United States Air Force Element, NPS Advanced Academic Degree Research Topics by Geographic Combatant Command



U.S. AIR FORCE

Overview:

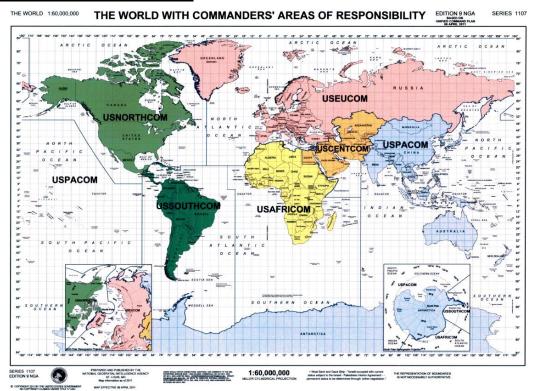
In order to formalize and provide recommended research topics for Air Force Students attending the Naval Postgraduate School (NPS) as part of an Advanced Academic Degree (AAD), this document synchronizes the Combatant Command's (COCOM) strategic priorities and high-emphasis topics with current Air Force Element (AFELM) NPS studies. This document will help students focus research on ongoing initiatives and future strategically important topics. While not inclusive of all relevant ongoing matters, this document can also assist students during their research topic brainstorming. In addition to COCOM topic inputs, this document also identifies existing efforts through Joint Staff J-7 to solicit research topics.

Joint Staff's main focus is to provide research topics to Joint Professional Military Education (JPME) Schools. Their existing database is named "Joint Professional Military Education Prospective Research Topics Database"—PRTD;

https://jdeis.js.mil/jdeis/index.jsp?pindex=324. Joint Staff's solicitation for research topics is conducted with the COCOM, Supporting Commands, the Services, the Joint Staff, and Service Centers for Lessons Learned annually. After compiling research topics, the Joint Staff provides a list of topics to students attending advanced military study programs and intermediate and senior service schools.

This document is organized by Geographic Combatant Command (GCC). It provides a brief description of each GCC, identifies its mission statement, notes their current command priorities/line of efforts, and identifies recommended research topics by GCC.

Geographic Combatant Commands:





<u>United States Africa Command (USAFRICOM)</u>: USAFRICOM is responsible for military relations with African nations, the African Union and African regional security organizations. It protects and defends the interests of the United States by strengthening the defense capabilities of African nations and, in cooperation with African governments, conducts military missions that

increase security while deterring and defeating a variety of transnational threats.

<u>Mission</u>: USAFRICOM, with partners, disrupts and neutralizes transnational threats, protects U.S. personnel and facilities, prevents and mitigates conflict, and builds African partner defense capability and capacity in order to promote regional security, stability and prosperity.

Command Priorities (Lines of Effort):

- Neutralize al-Shabaab and transition the security responsibilities of the African Union Mission in Somalia (AMISOM) to the Federal Government of Somalia (FGS)
- Degrade violent extremist organizations in the Sahel Maghreb and contain instability in Libya;
- Contain and degrade Boko Haram;
- Interdict illicit activity in the Gulf of Guinea and Central Africa with willing and capable African partners
- Build peacekeeping, humanitarian assistance, and disaster response capacity of African partners

Recommended Research Topics:

Topic Title: China's intentions in East Africa

Topic Title: Operational Impacts of Traditional Beliefs in Africa (OITBA)

Topic Title: Military Source Operations Categories

Topic Title: Maximizing Information Sharing with African Partners through Policy, Structure, and

<u>Practice</u>

Topic Title: Local Economic Development Trends that affect US Operations in Africa

Topic Title: Intelligence, Surveillance & Reconnaissance Requirements & Employment in Africa

Topic Title: Humanitarian Assistance/Disaster Relief (HA/DR) and Food Security In Africa

Topic Title: Governance Operations (Security Cooperation, Reconstruction and Stabilization)

Topic Title: "By, With, and Through" Collaboration

Topic Title: Foreign Fighter Flow

Topic Title: East Africa Joint Logistics Integration and Supply Chain Management Tools

Topic Title: US Response to China's expanding influence in Africa

Topic Title: Gulf of Guinea Transregional Challenges

Topic Title: Formation of a Somali National Army

Topic Title: Unification of clan militia members into a true Somalia National Army

