



Factoring Security Cooperation into Core U.S. Air Force Decisionmaking Processes

Incorporating Impact in Planning, Programming,
and Capability Development

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Preface

Security cooperation (SC) is a key component of U.S. national security strategy and has been emphasized recently by Congress, the Office of the Secretary of Defense, and the Chief of Staff of the Air Force as a high priority in defense planning and assessment. When an activity is considered a high national security priority and a core mission for a military service, it becomes critical to ensure that the mission is explicitly factored into the service's plans and programs for organizing, training, and equipping the force to ensure current and future capability. However, core U.S. Air Force (USAF) decisionmaking processes do not systematically incorporate SC impact—the effects that decisions might have on USAF's capacity to engage with foreign partners—into planning, programming, capability development, and acquisition.

This report provides a review of the treatment of SC issues in core USAF decisionmaking processes and offers recommendations for improving consideration of SC risks and opportunities. The research focused on two overarching core USAF decisionmaking processes: (1) strategy, planning, and programming and (2) capability development and acquisition, associated with the U.S. Department of Defense's Joint Capabilities Integration and Development System process. In addressing these issues, our aim is not to argue that SC considerations should drive or motivate decisions across the board. Rather, our goal is to suggest improvements in these processes that would make the impact on USAF SC capacity explicit to decisionmakers—especially the Secretary of the Air Force and the Chief of Staff of the Air Force in his self-described role as international air chief—when they are considering trade-offs in the USAF program.

This report should be of interest to USAF leadership and participants in the corporate structure; officials engaged in planning, programming, concept development, requirement identification, and acquisition; and SC professionals in USAF. It should also be of interest to their counterparts in the other services also grappling with the challenges of SC in their plans and programs.

The research reported here was commissioned by the Deputy Under Secretary of the Air Force for International Affairs and conducted within the Strategy and Doctrine Program of RAND Project AIR FORCE (PAF) as part of a fiscal year 2017 project “Supporting the U.S. Air Force Security Cooperation Enterprise: Incorporating Security Cooperation Impact into Core USAF Decision-Making Processes.”

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Summary

Security cooperation (SC) is a key component of U.S. national security strategy and is a high priority in U.S. Department of Defense (DoD) guidance. Congress has recently placed a great deal of emphasis on planning and assessing SC and consolidating the statutes that authorize it. Underscoring the priority he likewise places on SC, the Chief of Staff of the Air Force (CSAF) has termed it a “core mission” of the U.S. Air Force (USAF) and has identified international air chief as one of the hats he wears. Likewise, the Secretary of the Air Force has directed institutional reform efforts to strengthen alliances and partnerships.

Because it is a core mission, it is critical for USAF to explicitly factor SC into its plans and programs to organize, train, and equip (OT&E) the force to ensure current and future capability. This has been a challenge for a variety of reasons, not least of which is that SC is pervasive across other missions yet is not broadly considered a mainstream activity of the military—it is seen as a tax on what the military does to prepare for its main mission of fighting wars. However, given the high strategic emphasis on SC, these challenges do not absolve decisionmakers in USAF and other services of incorporating SC impact (in terms of potential risks and opportunities) into plans, programs, and initiatives.

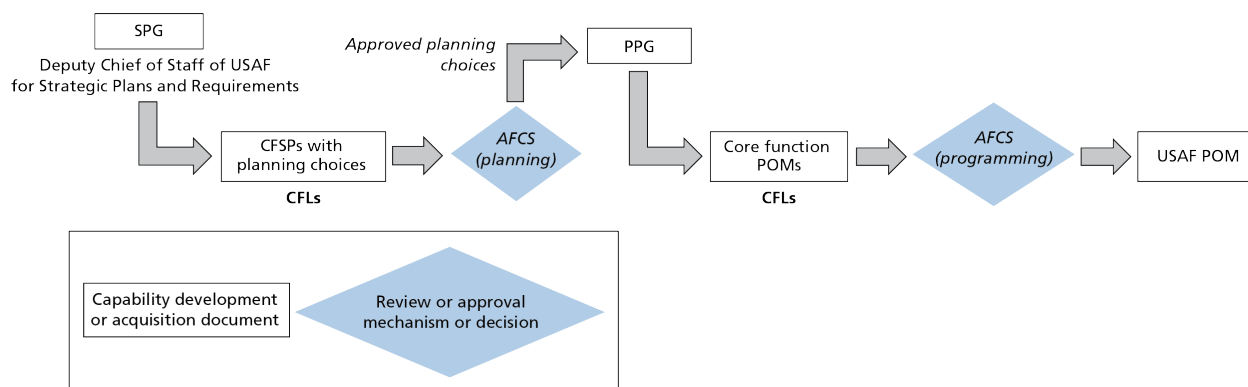
This report reviews two core USAF decisionmaking processes—the strategy, planning, and programming process (SP3) and the capability development and acquisition (CD/A) process—to provide insight into the extent to which SC impact is factored into decisions and to recommend improvements to decisionmaking processes that render incorporation of SC impact systematic and explicit. These are two key processes enabling USAF to organize, train, and equip and were agreed to by the sponsor. In general, the report reveals that CSAF, in his role as international air chief, is not well served by current core decisionmaking processes. USAF planning and programming efforts and CD/A initiatives do not systematically consider the impact of trade-off decisions on USAF’s capacity to engage partner nations—namely, to enhance relationships and access; build partner operational capability; implement agreements; sustain an SC workforce with appropriate language, cultural, and regional expertise; cooperate in acquisition; and improve SC-related institutions—except in cases in which a program or initiative is dedicated to SC. Although USAF has taken steps through its Security Cooperation Enterprise Governance Structure (SCEGS) to raise SC’s profile in planning and programming, USAF can take other actions to normalize it in core decisionmaking processes. We describe these in the next section.

Security Cooperation in Core Air Force Decisionmaking Processes: Decision Points and Challenges

Our review of USAF's SP3 and CD/A processes revealed key decision points at which OT&E decisions should account for potential effects on USAF capacity to engage partner nations. We found that many of these decision points appear early in these processes, at lower echelons of formulation of programs and concepts—at the major command (MAJCOM) and core function lead (CFL) levels. However, despite the high priority accorded SC by USAF leadership and its inclusion in a separate flight plan in the Strategic Master Plan (SMP) (Secretary of the Air Force and CSAF, 2015), consideration of SC was infrequent at these levels and by no means systematic. Although they are not insurmountable, the challenges to increasing SC's influence on planning, programming, and capability development are substantial, particularly in an operationally demanding, resource-constrained environment.

The SP3 is the means by which the Department of the Air Force implements the first two steps in DoD's Planning, Programming, Budgeting, and Execution system—namely, planning (developing a vision and overall objectives for the future) and programming (a specified set and level of activities and the supporting resources to carry out the assigned missions). The goal of this process is to deliver a corporately derived program objective memorandum (POM) to the Office of the Secretary of Defense that presents USAF resource allocation decisions in accordance with defense guidance. Two main stages of the SP3 are (1) strategic planning (which includes the development of the Air Force strategy, the SMP, the Strategic Planning Guidance [SPG], the Resource Allocation Plan, the Program Planning Guidance [PPG], and support plans, such as the Core Function Support Plans [CFSPs] and flight plans), and (2) program planning and POM development. Figure S.1 depicts a simplified SP3.

Figure S.1. Air Force Strategy, Planning, and Programming Process: Major Elements



NOTE: AFCS = Air Force Corporate Structure.

