

NORTH AMERICAN DEFENSE AND SECURITY ACADEMIC ALLIANCE ACADEMIC YEAR 2023-2024 NORAD AND USNORTHCOM PROSPECTIVE RESEARCH TOPIC NOMINATIONS

Table of Contents

NORAD Topic Nominations

1. Counter-Small Unmanned Aerial System (C-sUAS) Track Data Integration.....2
2. 6th Generation Over-the-Horizon Radar Wide Area Persistent All-Domain Awareness across Combatant Commands and Space Integration.....3

NORAD and USNORTHCOM Topic Nominations

3. Surges in Maritime Migration and Impacts on Homeland Defense.....4
4. Force Assignment, Allocation, and Apportionment.....5
5. Unified Campaign Plan Review.....6
6. Processes, Institutions, and Key Individuals Involved in the Drafting of Russia’s Long-Term Threat Assessments.....7
7. Russia’s Research and Development, Acquisition and Field Deployment Process, and Institutions and Key Individuals for the Integration of New Operational Concepts and Weapons Systems into the Russian Armed Forces.....8
8. Russia’s Defense Design and Deliberate Strategic Planning Process, Institutions, and Key Individuals..9
9. Deterrence by Denial: Is Achieving Decisions Superiority through Globally Integrated All-Domain Awareness and Information Dominance Enough?.....10
10. Integrated Layered Defense of the Homeland: National Security Prerequisite or Preoccupation.....11
11. Competition: Are NORAD and USNORTHCOM Postured, Positioned, and Prepared? What Does Competition Mean to NORAD and USNORTHCOM?.....12
12. Chinese Policies and Their Impact to Mexican Transnational Criminal Organization (TCO) Fentanyl Production.....13
13. Cyber Vulnerabilities – Civilian Infrastructure on Military Operations.....14
14. Logistics in a Cyber Contested Environment and Mitigation Strategy (-ies).....15
15. Inflated EGOS: Exploitation of Gas-Operated Systems (EGOS) in the Stratosphere (20 – 50 km).....16
16. Baby (go) Boom! Military Recruitment Strategies for a Declining Population Demographic.....17
17. Prism-er of War: Swarm-Enabled Decomposition/Recomposition of Directed Energy Weapon Systems.....18
18. American Way of War.....19
19. Should a "Homeland Defense Corps" be Established?.....20
20. Should the U.S. Civil Defense Corps be Reestablished?.....22

Counter-Small Unmanned Aerial System (C-sUAS) Track Data Integration

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	C-sUAS Track Data Integration
TOPIC DESCRIPTION:	Security agencies at all levels of the US Government need warning "decision space" to react at the tactical level in protecting people and critical infrastructure from a sUAS threat. This requires a situational awareness picture, accessible and understandable by all security partners, which is fed by databases and any sensors that detect the track.
DESIRED OBJECTIVES:	
EXTENDED TOPIC DESCRIPTION:	<p>Determine:</p> <ol style="list-style-type: none"> 1. List of required actions at Federal, State, & lower governmental levels. 2. Timeline of required actions. 3. Policies needed at federal, state & local levels. 4. Strategy for unity of actions among governmental levels. <p>Homeland security and defense partners need to establish integrated sUAS awareness and warning capability which enables detection and appropriate reaction/mitigation by federal, state, local, tribal and territorial security partners. As part of this vision, these template tools, open architecture and agreements will be used to reduce gaps in coverage, to improve detection and to enable mitigation of low-observable and small air threats (to include sUAS) throughout North America.</p>
REQUESTING/SPONSORING ORGANIZATION:	NORAD
SUBMISSION DATE:	2 Sep 21
DESIRED COMPLETION DATE:	30 Jun 24
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	<p>Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.</p> <p>It is recommended that researchers start with federal statutes which lay out info sharing restrictions between law enforcement, defense department and local security organizations.</p>

[Back to Top](#)