Topic Title: <u>United Nations and African Union Peace Mission Mod</u>

Topic Title: The Great Wall in Djibouti and the Gulf of Aden

Topic Title: The Russian Federation vs. the U.S.: A Strategic

Topic Title: Cross GCC Collaboration: Opportunities to Collaborate/Cooperate with China in Africa without adverse consequences to PACOM Strategy

Topic Title: What is China's Intent in the African Continent and How Does it Impact U.S. Strategy

Topic Title: Countering Instability in Africa: DoD's Role in 3D (Diplomatic, Defense, Development)



<u>United States Central Command (USCENTCOM)</u>: USCENTCOM is responsible for operations in twenty countries that fall within the "central" area of the globe: Afghanistan, Bahrain, Egypt, Iran, Iraq, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Oman, Pakistan, Qatar, Saudi Arabia, Syria, Tajikistan, Turkmenistan, United Arab Emirates, Uzbekistan and Yemen. United States

Central Command utilizes national and international partnerships to build cooperation among nations, respond to crisis, deter and defeat threats and support development that ultimately increases stability in the region.

<u>Mission</u>: USCENTCOM directs and enables military operations and activities with allies and partners to increase regional security and stability in support of enduring U.S. interests.

Command Priorities:

- Ensure an Effective Posture
- Strengthen Allies & Partnerships
- Disrupt & Counter VEOs and their Networks
- Deter & Counter State Aggressors

Recommended Research Topics:

Topic Title: Assist Partner Nation Defenses and Bolster Trust

Topic Title: The need for Combatant Commands to stand up a Cyber Component Command

Topic Title: Return on Investment in Offensive Cyberspace Operations

Topic Title: LONG TERM IMPACT OF DECLINING S.T.E.M. CAPABILITY

Topic Title: LONG TERM IMPACT OF BENEFIT CHANGES ON US MILITARY READINESS

Topic Title: Cyberspace Operations C2 Framework

Topic Title: <u>Training Cyber Forces to Analyze Legacy Hardware and Software</u>

Topic Title: How to Best Govern the "Wild West" of Cyberspace

Topic Title: <u>Is It Time for the Civilian Reserve Cyber Force to be Established</u>

Topic Title: Commander's In-extremis Cyber Force a concept we need to develop now?

Topic Title: A best Way Ahead for U.S. Cyberspace Defense

Topic Title: DoD Forensics and Biometrics Program

Topic Title: Does mitigation of CIVCAS impact military operations

Topic Title: By/With/Through - a new paradigm requiring a new approach?

Topic Title: Changing U.S. military presence in the Persian/Ara

Topic Title: Changing U.S. military presence in the Persian/Arabian Gulf Region.

Topic Title: Countering illicit revenue in Combined Joint Operating Area-Afghanistan (CJOA-A)

Topic Title: Operationalizing polling: Applying common political messaging techniques to the fight against terror networks

Topic Title: The Russian Federation vs. the U.S.: A Strategic

Topic Title: Cross CCDM Collaboration: Mil-to-Mil Relations with Pakistan and India

Topic Title: Seam Strategy: Forwarding U.S. Strategy while working with Syria, Iraq, and Turkey

Topic Title: How does the U.S. Minimize the crisis in Yemen While Assisting Our Strategic Partner (Saudi Arabia) and remaining outside of the existing conflict?

Topic Title: Gulf Cooperation Council: The Rift Within and the impact on U.S. Strategy/GCC Relationships.



<u>United States European Command (USEUCOM)</u>: USEUCOM works with NATO and other partner nations to address the security and defense needs of nations in Europe and parts of the Middle East and Eurasia. USEUCOM coordinates with these nations to find cooperative solutions in peace and

wartime alike, to plan training missions, provide humanitarian assistance and to develop strategies for promoting peace and stability in the region.

<u>Mission</u>: USEUCOM's mission is to prepare ready forces, ensure strategic access, deter conflict, enable the NATO Alliance, strengthen partnerships, and counter transnational threats in order to protect and defend the United States.

Command Priorities:

- Ensure Postured and Ready Forces
- Strengthen Strategic Partnerships
- Adapt to a Complex and Dynamic Strategic Environment
- Develop Resilient Servicemembers, Civilians, and Families

Recommended Research Topics:

Topic Title: Turkey in NATO: Would it work better without Turkey?

