wide secure wireless network so students can use their personal devices to access the library, curriculum and other academic resources. We implemented systems to evaluate student performance and effectively survey the multiple populations at NDU. Additionally, we are continually implementing new tools that improve business operations.

NDU now has an effective IT infrastructure and an understanding of the how to balance the security requirements of the modern cyber environment with the open communication

required for an effective academic institution. ITD will continue to implement, operate and defend the NDU network in support of its important academic mission.

### **International Student Management Office**

This was a banner year for the International Student Management Office (ISMO). The NDU International Fellows (IF) Class of 2014 marked the 30th anniversary of the International Fellows Program. The IF Class of 2014 was the largest to date, consisting of 186 graduates from 67 countries, and attended each of the NDU colleges.

International officers were integrated into every aspect of life at the university, from classes and seminars to intramural sports and events designed to forge lasting ties with their U.S. counterparts. Numerous student promotions to O-6 and flag officer ranks in the Class of 2014 bore testimony to the quality of officers sent by partner countries. NDU graduates continue to rise to senior positions throughout the world. This year, ISMO celebrated six inductions in the NDU International Hall of Fame. Furthermore, NDU's international alumni currently include 12 Chiefs/Secretaries of Defense and 18 Chiefs of Service.

Despite fiscal challenges facing governments around the world, ISMO continued to develop and improve the IF program. ISMO was able to execute one of its most robust field study programs, traveling to cities across the country to introduce International Fellows to all aspects of the American way of life. The program studied diversity in American governance by visiting a variety of government institutions and municipalities, ranging from an unincorporated township (run entirely by volunteers) to the highest levels of state and federal government, including a state governor. Students explored such challenging topics as the immigration surge across U.S. borders, the status of Native Americans, and the integration of diverse religious perspectives into the fabric of America. There was something for each of the Fellows to connect with and increase their understanding of the United States. Interestingly, some Fellows found the Detroit Field Study Program the one that most resonated with them, finding it to best depict the American ethic and spirit.

The NDU experience and Fellows' connection to the U.S. doesn't end when they graduate. ISMO continues to reach out to and engage a growing alumni base. In pursuit of that effort, September 2013 marked NDU's fourth quadrennial International Alumni Security Seminar. The seminar hails alumni from around the world to the NDU campus to study relevant and contemporary global security issues. The 2013 event focused on the effects of the U.S. Rebalance to Asia, the future implications of the Arab Spring, and the significance of cybersecurity as we face the opportunities and challenges of cyberspace. Speakers represented the highest levels of the U.S. and foreign governments, as well as industry. In all, some 70 countries were represented by 165 attendees, including 4 sitting Chiefs/Secretaries of Defense.

ISMO is also planning the next series of Continuing Education Seminars, which NDU will co-host in 2014 with the Austrian National Defence Academy. The focus will be the security crisis in Ukraine. Speakers should include the Permanent Secretary of Defense from Estonia and the Deputy U.S. Representative to NATO. We are committed to leveraging the great strategic asset that our graduates represent, while continuing to help foster their global connections and lifelong learning.

## **NDU Libraries**

The three priorities of the NDU Libraries at Fort McNair and in Norfolk are, in order of importance: Teaching, access to information and resources, and library services. These priorities have carried throughout the academic year.

To support the university's core educational mission, librarians created classes to teach effective use of the libraries. These brown bag sessions included: Advanced Search Tips, Congressional Research, Country and Regional Security Research, Research ... Using Customized Alerts, Spanish Language Resources, Tapping into Think Tanks, Evaluating Internet Resources, and more. Nearly 300 people attended the sessions, which received a 98% satisfaction rating. Library staff also provided hands-on research classes and library orientation to new students.

To facilitate access to information resources, the library facilitated network and systems improvements to enhance security and comply with the Defense Information Systems Agency's Command Cyber Readiness Inspection (CCRI) in March. The library migrated to the cloud critical systems, including EZProxy (enables remote access to online resources) and the Symphony Integrated Library System. The library also upgraded and migrated digital content management systems to virtual servers with enhanced security. The library team also created an academic technology lab and training materials to maximize student and faculty use of new technology tools.

NDU Libraries partnered with ITD in migrating NDU's public websites (i.e., all colleges, NDU Press, and research centers) from multiple hosts to the Defense Media Activity (DMA). This created efficiencies, improved the university's content management capabilities, enabled cohesive online branding, minimized security risks, maximized compliance with federal and DoD regulations, and provided NDU with a reliable COOP capability for its public websites.

NDU Libraries grew the university's Facebook community from 6,936 to 10,007 and more than doubled Twitter followers, growing the community to 1,093. Library staff also archived nearly 30 GBs of video broadcasts on Livestream, so they are accessible by the entire NDU community.

The library team supported the Joint Combined Warfighting School's satellite programs at the Combatant Commands. This enabled access to library resources and services at remote locations, which is critical given the emphasis on research.

The NDU Libraries' Special Collections, Archives and Visual Learning division supported NDU initiatives and those of the Joint Staff. Examples of this unique capability included:

- Organizing a "70th Anniversary of D-Day" exhibition, featuring an original copy of the Operations Plan for the Omaha Beach landing
- Supporting a meeting of the CJCS and U.S. Service Chiefs with their British counterparts with an exhibition on Normandy.
- Supporting a CJCS meeting with Canadian counterparts by creating a World War I exhibition.
- Creating an exhibition on Gallipoli to complement a similar meeting between the CJCS and Australian counterparts.
- Partnering with the Library of Congress to sponsor a special literary conversation with Admiral James G. Stavridis.
- Hosting three offsite events, sponsored by the Director of the Joint Staff, and supplementing these with the library's CJCS papers, which served as the basis for discussions.

The library also made significant additions to its special collections, including:

- GEN Colin Powell's donation of hand-written notebooks and diaries, together with LTG Richard Chilcoat's notebooks when he served as Powell's executive assistant.
- GEN John Vessey added significant documents to his papers, including Presidential letters, signed photographs, photo albums from his CJCS tour, and his diary from 1979.
- ADM James Stavridis' SACEUR and SOUTHCOM collections, including presentation gifts, uniforms, decorations, and artwork, now featured in the library's new reading room.

This concludes the NDU annual report for Academic Year 2013-2014.