6th-Generation Over-the-Horizon Radar: Wide Area Persistent, All-Domain Awareness across Combatant Commands and Space Integration

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	6th-Gen Over-the-Horizon Radar: Wide Area Persistent, All-Domain Awareness across Combatant Commands (CCMDs) and Space Integration
TOPIC DESCRIPTION:	Research 6th-Gen Over the Horizon Radars that provide Wide Area Persistent All-Domain Awareness across CCMDs including Space Integration, feasibility and employment concepts.
DESIRED OBJECTIVES:	Provide N&NC recommendations on the sensor capabilities, processing, best placement with a 360 degree mindset on defending the homelands, while integrating todays sensors including Space Integration, feasibility and employment concepts.
EXTENDED TOPIC DESCRIPTION:	Research 6th-Gen Over the Horizon Radars that provide Wide Area Persistent, All-Domain Awareness across CCMDs including Space Integration. Consider integration with existing systems and architecture and make recommendation based on findings for locations future employment and feasibility to assist N&NC Detect, Track, ID, and Warn against peer competitor threats.
REQUESTING/SPONSORING ORGANIZATION:	NORAD
SUBMISSION DATE:	1 Sep 21
DESIRED COMPLETION DATE:	30 Jun 24
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	<p>Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.</p> <p>Future advanced Long Range, Wide Area, Over-the-Horizon Radar Detection of modern threats is required to enable decision, space, and time for national leaders in support of the defense of the homelands.</p>

[Back to Top](#)

Surges in Maritime Migration and Impacts on Homeland Defense

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Surges in maritime migration and impacts on Homeland Defense (HD)
TOPIC DESCRIPTION:	Provide study on the impact of a Caribbean Mass Migration or Caribbean surge in migration and its impact on Homeland Defense.
DESIRED OBJECTIVES:	Impact on HD forward, approaches, and port security and littorals.
EXTENDED TOPIC DESCRIPTION:	Deep dive Coast Guard HD readiness impact while executing migrant interdiction and repatriation, address challenges to other government agencies, and develop a HD risk assessment to include vulnerabilities, threat intent and capability (10 years plus), mitigation opportunities, deterrence options, and consequence if mitigation efforts are not taken to address vulnerabilities to HD, etc.
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	31 Jan 23
DESIRED COMPLETION DATE:	30 Jun 2024
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Force Assignment, Allocation, and Apportionment

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Force Assignment, Allocation, and Apportionment
TOPIC DESCRIPTION:	Review, revise, and change current Force Assignment/Allocation/Apportionment methods and priorities.
DESIRED OBJECTIVES:	Provide a more realistic construct that enable effective force management to meet global security issues.
EXTENDED TOPIC DESCRIPTION:	Current Force Allocation methodologies tend to support the deployment of ad hoc formations to meet Combatant Command (COCOM) needs. Additionally, apportionment of practices create false impressions for each COCOM regarding true force availability.
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	31 Aug 21
DESIRED COMPLETION DATE:	30 Jun 24
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Unified Campaign Plan Review

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Unified Campaign Plan (UCP) Review
TOPIC DESCRIPTION:	Review, revise, or replace UCP.
DESIRED OBJECTIVES:	Provide a mechanism to better posture the nation for integrated security.
EXTENDED TOPIC DESCRIPTION:	The utilization of Geographical Combatant Commands (GCCs) allows regional focus and expertise. It also provides our enemies with gaps and seams to exploit. Further, it does not adequately address a whole of government solution, to include the private sector, when dealing with homeland defense.
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	31 Aug 21
DESIRED COMPLETION DATE:	30 Jun 24
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Processes, Institutions, and Key Individuals Involved in the Drafting of Russia's Long-Term Threat Assessments

