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**FROM FLIGHT LINES TO HEADLINES: HARNESSING
TACTICAL AIR FORCE INFORMATION
WARFARE FOR STRATEGIC EFFECTS**

by

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December 2023

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**FROM FLIGHT LINES TO HEADLINES: HARNESSING TACTICAL AIR
FORCE INFORMATION WARFARE FOR STRATEGIC EFFECTS**

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ABSTRACT

The current United States Air Force (USAF) information operations (IO) force posture, which operates predominately at the operational level with a small portion integrated at the tactical level within Special Operations Wings (SOW), is not distributed to effectively exploit the informational aspects of military activities. This research highlights the criticality of integrating IO officers across the levels of warfare, emphasizing their potential in conventional tactical units. This research analyzes the untapped synergy of IO, Agile Combat Employment (ACE), and air advising and finds that their integration demonstrates how integrated deterrence can be operationalized. Moreover, the study reveals discrepancies between doctrinal prescriptions and operational realities, which have led to impractical and occasionally inaccurate interpretations of how IO is employed in practice. In response, this research recommends revising the roles and functions of IO officers to align more closely with operational realities. Finally, the research advocates instilling an IO practitioner mindset across the force, emphasizing the significance of cognitive resilience—the capacity to counter foreign malign influence—as a fundamental function of IO. These recommendations aim to fortify the USAF’s tactical integration of IO, ensuring a more dynamic and resilient force capable of addressing the complexities of modern conflict.

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LIST OF ACRONYMS AND ABBREVIATIONS

AAR	After Action Report
ACE	Agile Combat Employment
AFDN	Air Force Doctrine Note
AFDP	Air Force Doctrine Publication
AFRICOM	US Africa Command
AFSC	Air Force Specialty Code
AFSOC	Air Force Special Operations Command
AMC	Air Mobility Command
ANG	Air National Guard
AOC	Air Operations Center
AOR	Area of Responsibility
ARCYBER	Army Cyber
BMT	Basic Military Training
BPC	Build Partner Capacity
BRI	Belt and Road Initiative
C2	Command and Control
CA	Civil Affairs
CDO	Contested, Degraded, and Operationally Limited
CGO	Company Grade Officer
COIN	Counterinsurgency
CRSS	Contingency Response Support Squadron
CRW	Contingency Response Wing
DIME	Diplomatic, Information, Military, Economic
DOD	Department of Defense
DoS	Department of State
EAF	Expeditionary Aerospace Force
EMSO	Electromagnetic Spectrum Operations

ETSS	Extended Training Service Specialist
FAO	Foreign Area Officer
FGO	Field Grade Officer
FID	Foreign Internal Defense
GCC	Geographic Combatant Command
HHQ	Higher Headquarters
IATF	Information Advantage Task Forces
IE	Information Environment
IO	Information Operations
IRC	Information-Related Capabilities
ISR	Intelligence, Surveillance, and Reconnaissance
IW	Information Warfare
JAG	Judge Advocate
LSCO	Large Scale Combat Operations
MAJCOM	Major Command
MDTF	Multi-Domain Task Forces
MIG	Marine Intelligence Group
MILDEC	Military Deception
MISO	Military Information Support Operations
MISTF	Military Information Support Task Force
MSAS	Mobility Support Advisory Squadron
MTT	Mobile Training Team
NDAA	National Defense Authorization and Appropriations Act
NDS	National Defense Strategy
NSS	National Security Strategy
OTS	Officer Training School
OAI	Operations, Activities, and Investments
OIE	Operations in the Information Environment
OPSEC	Operations Security

OSS	Office of Strategic Services
PACAF	Pacific Air Forces
PLA	People’s Liberation Army
PRC	People’s Republic of China
PME	Professional Military Education
PSYOP	Psychological Operations
PA	Public Affairs
SCO	Security Cooperation Officer
SFA	Security Force Assistance
SFAB	Security Force Assistance Brigade
SFAC	Security Force Assistance Command
SME	Subject Matter Expert
SMEE	Subject Matter Expert Exchange
SOE	Special Operations Executive
SOF	Special Operations Forces
SOS	Special Operations Squadron
SOUTHCOM	US Southern Command
SPP	State Partnership Program
SSR	Security Sector Reform
TAC	Tactical Advisory Squadron
TCP	Theater Campaign Plan
TRANSCOM	Transportation Command
TTP	Tactics, Techniques, Procedures
U.S.	United States
USACAPOC	United States Army Civil Affairs and Psychological Operations Command
USAF	United States Air Force
USMC	United States Marine Corps
UTC	Unit Type Code

VEO	Violent Extremist Organization
WX	Weather
XP	Plans and Programs

EXECUTIVE SUMMARY

A. A CALL FOR CHANGE: REEVALUATING USAF IO FORCE POSTURE

This thesis calls for a comprehensive reevaluation of the United States Air Force (USAF) Information Operations (IO) career field force posture. It underscores the necessity of integrating IO officers across all levels of warfare—tactical, operational, and strategic—to effectively fulfill the aims of integrated deterrence. Additionally, this research examines the potential synergy between three key constructs: IO, Agile Combat Employment (ACE), and air advising. These constructs currently operate in relative isolation with limited integration, and this study reveals how their integrated application could have force-multiplying effects and greatly enhance the USAF’s integrated deterrence strategy.

B. TACTICAL ACTIONS AND STRATEGIC IMPLICATIONS IN THE INFORMATION AGE

The twenty-first century and the dawn of the information age have condensed the levels of war, setting conditions for an Airman’s tactical actions to carry far-reaching strategic geopolitical impacts. Failure to posture IO officers at the tactical level poses both a risk and a substantial opportunity. This research answers how IO should be integrated at the tactical level, outlines IO roles and responsibilities, and illustrates the relationship between IO, ACE, and air advising.

C. METHODOLOGY

This thesis employed a systematic methodology, including a thorough analysis of current military doctrine across the military services, which was contrasted with data collected through interviews with IO, ACE, and air advising subject matter experts (SME). The research was guided by four key questions, which focused on the roles of IO officers, the overlap and integration of the three constructs, the impact on integrated deterrence, and solutions for tactical-level integration of IO officers. The doctrinal review applied a standardized framework to understand each construct’s relevancy, key terms and definitions, discernable roles and responsibilities, and required tools and resources. Complementing this, the interviews explored each construct’s role in integrated deterrence and assessed the degree of

understanding and integration within the USAF. These interviews highlighted these constructs' strengths, weaknesses, and synergies, providing a nuanced understanding of their application and effectiveness across the conflict continuum. Overall, this methodology offers a holistic view, blending rigorous doctrinal analysis with real-world insights from experts, ensuring a comprehensive and balanced understanding of the subject matter.

D. FINDINGS

A critical acknowledgment of this research is that while the constructs of IO, ACE, and air advising are not new, their integration and application within the framework of integrated deterrence is novel. The potential impact of IO in the context of the information age, coupled with the United States' increased reliance on its network of allies and partners, and the demands of ACE to evolve beyond a traditional Gulf War approach, presents unparalleled opportunities in fulfilling the tenets of integrated deterrence. The IO and air advising communities confront similar challenges: a significant lack of senior leadership, which hinders their advocacy and visibility at the upper echelons, leading to a widespread misunderstanding of their capabilities and subsequent inadequate resourcing. Furthermore, these communities grapple with the complex task of quantifying their impact, particularly in activities centered around influence and relationship-building, which are difficult to measure and assess. Compounding these issues is a pervasive culture of risk aversion within the USAF. Low risk tolerance stifles innovation and adaptability, hindering the ability to rapidly learn from low-stakes failures in competition to ensure success in high-stakes conflict scenarios. Addressing these challenges is vital for the USAF to adapt effectively to the modern warfare landscape.

E. SETTING CONDITIONS IN COMPETITION: REFRAMING THE ROLE OF TACTICAL IO

This research concludes that for effective integration at the tactical level, IO officers should be embedded within the Wing, specifically in the Plans and Programs (XP) shop, Operational Support Squadron (OSS), or within the A-3 division of the Wing Air Staff. This research proposes a revised framework that more accurately reflects the roles and responsibilities of IO officers, aligning with operational realities and setting achievable

expectations. Furthermore, it examines the combined implementation of IO, ACE, and air advising, underscoring critical intersections such as relationship building, influence, and setting conditions for conflict.

F. RECOMMENDATIONS FOR THE USAF IO ENTERPRISE

Finally, this thesis proposes five recommendations for the tactical-level integration of IO to enhance integrated deterrence. The first recommendation is to adapt the IO career field's force posture to integrate IO officers across the levels of war. This approach entails the integration of IO officers at the tactical level within conventional wings and the operational level within Special Operations Forces (SOF) Theater Special Operations Commands (TSOC). The second recommendation is to posture IO officers at the tactical level, specifically in support of ACE and air advising, to enhance the effectiveness of these mission sets across the conflict continuum.

The third recommendation is to revise the doctrinal IO functional competencies (analysis, planning, integration, and assessments) and principles (MISO, OPSEC, MILDEC) to more accurately reflect the operational roles and functions of IO officers. A new framework is proposed: for roles, IO officers serve as planners, integrators, coordinators, communicators, and advisors who execute influence, protection, and assessment functions.

Finally, the last two recommendations have USAF-wide implications: instilling an IO practitioner's mindset across the force and adopting cognitive resilience to support IO's protection function. To support an IO practitioner mindset, this research recommends reevaluating basic military training (BMT), officer training school (OTS), and professional military education (PME), then training the force on information's role, effects, and implications. Additionally, findings advocate for the USAF IO career field to adopt cognitive resiliency as a responsibility under its protection function, responsible for educating Airmen within their purview. Cognitive resiliency is training and education that arms Airmen with the tools to identify, resist, and counter adversarial malign influence activities. Embracing these recommendations is not just about enhancing current capabilities but is fundamental to ensuring that the USAF remains agile, resilient, and effective in the information age.

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I. INTRODUCTION

In the evolving landscape of modern warfare, the United States occupies a pivotal position on the global stage, where strategic competition is intensifying. It has become evident that operational overmatch is not the sole mechanism of deterrence to be reliant on. Rather, the foundation of integrated deterrence lies in employing “every tool at the Department’s disposal, in close collaboration with our counterparts across the U.S. Government and with Allies and partners, to ensure that potential foes understand the folly of aggression.”¹

The charge rests with the military service branches to harness the full spectrum of capabilities at their disposal to effectively deter adversaries. A credible tool in the United States Air Force’s (USAF) arsenal is its information operations (IO) officers, the primary proponent of USAF information warfare (IW) forces. The USAF employs IW to deliberately affect “adversary human and system behavior and preserve friendly freedom of action during cooperation, competition, and conflict”—a capability critical in supporting the tenets of integrated deterrence.² The success of employing IW forces lies in their ability to influence adversaries in competition, aiming to prevent escalation towards crisis or set conditions for conflict.

Considering the vital role IW forces play in reinforcing integrated deterrence, it stands to reason that the IO career field should be robustly integrated and adequately staffed to facilitate planning and execution throughout the USAF enterprise. However, the reality reveals a shortfall: the career field, numbering only 170 officers, is predominantly integrated at the operational and strategic levels, with only a fraction dedicated to supporting tactical missions. Even the most tactical, day-to-day activities can have far-reaching strategic ramifications in the information age. Consequently, the USAF finds

¹ Department of Defense, National Defense Strategy (Washington, D.C.: Secretary of Defense, 2022), <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>, iv.

² United States Air Force, Air Force Doctrine Publication 3-13, Information in Air Force Operations, AFDP 3-13 (Washington, D.C.: United States Air Force, 2023), https://www.doctrine.af.mil/Portals/61/documents/AFDP_3-13/3-13-AFDP-INFO-OPS.pdf, 4.

itself inadequately positioned to effectively deter adversaries in competition or establish conditions for conflict.

This thesis advocates for an evaluation of the USAF's IO officers' force posture to adequately integrate forces across the levels of war, with a particular emphasis on integration within tactical conventional units. Finally, this thesis narrows its focus to the integration of IW forces into two mission sets that encapsulate the principles of integrated deterrence: ACE, to demonstrate operational capabilities, and USAF air advising, to bolster relationships with allies and partners. Ultimately, this thesis culminates in answering the question: how should the USAF integrate IO in tactical mission sets, such as ACE and air advising, to enhance the United States' current and future deterrent posture?

A. BACKGROUND

The rules-based international order, once championed by the United States and its allies, is now facing a period of decline.³ Leaders from the United States, the People's Republic of China (PRC), and the Russian Federation have all acknowledged the significant changes in the current world order. President Joe Biden's foreword to the 2022 *National Security Strategy* (NSS) notes, "our world is at an inflection point" and "how we respond to the tremendous challenges and unprecedented opportunities we face today will determine the direction of our world."⁴ Similarly, President Xi Jinping and President Vladimir Putin released a joint statement in February 2022, stating, "the world is going through momentous changes, and humanity is entering a new era of rapid development and profound transformation."⁵

³ "How to Build a Better Order: Limiting Great Power Rivalry in an Anarchic World," *Foreign Affairs*, October 2022, <https://archive.ph/HbcPo>.

⁴ Joseph R. Biden, *National Security Strategy* (Washington, D.C.: The Executive Branch, 2022), <https://www.whitehouse.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy-10.2022.pdf>.

⁵ China Aerospace Studies Institute, "In Their Own Words Joint Statement of the Russian Federation and the People's Republic of China on the International Relations Entering a New Era and the Global Sustainable Development" (Maxwell Air Force Base, Alabama: Air University, February 4, 2022), <https://www.airuniversity.af.edu/Portals/10/CASI/documents/Translations/2022-02-04%20China%20Russia%20joint%20statement%20International%20Relations%20Entering%20a%20New%20Era.pdf>.

Each nation is meeting this change with distinct approaches. The PRC is amassing military capabilities and strategically investing abroad through initiatives like the Belt and Road Initiative (BRI) to expand its influence under the guise of aid and assistance. The Russian Federation threatens global stability, exemplified by its brutal, unprovoked full-scale invasion and war in Ukraine, and aims to reinstate a Russian security zone.⁶

In response, the United States has identified integrated deterrence as the cornerstone of its National Defense Strategy (NDS). Integrated deterrence involves the integration of “all tools of national power across domains, geography, and spectrum of conflict while working with allies and partners.”⁷ At its core, integrated deterrence seeks to shape adversary perceptions of risks in cooperation and competition to prevent escalation towards conflict.⁸

Integration is crucial to effectively meet future demands, protect shared international interests, and set conditions for success in conflict. This integration must occur externally with the Joint Force, allies, and partners and internally through cross-functional integration within the Department of Defense (DOD). At the service level, integration is essential across all levels of war (tactical, operational, and strategic) to generate synchronized top-down planning, execution, and effects.

The USAF has designated IO officers as its IW forces, specifically trained to shape the perceptions and behavior of relevant actors. IO officers are critical in developing campaigns and planning operations, activities, and investments (OAI) to shape adversary perceptions. However, the current force posture of the USAF does not sufficiently position its IO officers across all levels of war. Specifically, IO officers are not adequately postured at the operational level within Special Operations Forces (SOF) or the tactical level within conventional forces. The failure to leverage, synchronize, and manage tactical activities poses a significant risk. The information age has exacerbated the potential for tactical

⁶ Biden, National Security Strategy, 3.

⁷ Anna Pederson and Michael Akopian, “Sharper: Integrated Deterrence,” *Center for New American Security*, January 11, 2023, <https://www.cnas.org/publications/commentary/sharper-integrated-deterrence>.

⁸ Biden, National Security Strategy, 22.

actions to have strategic implications. Therefore, the USAF should reevaluate its posture of IO officers across all levels of war, particularly within conventional forces at the tactical level, to effectively manage risk and shape the strategic landscape.

Critics may argue that implementing integrated deterrence is a challenge, but in practice, it involves the synchronization of actions and activities to drive perceptions. Once a clear understanding of a target's decision-making process is established, OAs can be crafted and synchronized to achieve integrated deterrence objectives. Effective planning towards these objectives requires thoughtful consideration of the information environment (IE) and the cognitive factors that influence decision-making—factors that IO officers address and consider throughout the planning process. The DOD should make a concerted effort to align and harness the informational aspects of military activities through close coordination with other departments, inter-agency partners, and international allies. Proper posturing of IO officers across all levels of war is essential to successfully leverage these informational aspects and to drive perceptions to achieve national objectives.

B. THE PRC AND RUSSIA'S INFLUENCE PLAYBOOK

Both the PRC and Russia have similar levers of national power at their disposal to impose their will, and they both excel at a particularly discrete and subversive tactic: foreign influence operations. The digital age has allowed authoritarian regimes to exploit the openness of liberal democratic societies, effectively weaponizing social media and freedom of speech to exacerbate societal divisions and interfere in electoral proceedings.⁹ Foreign influence operations from these nations seek to subvert the international order by seeding chaos and interfering in democratic processes. While their aims align with destabilizing democracies, the PRC and Russia diverge in their approaches.¹⁰ The PRC employs an indirect, “well-funded,” and “long-term strategic approach,” while Russia executes a “blunt, inexpensive, short-term tactical approach.”¹¹

⁹ Carolyn Kenney, Max Bergmann, and James Lamond, “Understanding and Combating Russian and Chinese Influence Operations,” February 28, 2019, <https://www.americanprogress.org/article/understanding-combating-russian-chinese-influence-operations/>.

¹⁰ Kenney, Bergmann, Lamond, 2.

¹¹ Kenney, Bergmann, Lamond, 4.

C. PRC'S AIM: WINNING WITHOUT FIGHTING

China's mid-range strategy is comprised of three elements: (1) internal focus on domestic priorities while "maintaining a non-hostile external environment," (2) "reducing dependence on America while increasing the rest of the world's dependence on China," and (3) "expanding the reach of Chinese influence overseas."¹² As part of its efforts to increase influence and dependence, the PRC proactively expanded economic ties through economic coercion tactics. The PRC projects a "rise of the East and decline of the West," allowing them to play a more significant role in shaping rules and norms in their favor, and they plan to achieve this without crossing the threshold of armed conflict.¹³ American diplomat George F. Kennan classified this approach in 1948 as political warfare, which he defined as:

The employment of all the means at a nation's command, short of war, to achieve its national objectives. Such operations are both overt and covert. They range from such overt actions as political alliances, economic measures (as ERP), and "white" propaganda to such covert operations as clandestine support of "friendly" foreign elements, "black" psychological warfare and even encouragement of underground resistance in hostile states.¹⁴

Kerry Gershaneck, in his book *Political Warfare: Strategies for Combating China's Plan to "Win Without Fighting*, asserts that the PRC's use of political warfare is more than using influence to achieve a single objective; instead, it seeks to condition foreign governments and societies to act out of their own free will in a manner compatible with PRC end states.¹⁵ The PRC has mastered this approach and exerts its influence globally through both overt and covert means. Overtly, the PRC employs its United Front organization to target "businesses, universities, think tanks, scholars, journalists, and local,

¹² Hass, "How China Is Responding to Escalating Strategic Competition with the US," Brookings, March 1, 2021, <https://www.brookings.edu/articles/how-china-is-responding-to-escalating-strategic-competition-with-the-us/>.

¹³ Hass.

¹⁴ Policy Planning Staff Memo, "The Inauguration of Organized Political Warfare" (Official Memorandum, National Archives and Records Administration, College Park, Maryland, 1948).

¹⁵ Kerry Gershaneck, "To Win without Fighting: Defining China's Political Warfare," *Expeditions with MCUP*, June 17, 2020, <https://doi.org/10.36304/ExpwMCUP.2020.04>.

state, and Federal officials” abroad.¹⁶ Covertly, the PRC employs tools such as media manipulation, mis/dis-information, deception, espionage, and proxy forces to achieve its economic and foreign political objectives.¹⁷ These activities that support political warfare serve as a subset of the PRC’s “Unrestricted Warfare” model—a strategy that outlines the use of asymmetric, nonmilitary methods to defeat a stronger nation.¹⁸ Much like integrated deterrence, unrestricted warfare foundationally seeks to manage adversaries’ perceptions. Chinese strategic literature stresses using its three warfares under its IW concept to “control the prevailing discourse and influence perceptions in a way that advances China’s interests.”¹⁹ The PRC’s three warfares include (1) “strategic psychological operations,” (2) “overt and covert media manipulations,” and (3) “exploitation of national and international legal systems” (lawfare).²⁰ Employment of these concepts and strategies is prevalent throughout the PRC’s history.

The PRC has grown increasingly more assertive in shaping its political narrative abroad. In 2021, the United States Intelligence Community assessed that “Beijing has been intensifying efforts to shape the political environment in the United States to promote its policy preferences, mold public discourse, pressure political figures..., and muffle criticism of China.”²¹ Moreover, the Intelligence Community assessed that the PRC “considered but did not deploy influence efforts intended to change the outcome of the [2020] U.S. presidential election,” noting it was not worth the risk, but the capability to do so exists.²² The PRC overtly shapes political narratives across the diplomatic, information, military, and economic (DIME) model. Diplomatically, the PRC engages in wolf warrior diplomacy,

¹⁶ Gershaneck, “To Win without Fighting: Defining China’s Political Warfare,” 2.

¹⁷ Gershaneck, 6.

¹⁸ Gershaneck, 6.

¹⁹ Gershaneck, 7.

²⁰ Doug Livermore, “China’s ‘Three Warfares’ In Theory and Practice in the South China Sea,” Georgetown Security Studies Review, March 25, 2018, <https://georgetownsecuritystudiesreview.org/2018/03/25/chinas-three-warfares-in-theory-and-practice-in-the-south-china-sea/>.

²¹ Jon Bateman, *Limiting Chinese Influence Operations - US-China Technological “Decoupling”: A Strategy and Policy Framework* (Washington, D.C.: Carnegie Endowment for International Peace, 2022), <https://carnegieendowment.org/2022/04/25/limiting-chinese-influence-operations-pub-86923>.

²² Bateman.

an assertive form of diplomacy that exhibits aggression, outbursts, and insults within diplomatic forums.²³ From an information perspective, the PRC relies heavily on its “nationalistic state-sponsored media.”²⁴ Finally, on the economic front, the PRC has been known to overtly punish foreign companies that speak poorly of the PRC in public forums.²⁵ The PRC actively tries to sway American perceptions on China-related matters within the United States. As part of its long-term influence operations, the PRC leverages Confucius Centers within United States’ universities and exerts influence within Hollywood to portray the PRC positively.²⁶ To maintain a competitive advantage, the United States should reevaluate its efforts to keep the PRC from meeting its objectives while managing the risk of escalation.

D. ACTIVE MEASURES: RUSSIA’S TERM FOR COVERT SUBVERSION

Today, Russian influence operations embody an evolved form of historical ‘active measures’ recalibrated for the digital landscape. Max Bergmann, Director of Europe, Russia, and Eurasia Program and Stuart Center for the Center for Strategic and International Studies, along with Carolyn Kenney and James Lamond, identified three key objectives of Russian influence operations: (1) “disrupt and discredit democratic governance,” (2) “divide Europe,” and (3) “undermine the international system built at the end of World War II.”²⁷ Foreign influence operations have a long tradition in Russia, “dating back to the Soviet era and even tsarist Russia.”²⁸ Russia utilizes the term “active measures” in place of influence operations, which describe a spectrum of covert and subversive activities ranging from “the orchestration of domestic unrest” to “the spread of

²³ “Understanding Chinese ‘Wolf Warrior Diplomacy,’” The National Bureau of Asian Research, October 22, 2021, <https://www.nbr.org/publication/understanding-chinese-wolf-warrior-diplomacy/>.

²⁴ Bateman, *Limiting Chinese Influence Operations*.

²⁵ Bateman.

²⁶ Bateman.

²⁷ Carolyn Kenney, Max Bergmann, and James Lamond, “Understanding and Combating Russian and Chinese Influence Operations, 2.”

²⁸ Mark Galeotti, “Active Measures: Russia’s Covert Geopolitical Operations,” | George C. Marshall European Center for Security Studies 31, no. Describing covert and deniable political influence and subversion operations, <https://www.marshallcenter.org/en/publications/security-insights/active-measures-russias-covert-geopolitical-operations-0>.

disinformation.”²⁹ While entities like the British Special Operations Executive (SOE) and the United States Office of Strategic Services (OSS) experienced a significant decline in service post World War II, Soviet active measures were considered integral to day-to-day operations.³⁰ In peacetime, the Soviets saw the importance of employing “active measures to exert influence on the adversary and weaken his political, economic, scientific and technical and military positions.”³¹

The information age and technological advancements have amplified the reach, precision, and effectiveness of Russian active measures, enabling rapid, targeted, and anonymous dissemination of influence operations on an unprecedented scale. Today, election interference and the disruption of democratic politics are recent examples of Russia’s employment of active measures in peacetime. In the 2016 United States presidential elections, Russia executed an influence campaign that blended “covert intelligence operations—such as cyber activity—with overt efforts by Russian Government agencies, state-funded media, third-party intermediaries, and paid social media users or ‘trolls’” with the intent of undermining “public faith in the U.S. democratic process.”³² Following Russian interference in the 2016 United States election, seventeen other countries reported disinformation damaged “citizens’ ability to choose their leaders based on factual news and authentic debate.”³³ The United States National Intelligence Council found that, again, during the 2020 elections, Russian President Vladimir Putin authorized a range of influence operations designed to undermine public confidence and

²⁹ Galeotti.

³⁰ Galeotti.

³¹ Galeotti.

³² Director of National Intelligence, “‘Assessing Russian Activities and Intentions in Recent U.S. Elections’: The Analytic Process and Cyber Incident Attribution” (Washington, DC: Office of the Director of National Intelligence, January 6, 2017), https://www.intelligence.senate.gov/sites/default/files/documents/ICA_2017_01.pdf.

³³ The Freedom House, “New Report - Freedom on the Net 2017: Manipulating Social Media to Undermine Democracy,” *Freedom House*, November 13, 2017, <https://freedomhouse.org/article/new-report-freedom-net-2017-manipulating-social-media-undermine-democracy>.

exacerbate sociopolitical division.³⁴ Russian active measures have contributed to the discord and polarization of democracies globally, and the United States should consider how to develop measures to counter malign narratives while safeguarding its citizens from disinformation.

E. FROM AFTERTHOUGHT TO CORE STRATEGY: INTELLIGENCE INFORMED, INFORMATION LED

In addressing challenges posed by adversaries like the PRC and Russia, the DOD must reevaluate its force posture to support a whole-of-government approach and meet integrated deterrence objectives. How the United States competes and fights wars is radically changed by technological advancements, from cyber weapons with the ability to hold critical infrastructure at risk to the proliferation of malicious disinformation aimed at influencing and polarizing nations. The impacts of these advancements within the IE showcase tremendous challenges and opportunities for the DOD. All activities across the whole of government send a message and communicate intent. If these informational aspects can be leveraged and integrated across all domains, in coordination with the instruments of power, and in conjunction with allies and partners, then the United States will be better postured to convey a strong deterrent signal to competitors. Presently, the United States encounters significant challenges in executing cross-domain integration within a singular military service branch, not to mention the broader complexities inherent in a whole-of-government approach.

Today's threats and future conflicts do not allow for information to be integrated as an afterthought, and a strategy that layers on capabilities such as cyber, space, and IO will fail on contact.³⁵ Rather, these capabilities must be “mainstreamed in all we do and

³⁴ National Intelligence Council, “Intelligence Community Assessment: Foreign Threats to the 2020 U.S. Federal Elections” (Washington, D.C.: National Intelligence Council, March 10, 2021), <https://www.dni.gov/files/ODNI/documents/assessments/ICA-declass-16MAR21.pdf>.

³⁵ Jim Garamone, “Dunford: Speed of Military Decision-Making Must Exceed Speed of War,” *DOD News*, January 31, 2017, <https://www.defense.gov/News/News-Stories/Article/Article/1066045/dunford-speed-of-military-decision-making-must-exceed-speed-of-war/#:~:text=Dunford%3A%20Speed%20of%20Military%20Decision%20Making%20Must%20Exceed%20Speed%20of%20War,-Jan.&text=Military%20decision%20making%20needs%20to,recently%20in%20Joint%20Forces%20Quarterly>.

built into our thinking from the ground up.”³⁶ This degree of integration from the ground up is a near-impossible task without personnel integrated across all levels to support and drive change.

F. PROBLEM STATEMENT: MISSED OPPORTUNITIES, STRATEGIC IMPLICATIONS

Today, the USAF IO career field is at a crossroads. There is a pivotal need to reevaluate its force posture to determine if adaptation is necessary to support tactical mission sets. Since its formal conception as an Air Force Specialty Code (AFSC) in 2015, the IO career field grew from a small cohort of psychological operations (PSYOP) trained behavioral scientists to a globally deployed enterprise of 170 IO officers.³⁷ USAF IO officers are trained in social science to understand the cognitive factors of decision-making and proactively leverage information to “shape the perceptions and behaviors of relevant actors.”³⁸ Since IO officers are formally trained in understanding and shaping the cognitive dimension, they bring significant value to shaping operations in support of integrated deterrence. The USAF has postured its IO officers predominately at the strategic and operational levels, with a small footprint augmenting SOF at the tactical level. The current IO force distribution is insufficient to meet the demands of integrated deterrence and fails to fulfill the charge information integration from the ground up. In the information age, technological advancements have magnified the impact of even tactical actions. Whether physical, verbal, or visual, these actions now carry amplified strategic implications.

Limiting integration to predominately the operational and strategic levels poses a significant risk and increases the potential for unintended escalation. Tactical actions often generate strategic-level impacts, whether it be a bomb on the wrong target or a misinterpreted social media post. Failing to integrate across all levels results in missed opportunities, decreased effectiveness, and increased risk to the mission. In contrast, if

³⁶ Garamone, Dunford: Speed of Military Decision-Making Must Exceed Speed of War.

³⁷ HAF A2/6CX / A3CX, *United States Air Force 14F Guidebook 2022* (Washington, D.C.: U.S. Air Force Headquarters, 2022).

³⁸ United States Air Force, *Air Force Doctrine Publication 3-13, Information in Air Force Operations*.

properly aligned and postured, information is leveraged to shape adversary perceptions and bolster the United States' deterrence posture, thereby winning in competition before escalating to conflict.

G. RESEARCH QUESTION

This research aims to articulate the roles and responsibilities of IO officers within conventional units at the tactical level. As a scoping mechanism, this research will focus on ACE and air advising to showcase two unique mission sets that can gain substantial benefits from tactical IW integration. ACE is both a “proactive and reactive operational scheme of maneuver executed within threat timelines to increase resiliency and survivability while generating combat power.”³⁹ A critical component of ACE is disrupting the adversary's decision-making cycle by “presenting an adversary with dilemmas at an operational tempo that complicates or negates adversary responses,” in short, disrupting the adversary's ability to take action.⁴⁰ Air advising supports the broader whole-of-government security cooperation enterprise and consists of four pillars: “(1) building relationships, (2) building capability, (3) enabling interoperability, and (4) gaining access.”⁴¹ Both of these mission sets depend on understanding a target audience, gaining and maintaining access, and shaping perceptions to support the United States' interests, all of which are areas where IO could enhance effectiveness. Furthermore, this research showcases the overlap of these three respective mission sets, opportunities for integration, and the subsequent impact on integrated deterrence. Ultimately, this research seeks to answer the question: how should the USAF integrate IO in tactical mission sets, such as ACE and air advising, to enhance the United States' current and future deterrent posture?

³⁹ Curtis Lemay Center, *Agile Combat Employment Air Force Doctrine Note 1-21*, AFDN 1-21 (Maxwell Air Force Base, Alabama: Curtis E Lemay Center for Doctrine Development and Education, 2022), https://www.doctrine.af.mil/Portals/61/documents/AFDN_1-21/AFDN%201-21%20ACE.pdf.

⁴⁰ Curtis Lemay Center, *Air Force Doctrine Note 1-21 Agile Combat Employment*, AFDN 1-21 (Washington, D.C.: Curtis E Lemay Center for Doctrine Development and Education, 2022), https://www.doctrine.af.mil/Portals/61/documents/AFDN_1-21/AFDN%201-21%20ACE.pdf.

⁴¹ Zadalis, Timothy M, “The Air Advisor: The Face of U.S. Air Force Engagement,” *Air and Space Power Journal*, August 1, 2013, 4-13, https://www.airuniversity.af.edu/Portals/10/ASPJ/journals/Volume-27_Issue-4/SLP-Zadalis.pdf.

H. METHODS AND APPROACH

This research aims to answer four questions: (1) What are the general roles and responsibilities of an IO officer in a tactical USAF conventional unit? (2) How do these mission sets overlap, and what are the subsequent opportunities for integration? (3) What is the impact of synchronizing IO, ACE, and air advising on integrated deterrence? (4) How should the USAF integrate IO in tactical mission sets, such as ACE and air advising, to enhance the United States' current and future deterrent posture? To answer these questions, the research approach focuses on understanding these mission sets both doctrinally and in practice. This analysis is accomplished by two means: (1) analyzing and comparing IW, ACE, and air advising doctrine and (2) through interviews with military subject matter experts (SME) from the three respective mission sets. Both approaches answer the four relevant research questions, which inform the recommendations and findings section, by contrasting the doctrinal perspective with operational reality.

In addition to the four research questions, the interview questions are designed to: (1) define the three mission sets, unique capabilities, responsibilities, strengths, and limitations; (2) gauge how well these mission sets are integrated, understood, and how they compare with similar models; and (3) how each mission set supports, should be postured and impacts integrated deterrence. Finally, of note, for both the analysis of doctrine and interviews, this research assesses how the other services (United States Army and United States Marine Corps [USMC]) are employing and integrating their respective information functions.

1. Analysis of Doctrine

The doctrinal analysis follows a standardized framework that provides an overview, an evaluation of relevance, key terms and definitions, discernable roles and responsibilities (both explicit and implied), and required tools and resources for each mission set's respective doctrine. Table 1 outlines the five doctrine publications that were analyzed. Appendix B outlines a comprehensive evaluation of each publication and condenses hundreds of pages of doctrine into a three to four-page reference guide. This quick

reference guide can be leveraged by information professionals as an operational tool, and it can also serve as a primer on information-relevant doctrine.

Table 1. Mission Sets and Corresponding Doctrine

Mission Set	Year	Publication Title
USAF Information	2023	<i>Air Force Doctrine Publication 3-13 Information in Air Operations</i>
USAF Air Advising	2015	<i>AFDP 10-43 Air Advising/Security Assistance</i>
USAF ACE	2022	<i>Air Force Doctrine Note 1-21 Agile Combat Employment</i>
Army Information	2023	<i>Final Draft Army Doctrine Publication 3-13 Information</i>
USMC Information	2022	<i>Marine Corps Doctrine Publication 8 Information</i>

2. Qualitative Interviews

The complementary mechanism to collect data for this research is conducted through interviews. Appendix C outlines the target audiences and interview questions leveraged to collect data. There are four target audiences for the interview portion: (1) USAF IO Officers; (2) USAF Air Advisors; (3) USAF ACE SMEs; (4) Information forces from the other services (United States Army and USMC), to include Army Psychological Operations (PSYOP) Officers. To ensure the broadest applicability, members were selected to represent experience across the levels of war (tactical, operational, and strategic) and from multiple theaters.

I. OVERVIEW

Holistically, this thesis investigates opportunities for USAF IO integration, investigating the synergy between IW, ACE, and air advising. Chapter Two is the literature review and examines the historical interdependencies of these concepts, emphasizing their role in modern strategic competition and integrated deterrence. It establishes a foundational understanding of each concept, tracing the evolution from the USAF's initial concepts to the current constructs. Chapter Three undertakes a detailed doctrinal analysis to illuminate differences, synergies, and best practices among these constructs, setting the stage for

practical integration strategies. Chapter Four offers a unique perspective through interviews with IO, ACE, and air advising SMEs. It investigates each construct's role, the discrepancies between doctrine and practice, and their collective impact on integrated deterrence, uncovering strengths, weaknesses, and synergies. Chapter Five synthesizes these insights, answering key research questions and offering conclusions based on doctrinal analysis and interview data. It presents significant findings and practical recommendations to enhance IO's efficacy and integration in the USAF. The chapter also suggests opportunities for future research to address emerging challenges in the global security environment.

Additionally, supporting the main body, Appendix A expands upon the literature review in Chapter Two by providing an in-depth review of the security cooperation enterprise. Appendix B serves as a doctrinal "quick reference guide," distilling hundreds of pages of doctrine into a helpful resource that underscores the most salient points. Appendix C details the interview questions used to gather insights from USAF IO Officers, ACE SMEs, USAF Air Advisors, and information forces from other services. Lastly, Appendix D compiles the comprehensive findings from these interviews, which could serve as a tool to gain internal insights into how communities such as USAF IO officers view the current state of their career field.

II. LITERATURE REVIEW

This chapter focuses on the relationship and interdependencies between IW, air advising, and ACE concepts integral to military operations for centuries. As recent geopolitical shifts usher in a new era of strategic competition, there's a renewed focus on these constructs and their role in operationalizing an integrated deterrence strategy. The subsequent chapter establishes a foundational understanding of each concept, tracing their respective histories and evolutions into the constructs that exist today. Analyzing each individually reveals inherent synergies and underscores the imperative for integration.

A. THE CRITICALITY OF INFORMATION IN MODERN WARFARE

Information is an essential element of warfare but is often overlooked or an afterthought until its absence becomes glaringly apparent. The ability to maintain an information-dominant position or advantage can be the difference between triumph and defeat, making safeguarding, manipulating, or denying critical information a vital tradecraft in modern warfare. It is imperative to trace the origins of IW to understand its significance in the United States military and how it has shaped the USAF's IO career field today. Today, IW is understood within the USAF as "the military capabilities employed in and through the IE to deliberately affect adversary human and system behavior and preserve friendly freedom of action during cooperation, competition, and conflict."⁴² Comprising six principal capabilities—cyberspace operations, electromagnetic spectrum operations (EMSO), information operations, public affairs (PA), intelligence, and weather services (WX)—IW's roots can be traced back to the era of the Army Air Corps, underscoring its enduring significance in the Air Force's strategic and operational paradigms.⁴³ The subsequent sections will delve into the historical contributions of these capabilities, illuminating their foundational impact on the Air Force's IO career field and broader military operations.

