

UNITED STATES AIR FORCE CENTER FOR UNCONVENTIONAL WEAPONS STUDIES



Academic Year

Annual Report



MISSION

Mission: Develop Air Force, DoD, and other USG leaders to advance the state of knowledge, policy, and practices within strategic defense issues involving nuclear, biological, and chemical weapons



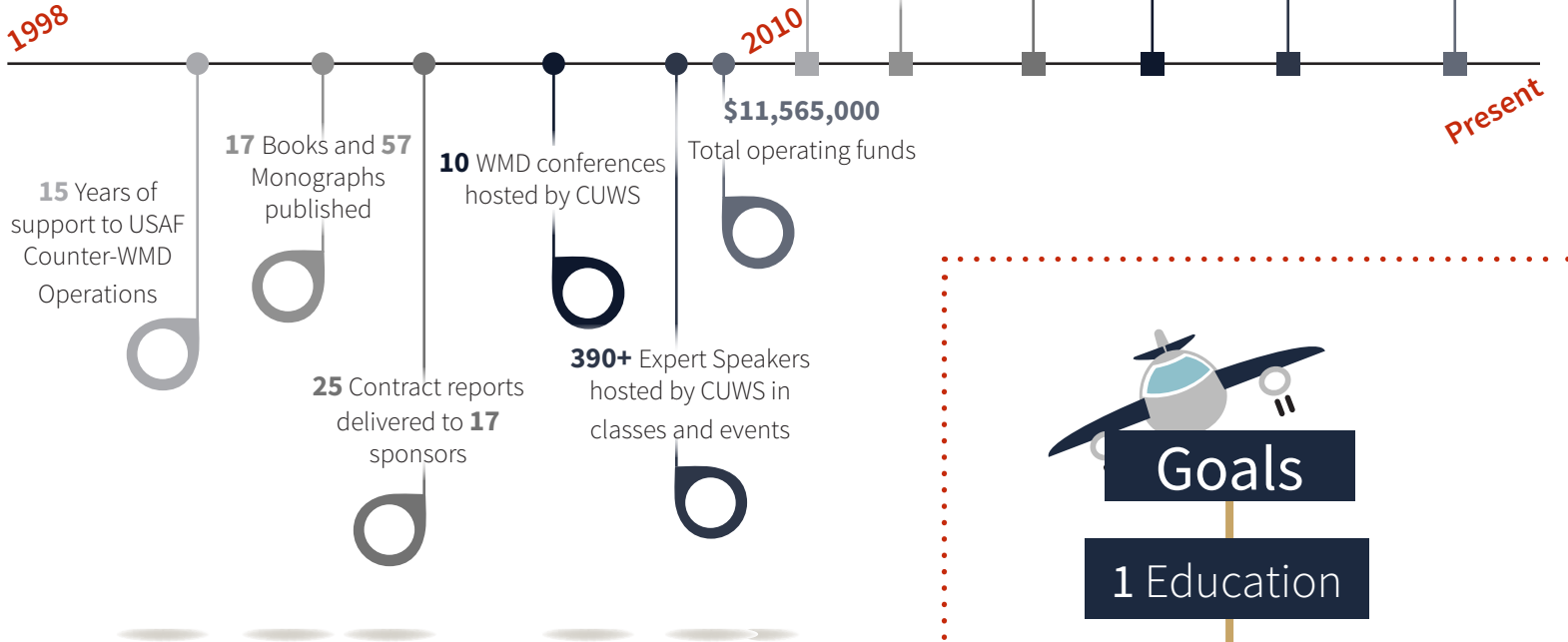
About Us

The USAF Counterproliferation Center was established in 1998 at the direction of the Chief of Staff of the Air Force. Located at Maxwell AFB, this Center capitalizes on the resident expertise of Air University, while extending its reach far beyond – and influences a wide audience of leaders and policy makers. A memorandum of agreement between the Air Staff Director for Nuclear and Counterproliferation (then AF/XON), now AF/A5XP) and Air War College Commandant established the initial manpower and responsibilities of the Center. This included integrating counterproliferation awareness into the curriculum and ongoing research at the Air University; establishing an information repository to promote research on counterproliferation and nonproliferation issues; and directing research on the various topics associated with counterproliferation and nonproliferation.

The Secretary of Defense’s Task Force on Nuclear Weapons Management released a report in 2008 that recommended “Air Force personnel connected to the nuclear mission be required to take a professional military education (PME) course on national, defense, and Air Force concepts for deterrence and defense.” As a result, the Air Force Nuclear Weapons Center, in coordination with the AF/A10 (Strategic Deterrence and Nuclear Integration) and Air Force Global Strike Command, established a series of courses at Kirtland AFB to provide continuing education through the careers of those Air Force personnel working in or supporting the nuclear enterprise. The mission was transferred to the Counterproliferation Center in 2012, broadening its mandate to providing education and research to not just countering WMD but also nuclear operations issues.

