



PROJECT AIR FORCE

THE ARTS
CHILD POLICY
CIVIL JUSTICE
EDUCATION
ENERGY AND ENVIRONMENT
HEALTH AND HEALTH CARE
INTERNATIONAL AFFAIRS
NATIONAL SECURITY
POPULATION AND AGING
PUBLIC SAFETY
SCIENCE AND TECHNOLOGY
SUBSTANCE ABUSE
TERRORISM AND
HOMELAND SECURITY
TRANSPORTATION AND
INFRASTRUCTURE
WORKFORCE AND WORKPLACE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

[Jump down to document](#) ▼

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

Support RAND

[Purchase this document](#)

[Browse Books & Publications](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore [RAND Project AIR FORCE](#)

View [document details](#)

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND PDFs to a non-RAND Web site is prohibited. RAND PDFs are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).

This product is part of the RAND Corporation monograph series. RAND monographs present major research findings that address the challenges facing the public and private sectors. All RAND monographs undergo rigorous peer review to ensure high standards for research quality and objectivity.

Courses of Action for Enhancing U.S. Air Force “Irregular Warfare” Capabilities

A Functional Solutions Analysis

Richard Mesic, David E. Thaler,
David Ochmanek, Leon Goodson

Prepared for the United States Air Force
Approved for public release; distribution unlimited



PROJECT AIR FORCE

The research described in this report was sponsored by the United States Air Force under Contract FA7014-06-C-0001. Further information may be obtained from the Strategic Planning Division, Directorate of Plans, Hq USAF.

Library of Congress Cataloging-in-Publication Data

Courses of action for enhancing U.S. Air Force “irregular warfare” capabilities : a functional solutions analysis / Richard Mesic ... [et al].

p. cm.

Includes bibliographical references.

ISBN 978-0-8330-4874-5 (pbk. : alk. paper)

1. United States. Air Force—Operational readiness. 2. Asymmetric warfare—United States. 3. Unified operations (Military science)—United States. I. Mesic, Richard, 1943—

UG633.C688 2010

358.4'142—dc22

2010000854

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

Cover photo courtesy of U.S. Air Force/Senior Airman Randi Flaugh.

© Copyright 2010 RAND Corporation

Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Copies may not be duplicated for commercial purposes. Unauthorized posting of RAND documents to a non-RAND Web site is prohibited. RAND documents are protected under copyright law. For information on reprint and linking permissions, please visit the RAND permissions page (<http://www.rand.org/publications/permissions.html>).

Published 2010 by the RAND Corporation

1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138

1200 South Hayes Street, Arlington, VA 22202-5050

4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665

RAND URL: <http://www.rand.org>

To order RAND documents or to obtain additional information, contact

Distribution Services: Telephone: (310) 451-7002;

Fax: (310) 451-6915; Email: order@rand.org

Summary

This monograph documents a “quick-turn” study to assist Air Force leadership in determining actions to enhance USAF capabilities and capacities for joint and combined operations in irregular warfare. The Secretary of Defense has directed the military services to come forward with operational and force structure initiatives to rebalance their forces across IW and conventional-warfare mission areas. According to this direction, U.S. forces must be prepared to conduct IW operations for many years to come. Airpower plays critical roles in IW operations that are both direct—e.g., hunting down and attacking terrorist groups—and indirect—e.g., training, equipping, advising, and assisting partners.

As the Air Force enhances its IW capabilities it must also maintain capabilities for deterring or defeating regional or near-peer adversaries in large-scale conflicts. In rebalancing, it must recognize that, although IW and large-scale combat operations have features in common, IW operations are not a lesser included case of major combat operations. This is particularly apparent when one recognizes that IW is largely about influencing relevant populations and operating by, with, and through partner nations. Further, military force is only one of the relevant instruments of national power and may even be secondary to political and economic instruments in many contexts.

Courses of Action for Enhancing Air Force IW Capabilities

We identify four dimensions in which the Air Force could act to expand its contributions to joint IW operations, both direct and indirect. These dimensions involve

- adapting the institutional Air Force to embrace an IW mindset even as it maintains capabilities for traditional missions
- enhancing its capacity to meet the pressing needs of commanders in Iraq and Afghanistan
- more generally, ensuring that it can meet *global* demands to support partner nations against extremist threats to their stability and populations’ well-being
- building force-structure capabilities and capacities to sustain this effort over the years of the “long war.”