⁴² United States Air Force, Air Force Doctrine Publication 3-13, Information in Air Force Operations, 2023, https://www.doctrine.af.mil/Portals/61/documents/AFDP_3-13/3-13-AFDP-INFO-OPS.pdf, 4.

⁴³ Chief of Staff, United States Air Force, *United States Air Force Operating Concept for Information Warfare* (Washington, D.C.: Chief of Staff, United States Air Force, 2022).

B. THE EVOLUTION OF INFORMATION WARFARE

1. World War II and Early Adoption

Throughout World War II, IW was instrumental in reducing civilian casualties and increasing air asset survivability; yet, in the post-war period, its proven efficacy did not translate into sustained investment.⁴⁴ The Army Air Corps emerged as an early adopter of IW, utilizing leaflets and radio broadcasts to maximize the impact of Major General LeMay's strategic bombing campaigns.⁴⁵ These IW tactics proved remarkably effective, inciting a mass evacuation of over eight million Japanese civilians before B-29s launched incendiary attacks on Japanese cities.⁴⁶ The Army Air Corps also skillfully leveraged advancements in electronic warfare, employing techniques like "jamming, spoofing, and intercepting enemy radio transmissions."⁴⁷ Among these techniques, jamming alone was estimated to have saved six hundred heavy bombers and two hundred B-29s. IW played a significant role in reducing collateral damage and enhancing aircraft survivability.⁴⁸ However, post-World War II, the United States' IW capabilities began to atrophy.⁴⁹ Despite its effectiveness in combat, IW was overshadowed by other priorities, leading to a decline in investment and integration.

2. The Resurgence of Information Warfare at the Close of the 20th Century

The latter half of the 20th century saw a resurging investment in IW, primarily driven by technological advancements that fundamentally transformed the conduct of warfare. Thomas Rona, a Boeing engineer, first introduced the term "information warfare"

⁴⁴ Conrad C. Crane et al., *A Return to Information Warfare* (Carlisle, PA: U.S. Army Heritage and Education Center Historical Services Division, 2019), https://ahec.armywarcollege.edu/documents/A_Return_to_Information_Warfare.pdf.

⁴⁵ Conrad C. Crane et al., "A Return to Information Warfare" (US Army Heritage and Education Center Historical Services Division, 2019), https://ahec.armywarcollege.edu/documents/A_Return_to_Information_Warfare.pdf, 2.

⁴⁶ Crane et al., 3.

⁴⁷ Crane et al., 3.

⁴⁸ Crane et al., 3.

⁴⁹ Crane et al., 2.

in 1976.⁵⁰ Under his IW construct, Rona foresaw that advancements in communication technology, specifically in space and cyberspace, would alter “the existing international system.”⁵¹ He also predicted that increased dependence on information capabilities would create a “significant liability in warfare,” forcing nations to evolve their “strategies, goals, and methods of warfare.”⁵² His predictions were realized in the late 1990s when the DOD and services set out to integrate and operationalize IW, recognizing its growing importance in the realm of modern warfare.

The close of the twentieth century witnessed what some describe as an information revolution in military affairs due to the rapid influx of technological advancements.⁵³ A prime example of this transformation was the Gulf War, where information revolutionized the reach and lethality of air power, evidenced by long-range precision strike capabilities, “satellite-aided navigation,” and swift intelligence processing.⁵⁴ This shift was driven by developments in “cyberspace, microcomputers, and associated information technologies,” catalyzing evolutionary changes across all sectors of society.⁵⁵ The fusion of technological advancements and military might showcased in the Gulf War served as a stark wake-up call for U.S. adversaries, highlighting a new paradigm of warfare. The Gulf War underscored the People’s Liberation Army (PLA) deficiencies when juxtaposed against the modern United States military forces, driving a transformation of Chinese “military

⁵⁰ Mary McEvoy, “From Global Village to Virtual Battlespace: The Colonizing of the Internet and the Extension of Realpolitik: From Global Village to Virtual Battlespace,” *International Studies Quarterly* 54, no. 2 (June 7, 2010): 381-401, <https://doi.org/10.1111/j.1468-2478.2010.00592.x>, 385.

⁵¹ Manjikian, “From Global Village to Virtual Battlespace: The Colonizing of the Internet and the Extension of Realpolitik: From Global Village to Virtual Battlespace,” 385.

⁵² Manjikian.

⁵³ Nick Brunetti-Lihach, “Information Warfare Past, Present, and Future,” *The Strategy Bridge*, November 14, 2018, <https://thestrategybridge.org/the-bridge/2018/11/14/information-warfare-past-present-and-future>.

⁵⁴ Kapil Kak, “Revolution in Military Affairs-An Appraisal,” *Strategic Analysis - Institute for Defence Studies and Analyses* 24, no. 1 (April 2000), https://ciaotest.cc.columbia.edu/olj/sa/sa_apr00kak01.html.

⁵⁵ Roger C. Molander, Andrew S. Riddile, and Peter A. Wilson, *Strategic Information Warfare: A New Face of War*, MR-661-OSD (Santa Monica, CA: RAND Corporation, 1996), https://www.rand.org/pubs/monograph_reports/MR661.html.

strategy, technology, and force structure.”⁵⁶ The United States and its adversaries quickly began to recognize the strategic military advantages and vulnerabilities associated with “global information infrastructure” and its associated technologies.⁵⁷

From 1995 to 1998, the DOD sought to institutionalize IW, leading to a spectrum of definitions: some broad, encompassing all human activity, and others narrower, consisting of a small portfolio of non-kinetic capabilities.⁵⁸ To better understand the DOD’s challenge with information, consider the distinction between viewing information as a process versus a tool.⁵⁹ As a process, information targets the cognitive domain, utilizing information to alter enemy perceptions of reality.⁶⁰ On the other hand, as a tool, information leverages technical capabilities akin to putting an electronic bomb on a target.⁶¹ This effort culminated with the DOD’s 1998 release of *JP 3-13, Joint Doctrine for Information Operations*, which aimed to codify the evolving understanding of information in military operations. JP 3-13 organized IW as a subset of IO, defining IO as “actions taken to affect adversary information and information systems while defending one’s own information and information systems” and IW as “information operations conducted during time of crisis or conflict to achieve or promote specific objectives over a specific adversary or adversaries.”⁶² Traces from these definitions are still reflected in doctrine today, and the foundational elements-affecting adversary information while protecting our own-still hold true.

⁵⁶ Michael Dahm, “China’s Desert Storm Education,” *Proceedings*: U.S. Naval Institute 147, no. 3 (March 2021): 1,417, <https://www.usni.org/magazines/proceedings/2021/march/chinas-desert-storm-education>.

⁵⁷ Roger C. Molander, Andrew S. Riddle, and Peter A. Wilson.

⁵⁸ Yulin G. Whitehead, “Information as a Weapon: Reality versus Promises” (Maxwell Air Force Base, Alabama, Air University: School of Advanced Airpower Studies, 1999), https://media.defense.gov/2018/Jan/02/2001862442/-1/-1/0/T_WHITEHEAD_INFORMATION_AS_WEAPON.PDF, 3.

⁵⁹ Whitehead, v.

⁶⁰ Whitehead, 3.

⁶¹ Whitehead, 3.

⁶² Chairman of the Joint Chiefs of Staff, *Joint Publication 3-13 Joint Doctrine for Information Operations*, JP 3-13 (Washington, D.C.: Chairman of the Joint Chiefs of Staff, 1998), https://www.c4i.org/jp3_13.pdf.

3. The United States Air Force and the Early Foundations of Information Warfare

While the broader DOD deliberated on IW's definitions and implications, the USAF proactively delineated its interpretation within this emerging domain. In 1997, even before the DOD officially released JP 3-13, (then) Air Force Chief of Staff General Ronald Fogleman and Secretary of the Air Force Sheila Widnall published a white paper titled *Cornerstones of IW*, with a twofold intent: (1) to highlight the importance of information in the early days of the Information Age, and (2) to guide the development of doctrine.⁶³ Within their paper, they keenly observed the striking parallels between the realms of air and information:

Before the Wright brothers, air, while it obviously existed, was not a realm suitable for practical, widespread military operations. Similarly, information existed before the Information Age. But the Information Age changed the information realm's characteristics so that widespread military operations within it became practical.⁶⁴

As USAF leadership recognized the far-reaching implications of advancements in the information realm, pivotal concepts such as “net-centric warfare and effects-based operations through networking, sensors, computers, and satellites’ emerged.”⁶⁵ The *Cornerstones of IW* established the foundation and codified the requirement for military operations to both exploit and protect critical information.

4. The Twenty-First Century and The Future of Information Warfare

By the late 1990s, the renewed interest in IW proved short-lived, as the United States swiftly pivoted to address emerging threats, including combating terrorism and non-state actors. However, during this time, adversaries like the PRC and Russia continued

⁶³ Ronald R. Fogleman and Sheila Widnall, “Cornerstones of Information Warfare” (Air Force Chief of Staff, April 17, 1997), National Security Archives, <https://nsarchive.gwu.edu/sites/default/files/documents/4164297/United-States-Air-Force-Cornerstones-of.pdf>, 1.

⁶⁴ Fogleman and Widnall, “Cornerstones of Information Warfare,” 6.

⁶⁵ Brunetti-Lihach, “Information Warfare Past, Present, and Future.”

investing in and developing their IW capabilities.⁶⁶ Major General Daniel Simpson, the Assistant Deputy Chief of Staff for Intelligence, Surveillance and Reconnaissance (ISR), highlighted the concerning trend of our adversaries operating below the threshold of armed conflict, leveraging IW to compete, and doing so with apparent impunity, as there have been no consequences for their actions.⁶⁷

In 2017, the DOD officially introduced information as the seventh joint function to better position itself to compete effectively in the IE in response to emerging challenges. Subsequently, the addition of information as a joint function has contributed to changes in “doctrine, organization, training, material, leadership and education, personnel, facilities, and policy.”⁶⁸

5. The Air Force’s Challenge: Competing in the Information Environment

Over the last twenty-six years, the USAF has evolved its view of IW and the forces dedicated to employing it. While the terminology has changed, the underlying aim remains constant: attacking adversary information and driving behaviors while safeguarding our own. Figure 1 showcases the evolution of USAF IW doctrine over the last three decades, with significant updates found in the recent *AFDP 3-13 Information in Air Force Operations*, published in April 2023. The most prominent changes are the inclusion of operations in the information environment (OIE) and clarity on the delineation between IO and IW. These adjustments were driven by *JP 3-03, Information in Joint Operations*, which rescinded the term IO and replaced it with a broader construct: OIE, which encompasses:

Military actions involving the integrated employment of joint information forces to affect drivers of behavior by informing audiences; influencing foreign relevant actors; attacking and exploiting relevant actor information,

⁶⁶ Mark Pomerleau, “Air Force Information Warfare Strategy Seeks to Beat Back Adversaries That Have Been ‘Operating in with Impunity,’” *DefenseScoop* (blog), April 13, 2023, <https://defensescoop.com/2023/04/13/air-force-information-warfare-strategy-seeks-to-beat-back-adversaries-that-have-been-operating-in-with-impunity/>.

⁶⁷ Pomerleau, “Air Force Information Warfare Strategy Seeks to Beat Back Adversaries That Have Been ‘Operating in with Impunity.’”

⁶⁸ Alexis G Grynkeiwich, “Introducing Information as a Joint Function,” *Joint Force Quarterly*, no. 2nd Quarter (April 2018), 7.

information networks, and information systems; and by protecting friendly information, information networks, and information systems.⁶⁹

Under AFDP 3-13, IO, formerly the term used to describe the integration of information-related capabilities (IRCs) to influence adversary decision-makers, is now designated as IO forces, the USAF's term for the IW forces charged with applying "social science...to shape the perceptions and behaviors of relevant actors."⁷⁰ Furthermore, there are three notable changes: (1) OIE leverages the informational aspects of all military activities, not just IRCs; (2) OIE targets foreign relevant actors, not just adversaries; and (3) the USAF has kept IO as the nomenclature for IW forces. Figure 1 showcases the evolution of IO and IW within the USAF.

⁶⁹ United States Air Force, "Air Force Doctrine Publication 3-13, Information in Air Force Operations," 4-5.

⁷⁰ United States Air Force, 13.

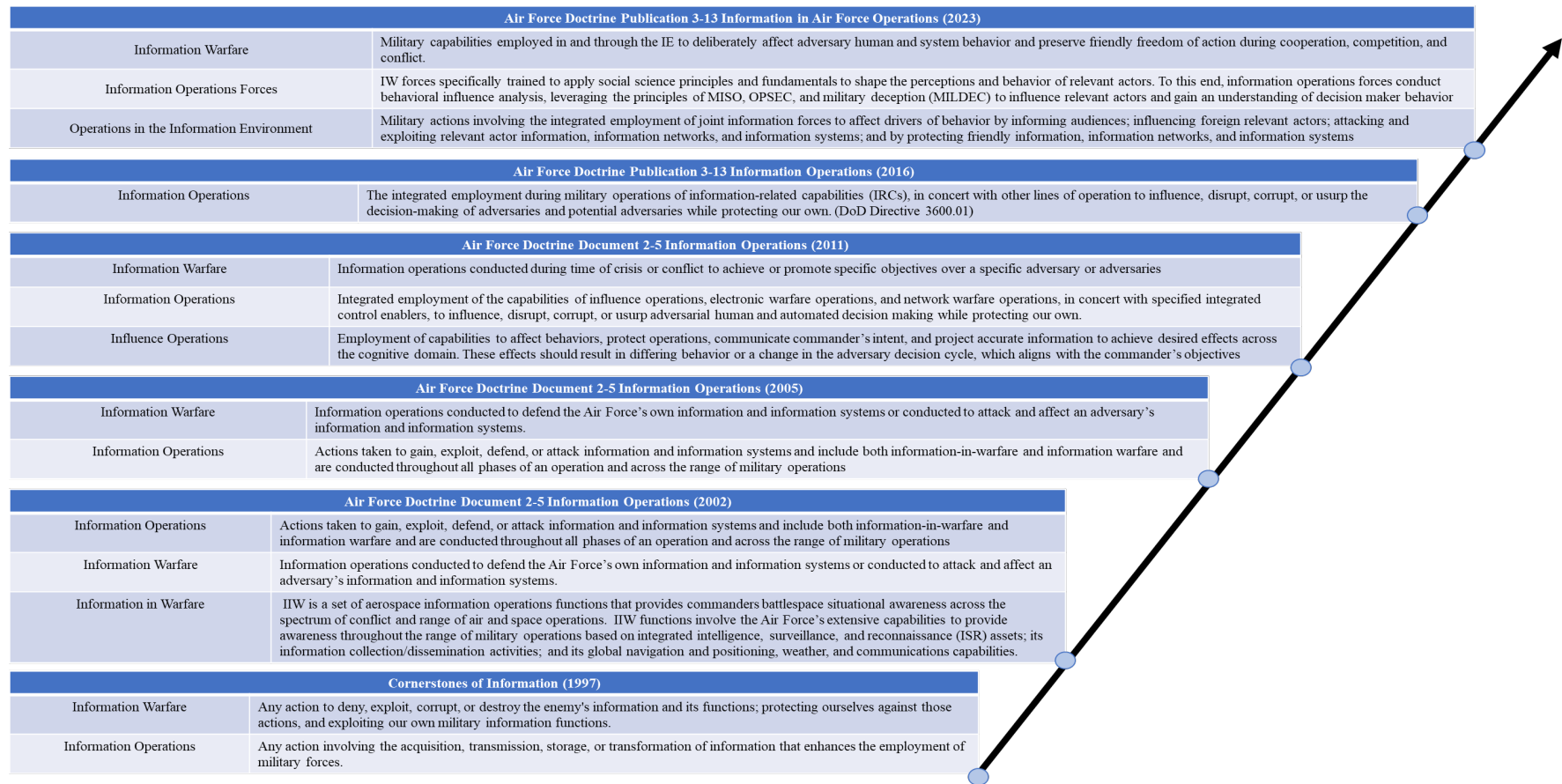


Figure 1. Evolution of USAF Information Operations Doctrine⁷¹

⁷¹ Adapted from United States Air Force, "AFDP 3-13, Information in Air Force Operations, 4.; Fogleman and Widnall, 10. Dept of the Air Force, AFDD 2-5 (Washington, DC: Dept of the Air Force, 2002), 71. Dept of the Air Force, AFDD 2-5 (Washington, DC: Dept of the Air Force, 2005), 51. Dept of the Air Force, AFDD 2-5 (Washington, DC, Dept of the Air Force, 2011), 52. Dept of the Air Force AFDP 3-13 (Washington, DC, Dept of the Air Force, 2016).

6. Establishing the USAF IO Officer Role: Evolution, Expertise, and Impact

In 2010, the Joint Staff's *Irregular Warfare Joint Operating Concept* emphasized the need for services to establish a dedicated career path and progression model for IO.⁷² In response, the USAF established IO officers, 14Fs, as an activated career field in the fall of 2016.⁷³

IO officers play a crucial role by employing information to target relevant actor perceptions, attitudes, and behaviors. What sets USAF IO officers apart from other DOD IO counterparts are three key elements: First, USAF IO officers possess a social science background, equipping them with critical thinking skills that pertain to human behavior and decision-making, allowing them to analyze and influence the information landscape. Second, IO officers exhibit four essential competencies: analysis, planning, integration, and assessments, enabling them to devise comprehensive and effective information strategies that align with military objectives. Finally, IO officers skillfully leverage the principles of operations security (OPSEC), military information support operations (MISO), and military deception (MILDEC)/deception activities, qualifying them to craft sophisticated campaigns to shape perceptions and behaviors while safeguarding friendly information.

Table 2 from the 2022 *14F Guidebook* outlines an IO officer's traditional roles and responsibilities, showcasing their multifaceted contributions to military operations.

⁷² Chairman of the Joint Chiefs of Staff, *Irregular Warfare: Countering Irregular Threats Joint Operating Concept* (Washington, D.C.: Chairman of the Joint Chiefs of Staff, 2010), https://www.jcs.mil/Portals/36/Documents/Doctrine/concepts/joc_iw_v2.pdf?ver=2017-12-28-162021-510, 38.

⁷³ U.S. Air Force, *United States Air Force 14F Guidebook* HAF A2/6CX / A3CX, 2022 (Washington, D.C.: U.S. Air Force Headquarters, 2022), 3.

Table 2. 14F Duties and Responsibilities⁷⁴

1. Apply social science principles across the four functional competencies of analysis, planning, integration, and assessments to influence perceptions, behavior, and action or inaction of relevant actors. 2. Integrate physical and informational power at the strategic, operational, and tactical levels with Service, Joint, and Interagency organizations. 3. Plan, coordinate, conduct, and assess OPSEC, MISO, and deception activities. 4. Conduct analysis and planning commensurate with human, social, and cultural dynamics. 5. Leverage the inherent information aspects of USAF operations, activities, and investments to support influence objectives. 6. Lead structured analytical techniques, critical and creative thinking concepts, research, and indications/warning formulation to deliver in-depth intelligence analysis providing insight into adversary intentions, weaknesses, and potential vulnerabilities.	7. Manage planning for flexible and adaptive operations through the joint planning process in support of higher headquarters' and commander's objectives and desired effects. 8. Direct the synchronized planning, execution, and assessment of kinetic and non-kinetic capabilities into the targeting cycle to effectively wage information warfare throughout the full spectrum of military operations. 9. Drive the coordination and integration of information-related capabilities with Service, Joint, and Interagency organizations. 10. Lead IO-focused input to assessment plans and evaluate data to provide IO-related assessment recommendations. 11. Lead the planning and assessment of unit-level Signature Management activities.
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By establishing a dedicated career path for IO, the USAF took deliberate steps to formalize IO and contextualize its role within military operations and the IE. Although understanding the roles and responsibilities of an IO officer is important, it is crucial to grasp the three principles that USAF IO officers specifically train in—(1) OPSEC, (2) MISO, and (3) MILDEC.

⁷⁴ Source U.S. Air Force, 5.

a. *Operations Security: Guarding Intentions and Shaping Perceptions*

OPSEC is a systematic approach to “identify, control, and protect critical information” that, if observed and collected, could lend insights into friendly force intentions and operations.⁷⁵ IO officers must maintain situational awareness of friendly force information and integrate appropriately at all planning phases to successfully incorporate OPSEC measures and countermeasures.⁷⁶ A subset of OPSEC is signature management, a process leveraged to profile “an installation’s day-to-day observable activities and operational trends.”⁷⁷ At the wing level, the signature management officer conducts the base profiling process to identify the observables, signatures, and indicators of an installation’s respective functional areas.⁷⁸ IO officers can manipulate or leverage these profiles to support higher-level operational OPSEC or MILDEC plans.⁷⁹

b. *Military Information Support Operations: Influencing Foreign Behavior*

IO officers conduct MISO to “impact foreign government, organizational, group, and individual behavior in a manner favorable to operational objectives by conveying selected information and messages to foreign audiences to influence their emotions, motives, thought processes, and reasoning.”⁸⁰ MISO may be employed to counter adversary propaganda, reinforce an existing behavior, or change foreign attitudes and behaviors. While MISO exists predominantly at the operational and strategic level, whether within an Air Component Command, a J-39 Directorate, or as part of a military information support task force (MISTF), it is crucial that MISO efforts are deconflicted with other information functions such as OPSEC, MILDEC, and public affairs to ensure synchronicity across “themes, messages, images, and actions.”⁸¹

⁷⁵ U.S. Air Force, *Information in Air Force Operations*, 17.

⁷⁶ U.S. Air Force, 17.

⁷⁷ U.S. Air Force, 17.

⁷⁸ United States Air Force, 17.

⁷⁹ United States Air Force, 17.

⁸⁰ United States Air Force, 14.

⁸¹ United States Air Force, 15.

c. Military Deception: The Crucial Elements of Planning and Development

MILDEC operations span all war levels, aiming to “deliberately mislead adversary military, paramilitary, or violent extremist organization decision-makers, thereby causing the adversary to take specific actions,” or inaction, that aids in meeting friendly objectives.⁸² For maximum effectiveness, deception considerations should be integrated at the initiation of planning an operation.⁸³ MILDEC planning and execution adheres to a strict need-to-know policy due to the sensitivity and need to manage and protect information.⁸⁴ MILDEC requires robust intelligence support and thorough analysis to understand how the information environment (IE) “supports decision makers and decision processes” and to inform what indicators need to be introduced or manipulated to generate a desired effect. Figure 2 outlines the MILDEC considerations (see, think, do model) and critical elements in MILDEC planning and development.

Deception goal		How deception activity contributes to accomplishment of the mission
Deception objective “do”		- What the deception will cause the adversary to do or not do - Expressed in terms of adversary action or inaction
Deception story		- Friendly force actions to be portrayed to depict what we want the adversary to believe so as to act in the desired manner - Should read like adversary’s own intelligence estimate concerning friendly commander’s intentions and actions
Required perceptions “think”		- Conclusions, official estimates, and assumptions the deception target uses in his assessment and decision-making - What friendly commander wants adversary to believe based on their observations or receipt of information about friendly forces
Deception events “see”		- Activities or actions executed by friendly or controlled elements to create what the deceiver wants the adversary to see - Requires determining what to hide (“dissimulate”) and what to show (“simulate”)

Figure 2. Military Deception Process⁸⁵

⁸² United States Air Force, 15.

⁸³ United States Air Force, 15.

⁸⁴ United States Air Force, 17.

⁸⁵ Source: United States Air Force, 16.

7. Conclusion

The evolution of IW has been inextricably linked to the changing dynamics of warfare, with notable shifts from its use in World War II to its modern implications in the digital age. Within the USAF, the development and emphasis on IW have been responsive to the increasing complexities of the information environment, especially as adversaries heighten their reliance on it for strategic advantage. The USAF's initiative in formalizing the IO officer role demonstrates a commitment to evolve in response to modern challenges. As the landscape of conflict continues to be influenced by information, the United States military's ongoing investments and adaptations in IW are critical in maintaining a strategic edge.

C. UNDERSTANDING THE SECURITY COOPERATION ENTERPRISE: THE FOUNDATION OF AIR ADVISING

Security cooperation is a complex and vital aspect of international relations; it “comprises all activities undertaken by the DOD to encourage and enable international partners to work with the United States to achieve strategic objectives.”⁸⁶ It is a tool the DOD employs to foster and enable international collaboration with the United States to reach shared strategic goals. Far from being limited to military engagements, security cooperation includes the development of foreign military capabilities for self-defense, the provision of peacetime and contingency access to host nations for United U.S. forces, and the building of robust defense and security relationships.⁸⁷

Security cooperation programs are distinct from security assistance programs, though they share some common ground. Security cooperation program authorizations and appropriations fall under the purview of the Secretary of Defense, typically as part of the annual National Defense Authorization and Appropriations Act (NDAA).⁸⁸ Title 10 provisions primarily authorize and appropriate these initiatives, underlining their strategic

⁸⁶ Defense Security Cooperation Agency, “Defense Security Cooperation Agency,” in Security Assistance Management Manual (Arlington, Virginia: Defense Security Cooperation Agency, 2012), <https://samm.dsca.mil/chapter/chapter-1#C1.3>.

⁸⁷ Defense Security Cooperation Agency.

⁸⁸ Defense Security Cooperation Agency.

importance within the defense framework. Often, these programs require coordination with the Secretary of State, reflecting a multifaceted approach that involves varying agencies or DOD activities.⁸⁹

Conversely, security assistance is a collection of programs authorized under Title 22 authorities.⁹⁰ Through this, the United States offers defense articles, military education, training, and other defense-related services via various methods.⁹¹ This process is overseen by the Secretary of State, ensuring alignment with United States' foreign policy interests. However, either the DOD or the Department of State (DoS) may administer security assistance programs.⁹² It is crucial to note that security assistance programs administered by the DOD are considered a subset of security cooperation, illustrating the interconnected nature of these international strategies.⁹³

1. Strategic Competition: The Role of Security Cooperation

Early in 2023, the Joint Chiefs of Staff unveiled the Joint Concept for Competing, framing strategic competition as “a persistent and long-term struggle that occurs between two or more adversaries seeking to pursue incompatible interests without necessarily engaging in armed conflict with each other.”⁹⁴ Central to this evolving landscape is the United States' intricate “network of allies, partners, proxies, and surrogates.”⁹⁵ Subsequently, security cooperation and other military engagements stand as the cornerstone of Joint Force strategic competition.⁹⁶

⁸⁹ Defense Security Cooperation Agency.

⁹⁰ Defense Security Cooperation Agency.

⁹¹ Defense Security Cooperation Agency.

⁹² Defense Security Cooperation Agency.

⁹³ Defense Security Cooperation Agency.

⁹⁴ Chairman of the Joint Chiefs of Staff, Joint Concept for Competing (Washington, D.C.: Chairman of the Joint Chiefs of Staff, 2023), <https://s3.documentcloud.org/documents/23698400/20230213-joint-concept-for-competing-signed.pdf>, iii.

⁹⁵ Chairman of the Joint Chiefs of Staff, Joint Concept for Competing, 22.

⁹⁶ Chairman of the Joint Chiefs of Staff, Joint Concept for Competing, 22.

In 2022, the RAND Corporation completed a study for the USAF to gain a comprehensive understanding of the role of security cooperation in strategic competition. Their study concluded that strategic competition occurs in the day-to-day activities beneath the threshold of armed conflict.⁹⁷ It posited that the United States’ security cooperation efforts must be in harmony with broader geopolitical aims, focusing on key areas such as reassurance, “capacity-building, relationship maintenance, and partner engagement.”⁹⁸ The report closed with tangible considerations for application. The report highlighted that many countries that play a critical role in strategic competition engage in strategic hedging, often avoiding outright alignment with one competitor over the other.⁹⁹ These countries aim to remain geopolitically independent and non-aligned. This reality limits the United States’ ability to “dictate solutions or obtain reflexive support for competitive policies,” underscoring the vital importance of investing in and fortifying partnerships in cooperation and competition.¹⁰⁰ Finally, the report highlighted USAF-specific opportunities for security cooperation. Specifically, it noted the importance of investing in “lower-level security cooperation activities” that are crucial in building interoperable partners “that can be called upon in crisis or war.”¹⁰¹ Among the opportunities highlighted were investments in support functions, enhancement of domain awareness, increased exercise participation, and bolstering partner capacity and interoperability through educational exchanges.¹⁰²

A critical aspect worthy of further elaboration is the investment in support functions. While the allure of new weapon systems or platforms may captivate many countries, it is crucial to note that the efficacy of a system is inherently tied to the quality of maintenance and support infrastructure sustaining it. Subsequently, a key area that the

⁹⁷ Michael J. Mazarr et al., “Security Cooperation in a Strategic Competition” (RAND Corporation, April 6, 2022), https://www.rand.org/pubs/research_reports/RRA650-1.html, v.

⁹⁸ Mazarr et al., .86.

⁹⁹ Mazarr et al., vi.

¹⁰⁰ Michael J. Mazarr, Bryan Frederick, and Yvonne K. Crane, “Understanding a New Era of Strategic Competition” (RAND Corporation, November 30, 2022), https://www.rand.org/pubs/research_reports/RRA290-4.html, 2.

¹⁰¹ Mazarr et al., “Security Cooperation in a Strategic Competition,” 89.

¹⁰² Mazarr et al., vi.

report recommended that the USAF focus was in support of “maintenance, operations, upgrades, technical training related to transport aircraft, and mobility assets.”¹⁰³

2. USAF Air Advising

Air advising serves as the critical conduit through which the USAF actualizes its security cooperation initiatives.¹⁰⁴ Functioning as air-minded specialists, air advisors are subject matter experts who “plan, execute, and evaluate operations to augment partner nation and coalition air power capabilities.”¹⁰⁵ Air advising comprises six basic mission tasks that directly support security force assistance: assess, train, advise, assist, accompany, and equip.¹⁰⁶ These activities are not just theoretical constructs; they serve as the practical means by which the USAF attains its engagement goals, such as “building relationships, building capabilities, enabling interoperability, and gaining access.”¹⁰⁷ In this framework, air advisors play a pivotal role in supporting the joint force. The tangible outcomes of successful air advising can be quantified in terms of improved collective security, increased access, strengthened relationships, enhanced interoperability, and shared burdens.¹⁰⁸ Furthermore, the adaptive nature of air advising enables the USAF to respond to evolving global challenges, making it an indispensable tool in the contemporary security environment. Historically, USAF air advising predominately resided with SOF through the employment of combat aviation advisors, but in 2022 that capability was divested. Today, air advising expertise resides with the conventional force through units such as the Mobility Support Advisory Squadrons (MSAS), Tactical Advisory Squadrons (TAS), and Contingency Response Support Squadrons (CRSS). Figure 3 showcases how air advisors

¹⁰³ Mazarr et al., vi.

¹⁰⁴ Kelly, Mark, Air Force Policy Directive 10-43 Air Advising/Security Force Assistance (Washington, D.C., 2020), https://static.e-publishing.af.mil/production/1/af_a3/publication/afpd10-43/afpd10-43.pdf, 3.

¹⁰⁵ Kelly, 3.

¹⁰⁶ Kelly, 3.

¹⁰⁷ Zadalis, Timothy M, “The Air Advisor: The Face of U.S. Air Force Engagement,” 10.

¹⁰⁸ Finch and Garretson, “Air Advising: A Critical Component of Joint Engagement,” 35.

serve as the means, employing their six advising tasks as means to ultimately achieve security cooperation ends.

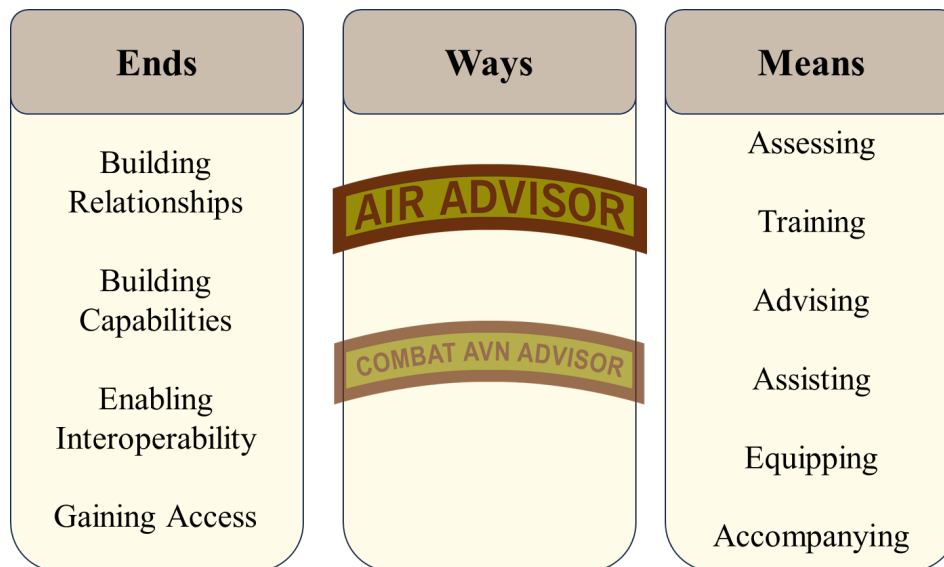


Figure 3. Ends, Ways, Means of Security Cooperation

3. Conventional Air Advising

a. *The Formation and Structure of the MSAS*

In 2009, the Air Force published *The 21st Century Air Force Irregular Warfare Strategy*, signaling a pivotal shift in the landscape of air advising. This strategy outlined the requirement for the expansion within the air advising enterprise: “The Air Force will establish a permanent general purpose force advisory capability for steady-state, protracted irregular warfare requirements to complement existing SOF advisory capabilities.”¹⁰⁹ Air Force leadership analyzed the lessons learned from Air Force Special Operations Command (AFSOC) and their employment of combat aviation advisors. They identified

¹⁰⁹ Michael B. Donley and Norton A. Schwartz, *The 21st Century Air Force Irregular Warfare Strategy* (Washington, D.C.: Air Force Chief of Staff), https://indianstrategicknowledgeonline.com/web/USAF_IW_Strategy.pdf.

bolstering and enhancing their aviation support functions of allies and partners as an opportunity to strengthen relationships.¹¹⁰

Recognizing the need for expanded air advising capabilities, the Air Force established the 571st and 818th MSAS in 2011.¹¹¹ These regionally aligned units, with the 571st MSAS aligned to U.S. Southern Command (SOUTHCOM) and the 818th MSAS aligned to U.S. Africa Command (AFRICOM), each consisting of 152 air advisor billets. They boast diversity, with over thirty different AFSCs in each squadron, offering tailorable force packages to meet a partner nation's needs across activities such as "aeromedical evacuation, command and control, communications, airfield operations, aerial support, aircraft maintenance, and other related support functions."¹¹²

To support the Indo-Pacific and European theater, air advisors of the 36th TAS and the 435th CRSS operate at a smaller scale compared to their MSAS counterparts.¹¹³ The operations carried out by the 36th TAS play a critical role in gaining and maintaining access, basing, and overflight for the Pacific Air Forces (PACAF), enabling the United States to compete against its adversaries while assuring its allies and partners.¹¹⁴ The 435th CRSS embodies NATOS's platform: "stronger together," and they aim to develop existing aviation enterprises across Europe further while investing in and bolstering partnerships in

¹¹⁰ Finch and Garretson, "Air Advising: A Critical Component of Joint Engagement," 35.

¹¹¹ Finch and Garretson, 36.

¹¹² Lesley Waters, "Mobility Support Advisory Squadrons Reach Full Operational Capability," *621st Contingency Response Wing Public Affairs*, January 22, 2013, <https://www.jbmdl.jb.mil/News/Article/243718/mobility-support-advisory-squadrons-reach-full-operational-capability/#:~:text=%E2%80%93One%20year%20after%20achieving%20initial,security%20objectives%2C%22%20said%20Lt.>

¹¹³ Akeem K. Campbell, "36th Contingency Response Support Squadron Undergoes Assumption of Command and Redesignation to 36th Tactical Advisory Squadron," *Andersen Air Force Base News*, July 5, 2023, <https://www.andersen.af.mil/News/Features/Article/3447665/36th-contingency-response-support-squadron-undergoes-assumption-of-command-and-https%3A%2F%2Fwww.andersen.af.mil%2FNews%2FFeatures%2FArticle%2F3447665%2F36th-contingency-response-support-squadron-undergoes-assumption-of-command-and%2F>.