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Processes, Institutions, and Key Individuals Involved in the Drafting of Russia's Long-Term Threat Assessments
TOPIC DESCRIPTION:	Product will serve as a partial answer to Combatant Commander (CCDR) NORAD and USNORTHCOM's question – How does Russia think about strategy?
DESIRED OBJECTIVES:	Answer the CCDR's question - How does Russia think about strategy?
EXTENDED TOPIC DESCRIPTION:	N/A
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	1 Sep 21
DESIRED COMPLETION DATE:	30 Jun 24
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Russia's Research and Development, Acquisition and Field Deployment Process, and Institutions and Key Individuals for the Integration of New Operational Concepts and Weapons Systems into the Russian Armed Forces

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Russia's Research & Development, Acquisition and Field Deployment Process, Institutions and Key Individuals for the Integration of New Operational Concepts and Weapons Systems into the Russian Armed Forces
TOPIC DESCRIPTION:	Product will serve as a partial answer to Combatant Commander (CCDR) NORAD and USNORTHCOM's question – How does Russia think about strategy?
DESIRED OBJECTIVES:	Answer the CCDR's question - How does Russia think about strategy?
EXTENDED TOPIC DESCRIPTION:	N/A
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	1 Sep 21
DESIRED COMPLETION DATE:	30 Jun 24
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Russia's Defense Design and Deliberate Strategic Planning Process, Institutions, and Key Individuals

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Russia's Defense Design and Deliberate Strategic Planning Process, Institutions, and Key Individuals
TOPIC DESCRIPTION:	Product will serve as a partial answer to Combatant Commander (CCDR) NORAD and USNORTHCOM's question – How does Russia think about strategy?
DESIRED OBJECTIVES:	Answer the CCDR's question - How does Russia think about strategy?
EXTENDED TOPIC DESCRIPTION:	N/A
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	1 Sep 21
DESIRED COMPLETION DATE:	30 Jun 24
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Deterrence by Denial: Is Achieving Decisions Superiority through Globally Integrated All-Domain Awareness and Information Dominance Enough?

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Deterrence by Denial: Is achieving Decision Superiority (DS) through Globally Integrated (GI) All-Domain Awareness (DA) and Information Dominance (ID) enough?
TOPIC DESCRIPTION:	Unlike deterrence by punishment, deterrence by denial seeks to influence an opponent to either not do something or do something they would rather not do. Are NORAD and USNORTHCOM strategic principles (DA, ID, DS, GI) enough to achieve deterrence by denial?
DESIRED OBJECTIVES:	<ol style="list-style-type: none"> 1. Assess the viability of deterrence by denial. 2. Determine if NORAD and USNORTHCOM strategic principles (DA, ID, DS, GI) achieve deterrence by denial. 3. Recommend additional principles if DA, ID, DS, and GI do not achieve deterrence by denial.
EXTENDED TOPIC DESCRIPTION:	Deterrence by punishment is fearing the prohibitive costs of reprisal. Deterrence by denial strives to influence an opponent to either not do something or do something they would rather not do. Nuclear deterrence remains the bedrock of the United States' defense. Reliance on nuclear deterrence alone creates an exploitable gap if competitors believe they can achieve objectives below the nuclear threshold. Directed in the Unified Command Plan, Commander, NORAD and USNORTHCOM, is responsible for planning, organizing, and as directed executing homeland defense operations within the USNORTHCOM area of responsibility. Are NORAD and USNORTHCOM strategic principles (DA, ID, DS, GI) enough to achieve deterrence by denial?
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	1 Sep 21
DESIRED COMPLETION DATE:	31 Jul 2024
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Integrated Layered Defense of the Homeland: National Security Prerequisite or Preoccupation