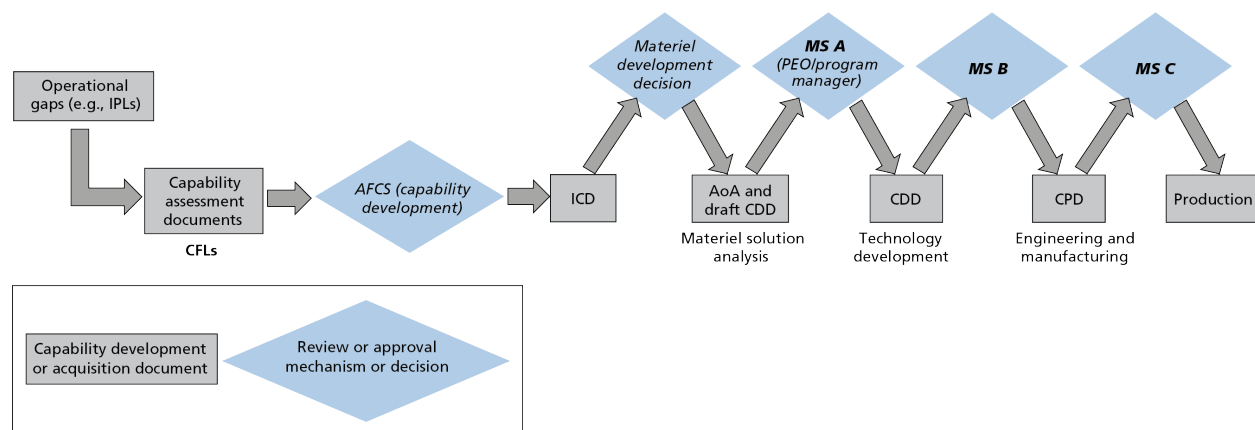
With some exceptions, SC is not part of CFL-level planning and programming. To a large extent, this is a result of USAF's decision to eliminate the building-partnerships core function in

2015, leaving SC without a dedicated CFL or MAJCOM champion at the critical initial stage of the planning process. Consequently, international affairs input is not formally built into the process. Key SP3 challenges include the following:

- the pervasive character of SC, which has prevented it from acquiring a functional home
- inadequate senior-leader emphasis on integrating SC into core planning and programming processes
- a lack of SC knowledge and experience within USAF as a whole
- the absence of large SC programs that can compete with non-SC programs as planning choices and POM initiatives
- the paucity of references to SC in planning and programming guidance documents
- personnel shortages that limit the ability of SC professionals to integrate SC into plans and programs at the MAJCOM level.

Like SP3, USAF's CD/A process is the service-level component of larger DoD systems—in this case, the Joint Capabilities Integration and Development System and the DoD acquisition system. The Joint Capabilities Integration and Development System identifies, assesses, validates, and prioritizes joint military capability requirements by considering the full range of potential materiel and nonmateriel solutions. Briefly, capability development begins with identification of an operational gap, generally based on a priority combatant command (CCMD) need expressed in the CFSP. Depending on USAF corporate and DoD approvals, a CFL can pursue a capability-based assessment, develop an initial capabilities document, conduct an analysis of alternatives if a concept is a materiel solution, and a draft capability development document (CDD). After a decision is made to proceed to acquisition (milestone A), a program executive officer or program manager is chosen to supervise the acquisition effort. In addition, the CFL produces a final CDD and then a capability production document (CPD), after which production begins. We depict the CD/A in simplified form in Figure S.2.

Figure S.2. Air Force Capability Development and Acquisition Process: Major Elements



NOTE: IPL = integrated priority list. ICD = initial capabilities document. AoA = analysis of alternatives. MS = milestone. PEO = program executive officer.

Again, SC impact does not appear to be a systematic part of deliberations or analyses that inform these documents and milestones, unless the solution is expressly dedicated to SC. Challenges involved in bringing SC into capability development discussions include the following:

- the exclusion of partner militaries from operational gap analyses
- CFLs' lack of incentive for developing partner-focused capabilities and deference to CCMDs with varying levels of interest in SC
- MAJCOM resistance to including SC considerations in key performance parameters.

Notwithstanding the difficulties of institutionalizing SC within USAF, our discussions with USAF stakeholders suggest that there is openness within Headquarters Air Force and the MAJCOMs and CFLs to considering SC's impact more systematically in SP3 and CD/A processes. However, decisionmakers will need more-detailed guidance and analysis on SC requirements and gaps, as well as on the risks of not filling these gaps.

Four Cases of Security Cooperation–Related Programs in Air Force Processes

In an effort to place these observations in greater context, we explored four case studies of SC-related programs and initiatives to draw lessons from their decision outcomes. The four cases are (1) undergraduate pilot training, in which foreign pilots attend courses that introduce them to USAF flying concepts in the same manner as new U.S. pilots are; (2) the light-attack aircraft, now termed the OA-X, which has been touted as a platform that both U.S. and foreign air forces can use in counterinsurgency and counterterrorism operations; (3) the C-17 Heavy Airlift Wing, which is part of the Strategic Airlift Capability, a group of 12 nations (including the United States) that share three C-17 airlifters based at Pápa Air Base, Hungary; and (4) the Air Advisor Academy, a schoolhouse at Joint Base McGuire–Dix–Lakehurst in New Jersey established to train USAF airmen in preparation for overseas advisory assignments, especially in Afghanistan and Iraq.

Despite the unique character and circumstances of each case study, we can draw several common lessons from them. First, three of our four case studies (OA-X, the C-17 Heavy Airlift Wing, and the Air Advisor Academy) were developed ad hoc—not from CCMD IPLs or analyses of operational gaps but by experienced professionals who noted emerging needs or opportunities from empirical observation of ongoing operations or events. Second, active and consistent support of top leadership within USAF was critical both to initiating and sustaining programs and was particularly effective when an SC initiative was linked to broader strategic goals, such as building U.S. irregular warfare capacity or increasing multinational engagement in ongoing operations. Third, SC considerations were often not the decisive factor in determining the fate of programs not dedicated to SC, and, in some cases, SC became the silent partner to the core arguments about such critical combat capability and readiness issues as pilot shortages and

aircraft life spans. Fourth, and related to the third lesson, it was beneficial to integrate SC-focused efforts—which appeared to be the most vulnerable when they stood out as a distinct SC activity—within broader USAF programs to avoid their being considered for cuts in resources to offset other needs. Finally, there was evidence of a need to present SC considerations in a more systematic manner within the USAF decisionmaking process to ensure that SC implications could be raised to USAF leadership in a consistent and timely fashion. We drew these lessons into our research, and they informed our findings and recommendations, to which we now turn.

Security Cooperation in Core Air Force Decisionmaking Processes: Findings and Recommendations

The research presented in this report tells a story of a key USAF activity—SC—that is underrepresented in core USAF decisionmaking processes and not systematically or explicitly factored into decisions that could affect USAF’s capacity to engage with foreign partners. Given that SC is a core mission of USAF, *top leaders who rely on inputs from core processes to make decisions are not well served by these processes when it comes to fully understanding the SC implications of those decisions.* At the same time, despite this lack of systematic incorporation into SP3 and CD/A, USAF still makes important contributions to DoD efforts to engage partners.