¹¹⁴ Divine Cox, "Air Advisors Continue to Build Partnerships in the INDO-PACIFIC," *Andersen Air Force Base News*, July 25, 2022, <https://www.pacom.mil/Media/News/News-Article-View/Article/3106146/air-advisors-continue-to-build-partnerships-in-the-indo-pacific/https%3A%2F%2Fwww.pacom.mil%2FMedia%2FNews%2FNews-Article-View%2FArticle%2F3106146%2Fair-advisors-continue-to-build-partnerships-in-the-indo-pacific%2F>.

the region.¹¹⁵ Additionally, the 156th TAS supports the broader air advising enterprise as part of the Puerto Rican Air National Guard and is aligned under the 156th Contingency Response Group.¹¹⁶

b. MSAS Alignment and Function

Aligned under Air Mobility Command (AMC), the MSAS brings a unique mobility-oriented focus that sets them apart in the security cooperation enterprise. Unlike traditional efforts that concentrate on foreign military sales and “providing hardware,” air advisors within the MSAS emphasize building long-lasting, mutually beneficial relationships with partner nations.¹¹⁷ The intent is clear: to foster independence and increase interoperability rather than solely focusing on equipment and weapon system provision.¹¹⁸

Within AMC, both the 571st MSAS and the 818th MSAS are aligned under the 621st Contingency Response Wing (CRW), a specialized “rapid response unit of air mobility, command and control, communication, and security experts that are tasked with establishing emergency or contingency airfields in remote, damaged or dangerous locations worldwide on short notice.”¹¹⁹ This integration serves as a vital enabler, capitalizing on the relationships built by advisors to expedite and enhance contingency response options. This relationship is demonstrated by the fact that “contingency response units often deploy in the footsteps and benefit from the relationships that advisors have

¹¹⁵ Alexcia Givens, “Stronger Together: 435 CRSS, Romanian AF Partner for Training,” United States Air Force News, July 26, 2022, <https://www.af.mil/News/Article-Display/Article/3105553/stronger-together-435-crss-romanian-af-partner-for-training/>[https%3A%2F%2Fwww.af.mil%2FNews%2FArticle-Display%2FArticle%2F3105553%2Fstronger-together-435-crss-romanian-af-partner-for-training%2F](https://www.af.mil/News/Article-Display/Article/3105553/stronger-together-435-crss-romanian-af-partner-for-training/).

¹¹⁶ Victoria Jewett, “Air Advisors Take It to the Edge,” *156th Wing News*, June 26, 2023, <https://www.156wg.af.mil/News/Article-Display/Article/3439578/air-advisors-take-it-to-the-edge/>[https%3A%2F%2Fwww.156wg.af.mil%2FNews%2FArticle-Display%2FArticle%2F3439578%2Fair-advisors-take-it-to-the-edge%2F](https://www.156wg.af.mil/News/Article-Display/Article/3439578/air-advisors-take-it-to-the-edge/).

¹¹⁷ Parker Gyokeres, “New Mobility Support Advisory Sq. Adds Outreach, Education to Mission of CRW,” 621st Contingency Response Wing Public Affairs, <https://www.jbmdl.jb.mil/News/Article-Display/Article/244385/new-mobility-support-advisory-sq-adds-outreach-education-to-mission-of-crw/>[https%3A%2F%2Fwww.jbmdl.jb.mil%2FNews%2FArticle%2F244385%2Fnew-mobility-support-advisory-sq-adds-outreach-education-to-mission-of-crw%2F](https://www.jbmdl.jb.mil/News/Article-Display/Article/244385/new-mobility-support-advisory-sq-adds-outreach-education-to-mission-of-crw/).

¹¹⁸ Lesley Waters, “Mobility Support Advisory Squadrons Reach Full Operational Capability.”

¹¹⁹ Gyokeres, “New Mobility Support Advisory Sq. Adds Outreach, Education to Mission of CRW.”

built in years past.”¹²⁰ The air advisors within the 36th TAS and the 435th CRSS are tasked with supporting missions defined by Geographic Combatant Commands (GCC) in alignment with their respective air components and in adherence to theater-specific country plan priorities.¹²¹

c. Air Advisors: A Professional Force

The MSAS are more than just mobile training teams; their strength lies in the quality and professionalism of their training, and their tactical mission generates a global impact.¹²² Upon selection, airmen receive specialized instruction from the 421st Combat Training Squadron, part of the United States Air Force Expeditionary Operations School (EOS).¹²³ The school’s curriculum includes fundamental education on security cooperation, air advising skills, and tailored language, regional, and cultural training, ensuring advisors are adequately prepared for their specific assignments.¹²⁴

The United States’ ability to work by, with, and through its allies and partners is a foundational component of integration within the integrated deterrence construct. The development and investment in the air advising enterprise encapsulates the USAF’s commitment to adapting to the ever-evolving needs of modern warfare. By focusing on relationship building and leveraging strategic alignments, these units represent an innovative approach to security cooperation, emphasizing the human dimension may be as important, if not more so, than the United States’ investment in technical capabilities. A true testament to the strength of air advising is having interoperable partners that can achieve United States and partner objectives with minimal United States presence. In a crisis, the movement and positioning of forces can become a significant vulnerability.

¹²⁰ Ashley Hyatt, “Once an Air Advisor, Always an Air Advisor,” U.S. *Air Force Expeditionary Center News*, September 6, 2019, <https://www.expeditionarycenter.af.mil/News/Article-Display/Article/1954082/once-an-air-advisor-always-an-air-advisor/>
<https%3A%2F%2Fwww.expeditionarycenter.af.mil%2FNews%2FArticle-Display%2FArticle%2F1954082%2Fonce-an-air-advisor-always-an-air-advisor%2F>.

¹²¹ Lesley Waters, “Mobility Support Advisory Squadrons Reach Full Operational Capability.”

¹²² Waters.

¹²³ Hyatt, “Once an Air Advisor, Always an Air Advisor.”

¹²⁴ Ashley Hyatt, “Once an Air Advisor, Always an Air Advisor.”

However, having interoperable partners in place can mitigate some of that risk. Lieutenant Colonel Brian Broekemeier, the 156th TAS commander, encapsulated this idea well in saying: “If a crisis or conflict happens, other elements of U.S. forces will have to fight to get to the fight; we’ll already be there, side-by-side with our allies and partners to sustain integration during unified operations.”¹²⁵

D. AGILE COMBAT EMPLOYMENT

In the eight decades following World War II, the U.S. Air Force dramatically reduced its overseas air bases by 65%, dropping from 93 to just 33.¹²⁶ This reduction has intensified the United States’ reliance on the American Way of War, a strategy characterized by offensive power projection from centralized forward operating locations.¹²⁷ Over the past thirty years, United States adversaries have keenly observed this strategy employed while conducting counterinsurgency (COIN) and counter-violent extremist organization (VEO) operations.¹²⁸ In turn, the United States’ footprint of overseas main bases has become a critical vulnerability; by targeting these linchpins, adversaries can substantially curtail the United States’ ability to project air combat power.¹²⁹

As geopolitical landscapes evolve and the United States enters a period of strategic competition, it is crucial to recognize that future conflicts and challenges will differ significantly from counter-VEO operations. A key planning consideration will be the Air Force’s ability to “survive and fight in contested, degraded, and operationally limited (CDO) environments.”¹³⁰ To preemptively address these anticipated challenges, the Air Force has

¹²⁵ Jewett, “Air Advisors Take It to the Edge.”

¹²⁶ Curtis Lemay Center, Agile Combat Employment Air Force Doctrine Note 1-21 (Maxwell Air Force Base, Alabama: Curtis E Lemay Center for Doctrine Development and Education, 2022), https://www.doctrine.af.mil/Portals/61/documents/AFDN_1-21/AFDN%201-21%20ACE.pdf, 1.

¹²⁷ Tony D. Bauernfeind et al., “Watch, Read: ‘Agile Combat Employment: Are We Ready?’,” Air & Space Forces Magazine, March 7, 2023, <https://www.airandspaceforces.com/watch-read-agile-combat-employment-are-we-ready/>.

¹²⁸ Bauernfeind et al.

¹²⁹ Bauernfeind et al.

¹³⁰ Patrick Mills et al., Building Agile Combat Support Competencies to Enable Evolving Adaptive Basing Concepts (RAND Corporation, 2020), <https://doi.org/10.7249/RR4200>, iii.

adopted the ACE concept as an evolution of the adaptive basing initiative.¹³¹ While not new, ACE signifies a paradigm shift for the Air Force. To be viable, ACE requires a departure from over-reliance on fixed bases and prompts a move towards leaner, more agile, and dispersed operational solutions.¹³²

The foundational aspect of ACE, outmaneuvering an adversary to increase the fog and friction of war, is an innate element of warfare. The value of ACE is its ability to “hold adversary targets at risk from multiple locations that are defensible, sustainable, and relocatable.”¹³³ This concept has expanded upon the Air Force’s Expeditionary Aerospace Force (EAF) concept that emerged in the 1990s.¹³⁴ The EAF concept was designed to provide “air combat power anywhere in the world within 48 hours,” as part of this concept, the USAF developed deployment force packages called Unit Type Codes (UTC).¹³⁵ These concepts remain in place today and are being reconfigured to meet the requirements of operating and fighting in a CDO environment. In December 2021, Air Force Chief of Staff, General Charles Brown, signed Air Force Doctrine Note (AFDN) 1-21 Agile Combat Employment, which serves as the basis for further development of ACE as a new operational approach.¹³⁶

The challenges for ACE look entirely different between theaters, but its primary functions remain the same. In the European theater, ACE grapples with the “tyranny of proximity,” characterized by shortened threat timelines and easily observable air operations.¹³⁷ The opposite is true in the Pacific, which faces a “tyranny of distance,” where roughly three-quarters of the region is water, and United States bases fall within the PRC’s

¹³¹ Mills et al., Building Agile Combat Support Competencies to Enable Evolving Adaptive Basing Concepts, iii.

¹³² Bauernfeind et al., “Agile Combat Employment: Are We Ready?”

¹³³ Sandeep Mulgund, “Command and Control for Agile Combat Employment,” Wild Blue Yonder, August 30, 2021, <https://www.airuniversity.af.edu/Wild-Blue-Yonder/Article-Display/Article/2753756/command-and-control-for-agile-combat-employment/>.

¹³⁴ Mills et al., Building Agile Combat Support Competencies to Enable Evolving Adaptive Basing Concepts, 7.

¹³⁵ Mills et al., 7.

¹³⁶ Greg Hadley, “Air Force Releases First Doctrine Note on Agile Combat Employment,” *Air & Space Forces Magazine*, December 14, 2021, <https://www.airandspaceforces.com/air-force-first-doctrine-note-agile-combat-employment/>.

¹³⁷ Mulgund, “Command and Control for Agile Combat Employment.”

advancing missile ranges.¹³⁸ Major General Derek France, Third Air Force Commander, succinctly outlined the primary functions of ACE in three broad categories: (1) ACE is to defend, (2) ACE is to deter, and (3) ACE is to win.¹³⁹ As outlined in AFDN 1-21, ACE is a “proactive and reactive operational scheme of maneuver executed within threat timelines to increase survivability while generating combat power,” which, in turn, complicates an adversaries’ targeting process and creates political and operational dilemmas for the enemy while creating flexibility for friendly forces. ACE to defend is thus reactive in nature; upon receiving indications and warnings of an imminent threat, ACE creates flexibility and increases air base resiliency by dispersing forces.¹⁴⁰ ACE to deter is inherently complemented by ACE to assure. This function is much more proactive and includes demonstrating operational viability (logistics, sustainment, command, and control) while investing in and building partner capacity and interoperability.¹⁴¹ Finally, ACE to win is implementing the concept at scale, conducting sustained combat operations in conjunction with the United States’ partners.¹⁴²

While there are five core elements of ACE, the two most relevant to this area of research are posture and information. Posture enables forces to relocate to positions of advantage. Yet, a critical enabler for securing and sustaining such a favorable posture is achieved through cooperation with regional allies and partners. Without access, basing, and overflight, ACE will not succeed.¹⁴³ Subsequently, tactical-level day-to-day investment focused on strengthening alliances and increasing partner capacity and capability is essential.¹⁴⁴ While there are many ways to achieve this, the air advising enterprise integrated within a “whole of government” approach is well suited to support.

¹³⁸ Mulgund.

¹³⁹ Bauernfeind et al., “Agile Combat Employment: Are We Ready?”

¹⁴⁰ Bauernfeind et al.

¹⁴¹ Bauernfeind et al.

¹⁴² Bauernfeind et al.

¹⁴³ Curtis Lemay Center, Air Force Doctrine Note 1-21 Agile Combat Employment, AFDN 1-21 (Washington, D.C.: Curtis E Lemay Center for Doctrine Development and Education, 2022), https://www.doctrine.af.mil/Portals/61/documents/AFDN_1-21/AFDN%201-21%20ACE.pdf, 6.

¹⁴⁴ Curtis Lemay Center.

Regarding information and IW, the informational aspects of ACE can be leveraged to shape the “perceptions, behaviors, and attitudes of relevant actors.”¹⁴⁵ Employing IW can bolster assurance and deterrence through proactive overt messaging, obfuscating critical information, or misleading adversaries.¹⁴⁶ Since a critical component of ACE is creating targeting dilemmas for an adversary, deception becomes an effective tool in disrupting adversary decision-making.¹⁴⁷

ACE represents a shift in military strategy, focusing on the dispersal of forces and operations to enhance resilience and responsiveness in contested environments. It underscores the importance of adaptability, flexibility, and the ability to operate from austere locations. Central to the success of ACE is the ability to foster and leverage regional partnerships, building a collaborative network of allies who can act in concert. Equally vital is the mastery of IW, as the information environment continues to play an increasingly dominant role in modern conflict. To ensure ACE’s effectiveness and maintain a strategic edge, fostering strong regional partnerships and mastering the nuances of information warfare are not just optional - they’re essential.

E. CONCLUSION

In examining the evolution of IW, air advising, and ACE, this chapter underscores their pivotal roles in shaping modern warfare. Individually, each concept offers distinct advantages: IW influences perceptions to align with objectives; air advising enhances allied capabilities and capacity, acting as a force multiplier during crisis and conflict; and ACE introduces increased flexibility, creating challenges for adversaries and increasing maneuverability for friendly forces. However, the full potential of these constructs as seamlessly integrated elements remains untapped. When aligned effectively, these constructs catalyze a cohesive whole-of-government approach, amplifying the United States’ integrated deterrence objectives. The following chapters analyze potential courses the USAF could take to actualize tactical integration of IW within both air advising and ACE.

¹⁴⁵ Curtis Lemay Center, 11.

¹⁴⁶ Curtis Lemay Center, 11.

¹⁴⁷ Curtis Lemay Center, 1.

III. ANALYSIS OF DOCTRINE

A. INTRODUCTION

Military doctrine serves as a fundamental reference point for the armed services, yet each branch outlines its own unique interpretations, insights, and procedures. While tailoring doctrine to fit individual service needs and capabilities can be beneficial, it also risks creating confusion at the joint level when identical terms have different meanings. To illuminate these differences and detect synergies and best practices, this chapter undertakes a comprehensive analysis of doctrine relevant to this research. As it pertains to IW, this chapter analyzes USAF, United States Army, and USMC IW doctrine: *Air Force Doctrine Publication 3-13 Information in Air Operations*, *Final Draft Army Doctrine Publication 3-13 Information*, and *Marine Corps Doctrine Publication 8 Information*. Furthermore, due to its relevance in this research, this chapter also analyzes USAF ACE and air advising doctrine: *Air Force Doctrine Note 1-21 Agile Combat Employment* and *Air Force Instruction 10-4201, Volume 3 Air Advising Operations*. Appendix B offers a thorough analysis of each service's respective doctrine and follows a standardized framework that provides: an overview, an evaluation of relevance, key terms and definitions, discernable roles and responsibilities (both explicit and implied), and required tools and resources.

This chapter aims to critically evaluate doctrinal data, comparing and contrasting it with the operational insights garnered from the interviews in Chapter Four, to ultimately inform the final recommendations and findings. This chapter begins by examining ACE and air advising doctrine, delineating their respective requirements. It then proceeds to summarize the IW doctrine of each service branch, leading to a comparative analysis that highlights the similarities and differences. The chapter culminates by addressing the research questions introduced in Chapter One, leveraging the data gathered from doctrinal analysis. The research questions are:

1. What are the general roles and responsibilities of an IO officer in a tactical USAF conventional unit?

2. How do these mission sets overlap, and what are the subsequent opportunities for integration?
3. What is the impact of synchronizing IO, ACE, and air advising on integrated deterrence?
4. How should the USAF integrate IO in tactical mission sets, such as ACE and air advising, to enhance the United States' current and future deterrent posture?

B. AIR FORCE DOCTRINE NOTE 1-21 AGILE COMBAT EMPLOYMENT

In response to a shifting global security landscape and emerging challenges, the USAF has implemented ACE as a means to introduce operational unpredictability and bolster air base resilience, thus complicating adversary targeting and enhancing overall combat effectiveness. Since World War II, there has been a significant reduction in overseas air bases, and with technological advancements made by adversaries in “pervasive intelligence, surveillance, and reconnaissance and all-domain long-range fires,” air bases now face heightened risk.¹⁴⁸ Moreover, “fiscal and political constraints” are inhibiting “the establishment of new permanent bases.”¹⁴⁹ ACE offers a strategy that, when executed aptly, enhances survivability and combat power generation by complicating enemy targeting, posing both “political and operational dilemmas” for adversaries, and ensuring “flexibility for friendly forces.”¹⁵⁰ AFDN 1-21 outlines the enablers and framework of ACE. In competition, ACE “deters aggression” and, in conflict, enables the “United States to defend and win.”¹⁵¹ At its core, ACE creates multiple dilemmas for adversaries enabling friendly freedom of action and decision advantage.¹⁵² The overarching intent of this doctrine note is to underscore a paradigm shift in USAF operational thinking and its subsequent approach to operations. Additionally, this guidance aims to foster discussion across the force and intends to be refined

¹⁴⁸ Curtis Lemay Center, 6.

¹⁴⁹ Curtis Lemay Center, 1.

¹⁵⁰ Curtis Lemay Center, 1.

¹⁵¹ Curtis Lemay Center, 4.

¹⁵² Curtis Lemay Center, 4.

through feedback from operations and exercises as ACE matures. Table 3 outlines ACE specific requirements, relevant to this research.

Table 3. Relevant ACE Requirements¹⁵³

Air Advising Relevant Requirements: • “Create steady-state and contingency authorities with partner nations which allow for: overflight, direct coordination with host nation defense, staging of material/equipment, etc.” • Organize, train, and equip forces for ACE constructs. • Build interoperability with allies and partners. Information Warfare Relevant Requirements: • Complicate enemy observe-orient-decide-act loop. • Preserve combat capability. • Deter conflict by “being strategically predictable but operationally unpredictable.” • Augment dispersal operations “with other passive defense measures such as hardening and camouflage.” • Leverage ACE informational aspects “to shape perceptions and behaviors in ways that support the achievement of friendly force objectives.” • Employ deceptive information to “cause an adversary to errantly diffuse or concentrate forces, rendering them ineffective.” • Employ deceptive information to induce “‘analysis paralysis’ about ACE maneuver that challenges an adversary’s ability to make effective, timely decisions.” • Leverage ACE schemes of maneuver to “bolster assurance and deterrence.” • Reveal “joint force capabilities to deny adversary benefits or punish aggression.” • “Conceal or obscure aspects that provide perishable advantage.” • “Suggest elements that mislead adversaries.” • Signal “a combat-credible deterrent to adversaries” while assuring partners and allies. Both IW & Air Advising Relevant Requirements: • Exercise ACE operations and conduct capability demonstrations with joint forces and partner nations as an active deterrent to conflict. • Strengthen “alliances through trust and increasing partner capacity and capabilities.” • Delegate command authorities to the lowest appropriate level. • Conduct “overt messaging about ACE can be used to communicate the ability to rapidly disperse assets, aircraft, and personnel across a wide range of potential forward operating locations and leverage host nation organic capabilities, assets, and partner nation cooperative agreements.”

¹⁵³ Adapted from Curtis Lemay Center

C. AIR FORCE INSTRUCTION 10-4201, VOLUME 3 AIR ADVISING OPERATIONS

Air advising spans a broad spectrum of “activities and operations to include bilateral and multilateral meetings between senior leaders; subject-matter expert exchanges; exercises and competitions; mobile training team (MTT) and extended training service specialists (ETSS) deployments; global health engagements; agile combat support engagements; and Air National Guard (ANG) State Partnership Program (SPP) engagements with partner nations.”¹⁵⁴ These activities in turn generate tactical, operational, and strategic effects. The overarching aim of air advising is “to support U.S. strategic objectives, GCC theater strategies, and [theater campaign plans] TCPs by assisting partner nations in the development and sustainment of their aviation enterprises.”¹⁵⁵ Air advising activities support security cooperation initiatives and programs to include “building partner capacity (BPC), security force assistance (SFA), foreign internal defense (FID), security sector reform (SSR), and support to security assistance.”¹⁵⁶ Air advising efforts are most effective through persistent engagement with the partner nation that generates “synergistic effects focused on the long-term strategic and objectives of the GCC.”¹⁵⁷ Table 4 outlines air advising specific requirements, relevant to this research.

¹⁵⁴ Secretary of the Air Force, Air Force Instruction 10-4201, Volume 3 Air Advising Operations, AFI 10-4201 (Washington, D.C.: United States Air Force, 2015), <https://daytonaero.com/wp-content/uploads/AFI-10-4201.pdf>, 5.

¹⁵⁵ Secretary of the Air Force, 17.

¹⁵⁶ Secretary of the Air Force, 5.

¹⁵⁷ Secretary of the Air Force, 19.

Table 4. Relevant Air Advising Requirements¹⁵⁸

Relevant Air Advising Requirements
IW Relevant Requirements: • Build “relationships and rapport with partner nation personnel.” ACE Relevant Requirements: • Gain U.S. “access to partner nation facilities required during both peacetime and contingency operations.” • Increase “interoperability among joint and coalition forces” through joint and coalition training. • Conduct “bilateral and multilateral exercises and competitions.” • Conduct joint “combined exchange training missions.” Both IW and Air Advising Relevant Requirements: • Conduct “initial ‘door-opening’ activities and periodic military-to-military discrete engagements at either a senior-level or subject matter expert level to address specific areas within the aviation enterprise.”

D. AIR FORCE DOCTRINE PUBLICATION 3-13 INFORMATION IN AIR OPERATIONS

The USAF has updated its approach to IO with the introduction of *AFDP 3-13 Information in Air Operations*, superseding its predecessor *AFDP 3-13 Information Operations*. The newest version incorporates OIE, which, in short, aims to inform, influence, attack, exploit, and protect information sources, whether they be networks, systems, or the very information itself.¹⁵⁹ Notably, OIE is not viewed as a standalone capability; instead, it achieves its objectives through planning, integration, and employing IW capabilities. The doctrine outlines fourteen distinct IW capabilities, providing comprehensive summaries for each; they include civil-military operations, counterintelligence, cyberspace operations, data science and operations research, EMSO, information operations forces, intelligence, international affairs, MISO, MILDEC, OPSEC, PA, space operations, and WX operations. AFDP 3-13 asserts that OIE can

¹⁵⁸ Adapted from Secretary of the Air Force.

¹⁵⁹ United States Air Force, *AFDP 3-13, Information in Air Force Operations*, 2.

maximize both the informational and operational advantage for the joint force by optimizing the tempo, scope, and purpose of the informational aspects of military actions. Furthermore, it asserts that information planners must recognize that tactical actions can yield strategic implications, underlining the interconnectedness of actions across the operational spectrum.¹⁶⁰ Thus, when developing campaigns, planners need to focus on the day-to-day activities as a means to generate effects; this may include baseline operations, military engagements, security cooperation, deterrence, or other shaping activities.¹⁶¹ Finally, as it relates to security cooperation, the doctrine keenly notes that supporting forces may not have a “habitual working relationship with OIE,” so it is critical for information planners to proactively coordinate to leverage opportunities such as civil-military operations, security assistance, audience engagement, and foreign military sales.¹⁶²

E. FINAL DRAFT ARMY DOCTRINE PUBLICATION 3-13 INFORMATION

While not yet published, the final draft of *Army Doctrine Publication 3-13 Information* embodies a paradigm shift for the Army, one which recognizes “that all activities have inherent informational aspects that generate effects which contribute to or hinder achieving objectives.”¹⁶³ Subsequently, “Army forces fight for, defend, and fight with information as part of a continuous struggle to gain and exploit advantages above and below the threshold of armed conflict.”¹⁶⁴ It outlines a combined arms approach that both creates and exploits information advantages. “During operations, Army forces collect, process, analyze, and use information to understand situations, make decisions, and issue orders that result in action.”¹⁶⁵

They deny threats access to friendly data and information, protect decisions, and defend networks to ensure communications. Army forces communicate information to inform relevant audiences, correct misinformation, and

¹⁶⁰ United States Air Force, 26.

¹⁶¹ United States Air Force, 10.

¹⁶² United States Air Force, 9.

¹⁶³ Army Chief of Staff, *Army Doctrine Publication 3-13 Information* (Washington, D.C.: Department of the Army, 15 June 2-23), ix.

¹⁶⁴ Army Chief of Staff, ix.

¹⁶⁵ Army Chief of Staff, ix.

counter threat disinformation. Army forces employ information in combination with physical action to influence threat decision-making and behavior. They attack threat data, information, and networks to affect the threat's ability to command and control (C2) its own forces.¹⁶⁶

These tasks are aligned in support of five information activities: (1) enable; (2) protect; (3) inform; (4) influence; and (5) attack.¹⁶⁷ During competition, information activities may include “military engagement, security cooperation, and deterrence activities;” these are executed to improve security within partner nations, enhance international legitimacy, gain multinational cooperation, and influence adversary decision-making.¹⁶⁸ The overarching message is clear: in today's digital age, achieving an information advantage is integral to operational success.

F. MARINE CORPS DOCTRINE PUBLICATION 8 INFORMATION

The *Marine Corps Doctrine Publication 8 Information* is introduced as a comprehensive framework aimed at enhancing the understanding and employment of the information warfighting function. It underscores the importance of utilizing information to gain information advantages across the competition continuum. Every Marine, regardless of rank, is instrumental in leveraging information for success, from supporting the prevailing narrative to defending or attacking critical information networks.¹⁶⁹ Marines strive to create three types of information advantages: systems overmatch, prevailing narrative, and force resiliency, which is instrumental in decision-making, operational tempo, and psychological warfare.¹⁷⁰ Central to this is information as a warfighting function, and all marines are expected to approach information with a maneuver warfare mindset. Marines are prompted to consider the broad, strategic implications of their operations, underscoring the importance of information within the information age.

¹⁶⁶ Army Chief of Staff, ix.

¹⁶⁷ Army Chief of Staff, ix.

¹⁶⁸ Army Chief of Staff, 2-9.

¹⁶⁹ Commandant of the Marine Corps, *Marine Corps Doctrine Publication 8 Information* (Department of the Navy, 2022), 1-6.

¹⁷⁰ Commandant of the Marine Corps, 2-7.

Information is viewed differently across the levels of war. On the strategic front, it involves defending vital information while persuading favorable perceptions, decisions, and behaviors in alignment with national policy objectives.¹⁷¹ Operationally and tactically, it is about “generating, preserving, denying, and projecting information” effectively to impose will and achieve objectives.¹⁷² When properly employed and leveraged, information advantages yield “increased decision speed, surprise, faster targeting cycles, increased operational tempo,” and/or psychological advantages.¹⁷³

G. COMPARATIVE ANALYSIS

The United States military branches have each developed their own doctrines that underscore the pivotal role of information; although these doctrines are largely aligned, they exhibit divergences in certain aspects. While the USAF, U.S. Army, and USMC all acknowledge the centrality of information in achieving strategic and operational objectives, their approach to its integration and application varies. AFDP 3-13 is capability-centric, providing an overview of all fourteen information capabilities and emphasizing the role of information in air operations as leveraging the informational aspects of military activities to optimize effects. Similarly, ADP 3-13 underscores the continuous and inherent informational aspects of all activities and places an emphasis on information advantage, which is defined as “a condition when a force holds the initiative in terms of situational understanding, decision making, and relevant actor behavior through the use of all relevant military capability.”¹⁷⁴ Finally, MCDP 8 is broadly applicable, emphasizing every Marine’s integral role in the information domain, irrespective of rank, and is intended to educate all Marines on how to create information advantages. Tables 5 and 6 delves into the similarities and nuances of these doctrines, highlighting each service’s unique perspective on information.

¹⁷¹ Commandant of the Marine Corps, 2-8.

¹⁷² Commandant of the Marine Corps, 2-8.

¹⁷³ Commandant of the Marine Corps, 2-12.

¹⁷⁴ Army Chief of Staff, *ADP 3-13 Information*, Glossary 5.

Table 5. Comparing and Contrasting Information Doctrine¹⁷⁵

Information Doctrine Comparative Analysis	
Similarities	Differences
Information’s Central Role: All three doctrines underscore the centrality of information in modern warfare. The USAF, U.S. Army, and USMC all emphasize the importance of leveraging the informational aspects of United States’ military activities to gain an advantage over adversaries. Strategic Implications: All services highlight the strategic implications of OIE. Furthermore, each note that information can be leveraged to accomplish friendly objectives more effectively. Relevant Actors: All three doctrines emphasize the significance of engaging with both friendly and adversary audiences. This includes leveraging activities like civil-military operations, security cooperation, military engagement, and deterrence.	Scope: The USAF’s doctrine provides a detailed breakdown of fourteen distinct IW capabilities, while the Army’s doctrine is structured around five key information activities, and the USMC focuses on three information advantages. View of Information: The USMC’s doctrine is unique in its emphasis on every Marine’s role in the information domain, irrespective of rank. In contrast, the USAF and U.S. Army doctrine reads as though it is intended primarily for information professionals. The U.S. Army also notes that commanders, staffs and soldiers at all levels have the responsibility to achieve information advantages, but this sentiment pales in comparison to the emphasis the USMC puts on this up front. Warfighting Function: While all three doctrines acknowledge the changing nature of the information landscape, the USMC doctrine places a significant emphasis on the importance of information in the digital age and views it as a warfighting function. Force Resiliency: Both the USMC and U.S. Army highlight the importance of training and educating the force to resist influence. The USMC highlights the needed investment in a “Marine’s ability to resist, counter, and prevail against enemy and adversary reconnaissance, technical disruptions, and malign activity.”¹⁷⁶ The U.S. Army highlights the entire force is potentially subject to threat-influence activities. Such threats “require all Soldiers to remain vigilant to threat attempts to undermine their morale and will.”¹⁷⁷ Information - The Commander’s Responsibility: Both the USMC and the U.S. Army clearly note that gaining and exploiting information advantages is the commander’s responsibility.

¹⁷⁵ Adapted from the United States Air Force, Air Force Doctrine Publication 3-13, Information in Air Force Operations, 2023, https://www.doctrine.af.mil/Portals/61/documents/AFDP_3-13/3-13-AFDP-INFO-OPS.pdf, Army Chief of Staff, *Final Draft Army Doctrine Publication 3-13 Information*. Commandant of the Marine Corps, Marine Corps Doctrine Publication 8 Information (Department of the Navy, 2022).

¹⁷⁶ Commandant of the Marine Corps, *Marine Corps Doctrine Publication 8 Information*, MCDP 8 (Washington, D.C.: Department of the Navy, 2022), <https://www.marines.mil/Portals/1/Publications/MCDP%208.pdf?ver=6gIvEcD0CUuPAgTSmyDNag%3d%3d>, 2-11.

¹⁷⁷ Army Chief of Staff, *Final Draft Army Doctrine Publication 3-13 Information*, ADP 3-13 (Washington, D.C.: Department of the Army, 2023), 5-5.

Table 6. Comparing Information Doctrine: Information Advantage

Information Doctrine Comparative Analysis	
Information Advantage: Each service identifies creating and exploiting information advantages as a critical component of warfare, but each service has a distinct definition for the information advantage construct.	
USMC	“An exploitable condition resulting from one actor’s ability to generate, preserve, deny, and project information more effectively than another.” ¹⁷⁸
USAF	“The operational advantage gained through the joint force’s use of information for decision making and its ability to leverage information to create effects on the IE.” ¹⁷⁹
U.S. Army	“A condition when a force holds the initiative in terms of situational understanding, decision making, and relevant actor behavior through the use of all relevant military capability.” ¹⁸⁰

H. RESEARCH QUESTIONS: DOCTRINAL RESPONSE

- (1) What are the general roles and responsibilities of an IO officer in a tactical USAF conventional unit?

In order to define the roles and responsibilities of IO officers in support of tactical mission sets, it is essential to understand the USAF’s definition of the tactical level. As outlined in AFDP 1, tactical actions directly contribute to conflict, they are instrumental in achieving operational outcomes and are intrinsically linked to strategic goals, aligning airpower with overarching national objectives. This construct underscores in the interconnectivity across the levels of war in stating:

Airpower creates effects across all three levels of warfare: strategic, operational, and tactical. The strategic level of war defines why and with what the conflict occurs. The operational level of war determines what courses of action, in what order, and for what” duration forces are employed in the conflict. Finally, the tactical level of war defines how we create the operational effects. Actions in war occur at the tactical level, but an understanding of the operational and strategic implications of those actions

¹⁷⁸ Commandant of the Marine Corps, *MCDP 8 Information*, 1-6.

¹⁷⁹ United States Air Force, *AFDP 3-13, Information in Air Force Operations*, Glossary 5.

¹⁸⁰ Army Chief of Staff, *ADP 3-13 Information*, 3.

is key to the employment of airpower in pursuit of our national objectives.¹⁸¹

AFDP 3-13 delineates seven core responsibilities for IO officers that span the competition continuum and the entire planning, execution, and assessment cycle. These encompass: (1) integration and synchronization of military informational aspects; (2) inform, influence, and engage foreign relevant actors; (3) attack, exploit, and deny foreign relevant actor information; (4) protect friendly information; (5) support commander's communication synchronization strategy; (6) planning and administrative functions; and (7) assessments. Additionally, the *14F Guidebook* further elaborates on these responsibilities, detailing eleven general duties that IO officers are expected to perform across the levels of war. When implemented at the tactical level, these responsibilities support and advance broader operational and strategic objectives. Table 7 serves as the amalgamation of both AFDP 3-13 and the *14F Guidebook*, resulting in a thorough, but not comprehensive, list of potential IO officer responsibilities. Tables 8 and 9 also include responsibilities from both ADP 3-13 and MCDP 8, respectively, reflecting alignment with the other service branches and capturing the full breadth of IW responsibilities.

It is essential to note caveats regarding this list of responsibilities. First, this list should not be considered exhaustive but rather a foundational framework for developing roles and responsibilities that are tailored to specific unit missions. Second, these duties demand a collaborative approach, necessitating a team of no fewer than two to three IO officers, as opposed to the reliance on a single IO officer. Finally, unit support and advocacy play a critical role in the successful integration of IW, serving as either a force multiplier or a critical detriment.

¹⁸¹ Chief of Staff, United States Air Force, *Air Force Doctrine Publication 1 The Air Force*, AFDP 1 (Washington, D.C.: Chief of Staff, United States Air Force, 2021), https://www.doctrine.af.mil/Portals/61/documents/AFDP_1/AFDP-1.pdf.

Table 7. USAF IO Officer Roles and Responsibilities¹⁸²

IO Officer Responsibilities
AFDP 3-13 Information in Air Operations & 14F Guidebook Integration and Synchronization of Military Informational Aspects: • “Integrate physical and informational power at the strategic, operational, and tactical levels with Service, Joint, and Interagency organizations.”¹⁸³ ○ “Drive the coordination and integration of information-related capabilities with Service, Joint, and Interagency organizations.”¹⁸⁴ • “Coordinate, integrate, and synchronize the employment of information capabilities with whole-of-government efforts,” to include “across components, areas of responsibilities, and with ally and mission partners.” ○ Integrate “all-domain kinetic and non-kinetic capabilities across a full range of military operations to produce lethal and non-lethal effects.” Inform, Influence, and Engage Foreign Relevant Actors: • “Apply social science principles across the four functional competencies of analysis, planning, integration, and assessments to influence perceptions, behavior, and action or inaction of relevant actors.”¹⁸⁵ ○ “Plan, coordinate, conduct, and assess OPSEC, MISO, and deception activities.”¹⁸⁶ ▪ Misperlead adversary-decision makers. • “Impose costs by diverting their cognitive and physical resources towards unproductive ends.” • “Leverage the inherent information aspects of USAF operations, activities, and investments to support influence objectives.”¹⁸⁷ ○ “Conduct selective demonstrations of unique Joint Force capabilities.” • “Deter adversaries from engaging in behaviors or actions detrimental to United States interests.” • “Assure and persuade allies, partners, and relevant foreign actors to initiate/continue beneficial behaviors or halt detrimental actions contrary to United States interests.” Attack, Exploit, and Deny Foreign Relevant Actor Information:

¹⁸² Adapted from United States Air Force, *Air Force Doctrine Publication 3-13, Information in Air Force Operations*, 2023, https://www.doctrine.af.mil/Portals/61/documents/AFDP_3-13/3-13-AFDP-INFO-OPS.pdf.

¹⁸³United States Air Force, 14F Guidebook, 5.

¹⁸⁴ United States Air Force, 5.

¹⁸⁵ United States Air Force, 5.

¹⁸⁶ United States Air Force, 5.

¹⁸⁷ United States Air Force, 5.

IO Officer Responsibilities
AFDP 3-13 Information in Air Operations & 14F Guidebook
• Deny adversary “critical information and observable indicators about friendly forces and intentions” through OPSEC. ○ Employ signature management and the base profiling process “to profile an installation’s day-to-day observable activities and operational trends.” • Employ MILDEC to affect “an adversary decision-maker’s information systems, processes, and capabilities.” Protect Friendly Information: • Employ OPSEC to “identify, control, and protect critical information.” • “Analyze friendly actions associated with military operations and other activities.” ○ Develop and maintain a critical information and indicators list (CIIL) • Conduct base profiling process: “a deliberate effort to identify functional areas; their associated observables, signatures, and indicators; and how they contribute to the installation’s overall signature profile.” • “Lead the planning and assessment of unit-level Signature Management activities.”¹⁸⁸ Support Commanders’ Communication Synchronization Strategy: • Nest under the overall component narrative, establish a tactical narrative, key themes, and allocate resources. ○ “Continually reinforce the component narrative through sustained presence and engagement.” ○ “Coordinate themes and messages with action approvals, tasking orders, and targeting lists.” • Respond proactively to “emergent events across the competition continuum.” ○ Match actions with messages. • Synchronize messaging with allies and partners. • Expose and counter malign influence. ○ “Counter adversary propaganda and disinformation.” Planning and Administrative Functions: • Provide OIE inputs “during each step of the JPPA and the air tasking cycle.” • “Conduct analysis and planning commensurate with human, social, and cultural dynamics.” ○ “Submit requirements for analytical needs.” ○ “Manage planning for flexible and adaptive operations through the joint planning process in support of higher headquarters and commander’s objectives and desired effects.”¹⁸⁹

¹⁸⁸ United States Air Force,

¹⁸⁹ United States Air Force, 5.