Topic Title: European Migration Draining European Resources; Opportunities and Challenges to

NATO plan to Defend Europe

Topic Title: Cyber Warfare

Topic Title: Theory of Deterrence

Topic Title: <u>Narcotics Sales in Eur</u>ope

Topic Title: National Resource Costs to Influence Global Policy

Topic Title: Rising Russia and the Need for Global Strike Deterrent Capabilities 11

Topic Title: The Russian Federation vs. the U.S.: A Strategic



<u>United States Northern Command (USNORTHCOM)</u>: USNORTHCOM operates in the area of responsibility encompassing the continental United States, Alaska, Mexico, Canada, portions of the Caribbean and surrounding waters. USNORTHCOM is primarily responsible for civil support and homeland security and also oversees the North American Aerospace

Defense Command (NORAD). USNORTHCOM has few permanent forces and is instead assigned forces by the Secretary of Defense or the President whenever required for the execution of its missions.

<u>Mission</u>: USNORTHCOM partners to conduct Homeland Defense and Civil Support operations within the assigned area of responsibility to defend, protect, and secure the United States and its interests.

Command Priorities:

- Expand and strengthen our trusted partnerships
- Advance and sustain the binational military command
- Gain and maintain all-domain situational awareness
- Advocate and develop capabilities in our core mission areas to outpace all threats
- Take care of our people; they are our foundation

Recommended Research Topics:

Topic Title: <u>Assess accuracy of DOD Name Based Databases in establishing a person's authentic</u> identity

Topic Title: Animal Decontamination in CBRN Response Enterprise Operations

Topic Title: Countering Criminal and Drug Trafficking Organizations in the Cyber Domain

Topic Title: COG Analysis of Drug Trafficking Organizations

Topic Title: Alignment of Counter-Transnational Organized Crime (CTOC) responsibilities

Topic Title: NGO Network

Topic Title: DSCA HF Nets

Topic Title: Wind Turbine Radar Interference Mitigation

Topic Title: <u>Aerospace Warning & Control of Advanced Cruise Missile Threats</u>

Topic Title: The Dragon's New Bear Rug

Topic Title: Why are East and West Coast Maritime Command and Control (C2) Different?

Page | 8 Author: Lt Col Jorge Jaramill

Topic Title: Western Hemisphere Mass Migration

Topic Title: Unmanned Aircraft Systems (UAS) and force protection in the USNORTHCOM AOR

Topic Title: Threat Analysis: Foreign Terrorist Organizations and Transnational Criminal

Organizations

Topic Title: <u>Southwest Border Training Lessons for Oversees Contingency Missions</u>

Topic Title: Should Mexico join NORAD?

Topic Title: Maximizing Effectiveness of DoD Training through JTF-N

Topic Title: "Leadership Decapitation" of Transnational Criminal and Drug Trafficking

Organizations

Topic Title: <u>Interagency Coordination</u>

Topic Title: Interagency Common Operating Picture / Common Intelligence Picture

Topic Title: Homeland Joint Interagency Task Force (JIATF) to Combat Transnational Organized

Crime (CTOC)

Topic Title: Economic/Threat Analysis of Narcotics Supply Chain

Topic Title: Operationalizing polling: Applying common political messaging techniques to the

fight against terror networks

Topic Title: The Russian Federation vs. the U.S.: A Strategic



<u>United States Pacific Command (USPACOM)</u>: USPACOM oversees an area of responsibility stretching from the waters of the United States' west coast to the western border of India, and from Antarctica to the North Pole, encompassing 36 diverse nations. USPACOM and its partners work to promote the development of the region while cooperating to enhance

security, deter aggression, respond with force when necessary and to provide humanitarian assistance.

<u>Mission</u>: USPACOM protects and defends, in concert with other U.S. government agencies, the territory of the United States, its people, and its interests. With allies and partners, we will enhance stability in the Indo-Asia-Pacific region by promoting security cooperation, responding to contingencies, deterring aggression, and, when necessary, fighting to win.