The courses of action (CoAs) we propose address each of these dimensions. We formulate our CoAs using an incremental approach. CoA 0 is the bedrock, and should be taken in any case. The additional CoAs are thematically coherent incremental building blocks. Each has merit and each would build on the others. All are grounded in analysis, recent operational experience of USAF general-purpose forces (GPF) in IW, and long experience by USAF special operations forces (SOF). Although there have been many discussions along the way (and in past work) about alternatives and their relative merits, this monograph focuses on conclusions. In some cases the initiatives have not been subjected to detailed force-effectiveness analysis. In many cases, the Air Force itself is the source of initiatives. In fact, most of the initiatives identified here are already being considered and, in some instances, pursued by USAF organizations. Nevertheless, while in all cases the details should be further checked and refined, the basic elements appear to us sound.

Course of Action 0: Set the Climate

Serving as the foundation for all other courses of action, CoA 0 focuses on deepening the institutional commitment to developing IW expertise in the USAF and providing relevant capabilities. In our view, CoA 0 is

not optional, but essential, if the Air Force undertakes to truly embrace irregular warfare as a USAF competency. It is for this reason that we call it “CoA 0.” It includes five initiatives to inculcate an IW mindset in USAF culture and to ensure that IW has a top priority:

- early and frequent leadership emphasis on IW as an institutional priority
- a permanent, high-level management organization to monitor and direct IW activities in the Air Force with unity of purpose
- realignment of career management to encourage and reward IW experience
- realignment of education and training to greatly increase the exposure of airmen to IW concepts throughout their careers
- expansion of the Coalition Irregular Warfare Center (CIWC) as a USAF focal point for IW-related concept development, technology exploitation, and strategic assessment.

We estimate the resources to implement the initiatives of CoA 0 as 180 personnel, an initial investment of about \$7 million (mostly for office equipment), and an annual operations and support (O&S) cost of about \$30 million. (See pp. 17–20.)

Course of Action 1: Succeed in Iraq and Afghanistan

Course of Action 1 is predicated on the judgment that the Air Force should prepare for continued heavy involvement in direct and indirect operations in Iraq and Afghanistan. Activities in Afghanistan have recently increased and are likely to continue for years. The rugged terrain and lack of roads, and the distances between distributed battle areas, will highlight the flexibility and reach of airpower. In addition, recent decisions to greatly expand the size of the Afghan National Army presage a long-term requirement for the USAF to help build the Afghan Air Corps and support the extension of the Afghan government’s reach into rural areas. The situation in Iraq is more ambiguous. The U.S.-Iraq security agreement calls for U.S. forces to withdraw from Iraq by 2011. That may well occur on schedule, but it is also possible that Iraqi leadership will ask U.S. forces to remain with a smaller, less-

visible presence focused on building Iraqi security forces while providing niche capabilities in support of Iraqi operations. These niche capabilities could well include USAF assets for close-air support (CAS), armed overwatch, intelligence, surveillance, and reconnaissance (ISR), airlift, command and control, force protection, and other important functions—perhaps for 5–10 years.¹

Thus, CoA 1 addresses shortfalls in current and potential operations in Iraq and Afghanistan by pushing more Air Force capability and capacity forward, preparing the USAF for what could be a longer-than-hoped-for stay while broadening efforts dedicated to establishing the Iraqi Air Force and Afghan Air Corps as strong, self-sustaining entities. The intent of CoA 1 is to show immediate effects in the Iraqi and Afghan theaters and to field systems that improve the effectiveness and efficiency of deployed forces for operations.

The initiatives for CoA 1 involve

- training more Joint Terminal Attack Controllers (JTACs) and embedding specialized air expertise at multiple echelons to support planning and operations
- providing additional ISR and transferable CAS and mobility capability
- pushing forward a range of capabilities for information operations, strategic communications, agile combat support, and lessons-learned capacity
- providing a more robust, tailorable Air Education and Training Command (AETC) pipeline for training USAF advisors
- adding an Air Force Special Operations Command (AFSOC) squadron of combat aviation advisors

¹ The commander of Multi-National Forces in Iraq, General Ray Odierno, has stated his belief that U.S. air capabilities could be needed in Iraq for another five to ten years. More recently, Iraqi Prime Minister Nuri al-Maliki left the door open to continuing U.S. military presence after 2011: “If Iraqi forces need more training and support, we will reexamine the [status of forces] agreement at that time, based on our own national needs.” See Department of Defense, “DoD News Briefing with Lt. Gen. Odierno from Iraq,” January 17, 2008; and “A Conversation with Iraq’s Prime Minister Nuri al-Maliki,” United States Institute of Peace, July 23, 2009.