IO Officer Responsibilities
AFDP 3-13 Information in Air Operations & 14F Guidebook
• “Lead structured analytical techniques, critical and creative thinking concepts, research, and indications/warning formulation to deliver in-depth intelligence analysis providing insight into adversary intentions, weaknesses, and potential vulnerabilities.”¹⁹⁰ • “Direct the synchronized planning, execution, and assessment of kinetic and non-kinetic capabilities into the targeting cycle to effectively wage information warfare throughout the full spectrum of military operations.”¹⁹¹ Assessments: • “Lead IO-focused input to assessment plans and evaluate data to provide IO-related assessment recommendations.”¹⁹² • “Develop assessment criteria (e.g., measures of performance, or MOP, and MOE).”

Table 8. ADP 3-13 Roles and Responsibilities for Consideration¹⁹³

Responsibilities for Consideration from the Other Service Branches
ADP 3-13 Information
Enable: • “Conduct the operations process and coordinate across echelons.” ○ Establish liaison - “contact or intercommunication maintained between elements of military forces or other agencies.” • “Conduct risk management.” • “Identify and describe relevant actors.” • “Identify likely behavior of relevant actors.” Protect: • Implement OPSEC: OPSEC “is both a process and a mindset adopted by all Soldiers to reduce the threat’s ability to collect information and discern friendly force intentions.” • “Conduct deception in support of Operations Security” (DISO): “Commanders employ deception in support of OPSEC to create multiple false indicators that

¹⁹⁰ United States Air Force, 5.

¹⁹¹ United States Air Force, 5.

¹⁹² United States Air Force, 5.

¹⁹³ Adapted from Army Chief of Staff, *Final Draft Army Doctrine Publication 3-13 Information*.

Responsibilities for Consideration from the Other Service Branches
ADP 3-13 Information confuse enemy or adversary forces operating in the unit’s area of operations, making unit intentions harder to interpret.” • “Employ camouflage, concealment, and obscurity:” “OPSEC measures are used to protect friendly forces and activities from threat detection—observation and surveillance. Camouflage and concealment help obscure friendly data and information.” Inform: • Employ commander’s communication synchronization (CCS), “a process that coordinates and synchronizes narratives, themes, messages, images, operations, and actions to ensure their integrity and consistency to the lowest tactical level across all relevant communication activities.” • Educate Soldiers: “The entire Army force is potentially subject to threat-influence activities. Such threats require all Soldiers to remain vigilant to threat attempts to undermine their morale and will. Leaders train Soldiers to recognize such activities during initial entry training and throughout their service.” • Conduct community engagement: “These activities involve working collaboratively with, and through, groups of people affiliated by geographic proximity or special interests to enhance the understanding and support for Army forces and operations.” • Conduct soldier and leader engagement: “Interpersonal interactions by Soldiers and leaders with audiences in an area of operations.” • “Correct misinformation and counter disinformation” within international audiences. Influence: • Conduct deception activities: “Military deception is actions executed to deliberately mislead adversary military, paramilitary, or violent extremist organization decision makers, thereby causing the adversary to take specific actions (or inactions) that will contribute to the accomplishment of the friendly mission.” • Conduct Tactical Deception: “a friendly activity that causes enemy commanders to take action or cause inaction detrimental to their objectives.”

Table 9. MCDP 8 Roles and Responsibilities for Consideration¹⁹⁴

Responsibilities for Consideration from the Other Service Branches
MCDP 8 Information Systems Overmatch: • Implement “operations security measures, communication discipline, camouflage, counterintelligence, signature suppression, and cybersecurity measures.” • “Marines conduct a wide range of tactical deception operations, including feints, demonstrations, ruses, and displays to draw the enemy or adversary away from our main effort.” ○ Use of “tempo to confuse the enemy,” employing “decoys to overwhelm radars,” and “conducting cyberspace and electromagnetic spectrum operations to bombard adversary networks and computer systems with digital noise.” ○ “Techniques that Marines employ to deceive opposing systems range from tactical deception to highly sensitive joint military deception activities, to deception in support of operations security.” ○ “Tactical deception creates disproportionate advantages based on how much time and resources an enemy or adversary diverts toward our ruse or trap.” • “Marines support joint military deception activities by taking specific actions or by employing special technical capabilities to deceive a specific target or decision maker.” • “Deception in support of operations security manipulates the information available to a foreign intelligence entity and limits their overall ability to collect or accurately analyze critical information about friendly operations, personnel, programs, equipment, and other assets.” Prevailing Narrative: • “Build understanding of key pre-existing and potential narratives (friendly, neutral, opponent) to include all relevant contexts and nuances.” ○ Study “the mental and moral factors underpinning key populations.” ○ Identify “key stakeholders.” ○ Measure “the narrative’s effectiveness with the intended audience.” • “Marines must also understand that their presence, posture, and actions will always communicate a message that is open to interpretation.” • “Protect and defend the friendly narrative from opponent disruption and replacement; document and maintain unit histories and historical events with accuracy.” ○ “Record and archive historical information about the unit’s operations.” • Recognize and dispel misinformation and disinformation.

¹⁹⁴ Adapted from Commandant of the Marine Corps, *Marine Corps Doctrine Publication 8 Information, MCDP 8* (Washington, D.C.: Department of the Navy, 2022), <https://www.marines.mil/Portals/1/Publications/MCDP%208.pdf?ver=6gIvEcD0CUuPAgTSmyDNag%3d%3d>.

Responsibilities for Consideration from the Other Service Branches
MCDP 8 Information • “Communicate the friendly narrative by coordinating and synchronizing all communication, messaging, and actions, nesting them within the strategic and joint force narratives.” ○ “Align actions with official communication and other messaging to gain a public opinion or perception advantage with key audiences.” ○ “Project information through deliberate activities, including key leader engagements, military-to-military training exercises, community relations projects, news releases, or presence.” • “Recognize that all military activities are physically detectable and observable and can therefore communicate a message—whether intentional or unintentional.” • “Marines at all levels must understand the impact that their actions and messages communicate— particularly in the context of local and international narratives.” Force Resiliency: • “Build understanding of own force information vulnerabilities, actual and potential threats; identify risks and opportunities for action.” • “Defeat or disrupt the opponent’s ability to access, gather, make sense of, or use information; guard against cognitive biases, conduct media literacy training to ensure Marines recognize and stop foreign influence.” • “Manipulate, corrupt, or deceive the opponent; communicate by action (exercises, demonstrations, freedom of navigation operations) to reassure allies and partners and send deterring messages of resolve to actual or potential adversaries.” Information in Competition: • Conduct military engagement, “which is the deliberate contact and interaction between military personnel or units and those of another nation’s armed forces or civilian authorities and agencies. All engagements should shape a credible prevailing narrative that builds trust and confidence by sharing information and coordinating mutually beneficial activities.” ○ Maintains “a persistent forward presence in contested zones.” ○ Engage with allies and partners. ○ Conduct security cooperation. ○ Provide credible deterrence. Information in Armed Conflict and General Warfare: • “Directly target the enemy’s will to fight by using aggressive disinformation and propaganda to manipulate their perceptions of self, trust in their leaders, one another, and their ability to endure the hardships of battle.” • “Preserving data and information networks is a critical concern of commanders during armed conflict and general warfare and requires careful study and planning, coupled with forceful offensive and defensive actions.”

- (2) How do these mission sets overlap, and what are the subsequent opportunities for integration?

Drawing from both the ACE and air advising requirements, Table 10 highlights the two primary categories that encapsulate where these mission sets overlap: engagements and demonstrations. Engagements are centered predominately around relationship-building activities and entail: subject matter expert exchanges, information sharing, key leader engagements, education, and efforts aimed at increasing trust and strengthening alliances. Demonstrations consist of activities that showcase operational capability and act as a mechanism to both deter and assure. They consist of exercises, OAI, building capacity and capability, and increasing interoperability.

Table 10. Integration Opportunities

Integration Opportunities	
Engagements	
Strengthen Relationships	IW: Leverage influence techniques, MISO, and cultural understanding of relevant audience to build and strengthen relationships. Synchronize and align activities with key stakeholders to yield synergistic effects. Assist in development of engagement strategies to ensure continuity of effort is pursuit of operational and strategic investments. ACE: Strengthen relationships to gain and maintain access for dispersed ACE operations and enhance interoperability. Air Advising: Employ air advising to invest in partner nations capabilities and capacities that augment of support U.S. national objectives.
Subject Matter Expert Exchanges	IW: “Continually reinforce the component narrative through sustained presence and engagement.”¹⁹⁵ This can be reinforced through talking points supporting SMEEs. ACE: Conduct SMEEs on ACE related competencies. Air Advising: Engage directly with partner nations through SMEEs.

¹⁹⁵ United States Air Force, Air Force Doctrine Publication 3-13, Information in Air Force Operations, AFDP 3-13 (Washington, D.C.: United States Air Force, 2023), https://www.doctrine.af.mil/Portals/61/documents/AFDP_3-13/3-13-AFDP-INFO-OPS.pdf, 7.

Integration Opportunities	
Engagements	
Key Leader Engagements	IW: Reinforce component narrative. This can be reinforced through talking points supporting KLEs. ACE: Conduct door opening activities with senior leaders to gain and maintain access. Air Advising: Leverage air advising activities to engage with key leaders.
Demonstrations	
Conduct ACE Exercises	IW: Conduct overt messaging about ACE for assurance and deterrence objectives. “Communicate the ability to rapidly disperse assets, aircraft, and personnel across a wide range of potential forward operating locations and leverage host nation organic capabilities, assets, and partner nation cooperative agreements.”¹⁹⁶ ACE: Conduct ACE exercises as capability demonstrations to both deter adversaries and assure allies and partners. Air Advising: Integrate allies and partners in ACE exercises. Train on ACE proficiencies, increase interoperability, and source critical operational requirements by leveraging local and regional markets.
Build Partner Capacity	IW: Increase partner nation IW capabilities, overtly message BPC activities. ACE: Build partner ACE capabilities. Air Advising: Conducting training and education to build partner capacities.
Increase Interoperability	IW: Overtly message increased interoperability as a deterrent. ACE: Increase interoperability with partner nations to off-set ACE requirements. Air Advising: Leverage air advising training and education missions to increase partner nation interoperability.

¹⁹⁶ Curtis Lemay Center, *Agile Combat Employment Air Force Doctrine Note 1-21, 11*.

- (3) What is the impact of synchronizing IO, ACE, and air advising on integrated deterrence?

Doctrinally, integrated deterrence is defined in the NDS as the employment of “all tools of national power across domains, geography, and spectrum of conflict while working with allies and partners.”¹⁹⁷ Its essence is to calibrate adversary risk perceptions to avoid conflict escalation. As it pertains to IW, a critical responsibility is to inform, influence, and engage relevant actors. A subset of influencing relevant actors is deterring “adversaries from engaging in behaviors or actions detrimental to United States interests,” which directly supports the aims of integrated deterrence.¹⁹⁸ Moreover, when properly integrated across the levels of war, IO officers “coordinate, integrate, and synchronize the employment of information capabilities with whole of government efforts, to include across components, areas of responsibilities, and with ally and mission partners,” inherently fulfilling integrated deterrence requirements.¹⁹⁹ ACE, as a scheme of maneuver is designed to serve as an active “deterrent to conflict.”²⁰⁰ ACE accomplishes this through exercise and demonstrations with the joint force and in conjunction with allies and partners. Finally, a foundational component of integrated deterrence is the United States network of allies and partners. Air advising supports and bolsters the enterprise by working alongside partner nations to improve their respective aviation enterprises, allowing for a more capable and interoperable force, and serving as a credible deterrent. Collectively, the integration and employment of IW, ACE and air advising in unison operationalizes integrated deterrence, bolstering the United States’ influence, deterrent capabilities, and contributions to global stability.

- (4) How should IO be integrated into tactical mission sets?

AFDP 3-13 outlines the current posture of IO officers; as it stands, the USAF embeds IW planning functions within an Air Operations Center (AOC) or on the Air

¹⁹⁷ Pederson and Akopian, “Sharper: Integrated Deterrence.”

¹⁹⁸ United States Air Force, *AFDP 3-13, Information in Air Force Operations*, 32.

¹⁹⁹ United States Air Force, 2.

²⁰⁰ Curtis Lemay Center, *AFDN 1-21 Agile Combat Employment*, 6.

Component Commander's staff. Posturing forces in this manner supports operational and strategic level planning.²⁰¹ Within the AOC, IW planners are often attached to the strategy division or act as a commander's cross-cutting specialty team.²⁰² There is no doctrinal prescription for how IO should be integrated to support tactical mission sets, rather, the data from the interview questions will inform how IO could be postured to support these mission sets.

I. CONCLUSION

While perhaps not explicit, there is an integral component that is the thread between integrated deterrence, IW, ACE, and air advising: the human dimension. As defined in ADP 3-13, the human dimension encapsulates the “interaction between individuals and groups, how they understand information and events, make decisions, generate will, and act within an operational environment.”²⁰³ The ability to exert influence and deter adversaries ultimately resides within the human dimension, achieved through the intentional crafting of narratives, alignment of actions, and revealing and/or concealing of operational capabilities. Fostering relationships with allies and partners rests on the United States' ability to gain trust and confidence and assure foreign audiences of our unwavering commitment. Ultimately, the strength of integrated deterrence lies in the human dimension, where hearts and minds are won, and the resolve of our allies and adversaries is shaped.

Currently, these mission sets operate in relative isolation, consequently attenuating the efficacy of integrated deterrence. The doctrinal analysis reveals substantial areas of convergence and opportunities for a more cohesive approach. Moving forward, dismantling these operational silos and integrating these mission sets will not only enhance the effectiveness of integrated deterrence but also strengthen the United States' role as a formidable and dependable global ally. This chapter has set the stage for such integration, uncovering paths for collaboration that are deeply rooted in the human dimension—the critical enabler of influence and deterrence.

²⁰¹ United States Air Force, *AFDP 3-13, Information in Air Force Operations*, 17.

²⁰² United States Air Force, 21.

²⁰³ Army Chief of Staff, *I-9*.

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IV. INTERVIEW FINDINGS AND ANALYSIS

A. INTRODUCTION

This chapter provides a comprehensive overview of IO, ACE, and air advising from the perspective of professionals in each respective field. The interview questions were designed to understand the role of each construct, the gap between doctrinal prescriptions and operational realities, the degree of understanding and integration across the force, and the role in integrated deterrence. Through interviews and subsequent conversations, these constructs' inherent strengths and weaknesses were illuminated, and their synergies became evident. This chapter begins with an overview of the key findings from the subset of interviews: USAF IO Officers, ACE SMEs, USAF Air Advisors, and Other Military Services Information Professionals (USMC and United States Army). The chapter culminates by addressing the research questions introduced in Chapter One, leveraging the data gathered from interviews, and contrasting with the doctrinal analysis from Chapter Three. The research questions are:

1. What are the general roles and responsibilities of an IO officer in a tactical USAF conventional unit?
2. How do these mission sets overlap, and what are the subsequent opportunities for integration?
3. What is the impact of synchronizing IO, ACE, and air advising on integrated deterrence?
4. How should the USAF integrate IO in tactical mission sets, such as ACE and air advising, to enhance the United States' current and future deterrent posture?

Ultimately, this chapter seeks to illuminate these constructs' diverse roles, challenges, and integrative potentials within contemporary military operations.

B. SUMMARY AND KEY FINDINGS: INSIGHTS FROM INTERVIEWS

1. Roles, Responsibilities, and Functions

a. USAF IO Officers

There is a consensus among USAF IO officers that doctrinally, they are trained in MISO, OPSEC, and MILDEC principles and are expected to conduct analysis, planning, integration, and assessment. USAF IO officers are the only AFSC explicitly charged with the integration function and are responsible for conducting MISO within the USAF. Respondents highlight that the gap between doctrine and practical application is a recurring issue. IO officers are often tasked with responsibilities that extend beyond their formal training, necessitating ingenuity, and creative thinking, aspects that doctrine cannot sufficiently account for.

Despite their social science backgrounds, IO officers rarely apply psychological theories in operations, suggesting a misalignment between their academic training and the practical demands of military operations. This disparity raises questions about the appropriateness of entry requirements and the effectiveness of current tactics, techniques, and procedures (TTP).

Furthermore, the role of an IO officer varies considerably depending on the mission, unit, and position, leading to inconsistent standardization within the service. This lack of a clear, universal definition of an IO officer's role results in varied expectations and preparedness levels for IO officers and their leadership. While training is thorough, it fails to encompass the full range of real-world operational challenges IO officers face.

b. IO Officers Across the Services

Defining the roles and responsibilities of an IO officer across the services, both doctrinally and in practice, involves recognizing the breadth and depth of their duties. Doctrinally, an IO officer is responsible for planning, synchronizing, and integrating various information capabilities to support overall operational plans and align with the commander's intent. Doctrine often outlines a structured and systematic approach, while in practice, roles are more fluid and influenced by factors such as unit culture, the operating

environment, and the commander's preferences. IO's effectiveness hinges on not just adherence to doctrine but also its ability to adapt to evolving operational realities and geopolitical landscapes. An interdisciplinary approach is crucial for effective IO but also adds complexity in synchronizing a diverse toolkit of information capabilities. A recurring theme is the challenge of effectively integrating different elements of IO within the broader operational plan.

Challenges in integration, synchronization, and effective utilization of information capabilities are common, compounded by frequent changes in doctrine and a lack of understanding at higher command levels. Another roadblock is that doctrinally, IO is envisioned as a broad, integrated effort requiring a comprehensive understanding of various information capabilities. However, IO officers often specialize in specific areas in practice, leading to a lack of holistic expertise. Across the forces, senior leaders frequently lack a thorough understanding of IO, leading to inefficiencies and misinformed decision-making, training exercises fail to adequately mirror the complexities of real-world IO, and the frequent changes in IO doctrine and structure make it difficult to understand and appreciate. Finally, the internal competition for funding and influence within the military hierarchy further complicates the effective implementation of IO as envisioned doctrinally, highlighting an apparent disparity between what is prescribed and what is practiced.

c. ACE: Operational Concept in In Practice

ACE is envisioned as a dynamic operational concept designed to enable more flexible and decentralized command structures in USAF operations. The core idea behind ACE is to facilitate swift, unpredictable, and effective deployment of forces that increase survivability. However, in practice, the implementation of ACE faces challenges, primarily due to a historical focus on large-scale, steady-state operations, which have led to a decline in expeditionary assets and proficiency. For example, once widely employed systems like Red Horse, bare base, and contingency response groups have become less effective due to underutilization over the years. Compounding these challenges are issues related to funding and procurement. Despite a wealth of innovative and efficient ideas, the lagging procurement process impedes the timely realization of ACE's full potential. This situation

underscores the urgent need for aligning resources and processes with the evolving operational requirements of the Air Force.

Operationalizing ACE reveals stark contrasts between the doctrinal ideal and operational reality. A major discrepancy is that ACE training is being conducted with outdated Gulf War-era equipment. Moreover, the USAF has introduced the Air Force Generation (AFORGEN) model but has not yet adapted UTCs to fit ACE requirements. The result is antiquated equipment being employed under AEF UTCs in support of ACE operations. These issues are intensified by a risk-averse culture, creating bureaucratic hurdles and limiting the decision-making authority of front-line leadership. To be effective, ACE requires decentralized execution, where the lowest levels, acting on mission-type orders (MTO), can make real-time decisions; such empowerment is essential for executing ACE effectively in austere communications-denied environments.

d. USAF Air Advisors

Air advisors play a crucial role, both doctrinally and in practice, in developing and enhancing the military capabilities of partner nations through building partner capacity. Their duties encompass training, advising, assessing, and equipping allied forces, focusing on tailoring these activities to suit each partner's unique regional contexts and strategic needs. Additionally, air advisors are integral to security cooperation and security force assistance initiatives, engaging in diverse activities ranging from detailed assessments and training to supporting planning and equipment provision. A fundamental aspect of their role is establishing and maintaining robust relationships with partner nations. This task underscores the principle that “you cannot surge trust,” rather, it requires sustained and consistent interaction, emphasizing the critical nature of long-term engagement for forging effective and enduring partnerships.²⁰⁴

The air advising enterprise is not immune to the disconnect between doctrinal requirements and operational realities and faces a notable challenge with the alignment of strategic plans and tactical execution. A tension exists between achieving long-term

²⁰⁴ Anonymous, USAF Air Advising Interview 1, June 2023.

strategic objectives and providing immediate, quantifiable results, which highlights the difficulty in balancing military effectiveness with accountability. In the realm of security cooperation, the existence of various United States codes, such as Title 10, Title 50, and Title 22, each with distinct objectives, which further complicates the achievement of overarching goals that align with the strategic interests of both the United States and its partner nations. Additionally, military advising is often fragmented, with different advisory elements from multiple services and contracted advisors working independently within a partner nation. This fragmentation leads to missed opportunities for unified support towards broader security cooperation goals. A sentiment shared by respondents was the overarching operational disconnect - “it takes a lot of time to build relationships and gain access, but at the end of the day, we are trying to meet an objective that is neither timely nor easily quantifiable.”²⁰⁵

2. Strengths and Weaknesses

a. USAF IO Officers

IO officers are distinguished by their foundational understanding of psychological and social sciences, complemented by robust critical thinking abilities and a strategic mindset. Their unique capability lies in integrating diverse informational capabilities into cohesive strategies and campaigns. Respondents emphasized that early career exposure to the operational and strategic levels, coupled with strong interpersonal communication abilities and a drive for innovation, are key attributes that distinguish IO officers.

Since its establishment in 2016, the IO career field has been steadily growing but has a disproportionate amount of junior company grade officers (CGO). While some may view this as a disadvantage, it also serves as a strength. One respondent noted that IO officers “came in very young, as young lieutenants and captains, we sat across the table from field grade officers (FGO). We came in young with fresh perspectives, not yet ingrained in the USAF and military culture. We provide a new perspective to an old way

²⁰⁵ Anonymous, USAF Air Advising Interview 2, June 2023.

of doing things, and in a regard, that is an advantage.”²⁰⁶ However, a new career field comes with significant barriers, such as gaining credibility and influence within an organization - “our career field, by and large, has really good people who are motivated and want to do the work, but because there are so few of us, we have to gain credibility before we can even earn our seat at the table. While our fight is to operate in the information environment, we must first get the staff to understand our perspective and the need for something different.”²⁰⁷

IO officers navigate complex and often ambiguous environments where roles, objectives, and desired outcomes are not always distinctly outlined. Compounding these challenges is the absence of IO organic capabilities. Overwhelmingly, respondents identified adaptability and critical thinking as key traits critical in overcoming these challenges. As one respondent keenly noted, reflecting on the operational realities faced by IO officers, “the only organic capability a 14F will ever readily have access to is our own brain.”²⁰⁸

The insights gathered from the responses on the strengths and weaknesses of IO paint a picture of a field that is both uniquely capable and facing significant challenges. One respondent noted that the spectrum of how people perceive IO spans from: “it’s useless, to its going to solve all the problems.”²⁰⁹ The critical importance of individual personalities emerges as a recurring theme, acting both as a strength and a weakness within the IO field. Proactive officers possess strong communication skills and continually seek opportunities for learning and development, often yielding successful outcomes highlighting the field’s strengths. Conversely, less assertive or more soft-spoken officers may find challenges when operating independently, which can hinder integration and progress in IO initiatives.

²⁰⁶ Anonymous, USAF IO Officer Interview 1, May 2023.

²⁰⁷ Anonymous, USAF IO Officer Interview 2, May 2023.

²⁰⁸ Anonymous, USAF IO Officer Interview 3, May 2023.

²⁰⁹ Anonymous, USAF IO Officer Interview 4, July 2023.

Interview insights highlight additional strengths and weaknesses within the IO career field. On the strengths side, IO officers are known for their innovative thinking, skillfully leveraging information in military activities to create strategic behavioral impacts. Their proficiency in integrating and synchronizing various effects significantly enhances operational efficiency, acting as a force multiplier while minimizing costs and risks. However, the field faces challenges, notably in continuing education and internal branding. There is also a lack of a well-defined identity for IO, further impacted by limited resources, including staffing and dedicated support, which restricts the field's full potential.

b. IO Officers Across the Services

Respondents noted several trends regarding the strengths and weaknesses of IO. As a strength, IO officers specialize in synchronizing information capabilities, which requires understanding each capability and the foresight to integrate those capabilities to support the overarching strategic objectives. Their ability to effectively communicate complex technical information to various stakeholders, understanding of interagency processes, and their strategic 'big picture' mindset further distinguish them in their field. This combination of synchronization skills, strategic thinking, specialized knowledge, and interpersonal abilities makes IO officers a distinct and vital component in military operations. As an enterprise, IO also faces challenges; namely, due to its broad scope, there may be a hindrance to the development of specialized skills. Similarly, because IO spans so much, it is often a victim of misunderstanding and underutilization. Despite its recognized importance, IO often suffers from inadequate resources and support. Additionally, inconsistencies in doctrine and practices across services create inefficiencies, and the unpredictable nature of the cognitive domain makes it challenging to assess the effectiveness of IO campaigns. Lastly, IO does not possess organic capabilities and is thus dependent on external assets, which introduces complexities in terms of resources, timelines, coordination and authorities, and conflicting priorities.

c. ACE

ACE's strengths lie in its decentralized command structure and the empowerment of decision-making at lower levels. This approach contrasts with the more centralized

command structures of major competitors and provides a strategic advantage in adaptability and speed of decision-making. “It is this lack of trust of subordinates that will be the US’s greatest advantage in any future conflict.”²¹⁰ However, the practical implementation of ACE, especially in the Pacific Air Forces (PACAF), faces limitations due to the lack of infrastructure to support fighter or larger aircraft operations. The limited number of viable locations for aircraft operations in the Indo-Pacific region presents a significant strategic challenge.

d. USAF Air Advisors

Air advisors possess a comprehensive skill set crucial for assisting and training partner nations. A key element of this skill set is their proficiency in cultural and language awareness, which equips them to engage deeply with partners by understanding and respecting their cultural contexts and communication styles. This awareness extends beyond mere language proficiency to encompass a nuanced grasp of cultural practices and norms, enabling meaningful interaction and the avoidance of cultural misunderstandings. Additionally, air advisors are adept in public affairs, skilled in liaising with partner nation leadership and managing media relations, a vital capability in scenarios where embassy presence is limited or absent. Their rigorous vetting process further distinguishes them from other military personnel in similar roles. Their unique blend of specialized knowledge, cultural sensitivity, and practical experience makes air advisors exceptionally suited for their diverse and challenging responsibilities.

Air advising’s strengths lie in language and cultural expertise, diverse and specialized skill sets, and their ability to leverage tactical actions for strategic effect. Air advisors play a critical role in competition by gaining access and placement: “the amount of capability we can provide is dependent on access and placement before the fight.”²¹¹ Air advisors also play the critical role of occupying space on the chess board, which further reinforces the point, “you can’t compete if you’re not there.”²¹² However, weaknesses

²¹⁰ Anonymous, ACE SME Interview 1, August 2023.

²¹¹ Anonymous, USAF Air Advising Interview 2.

²¹² Anonymous, USAF Air Advising Interview 3, July 2023.

include challenges in expressing the value of air advising in quantifiable metrics, expeditionary advisor limitations, and the absence of a unified security cooperation strategic approach.

3. Hypothetical Insights: The Absence of IO, ACE, and Air Advising

a. USAF IO Officers

The interviews posed a hypothetical question: what would be the impact on operations if IO did not exist? The collective responses on the hypothetical absence of IO suggest that while day-to-day military activities like flight operations might continue with limited immediate disruption, the strategic implications would be considerable and detrimental. The absence of IO would likely lead to deficits in deliberate information engagement, heightened OPSEC vulnerabilities, and diminished integration and synchronization across various domains. Such a scenario underscores the critical role of IO in proactively shaping the battlespace; without it, military operations risk becoming more reactive, less coordinated, and potentially more prone to escalate to conflict.

b. IO Officers Across the Services

IO, in theory, holds considerable potential to substantially enhance military strategies and operations through a range of diverse and specialized capabilities. However, in practice, the impact of IO is often limited by significant visibility issues. Information capabilities may be overlooked or underrepresented, particularly in larger, higher-level command structures such as a 3-star command. This lack of visibility results in these capabilities not being fully brought to the operational planning table, leading to a failure to integrate them effectively into overall military strategies. Consequently, despite the inherent strengths of IO, its real-world impact is frequently constrained by these systemic limitations, underscoring the need for a more inclusive and recognized role within the broader scope of military operations.

The assessment of the potential impact on military operations in the absence of IO reveals critical insights into the value and necessity of IO in modern warfare. Without IO, there would be a significant lack of coordination and synchronization of information

capabilities, leading to less effective operational plans. The absence of IO would exacerbate its current status as an afterthought in military planning and education, resulting in a lack of advocacy and integration across the levels of war. A notable concern is ceding informational advantage to adversaries, as they would continue to utilize information strategies. The absence of IO could diminish military effectiveness, particularly in controlling narratives and offering strategic off-ramps in sensitive contexts. However, some perspectives suggest that the current impact of IO may be overestimated, pointing to the current distribution of IO-related responsibilities to other communities based on manning deficiencies. Overall, the absence of IO would significantly impact military capabilities, particularly in areas of narrative control, risk mitigation, and strategic influence.

c. ACE

Without ACE, the USAF risks persisting with outdated operational models that focus on large-scale, extended deployments. The shift to ACE has been a catalyst for change, breaking away from a Gulf War-era mindset that prioritized risk minimization over operational agility. The ACE “mindset” has increased intra/inter-agency communication across the whole of government and with our allies and partners. “Operations are now more than ever focused on how all players involved in an operation can support each other while bringing their own unique skillsets to a fight.” This approach enhances the collective response capabilities in potential conflict scenarios.

d. USAF Air Advising

The effectiveness of air advising is significantly constrained by several factors: the tasking process, the slow nature of results, budget constraints, and shifting strategic priorities. The shift from a counterterrorism focus to addressing great power competition exemplifies these shifting priorities, directly impacting the allocation of resources and the sustained commitment to air advising programs. This turbulent environment has put the air advising enterprise at a crossroads, shifting between being fully invested in to potentially disbanded, thereby hindering its ability to be well established within the USAF.

Air advising plays a role in aligning political objectives and equipment needs within the framework of security cooperation. In the absence of air advising, these critical alignments risk disruption, potentially undermining the strategic goals and effectiveness of security cooperation initiatives. The removal of air advising would significantly weaken the integration of partners in combat operations, a cornerstone of integrated deterrence and security cooperation. This could likely lead to a deterioration of key international relationships, as partner nations might no longer view the United States as a preferred partner of choice, potentially creating power vacuums and allowing for increased influence from rival nations.

4. Assessing the Degree of Understanding and Integration

a. USAF IO Officers

The understanding of IO within the USAF is on an upward trajectory, and there is an acknowledgment of IO's growing importance, particularly among senior leaders who are beginning to appreciate the significance of information. However, there remains a lack of understanding across all levels of the force. Respondents highlight that while some may be familiar with IO-related terms, they are often used incorrectly, in the wrong context, or conflated with other information capabilities such as MISO. Additionally, because the role of IO differs across the levels of war, some respondents note that an individual's understanding of IO is often based on their first exposure, resulting in a limited understanding of the career field. Furthermore, the understanding and implementation of IO are heavily dependent on the unit's culture and the individual's background. To remedy this gap, many respondents advocate for the integration of IO into mandated training programs, such as basic military training (BMT), professional military education (PME), primary developmental education (PDE), intermediate developmental education (IDE), and senior developmental education (SDE). Additionally, some respondents suggest renaming and rebranding the career field to something more intuitive, like influence officers, indicating the need for clearer roles that are more easily communicated and understood.

In terms of integration, IO integration seems most effectively integrated at the operational level, often supporting strategic objectives. There is a sense that IO's value is recognized here, with personnel effectively bridging the gap between tactical inputs and strategic decision-making. At the strategic level, there is an acknowledgment of the importance of IO, notably in shaping campaigns and overarching narratives, but its implementation varies by command. Integration at the tactical level appears to be inconsistent and less understood; respondents note that this is likely the result of limited integration and exposure. A key insight that captures both the understanding and integration of IO is that "you can't work with what you don't know," and thus, enhancing the force's knowledge of information is critical to drive meaningful change in IO integration and application.²¹³

b. IO Officers Across the Services

The understanding of IO across the services varies significantly. Most respondents acknowledge that there is recognition of the significance of IO, particularly at the strategic level, but a lack of understanding of how to tactically employ and integrate information capabilities. Within the United States Army, IO is classed as a functional area and is not designated as a distinct branch which influences its funding, support, and visibility. Moreover, the absence of rank within the IO community, a one-star general or equivalent, leads to reduced agency and funding, impacting the effectiveness of IO integration across different levels. Further complicating the understanding are issues like inadequate resourcing, frequent changes in doctrine, over-classification, and misconceptions about IO's role, often conflating it with other information capabilities. These factors contribute to an inconsistent and often superficial grasp of IO across the military, hindering its effective application and integration into broader military strategies.

Integration of IO across the services achieves its greatest efficacy at the operational level. Here, IO is regarded as an asset, enhancing military operations with adequate planning time for the necessary staffing and integration of diverse information capabilities.

²¹³ Anonymous, USAF IO Officer Interview 5, July 2023.

In contrast, at the tactical level, challenges arise, often stemming from IO officers being tasked with roles peripheral to their core IO functions. These assignments divert them from their primary tasks, leading to less effective integration. At the strategic level, with multiple stakeholders, obstacles include the need to align objectives across various departments, further detracting from IO integration. Despite occasional effective instances at the tactical level and efforts to align IO with strategic aims, it is the operational level that consistently demonstrates superior integration. This success is attributed to a balanced approach that adeptly navigates the immediate demands of tactical operations while concurrently aligning with overarching strategic goals.

c. USAF Air Advisors

Air advising within the USAF is not widely or deeply understood, primarily due to limited exposure and association with specific regional operations, such as those in the Middle East. While there have been attempts to professionalize and better integrate air advising, it remains partially understood and recognized only by those directly involved. Additionally, there is a perception among some USAF and joint leaders that air advising is a temporary or context-specific requirement rather than a consistent element of the Air Force's mission, further hindering its recognition and understanding.

Air advising within the USAF is increasingly becoming better integrated, though it predominantly occurs at the tactical level. This level of integration is attributed to a focus on immediate, ground-level operations where air advisors can directly apply their expertise. However, integration is less developed at the operational and strategic levels, partly due to organizational and doctrinal challenges, as well as a lack of awareness and standardized practices across the Air Force. The operational level presents significant potential for air advising integration, particularly for broader, more consistent, and adaptable approaches that align with overall security cooperation objectives. Strategic integration is currently the least developed, often not fully incorporated into operational planning or utilized in broader USAF strategies. This disparity is attributed to organizational structure issues, the need for senior leadership advocacy, and the necessity of aligning air advising more closely with the strategic objectives of combatant commanders. The integration of air advising within

the USAF, therefore, shows room for improvement, especially in expanding its role beyond tactical applications to more operational and strategic contexts.

5. Insights for the Future

a. USAF IO Officers

The interview responses converge on the critical nature of IO integration across all levels of warfare—tactical, operational, and strategic—each identified as vital for distinct reasons. Effective IO requires a layered approach where strategic, operational, and tactical levels are interconnected. The absence of integration at any level can lead to failure. There’s a recurring notion of an “IO supply chain,” where each level is interdependent.²¹⁴ The concept is that if one level is compromised, it affects the entire operation. There is an emphasis on the need for feedback mechanisms and information sharing across levels to ensure effectiveness.

IO plays an integral role in integrated deterrence by managing the perceptions and decision-making processes of adversaries, thus preventing escalation to kinetic conflict. IO leverages effects-based planning, integrating information capabilities and military activities to influence adversary decision-makers. The complexity of deterrence is managed through a thorough understanding of the target audience, encompassing political, social, and individual motivations. Effective IO for deterrence extends beyond the military domain, requiring synchronization across the instruments of national power, all while fostering relationships that solidify the United States as the partner of preference amongst allies and partners. A recurring challenge in IO is measuring the effectiveness of deterrence—assessing whether actions or inactions are a result of IO efforts. The responses highlight a consensus that while IO’s role in integrated deterrence is well-recognized, ambiguity still exists as to how to operationalize it.

IO serves as a critical enabler for ACE in three ways: (1) building relationships with allies and partners, (2) signature management, and (3) deception activities. Relationships with allies and partners serve “to mitigate, deter, or delay having to utilize

²¹⁴ Anonymous, USAF IO Officer Interview 6, May 2023.

ACE in conflict or crisis.”²¹⁵ Signature management and deception activities play an essential role in creating operational ambiguity, thereby deterring adversaries and enhancing the survivability of forces. The further from conflict, we go from conflict and “having to execute ACE is where IO is the most valuable,” building relationships, gaining access, and profiling friendly force signatures.²¹⁶ To be effective, “IO needs to be postured to support ACE at the maneuver echelon, at the wing level, to increase wing survivability and generate air power in support of the joint force.”²¹⁷

b. IO Officers Across the Services

IO plays a crucial role in enhancing the military’s support for integrated deterrence, primarily by shaping adversary perceptions and behaviors in alignment with the United States’ strategic objectives. IO extends beyond conventional military tactics, involving tools such as strategic communication and prevailing narrative. IO leverages the informational aspect of military activities to shape perceptions; an example of this is leveraging military live-fire exercises to showcase capabilities and convey United States intentions to adversaries. Some respondents proposed the re-establishment of a centralized information agency that could further strengthen IO’s role, ensuring more cohesive coordination and a unified approach across government sectors. In sum, the effective use of IO in integrated deterrence involves leveraging the informational aspects of military activities to enhance the military’s ability to deter adversaries through a combination of military might and strategic communication.

c. Relationship Between ACE and Air Advising

The relationship between ACE and air advising is rooted in an interoperability approach rather than traditional air advising methods, which prioritize training. ACE exercises capitalize on ally and partner integration, increasing interoperability and enabling forces to train and learn from one another. This approach is less about imposing superiority

²¹⁵ Anonymous, USAF IO Officer Interview 3.