The following findings summarize this research:

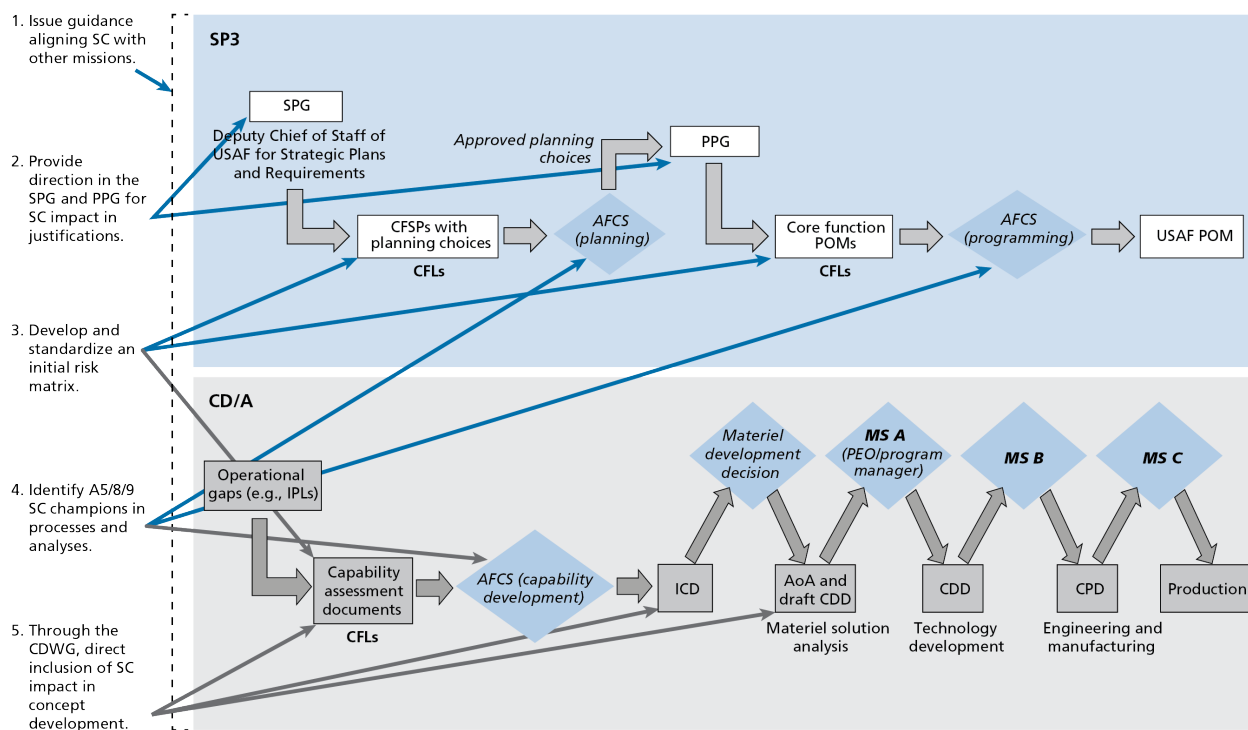
- Although SC is stated to be a high strategic priority, it is not systematically factored into processes at lower echelons and does not appear as a systematic, explicit component of trade-offs that inform decisions.
- Important foundational analyses of USAF capabilities and gaps that help justify USAF programs do not consider contributions of allies and partners.
- At times, SC initiatives are developed ad hoc outside traditional decisionmaking processes.
- SC as a mission lacks commonality with other mission and process structures in terms of metrics and differentiation of resources.
- Ensuring that SC impact is successfully factored into decisions on USAF programs becomes increasingly difficult as the decisionmaking process moves along.
- Although it is still new, SCEGS has had positive effects on socializing SC across USAF and synchronizing SC activities, but effects on core processes and on establishing SC priorities are not yet clear.

Our sense is that SC *can* be more systematically taken into account, perhaps similarly to other issues whose risk is accounted for (e.g., readiness, manpower, training) with targeted efforts earlier in the planning stages. We suggest the beginnings of a framework, in the form of a risk matrix, by which to illuminate the opportunities and risks that OT&E decisions might bring to USAF SC with partner air forces and, ultimately, to measure the impact of those activities. The framework draws inspiration from risk matrices found in CFSPs that the CFLs prepare to justify planning choices and programs. It is qualitative in nature and meant to precipitate

systematic discussion about how plans and concepts might affect USAF's capacity to engage foreign partners.

Informed by our research, we propose near-term (one-year) and mid- to long-term (two-plus-year) actions that USAF could take (depicted in Figures S.3 and S.4) to ensure that SC impact is systematically factored into its SP3 and CD/A processes. The proposals are guided by four considerations: (1) Although SC impact might not be a primary driver of decisions, decisionmakers should see that impact made explicit in trade-offs; (2) SC impact should be systematically considered in the early stages of each process; (3) proposals should be complementary to the existing SCEGS approach; and (4) the effort to systematically incorporate SC impact will be an evolutionary, step-by-step process.

Figure S.3. Proposed Near-Term Actions to Systematically Incorporate Security Cooperation Impact in Core Air Force Decisionmaking Processes



NOTE: CDWG = Capability Development Working Group. A5/8/9 = Directorate of Strategic Plans, Programs, Requirements and Assessments.

Figure S.4. Proposed Mid- to Long-Term Actions to Systematically Incorporate Security Cooperation Impact in Core Air Force Decisionmaking Processes

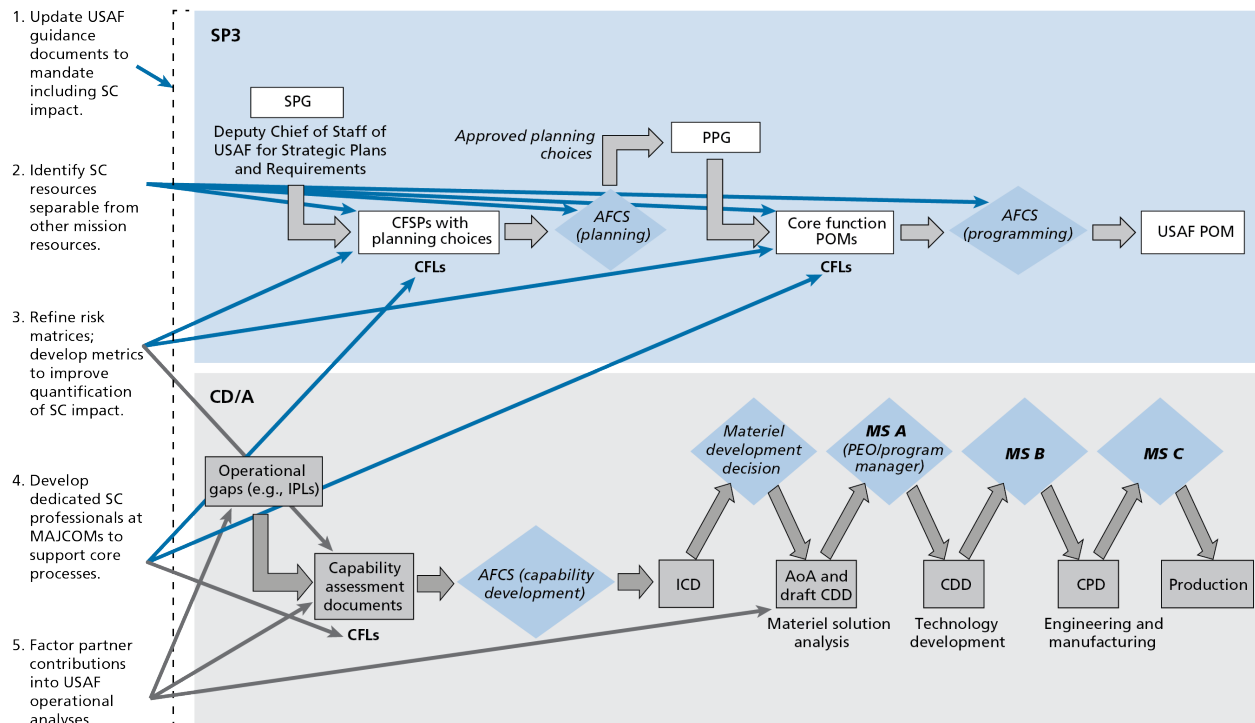


Figure S.3 introduces proposed near-term actions overlaid on the simplified depictions of the two core processes (SP3 in the upper path of the figure, CD/A in the lower path), with each action directed via arrows at important touch points in the two processes. The proposed near-term actions are as follows:

1. *Issue USAF-wide guidance (in the SMP or other strategic communication) declaring alignment of SC with other missions and activities in core processes, thereby putting CSAF's imprimatur on the effort, without which this effort will not gain traction.*
2. *Provide detailed direction in the SPG (for planners) and in the PPG (for programmers) on including SC impact assessment alongside other, more-traditional assessments in program justifications.*
3. *Provide detailed direction through the CDWG to factor SC impact into concept development deliberations and products like the CDWG does for other USAF-wide considerations and stakeholders.*
4. *Develop and standardize SC risk matrices with impact areas and questions that should be addressed as an initial step to factor SC impact into SP3 and CD/A deliberations and analyses, and include them in CFSPs, POM submissions, capability-based assessments, and initial capabilities documents.*
5. *Identify personnel in A5/8/9 who can serve as champions of SC issues in Air Staff processes and analyses supporting the corporate structure for the purposes of supporting planning, programming, and concept development guidance and flagging potential challenges and opportunities during process implementation.*

Figure S.4 introduces proposed mid- to long-term actions that USAF should consider:

1. *Update USAF directives and instructions*, documents in which reference to SC is largely absent, *to mandate consideration of SC risks and opportunities*.
2. *Develop mechanisms to factor partner capabilities into USAF operational and interdependency analyses* that drive the two processes—especially in light of the high priority given to coalition operations in DoD guidance and the constraints on resources that USAF faces as it seeks to meet global demands.
3. *Identify resources for SC within USAF that are separable from other mission resources* to make them more visible to decisionmakers.
4. *Refine risk matrices and develop other assessment techniques to improve qualification and quantification of SC impact* to facilitate straightforward comparison with other USAF activities in “rack-and-stack” exercises and trade-off analyses.
5. *Develop dedicated SC professionals at the headquarters and MAJCOM levels to support assessment of SC impact and shepherd resulting deliberations and analyses within the core processes*; establish requirements for them as part of USAF’s SC workforce.

In light of emerging USAF concepts for better integrating the two core processes, we recommend that USAF consider these proposed actions regardless of any new or evolving corporate planning structures that it adopts. SC impact must be factored into decisions and trade-offs in the early stages of OT&E decisionmaking processes and at lower echelons (e.g., MAJCOMs), in which plans are implemented and programs built, and must be made explicit in justifications of these programs to USAF leadership.

Acknowledgments

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The content of this report is the sole responsibility of the authors.

Abbreviations

A3	Operations Directorate
A5	Strategy and Requirements Directorate
A8	Planning and Programming Directorate
AAA	Air Advisor Academy
ACC	Air Combat Command
ACS	agile combat support
AETC	Air Education and Training Command
AFB	Air Force base
AFCENT	U.S. Air Forces Central Command
AFCS	Air Force Corporate Structure
AFI	Air Force instruction
AFMC	Air Force Materiel Command
AFPD	Air Force policy directive
AFROC	Air Force Requirements Oversight Council
AFSAT	Air Force Security Assistance Training Squadron
AFSOC	Air Force Special Operations Command
AMC	Air Mobility Command
AoA	analysis of alternatives
ATDR	Aircrew Training and Distribution Requirements
BP	building partnerships
BPC	building partner capacity
CBA	capability-based assessment
CCMD	combatant command
CD/A	capability development and acquisition
CDC	Capability Development Council
CDD	capability development document
CDWG	Capability Development Working Group
CFL	core function lead
CFSP	Core Function Support Plan
COIN	counterinsurgency
CPD	capability production document
CSAF	Chief of Staff of the Air Force
DISCS	Defense Institute of Security Cooperation Studies
DoD	U.S. Department of Defense
DoDD	Department of Defense directive

DoDI	Department of Defense instruction
EC	Expeditionary Center
EOS	Expeditionary Operations School
EU	European Union
EUCOM	U.S. European Command
FMS	foreign military sales
FY	fiscal year
FYDP	Future Years Defense Program
GPf	general-purpose force
HAF	Headquarters Air Force
HAW	Heavy Airlift Wing
ICD	initial capabilities document
IPL	integrated priority list
ISR	intelligence, reconnaissance, and surveillance
IW	irregular warfare
JCIDS	Joint Capabilities Integration and Development System
JROC	Joint Requirements Oversight Council
KPP	key performance parameter
LAAR	Light Attack/Armed Reconnaissance
MAJCOM	major command
MOU	memorandum of understanding
MS	milestone
NAM	North Atlantic Treaty Organization Airlift Management
NAMA	North Atlantic Treaty Organization Airlift Management Agency
NATO	North Atlantic Treaty Organization
OCO	overseas contingency operation
O&M	operation and maintenance
OPTEMPO	operating tempo
OSD	Office of the Secretary of Defense
OT&E	organize, train, and equip
PE	program element
PEO	program executive officer
POM	program objective memorandum
PPBE	Planning, Programming, Budgeting, and Execution
PPG	Program Planning Guidance
QDR	Quadrennial Defense Review
SAC	Strategic Airlift Capability
SAF/IA	Deputy Under Secretary of the Air Force for International Affairs
SC	security cooperation

SCEGS	Security Cooperation Enterprise Governance Structure
SCO	security cooperation office
SecAF	Secretary of the Air Force
SMP	Strategic Master Plan
SP3	strategy, planning, and programming process
SPG	Strategic Planning Guidance
SSS	staff summary sheet
SUPT	specialized undergraduate pilot training
UN	United Nations
UPT	undergraduate pilot training
USAF	U.S. Air Force
USAFE	U.S. Air Forces in Europe
USCENTCOM	U.S. Central Command

Chapter One. Introduction

Security cooperation (SC) is a key component of U.S. national security strategy and serves as a means by which the United States shores up alliances, establishes access to regions of U.S. interest, and prevents conflict. It is a high priority in U.S. Department of Defense (DoD) guidance, and Congress has recently placed a great deal of emphasis on planning and assessing SC and consolidating the statutes that authorize it (Pub. L. 114-328, 2016). Moreover, the Chief of Staff of the Air Force (CSAF), Gen David L. Goldfein, has termed SC a “core mission” of the U.S. Air Force (USAF) and has identified serving as international air chief as one of his key responsibilities, and the Secretary of the Air Force (SecAF), Heather Wilson, has directed institutional reform efforts to strengthen alliances and partnerships.¹ Like its counterpart services, USAF has engaged with foreign nations and their security forces since well before SC was seen as a core, much less a unique and separable, mission—and it now forges partnerships, builds partner capacity, and gains and maintains access with more than 100 nations and their air forces in support of U.S. national security strategy—all with the aim of “strengthening our global network of allies and partners” (Joint Chiefs of Staff, 2015, p. 1).

When an activity is considered a high national security priority and a core mission for a military service, it becomes critical to ensure that the mission is explicitly factored into the service’s plans and programs to organize, train, and equip (OT&E) the force to ensure current and future capability. In the case of SC, this has been a challenge for a variety of reasons, not least of which is that it is pervasive—most military personnel engage with foreign partners at some point in their careers, and SC is embedded in many daily activities in which USAF engages—yet not broadly considered a mainstream activity of the military (i.e., it is seen as peripheral to maintaining current readiness for combat operations and ensuring future operational capabilities). It is also difficult to systematically measure the effects of SC and therefore to assign priority to it in a quantitative way in relation to other activities (and thus to conduct “rack-and-stack” exercises that allow planners to make trade-offs among activities within a finite budget). Finally, much of the funding for USAF-supported SC activities originates outside USAF’s budget (in U.S. Department of State–managed Title 22 programs, as well as non-USAF, DoD-managed Title 10 programs), yet decisions that USAF makes to OT&E its forces influence its capacity to deliver SC. Broadly, SC is seen as a tax on what USAF does rather than as an integral part of its mission.