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Integrated Layered Defense of the Homeland: National Security Prerequisite or Preoccupation
TOPIC DESCRIPTION:	Integrated Layered Defense of the Homeland comprises all domains (e.g., air, land, maritime, space, cyberspace) and geographies (e.g., global, regional, and local). Integrated Layered Defense protects United States' vital national interests.
DESIRED OBJECTIVES:	<ol style="list-style-type: none"> 1. Assess Integrated Layered Defense of the Homeland as a national security prerequisite. 2. Develop insights on policy for Integrated Layered Defense.
EXTENDED TOPIC DESCRIPTION:	Integrated Layered Defense of the Homeland comprises all domains (e.g., air, land, maritime, space, cyberspace) and geographies (e.g., global, regional, and local). Integrated Layered Defense creates the balance between offensive and defensive actions necessary to protect United States' vital national interests. An integrated layered defense is the result of coordinated efforts with adjacent Combatant Commands, Allies and Partners, and Whole of Government/Interagency to deter and, if necessary, defeat threats.
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	1 Sep 21
DESIRED COMPLETION DATE:	31 Jul 2024
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Competition: Are NORAD and USNORTHCOM Postured, Positioned, and Prepared? What Does Competition Mean to NORAD and USNORTHCOM?

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Competition: Are NORAD and USNORTHCOM Postured, Positioned, and Prepared? What Does Competition Mean to NORAD and USNORTHCOM?
TOPIC DESCRIPTION:	The Competition Continuum is documented in Joint Doctrine Note 1-19 (2019). The missions of NORAD and USNORTHCOM ultimately serve to protect North America and deter aggression. Are NORAD and USNORTHCOM effectively competing? What capabilities are necessary to effectively compete?
DESIRED OBJECTIVES:	<ol style="list-style-type: none"> 1. Assess NORAD and ability to compete. 2. Develop insights on the necessary capabilities and conditions for NORAD and USNORTHCOM to compete.
EXTENDED TOPIC DESCRIPTION:	The Competition Continuum is documented in Joint Doctrine Note 1-19 (2019). The competition continuum describes a world of enduring competition conducted through a mixture of cooperation, competition below armed conflict, and armed conflict. The missions of NORAD and USNORTHCOM ultimately serve to protect North America and deter aggression. Are NORAD and USNORTHCOM effectively competing? What capabilities are necessary to effectively compete?
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	1 Sep 21
DESIRED COMPLETION DATE:	31 Jul 2024
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Chinese Policies and Their Impact to Mexican Transnational Criminal Organization (TCO) Fentanyl Production

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Chinese Policies and Their Impact to Mexican Transnational Criminal Organization (TCO) Fentanyl Production
TOPIC DESCRIPTION:	Identify the Chinese policies that enable continued flow of finished fentanyl and precursor chemicals to Mexico.
DESIRED OBJECTIVES:	1. Identify Chinese laws, regulations, cultural considerations, etc., that undermine efforts to stem precursor chemical flow into Mexico. 2. Distinguish between Chinese government (CCP) and Chinese Transnational Criminal Organization activities (government complicity? Criminal enterprise?).
EXTENDED TOPIC DESCRIPTION:	Chinese national laws, the structure of government organizations (state owned enterprises vice private) and differences in legal and business practices likely impact how China addresses/fines/sanctions companies or individuals facilitating the shipment of fentanyl precursor chemicals to Mexico. Better understanding how China's system is set up and enables/mitigates these shipments would provide a foundation for N&NC J2, NCJ3 and N&NCJ5 efforts to combat the raw components of fentanyl production in Mexico as part of a whole-of-government approach to countering transnational organized crime.
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	1 Sep 2021
DESIRED COMPLETION DATE:	1 Jun 2024
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Cyber Vulnerabilities – Civilian Infrastructure on Military Operations

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Cyber Vulnerabilities – Civilian Infrastructure on Military Operations
TOPIC DESCRIPTION:	What is the effect of adversary cyber attack(s) on civilian infrastructure?
DESIRED OBJECTIVES:	A prioritized list of critical civilian infrastructure impacting Homeland defense and a mitigation strategy (-ies).
EXTENDED TOPIC DESCRIPTION:	N/A
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	31 Aug 2021
DESIRED COMPLETION DATE:	1 Jun 2024
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Logistics in a Cyber Contested Environment and Mitigation Strategy (-ies)