²¹⁶ Anonymous, USAF IO Officer Interview 7, June 2023.

²¹⁷ Anonymous, USAF IO Officer Interview 3.

and more about fostering collective strength among allies. To be successful, ACE relies heavily on the support of allies and partners to offset capabilities and requirements. “None of the countries want a giant target placed on them by allowing U.S. basing, but if we can show them that we are going to work with them rather than just use them for their resources, they know they have a better chance of maintaining their freedom with us rather than alone.”²¹⁸ This strategy emphasizes mutual respect and cooperation, which is vital for maintaining alliances and collective security.

d. USAF Air Advising

Air advising plays a pivotal role in supporting integrated deterrence, primarily through its involvement in security cooperation and strategic competition. Air advising is essential for establishing and maintaining a United States presence in key regions, and this presence enables the United States to compete effectively on the global stage. It is critical to recognize that there will never be enough United States forces to accomplish all objectives; air advising under the security force assistance and security cooperation umbrella becomes a critical tool. By working with partner nations, air advising enables United States’ access and influence in regions where direct United States military presence is limited. Additionally, it serves as a vital tool for deepening relationships with partner nations and enhancing their capabilities and capacities. Capacity building is not only operationally beneficial but also strategically significant, as it ensures that in times of crisis or conflict, these nations can provide access to the United States and align with its strategic interests. Consequently, air advising plays a vital role in reinforcing the overall deterrence posture of the United States, establishing it as a key element in integrated deterrence strategies.

The “ability for ACE to be effective in combat is a direct result of successful security cooperation in competition.”²¹⁹ ACE is both a proactive and reactive scheme of maneuver, which closely aligns with training partners in crisis response, skills that can be leveraged across the spectrum to support anything from humanitarian assistance to combat

²¹⁸ Anonymous, ACE SME Interview 1.

²¹⁹ Anonymous, USAF Air Advising Interview 2.

operations. Additionally, air advisors are a low-cost, high-reward solution. A small team of air advisors can be deployed to work by, with, and through a partner nation to offset ACE requirements. Air advisors also play a critical role in door-opening activities, gaining access and placement to allow for the staging of forces to generate combat power and sustain operations. Overall, air advising contributes to ACE by enhancing crisis response, interoperability, and strategic partnership, thereby augmenting United States forces in complex operational environments.

C. RESEARCH QUESTIONS: INSIGHTS FROM INTERVIEWS

- (1) What are the general roles and responsibilities of an IO officer in a tactical USAF conventional unit?

Doctrine provides a framework for the roles and responsibilities of IO officers, yet it often falls short of capturing the complexities and operational realities of operating in the information environment. Subsequently, interviews with information professionals across the services reveal insights on potential roles, responsibilities, and specific traits that enable IO officers to support tactical units more effectively.

The roles and responsibilities illuminated through these interviews emphasize three core functions not explicitly outlined in doctrine: an advisory role, a communicator role, and a coordinator role. IO officers act as advisors to commanders, educating them on the legal limitations and relevant authorities of information capabilities. IO officers serve as internal communicators, translating complex technical information capabilities into clear terms showcasing how these capabilities can be leveraged to meet objectives. Finally, as coordinators, IO officers work to align actions and activities across the domains and with interagency to operationalize the tenets of integrated deterrence.

In terms of traits and attributes, in addition to effective communication skills, it is essential for IO officers to operate with the strategic “big picture” in mind and to constantly evaluate the second and third-order effects of military actions on the information environment. Due to constraints and lead times associated with securing certain information capabilities, IO officers must be resourceful and adaptive, leveraging innovative approaches and readily available resources to achieve effects.

- (2) How do these mission sets overlap, and what are the subsequent opportunities for integration?

The integration of IO, ACE, and air advising presents significant, yet largely untapped, opportunities for enhancing military operations. Analyzing interview data reveals the distinct yet complementary roles of these concepts. This analysis demonstrates how their combined application can bolster integrated deterrence, offering a more cohesive and effective approach to military strategy.

Integration of IO into ACE in competition sets conditions and increases the likelihood of success in conflict. IO plays a pivotal role in ACE in three regards: influencing relevant actors, safeguarding vulnerabilities, and imposing costs on adversaries.

IO's employment of influence spans allies to adversaries, and a critical component is the employment of influence techniques to foster relationships with the intent of gaining allies' and partners' trust and confidence. Subsequently, IO's pivotal role in building and maintaining robust relationships with allies and partners stands out as a cornerstone for ACE's success. These cultivated relationships, established and strengthened during peacetime through trust and cooperation, are essential in mitigating and deterring potential conflicts. Solidifying these relationships in competition enables the rapid dispersal of air assets across the theater in conflict, coupled with increased reliance and interoperability with allies and partners.

IO's employment of signature management in support of ACE safeguards critical vulnerabilities by identifying and managing the physical, technical, and administration signals associated with day-to-day military operations and concealing or obfuscating vulnerable components from adversary collection.

IO's ability to impose costs on the adversary is largely the byproduct of decision activities. Deception activities allow IO officers to manipulate reality by injecting false information, causing the adversary to expend time and resources to understand the United States' true intentions. This obscurity in capabilities and intentions serves as a deterrent to adversaries, contributing significantly to the success of ACE. Finally, IO officers, with

their strategic foresight, can bridge across the levels of war, aligning the tactical application of military force with broader operational and strategic objectives.

IO's role in supporting air advising can be summarized by three functions: influence, assessments, and synchronization. In a similar way, IO supports ACE in fostering and building relationships; IO supports air advising by understanding the drivers of behavior in target audiences and developing plans to align target audience behaviors in support of objectives. This is accomplished through engagements and communication mechanisms. IO officers' expertise in strategic communication is crucial, particularly in utilizing local media to highlight the impact of airpower, thereby bolstering the objectives of air advising. IO's role also extends to providing clear communication guidelines to air advisors, balancing transparency with operational security. IO is also instrumental in defining and measuring behavioral changes in partner nations, employing metrics to evaluate and refine the effectiveness of air advising strategies. These assessments can assist the air advising enterprise in quantifying metrics such as relationship building to help showcase their value at higher echelons and the role they play in supporting the broader security cooperation enterprise. Finally, as part of their core competencies, IO can serve as an integrator and synchronizer for the air advising enterprise, aligning air advising activities with other activities happening within the area of responsibility (AOR) and crafting a narrative to link otherwise disparate activities. In turn, IO is able to leverage the informational aspects of air advising activities and frame those activities in the scheme of the broader strategic narrative.

The combination of IO, ACE, and air advising contributes significantly to the concept of integrated deterrence. A vignette set in competition showcases the inherent synergies between these constructs:

IO integration with air advising enables air advisors to gain and maintain access with a host nation, setting conditions in competition for the staging of ACE operations in conflict. This established relationship allows for increased interoperability through exchanges, training, and exercises, and overtime increases proficiency in ACE constructs. In the foreground, this enhanced bi-lateral operational capability serves as a credible deterrent, signaling to adversaries the potential costs of conflict. In the background, IO surgically conceals and reveals friendly force signatures creating

targeting and operational dilemmas for the adversary, influencing the metrics that support their decision-making cycle. On the ground, air advisors support the training and equipping of allies and partners to off-set ACE requirements, while IO officers support the communication and framing of tactical actions within the broader strategic context.

Integrating these three elements enables the USAF to adopt a comprehensive approach to deterrence. When employed in unison, this approach blends physical military capabilities, influence, and the United States network of allies and partners. Such an approach ensures a multi-domain, robust deterrence posture that effectively addresses various strategic challenges.

- (3) What is the impact of synchronizing IO, ACE, and air advising on integrated deterrence?

The overarching impact of synchronizing these three constructs in support of integrated deterrence enables the USAF to respond more rapidly and effectively to emerging threats. ACE's rapid deployment capability, supported by IO's role in influencing perceptions and decision-making processes and strengthened by air advising's groundwork in building partner capacities, allows for a swift and coordinated response. This capability to respond quickly and effectively is a powerful deterrent, signaling to potential adversaries the futility of aggressive actions.

- (4) How should the USAF integrate IO in tactical mission sets, such as ACE and air advising, to enhance the United States' current and future deterrent posture?

To optimize the integration of IO in tactical mission sets like ACE and air advising, the positioning of IO officers is key. For ACE, the consensus is that IO officers should operate above the squadron level. Three specific recommendations for their placement include the Wing Plans and Programs Shop (XP), the Wing Operational Support Squadron (OSS), or directly within the A3 section of a Wing's A-Staff. In the context of air advising, IO officers are best situated at the group or wing level, either embedded within the Contingency Response Group (CRG) or within the Wing XP Shop. Integrating IO officers at the tactical level improves synchronicity across the levels of war, enhancing the USAF's capacity to bolster its current and future deterrent posture.

D. CONCLUSION

In conclusion, this chapter showcases the multifaceted nature of IO, ACE, and air advising within the USAF, highlighting the complexity and depth of these constructs beyond doctrinal confines. The analysis of interview data provides a nuanced perspective on the operational realities, challenges, and opportunities for integration within these constructs. By identifying gaps between theory and practice and exploring the dynamic interplay of capabilities, this analysis contributes to a more holistic understanding of how these elements can be effectively operationalized and synchronized to enhance integrated deterrence. The insights gained pave the way for strategic advancements in military operations, ensuring a more agile, informed, and coordinated approach across the levels of war.

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V. CONCLUSIONS AND RECOMMENDATIONS

A. INTRODUCTION

This final chapter reiterates the research questions, providing comprehensive answers derived from doctrinal analysis and interview data. It highlights the study's key findings, emphasizing critical insights and takeaways. The chapter concludes with practical recommendations grounded in findings to enhance the efficacy and integration of IO within the USAF. Furthermore, it suggests areas for future research to continue advancing the field and addressing emerging challenges in the evolving global landscape.

B. RESEARCH QUESTIONS: COMPREHENSIVE RESPONSES

- (1) What are the general roles and responsibilities of an IO officer in a tactical USAF conventional unit?

The research derived from both doctrinal analysis and interviews provides a comprehensive understanding of the roles and responsibilities associated with tactical IO integration in the USAF. Doctrinally, IO responsibilities are traditionally delineated through a set of competencies and principles. These competencies include analysis, planning, integration, and assessments, while the principles are MISO, OPSEC, and MILDEC.

However, a more nuanced and effective framework emerges from this research, suggesting a shift from competencies and principles to specific roles and functions. In this refined model, the roles of IO officers are categorized as planners, integrators, coordinators, communicators, and advisors. This categorization not only aligns more closely with the practical demands of the field but also highlights the diverse skill sets required of IO professionals, setting realistic expectations for both IO officers and those who lead IO officers. Additionally, the functions within this framework are streamlined into three core areas: influence, protection, and assessments. This approach provides a clearer, more actionable understanding of IO responsibilities, aligning doctrinal guidelines with the operational application and the demands of IO in the USAF.

To showcase how this framework tangibly applies, Table 11 outlines each of the roles and functions and expands upon the specified responsibilities for each.

Table 11. IO Officer Framework: Roles and Functions

IO Roles	
Planner	• As planners, IO officers provide strategic foresight with consideration for the information environment, cognitive dimension, information dimension, and the impact of second and third-order effects from military actions throughout the joint planning process. • IO officers should be embedded from the outset of planning, considering the informational aspects, current and desired perceptions/behaviors that ultimately increase effectiveness while reducing costs and risks. • IO officers ensure alignment of planning considerations across the levels of war (tactical, operational, and strategic) to ensure a unified approach in support of strategic objectives.
Integrator	• As integrators, IO officers integrate information capabilities into the broader operational scheme of maneuver to support the commander's intent and strategic objectives. • IO officers integrate the informational aspects of military OAs into overarching influence objectives or campaigns.
Coordinator	• As coordinators, IO officers foster relationships across the service and with the joint community, interagency partners, and allies and partners to share information, deconflict activities, and create opportunities for collaboration. • IO officers integrate and synchronize actions and activities across the domains and with interagency to operationalize the tenets of integrated deterrence. • IO officers coordinate with higher echelons to support operational and strategic information objectives.
Communicator	• As communicators, IO officers internally translate complex technical information, making it easily understandable, and demonstrate how these capabilities can be leveraged to meet objectives. • IO officers contribute to and support the Commander's Communication Synchronization (CCS). • IO officers establish a tactical narrative to frame tactical military OAs.

IO Roles	
	○ IO officers support the alignment of actions with words. ○ IO officers identify and counter disinformation and propaganda, when appropriate.
Advisor	● As advisors, IO officers advise commanders, educating them on information capabilities and their respective legal limitations, permissions, and authorities. ● IO officers advise partners and allies through exchanges, exercises, and liaison positions.
IO Functions	
Influence	● IO officers influence perceptions, behaviors, and actions of relevant actors. ● IO officers leverage the informational aspects of USAF OAs to support influence objectives. ● IO officers leverage the principles of OPSEC, MISO, and deception activities to support influence objectives. ● IO officers deter/compel adversaries. ● IO officers assure and persuade allies, partners, and relevant foreign actors. ● IO officers conduct deception activities at the tactical level and in support of Joint MILDEC plans.
Protection	● IO officers employ OPSEC to identify, control, and protect critical information. ● IO officers analyze friendly actions associated with military operations and other activities. ● IO officers develop and maintain a critical information and indicators list (CIIL). ● IO officers conduct the base profiling process, a deliberate effort to identify functional areas, their associated observables, signatures, and indicators, and how they contribute to the installation's overall signature profile. ● IO officers employ camouflage, concealment, and deception; OPSEC measures help obscure friendly data and information from observation and surveillance. ● IO officers employ deception in support of OPSEC (DISO) to obfuscate unit intentions.
Assessments	● IO officers contribute to IO-focused assessment plans and evaluate data to provide IO-related assessment recommendations. ● IO officers develop assessment criteria (e.g., measures of performance (MOP), measures of effectiveness (MOE), and measures of effectiveness indicators (MOEI)).

- (2) How do these mission sets overlap, and what are the subsequent opportunities for integration?

The integration of IO, ACE, and air advising within the USAF offers significant tactical and strategic advantages, and this integration effectively enhances the USAF's capability to influence relevant actors, secure access, and set conditions for crises.

IO, at its core, aims to influence relevant actors' perceptions, beliefs, and behaviors—a function that aligns with the aims of both air advising and ACE. Air advising builds relationships through a combination of physical presence, cultural understanding, and linguistic proficiency. Through influence, IO officers leverage their understanding of the cognitive and information dimensions in conjunction with information capabilities to support air advisors in strengthening relationships. As integrators, IO officers align air advising exchanges and activities with the other services and interagency efforts, nesting under strategic objectives and supporting a whole-of-government approach. As communicators, IO officers amplify the work of air advisors down range, assuring partners while deterring adversaries. Finally, as advisors, IO officers could serve as SMEs to air advisors providing insight on OPSEC practices or CCS. This collaboration is instrumental in establishing the United States as the partner of preference, fostering trust and confidence among allies and partners.

The relationships fostered through air advising and IO work towards gaining access, basing, and overflight in key forward operating locations essential for ACE operations. Air advisors increase partner nations' proficiency in ACE competencies through education, training, and equipping. Interoperable allies and partners trained in ACE competencies offset USAF requirements, increasing joint force flexibility and responsiveness. Demonstrations of this combat capability serve as a credible deterrent. Bilateral ACE exercises, engagements, and training activities highlight the United States' collective strength with its partners and are all actions that IO officers as communicators can amplify to adversarial relevant actors.

ACE's primary objective in conflict is to increase survivability. This is achieved predominately through the dispersal of assets, but coupling the dispersal of assets with the employment of IO serves as a force multiplier, offering low-cost solutions with high

returns. Through protection, IO officers employ signature management to obfuscate force movements and surgically reveal specific signatures for adversary foreign intelligence entities to collect. IO officers employ camouflage, concealment, and deception to obscure selected information and mislead adversaries. Finally, IO officers may employ deception activities to inject false signatures, amplifying ACE's strategic impacts and creating targeting dilemmas for the adversary.

The integration of IO, ACE, and air advising notably enhances the USAF's ability to establish conditions in competition for future conflicts. This integration results in a combat-ready and credible force that sends a clear deterrent message about the risks of escalation. The combined capabilities of IO, ACE, and air advising not only increase the USAF's adaptability and resilience but also ensures a dynamic and responsive posture in the face of global challenges. This positions the USAF as both a proactive and reactive force of influence, shaping the international security environment.

- (3) What is the impact of synchronizing IO, ACE, and air advising on integrated deterrence?

Synchronizing IO, ACE, and air advising substantially bolsters the concept of integrated deterrence as defined in the NDS. Integrated deterrence hinges on using all national power tools across domains and geographies in coordination with allies and partners to calibrate adversary risk perceptions and prevent conflict escalation. In this framework, IO plays a vital role in coordinating and synchronizing information capabilities with whole-of-government efforts, fulfilling the core requirements of integrated deterrence. ACE contributes as an active deterrent through its rapid deployment capabilities, as demonstrated in exercises and operations with joint forces and allies, and is communicated by IO officers to key information conduits. Air advising strengthens this deterrence framework by enhancing a partner nation's aviation capabilities, fostering interoperability, and occupying space on the chess board. The collective impact of integrating IO, ACE, and air advising lies in operationalizing integrated deterrence, thereby enhancing the USAF's ability to respond to threats while influencing relevant actors and contributing to global stability and security.

- (4) How should the USAF integrate IO in tactical mission sets, such as ACE and air advising, to enhance the United States' current and future deterrent posture?

At the tactical level, IO officers best serve as planners, integrators, coordinators, communicators, and advisors proficient in influence, protection, and assessments. While doctrinally, there is no prescription for how to integrate IO officers tactically, the interviews provided insight. Of note, multiple respondents stressed that IO officers thrive in collaborative environments and subsequently recommend that IO officers operate in teams of two to three at the tactical level. In terms of integration, IO officers would best be postured in the Wing XP Shop, OSS, or the A3 of the Wing A-Staff. Integration of IO officers at these tactical levels ensures better coordination and synchronicity across different warfighting levels, significantly enhancing the USAF's ability to strengthen its current and future deterrent capabilities.

C. KEY FINDINGS

- **Evolving Tactics - Adapting Old Concepts for New Challenges:** While concepts like influence, advising partner nations, and dispersal of aircraft to enhance survivability are not new constructs, they do have unique applications within the scope of competition. The information age and foreign malign influence efforts have exacerbated the need for a forward-leaning information strategy within the DOD. The United States is reliant more than ever on its vast network of allies and partners to uphold a rules-based international order. The USAF needs to break free from its Gulf War approach to fighting and operating with lean and agile teams in communications-denied environments against near-peer adversaries.
- **Leadership Representation and Advocacy:** Neither the IO enterprise, across the military services, nor the USAF air advising community have general officers. Consequently, this directly impacts the respective communities' degree of representation and advocacy at the senior level. This lack of senior leader representation limits the potential refinement of the ACE construct, stifles integration opportunities, constrains advocacy

for funding and in other critical conversations, and perpetuates persistent misunderstanding of these constructs, thereby hindering their advancement and effective utilization.

- **Lack of Visibility and the Repercussions on Understanding:** Both the USAF IO career field and air advising are small communities performing highly specialized roles that are not well integrated into the broader USAF organization. Their small forces, specialization, and poor integration, compounded with a lack of senior leadership, result in a deficient understanding of their capabilities across the USAF. IO is often reduced to a singular information capability such as OPSEC or MISO and is not appreciated for the wide breadth of functionality it brings to the table. Within the air advising community, their roles are conflated with historic combat aviation advising in Iraq and Afghanistan, and they are often viewed as only being proficient in training, which accounts for one of their six mission tasks. The consequence of limited understanding is a lack of familiarity with these constructs in competition, which will only exasperate underutilization and confusion in conflict.
- **Quantifying Value:** A critical component of both IO and air advising is concerned with the human domain by influencing relevant actors and strengthening relationships, both of which are difficult to quantify. Measuring and assessing the human dimension requires time to see effects and change in human behavior is not easily measurable. Consequently, this affects each community's ability to showcase value, which has direct implications for funding and resourcing.
- **Doctrinal Disconnect with Operational Reality:** A pervasive theme was that doctrinal prescriptions are too closely aligned with ideals and not concordant with operational reality.

- **Cultural Barriers:** The USAF's default is risk aversion, and the consequence of that is red tape, policy, and unnecessary bureaucracy. Failing fast in competition when the stakes are low allows for the refinement of TTPs to better prepare forces for conflict. Risk aversion was unanimously identified by respondents from all three communities as a significant cultural barrier. Those in information forces across the services emphasized a widespread reluctance to delegate authorities. ACE SMEs observed a hesitancy in operationalizing mission command, which is critical for decentralized execution and decision-making at lower echelons. Finally, air advisors highlighted the need to greater risk tolerance in having partner nations augment and offset USAF forces.
- **Centralized Control, Decentralized Execution:** ACE disperses aircraft to increase survivability, and under the mission command construct lower echelons are empowered to make decisions in line with the commander's intent. The principles of this construct are no different for IO officers. As it currently stands, having the preponderance of IO officers operating within an AOC or MAJCOM staff increases vulnerabilities. IO officers operating solely at the operational level is a single point of failure; without integration at the tactical level, there is limited IW expertise to carry out mission command in a communications-denied environment.

D. RECOMMENDATIONS

- **Improving IO Integration Across All Levels of War:** Recommend adapting the current IO career field force posture to sufficiently integrate IO officers across the levels of war, at the tactical, operational, and strategic levels. The levels of war are inherently interconnected, and failure to integrate within one reduces effectiveness. Implementation of this recommendation would entail the integration of IO officers at the tactical level within conventional wings and the integration of IO officers at the operational within SOF TSOCs.

- **Aligning IO Forces for Tactical Advantages in ACE and Air Advising:** Recommend posturing IO officers at the tactical level and specifically aligning them in support of ACE and air advising to enhance the effectiveness of these mission sets across the conflict continuum. IO integration enables a dynamic and responsive approach, adapting rapidly to evolving threats, thereby reinforcing the resilience and adaptability of forces.
- **Proposing a New Framework for IO Officer Roles and Functions:** Recommend revising the doctrinal IO functional competencies (analysis, planning, integration, and assessments) and principles (MISO, OPSEC, MILDEC) to more accurately reflect the operational roles and functions of IO officers. The proposed framework from this research outlines five IO roles and three functions. As roles, IO officers are planners, integrators, coordinators, communicators, and advisors who perform the functions of influence, protection, and assessments.
- **Instilling an IO Practitioner Mindset:** Recommend re-evaluating professional military education and training to identify opportunities to better educate the force on information: its role, effects, and implications. It is essential for all Airmen to recognize that their presence, posture, and actions, both in service and off duty, have informational consequences that can lead to second and third-order effects. By fostering an information practitioner mindset from the start of their careers, both enlisted and officer Airmen will be better equipped to consistently consider the informational aspects of military operations. Recognizing that a fragmented target, whether an individual or a system, is more susceptible than a consolidated one, it becomes crucial lead with and leverage information to bolster operations, controlling escalation while creating favorable circumstances should conflict arise.

- **Cognitive Resilience as a Function of IO:** Modeled after the USMC's construct of force resiliency outlined in MCDP 8 Information, this research recommends that USAF IO career field adopt cognitive resiliency as a responsibility under the IO protection function. Cognitive resiliency equips Airmen with a critical thinking mindset, fostering a discerning and cautious attitude towards the content they engage with and share. Cognitive resiliency encompasses the capacity of Airmen to identify, resist, and counter adversarial malign influence activities to include misinformation, disinformation, and propaganda. Examples of strengthening Airmen's cognitive resilience could be through education on adversarial foreign malign influence, influence tactics and techniques, and cognitive traps such as bias and heuristics. Force-wide employment would safeguard Airmen, making them hardened cognitive targets less vulnerable to adversarial influence. The IO career field would be the lead for ensuring Airmen and their families are educated and armed against adversarial foreign malign influence.

E. RECOMMENDATIONS FOR FUTURE RESEARCH

- **Translation of Psychological Theory into Operational Tools:** USAF IO officers identified that while their background in social science offered unique perspectives and generalized insights into the human dimension, it failed to offer concrete application of psychological theory. A recommendation for future research would be to analyze how psychological theories and principles could be applied operationally to more effectively achieve influence objectives.
- **Measuring Deterrence:** While this research highlighted the role that IO, ACE, and air advising could play in supporting integrated deterrence, the question remains: how would effectiveness be measured? Measuring deterrence is challenging due to it being an inaction, and it is difficult to discern if the outcome was the result of deterrence efforts or other

confounding variables. Recommendations for future research in this field would be scoped to measure the effectiveness of the United States' integrated deterrence strategy in competition.

- **Information Brand Management:** IO and IW are constructs that have been integrated within the DOD for decades. For a community that prides itself on its ability to exert influence and communicate, it struggles with gaining internal advocacy and credibility. Critical factors at play include a failure to adopt a standardized lexicon amongst information professionals, poorly articulated roles and responsibilities, and a lack of internal education. Recommendations for future research would be to analyze the challenges across the IO enterprise, identify improvement opportunities, and to accurately articulate IO impact and requirements to different audiences.

F. CONCLUSION

This final chapter consolidates the study's findings, addressing the research questions with insights from doctrinal analysis and interviews. It defines the roles and responsibilities of IO officers in the USAF, proposing a role-based model over traditional competencies. This model better suits the current operational demands. The chapter also examines how IO integrates with ACE and air advising, enhancing the USAF's capabilities. Practical recommendations for the USAF and suggestions for future research areas, including psychological theory application, deterrence effectiveness, and IO brand management, conclude the chapter. The implementation of these recommendations will improve IO effectiveness and the ability for the Air Force to deter and respond to global security challenges.

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APPENDIX A. UNITY IN DEFENSE: THE EVOLUTION OF SECURITY COOPERATION

A. INTRODUCTION

Security cooperation has been a linchpin in strategic military history, profoundly influencing geopolitical outcomes and the balance of power. For the United States, this collaborative approach has evolved from foundational military alliances to intricate partnerships that shape its defense posture and demonstrate its global leadership role. This section provides a comprehensive overview of the evolution and intricacies of U.S. security cooperation, from its seminal engagements during the Revolutionary War to its present-day dynamics in a multifaceted global environment.

B. HISTORY OF SECURITY COOPERATION

Throughout history, great nations have flourished or fallen by virtue of the success of their security cooperation efforts. A testament to this is the United States, a nation whose stature today is largely attributable to its substantial investment in security cooperation. Dating as far back as the Revolutionary War, the Colonies established a military treaty with France, formalizing France's "financial and military support of the revolutionary government in America."²²⁰ While other nations have pursued a transactional approach to security cooperation, the United States prides itself in seeking collaborative and mutually beneficial partnerships. While adversaries like the People's Republic of China and Russia have nurtured global customer bases, the United States has cultivated a network of international partners.²²¹ The United States views security cooperation through a values-based lens that transcends traditional security cooperation and often involves weapons transfers. Instead, it includes elements such as "institutional capacity building, international education and training, humanitarian assistance, and committed long-term

²²⁰ General Records of the United States Government, "Treaty of Alliance with France 1778" (Official Memorandum, Washington, DC: National Archives, 1778), <https://www.archives.gov/milestone-documents/treaty-of-alliance-with-france>.

²²¹ Charles Hooper, "Defense Security Cooperation Agency Chief on the Value of Partnerships," Defense News, December 4, 2019, <https://www.defensenews.com/outlook/2019/12/02/defense-security-cooperation-agency-chief-on-the-value-of-partnerships/>.

partnerships and alliances.”²²² Post World War II set the United States on the trajectory to developing the security cooperation enterprise that exists today and has been shaped by eighty years of multinational alliances in conflict.²²³

1. The Aftermath of World War II: Europe and the Pacific

In the reconstruction period after World War II, the United States provided economic support and basic necessities to European nations under the Economic Recovery Act of 1948, more commonly known as the Marshall Plan.²²⁴ The Marshall Plan, in turn, thwarted Soviet expansion, fostered trade relations, and assisted in establishing stable democracies in Western Europe.²²⁵ However, the geopolitical landscape shifted in June 1948 when the Soviet Union, a former United States ally, imposed the Berlin blockage, severing West Berlin from West Germany.²²⁶ This triggered the Berlin Airlift, a testament to the strength of unity and cooperation, where British and American aircrews “delivered more than 2.3 million tons of food, fuel, and supplies to West Berlin.”²²⁷ The Berlin Airlift served as a testament to security cooperation, underscoring the importance of alliances in accomplishing tasks “that one country simply can’t do alone.” At the close of the blockade in 1949, the North Atlantic Treaty Organization (NATO) was formed, solidifying the Iron Curtain, the ideological divide between Western democracies and Eastern communism.²²⁸

Simultaneously, in the Pacific, the Allies laid the groundwork for Japan’s occupation and rehabilitation following its World War II defeat. The occupation of Japan

²²² Defense Security Cooperation Agency, Security Cooperation History, Educational (Department of Defense, 2021), <https://www.dsca.mil/50th-anniversary/security-cooperation-history>, 2:57.

²²³ Defense Security Cooperation Agency, 2:36.

²²⁴ General Records of the United States Government, *Marshall Plan* (Washington, D.C.: National Archives, 1948), <https://www.archives.gov/milestone-documents/marshall-plan>.

²²⁵ General Records of the United States Government.

²²⁶ North Atlantic Treaty Organization, “The Berlin Blockade,” North Atlantic Treaty Organization, accessed August 4, 2023, http://www.nato.int/cps/en/natohq/declassified_136188.htm.

²²⁷ Katie Lange, “The Berlin Airlift: What It Was, Its Importance in the Cold War,” DOD News, June 24, 2022, <https://www.defense.gov/News/Feature-Stories/story/Article/3072635/the-berlin-airlift-what-it-was-its-importance-in-the-cold-war/https%3A%2F%2Fwww.defense.gov%2FNews%2FFeature-Stories%2FStory%2FArticle%2F3072635%2Fthe-berlin-airlift-what-it-was-its-importance-in-the-cold-war%2F>.

²²⁸ Lange, “The Berlin Airlift: What It Was, Its Importance in the Cold War.”

consisted of three distinct phases: (1) punishment and reform, (2) economic revival, and (3) establishment of a formal peace treaty and alliance.²²⁹ The final phase led to the Mutual Security Treaty of 1951, which remains in effect today, cementing a bilateral security pact between the United States and Japan.²³⁰ This treaty swiftly enabled the U.S. to counterbalance Soviet influence in the region during the Cold War, specifically in the Korean Peninsula and Southeast Asia.²³¹

2. Cold War Era and Foundational Security Cooperation Legislation

At the height of the Cold War, President Kennedy and Congress enacted the Foreign Assistance Act of 1961, designed to “organize and implement U.S. foreign assistance programs with a commitment to long-range economic assistance to the developing world.”²³² The intent was to strengthen developing states socially and politically and to counter the pressures of communism.²³³ This act and its subsequent amendments established the standards for human rights, foreign military sales, and export controls on military equipment.²³⁴

In the years to follow, partnerships expanded, and in 1968, Congress passed the Foreign Military Sales Act.²³⁵ The act authorized the sale of defense equipment from the United States to friendly countries to support “national defense requirements and objectives of mutual concern.”²³⁶ Under this act, sales are required to be aligned with foreign policy

²²⁹ Office of the Historian, “Occupation and Reconstruction of Japan, 1945-52,” Office of the Historian, accessed August 4, 2023, <https://history.state.gov/milestones/1945-1952/japan-reconstruction>.

²³⁰ Office of the Historian.

²³¹ Defense Security Cooperation Agency, Security Cooperation History, 4:38.

²³² Congressional Research Service, “Foreign Assistance Act of 1961: Authorizations and Corresponding Appropriations” (Washington, D.C.: Congressional Research Service, January 18, 2023), <https://sgp.fas.org/crs/row/R40089.pdf>, 1.

²³³ Congressional Research Service, “Foreign Assistance Act of 1961: Authorizations and Corresponding Appropriations,” 1.

²³⁴ Defense Security Cooperation Agency, Security Cooperation History, 5:24.

²³⁵ “Public Law 90-629 The Foreign Military Sales Act 1968,” Pub. L. No. 90-629, 1320 82 Stat. (1968), <https://www.govinfo.gov/content/pkg/STATUTE-82/pdf/STATUTE-82-Pg1320-2.pdf#page=1>, 1320.

²³⁶ Public Law 90-629 The Foreign Military Sales Act 1968, 1321.

interests and the 1961 Foreign Assistance Act, and the intent is to enable the United States and friendly nations to “act in concert to deter or defeat aggression.”²³⁷

As the United States security cooperation enterprise expanded, so did the demand for a single agency to direct, administer, and supervise it. In 1971, the DOD centralized security assistance programs, including foreign military sales and the international military education and training (IMET) program, under the Defense Security Assistance Agency, which decades later became the Defense Security Cooperation Agency (DCSA). The DCSA is designed to implement a whole of government approach that leverages security cooperation and the United States relationship-based partnerships to address the challenges of an increasingly competitive security environment.

3. Security Cooperation in Action: Vietnamizing the Search for Peace

In 1969, President Richard Nixon addressed the American public in a televised speech, explaining that the United States would no longer lead the fighting in Vietnam; instead, “US forces would train the South Vietnamese military to handle the conflict on its own.”²³⁸ President Nixon coined this policy as Vietnamization and best explained it by stating: “When you are trying to assist another nation to defend its freedom, U.S. policy should be to help them fight the war but not to fight the war for them.”²³⁹ This sentiment echoes the guiding principles of security cooperation.

To support increasing Vietnam’s air capabilities, the USAF deployed combat aviation advisors to train the Vietnamese Air Force personnel.²⁴⁰ While deployed to Pleiku Air Base, Vietnam, the combat aviation advisors “flew combat missions, including air

²³⁷ Public Law 90-629 The Foreign Military Sales Act 1968, 1321.

²³⁸ Ken Hughes and Jordan Moran, “Richard Nixon: Foreign Affairs & First Domino: Nixon and the Pentagon Papers,” UVA The Miller Center, October 2, 2010, <https://millercenter.org/the-presidency/educational-resources/vietnamization>.

²³⁹ Hughes and Moran.”

²⁴⁰ 492nd Special Operations Wing, “6th Special Operations Squadron,” 492d Special Operations Wing, <https://www.492sow.af.mil/About-Us/Units/6-SOS/>.

support for ground forces, air cover for transports, day and night interdiction, combat search and rescue support, armed reconnaissance, and forward air control.”²⁴¹

In the aftermath, Nixon’s efforts of “Vietnamization” led to a large-scale expansion of foreign student slots in United States military schools.²⁴² These legacies live on today through the IMET program, which prepares hundreds of future leaders through professional education programs at the United States military universities.²⁴³

4. Arms Control Restraint: A Mechanism of Foreign Policy

Mechanisms like the Foreign Assistance Act and Foreign Military Sales Act increased security cooperation through the sales of defense materials, particularly the transfer of arms. By the late 1970s, President Jimmy Carter viewed the “unrestrained spread of conventional weaponry” as a threat to global stability.²⁴⁴ In response, his administration established the first conventional arms transfer policy.²⁴⁵ The policy viewed arms transfers as foreign policy tools that advance national security interests. Ultimately, the United States decided to “utilize arms transfers to promote our security and the security of our close friends.”²⁴⁶ Presidents Reagan, Clinton, Obama, Trump, and Biden have since updated this policy. It is utilized as a means for an administration to clarify its position and guidance on arms transfers as a foreign policy tool.²⁴⁷

The Regan administration intensified Cold War competition, breaking away from a containment strategy and more directly and actively pushing back against the Soviet

²⁴¹ 492nd Special Operations Wing, “6th Special Operations Squadron.”

²⁴² Defense Security Cooperation Agency, Security Cooperation History, 8:18.

²⁴³ Defense Security Cooperation Agency, Security Cooperation History, 8:29.

²⁴⁴ Jimmy Carter, “Conventional Arms Transfer Policy Statement by the President.” (Washington, D.C., May 19, 1977), <https://www.presidency.ucsb.edu/documents/conventional-arms-transfer-policy-statement-the-president>.

²⁴⁵ Defense Security Cooperation Agency, Security Cooperation History, 8:55.

²⁴⁶ Jimmy Carter, “Conventional Arms Transfer Policy Statement by the President.”

²⁴⁷ Defense Security Cooperation Agency, Security Cooperation History, 9:12.

Union's influence.²⁴⁸ Through security cooperation efforts, the Regan doctrine became the centerpiece of American foreign policy, focusing on anti-communism efforts in places like Afghanistan and Nicaragua.²⁴⁹ Weapons transfers played a significant role in advancing foreign policy objectives and supporting these efforts, and throughout his presidency, there were increased weapons transfers to NATO and other allies.²⁵⁰

5. Security Cooperation: Access and Placement

The United States' strategic investment in security cooperation following World War II has proven highly successful over the past three decades. The first Gulf War demonstrated the benefits of security cooperation, with influence, access, and basing emerging as tangible byproducts of collaborative security relationships.²⁵¹ Furthermore, media coverage of the conflict spurred an increased demand for U.S. military training and equipment, a trend that continued after the war's conclusion.²⁵²

In the wake of 9/11, both the Bush and Obama administrations adeptly led an international coalition that tackled a myriad of challenges and transnational threats.²⁵³ The United States' intervention in Afghanistan, then Iraq, and finally, its investment in addressing transnational issues prompted the United States to amplify its investment in building partner capacity.²⁵⁴ The USAF supported building partnerships by employing combat aviation advisors from the 6th Special Operations Squadron (SOS) to Iraq and Afghanistan.²⁵⁵ Advisors worked with and trained both partner nations to increase their

²⁴⁸ Bureau of Public Affairs Department of State. The Office of Electronic Information, "Reagan Doctrine, 1985," U.S. Dept of State Archive (Department of State. The Office of Electronic Information, Bureau of Public Affairs.), 2023, <https://2001-2009.state.gov/r/pa/ho/time/rd/17741.htm>.