¹ Author discussions with USAF officials, August 4, 2017, and January 10, 2018. Formally, USAF defines its five core missions as (1) air and space superiority; (2) intelligence, surveillance, and reconnaissance (ISR); (3) rapid global mobility; (4) global strike; and (5) command and control. CSAF’s comment appears to underscore the high priority he places on SC rather than an effort to add a sixth mission.

Because Congress, DoD, and USAF have accorded SC such strong strategic emphasis, these challenges do not absolve decisionmakers in USAF and other services from incorporating it into plans, programs, and initiatives. It is critical to demonstrate how OT&E decisions might affect USAF's capacity to conduct SC with partner nations in terms of potential risks and opportunities. This report provides a review of the treatment of SC issues in core USAF decisionmaking processes and offers recommendations for improving consideration of SC risks and opportunities. The report seeks to answer the following three questions:

1. How is impact on USAF's ability to work with partner nations and their militaries—SC—factored into core USAF decisionmaking processes?
2. Where in these processes should SC be considered if it is not already, and why?
3. How can USAF more systematically incorporate into these processes the effects that USAF decisions have on SC?

Our research focuses on addressing these questions in the context of two overarching core USAF decisionmaking processes: (1) the strategy, planning, and programming process (SP3) and (2) capability development and acquisition (CD/A, associated with DoD's Joint Capabilities Integration and Development System, or JCIDS, process). These are two key processes enabling the USAF to OT&E and were agreed to by the sponsor. In answering these questions, our aim is not to argue that SC considerations should drive or motivate decisions across the board. Rather, our goal is to suggest improvements in these processes that would make this impact on USAF SC capacity explicit to decisionmakers—especially CSAF (in his self-described role as international air chief) and SecAF—when they are considering trade-offs in the USAF program. Whether, in the end, a decision has a positive or negative impact on USAF capacity to engage in SC activities is not the issue here—visibility of that impact to decisionmakers is.

In USAF, the Deputy Under Secretary of the Air Force for International Affairs (SAF/IA) is the designated SC lead and advocate. SAF/IA is responsible for providing vision for and organizing USAF's SC enterprise to ensure that USAF is effective and efficient in contributing to near-term combatant command (CCMD) theater objectives and longer-term DoD goals. Those goals are to “preserve our alliances, expand partnerships, maintain a global stabilizing presence, and conduct training, exercises, security cooperation activities, and military-to-military engagement” (Joint Chiefs of Staff, 2015, p. 9). This requires that SC- and non-SC-related OT&E efforts that USAF pursues be synchronized and that processes exist that enable decisionmakers to make informed trade-offs among these efforts. In recognition of these prerogatives, USAF has established a strategic blueprint (the USAF SC Flight Plan, which includes a long-term strategy and a capability and resource plan) for guiding USAF's approach to SC and an institutional framework (SC Enterprise Governance Structure, or SCEGS) for synchronizing its service SC activities. These are relatively recent efforts that are designed not only to help synchronize activities across USAF but also to increase the visibility of the SC enterprise and to set the stage for more-focused planning and centralized management of USAF SC activities. Moreover, as of this writing, USAF is in the process of developing courses of

action for CSAF and SecAF to consider that could further strengthen USAF's institutional commitment to SC.

Although the full benefits of these new efforts are yet to materialize, our research reveals that CSAF, in his role as international air chief, is not well served by current core decisionmaking processes. USAF corporate decisions neither consistently nor systematically consider the SC risks and opportunities that the decisions could engender. This report provides recommendations that support the normalization of this important mission in USAF planning, programming, concept development, and acquisition.

Security Cooperation and Definition of Impact

SC refers to

[a]ll Department of Defense interactions with foreign security establishments to build security relationships that promote specific United States security interests, develop allied and partner nation military and security capabilities for self-defense and multinational operations, and provide United States forces with peacetime and contingency access to allied and partner nations. (Joint Chiefs of Staff, 2017, p. 206)

USAF's SC Flight Plan lays out three strategic SC goals that the service pursues in its interactions with partner nations: (1) enable the United States to operate in support of shared interests, (2) enable partners to operate in lieu of the United States, and (3) enable partners to operate with the United States (SAF/IA, 2016, p. 4). The force elements that USAF OT&Es support these interactions in the air, space, and cyber domains by engaging both developed and developing partner nations in myriad activities, including exercises, personnel exchanges, agreements, and provision of U.S. equipment. It follows that the OT&E decisions that USAF makes potentially have impacts on its capacity to perform SC activities.

This report is purposely input-oriented in its approach to understanding and injecting this capacity, which we call *SC impact*, into the core processes. It is aimed at helping USAF clarify and assess its capacity (what input in terms of forces and resources it can provide) to meet demands for SC activities from the CCMDs, the Office of the Secretary of Defense (OSD), other U.S. government agencies, and international partners. It does not focus on output (what level of activities USAF can support) or outcome (the activities' effectiveness at achieving SC objectives in particular countries). Our aim is to ensure that internal decisions with potential impact on USAF's SC capacity explicitly take that impact into account. Core processes should explicitly address how a decision might affect the risk to USAF's ability to meet the current and future demands associated with building partnerships (BP) around the world or how it might influence USAF's ability to take advantage of emerging opportunities to expand those partnerships.

SC is broadly considered a pervasive activity or mission that cuts across all core functions of USAF.² Therefore, results of decisions and trade-offs in and across these core functions could affect USAF's ability to engage with foreign air forces and other partner security organizations. Although programs centered on SC—such as the Gulf Air Warfare Center in the United Arab Emirates or the North Atlantic Treaty Organization (NATO) Airborne Warning and Control System program—are considered when they are raised as potential initiatives or offsets, many USAF programs not seen as SC-dedicated do affect USAF's SC capacity. For example, F-16 flying hours not only help maintain USAF pilot currency but also enable U.S. participation in multinational exercises and exchanges with similarly equipped partners. Thus, OT&E decisions on F-16 flying hours should consider SC impact as part of deliberations to inform those decisions.

In the context of this study, we define six categories of SC impact that could be considered in core USAF decisionmaking processes:

- enhancing geopolitical or air force-to-air force relations and gaining access
- expanding partner operational capability
- adhering to laws and regulations
- ensuring a robust SC workforce
- encouraging effective, efficient acquisition
- promoting SC institutional health.

We describe each of these categories here with example questions for illustrative purposes. The idea is to provide USAF planners, strategists, and assessors with the elements of a framework by which to begin to identify and then articulate the impact, with a greater degree of fidelity than is currently possible, of USAF SC activities.

The first category of impact, *relationship- or access-related*, is a type of impact that can manifest in the form of stronger relationships between USAF and allies and partners, identification of common values and approaches, increased or more-substantive and targeted defense and military contacts, and new or sustained access to facilities or infrastructure that is deemed important to the United States to pursue operational objectives. It is important for USAF decisionmakers to understand how USAF plans, programs, and concepts might affect air force-to-air force relationships, access, and alignment of interests.

The second category of SC impact, *operational*, is a type of impact that can be manifested in the form of enhanced partner capability and more-effective and timely intelligence-sharing, and

² Core functions are planning and programming activities championed by functional communities in USAF, particularly in the major commands (MAJCOMs). The core functions and their champions (core function leads [CFLs]) are air superiority, command and control, global integrated ISR, global precision attack, and personnel recovery operations, all under Air Combat Command (ACC); space superiority and cyberspace superiority, under Air Force Space Command; rapid global mobility, under Air Mobility Command (AMC); nuclear deterrence operations, under Air Force Global Strike Command; special operations, under Air Force Special Operations Command; agile combat support (ACS), under Air Force Materiel Command (AFMC); and education and training, under Air Education and Training Command (AETC). See Chapter Two for more information.

capacity-building training and exercises. Thus, USAF leaders should understand when decisions they make affect USAF capacity to build partner capabilities, support English language proficiency, improve interoperability, and exchange information.