In February 2014, the Center’s name was changed to the Center for Unconventional Weapons Studies to reflect its broad coverage of unconventional weapons issues, both offensive and defensive, across the six joint operating concepts (deterrence operations, cooperative security, major combat operations, irregular warfare, stability operations, and homeland security). The term “unconventional weapons,” currently defined as nuclear, biological, and chemical weapons, also includes the improvised use of chemical, biological, and radiological hazards.

Highlights:



AF Nuclear College

Between FY2010 - Present Conducted:

- **5** In resident courses offered **20** times per year
- **2** nuclear Executive Seminars per year
- **8** Mobile Training Team courses on nuclear certification and equipment per year



AF Nuclear College

Between FY2010 - Present Reached:



- **1,190** Military & civilians participated in the Nuclear Certification Process
- **578** Military & civilians educated in Nuclear Certified Equipment
- **590** Military & civilians educated in AFMC's Nuclear Management Course
- **929** Military & civilians educated in Nuclear Fundamentals
- **275** Military & civilians educated in Advanced Nuclear Concepts
- **83** Senior Leaders, Including **13** General officers, educated in Senior Leader Nuclear Management



Goals

1 Education

2 Research

3 Outreach

- 1 Educate Airmen and other USG leaders on how to think critically about the operational and strategic implications of unconventional weapons within the context of military operations
- 2 Produce quality research on relevant unconventional weapon issues that contributes to policy-making while advancing academic scholarship
- 3 Advise Air Force, DoD, and other USG policy-makers by offering critical insights and analysis on current and future (4-15 yrs) challenges posed by unconventional weapons

Goal 1: Education



Educate Airmen and other USG leaders on how to think critically about the operational and strategic implications of unconventional weapons within the context of military operations

Professional Military Education:

- Air War College electives: Nuclear Enterprise Issues Research Group (2 terms); Homeland Security and Defense
- Air War College short elective: Developing Counter-WMD Policy and Strategy
- Air Command and Staff College electives: Arms Control and Treaty Support; WMD, Black Swans, and Homeland Security
- Field trips to HQ Air Staff, Joint Staff, OSD Policy, CIA, State Dept, NNSA, Center for Nonproliferation Studies, Los Alamos National Laboratory, Sandia National Laboratory, Defense Threat Reduction Agency, U.S. Coast Guard Eighth District, FBI-New Orleans District, FEMA's Louisiana Recovery Office, U.S. Immigrations and Customs Enforcement- New Orleans Field Office, New Orleans Office of Homeland Security and Emergency Preparedness, and others

Professional Continuing Education:

- Nuclear Certification Equip User Course: **130** Airmen (enlisted, officers, and civilians)
- Nuclear Certification Process Course: **297** Airmen (enlisted, officers, and civilians)
- Nuclear Management Course: **284** Airmen (enlisted, officers, and civilians)
- Nuclear Fundamentals Course (Nuke 200): **236** Airmen (E6-E8, O1-O4)
- Advanced Nuclear Concept Course (Nuke 300): **140** Airmen (E7-E9, O3-O6)
- Senior Leader Nuclear Management (Nuke 400): **40** Airmen (E-9, O6-O9)