²⁴⁹ Department Of State. The Office of Electronic Information, "Reagan Doctrine, 1985."

²⁵⁰ Defense Security Cooperation Agency, Security Cooperation History, 10:56.

²⁵¹ Defense Security Cooperation Agency, 11:42.

²⁵² Defense Security Cooperation Agency, 11:54.

²⁵³ Defense Security Cooperation Agency, 12:44.

²⁵⁴ Defense Security Cooperation Agency, 12:55.

²⁵⁵ Nicole S Finch and Peter A Garretson, "Air Advising: A Critical Component of Joint Engagement," National Defense University Press, no. 70 (2013), 35.

aviation counterinsurgency capabilities.²⁵⁶ With increased spending, the United States increased its efforts to build partner capacity and expand security cooperation programs, such as “exercise planning, train and equip efforts, theater exercises, and humanitarian assistance.”²⁵⁷ The 6th SOS’ efforts proved so successful that Congress mandated that the unit double in size in 2006 and again in 2010.²⁵⁸ These investments in security cooperation showcased the mutually beneficial relationships afforded the United States and its partners when training, tools, and capabilities are tailored to meet the objectives of both parties.

6. Legacy of the 6th Special Operations Squadron

a. Formation and Early Successes

The 6th SOS, initially established in 1944 as the 6th Fighter Squadron commenced operations flying the P-47D Thunderbolt out of India.²⁵⁹ In 1994, following a successful aviation-focused foreign internal defense deployment to Ecuador, the unit was reconstituted as the 6th SOS.²⁶⁰ The unit was comprised of combat aviation advisors who were uniquely trained Air Commandos who “worked by, with, and through partners and allies to create deep relationships, integrate partner forces into multinational operations, and develop the capabilities of those partners’ air forces to help their nations resist aggression and subversion.”²⁶¹ Their integral role became evident in the aftermath of the September 11, 2001 attacks, where they trained security forces in Iraq and Afghanistan in various skills, such as mission planning and aircraft maintenance.²⁶² Notably, the advisors

²⁵⁶ Finch and Garretson, “Air Advising: A Critical Component of Joint Engagement,” 36.

²⁵⁷ Defense Security Cooperation Agency, Security Cooperation History, 13:12.

²⁵⁸ Finch and Garretson, “Air Advising: A Critical Component of Joint Engagement,” 36.

²⁵⁹ “6th Special Operations Squadron,” <https://www.492sow.af.mil/About-Us/Units/6-SOS/>.

²⁶⁰ 492nd Special Operations Wing, “6th Special Operations Squadron.”

²⁶¹ Ioannis Koskinas, “Ready, FIRE, Aim: Great Power Competition without Combat Aviation Advisors,” *Small Wars Journal*, March 1, 2023, [https://smallwarsjournal.com/jrnl/art/ready-fire-aim-great-power-competition-without-combat-aviation-advisors#:~:text=Ready%2C%20FIRE%2C%20Aim%3A%20Great%20Power%20Competition%20withou%20Combat%20Aviation%20Advisors,-Articles&text=In%20late%202022%2C%20the%20Air,for%20irregular%20warfare%20\(IW\)](https://smallwarsjournal.com/jrnl/art/ready-fire-aim-great-power-competition-without-combat-aviation-advisors#:~:text=Ready%2C%20FIRE%2C%20Aim%3A%20Great%20Power%20Competition%20withou%20Combat%20Aviation%20Advisors,-Articles&text=In%20late%202022%2C%20the%20Air,for%20irregular%20warfare%20(IW).).

²⁶² Finch and Garretson, “Air Advising: A Critical Component of Joint Engagement,” 35.

trained Afghan pilots on the A-29 light attack aircraft, a program singled out for its success in Operation Enduring Freedom's official report.²⁶³

b. Strategic Engagements and Expansion

Throughout their history, combat aviation advisors provided strategic engagements in support of national security objectives, “deploying to more than 45 partner nations and engaging on more than 40 different types of aircraft to carry out their mission.”²⁶⁴ Recognizing this value, in 2010, the DOD advocated for expanding aviation advisors across the USAF enterprise to support both SOF and conventional forces, enabling SOF to remain specialized while conventional air advisors could respond to and support a broader mission set.²⁶⁵

c. Challenges and Shortfalls

Despite specific successes, the air advising enterprise faced challenges, particularly in building operable air forces in Iraq and Afghanistan with the F-16 and UH-60 programs.²⁶⁶ With both these programs, advisors were augmentees sourced ad hoc, without specific advising experience, and operated on a rotational basis, leading to the loss of knowledge and experience after their mission ended.²⁶⁷ This example underscored the need for permanent, regionally aligned air advisory units.

d. Recent Developments and Legacy

In 2022, the air advising capability underwent significant changes. With the divestiture of the 6th SOS, the responsibility for air advising was solely entrusted to the

²⁶³ Ethan Brown and Jonathan Magill, “Integrated by Design: Building a Partner Air Force,” War on the Rocks, October 14, 2022, <https://warontherocks.com/2022/10/integrated-by-design-building-a-partner-air-force/>.

²⁶⁴ 492nd Special Operations Wing, “6th Special Operations Squadron.”

²⁶⁵ Finch and Garretson, “Air Advising: A Critical Component of Joint Engagement,” 36.

²⁶⁶ Jonathan Magill and Tobias Bernard Switzer, “<https://doi.org/10.1111/j.1468-2478.2010.00592.x>,” *Modern War Institute*, October 4, 2022, <https://mwi.westpoint.edu/how-to-improve-your-pickup-aviation-advising-game/>.

²⁶⁷ Tobias Bernard Switzer and Jonathan Magill, “How to Improve Your Pickup Aviation Advising Game.”

conventional forces, thereby eliminating this capability from SOF. The decision seemed contrary to the 2022 Defense Department Special Operations Vision and Strategy “that aimed to bolster integrated deterrence by advancing partnerships and enhancing relationship with allies, partners, and the interagency.”²⁶⁸ Despite these shifts, the historical contributions of the 6th SOS and the indelible legacy of combat aviation advisors have firmly established the enduring relevance and demand for the air advising enterprise in contemporary defense strategies.

C. CONCLUSION

The trajectory of U.S. security cooperation, as detailed in this section, underscores a fundamental tenet: collaboration, when rooted in shared values and strategic vision, can amplify the collective security capabilities of allied nations. By examining the depth and breadth of American defense partnerships over the centuries, it becomes evident that security cooperation is more than mere transactional relationships or weapon transfers; it is a complex interplay of providing support, building trust, and strengthening relationships. As global challenges continue to evolve, from technological advancements to shifting geopolitical environments, the insights gleaned from the United States’ experience with security cooperation will remain crucial, offering valuable insights for future partnerships and collaborations.

²⁶⁸ Koskinas, “Ready, FIRE, Aim: Great Power Competition without Combat Aviation Advisors.”

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APPENDIX B. DOCTRINAL ANALYSIS

This section provides a systematic review of several doctrinal publications: *Air Force Doctrine Publication 3-13 Information in Air Operations*, *Final Draft Army Doctrine Publication 3-13 Information*, *Marine Corps Doctrine Publication 8 Information*, *Air Force Doctrine Note 1-21 Agile Combat Employment*, and *Air Force Instruction 10-4201, Volume 3 Air Advising Operations*. The overarching objective was to compare doctrinal tenets with insights gleaned from interview data in Chapter Four. Five distinct components were systematically examined within each doctrine: an overview, relevant terms, roles and responsibilities, relevance assessment, and required tools and resources. The subsequent appendix captures a concise synthesis of the data, when used independently, can serve as a concise reference guide for each respective publication. Tables 12-16 provide an overview of each respective mission set, and highlight the aspects most relevant to this research.

Table 12. Air Force Doctrine Publication 3-13 Information in Air Operations²⁶⁹

Summary
The USAF has updated its approach to IO with the introduction of <i>AFDP 3-13 Information in Air Operations</i> , superseding its predecessor <i>AFDP 3-13 Information Operations</i> . The newest version incorporates OIE which, in short, aims to inform, influence, attack, exploit, and protect information sources, whether it be networks, systems, or the very information itself. Notably, OIE is not viewed as a standalone capability; instead, it achieves its objectives through planning, integration, and employing IW capabilities. The doctrine outlines fourteen distinct IW capabilities, providing comprehensive summaries for each, they include civil-military operations, counterintelligence, cyberspace operations, data science and operations research, EMSO, information operations forces, intelligence, international affairs, MISO, MILDEC, OPSEC, PA, space operations, and WX operations. AFD 3-13 asserts that OIE can maximize both the informational and operational advantage for the joint force by optimizing the tempo, scope, and purpose of the informational aspects of military actions. Furthermore, it asserts that information planners must recognize that tactical actions can yield strategic implications, underlining the interconnectedness of actions

²⁶⁹ Adapted from United States Air Force, *Air Force Doctrine Publication 3-13, Information in Air Force Operations*.

across the operational spectrum. Thus, when developing campaigns, planners need to focus on the day-to-day activities as a means to generate effects; this may include baseline operations, military engagements, security cooperation, deterrence, or other shaping activities. Finally, as it relates to security cooperation, the doctrine keenly notes that supporting forces may not have a “habitual working relationship with OIE,” so it is critical for information planners to proactively coordinate to leverage opportunities such as civil-military operations, security assistance, audience engagement, and foreign military sale

Relevancy

Up-to-date and relevant, reflecting adaptations of recent changes in joint guidance. Published in April 2023, this document falls in line with the updates to *JP 3-04 Information in Joint Operations*.

Terms & Definitions

Cognitive Aspects: “Encompass the human aspects through which information is transmitted, received, understood, and responded to or acted on. Whether focused individually or collectively, the cognitive dimension is influenced by many factors, including culture, beliefs, norms, vulnerabilities, motivations, emotions, experiences, morals, education, mental health, identities, and ideologies.”

Information Advantage: “The operational advantage gained through the joint force’s use of information for decision-making and its ability to leverage information to create effects on the IE.”²⁷⁰

Information Environment (IE): “The aggregate of social, cultural, linguistic, psychological, technical, and physical factors that affect how humans and automated systems derive meaning from, act upon, and are impacted by information, including the individuals, organizations, and systems that collect, process, disseminate, or use information.”²⁷¹

Informational Power: “The ability to use information to support achievement of objectives and gain an informational advantage. The essence of informational power is the ability to exert one’s will through the projection, exploitation, denial, and preservation of information in pursuit of objectives.”

Information Warfare: “The Air Force’s term for the military capabilities employed in and through the IE to deliberately affect adversary human and system behavior and preserve friendly freedom of action during cooperation, competition, and conflict.”

Information Warfare Forces: “Leverage IW capabilities to achieve information advantage and preserve decision advantage. IW forces are those Air Force personnel specifically organized, trained, and equipped to create effects in the IE.”

²⁷⁰ Joint Chiefs of Staff, *Joint Publication 3-04 Information in Joint Operations*, JP 3-04 (Washington, D.C.: Joint Chiefs of Staff, 2022).

²⁷¹ Joint Chiefs of Staff.

Information Warfare Forces Responsibilities:
Information as a joint function encompasses the management and application of information. Upon reviewing AFDP 3-13, this study gleaned seven broad categories of responsibilities unique to information warfare forces; these responsibilities span the competition continuum and across the planning, execution, and assessment processes. The seven responsibilities unique to information warfare forces are (1) integration and synchronization of military informational aspects; (2) inform, influence, and engage foreign relevant actors; (3) attack, exploit, and deny foreign relevant actor information; (4) protect friendly information; (5) support commander's communication synchronization strategy; (6) planning and administrative functions; (7) assessments.
1. Integration and Synchronization of Military Informational Aspects
• Integrate “all-domain kinetic and non-kinetic capabilities across a full range of military operations to produce lethal and non-lethal effects.” • “Coordinate, integrate, and synchronize the employment of information capabilities with whole of government efforts,” to include across components, areas of responsibilities, and with ally and mission partners.
2. Inform, Influence, and Engage Foreign Relevant Actors
• “Deter adversaries from engaging in behaviors or actions detrimental to U.S. interests.” • Assure and persuade allies, partners, and relevant foreign actors to initiate/continue beneficial behaviors or halt detrimental actions contrary to United States interests. • “Coerce adversaries to act in a manner beneficial to U.S. interests or to stop acting in a manner contrary to U.S. interests” by amplifying a credible threat or use of force. ○ “Conduct selective demonstrations of unique Joint Force capabilities.” • Convey “selected information and messages to foreign audiences to influence their” behavior to be favorable to the United States through MISO. • “Mislead adversary-decision makers.” ○ “Impose costs by diverting their cognitive and physical resources towards unproductive ends.” ○ Manipulate Joint Force dispositions, capabilities, and vulnerabilities.
3. Attack, Exploit, and Deny Foreign Relevant Actor Information
• Deny adversary “critical information and observable indicators about friendly forces and intentions” through OPSEC. ○ Employ signature management and the base profiling process to “profile an installations day-to-day observable activities and operational trends.” • Employ MILDEC to affect an adversary decision-maker’s “information systems, processes, and capabilities.”
4. Protect Friendly Information
• Employ OPSEC to “identify, control, and protect critical information.” • “Analyze friendly actions associated with military operations and other activities.” ○ Develop and maintain a critical information and indicators list (CIIL).

• Conduct base profiling process: “a deliberate effort to identify functional areas; their associated observables, signatures, and indicators; and how they contribute to the installation’s overall signature profile.”
5. Support Commanders’ Communication Synchronization Strategy
• “Establish overall component narrative and key themes and allocate resources in accordance with and in support of them.” ○ “Continually reinforce the component narrative through sustained presence and engagement.” • Proactively respond “to emergent events across the competition continuum.” ○ Match actions with messages. • Synchronize messaging with allies and partners. ○ “Attract new security partners by communicating presence and commitment.” • “Expose and counter malign influence.” ○ “Counter disinformation and propaganda.” ○ “Diminish adversary’s competitive space by countering/frustrating their narrative.”
6. Planning and Administrative Functions
• Execute deliberate, long-term campaigns. • “Provide OIE inputs to strategic/campaign-level operation planning documents (e.g., campaign plans, contingency plans, OPLANs).” • “Provide input on operational planning documents (e.g., annexes/appendices, joint air operations plan [JAOP], air operations directive).” ○ Provide OIE inputs “during each step of the JPPA and the air tasking cycle.” • Coordinate themes and messages with action approvals, tasking orders, and targeting lists. • “Submit requirements for analytical needs (e.g., telecom studies, patterns of life).”
7. Assessments
• “Develop assessment criteria (e.g., measures of performance, or MOP, and MOE).” • “Assess effects in support of JFC campaign objectives and refine campaign approach.”
Requirements
• Intelligence support: ○ Establish a “dedicated intelligence integration element” that “serves as a conduit to translate and internally coordinate OIE’s requirements with collection management and production cells within the ISRD.” ○ “Baseline characterization of the IE,” detailed target packages, “complex effects assessments,” and to “aid in relevant actor/target audience analysis.” ○ “MILDEC planners require specific analysis to generate a sufficiently detailed understanding of how the IE supports decision-makers and decision processes.” ○ “Monitor how component activities resonate through the IE.” ○ “Collect MOEI and maintain an understanding of the IE.” ○ “Coordinate with intelligence to ensure the” MOE/MOP “chosen are observable by available collection capabilities.”

- “Mission-specific ROE from the appropriate senior authority.”
- Reach-back support may provide “OIE-specific expertise or information to augment theater planning.”
- “Information-related authorities and permissions...and additional authorities or permissions that may be needed.”
- Identification and accessibility of “forces required to support OIE actions, to include those from joint, coalition, and interagency partners.”

Table 13. Final Draft Army Doctrine Publication 3-13 Information²⁷²

Summary
While not yet published, the final draft of <i>Army Doctrine Publication 3-13 Information</i> embodies a paradigm shift for the Army, one which recognizes “that all activities have inherent informational aspects that generate effects which contribute to or hinder achieving objectives.” Subsequently, “Army forces fight for, defend, and fight with information as part of a continuous struggle to gain and exploit advantages above and below the threshold of armed conflict.” It outlines a combined arms approach that both creates and exploits information advantages. “During operations, Army forces collect, process, analyze, and use information to understand situations, make decisions, and issue orders that result in action.” They deny threats access to friendly data and information, protect decisions, and defend networks to ensure communications. Army forces communicate information to inform relevant audiences, correct misinformation, and counter threat disinformation. Army forces employ information in combination with physical action to influence threat decision-making and behavior. They attack threat data, information, and networks to affect the threat’s ability to command and control (C2) its own forces. These tasks are aligned in support of five information activities: (1) enable; (2) protect; (3) inform; (4) influence; and (5) attack. During competition, information activities may include “military engagement, security cooperation, and deterrence activities;” these are executed to improve security within partner nations, enhance international legitimacy, gain multinational cooperation, and influence adversary decision-making. The overarching message is clear: in today’s digital age, achieving an information advantage is integral to operational success.
Relevancy
Up-to-date and relevant, reflecting adaptations of recent changes in joint guidance. Draft is from June 2023, this document falls in line with the updates to <i>JP 3-04 Information in Joint Operations</i>.
Terms & Definitions

²⁷² Adapted from Army Chief of Staff, *Final Draft Army Doctrine Publication 3-13 Information*.

Information: “Data in the context which a receiver (human or automated system) assigns meaning.” “Humans assign meaning to data and use information to understand, make decisions, communicate, and act.”

Inherent Informational Aspects: “Features and details of a situation or an activity that can be observed.” “Inherent informational aspects include, but are not limited to, physical attributes of the capabilities and forces involved; the duration, location, and timing of the situation or activity; and any other characteristics that convey information to an observer.”

Informational Power: “The ability to exert one’s will through the projection, exploitation, denial, and preservation of information in pursuit of objectives.”²⁷³

Misinformation: “Unintentional incorrect information from any source.”

Disinformation: “Incomplete, incorrect, or out-of-context information deliberately used to influence audiences.”

Adversary: “A party acknowledged as potentially hostile to a friendly party and against which the use of force may be envisaged.”²⁷⁴

Enemy: “A party identified as hostile against which the use of force is authorized, called a combatant, and is treated as such under the law of war.”²⁷⁵

Information Advantage: “A condition when a force holds the initiative in terms of situational understanding, decision-making, and relevant actor behavior.”

Commander’s Communication Synchronization: “A process to coordinate and synchronize narratives, themes, messages, images, operations, and actions to ensure their integrity and consistency to the lowest tactical level across all relevant communication activities.”²⁷⁶

Information Activity: “A collection of tasks linked by purpose to affect how humans and automated systems derive meaning from, use, and act upon, or are influenced by, information.”

²⁷³ Joint Chiefs of Staff, *Joint Publication 3-04 Information in Joint Operations*.

²⁷⁴ Joint Chiefs of Staff, *Joint Publication 3-0 Joint Operations*, JP 3-0 (Washington, D.C.: Chairman of the Joint Chiefs of Staff, 2022).

²⁷⁵ Department of the Army, *Army Doctrine Publication 3-0 Operations*, ADP 3-0 (Washington, D.C.: Department of the Army, 2019).

²⁷⁶ Joint Chiefs of Staff, *Joint Publication 3-61 Public Affairs*, JP 3-61 (Washington, D.C.: Chairman of the Joint Chiefs of Staff, 2016).

Information Dimension: “The content and data that individuals, groups, and information systems communicate and exchange, as well as the analytics and technical processes used to exchange information within an operational environment.”²⁷⁷

Operations in the Information Environment: “Military actions involving the integrated employment of multiple information forces to affect drivers of behavior.”²⁷⁸

Information Responsibilities:

1. Enable

Overview:

- “The enable information activity consists of related tasks that enhance friendly C2. The focus of this activity is to improve situational understanding, decision-making, and communications.”

Tasks:

- **Establish, operate, and maintain C2 systems.**
 - “Organize people: staff sections, command post cells, augmentation, working groups, and boards.”
 - “Organize processes.”
 - “Establish, operate, and maintain networks.”
 - “Organize command posts.”
- **Conduct the operations process and coordinate across echelons.**
 - Operations Process: “the major C2 activities performed during operations: planning, preparing, executing, and continuously assessing the operation.
 - Prioritize information requirements.”
 - Maintain “running estimates.”
 - “Creating, maintaining, and disseminating the common operating picture.”
 - “Establishing liaison” - “contact or intercommunication maintained between elements of military forces or other agencies.”
- **Execute the integrating processes.**
 - “Intelligence preparation of the operational environment.”
 - “Information collection.”
 - “Targeting.”
 - “Risk management.”
 - “Knowledge management.”
- **Enhance understanding of an OE.**
 - “Analyze the operational and mission variables.”
 - “Identify and describe relevant actors.”
 - “Identify likely behavior of relevant actors.”

2. Protect

²⁷⁷ Department of the Army, *Field Manual 3-0 Operations*, FM 3-0 (Washington, D.C.: Department of the Army, 2022).

²⁷⁸ Joint Chiefs of Staff, *Joint Publication 3-04 Information in Joint Operations*.

Overview:

- “Protection is the preservation of the effectiveness and survivability of mission-related military and nonmilitary personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a given operational area.” This activity “focuses on denying threat access to friendly data and information while preserving friendly communications capabilities.”

Tasks:

- **Secure and obscure information.**
 - “Implement OPSEC:” “Operations security is both a process and a mindset adopted by all Soldiers to reduce the threat’s ability to collect information and discern friendly force intentions.”
 - “Conduct deception in support of Operations Security” (DISO): “Commanders employ deception in support of OPSEC to create multiple false indicators that confuse enemy or adversary forces operating in the unit’s area of operations, making unit intentions harder to interpret.”
 - “Employ camouflage, concealment, and obscurity:” “OPSEC measures are used to protect friendly forces and activities from threat detection—observation and surveillance. Camouflage and concealment help obscure friendly data and information.”
- **Conduct security activities.**
 - Conduct security operations: “Provide early and accurate warning of enemy operations, to provide the forces being protected with time and maneuver space within which to react to the enemy, and to develop the situation to allow commanders to effectively use their protected forces.”
 - Implement physical security: “Physical measures designed to safeguard personnel; prevent unauthorized access to equipment, installations, material, and documents; and safeguard them against espionage, sabotage, damage, theft, and terrorism.”
 - Implement the personnel security program: Ensures “personnel in sensitive positions have the appropriate clearance, a need-to-know, and required certifications before granting access to critical network infrastructure.”
 - Conduct counterintelligence: “Information gathered, and activities conducted to identify, deceive, exploit, disrupt, or protect against espionage, other intelligence activities, sabotage, or assassinations conducted for or on behalf of foreign powers, organizations or persons or their agents, or international terrorist organizations or activities.”
- **Defend the network, data, and systems.**
 - Conduct cyberspace security: “Actions taken within protected cyberspace to prevent unauthorized access to, exploitation of, or damage to computers and networks, including platform information technology.”

- Conduct defensive cyberspace operations: “Missions to preserve the ability to utilize and protect blue cyberspace capabilities and data by defeating ongoing or imminent malicious cyberspace activity.”
- Conduct communications security: “Protection resulting from all measures designed to deny unauthorized persons information of value that might be derived from the possession and study of telecommunications or to mislead unauthorized persons in their interpretation of the results of such possession and study.”
- Conduct electromagnetic protection: “Division of electromagnetic warfare involving actions taken to protect personnel, facilities, and equipment from any effects of friendly or enemy use of the electromagnetic spectrum that degrade, neutralize, or destroy friendly combat capability.”
- Conduct space control: Defensive - “surveil and assess space systems—on the ground and in space—in support of military and civil operations.” Offensive - “a form of fires that may be used to counter an enemy’s use of space capabilities for hostile purposes.”

3. Inform

Overview:

- The inform information activity consists of the related tasks that facilitate the informed perceptions of various audiences about military operations and activities.

Tasks:

- **Conduct Commander’s Communication Synchronization:**
 - Commander’s communication synchronization (CCS) is “a process to coordinate and synchronize narratives, themes, messages, images, operations, and actions to ensure their integrity and consistency to the lowest tactical level across all relevant communication activities.”
 - “CCS is a top-down process starting at the U.S. government level and nesting down to Army tactical forces.”
- **Inform and educate Army audiences.**
 - Informing internal audiences: “Commanders and leaders keep internal audiences informed on organizational goals, priorities, values, and expectations while encouraging feedback. They inform through various means ranging from conducting mission briefings to subordinates to hosting town hall meetings.”
 - Educating Soldiers: “The entire Army force is potentially subject to threat-influence activities. Such threats require all Soldiers to remain vigilant to threat attempts to undermine their morale and will. Leaders train Soldiers to recognize such activities during initial entry training and throughout their service. This continued education provides Soldiers with tools the ability to recognize and mitigate threat influence activities as well as to withstand enemy influence attempts.” Education may include:
 - “Threat information warfare methods.”
 - “The role of the Army.”
 - “Army Values and Warrior Ethos.”

- **Inform U.S. domestic audiences.**
 - Conduct Public Communication: “Providing public information includes the receipt and exchange of ideas and opinions that contribute to public understanding of—and discourse with—the Army.”
 - Conduct Community Engagement: “Public affairs activities that support the relationship between military and civilian communities.”
 - “Correct misinformation and counter disinformation related to Army forces or operations.”
- **Inform international audiences.**
 - Conduct community engagement: “These activities involve working collaboratively with, and through, groups of people affiliated by geographic proximity or special interests to enhance the understanding and support for Army forces and operations.”
 - Conduct soldier and leader engagement: “Interpersonal interactions by Soldiers and leaders with audiences in an area of operations.”
 - Conduct civil affairs operations: “Engage the civil component of an OE,” and “assist commanders in informing international audiences, to include unified action partners and indigenous populations and institutions.”
 - “Correct misinformation and counter disinformation within international audiences.”

4. Influence

Overview:

- “The influence activity is the related tasks that affect the thinking and ultimately the behavior of threats and other foreign audiences. This activity focuses on reinforcing or changing how individuals and groups think, feel, and act in support of objectives.”

Tasks:

- **Influence threat perception and behaviors**
 - Conduct deception activities: “Military deception is actions executed to deliberately mislead adversary military, paramilitary, or violent extremist organization decision makers, thereby causing the adversary to take specific actions (or inactions) that will contribute to the accomplishment of the friendly mission.”
 - “At very low tactical echelons, an infantry squad might use smoke to draw the attention of the enemy away for long enough to cross a street. At a slightly higher echelon, a platoon might conduct a feint to deceive the enemy about the location of the company commander’s main attack for several minutes. Deception efforts at higher echelons require greater coordination because the number of actions required to successfully fool the threat increases.”
 - Conduct Tactical Deception: “a friendly activity that causes enemy commanders to take action or cause inaction detrimental to their objectives.”

○ Conduct MISO: “planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals in a manner favorable to the originator’s objectives.” ● Influence other foreign audiences. ○ “Conduct soldier and leader engagement.” ○ “Conduct MISO.” ○ “Conduct civil affairs operations.”
5. Attack
Overview: ● “The attack information activity contributes to this advantage through two related tasks: degrade the threat’s ability to C2 and affect threat information warfare capabilities.” Tasks: ● Degrade threat command and control. ○ “Physical destruction: Physical destruction is the application of lethal fires and maneuver to affect threat C2 and communications.” ○ Electromagnetic Attack: “Use of electromagnetic energy directed energy or antiradiation weapons to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capability and is considered a form of fires.” ○ Cyberspace Attacks: “actions taken in and through cyberspace that create denial ([such as], degradation, disruption, or destruction) or manipulation effects in cyberspace and are considered a form of fires.” ● Degrade threat command and control. ○ “Affect threat understanding of an operational environment.” ○ “Affect threat networks and systems.” ● Affect threat information warfare capabilities: ○ “To degrade or defeat threat information warfare capabilities, Army forces may employ the same types of capabilities and use methods like those used in other Army information activities. The type of threat information warfare capability, as well as the strategic context of the attack, may narrow or broaden the list of appropriate military capabilities employed in response.”
Requirements

• Language, regional, and cultural subject matter experts. • During competition below armed conflict, units “continuously conduct most of these preparatory activities (intelligence operations, cyberspace reconnaissance, electromagnetic reconnaissance, target audience analysis, and target development)” at echelons above division. • Assessment plans to monitor effects of information activities, including effects of other units, to enable adjustments. • Identify and when necessary, request “required authorities related to conducting various information activities.” • Information requirements that fill gaps in knowledge about the threat’s C2 and information warfare systems during IPOE.
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Table 14. Marine Corps Doctrine Publication 8 Information²⁷⁹

Summary
The <i>Marine Corps Doctrine Publication 8 Information</i> is introduced as a comprehensive framework aimed at enhancing the understanding and employment of the information warfighting function. It underscores the importance of utilizing information to gain information advantages across the competition continuum. Every Marine, regardless of rank, is instrumental in leveraging information for success, from supporting the prevailing narrative to defending or attacking critical information networks. Marines strive to create three types of information advantages: systems overmatch, prevailing narrative, and force resiliency, which are instrumental in decision-making, operational tempo, and psychological warfare. Central to this is information as a warfighting function, and all marines are expected to approach information with a maneuver warfare mindset. Marines are prompted to consider the broad, strategic implications of their operations, underscoring the importance of information within the information age. Information is viewed differently across the levels of war. On the strategic front, it involves defending vital information while persuading favorable perceptions, decisions, and behaviors in alignment with national policy objectives. Operationally and tactically, it is about “generating, preserving, denying, and projecting information” effectively to impose will and achieve objectives. When properly employed and leveraged information advantages yield “increased decision speed, surprise, faster targeting cycles, increased operational tempo,” and/or psychological advantages.
Relevancy
Up-to date and relevant. Does not reflect some critical aspects from JP 3-04, such as OIE. While information-centric, its intended audience is the broader USMC, and subsequently, it utilizes nomenclature and concepts that can be easily understood from private to general officer. Lt. Gen. Matthew Glavy, deputy commandant for information, noted that the information space is dynamic and thus this product will likely be updated every two to three

²⁷⁹ Adapted from Commandant of the Marine Corps, *Marine Corps Doctrine Publication 8 Information*.

years.²⁸⁰ *MCDP 8 Information* is ultimately intended to serve as a guide to the force on how to gain information advantages across the competition continuum, and that directly translates to how the Corps should approach campaign within a time of strategic competition in support of integrated deterrence.

Terms & Definitions

Information Environment: “The global competitive space that spans the warfighting domains, where all operations depend on information.”²⁸¹

Information advantage: “An exploitable condition resulting from one actor’s ability to generate, preserve, deny, and project information more effectively than another.”

Misinformation: “False information that is not deliberately intended to cause harm.”

Disinformation: “False information that is deliberately intended to cause harm or create an effect.”

Thinking Processes: “Human perception, cognition, decision-making, and behavior.”²⁸²

Non-Thinking Processes: “Preprogrammed, ‘hard-wired,’ or algorithmic decision making and behavior—such as simple or complex tasks performed by machines or computers.”²⁸³

Competitors: “Governments or non-state actors who use competitive methods that run counter to accepted international norms or clash with U.S. interests.”²⁸⁴

Opponent: “Any actual or potential competitor, adversary, or enemy against which we are taking action on any point of the competition continuum.”

Information Systems: “The structures of technology that gather, use, and relay information worldwide as an element of influence and power projection.”

Informational Power: “The use of information, narratives, and technical means to advance interests and achieve the Nation’s objectives.”²⁸⁵

²⁸⁰ Mark Pomerleau, “Marine Corps Releases New Doctrine on Information,” *DefenseScoop* (blog), June 29, 2022, <https://defensescoop.com/2022/06/29/marine-corps-releases-new-doctrine-on-information/>.

²⁸¹ Michael Schuille et al., *Handbook for Tactical Operations in the Information Environment* (Santa Monica, CA: RAND Corporation, 2021), <https://www.rand.org/pubs/tools/TLA732-1.html>.

²⁸² *Story of Information* (British Broadcasting Corporation, London, UK, 2012).

²⁸³ *Story of Information*.

²⁸⁴ Department of the Navy, *Marine Corps Doctrine Publication 1-4 Competing*, MCDP 1-4 (Washington, D.C.: Department of the Navy, 2020).

²⁸⁵ Department of the Navy, *Marine Corp Doctrine Publication 1-1 Strategy*, MCDP 1-1 (Washington, D.C.: Department of the Navy, 2018).

Information Generation: “The function of information that Marines apply to gain and maintain access to the information environment; build awareness of information-based threats, vulnerabilities, and opportunities; hold systems at risk; and create the necessary information to plan and conduct operations.”

Information Preservation: “The function of information that Marines use to protect and defend the information, systems, and networks used to facilitate planning and friendly operations against internal and external threats.”

Information Denial: “The function that Marines apply to disrupt or destroy the information needed by the opponent to understand the situation, make decisions, or act in a coordinated fashion.”

Information Projection: “The function of information that Marines use to communicate, transmit, or deliver information of any type to inform, influence, or deceive an observer or targeted system.”

Information Responsibilities:

1. Systems Overmatch

Overview:

- “The technical advantage of one side over another, yielding fires, intelligence, maneuver, logistics, force protection, or command and control advantages.”

Tasks:

- **Generate**
 - “Build situational awareness, gain access to the opponent’s information and systems, develop plans and orders, and obtain permissions.”
 - “Create ambiguity and uncertainty in an opponent to cause friction while defending against it.”
- **Preserve**
 - “Prevent an opponent from accessing, manipulating, or destroying friendly information; guard against internal threats.”
 - “Offensive cyberspace operations, electromagnetic spectrum operations, fires, and manipulating or suppressing the physical and digital signatures emanating from friendly forces.”
 - “Marines strive to reduce uncertainty to a manageable level by gathering and fusing information to understand the situation and make timely decisions.”
- **Deny**
 - “Defeat or disrupt the opponent’s ability to gather, make sense of, or use information.”
 - Implement “operations security measures, communication discipline, camouflage, counterintelligence,” signature suppression, and cybersecurity measures.
- **Project**

- “Manipulate, corrupt, or deceive the opponent’s sensors, systems, human-machine interfaces, and computer processing.”
- Marines can overload opponent systems by projecting more information than the opponent’s systems can process.
 - Use of “tempo to confuse the enemy,” employing “decoys to overwhelm radars,” conducting “cyberspace and electromagnetic spectrum operations to bombard adversary networks and computer systems with digital noise.”
 - Techniques that Marines employ to “deceive opposing systems range from tactical deception to highly sensitive joint military deception activities, to deception in support of operations security.”
 - “Tactical deception creates disproportionate advantages based on how much time and resources an enemy or adversary diverts toward our ruse or trap.”
 - “Marines conduct a wide range of tactical deception operations, including feints, demonstrations, ruses, and displays to draw the enemy or adversary away from our main effort.”
 - “Marines support joint military deception activities by taking specific actions or by employing special technical capabilities to deceive a specific target or decision maker.”
 - “Deception in support of operations security manipulates the information available to a foreign intelligence entity and limits their overall ability to collect or accurately analyze critical information about friendly operations, personnel, programs, equipment, and other assets.”

2. Prevailing Narrative

Overview:

- “The prevailing narrative is the one that is credible and resonates most with the intended audience. The crafter’s goal is to achieve a prevailing narrative that results in a public opinion or perception advantage by eliciting trust, credibility, and believability in our presence, mission, and objectives.”

Tasks:

- **Generate**
 - “Build understanding of key pre-existing and potential narratives (friendly, neutral, opponent) to include all relevant contexts and nuances.”
 - Study the mental and moral factors underpinning key populations.
 - Identify “key stakeholders.”
 - Measure “the narrative’s effectiveness with the intended audience.”
 - “Marines must also understand that their presence, posture, and actions will always communicate a message that is open to interpretation.”
- **Preserve**

○ “Protect and defend the friendly narrative from opponent disruption and replacement; document and maintain unit histories and historical events with accuracy.” ▪ “Record and archive historical information about the unit’s operations.” ○ Recognize and dispel “misinformation and disinformation.” • Deny ○ “Deny the opponent’s ability to effectively communicate their narrative.” ▪ “Marines must aggressively highlight discrepancies in the opponent’s narrative by providing evidence of the gap between what they say and what they do.” ▪ “Marines must exploit systems overmatch to physically disrupt opponent message distribution and the opponent’s ability to communicate with their intended audiences.” • Project ○ “Communicate the friendly narrative by coordinating and synchronizing all communication, messaging, and actions, nesting them within the strategic and joint force narratives.” ▪ “Align actions with official communication and other messaging to gain a public opinion or perception advantage with key audiences.” ▪ “Project information through deliberate activities, including key leader engagements, military-to-military training exercises, community relations projects, news releases, or presence.” ○ “Recognize that all military activities are physically detectable and observable and can therefore communicate a message—whether intentional or unintentional.” ○ “Marines at all levels must understand the impact that their actions and messages communicate— particularly in the context of local and international narratives.”
3. Force Resiliency Overview: • “From an information perspective, resiliency embodies these traits, carried forward by a Marine’s ability to resist, counter, and prevail against enemy and adversary reconnaissance, technical disruptions, and malign activity such as misinformation, disinformation, and propaganda. In short, Marines resist, counter, and prevail against any threat that targets our systems and our psyche.” Tasks: • Generate ○ “Build understanding of own force information vulnerabilities, actual and potential threats; identify risks and opportunities for action.” ▪ “Marines understand competitor and adversary perspectives, playbooks, malign behaviors, or other disruptive information actions.” • Preserve

- “Recover from opponent information disruptions (functional or cognitive); educate and train against cognitive biases; conduct robust media literacy training.”
 - “Recovering from and mitigating all forms of information disadvantage that result from setbacks in a systems overmatch or narrative contest.”
- **Deny**
 - “Defeat or disrupt the opponent’s ability to access, gather, make sense of, or use information; guard against cognitive biases, conduct media literacy training to ensure Marines recognize and stop foreign influence.”
 - “Well-educated and trained Marines who understand the opponent’s targeting and influence methods and use that information to make themselves harder to influence.”
- **Project**
 - “Manipulate, corrupt, or deceive the opponent; communicate by action (exercises, demonstrations, freedom of navigation operations) to reassure allies and partners and send deterring messages of resolve to actual or potential adversaries.”
 - “Marines continue the mission by taking the initiative based on the commander’s intent and any information still available, forcing the opponent to react to our action.”