The third category, *legal or regulatory*, is a type of impact that results in new or strengthened agreements or legal frameworks and easier transfer of appropriate technology to allies and partner nations. USAF decisionmakers need to consider when USAF plans and concepts might affect or be governed by international agreements, technology-transfer regulations, and other legal or regulatory constraints.

The fourth category, *workforce-related*, can be thought about in terms of USAF personnel, such as advisors, who are trained to engage effectively in SC. Thus, for example, how might USAF decisions affect USAF capacity to interact with foreign partners through recruitment and training of foreign language-proficient, culturally attuned, regionally oriented airmen who can easily interact with foreign partners and become experienced and qualified in partner systems and concepts?

The fifth category, *acquisition-related*, consists of research, development, test, and evaluation opportunities and creating economies of scale. In CD/A in particular, USAF decisionmakers should understand when it is appropriate to consider multilateral acquisition to lower unit costs, technology development with allies, and exchanges of ideas on future acquisitions.

The final category, *institutional*, can be thought of relative to improved or streamlined internal processes and realigned organizations that can take many different shapes. In part, this is the impact that our study sought—improvements in consideration of SC in core USAF processes. But USAF decisions on internal analytic efforts could affect institutional capacity for assessment, monitoring, and evaluation of SC; management of SC-related human capital; and other institutional efforts.

We return to these categories of SC impact later in our discussions of case studies and how the categories can be used to incorporate SC factors into core decisionmaking processes.

Methodology and Organization of the Report

The research reported here drew from reviews of DoD and USAF directives, instructions, and other documents associated with SC and with the two core processes under scrutiny. We perused more than 30 DoD instructions, USAF manuals and instructions, and guidance documents to provide insight into whether and how SC appeared in foundational documents that are intended to drive these processes. In addition, the study team developed discussion protocols to frame research questions on SC and the two core processes and at various echelons of command. Team members then conducted focused discussions with subject-matter experts throughout USAF, including the Secretariat (SAF/IA, the Assistant Secretary of the Air Force for Acquisition) and Air Staff (Operations [A3], Strategy and Requirements [A5], and Planning and

Programming [A8] directorates). We also reached out to planners, programmers, conceivers, acquisition personnel, and SC professionals in multiple MAJCOMs: AETC, AMC, AFMC, ACC, Pacific Air Forces, and U.S. Air Forces in Europe (USAFE)—Air Forces Africa. Some of these MAJCOMs house staffs that conduct planning, programming, capability development, and acquisition in each core function. In all, our team engaged in about 40 separate discussions. Experience with SC among interlocutors varied widely, and there were some differences in perspective on challenges in how USAF institutionally deals with it. Nearly all agreed that USAF can do a better job at incorporating SC into its OT&E processes.

Chapter Two provides brief reviews of the two core processes (SP3 and CD/A) and identifies key decision points in each. It then provides an assessment of the extent to which SC impact is considered and lays forth challenges that planners, conceivers, SC professionals, and others face in explicitly factoring SC into plans and initiatives. This analysis helps address the first two questions set forth earlier.

To provide greater insight into the second question, Chapter Three presents four case studies that briefly describes the processes engaged in SC-related programs and initiatives and draws lessons from their decision outcomes. The four cases are (1) undergraduate pilot training (UPT), in which foreign pilots attend courses to introduce them to USAF flying concepts in the same manner as new U.S. pilots are; (2) the light-attack aircraft, now termed the OA-X, which has been touted as a platform that both U.S. and foreign air forces can use in counterinsurgency (COIN) and counterterrorism operations; (3) the C-17 Heavy Airlift Wing (HAW), which is part of the Strategic Airlift Capability (SAC), a group of 12 nations (including the United States) that share three C-17 airlifters based at Pápa Air Base, Hungary; and (4) the Air Advisor Academy (AAA), a schoolhouse at Joint Base McGuire–Dix–Lakehurst in New Jersey established to train USAF airmen in preparation for overseas advisory assignments, especially in Afghanistan and Iraq.

Finally, Chapter Four summarizes the key findings of the research and answers the third question, offering options and recommendations to help USAF systematically incorporate SC impact into its core decisionmaking processes.

It should be noted that, at the time of writing, USAF was considering major changes to the core processes reviewed in this report. The findings and recommendations that emerge from our research should inform future institutional constructs.

Chapter Two. Security Cooperation in Core Air Force Decisionmaking Processes

Based on official USAF directives and instructions, as modified through interviews with headquarters, secretariat, and MAJCOM practitioners, this chapter describes the two major processes used to provide USAF the wherewithal to carry out its operational missions: the SP3 and the CD/A process. The former aims to ensure that planning drives programming rather than the reverse. The latter addresses high-priority gaps in operational capability through development of new concepts and, if materiel solutions are warranted, builds and procures new systems. Although we treat them separately in this chapter, these two processes can be linked—new capability development initiatives are introduced into the SP3, which can provide the resources necessary to acquire them.

The purpose of these process descriptions is to provide a context for understanding the relationship between USAF SC and the institutional USAF. To achieve such an understanding, this chapter (1) identifies decision points in these two core processes at which SC considerations might be effectively injected; (2) offers findings on how SC impact is or is not systematically incorporated into process documents and deliberations; and (3) analyzes the challenges faced by SC advocates and process managers in making SC a normal component of planning, programming, and capability development. For the most part, the results of this investigation are derived from interviews with Air Staff and secretariat officials who oversee the two processes, MAJCOM officials and CFLs who execute the processes, and SAF/IA and MAJCOM international affairs officials who plan, manage, and facilitate SC activities.

This chapter concludes that USAF core processes offer potential entry points for SC advocates interested in influencing planning, programming, and capability decisions. Currently, however, SC is not systematically considered except in the case of programs that are clearly dedicated to SC. Therefore, SC requirements, opportunities, implications, and risks are not visible to leaders who make final decisions on SP3 and CD/A outcomes.

Strategy, Planning, and Programming

The SP3 is the means by which the Department of the Air Force implements the first two steps in DoD's Planning, Programming, Budgeting, and Execution (PPBE) system—namely, planning (developing a vision and overall objectives for the future) and programming (a specified set and level of activities and the supporting resources to carry out the assigned missions). The ultimate goal of this process is to deliver a corporately derived program objective memorandum (POM) to OSD that presents DoD resource allocation decisions “in responding to

and in accordance with Defense Guidance” (Air Force Policy Directive [AFPD] 90-11, 2015, p. 11).

Designed to be both deliberate and adaptable, the SP3 integrates “strategy, concepts, and capability development to identify force objectives and programming” to support the organization, training, equipping, and posture missions of the entire USAF (AFPD 90-11, 2015, p. 1). The three main stages of the SP3 are (1) strategic planning (which includes the development of the USAF Strategy, the Strategic Master Plan [SMP] [SecAF and CSAF, 2015], the Strategic Planning Guidance [SPG], the Resource Allocation Plan, the Program Planning Guidance [PPG], and support plans, such as the Core Function Support Plans [CFSPs] and flight plans), (2) program planning and POM development, and (3) program POM defense (AFPD 90-11, 2015, p. 2).

The Air Staff, CFLs, and MAJCOMs carry out key SP3 roles and responsibilities. Within Headquarters Air Force (HAF), the Deputy Chief of Staff of the Air Force for Strategic Plans, Programs, and Requirements is the focal point for strategic planning and requirements, with HAF/A5 Strategy and Requirements responsible for building the USAF strategy and establishing USAF requirements and HAF/A8 responsible for building the USAF plan organized around departmental core functions. Appointed by SecAF and CSAF, CFLs are responsible for developing the CFSP (described in the next section), as well as for making recommendations related to the POM in their functional areas. MAJCOMs and other elements of USAF provide important inputs to strategy and planning documents and the POM.