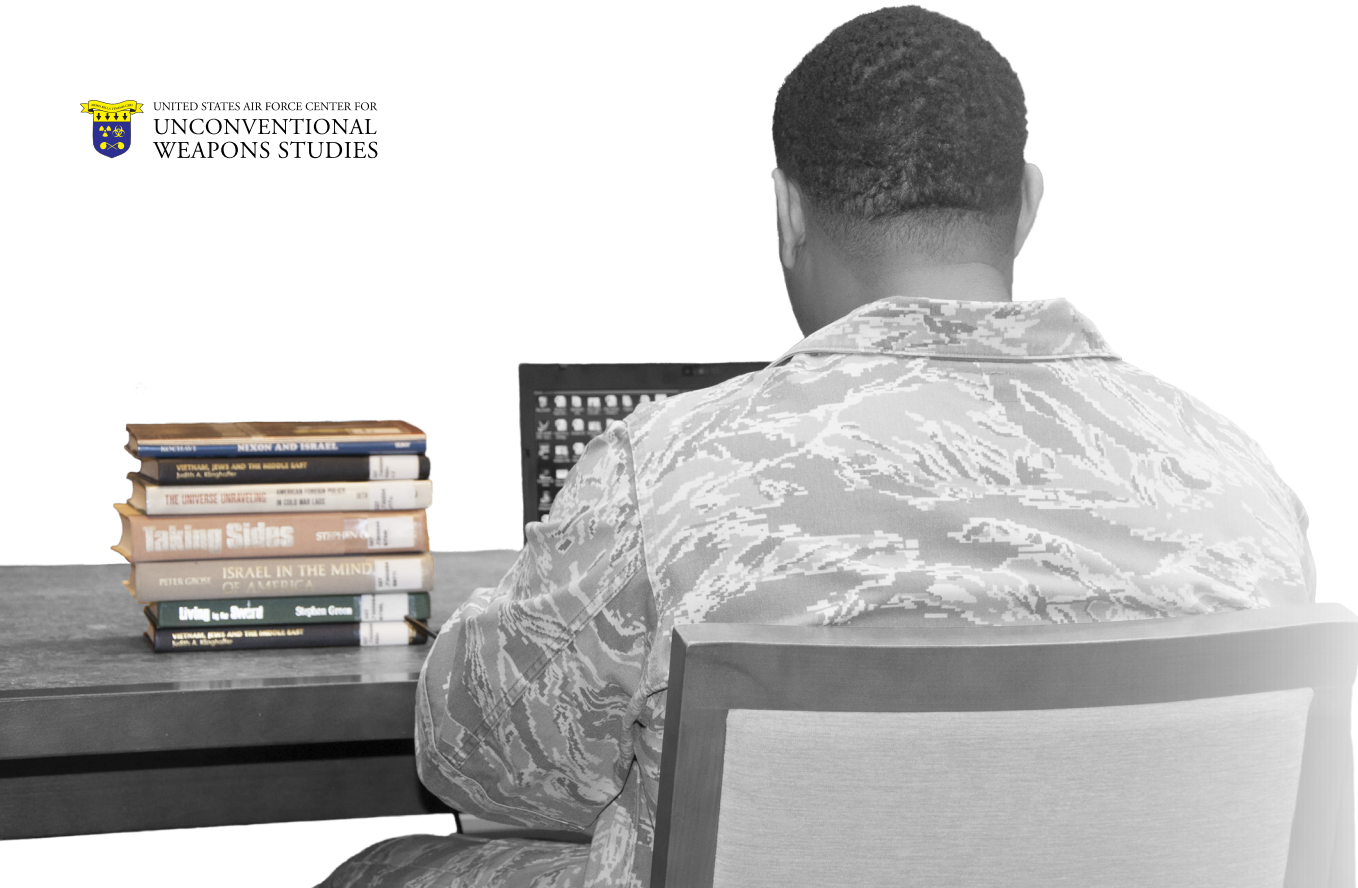
Workshops and Courses:

Conducted Nuclear Enterprise Education Review in Oct 2014 with the major commands and senior mentors (follow-on to the Jun review)

Expert Speakers:

- CAPT Laura Thompson, U.S. Coast Guard
- Mr. Tom DiSilverio, U.S. Northern Command
- LTC Erich Babbitt, 46th WMD Civil Support Team
- Mr. Reid Kirby, CB weapons expert

Goal 2: Research



Produce quality research on relevant unconventional weapon issues that contributes to policy-making while advancing academic scholarship

Original Research

- Trinity Paper #4: “Enhancing Air Interdiction of WMD,” Major Thomas Ward
- CUWS book, “The Artisanal Nuke,” Mary C. Dixon
- CUWS book, “The Strategic Challenge of the U.S. Nuclear Arsenal: AY14 Nuclear Issues Research Group,” Al Mauroni (editor)
- CUWS book, “U.S. Chemical and Biological Warfare Policy: Strategic Deterrents during the Cold War,” Al Mauroni (editor)
- AWC Professional Study Paper, “Nuclear Hell on Wheels: Examining the Need for a Mobile ICBM,” Lt Col Matthew Dillow (AY15 Horner Award)
- ACSC paper, “Broaden Our Horizons: Expanding Test Routes for Realistic Cruise Missile Flight Testing,” Maj Timothy Biggs (AY15 Miller Award)
- Nine electronic journal articles published on the internet