4. Role of Information Across the Competition Continuum

Information in Competition:

- “Marines shape the environment by conducting military engagement, which is the deliberate contact and interaction between military personnel or units and those of another nation’s armed forces or civilian authorities and agencies. All engagements should shape a credible prevailing narrative that builds trust and confidence by sharing information and coordinating mutually beneficial activities.”
- “Military engagement, security cooperation, and credible force presentations are inherently information-centric activities employed as part of a campaign to create and exploit information advantages that can lead to favorable decisions and behaviors of relevant actors within the security environment.”
- Maintains a “persistent forward presence in contested zones.”
- Engage “with allies and partners.”
- Conduct “security cooperation.”
- Provide “credible deterrence.”

Information in Armed Conflict and General Warfare:

- “In war, we must seek to manipulate, disrupt, or destroy aspects of the enemy’s command and control, intelligence, and weapons systems to confuse, shatter their cohesion, and deny their ability to function and fight.”
- “Directly target the enemy’s will to fight by using aggressive disinformation and propaganda to manipulate their perceptions of self, trust in their leaders, one another, and their ability to endure the hardships of battle.”

• “Preserving data and information networks is a critical concern of commanders during armed conflict and general warfare and requires careful study and planning, coupled with forceful offensive and defensive actions.”
Required Tools & Resources
• “Training in critical thinking skills to recognize untrustworthy information sources, and to understand how one’s own potential cognitive biases may increase one’s susceptibility to manipulation.” • “Education on how to perform joint military deception, understanding where authorities reside, and the tight security controls needed to coordinate such actions.” • “Integration of the information warfighting function with the other warfighting functions and included in plans and orders to create maximum effect.” • “Understanding of the broader strategic narratives transpiring among all relevant stakeholders.” • “Well-educated and trained Marines who understand the opponent’s targeting and influence methods and use that information to make themselves harder to influence.” • Intelligence support to combat assessment, a factor that is “critical to understanding the effects of information in the battlespace.” • Training for Marines who “require specific technical skills to apply information capabilities or conduct specific information activities to create or exploit advantages.”

Table 15. Air Force Instruction 10-4201, Volume 3 Air Advising Operations²⁸⁶

Summary
Air advising spans a broad spectrum of “activities and operations to include bilateral and multilateral meetings between senior leaders; subject-matter expert exchanges; exercises and competitions; mobile training team (MTT) and extended training service specialists (ETSS) deployments; global health engagements; agile combat support engagements; and ANG State Partnership Program (SPP) engagements with partner nations.” These activities in turn generate tactical, operational, and strategic effects. The overarching aim of air advising is “to support U.S. strategic objectives, GCC theater strategies, and theater campaign plan (TCP) by assisting partner nations in the development and sustainment of their aviation enterprises.” Air advising activities support security cooperation initiatives and programs to include “building partner capacity (BPC), security force assistance (SFA), foreign internal defense (FID), security sector reform (SSR), and support to security assistance.” Air advising efforts are most effective through persistent engagement with the partner nation that generates “synergistic effects focused on the long-term strategic and objectives of the GCC.”
Relevancy

²⁸⁶ Adapted from Secretary of the Air Force, *Air Force Instruction 10-4201, Volume 3 Air Advising Operations*.

AFI 10-4201 was published in 2015, while the tenets of air advising remain the same, the role of air advising in support of strategic competition, integrated deterrence, and ACE are still being codified.

Terms & Definitions

Air Advising: “A category of related activities that provides the basic operational methods used by USAF personnel to work with partner nations to develop, sustain, and employ their aviation enterprise to meet their national security needs, in support of U.S. interests. In essence, it is the act of communicating professional knowledge and skills to partner nation personnel. Air advising occurs within the following five core tasks: assessing, training, advising, assisting, and equipping.”

Security Cooperation: “Activities undertaken by the Department of Defense to encourage and enable international partners to take political action in support of United States goals, provide the United States operational access, and apply capability and capacity consistent with United States defense objectives. Also called SC.”²⁸⁷

Security Force Assistance: “A subset of security cooperation, those Department of Defense activities requiring legislative authorities that contribute to unified action by the United States Government to support the development of the capacity and capability of foreign security forces and their supporting institutions.”²⁸⁸

Air Advisor Responsibilities:

1. Building Partnerships/International Relationships

- Build “relationships and rapport with partner nation personnel.”
- Conduct “initial ‘door-opening’ activities and periodic military-to-military discrete engagements at either a senior-level or subject matter expert level to address specific areas within the aviation enterprise.”
- Gain “US access to partner nation facilities required during both peacetime and contingency operations.”
- Maintain “these relationships over time to further U.S. strategic interests as partner nation personnel become senior leaders of their military or government.”

2. Building Partner Capabilities/Capacities

- Increase “the capabilities and/or capacities of the partner nation’s aviation enterprise.”
- Develop “the basic infrastructure and support systems of an aviation enterprise.”
- Train “partner nation personnel to perform military aviation missions such as airlift and personnel recovery.”
- Tailor “the needs and the capabilities of the partner nation, based on economic, infrastructure, and human capital, to ensure the partner nation can operate and sustain their capabilities.”

3. Joint Training and Interoperability

²⁸⁷ Joint Chiefs of Staff, *Joint Publication 1-02 Department of Defense Dictionary of Military and Associated Terms*, JP 1-02 (Washington, D.C.: Chairman of the Joint Chiefs of Staff, 2016).

²⁸⁸ Joint Chiefs of Staff *Joint Publication 1-02 Department of Defense Dictionary of Military and Associated Terms*.

• Increase “interoperability among joint and coalition forces” through “joint and coalition training.” • Conduct “bilateral and multilateral exercises and competitions.” • Conduct “joint combined exchange training missions.” • Integrate SOF, “forward-stationed forces, teams, and individual liaison officers in training with international allies and partners on a daily basis.” • Seek opportunities to incorporate international allies and partners in day-to-day training.
4. Assessing the Partner Nation
• Continually “assess partner nations’ aviation capabilities and limitations based on specific tasks in response to GCC requirements and the country.” • Conduct baseline assessments. ○ Identifies “the initial/current state” of the partner nation as it relates to the military objective. • Conduct operational assessments. ○ Assess the progress of the partner nation between the “initial state and objective.” This assessment is conducted at the tactical, operational, and theater strategic levels. ○ “Operational assessments of the event and training/capacity plans” then inform the TSOC/AFFOR staff’s assessment of the country plan.
5. Training the Partner Nation
• “Train partner nation military aviation forces to operate and sustain indigenous airpower resources and capabilities.” ○ Training can span a range of instruction programs from “technical skills, sustainment functions, and tactical flying skills.” ○ “Training enables foreign aviation forces to accomplish a variety of airpower functional tasks, roles, and missions.” ○ “Training can provide a doctrinal or procedural foundation for military operations and activities.” ○ “Training can be used to close specific gaps in foreign skills and to raise the partner nation’s level of competency.”
6. Advising the Partner Nation
• Advising can provide “mission-related advice on but not limited to intelligence, maintenance, logistics, communications, and administration, as well as tactical operations.” • In conflict, advising may entail “advising central command elements of the host military on the capabilities, limitations, and correct use of airpower.” ○ Transitioning “from training to advising crosses a political threshold requiring at a minimum, Secretary of Defense approval and potentially Presidential approval.”
7. Assisting the Partner Nation
• “Assist operations are unique and may be authorized when a partner nation cannot conduct required missions or contingency operations alone.”

• “Assist operations can also include all types of mission and operational support functions working in parallel to support the overall objective.”
8. Equipping the Partner Nation
• Legal consideration - “it is imperative that air advisors understand they are not authorized to transfer any equipment and/or information to foreign security forces not explicitly authorized in their mission orders.”
Requirements
• “Airmen involved in air advising activities must be proficient in operational planning.” • “Airmen involved in the planning, execution, and assessment of air advising activities need to be familiar with CCMD campaign plans and COMAFFOR/TSOC campaign support plans, as these plans link country plans and air advisor activities with national level strategy and objectives.”

Table 16. Air Force Doctrine Note 1-21 Agile Combat Employment²⁸⁹

Summary
In response to a shifting global security landscape and emerging challenges, the USAF has implemented ACE as a means to introduce operational unpredictability and bolster air base resilience, thus complicating adversary targeting and enhancing overall combat effectiveness. Since World War II, there has been a significant reduction in overseas air bases, and with technological advancements made by adversaries in “pervasive intelligence, surveillance, and reconnaissance and all-domain long-range fires,” air bases now face heightened risk. Moreover, “fiscal and political constraints” are inhibiting “the establishment of new permanent bases.” ACE offers a strategy that, when executed aptly, enhances survivability and combat power generation by complicating enemy targeting, posing both political and operational dilemmas for adversaries, and ensuring flexibility for friendly forces. AFDN 1-21 outlines the enablers and framework of ACE. In competition, ACE deters aggression and, in conflict, enables the United States to defend and win. At its core, ACE creates multiple dilemmas for adversaries enabling friendly freedom of action and decision advantage. The overarching intent of this doctrine note is to underscore a paradigm shift in USAF operational thinking and its subsequent approach to operations. Additionally, this guidance aims to foster discussion across the force and intends to be refined through feedback from operations and exercises as ACE matures.
Relevancy
Relevant and up to date, published as the initial strategic guidance to drive the evolution of ACE within the USAF.
Terms & Definitions
Agile: “Able to outpace adversary action through movement and maneuver to achieve commander’s intent.”

²⁸⁹ Adapted from Curtis Lemay Center, *Air Force Doctrine Note 1-21 Agile Combat Employment*.

Agile Combat Employment: “A proactive and reactive operational scheme of maneuver executed within threat timelines to increase resiliency and survivability while generating combat power.”

Base Cluster: “A base cluster is a collection of bases, geographically grouped for mutual protection and ease of C2.”²⁹⁰

Conditions Based Authorities: “A published set of authorities that are delegated down the chain of command from one commander to another, to be activated only when specified conditions are met.”

Hub and Spoke Distribution: “A physical distribution system, in which a major port serves as a central point from which cargo is moved to and from several radiating points to increase transportation efficiencies and in-transit visibility.”²⁹¹

Mission Command: “An approach to C2 that empowers subordinate decision-making for flexibility, initiative, and responsiveness in the accomplishment of commander’s intent.”²⁹²

Multi-Capable Airmen (MCA): “Airmen trained in expeditionary skills and capable of accomplishing tasks outside of their core Air Force specialty.”

ACE Requirements

1. ACE in Cooperation

- “Create steady-state and contingency authorities with partner nations which allow for: overflight, direct coordination with host nation defense, staging of material/equipment, etc.”
- Organize, train, and equip forces for ACE constructs.
- Build interoperability with allies and partners.

2. ACE in Competition

- Exercise ACE operations and conduct capability demonstrations with joint forces and partner nations as an active deterrent to conflict.
- Maintain freedom of access and maneuver.

3. ACE in Conflict

- Conduct persistent mission generation and logistics under attack.
- Complicate enemy observe-orient-decide-act loop.
- Preserve combat capability.
- Generate combat power.

4. Posture

²⁹⁰ Joint Chiefs of Staff, *DOD Dictionary of Military and Associated Terms* (Washington, D.C.: Chairman of the Joint Chiefs of Staff, 2021).

²⁹¹ Joint Chiefs of Staff.

²⁹² Chief of Staff, United States Air Force, *Air Force Doctrine Publication 1 The Air Force*.

• “Forces must be able to rapidly execute operations from various locations with integrated capabilities and interoperability across the core functions.” ○ Deter conflict by being “strategically predictable but operationally unpredictable.” ○ Provide “commanders with expanded force employment options and mitigates operational risk.” ○ Redistribute “theater-assigned and follow-on forces to positions of advantage to best support operations plan execution.” ○ Maintain robust enduring location with “the ability to support further dispersion to smaller contingency locations while maintaining integrated capabilities and interoperability.” • Defensive posture increases “the scope and scale of friendly force locations, boosts deterrence to adversary aggression, and assures allies by presenting a credible combat force.” ○ Bolster operational unpredictability by “increasing the number of locations an adversary must target.” • “Access, basing, and overflight are essential to the successful application of ACE.” ○ Strengthen alliances through trust and increasing partner capacity and capabilities. ○ Assess and “understand the local and regional market’s capacity to source critical operational requirements.”
5. Command and Control
• ACE C2 Framework: “centralized command, distributed control, and decentralized execution.” ○ “Airmen should be trained and equipped to employ communications equipment to support distributed operations.” ○ Units must “be trained to operate via commander’s intent with limited direction from air operations centers or air component staffs.” ○ Delegate command authorities to the lowest appropriate level. • “ACE requires communications that are mobile, survivable, secure, and sustainable across the electromagnetic spectrum.”
6. Movement & Maneuver
• “ACE provides greater agility and ability to outpace an adversary’s action through movement and maneuver to achieve and fight from positions of advantage.” ○ “Agility is capable of disrupting an adversary’s decision cycle by creating multiple dilemmas with which they must contend.” ○ “Dispersal operations complicate enemy targeting by either redistributing forces to multiple operating locations or redistributing forces within an established air base.” ▪ “Dispersal operations are augmented with other passive defense measures, such as hardening and camouflage.”
7. Information

• “Effective conduct of information warfare is a key element of ACE. All ACE actions, including written or spoken words and displayed or related images, have informational aspects that communicate some message or intent.” ○ Leverage ACE informational aspects “to shape perceptions and behaviors in ways that support the achievement of friendly force objectives.” ○ Conduct “overt messaging about ACE can be used to communicate the ability to rapidly disperse assets, aircraft, and personnel across a wide range of potential forward operating locations and leverage host nation organic capabilities, assets, and partner nation cooperative agreements.” ○ Employ deceptive information to “cause an adversary to errantly diffuse or concentrate forces, rendering them ineffective.” ○ Employ deceptive information to induce “‘analysis paralysis’ about ACE maneuver that challenges an adversary’s ability to make effective, timely decisions.” ○ Leverage “ACE schemes of maneuver” to “bolster assurance and deterrence.” ○ Reveal “joint force capabilities to deny adversary benefits or punish aggression.” ○ “Conceal or obscure aspects that provide perishable advantage.” ○ “Suggest elements that mislead adversaries.” ○ Signal a “combat credible deterrent to adversaries” while assuring partners and allies.
Required Tools & Resources • Expeditionary and Multi-Capable Airmen: “These teams are tailored portions of force packages able to provide mission generation (MG), command and control, and base operating support (BOS) as the mission dictates.” • Command and Control: “Commanders in any conflict require the ability to conduct C2 across domains.” • Mission command: Enable “subordinates at the lowest capable level to make decisions and take decisive action at their level.” • Access, Basing, and Overflight: “Theater operational planners should focus ACE efforts in day-to-day operations and activities on strengthening alliances through trust, and increasing partner capacity and capabilities.” • Tailorable force packages: “ACE requires tailorable force packages with the ability to execute across a range of operating locations.”

APPENDIX C. INTERVIEW QUESTIONS

Tables 17-20 outline the interview questions that serve as the bases for collecting qualitative data from SMEs from each respective mission set.

Table 17. United States Air Force Information Operations Interview Questions

Audience: IO officers at the tactical, operational, and strategic levels across a minimum of two theaters. (Unit Types: SOWs, AOCs, Air Staff, and Joint Staffs)
1. What is IO? A. How would you define the roles and responsibilities of an IO officer - both doctrinally and in practice? 1. What are the main contrasts between doctrinal requirements and operational practices? Are there any existing roadblocks or disconnects? B. What are IO capabilities and skill sets - what makes an IO officer unique? C. What are the strengths and weaknesses of IO? D. Describe the impact and limitations of IO. 1. Describe the impact on operations if IO did not exist?
2. IO Integration: A. How well is IO understood within the USAF, and why? B. How well is IO integrated within the USAF, and why? At what level (tactical, operational, strategic) does this integration happens the best? C. At what level of war (tactical, operational, strategic) is IO integration the most critical, why? What is the role of an IO officer at that level? D. At what level of war (tactical, operational, strategic) does IO generate the most effects? E. How does USAF IO compare with the models employed by the other services. What does the USAF do well, what can we do better? What do they do well, how can we learn from them?
3. Integrated Deterrence: <i>Integrated deterrence means using every tool at the Department's disposal, in close collaboration with our counterparts across the U.S. Government and with Allies and partners, to ensure that potential foes understand the folly of aggression.</i> ²⁹³

²⁹³ Office of the Secretary of Defense, *2022 National Defense Strategy of the United States of America* (Washington, D.C.: Office of the Secretary of Defense, 2022), <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>.

A. Describe how IO supports integrated deterrence. B. What functional areas should IO be aligned with to support integrated deterrence? C. How should IO be postured to support integrated deterrence? A. How can IO support ACE? B. How can IO support air advising? 1. How can IO support air advising's aims of (1) building relationships, (2) building capability, (3) enabling interoperability, and (4) gaining access?

Table 18. Agile Combat Employment Interview Questions

1. What is ACE? A. How would you define ACE as an operational concept and in practice? 1. What are the main contrasts between doctrinal requirements and operational practices? Are there any existing roadblocks or disconnects? B. What does ACE need to be effective? C. What are the strengths and weaknesses of ACE? D. Describe the impacts and limitations of ACE. 1. Describe the impact on operations if ACE did not exist. E. How does ACE support integrated deterrence?
2. ACE & Air Advising A. What is the relationship between ACE and air advising? 1. How should air advising support ACE? B. What mechanisms does ACE utilize to gain and maintain access, basing, and overflight in partner nations?
3. ACE & Information Warfare A. How does ACE affect the information environment? B. How can ACE leverage information warfare (IW) and/or operations in the information environment (OIE)? C. What is the relationship between ACE and IW - is this operationally viable? Are forces postured to support this? 1. How should IW be postured to support ACE? D. What should the role of IW be in supporting ACE?

Table 19. United States Air Force Air Advising Interview Questions

Audience: USAF Air Advisors at the tactical, operational, and strategic levels across a minimum of two theaters.
1. What is Air Advising? A. How would you define the roles and responsibilities of an air advisor- both doctrinally and in practice?

1. What are the main contrasts between doctrinal requirements and operational practices? Are there any existing roadblocks or disconnects? B. What are air advisor capabilities and skill sets - what makes an air advisor unique? C. What are the strengths and weaknesses of air advising? D. Describe the impact and limitations of air advising. 1. Describe the impact on operations if air advising did not exist?
2. Air Advising Integration: A. How well is air advising understood within the USAF, and why? B. How well is air advising integrated within the USAF, and why? At what level (tactical, operational, strategic) does this integration happen the best? C. At what level of war (tactical, operational, strategic) is the integration of air advising to be most critical, why? What is the role of an air advisor at that level? D. At what level of war (tactical, operational, strategic) do air advisors generate the most effects? E. How does USAF air advising compare with the models employed by the other services. What does the USAF do well, what can we do better? What do they do well, how can we learn from them?
3. Integrated Deterrence: <i>Integrated deterrence means using every tool at the Department's disposal, in close collaboration with our counterparts across the U.S. Government and with Allies and partners, to ensure that potential foes understand the folly of aggression.</i>²⁹⁴ A. Describe how air advising supports integrated deterrence. B. What functional mission sets do you believe air advising should be aligned with to support integrated deterrence? 1. How does air advising support ACE? C. How should air advisors be postured to support integrated deterrence?

Table 20. Other Military Services Information Forces Interview Questions

Audience: Other service IO career field equivalents.
3. What is Information Operations? A. How would you define the roles and responsibilities of an information operations officer - both doctrinally and in practice? 1. What are the main contrasts between doctrinal requirements and operational practices? Are there any existing roadblocks or disconnects?

²⁹⁴ Office of the Secretary of Defense.

- B. What are information operations capabilities and skill sets - what makes an information operations officer unique?
- C. What are the strengths and weaknesses of information operations?
- D. Describe the impact and limitations of information operations.
 - 1. Describe impact on operations if information operations did not exist?

4. Information Operations Integration:

- A. How well do you believe IO is understood within your service, and why?
- B. How well do you believe IO is integrated within your service, and why? At what level (tactical, operational, strategic) do you believe this integration happens the best?
- C. At what level of war (tactical, operational, strategic) do you believe integration of information operations to be most critical, why? What is the role of an information operations officer at that level?
- D. At what level of war (tactical, operational, strategic) do you believe information operations generates the most effects?
- E. How does your service employ IO at the tactical level?
- F. How do you believe your service's IO compares with the models employed by the other services. What does your service do well, what can it do better? What do the other services do well, what best practices can be adopted from them?

3. Integrated Deterrence: *Integrated deterrence means using every tool at the Department's disposal, in close collaboration with our counterparts across the U.S. Government and with Allies and partners, to ensure that potential foes understand the folly of aggression.*²⁹⁵

- A. Describe how information operations supports integrated deterrence.
- B. What functional mission sets, organizations, or inter-agency partners do you believe information operations should be better aligned with to support integrated deterrence?
- C. How would you posture information operations to best support integrated deterrence?

²⁹⁵ Office of the Secretary of Defense.

APPENDIX D. INTERVIEW DATA COMPREHENSIVE FINDINGS

Tables 21-24 represent the culmination of the analysis of interview responses, highlighting critical findings for each question. The qualitative responses were collected through interviews, key themes and trends from responses were synthesized, and these tables present an overview of the findings for each question. These tables provide a detailed understanding of each mission set's self-perception, challenges, and assessment on the level of integration within each respective service. They offer an in-depth view of the current state of each mission set, outlining strengths, areas for improvement, and opportunities for growth.

Table 21. USAF IO Officers Interview Data Key Findings

How would you define the roles and responsibilities of an IO officer - both doctrinally and in practice?
• Variability in Roles: There is a consensus that the role of an IO officer is highly dependent on the position they fill and the organizational level at which they operate. While doctrine might provide a guide, in practice, IO officers often adapt to the needs of their specific assignments, which can vary significantly. • Lack of Standardization: Multiple responses pointed to a lack of standardization across IO roles, suggesting that there is not a clear, universally understood definition of what an IO officer does in practice, resulting in unrealistic expectations and varying degrees of preparedness. • Complexities of a Rapidly Evolving Environment: The rapid pace of information and its dissemination conduits is outpacing doctrinal development, leading IO officers to work in environments that doctrine has yet to address or comprehend fully. • Strategic Mindset: A recurrent theme is that IO officers are called to think with strategic foresight, considering the second and third-order effects of actions and the subsequent impact in the information environment. • Expectation Management & the Overpromise of Capabilities: Since IO officers are trained in the principles of OPSEC, MISO, and MILDEC, there is inherently a perception that they will be able to execute those functions across the levels in any unit. The reality is that based on authorities, permissions, and legalities, specifically capabilities such as MISO and joint MILDEC, cannot be readily employed in any context.

• Lack of Social Science Rigor: A reoccurring theme is that while IO officers benefit from a background in social science, there exists a significant gap in applying and utilizing psychological theories in the operational setting. Some respondents advocate that the career field would benefit from a greater application of academic/psychological principles. Likening influence and assessments to social experiments, leveraging the methodology from social science fields to drive operational effects. • Clear Understanding of Legalities & Authorities: Each information capability has its own respective authorities and permissions; IO officers must understand how to operate within these confines and must advise the commander to enable informed decision-making. • Cross-functionality: IO officers must coordinate across domains and with external agencies. Multiple respondents noted the potential value of continuing education that provides education on joint and interagency capabilities.
What are the main contrasts between doctrinal requirements and operational practices? Are there any existing roadblocks or disconnects?
• Force Wide Integration Challenges: Integrating IO officers effectively into the force structure remains a major hurdle. Based on manning limitations and lack of representation across the levels of war, IO potential contributions are not being fully exploited. In units where they are integrated, a pervasive lack of understanding limits IO's potential. • Risk Tolerance: Respondents noted the need for a greater risk tolerance across the force to allow for employment and refinement of IO within an operational context. • "Sprinkle some IO on it:" The IO community still faces the challenge of being integrated too late in the planning process and are often an afterthought. Compounding this challenge is that IO planning cells/teams are often isolated in silos, preventing opportunities for early integration. • Criticality of Early Integration: The necessity for integrating IO into campaign planning from the outset is stressed to ensure tactical actions are aligned with the overarching strategy. • Lexicon: There is a call for a standardized lexicon across the services to present information and IO in a unified manner. Currently, there is a mismatch across terminology, with the same words having different meanings. Overall, this continues to confuse understanding of information across the services and limits its effectiveness. • Commander Endorsement: The success of IO operations is significantly influenced by the understanding and support of commanders. The effectiveness of IO officers hinges on the education and receptiveness of the leadership, highlighting the need for greater comprehension and understanding at the senior levels.
What are IO capabilities and skill sets - what makes an IO officer unique?
• Operational Understanding: Multiple respondents highlighted the criticality of understanding how the USAF operates - its weapon systems, functions,

approval processes, and how to integrate within the overarching system. A strong grasp of military operations adds value to an IO officer's insights and recommendations.

- **Social Science Backgrounds:** Many officers highlight a strong psychological and social sciences background, which is leveraged to understand human behavior and motivations, is a critical skill that offers IO officers a unique perspective.
- **Critical and Strategic Thinking:** IO officers are consistently described as critical thinkers who are adept at understanding complex situations, conducting analysis, and anticipating second and third-order effects. They're viewed as having the ability to plan with foresight and strategic intent.
- **Integration and Interoperability:** A recurring point is the IO officer's role in integration, particularly their understanding of various information capabilities and how to synergize them within larger operational contexts. Their training allows them to bridge gaps between different branches and services, highlighting the importance of understanding joint operations.
- **Adaptability and Innovation:** Several officers point out that the lack of organic capabilities within their field requires them to be innovative and adaptable. This unique challenge compels them to constantly seek new solutions and think outside traditional paradigms.
- **Focus on the Information Environment:** IO officers operate with a distinct focus on the information environment, aiming to manage perceptions and narratives within this space.
- **Young Career Field:** The IO career field has a disproportionate number of junior CGOs. Subsequently, they are often exposed early on in their careers to joint planning processes and are seen to bring fresh and innovative perspectives.

What are the strengths and weaknesses of IO?

- **Personality Dependent:** The ability of an IO officer to successfully integrate within an organization is often heavily dependent on their individual drive and personality. Those who are more assertive and vocal may have more success in "gaining a seat at the table," while those who are more reserved may find it challenging to make their inputs known. This can be both a strength and a weakness for the career field.
- **Innovative and Non-Kinetic Approaches:** Strengths identified include the ability of IO to plan and execute non-kinetic, effects-based operations, often in non-permissive environments, and the potential for cost savings and reduced risk compared to kinetic options.
- **Cognitive and Behavioral Focus:** IO is uniquely positioned to guide thinking and achieve behavioral effects, a strength that requires a deep understanding of human psychology and the information environment.
- **Adaptability:** Adaptability and the ability to thrive in conditions that allow for creativity are considered strengths, highlighting the agile nature of IO.

- **IO's Approach:** IO is recognized for its role in being able to prevent conflict and reduce losses through influencing the behaviors and decision-making of adversaries, which is viewed as a significant strength.
- **Resource Constraints:** Several officers highlight a lack of resources, including staffing, equipment, and dedicated support, which impedes the effectiveness of IO.
- **Operational Exposure & Comprehension:** Respondents noted that a lack of operational understanding or comprehension of USAF weapon systems and technical details can result in a lack of credibility amongst the IO community.
- **Authority and Command Challenges:** A significant challenge mentioned involves the struggle with command structures, authorities, and the proper employment of capabilities, which leads to misconceptions and potentially underutilized IO contributions.
- **Identity and Visibility Issues:** IO suffers from a lack of a clear identity within the larger military structure, leading to challenges in being appropriately recognized and integrated into the planning and execution phases.

Describe the impact on operations if IO did not exist.

- **Non-Critical Impact in the Short-Term:** Many respondents believe that while IO contributes to the operational environment, its absence wouldn't drastically affect immediate military capabilities or the execution of basic operational tasks such as flying missions. However, the nuanced effects and strategic advantages provided by IO are acknowledged.
- **Capability Persistence and Evolution:** There's a sense that the functions of IO would persist even if the formal structure did not, as units would still seek to fulfill those capabilities, although potentially less effectively.
- **Training and Operational Viability:** The responses indicate that while many believe they can perform IO tasks, without proper training and understanding, the effectiveness and accuracy of such efforts would be significantly diminished.
- **Transition from Tactical to Strategic Thinking:** IO is recognized for fostering a paradigm shift from a tactical to a strategic mindset, equating its presence to playing chess instead of checkers, and underlining its importance in keeping pace with adversaries.
- **Importance of Deliberate Information Engagement:** There's a consensus that prior to the formal establishment of IO, information-related operations were conducted but not with the deliberate and integrated approach that current IO practices promote.
- **Increased Vulnerabilities:** A few responses indicate that without IO, there would be an increased risk of OPSEC lapses, suggesting IO's critical role in safeguarding sensitive information.

- **Cultural and Cognitive Gaps:** Without IO, several respondents note there would be significant gaps in cultural understanding and cognitive effects, which are essential in long-term strategic relations and operations.
- **Risk of Escalation:** Without the expertise provided by IO, operations might be prone to knee-jerk reactions, resulting in unintentional conflict escalation.
- **IO the Linchpin Across Domains:** IO is perceived as a linchpin that connects various domains and capabilities, such as cyber, EMSO, space, PA, and intelligence, suggesting its critical role in a cohesive warfare strategy.
- **Future of Warfare and Information as a Domain:** Respondents allude to the evolution of warfare and the increasing importance of information as a domain in itself, drawing parallels to the critical role of airpower in past conflicts and the current necessity to understand and leverage information power.

How well is IO understood within the USAF, and why?

- **Progressing Understanding:** There is a general consensus that understanding of IO is improving across the USAF, with more senior leaders becoming aware of its implications, especially in terms of security operations like OPSEC.
- **Educational Gaps:** Respondents highlight that while terms related to IO are more frequently used, they are often used incorrectly, suggesting a need for better education and training within the force.
- **Lack of Standardization and Integration:** A common theme is the lack of standardization in IO understanding and practices, which leads to siloed knowledge and inconsistent integration of IO into operations.
- **Organizational Perception and Identity Crisis:** There's an indication that IO is perceived differently across various levels of the USAF, from tactical to strategic, with some equating IO to specific functions like PSYOP or MISO. Additionally, there is a sense of an identity crisis within the IO community, making it challenging to communicate its role and value.
- **Varied Understanding:** Understanding of IO is varied, with some areas, such as OPSEC, being better understood than others like MILDEC.
- **Leadership and Advocacy:** A few respondents recognize that certain leaders within the USAF understand IO well and advocate for it, yet there seems to be a gap in the "frozen middle's" understanding of IO's strategic potential and practical application.
- **Visibility and Branding:** There is a call for better internal branding of IO to increase its visibility and understanding within the force.
- **Renaming Career Field:** Suggestions for renaming and rebranding IO positions to something more intuitive, like influence officers, indicate a need for clearer roles that are more easily communicated and understood.

How well is IO integrated within the USAF, and why? At what level (tactical, operational, strategic) does this integration happen the best?

- **Operational Level Success:** IO integration seems most effective at the operational level, often supporting strategic objectives. There is a sense that

IO's value is recognized here, with personnel effectively bridging the gap between tactical inputs and strategic decision-making. • Challenges at the Tactical Level: Integration at the tactical level appears to be inconsistent and less understood. Several respondents noted that this may be in part due to a lack of integration at this level and a lack of understanding of information capabilities. • Strategic Level Awareness: At the strategic level, there is an acknowledgment of IO's importance, especially in the context of campaigns and broader narratives. However, the application varies by command, with some combatant commands integrating IO more effectively into their planning and operations than others. • Hurdles: Responses suggest that there are organizational and structural issues, including a lack of clear paths forward for IO roles, difficulty in showcasing the unique capabilities of IO officers, and challenges in inter-agency cooperation and information sharing
At what level of war (tactical, operational, strategic) is IO integration the most critical, why? What is the role of an IO officer at that level? • Multilevel Criticality: There's a consensus that IO integration is critical at all levels of warfare for different reasons. The strategic level is often cited as the most critical due to its broad scope and influence on the operational and tactical levels. However, the importance of IO at the operational and tactical levels is also recognized. • Strategic Emphasis: Several respondents emphasize the strategic level as the most critical for IO integration. The reason is that strategic planning enables the use of capabilities in a manner that produces desired effects with strategic implications. • Tactical Significance: While the strategic level may be valued for planning, the tactical level is recognized for its direct action in the field, especially by SOF. The hands-on implementation of IO at this level is considered crucial by some respondents. • IO Officer's Role: The role of an IO officer varies by level but generally involves leading planning and integration efforts, translating strategic directives to operational and tactical tasks, and ensuring that IO efforts are understood and implemented across the force. • Education and Knowledge: The need for widespread knowledge and basic education in IO across all levels of warfare is highlighted, indicating that for IO to be successful, there must be a foundational understanding of its principles at every level. • Layered Integration: Effective IO requires a layered approach where strategic, operational, and tactical levels are interconnected. The absence of integration at any level can lead to failure. • Contingency and Adaptability: There is a need for IO integration to be adaptable and responsive to the dynamic nature of warfare, with some

respondents pointing out that the role of IO can differ based on where one is on the conflict continuum.
At what level of war (tactical, operational, strategic) does IO generate the most effects?
• Interdependence of Levels: There's a recurring notion of an "IO supply chain," where each level is interdependent. The concept is that if one level is compromised, it affects the entire operation. The need for feedback mechanisms and information sharing across levels is emphasized to ensure effectiveness. • Assembly Line Analogy: The analogy of an assembly line is used to describe the interconnected nature of the levels of war in IO, illustrating the necessity for a solid foundation at each level to prevent the collapse of the entire operation. • Feedback Loop: The importance of strategic-level actors listening to ground-level input is underscored, highlighting the value of bottom-up communication in shaping effective IO. • Operational Centrality: A dominant theme is the centrality of the operational level, where IO is often generated and planned. This level is seen as a bridge translating high headquarters (HHQ) guidance into executable plans and tasks, with a focus on effects-based planning that can have both tactical and strategic implications. • Tactical Execution: The tactical level is viewed as the frontline where IO effects are directly implemented and observed. The responses suggest that tactical proficiency is essential for achieving desired outcomes and that face-to-face interactions at this level can be critical for relationship building. • Role of IO Officers: At the tactical level, IO officers are involved in the direct application and assessment of effects. At the operational level, they focus on planning and executing larger moves and decisions that drive behaviors. Strategically, IO officers are concerned with long-range plans and crafting strategies through a cognitive lens.
How does USAF IO compare with the models employed by the other services? What does the USAF do well, what can we do better? What do they do well, and how can we learn from them?
• Cultural and Operational Differences: Each service has a different operational culture, with the Marines and Army noted for proficiency in joint training and integration. The USAF is seen as risk averse. • Tactical vs. Strategic Mindsets: The responses suggest that other services may be more tactically minded, focusing on short-range targets, whereas the USAF tends to have a more operational and strategic mindset, with a potential lack of tactical requirements.
Describe how IO supports integrated deterrence.

• Managing Perceptions: The art of deterrence through IO is primarily about managing perceptions, which involves understanding motivations and crafting plans that can either provoke or deter, depending on the strategic objective. • Effects-Based Planning: Integrated deterrence through IO relies on effects-based planning, which necessitates a deep understanding of the psychological impacts of both kinetic and non-kinetic actions, tailored to specific audiences. • Integration: Effective IO for deterrence requires integration not just within the military but across all instruments of national power (DIME: Diplomatic, Information, Military, Economic), including cooperation with other agencies and departments. • Relationship Building: IO plays a role in fostering long-term relationships with host nations and supporting diplomatic efforts, which can involve everything from community investment to highlighting the advantages of partnerships with the U.S. over adversaries. • Shaping Partner Preference: IO supports deterrence by building relationships that position the U.S. as a preferred partner, highlighting the flaws of adversaries and thus strengthening alliances. • Operational Challenges: There is an acknowledgment that while the concept of integrated deterrence is recognized, its operationalization within the framework of IO is not fully developed. • Measurement of Deterrence: A recurring challenge in IO is measuring the effectiveness of deterrence—assessing whether actions or inactions are a result of IO efforts. • Behavioral Understanding and Change: A crucial aspect of IO in deterrence is understanding current behaviors and the necessity to compel changes where required, setting intermediate objectives to guide the desired shifts.
What functional areas should IO be aligned with to support integrated deterrence?
• Broad Functional Integration: There is a consensus that IO should have a broad understanding of and integration with various functional areas within the military. This includes areas such as acquisition, logistics, airfield operations, and maintenance, where IO can play a role in signature management and OPSEC. • Historical and Records Management: There is a notion that IO could benefit from an understanding of historical operations and records management, which could aid in planning and capturing best practices.
How should IO be postured to support integrated deterrence?
• Strategic Insights & Influence: There's an emphasis on the need for IO practitioners to be guided by senior leadership vision rather than just published guidance, suggesting that IO must be aligned with the strategic intent and objectives of senior leaders.