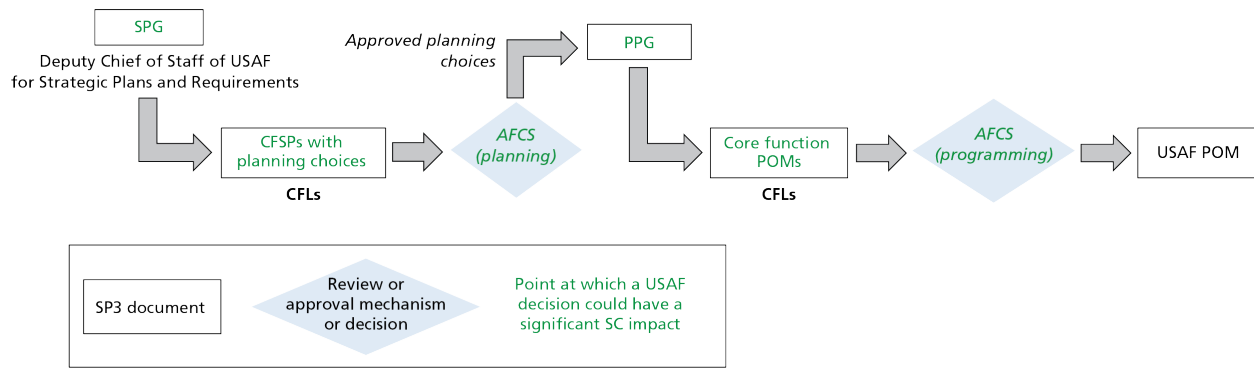
End-to-End Description of the Process

Figure 2.1 presents a simplified version of the SP3 that includes important process elements (documents and review and approval mechanisms) and points in the process at which USAF decisions could have a significant SC impact.

To briefly describe the figure flow, HAF Deputy Chief of Staff for Strategic Plans, Programs, and Requirements issues the SPG to guide USAF planning efforts across the service’s core functions, drawing on concepts, vectors, and priorities outlined in the Air Force Strategy and the SMP. The SPG serves as the basis for the CFLs’ CFSPs, which are, in turn, used as source materials in the development of strategic-level planning choices for top USAF leadership. These choices are refined and validated within AFCS, composed of three layers of officials representing all major USAF components. The planning-choice event is the culmination of the corporate planning process, enabling CSAF, SecAF, and other senior USAF leaders to make long-range resource allocation decisions and review the alignment of strategic planning and capability development priorities. Approved planning choices are reflected in programming guidance, which concludes the annual planning cycle and provides direction for POM development. CFLs use this guidance for formulating their core function POMs. AFCS members assess and debate the proposed program initiatives, disconnects, and offsets in these documents, which are then integrated into an overall USAF POM. After being approved by CSAF and

SecAF, the USAF POM is sent to OSD, which reviews the document and offers change recommendations that are addressed in the course of the program defense phase of the SP3.

Figure 2.1. The Air Force Strategy, Planning, and Programming Process: Major Documents and Review/Approval Mechanisms



SOURCES: AFD 90-11, 2015; interviews with SP3 participants.

NOTE: AFCS = Air Force Corporate Structure.

SP3 documents—as well as interviews with HAF and MAJCOM participants—indicate points within the SP3 at which SC considerations might be effectively injected. Most of these points are located in the planning phase when basic, crosscutting institutional decisions are being made and before choices have been narrowed and confined to specific USAF programs, most of which are not dedicated to SC. These decision points are associated with the following SP3 elements: the SPG, the CFSPs and planning choices, the planning aspect of AFCS, the programming guidance, and the core function POMs.

Strategic Planning Guidance

The SPG provides direction for subordinate planners and headquarters staff to develop and update plans that support strategic decisionmaking. It includes guidance related to capability development, major resource investments and divestments, risk mitigation measures, and studies and analyses in support of USAF leadership initiatives (AFPD 90-11, 2015, p. 9). According to HAF/A5, many directives that are ultimately incorporated into the SPG result from issues raised during the document coordination process, making it an advantageous point for major corporate stakeholders, such as SAF/IA, to influence the development and implementation of USAF strategy and planning.³

³ Author discussion with USAF officials, February 16, 2017.

Core Function Support Plans

Developed under CFL management, CFSPs provide USAF-level, long-range, functionally specific analyses and recommendations that support both the SP3 and capability development processes. (See Table 2.1 for a list of Air Force service core functions and CFLs.) As directed by the Air Force Strategy and the SPG, CFSPs integrate force development concepts and resources to ensure future viability of core function capabilities across the range of military operations. In particular, CFSPs “support the annual refinement of the fiscally constrained 30-year Resource Allocation Plan, capability gap prioritization, capabilities investment, and science and technology priorities.” They also make core function–related recommendations in support of POM development (AFPD 90-11, 2015, p. 9).

Table 2.1. Air Force Service Core Functions and Core Function Leads

Service Core Function	CFL
ACS	AFMC
Air superiority	ACC
Command and control	ACC
Cyberspace superiority	Air Force Space Command
Education and training	AETC
Global integrated ISR	ACC
Global precision attack	ACC
Nuclear deterrence operations	Air Force Global Strike Command
Personnel recovery operations	ACC
Rapid global mobility	AMC
Space superiority	Air Force Space Command
Special operations	AFSOC

SOURCE: Air Force Doctrine Document 1, 2011, pp. 42–53.

NOTE: AFSOC = Air Force Special Operations Command.

Since the demise of the short-lived BP core function in 2015, no CFSP has specifically targeted USAF SC activities. However, the ACS CFL at AFMC has been designated as SAF/IA’s entry point to AFCS.⁴ More generally, CFSPs offer potential injection points for SC considerations related to a range of USAF functions, provided that SC advocates can achieve buy-in from CFLs and an appropriate mechanism can be found. This is an important goal of SCEGS.

⁴ Author discussion with USAF officials, June 29, 2017.

Flight Plans

Currently, the flight plan is the principal means used by SAF/IA to influence the planning phase of the SP3. An instrument for USAF activities that lack CFLs, flight plans can be used to inform resourcing decisions and suggest inputs to CFSPs and planning-choice proposals. Although no specific requirements direct flight plan development, flight plans must be aligned with the strategy or the SMP (AFPD 90-11, 2015, p. 10). The challenge for developers is that flight plans are not an essential component of the SP3 and tend to be ignored by CFL, MAJCOM, and Air Staff planners unless a compelling analytical case is made for recommended changes.

Planning Choices

CFSPs are the key source of analysis for USAF planning choices, which are resourcing proposals rather than strategic options.⁵ CFLs prepare and submit planning choices to the department's senior leadership via AFCS. HAF/A8 scores planning choices based on their importance to strategy; trade-offs are then considered within AFCS; and CSAF and SecAF approve (or sometimes disapprove) the scored and refined list of choices. HAF/A8 uses the approved planning choices as the basis for its programming guidance to the CFLs and the MAJCOMs, which provides them the necessary detail to start the POM development stage of the SP3.⁶ Potentially, SC-related planning choices could be submitted via the ACS CFSP or other CFL CFSPs, although the \$250 million "floor" for a planning choice makes a stand-alone submission unlikely.⁷ Alternatively, SAF/IA, as a member of AFCS, has the opportunity to shape others' planning choices that it perceives as having an impact on SC.