Command Priorities:

- Defend the Homeland
- Be Ready to Fight Tonight
- Lead the Rebalance
- Have Unity of Purpose
- Operationalize Theater Command and Control
- Optimize Our Organization

Recommended Research Topics:

Topic Title: Examples of US participation in non-US led coalitions or combined forces

Topic Title: USPACOM Munitions Storage Feasibility Study and Cost Benefit Analysis

Topic Title: (U) Intelligence Support to Cyberspace Operations and Targeting

Topic Title: Multi domain Authorities for Multi Domain Operations, an initial examination

Topic Title: Given the current Operational Environment, how can the United States Army Pacific best support each of the non-military aspects of the newly-identified Instruments of National Power (MIDFIELD - Military, Informational, Diplomatic, Financial, Intelligence, Economic, Law, and Development) in support of the United States and Allies" interests in the Indo-Pacific?

Topic Title: ORGANIZATIONAL CULTURE - EXPLORING DIVERSITY, ETHICS, AND CULTURAL COMPETENCY

Topic Title: Long term foreign national presence on Andersen AFB

Topic Title: Joint Systems Acquisition for Winning the Distributed Basing War

Topic Title: Non-material solutions to increase the efficiency

Topic Title: <u>Creating Episodic Information Exchange and Data Ma</u>

Topic Title: <u>IMPACT OF RESERVE LOGISTICS ENABLERS AND FORCES TO</u>

Topic Title: <u>U.S. Exercise Engagement With Host Nations</u>

Topic Title: <u>United Nations-led Non-combatant Evacuation Operations</u>

Topic Title: Alliance information sharing

Topic Title: Examples of US participation in non-US led coalitions or combined forces

Topic Title: How to prevent nK WMD Proliferation

Topic Title: Can Humanitarian Assistance (HA) Disaster Relief (DR) engagements with the

PRC during Phase 0, shape Phase IV and V operations in the KTO?

Topic Title: Force projection and sustainment against North Korea

Topic Title: Friendly friction and initial North Korean tempo advantage

Topic Title: Contest of Wills with North Korea

Topic Title: 2035 Force Development Solutions for North Korea

Topic Title: North Korea Escalation Control

Topic Title: North Korean WMD Elimination

Topic Title: Decapitation

Topic Title: Neutralize North Korean WMD

Topic Title: <u>Defeat North Korean aggression out through 2035</u>

Topic Title: Homeland Defense against North Korea

Topic Title: The Russian Federation vs. the U.S.: A Strategic

Topic Title: Pacific Collaboration: Partner Nation Cooperation for Pacific Security

<u>United States Southern Command (USSOUTHCOM)</u>: USSOUTHCOM oversees an area of responsibility encompassing 31 nations in the Latin America region south of Mexico, Central and South America, and the Caribbean Sea. USSOUTHCOM works to increase the security of the United States by engaging its partners to enhance the peacekeeping abilities of the region, to promote

human rights, to deter illegal activities associated with illicit trafficking and to conduct multinational military exercises designed to strengthen partnerships while developing collective capabilities.

<u>Mission</u>: USSOUTHCOM leverages rapid response capabilities, partner nation collaboration, and regional cooperation within our Area of Responsibility in order to support U.S. national security objectives, defend the Southern approaches to the United States, and promote regional security and stability.

Command Priorities (Lines of Effort):

- Countering Transnational and Transregional Threat Networks (C-T3N)
- Building relationships to meet global challenges
- Enabling Rapid Response

Recommended Research Topics:

Topic Title: Military Medical Capability Gaps by Country

Topic Title: SIA Facilitation Networks and their Illicit and Indigenous Partners in South

<u>America</u>

Topic Title: <u>National Security Implications of Transregional Threat</u>

Topic Title: Impact of Transnational Organized Crime (TOC) in Central America (CENTAM)

and its effect on US Security

Topic Title: <u>Identifying black swan events that threaten US National Security Interests</u>

Topic Title: Determining/Measuring US Influence via US Military Power in Latin America

Topic Title: Mass Migration events

Topic Title: Migrant flow and interdiction

Topic Title: Changing SOUTHCOM's countering transnational organized crime (CTOC)

Strategy

Topic Title: Migrant flow and interdiction

Topic Title: Western Hemisphere Mass Migration

Topic Title: The Russian Federation vs. the U.S.: A Strategic

Topic Title: Dealing with Growing Chinese Influence in South America

Topic Title: Cross CCMD Collaboration Initiative

Topic Title: Pacific Collaboration: Partner Nation Cooperation for Pacific Security