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Logistics in a Cyber Contested Environment and Mitigation Strategy (-ies)
TOPIC DESCRIPTION:	Homeland Defense (strategic) logistics in a cyber contested environment and mitigation strategy (-ies).
DESIRED OBJECTIVES:	Define critical logictic nodes and the effect of cyber attack on defense and a mitigation strategy (-ies).
EXTENDED TOPIC DESCRIPTION:	N/A
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	31 Aug 2021
DESIRED COMPLETION DATE:	1 Jun 2024
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Inflated EGOS: Exploitation of Gas-Operated Systems (EGOS) in the Stratosphere (20 – 50 km)

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Inflated EGOS: Exploitation of Gas-Operated Systems (EGOS) in the Stratosphere (20 – 50 km)
TOPIC DESCRIPTION:	Wide-ranging exploration and analysis of options available to counter, mitigate, or exploit an adversary's use of high-altitude lighter-than-air (HALTA) systems.
DESIRED OBJECTIVES:	Return on Investment (ROI) recommendations regarding one or more promising lines of development and testing of capabilities to turn adversarial use of HALTA systems to blue force advantage.
EXTENDED TOPIC DESCRIPTION:	High-altitude lighter-than-air (HALTA) technology has matured over many decades and is in common use for weather observation and other commercial applications. Military use of these systems has a similar extended history, fulfilling a variety of missions. Countering an adversary's use of such systems includes kinetic neutralization (direct shoot-down), but other options may exist that invert the adversary's cost-benefit analysis to blue force advantage. This research proposes to consider a variety of options, including standoff (ground-, air-, or space-based), proximity (co-suspended), attachment (remora), or penetration (puncture-and-seal), to emplace a device that can surreptitiously monitor, modify, or fully override the functionality of the targeted system.
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	4 Mar 2023
DESIRED COMPLETION DATE:	31 Jul 2024
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Baby (go) Boom! Military Recruitment Strategies for a Declining Population Demographic

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Baby (go) Boom! Military Recruitment Strategies for a Declining Population Demographic
TOPIC DESCRIPTION:	Macro numerical analysis of whether reduced manning requirements in future semi- and fully-autonomous weapon systems will lead or lag the availability of sufficient numbers of qualified candidates to operate them.
DESIRED OBJECTIVES:	Identification of one or more key inflection points indicating when the array of military capabilities becomes limited not by lethal effectiveness but by insufficient manning, with suggested strategies to eliminate or at least delay or mitigate such a situation.
EXTENDED TOPIC DESCRIPTION:	Advances in military technology have steadily reduced the number of personnel needed to man a given weapon system to achieve a defined level of battlefield effectiveness. However, projected trends in future population demographics suggest not only a declining pool of candidates with the skills required to operate these advanced systems, but an increase in the competition for these talented individuals. This analysis seeks to identify if and when these trends will become the limiting factor in projected combat effectiveness, and, based on a prioritized assessment of characteristics of the available recruiting pool, which strategies or incentives should be employed to sustain overall military mission assurance.
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	4 Mar 2023
DESIRED COMPLETION DATE:	31 Jul 2024
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

Prism-er of War: Swarm-Enabled Decomposition/Recomposition of Directed-Energy Weapon Systems

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Prism-er of War: Swarm-Enabled Decomposition/Recomposition of Directed-Energy Weapon Systems
TOPIC DESCRIPTION:	Concept development and feasibility study of prismatic decomposition of a directed-energy beam toward an array of Unmanned aerial vehicles (UAVs) prepositioned spherically around a target, with reflected recomposition focused on the target from all directions.
DESIRED OBJECTIVES:	Prototype development and testing proposal to demonstrate and evaluate candidate weapon system(s).
EXTENDED TOPIC DESCRIPTION:	Weapon systems employing a single, high-powered, coherent directed-energy beam may be defended against using a deflection strategy in line between the weapon and its target. If, however, the beam can be decomposed, redistributed to a dispersed swarm of UAVs surrounding the target, and reflected/recomposed toward the point target, the system is now an all-aspect directed-energy weapon, similar in principle to solar-energy thermal power generation. This research project examines the anticipated technical challenges involved, identifies promising solutions, and describes the critical aspects of design, development, and testing for one or more prototypes.
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	4 Mar 2023
DESIRED COMPLETION DATE:	31 Jul 2024
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.