- creating a regional air academy focused on Iraqi and Afghan airmen.

Implementing all the CoA 1 initiatives would require an estimated 3,600 personnel, 200 aircraft (including additional intelligence-gathering MC-12s, the conceptual OA-X light attack platform, and a family of light cargo aircraft), about \$1.9 billion in initial investment (mainly for aircraft), and some \$423 million in yearly O&S costs. (See pp. 20–27.)

Course of Action 2: Support Partners Globally

Notwithstanding the importance of operations in Iraq and Afghanistan, they are by no means archetypal scenarios for future IW. The challenges are global, and operations in other contingencies are unlikely to look much like those in Iraq and Afghanistan. CoA 2 would recognize this global challenge. It would enable the United States and its partners to put unremitting pressure on terrorists and insurgents around the world—working largely by, with, and through partners with diverse needs and at varied developmental levels—while enhancing its contribution to discreet U.S. direct operations against terrorist groups. This global demand for the expertise of U.S. airmen is neither static nor well defined as of yet, but its magnitude is widely recognized as being well beyond current U.S. capacity.

As the USAF presses ahead with its efforts to build Iraqi and Afghan air capabilities, CoA 2 addresses these global demands through initiatives that

- establish IW advisory wings in the general-purpose force and in AFSOC
- expand AETC training efforts to sustain the larger advisory force
- pursue advisory and employment concepts for agile combat support
- embed air advisory elements in air components of the combatant commands (COCOMs)
- establish additional regional air academies

- deploy transferable, multi-mission (including ISR) light utility aircraft to the COCOMs
- expand USAF human-intelligence capabilities.

Overall, CoA 2 involves 3,000 personnel, 255 aircraft, an investment of \$2.3 billion, and an annual O&S cost of \$374 million. (See pp. 27–31.)

Course of Action 3: Ensure Future Access and Action

Course of Action 3 is aimed at long-term force structure rebalancing to support IW. Its main objectives are to ensure that the Air Force would be positioned to support surge IW operations in the future and that special operations forces could operate in less permissive environments, at times clandestinely. We divide CoA 3 into two elements, each associated with one of these objectives. In the first element, units equipped with an additional 93 manned ISR platforms (to complement what we assume will be continued expansion of unmanned systems) and 300 counterinsurgency-dedicated CAS platforms would be available for global operations. We estimate the resources needed to pursue these two initiatives at 4,400 personnel, \$4.7 billion in investment, and \$600 million in annual O&S costs (for all 393 aircraft).

The second CoA 3 element enhances special operations capabilities in the out-years with a low-observable, next-generation gunship concept and a low-observable SOF mobility platform for infiltration/exfiltration operations in denied areas and over long distances. This element of CoA 3 recognizes that even as the United States emphasizes operating by, with, and through partners, there will still be a need for U.S. forces to conduct direct operations against nonstate adversaries. We estimate resources for the 48 aircraft associated with these initiatives to be 1,320 personnel, \$20.5 billion in investment, and \$216 million in annual O&S costs. Most of the resources would be needed beyond 2020, although some research, development, test, and evaluation (RDT&E) would appear late in the Future Years Defense Plan. (See pp. 31–33.)

The matrix in Table S.1 provides a summary of our proposed CoAs and initiatives, grouped by functional area—institutional, oper-

ational capability, building partner capacity, and future procurement. An initiative identified as part of a CoA receives a checkmark under that CoA. However, initiatives may also play roles in follow-on CoAs. As such, if an initiative also supports the goals or emphases of other CoAs, it receives a plus sign under those CoAs. Estimated resources for each CoA appear at the bottom of the matrix. For CoA 3, resources are divided between the first two (MC-12 and OA-X) and second two initiatives (gunship and mobility platform, which are bracketed). The total incremental manpower, total aircraft inventory, investment costs, and annual O&S costs refer to fully implemented initiatives. Appendix B details the breakout and flow of these manpower and cost figures.