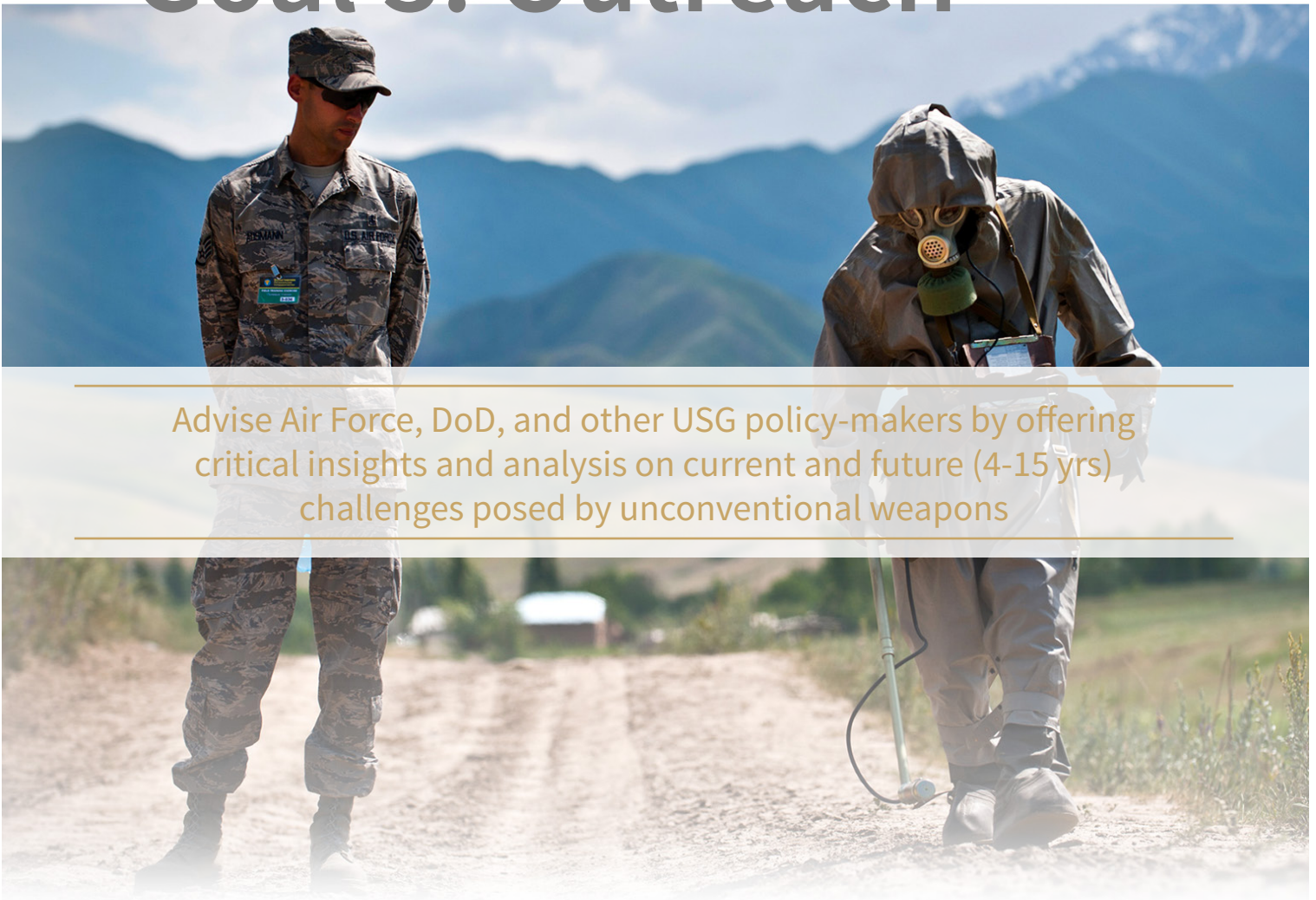
Applied Research

Working with Headquarters Air Force (A10-S) on new AF doctrine annex “Counter-WMD Operations”

Information Repository

Developed info repositories on web site – one for all CUWS Outreach Journals and one for selected govt/public documents on US nuclear deterrence operations

Goal 3: Outreach



Advise Air Force, DoD, and other USG policy-makers by offering critical insights and analysis on current and future (4-15 yrs) challenges posed by unconventional weapons

Social Outreach

- CUWS Outreach Journal emailed to over **2,100** recipients across the national security enterprise – average 30 stories per journal, weekly distribution
- Redesigned CUWS Outreach Journal to a more modern and streamlined electronic format
- Continuing CUWS Video – AUTV **300** broadcasts over the year (2 videos shown 3 times a week) on nuclear and other WMD-related topics for AU faculty and students
- Growing Twitter account (@USAF_CUWS), supporting DoD and AF outreach efforts

External Engagement

- Updated Strategic Issues List to guide prospective CUWS authors
- Participated in the 2014 USSTRATCOM Strategic Deterrence Symposium
- Participated in the 2015 Carnegie International Nuclear Policy Conference
- Participated in 2015 NDU CSWMD Counter-WMD Symposium



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