[Back to Top](#)

American Way of War

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	American Way of War
TOPIC DESCRIPTION:	Is the American way of war, focusing on the away game, relevant in today's globally interconnected world?
DESIRED OBJECTIVES:	Explore the need for Homeland Defense (HD)
EXTENDED TOPIC DESCRIPTION:	Many in DOD minimize the need to HD investments compared to the away game - taking the fight to an adversary.
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM
SUBMISSION DATE:	Fall 2021
DESIRED COMPLETION DATE:	Jul 2024
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM. Can be viewed from a policy, logistics, doctrine, or technology perspective.

[Back to Top](#)

Should a “Homeland Response Corps” be Established?

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Should a “Homeland Response Corps” (similar to the former Civil Defense Corps) be established?
TOPIC DESCRIPTION:	Determine if there is a current or emerging need, and the potential for unmet domestic response capabilities that could be addressed by a largely volunteer Homeland Response Corps, similar to that which existed during WWII and the Cold War? If so, propose what its form and functions should be.
DESIRED OBJECTIVES:	Explore the need for Homeland Defense (HD)
EXTENDED TOPIC DESCRIPTION:	<p>Facts bearing on the question:</p> <p>The strategic environment has changed</p> <ul style="list-style-type: none"> • The homeland is no longer a sanctuary • Potential adversaries are more aggressive, numerous and capable • Competitors and potential adversaries are forming alliances • Any conflict with those adversaries will be global rather than regional impacting the homeland • The U.S. and its allies ability to deter attacks on the homeland across the spectrum of conflict has diminished <p>The U.S. capability, resources and forces available to address multiple challenges simultaneously has diminished since the 1990’s.</p> <p>The U.S. military force structure and regional Operational Plans (OPLANs) require significant mobilization of the Reserve Components, including the National Guard which serves as the primary combat reserve of the Army and Air Force and primary domestic response force.</p> <p>Simultaneous execution of regional OPLANs, or a conflict fought globally, will leave few forces available to support/protect US critical infrastructure, local governments and the domestic population.</p> <p>Recent events such as the pandemic, civil disturbances, natural disasters, wildland fires and overseas commitments exceeded interagency capacities resulting in unprecedented “peace time” mobilization of the reserve components within the homeland to meet the needs.</p> <p>The Federal Emergency Management Agency (FEMA), federal and state emergency services and first responder departments and agencies did not have the capacity to cope with these recent events, nor are they projected to be able to effectively address the impacts of a significant attack on the homeland.</p>
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM

SUBMISSION DATE:	31 Jan 2023
DESIRED COMPLETION DATE:	30 Jun 2024
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	<p>Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.</p> <p>Background: Historically, Civil defense comprised activities designed to minimize the effects of war on the civilian population, deal with immediate emergency conditions, and quickly restore vital utilities and facilities damaged in an attack.</p> <p>The Office of Civilian Defense (OCD) was established by President Franklin D. Roosevelt in May 1941. It was responsible for planning community health programs and medical care of civilians in the event of a military attack on the United States.</p> <p>With the Federal Civil Defense Act of 1950, Congress charged the Federal Civil Defense Administration (FCDA) with creating shelter, evacuation, and training programs that state and local governments would implement. Local governments could request federal funds for these programs and for post-attack health care and reconstruction.</p> <p>In 1979, President Carter signed Executive Order 12179 merging the successor to the Federal Civil Defense Administration (The Defense Civil Preparedness Agency–DCPA) into today’s FEMA. In 2003, FEMA was merged into the U.S. Department of Homeland Security.</p>

[Back to Top](#)

Should the U.S. Civil Defense Corps be Reestablished?