Table S.1
Summary of Initiatives to Support Courses of Action

Initiatives	CoA 0 Set the Climate	CoA 1 Succeed in Iraq and Afghanistan	CoA 2 Support Partners Globally	CoA 3 Ensure Future Access and Action
Institutional				
Provide leadership emphasis	√	+	+	+
Designate HAF integrator for IW	√	+	+	+
Emphasize IW career incentives	√	+	+	+
Expand IW curricula in education and training	√	+	+	+
Expand CIWC	√	+	+	+
Operational Capability				
Embed air expertise forward		√		
Add JTACs		√		
Push and sustain airborne ISR and PED		√	+	√
Emphasize innovative information operations		√	+	+
Synchronize strategic communications		√		
Mitigate agile combat support shortfalls		√	√	+
Operationalize analyses		√	+	+

Table S.1 (continued)

Initiatives	CoA 0 Set the Climate	CoA 1 Succeed in Iraq and Afghanistan	CoA 2 Support Partners Globally	CoA 3 Ensure Future Access and Action
Building Partner Capacity				
Expand advisor training		√	√	+
Stand up GPF advisor unit and elements			√	+
Add combat aviation advisors		√	√	+
Expand USAF human intelligence			√	+
Build regional air academies		√	√	+
Future Procurement				
Provide transferable, COIN-dedicated CAS and armed overwatch platform		√	+	√
Develop and procure light cargo aircraft		√	√	+
Develop and deploy next-generation gunship				√
Develop and deploy next-generation SOF mobility platform				√
Total Estimated Resources				
Manpower	181	3,594	2,995	4,395 [1,320]
Total aircraft inventory	0	200	255	393 [48]
Investment	\$7 million	\$1.9 billion	\$2.3 billion	\$4.7 billion [\$20.5 billion]
Annual O&S	\$30 million	\$423 million	\$374 million	\$598 million [\$216 million]

Concept Development for Irregular Warfare

Although this monograph has focused on macro IW issues, such as leadership, culture, and human capital, the Air Force is also a leader and innovator in applying high technology to challenging, complex problems. Emerging operational concepts needed to utilize such technology have much to offer in IW operations. The USAF needs to be at the forefront of developing concepts for ISR (especially signals intelligence and persistent wide-area surveillance), space and cyberspace capabilities, communications, and low-collateral-damage weapons. Moreover, because building partner capacity and operating indirectly are so central to IW, the Air Force should pursue a dedicated effort to make the fruits of these technologically driven concepts available to partners within export control parameters and without compromising sensitive or classified U.S. capabilities. In fact, concept development activities should explicitly consider applicability to capacity-building and foreign internal defense. It would be the responsibility of the IW integrator at Headquarters Air Force and the expanded Coalition Irregular Warfare Center to ensure that technological opportunities for novel IW applications were explored, developed, and fielded. (See pp. 38–40.)

Conclusions

In summary, the Secretary of Defense has directed the Air Force and the other services to adapt to the emerging threat environment characterized as the “long war.” The direction is clear, but the specifics present numerous challenges, not the least of which is the need to begin to change the USAF culture from one focused on the challenges of major combat operations (challenges that are not going away) to one equally accomplished in irregular warfare. The Air Force has a great deal to offer in this realm—indeed, U.S. efforts to counter terrorism and insurgency, support partners in foreign internal defense, and bring stability to vulnerable populations *could not be done without the Air Force*. In this spirit, we formulate and propose the CoAs in this report.

There is a compelling rationale for immediately beginning to implement the initiatives in CoAs 0, 1, and 2—or some versions thereof.² The need to adapt as an institution, to redouble efforts in Afghanistan and to support an orderly withdrawal and potential post-withdrawal presence in Iraq, and to pressure adversaries and support partners around the world is unassailable. As the Air Force implements these CoAs and gains additional experience in, and knowledge about, IW operations, USAF leadership can take more time to consider the more ambitious and costly initiatives proposed in CoA 3. (See pp. 41–43.)

Finally, while there are material initiatives in these CoAs, most of the initiatives are nonmaterial. People, not platforms, are the key to transforming the Air Force and rebalancing its IW and conventional capabilities, allowing it to work more effectively and efficiently by, with, and through partner nations in the long war. As Secretary of Defense Robert Gates wrote, “In the end, the military capabilities needed cannot be separated from the cultural traits and the reward structure of the institutions the United States has: the signals sent by what gets funded, who gets promoted, what is taught in the academies and staff colleges, and how personnel are trained.”³

² The analysis herein provides rough estimates of resources required to implement initiatives, but it does not attempt to identify where those resources might originate (i.e., either from offsets within the Air Force program or from external funding sources).

³ Robert M. Gates, “A Balanced Strategy: Reprogramming the Pentagon for a New Age,” *Foreign Affairs*, January/February 2009.