• Intelligence Collaboration: IO should be tightly integrated with intelligence functions, maintaining a forward-looking approach to identify and understand future threats. This suggests that deterrence is predicated on a deep understanding of adversary actions and intentions. • Interagency Coordination: There's a call for non-DOD liaison, particularly with the Department of State and other three letter agencies, to ensure that IO supports broader messaging and national-level objectives, including economic and financial elements. • Cognitive Objectives Alignment: IO should focus on identifying and achieving cognitive objectives that align with strategic goals, understanding both blue (friendly) and red (adversary) decision-making processes and requirements. • Task-Level Specificity: While strategic alignment is critical, there is also a need for specificity at the task level, with IO identifying and countering adversary decision-making processes to prevent them from taking undesirable actions.
How can IO support ACE?
• Allies and Partners Engagement: There is a strong emphasis on the importance of using IO to foster relationships with allies and partners, as these relationships are deemed crucial for the success of ACE. Building trust and cooperation with allies in peacetime is considered essential for mitigating and deterring conflict. • Signature Management and Deception: IO should focus on signature management and Military Deception to enhance the ambiguity of operations, which can deter adversaries by obscuring actual capabilities and intentions. Deception is seen as a critical component of ACE's success. • Communication and Messaging: Effective communication strategies are crucial for ACE, both to manage perceptions among local populations and to maintain ambiguity for adversaries. • Preparation and Setting Conditions: There's an acknowledgment that the most valuable contribution of IO to ACE occurs before the need for deployment arises. By setting up partnerships and understanding host nation dynamics, IO can ensure smoother execution when ACE is necessary. • Interagency Collaboration: Working alongside non-DOD entities, such as the Department of State and host nation governments, is crucial for IO to support ACE. This collaboration can help build resilience and shape favorable perceptions.
How can IO support air advising?
• Strategic Communication: IO can play a vital role in creating strategic communication initiatives, such as running local papers or leveraging the psychological impact of airpower to advocate for cooperation and demonstrate commitment.

• Metrics and Behavior Change: IO can assist in shaping how partner nations conduct operations by tying actions to measurable behaviors and environments, incentivizing desired changes through well-defined metrics and implied tasks. • Preparation of the Environment: IO is crucial in preparing the environment, especially for sensitive operations like personnel recovery, by making populations receptive to activities that may have spillover effects into civilian areas. • Influence Operations: Small, logistical preparations and influence activities, such as using bands or cultural elements as tools of influence, are identified as effective IO methods to increase partnerships and support air advising goals. • Transparency and Communication: Providing air advisors with clear communication support, including what can be shared transparently with partners and what should be kept secure, is crucial for successful IO support in air advising. • Exchange Programs and Learning: Engaging with partner nations that have strong IO capabilities, can be mutually beneficial. SMEE with IO professionals from these nations can enhance IO's ability to influence friendly populations to achieve desired end-states.

Table 22. ACE Interview Data Key Findings

How would you define ACE as an operational concept and in practice? What are the main contrasts between doctrinal requirements and operational practices? Are there any existing roadblocks or disconnects? • Definition and Operational Concept of ACE: ACE is characterized by its decentralized command and execution, aimed at enabling more agile and responsive Air Force operations. It contrasts with traditional large-scale, steady-state operations. • Contrasts Between Doctrinal Requirements and Operational Practices: There's a significant gap between the ACE doctrine and its operational implementation. The Air Force's focus on large-scale operations has led to a decline in expeditionary capabilities. There's a lack of alignment between new concepts like AFORGEN and ACE, and the units are still using outdated equipment and methods. • Roadblocks and Disconnects: Major issues include inadequate training and equipment that do not align with ACE doctrines, outdated procurement processes, and insufficient funding. Furthermore, there's a cultural barrier in the Air Force, characterized by risk-averse behavior and excessive supervision, which hinders the adoption of ACE principles. What does ACE need to be effective? • Requirements for Effective ACE Implementation: ACE requires substantial funding, efficient use of existing equipment, and a significant cultural shift in the Air Force towards accepting reasonable risks and empowering lower-level decision-making.
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What are the strengths and weaknesses of ACE?
• Strengths and Weaknesses of ACE: ACE's strength lies in its decentralized approach, which contrasts with the highly centralized approaches of competitors. However, limitations include infrastructure challenges in supporting operations, particularly in the Pacific region.
Describe the impacts and limitations of ACE. Describe the impact on operations if ACE did not exist.
• Impacts and Limitations: Without ACE, the Air Force would likely continue with outdated large-scale deployment strategies. ACE encourages a more adaptable and efficient deployment approach, necessary for breaking free from traditional mindsets.
How does ACE support integrated deterrence?
• ACE's Role in Integrated Deterrence: ACE enhances the Air Force's ability to respond quickly to threats, improving communication across agencies and focusing on collaborative operations with allies and partners.
What is the relationship between ACE and air advising?
• Relationship between ACE and Air Advising: ACE uses an interoperability approach rather than traditional air advising. It focuses on joint training and cooperation with allies and partners, emphasizing mutual learning and support to maintain a united front.

Table 23. Air Advisor Interview Data Key Findings

How would you define the roles and responsibilities of an air advisor - both doctrinally and in practice?
• Building Partner Capacity: This is a central theme across the responses, emphasizing the importance of air advisors in enhancing the capabilities of partner nations. This involves training, equipping, and advising partner forces, with a focus on improving their operational capabilities in various scenarios, from peacetime to conflict situations. • Integration with Allies and Partners: A recurring point is the integration of allies and partners into U.S. military activities, especially in conflict situations. Air advisors play a crucial role in this, helping to establish and maintain interoperability and cooperation between U.S. forces and those of partner nations. • Focus on Security Cooperation and Force Assistance: The responses highlight the role of air advisors in security cooperation and security force assistance. This includes a range of activities, from conducting assessments and training to assisting in equipping and planning. • Importance of Relationships and Trust: Building and sustaining relationships with partner nations is emphasized as a critical aspect of the air advisor role.

The concept that “you cannot surge trust” highlights the importance of ongoing, consistent engagement to build effective partnerships. • Gap Identification and Addressing Challenges: There is a focus on identifying and filling gaps in capabilities and understanding, both in terms of the partners’ needs and within the air advising community itself. This includes recognizing areas of disconnect or where improvements are needed, such as in understanding the alignment of ends, ways, and means in security cooperation.
What are the main contrasts between doctrinal requirements and operational practices? Are there any existing roadblocks or disconnects?
• Disconnect Between Plans and Implementation: There is a notable disconnect between the strategic plans devised for building capabilities (e.g., F-16 capability for a specific country) and their on-the-ground implementation. Influences from partner nations, deviating from original plans, and challenges in building effective supply chains are highlighted as key issues. • Challenges in Assessment and Training: The need for clear, phased approaches in assessments and after-action reports (AARs) is emphasized. The reliance on field service and contractors, who may lack the same level of cultural training as military personnel, presents additional challenges. • Force Structure Limitations and Proposals for Change: There is a critique of the current force structure, which is deemed not comprehensive enough to cover the full range of missions. Proposed changes include realigning for effects-based operations, embedding advisors in theater air operation squadrons, and adjusting the advisor footprint. • Issues with Integration and Alignment: Challenges in integrating and aligning different elements of the military structure, such as the Air National Guard, MAJCOMs, SCOs, and conventional air advisors, are highlighted. These challenges affect how air advisors are utilized and positioned within different geographical locations and operational commands. • Long-Term Objectives vs. Immediate Results: There is a tension between achieving long-term objectives and providing immediate, quantifiable results. This tension affects how operations are perceived both internally and by external stakeholders, including taxpayers.
What are air advisor capabilities and skill sets - what makes an air advisor unique?
• Rigorous Vetting and Certification: Air advisors undergo a thorough vetting process, making them distinct from other military personnel engaging with partners. • Cultural and Language Awareness: A crucial part of an air advisor’s skill set is their cultural and language awareness. This training helps them to avoid culture shock and to engage meaningfully with partners, understanding their perspectives and needs. This includes not just the ability to communicate but also an understanding of cultural nuances and practices.

- **Comprehensive Training Program:** Air advisors receive extensive training that encompasses not just academic knowledge but also practical field skills. This training covers cultural studies for specific AORs, legal and case funding parameters, and mission-specific skills like close-quarters battle and urban warfare.
- **Operational Independence and Flexibility:** The training equips air advisors with the skills to operate independently in various environments, both armed and unarmed. This includes land navigation and the ability to adapt to different geopolitical environments.
- **Strategic and Tactical Understanding:** Air advisors are trained to understand the broader geopolitical environment and how their role fits into larger strategies, such as great power competition and strategic competition.
- **Communication Skills & Media Engagement:** They are also trained in public affairs and how to interact with partner nation leadership and the press. This skill is crucial, especially when the embassy cannot maintain a constant presence.
- **Continuing Education:** Air advisors continue to develop their skills through specialized courses like the mission commander and team sergeant courses.

What are the strengths and weaknesses of air advising?

- **Strengths:**
 - **Language and Cultural Expertise:** Several responses emphasize the importance of language skills and cultural understanding in air advising, enabling effective communication and integration with partner nations.
 - **Diverse and Specialized Skill Sets:** Air advisors are noted for their diverse capabilities and subject matter expertise in their respective trades, contributing to their effectiveness in various operational contexts.
 - **Strategic Positioning and Flexibility:** The ability of air advisors to occupy strategic positions on the “chessboard” of international military cooperation and to adapt to different crisis or conflict situations is highlighted as a key strength.
 - **Comprehensive Training and Development:** The deliberate, purpose-driven training and development of air advisors, including language training and cultural immersion, is seen as a significant advantage, enhancing their operational readiness and respect for local customs.
 - **Partner Nation Influence and Access:** Air advisors’ role in facilitating foreign military sales and training post-sale is seen as a strength, as it allows for stabilizing influence and access to regions through security cooperation and force assistance.
- **Weaknesses:**
 - **Long-term Impact and Quantification Challenges:** The long-term nature of air advising’s impact and the difficulty in quantifying this impact are seen as weaknesses. The effect of air advising is often not

immediate and can be challenging to measure, especially in terms of access and influence. ○ Budget Restraints and Resource Allocation: Budget constraints and the allocation of resources, particularly in comparison to other military branches, are noted as challenges affecting the effectiveness of air advising. ○ Dependency on Partner Nations: The success of air advising heavily depends on the partner nation's capabilities, willingness to cooperate, and the political situation on the ground. This dependency can be a significant limitation in achieving desired outcomes. ○ Lack of Unified Strategy and Coordination: A noted weakness is the absence of a unifying scheme or holistic approach that links different aspects of security cooperation, such as foreign military sales and air advising efforts. ○ Expeditionary Advisor Limitations: The limitations faced by expeditionary advisors, who may not have the same level of training and deliberate development as standing advising units, are seen as a weakness, affecting the depth and effectiveness of their engagement.
Describe the impact and limitations of air advising. ● Tasking Process Limitations: One response pointed out the limitations in the tasking process, such as challenges with TRANSCOM and AMC in the global force management process. The lack of a clear tasking process that captures the demand signal for air advisors is seen as a key limitation, affecting their deployment and effectiveness. ● Dependency on Partner Nations: The variable nature of partner nations, ranging from well-established states to those with long histories of conflict or instability, is noted as a critical factor influencing the impact of air advising. This dependency underscores the importance of understanding the unique contexts and needs of each partner. ● Slow Results and Sustainment Challenges: The slow nature of achieving results in air advising is mentioned, highlighting the need for patience and long-term vision. Additionally, maintenance and sustainment of air power are identified as consistent challenges, often overshadowed by the more visible aspects like aircraft acquisition. ● Budget Constraints and Institutional Challenges: Budgetary decisions and the prioritization of resources, especially in the context of shifting focus from counterterrorism to great power competition, are seen as major limitations. The challenge of protecting funding for air advising programs, which often don't yield immediate, tangible results, is a recurring theme.
Describe the impact on operations if air advising did not exist. ● Alternative Means of Engagement: Respondents note that while air advising is crucial, there are other ways to engage in similar activities.

• Deterioration of International Relationships: The role of air advising in building and maintaining relationships with partner nations is highlighted. Without it, there's a risk that these nations might not view the United States as a preferred partner, potentially leading to a power vacuum and increasing influence from other nations. • Impact on Security Cooperation Objectives: Air advising plays a role in aligning political objectives and equipment needs within the framework of security cooperation strategies. Its absence could disrupt these alignments, affecting the strategic objectives and overall effectiveness of security cooperation.
How well is air advising understood within the USAF, and why?
• Limited Exposure and Understanding: A common theme is that air advising is not well understood within the USAF, primarily due to limited exposure. Many in the USAF automatically associate air advising with specific regions like the Middle East and do not fully grasp its broader applications or importance. • Connection to Regional Strategies and Language Training: The importance of language and cultural training is emphasized, with suggestions to integrate air advising more closely with Foreign Area Officer (FAO) programs and regional strategies. This integration could enhance understanding and professionalization within the USAF. • Integration into the USAF Structure: While there have been efforts to professionalize and integrate air advising into the USAF, it is still seen as a specialized area that not all personnel are exposed to. • Perception as a Temporary Requirement: There is a perception among some in the USAF and joint leaders that air advising is a temporary or contextual mission requirement, not recognizing it as a consistent and integral part of the Air Force's historical and ongoing missions. • Need for a Restructured Approach: The responses suggest a need for a restructured approach to conventional air advising within the USAF, which could enhance understanding, provide better access, and improve influence in partner nations.
How well is air advising integrated within the USAF, and why? At what level (tactical, operational, strategic) does this integration happen the best?
• Improving Integration: One viewpoint suggests that the integration of air advising within the USAF is getting better, with efforts to unify approaches across MAJCOMs and gain higher-level attention. This improvement is seen as beneficial in leveraging allies and partners, especially in resource-limited situations. • Tactical Focus and Operational Potential: There's a consensus that air advising is currently integrated primarily at the tactical level, but there's significant potential for it to be more effective at the operational level. The need

for a comprehensive, consistent, and adaptable approach at various levels is emphasized. • Doctrine and Senior Leadership Advocacy: The need for fundamental alignment in doctrine and greater advocacy at the senior leadership level is noted. This includes understanding how to employ air advisors in contexts like great power competition and aligning priorities across the Departments of Defense and State. • Force Presentation Standardization: The call for more standardization and predictable force presentation among advisory units across various GCCs is mentioned. This standardization is seen as a way to create a more effective and well-understood community of practice while ensuring that advisory missions remain aligned with each combatant commander's objectives.
At what level of war (tactical, operational, strategic) is the integration of air advising to be most critical, why? What is the role of an air advisor at that level?
• Strategic Level Emphasis: The response clearly indicates that the integration of air advising is most critical at the strategic level. This is highlighted as the key level where air advisors can exert significant influence and contribute to long-term planning and decision-making. • Role of Air Advisors at the Strategic Level: The role of air advisors at this level is described as primarily advisory and influential. They participate in high-level discussions and working groups, providing insights and recommendations that shape strategic planning and policy directions. This includes involvement in the development of multi-year plans, advising on resource allocation and funding, and influencing the direction of security cooperation efforts with partner nations.
At what level of war (tactical, operational, strategic) do air advisors generate the most effects?
• Strategic and Operational Level Focus: The response emphasizes that air advisors generate the most effects during the strategic planning phase and at the operational level. This is where critical discussions and alignments with country teams take place, underscoring the importance of strategic and operational levels in air advising. • Significance of Operational Level Conversations: The operational level is highlighted as particularly crucial because it is where conversations and collaborations with country teams occur. This level of engagement is essential for aligning objectives and strategies, indicating that operational-level activities are key to generating impactful outcomes. • Integration with Country Teams and SCO Planning: The integration of air advisors with country teams and SCO planning is crucial. Their involvement in these processes ensures that air advising efforts are well-aligned with the overall objectives and strategies of both the USAF and the partner nation.

How does USAF air advising compare with the models employed by the other services. What does the USAF do well, what can we do better? What do they do well, how can we learn from them?

- **Comparison with Army's SFAC and SFAB:** The Army's Security Force Assistance Command (SFAC) and Security Force Assistance Brigade (SFAB) are regionally aligned forces that have undergone significant improvements. Initially, they faced challenges with maturity and vetting, but strong leadership and branding have enhanced their effectiveness. The SFAB model, with its rigorous training and embedding process, is highly structured and receives substantial funding and support.
- **Learning from the SFAB Model:** The SFAB model, with its clearly defined mission, geographic alignment, and strong leadership support, is seen as a template that the USAF could learn from. This model provides a structured approach to training, deployment, and reintegration, ensuring sustained and focused advising efforts.
- **Importance of Leadership and Advocacy:** A recurring theme is the importance of having high-level leadership support and advocacy, such as a two-star general officer level leadership, which the SFAB benefits from. This level of leadership is crucial for strategic planning, resource allocation, and overall effectiveness of the advising enterprise.

Describe how air advising supports integrated deterrence.

- **Role in Security Cooperation and Competition:** Air advising is closely linked to security cooperation and competition, playing a crucial role in ensuring a presence in strategic areas. The notion that "you're not competing if you're not there" underscores the importance of air advising in establishing and maintaining a presence in key regions, which is essential for integrated deterrence.
- **Compensation for Limited U.S. Forces:** Recognizing that there will never be enough U.S. forces to accomplish all objectives, air advising under the security force assistance and security cooperation umbrella becomes a critical tool. By working with partner nations, air advising enables U.S. access and influence in regions where direct U.S. military presence is limited. Enabling partners to offset U.S. requirements.
- **Deepening Relationships for Crisis and Conflict:** Air advising is seen as a means to deepen relationships with partner nations, enhancing their capabilities and capacities. This is pivotal for ensuring that, in times of crisis and conflict, these nations grant access to the U.S., thereby aligning with U.S. strategic interests and contributing to integrated deterrence.
- **Strategic Influence through Partner Capacity Building:** The building of partner capacities is not just a tactical or operational goal but also a strategic one. By enhancing the capabilities of partner nations, air advising indirectly contributes to the overall deterrence posture of the U.S., as these enhanced capabilities of partners can act as a force multiplier in times of crisis.

How does air advising support ACE?
• Interoperability and Kinetic Effects Delivery: Air advising contributes to ACE by enhancing interoperability and the ability to deliver kinetic effects. This involves streamlining operations and transferring skills and knowledge in air combat applications and airfield-centric capabilities. • Role in Security Cooperation: The general relationship between security cooperation and ACE is highlighted, with the effectiveness of ACE in conflict being directly related to security cooperation in competition. Air advising can develop partner nations as multi-capable airmen and leverage preposition bases for interoperability. • Cultural Understanding and Relationship Building: The importance of cultural understanding and relationship building in air advising is emphasized. Advisors who have personal relationships with commanders in partner nations can bridge gaps and facilitate operations, such as runway usage, highlighting the value of persistent engagement and sustainable relationships. • Low-Cost, High-Impact Approach: The responses suggest that a relatively small number of well-informed and connected advisors can create significant impact, offering a low-cost approach to enhancing interoperability and supporting ACE. • Strategic Partnership in Scheme of Maneuver: Air advising can enable the use of partner bases and forces to complement U.S. forces in an ACE scheme of maneuver, thereby augmenting U.S. capabilities.
How should air advisors be postured to support integrated deterrence?
• Leadership, Advocacy, and Budget: The importance of leadership support, advocacy, and adequate budgeting for effective air advising is stressed. This includes ensuring that air advisors have the necessary resources and backing to be forward-deployed. • Importance of Language and Cultural Skills: The critical role of language skills and cultural understanding in building trust and rapport with partner nations is highlighted. Being able to comfortably interact and communicate in the partner's language is seen as crucial for effective advising and trust-building. • Standardization and Location of Advisor Units: A suggestion is made to standardize the air advisor units across the Geographic Combatant Commands (GCCs) and co-locate them with command headquarters or numbered air forces. This standardization is proposed to create a more effective, well-understood community of practice, ensuring that advisory missions are aligned with each combatant commander's objectives. • Focus on Security Cooperation Elements: The threefold aspects of security cooperation - relationships, capabilities, and access - are emphasized. Building relationships and capabilities with partner nations is seen as essential for gaining strategic access and making tactical gains.

Table 24. Other Service Information Forces Interview Data Key Findings

How would you define the roles and responsibilities of an information operations officer - both doctrinally and in practice?
• Doctrine vs. Practice: There is a noticeable difference between the doctrinal definitions of an IO officer's role and the practical, on-the-ground realities. Doctrine often outlines a structured and systematic approach, while in practice, roles are more fluid and influenced by various factors such as command preferences, unit specifics, and the operational environment. • Interdisciplinary Coordination: The role often involves coordinating across various disciplines like civil affairs, psychological operations, and cyber operations. This interdisciplinary approach is crucial for effective information operations but also adds complexity and requires adeptness in managing diverse elements. • Challenges in Integration and Synchronization: A recurring theme is the challenge of effectively integrating and synchronizing different elements of information operations within the broader operational plan. This includes struggles with unit staffing, such as the lack of IO planners at certain levels and the need for specialized training. • Evolution of Doctrine and Culture: There is an acknowledgment that the doctrine and cultural understanding of IO within the United States Army are evolving. This evolution reflects a growing recognition of the importance of information beyond just words and images and as a crucial element in operations planning. • Levels of War & IO: The responses highlight the distinction between tactical, operational, and strategic levels of information operations. Tactical levels involve on-the-ground actions, while operational and strategic levels focus on broader planning and ideation. • Role of Technology and Media: Understanding and utilizing technology and media effectively is a critical part of the IO officer's role, as these are key tools in information dissemination and influence.
What are the main contrasts between doctrinal requirements and operational practices? Are there any existing roadblocks or disconnects?
• Expertise and Specialization: There's a trend where IO officers often specialize in a single information capability, leading to a lack of broader expertise. This specialization can result in officers with narrow focus areas potentially missing out on the broader scope of IO responsibilities. • Leadership and Organizational Challenges: Senior leaders often lack a deep understanding of IO capabilities, limitations, and operational planning. This gap in understanding can lead to frustration and ineffective decision-making. Additionally, there's a reluctance to centralize IO due to fears of losing influence and funding.

- **Training and Exercise Limitations:** Army training exercises struggle to effectively model IO, particularly in relation to the fast-paced Joint Targeting Cycle. There's also a challenge in providing substantive feedback for measures of effectiveness in training exercises.
- **Frequent Changes in Doctrine and Structure:** The doctrine and structure of Army IO have undergone dramatic changes since its inception, making it difficult for IO officers and other stakeholders to keep up.
- **Competing for Funding and Influence:** Army IO competes for funding and influence with other entities like USACAPOC and ARCYBER, creating a challenging environment where high-ranking leaders may resist changes that threaten their missions and power.
- **COIN vs. LSCO Approaches:** Many senior Army IO officers are only experienced in counter-insurgency (COIN), which requires a different approach than Large Scale Combat Operations (LSCO). This results in outdated aspects of doctrine still influencing current practices.

What are information operations capabilities and skill sets - what makes an information operations officer unique?

- **Synchronization and Coordination Skills:** A primary skill of IO officers is their ability to synchronize various information capabilities. They are not necessarily technical experts in every field but must possess enough knowledge to effectively discuss and integrate these information capabilities.
- **Broad Understanding and Strategic Thinking:** IO officers are required to have a broad view and understanding of the entire spectrum of IO. This includes having strategic thinking abilities and the capability to integrate different forces and tactics within the broader operational context.
- **Specialized Knowledge in Influence and Behavior Change:** Specifically in the realm of psychological operations (PSYOP), officers are uniquely trained and authorized to conduct targeted influence for behavior change, a role underscored by its Congressional approval.
- **Adaptability and Flexibility:** As highlighted by the Marine perspective, IO officers often come from a culture of being “jacks of all trades, masters of none,” forced to adapt and expand their focus beyond just tactical operations due to the nature of their smaller service branch.
- **Professionalism:** The role demands a high level of professionalism, as IO officers may find themselves in diverse environments, such as embassies, working alongside different branches of the military and government.
- **Interpersonal and Communication Skills:** Effective communication and interpersonal skills are vital. IO officers often act as intermediaries, translating complex technical information into understandable language for various audiences. They are seen as “nerd whisperers,” bridging the gap between technical experts and maneuver planners.

- **Big Picture Mindset:** IO officers require a ‘big picture’ mindset, often needing to step back and view operations from a strategic level to effectively integrate various elements into a cohesive plan.

What are the strengths and weaknesses of information operations?

- **Strengths of IO:**
 - **Interdisciplinary Coordination:** IO officers are skilled in bringing various information capabilities to the table, showcasing strong coordination and leadership abilities.
 - **Creative and Talented Personnel:** Individuals in IO are often creative and dedicated, investing significant effort into making operations work.
 - **Strategic Integration:** IO officers possess a broad understanding, allowing them to effectively integrate different aspects of operations across the spectrum.
 - **Collaboration Across Services:** IO units across different military branches (Army, Navy, Air Force) work well together, understanding the need and purpose of their operations.
- **Weaknesses of IO:**
 - **Broad Scope Leading to Lack of Focus:** IO’s broad scope often leads to a lack of specific focus, making it challenging to hone particular skills.
 - **Misunderstanding and Underutilization:** There is a general lack of understanding about what IO entails, leading to its underutilization or misapplication.
 - **Training and Experience Gaps:** Training can be inconsistent, and gaining a wide range of experience in various IO aspects can be difficult.
 - **Lack of Adequate Resources:** Despite the recognition of its importance, IO often doesn’t receive the necessary resources or support, reflected in budget allocations and organizational priorities.
 - **Inconsistency in Doctrine and Practices:** Different approaches and interpretations of joint doctrine among services lead to inconsistencies and inefficiencies.
 - **Challenges in Predicting Effects:** Estimating the effectiveness of IO campaigns is challenging due to the unpredictable nature of the cognitive domain.
 - **Dependency on External Assets:** IO often requires extensive support from joint or interagency assets, which can be resource-intensive and legally complex.

Describe the impact and limitations of information operations.

- **Limited Visibility and Recognition:** One of the primary limitations of IO is the lack of visibility of information capabilities. Essential components and capabilities of IO often go unnoticed or are not adequately recognized within the broader operational context.
- **Need for Integration in Operations:** There is a clear need for someone with operational authority, ideally from the operations division, to actively

incorporate IO capabilities into overall military operations. This integration is crucial to ensure that the full potential of IO is realized and effectively utilized. • Risk of Overlooking Key Capabilities: The response highlights the risk of overlooking significant aspects of IO, particularly when these capabilities are not adequately represented or advocated for in higher command structures. This oversight can lead to underutilization of valuable resources and missed opportunities in leveraging IO's full impact.
Describe impact on operations if information operations did not exist? • Overestimation of Impact: There's a perspective that the absence of IO might not result in significant fallout, as some believe that its current impact is overestimated. This view points to the underfilling of IO positions and the delegation of its responsibilities to other operational elements. • Loss of Coordination and Synchronization: Without IO, the coordination and synchronization of various information capabilities would be significantly diminished. This would likely lead to less effective operational plans, as information capabilities might operate in silos without adequate oversight or integration. • Afterthought in Planning and Education: IO is already seen as an afterthought in many military operations and education programs. Its absence would further exacerbate this issue, leaving a gap in advocacy and integration of information strategies at various levels. • Ceding Ground to Adversaries: One viewpoint suggests that without IO, military forces would concede the information realm to adversaries. Adversaries would continue to employ information strategies, potentially gaining an advantage. • Impact on Military Effectiveness and Strategy: The absence of IO could lead to a less capable force, particularly in mitigating risks and controlling narratives in politically sensitive situations. It would also affect the ability to provide strategic options and influence outcomes.
How well do you believe IO is understood within your service, and why? • Varying Levels of Understanding Across Army Ranks and Units: There is a notable variation in how well IO is understood across different levels of the military structure. At strategic and operational levels, IO is generally well comprehended. However, at the division level and below, particularly at brigade and battalion levels, there is a lesser degree of understanding, often attributed to the high operational demands at these levels. • Army Functional Area vs. Branch Distinction: The perception of IO as a functional area rather than its own branch impacts its understanding and integration. This distinction places IO in a technical skill category, potentially limiting its visibility and application at the tactical level. • Importance Recognized but Integration Lacking: There is a recognition of the importance of information in operations but a lack of understanding of how to effectively integrate IO capabilities into broader plans.

• Frequent Doctrine Changes and Over-Classification: Constant changes in doctrine and issues with over-classification contribute to a lack of clear understanding of IO. This is exacerbated by the initial training for IO being insufficiently in-depth for the complexity of the field. • Misconceptions and Conflation with Other Areas: Across the Army and other services, IO is often incorrectly conflated with other information capabilities, leading to further misunderstandings about its distinct role and capabilities.
How well do you believe IO is integrated within your service, and why? At what level (tactical, operational, strategic) do you believe this integration happens the best?
• Better Integration at Operational Level: There is a consensus that IO integration is better at the operational level compared to the tactical level. At the operational level, there is more planning time and a proactive approach to incorporating IO as a viable option in operations. • Need for Commanders' Understanding and Involvement: The importance of commanders understanding and executing activities with informational effects in mind is emphasized. The idea is for IO and PSYOP planning to be integrated into the commander's decision-making process, similar to how other advisors like Public Affairs (PA) and Judge Advocate (JAG) officers operate. • Inconsistencies Across Levels and Services: At all levels, there are inconsistencies in how well IO is integrated. While there are instances of effective integration at the tactical level, overall, the integration of IO/OIE is not consistently done well. • Strategic Level Challenges and Relationship Building: At the strategic level, challenges include aligning objectives across different departments, such as the Department of State and military commands. The lack of a unified Department of Information or Information Agency and the rotational nature of assignments can hinder relationship building and consistent messaging. • Agency and Funding Limitations: The absence of a one-star general or equivalent in IO leads to reduced agency and funding, impacting the effectiveness of IO integration across different levels.
At what level of war (tactical, operational, strategic) do you believe integration of information operations to be most critical, why? What is the role of an information operations officer at that level?
• Importance of Operational Level Integration: There is a general consensus that the operational level is a critical area for the integration of IO. This level is considered an ideal fit for conducting IO due to the balance it offers between tactical immediacy and strategic oversight. At the operational level, IO can be more effectively coordinated and executed. • Need for Higher-Level Influence and Coordination: There is an expressed need for more senior IO leadership at the strategic level to expand IO's

influence. The highest-ranking IO officers are often at the O6 level, limiting their say in strategic decisions. Better coordination and clear guidance at the strategic level are seen as essential for more effective IO integration.

- **Challenges at the Tactical Level:** At the tactical level, specifically within divisions and corps, the integration of IO is crucial for ensuring synchronization with higher-level strategies. However, challenges exist in enhancing the understanding and effectiveness of IO at this level.
- **Role of IO Officers at Different Levels:** At the operational level, IO officers are involved in conducting and coordinating IO activities. At the strategic level, their role would ideally involve providing clear guidance and ensuring better inter-service coordination. At the tactical level, IO officers are focused on integrating IO into various programs and maintaining the impact of operations in mind.
- **Strategic Level as Key for Overall Integration:** Some responses emphasize that integration at the strategic level is key, as it sets the tone and direction for IO across all levels. Effective strategic-level integration ensures that desired effects and goals are clearly communicated and followed through at operational and tactical levels.
- **Variability in Integration Quality:** The quality of IO integration can vary widely, often dependent on the personalities and preferences of commanding officers and staff. This variability impacts the consistency and effectiveness of IO across different units and levels.

At what level of war (tactical, operational, strategic) do you believe information operations generates the most effects?

- **Varied Impact Across Levels of War:** There is an understanding that the impact of IO varies across different levels of warfare. While IO can generate significant effects at the tactical level during conflict, its impact is perceived to be higher at operational and strategic levels during competition.
- **Compression of Levels of War in the Information Age:** The 21st-century information environment has led to a compression of the levels of war, where tactical-level activities can have strategic effects. This compression is due to the immediate and widespread dissemination of information, which can elevate tactical incidents to strategic significance.
- **Focus on Tactical Excellence:** There is an emphasis on the importance of executing tactical operations well, understanding that even individual actions at this level can have far-reaching strategic impacts due to the information environment.
- **Importance of Planning at Operational and Strategic Levels:** At the operational and strategic levels, the role of IO is more about influencing planning processes and long-term strategies rather than direct action. The focus here is on avoiding significant losses rather than achieving big wins, with an emphasis on consistent, incremental progress.

How does your service employ IO at the tactical level?
• Supporting Commanders' Missions: At the tactical level, especially in the Marines at the battalion level, IO is focused on supporting commanders' missions. This includes employing electronic warfare (EW) and cyber effects to aid maneuver operations. • Integration with Other Capabilities: IO at the tactical level often involves integration with psychological operations (PSYOP), public affairs operations (PAO), and civil affairs (CA). This integration is crucial for ensuring that IO aligns with the broader strategic narratives and objectives set by higher headquarters. • Liaison Roles and Information Flow: IO at the tactical level can involve serving as a reverse liaison, where personnel keep higher headquarters informed about dynamic targeting and effects. This ensures a flow of information that aids in strategic alignment. • Manpower and Resourcing Issues: There are challenges in resourcing and manpower for IO at the tactical level, including pulling personnel from higher levels to divisions. This suggests a need for a more balanced distribution of IO resources across levels. • Recruitment and Training Challenges: Recruitment for IO roles is often based on word of mouth, and there are concerns about the quality and effectiveness of the training programs. The history of IO as a functional area in the Army, with some personnel being forced into the field, contributes to a mixed quality of expertise among IO officers. • Mixed Quality of Leadership: The quality of leadership within IO varies, with a mix of highly competent and less effective officers. This variance impacts the effectiveness of IO at the tactical level.
How do you believe your service's IO compares with the models employed by the other services. What does your service do well, what can it do better? What do the other services do well, what best practices can be adopted from them?
• Different Approaches Across Services: Each service has a unique approach to IO. The Army, for instance, is noted for its delineation between IO and PSYOP, and for transparency in its targeting process. The Marines focus on doctrine development and maintaining a specific mission scope, while the Air Force is recognized for its cerebral approach and willingness to engage with inter-agency partners and foreign counterparts aggressively. • Need for More Regional Specialization: The idea of regionalization in IO, where officers specialize in specific areas or countries, is suggested as beneficial. This could lead to more effective, culturally aware operations. • Limitations in Time and Experience: The short duration of deployments and the lack of continuity in regional assignments are seen as limitations. Longer-term assignments could lead to a more effective understanding and implementation of IO.

Describe how information operations support integrated deterrence. • Leading Role in Integrated Deterrence: IO is seen not just as a supporting element but as a leading component in integrated deterrence. It plays a crucial role in military exercises and partnerships, which are key to demonstrating military capabilities and intentions. • Need for an Overarching Information Agency: There is a suggestion for a national-level information agency that could bridge the gap between the Department of State (DoS) and the Department of Defense (DOD). Such an agency would better organize and lead information activities, providing a more cohesive approach to integrated deterrence. • Challenges in Collaboration and Planning: There is an acknowledgment of the lack of collaboration and effective planning within services. IO is often an afterthought in larger planning processes, which diminishes its potential impact in integrated deterrence strategies. • Role of IO officers in Decision-Making: The positioning of IO officers within the command structure is crucial. They should be placed at levels equivalent to key decision-making roles, such as the S3 XO, to ensure their input is integrated into planning and execution. • Leveraging IO Capabilities: IO offers versatile and maneuverable tools for commanders, which are cost-effective compared to traditional military assets. However, there is a need for better leveraging and capitalizing on these capabilities in operational planning and exercises. • Joint Coordination and Interagency Processes: Effective integrated deterrence requires joint coordination and interagency processes. Training exercises that simulate these processes are essential for preparing forces for real-world deterrence scenarios.
What functional mission sets, organizations, or inter-agency partners do you believe information operations should be better aligned with to support integrated deterrence? • Broader Collaboration with the Intelligence Community: There is a consensus on the need for IO to be more closely aligned with the intelligence community. • Inter-Agency Collaboration and Integration: Effective integrated deterrence requires better collaboration with various agencies such as the State Department, Commerce Department, and others. Understanding each agency's contribution to integrated deterrence and fostering cooperation is vital for a cohesive strategy. • Diverse Mission Set Integration: IO should be integrated with specific mission sets such as security cooperation, highlighting the role of agencies like the Global Engagement Center in aligning DOD and DoS objectives. Including more personnel in embassies and other strategic locations worldwide is suggested.
How would you posture information operations to best support integrated deterrence?

- **Strategic Level Integration:** There's a consensus on the need for greater integration of IO at the strategic level. This includes figuring out how IO fits into Multi-Domain Task Forces (MDTF) and Information Advantage Task Forces (IATF), ensuring that IO is effectively incorporated into higher-level planning and execution.
- **Reserve Forces Alignment and Tactical Integration:** Suggestions include aligning reserve forces more closely with their conventional counterparts and embedding IO elements, such as captains and NCOs, into brigade-level units. This approach would facilitate better integration of IO into tactical units and operations.
- **Centralized Direction and Training within the USMC:** Centralizing IO direction and training is seen as beneficial. For instance, consolidating all IO forces under a Marine Intelligence Group (MIG) and having a General Officer (GO) plan and manage effects could streamline operations. Uniform training and knowledge management systems across services would also aid in effective transition and continuity.
- **Long-term Stationing and Regional Alignment:** Positioning IO forces under GCC and stationing them in theater for longer periods is suggested. This would allow for more in-depth regional knowledge and better integration with local operations.
- **Civilian Augmentation for Continuity:** The introduction of civilian positions to augment military organizations is proposed. These positions would focus on specific training and operational aspects, providing continuity amidst frequent rotations of uniformed personnel.

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