CLASSIFICATION:	UNCLASSIFIED
RESEARCH TOPIC TITLE:	Should the U.S. Civil Defense Corps be reestablished?
TOPIC DESCRIPTION:	Determine if there is a current or emerging need, and the potential for unmet domestic response organization and capabilities that could be addressed by a largely volunteer Civil Defense organization, similar to that which existed during WWII and the Cold War? If so, propose what its form and functions should be.
DESIRED OBJECTIVES:	Explore the need for Homeland Defense (HD)
EXTENDED TOPIC DESCRIPTION:	<p>Facts bearing on the question:</p> <p>The strategic environment has changed</p> <ul style="list-style-type: none"> • The homeland is no longer a sanctuary • Potential adversaries are more aggressive, numerous and capable • Competitors and potential adversaries are forming alliances • Any conflict with those adversaries will be global rather than regional impacting the homeland • The U.S. and its allies ability to deter attacks on the homeland across the spectrum of conflict has diminished <p>The U.S. capability, resources and forces available to address multiple challenges simultaneously has diminished since the 1990's.</p> <p>The U.S. military force structure and regional Operational Plans (OPLANs) require significant mobilization of the Reserve Components, including the National Guard which serves as the primary combat reserve of the Army and Air Force and primary domestic response force.</p> <p>Simultaneous execution of regional OPLANs, or a conflict fought globally, will leave few forces available to support/protect US critical infrastructure, local governments and the domestic population.</p> <p>Recent events such as the pandemic, civil disturbances, natural disasters, wildland fires and overseas commitments exceeded interagency capacities resulting in unprecedented "peace time" mobilization of the reserve components within the homeland to meet the needs.</p> <p>The Federal Emergency Management Agency (FEMA), federal and state emergency services and first responder departments and agencies did not have the capacity to cope with these recent events, nor are they projected to be able to effectively address the impacts of a significant attack on the homeland.</p>
REQUESTING/SPONSORING ORGANIZATION:	NORAD and USNORTHCOM

SUBMISSION DATE:	2 Sep 2021
DESIRED COMPLETION DATE:	30 Jun 2024
POINT OF CONTACT:	N&NC/J72
MAILING ADDRESS:	NORAD&USNORTHCOM/J72, 250 Peterson Rd (BLDG 1470), Suite 401, Peterson AFB, CO 80914-3813
EMAIL ADDRESS:	n-nc.peterson.n-ncj7.mbx.j72-education-team-omb@mail.mil
TELEPHONE NUMBER (Commercial):	719-554-7340
AVAILABLE FUNDING, IF ANY:	None identified.
COMMENTS:	<p>Point of Contact may be updated based on sponsorship within Headquarters NORAD and USNORTHCOM.</p> <p>Background: Historically, Civil defense comprised activities designed to minimize the effects of war on the civilian population, deal with immediate emergency conditions, and quickly restore vital utilities and facilities damaged in an attack.</p> <p>The Office of Civilian Defense (OCD) was established by President Franklin D. Roosevelt in May 1941. It was responsible for planning community health programs and medical care of civilians in the event of a military attack on the United States.</p> <p>With the Federal Civil Defense Act of 1950, Congress charged the Federal Civil Defense Administration (FCDA) with creating shelter, evacuation, and training programs that state and local governments would implement. Local governments could request federal funds for these programs and for post-attack health care and reconstruction.</p> <p>In 1979, President Carter signed Executive Order 12179 merging the successor to the Federal Civil Defense Administration (The Defense Civil Preparedness Agency–DCPA) into today’s FEMA. In 2003, FEMA was merged into the U.S. Department of Homeland Security.</p>

[Back to Top](#)