Air Force Corporate Structure (Planning)

In its various manifestations, AFCS plays a key role in implementing USAF's PPBE process. Using three tiers of increasingly high-ranking members from all major stakeholder organizations, AFCS systematically analyzes and reviews planning, programming, and budgeting proposals before they are approved at the highest level of the department. Starting from the bottom level, the three tiers are the group, board, and council, chaired respectively by a one-star general officer or civilian equivalent, a two-star or equivalent, and a four-star or equivalent. Chairmanship shifts among Air Staff and USAF secretariat elements based on which aspect of PPBE the structure is considering. The Director of USAF for Plans manages the Air Force planning structure, including the planning group, planning board, and planning council, as well as the planning-choice events. SAF/IA has a permanent seat at each level of this structure, giving it the right to

⁵ Author discussion with USAF officials, February 16, 2017.

⁶ Author discussion with USAF officials, February 16, 2017.

⁷ Author telephone discussion with USAF officials, July 6, 2017.

present its views on all planning proposals that are under review—if it chooses to exercise it (Air Force Guidance Memorandum 2016_90-1101, 2016).

Programming Guidance

Informed by the outcome of the planning-choice events attended by USAF senior leaders, USAF modifies its 30-year Resource Allocation Plan. HAF/A8 then issues nearer-term programming guidance (Air Force Guidance Memorandum 2016_90-1101, 2016). The PPG document initiates POM development. It is followed by the program guidance memorandum, which provides the necessary detail to start the POM process.⁸ The formulation of these programming guidance documents represents the last point in the SP3 at which SC advocates might influence high-level resourcing objectives prior to their implementation in the form of individual program start-ups and changes.

Core Function Program Objective Memoranda

The POM displays the resource allocation decisions of the military departments in responding to, and in accordance with, defense guidance (AFPD 90-11, 2015, p. 11). The first step in the POM process for USAF is the development of the core function POMs under the direction of the CFLs. There are three rounds to this part of the programming process: (1) making zero-based transfers (fixing resource imbalances internally), (2) proposing initiatives (new starts) and identifying disconnects (broken programs that need to be fixed), and (3) proposing offsets (cuts to existing programs to fund new starts and fix disconnects).⁹ Following the guidance laid out in the PPG and the program guidance memorandum, these rounds take place within program panels led by representatives of the Air Staff and attended by program element (PE) managers from across USAF, including SAF/IA. Once the panels have made their initial programmatic decisions, their proposals are integrated, analyzed, and refined via the Air Force programming structure, which also has SAF/IA representation. As mentioned earlier, however, program development is generally a less desirable SP3 phase for SC advocates to intervene in than planning is, given the limited number of SC-dedicated programs and the incremental changes that normally result from the POM process.

Systematic Consideration of Security Cooperation Impact?

Having described the SP3 and potential points in that process at which SC advocates might intervene, this section addresses the question of the extent to which SC impact is currently considered in USAF planning and programming.

⁸ Author discussion with USAF officials, February 16, 2017.

⁹ Author discussion with USAF officials, March 7, 2017.

Security Cooperation Not Normally Considered by Core Function Leads

With some exceptions, SC is not part of CFL-level planning and programming. To a large extent, this is a result of USAF's decision to eliminate the BP core function in 2015.¹⁰ Despite the large number of SC activities executed by service components, AETC, the former BP lead, could not associate a set of dedicated PEs with the function that amounted to more than a minute fraction of the USAF budget.¹¹ Thus, there was little of consequence on which to focus in terms of planning choices or programming trade-offs. Although this is understandable, the decision to do away with the BP core function has left SC without a dedicated CFL or MAJCOM champion at the critical initial stage of planning. As a result, international affairs "input is not formally built into the process No one is giving [SC] data" to the CFLs; instead, they must pull such information, if it is needed, from external sources.¹² For the most part, however, they do not think about SC.¹³ Foreign "partner impact is not a metric" that CFLs normally consider in developing planning choices and programming inputs.¹⁴ A CFL official at ACC could not relate any examples during his tenure when SC had had a significant impact on decisionmaking, although he allowed that SC considerations might have influenced some planning decisions—for example, the location of F-35 and F-16 training units on bases that were accessible to foreigners. According to a HAF/A8 official, SC factors had "marginally" affected certain planning choices (e.g., those related to the multinational F-35 program and the C-17 NATO program).¹⁵

Having assumed responsibility for the SC program portfolio following the demise of the BP core function, AFMC's ACS CFL is necessarily more attuned to SC requirements, describing its role as "SAF/IA's conduit to the Air Force Corporate Structure." But the ACS element that handles SC is a "catch-all" of 98 disparate programs, including commissaries, counterterrorism and counternarcotics, the headquarters operating budget, and communications. As a result, no member of its staff is focused primarily on SC.¹⁶

Deputy Under Secretary of the Air Force for International Affairs Not Principally Involved in Programming Panels

SAF/IA plays a relatively minor role in programming deliberations at the entry point to the AFCS (i.e., the panel), relying on other MAJCOM and CFL organizations to advocate for SC programs on its behalf. AFMC/ACS officials claim that they work closely with PE managers in

¹⁰ Author discussion with USAF officials, March 7, 2017.

¹¹ Author discussion with USAF officials, May 31, 2017.

¹² Author discussions with USAF officials, June 13–14, 2017.

¹³ Author discussions with USAF official, May 31, 2017.

¹⁴ Author discussions with USAF official, June 27, 2017.

¹⁵ Author discussion with USAF officials, March 7, 2017.

¹⁶ Author discussion with USAF officials, June 29, 2017.

SAF/IA. However, the USAF-funded SC programs in ACS's portfolio constitute only a small portion of SAF/IA's resources, which derive mostly from security assistance funds provided by foreign partners and the U.S. Department of State. ACS actively advocates for only a handful of programs, including the Air National Guard's activities in the State Partnership Program and miscellaneous support of other nations, which together account for only \$35 million to \$40 million. Most of ACS's other SC programs are pass-throughs that USAF does not actively manage but for which it acts as an executive agent, such as counternarcotics, support to the CCMDs, and U.S. embassy air attachés.¹⁷ Other CFL and HAF elements are responsible for a small number of other SC-related programs and activities within the AFCS. For example, the program to expand air bases in Australia to accommodate U.S. air forces is covered by HAF/A8 posture officials on the Installation Support Panel.¹⁸ For its part, ACC programs some USAF operation and maintenance (O&M) funds for international exercises, although officials admit that these events do not fare well in competition with USAF-focused readiness exercises, such as Red Flag.¹⁹

Deputy Under Secretary of the Air Force for International Affairs Has Means to Exert Influence via the Air Force Corporate Structure

Although its impact in CFL and panel proceedings is mostly indirect, SAF/IA has a formal seat at the AFCS table. As described earlier in this chapter, SAF/IA is represented at the group, board, and council levels of the planning and programming corporate structures. That said, SAF/IA is in the initial stages of determining how best to exert its influence within the AFCS. None of the interviewees for this report within HAF or MAJCOM organizations mentioned any instances in which SAF/IA had injected SC-related imperatives into AFCS discussions. However, SAF/IA's recent sponsorship of SCEGS is clearly intended to provide a mechanism for building an international affairs community consensus on proposals that could be broached within the context of the AFCS. MAJCOM officials appear mostly supportive of this initiative, describing it as "a good step for inclusivity" and a helpful forum for synchronizing SC activities that could be used to funnel information to SAF/IA and reinforce its "voice in HAF deliberations."²⁰ Still, although SCEGS is still relatively nascent, these officials remain somewhat skeptical that SCEGS will fulfill its potential, claiming that it is "not being used to develop SC requirements that can be decided upon by senior leaders."²¹ Also, its influence could be limited by the fact SCEGS is a three-star, rather than a four-star, organization.²²

¹⁷ Author discussion with USAF officials, June 29, 2017.

¹⁸ Author discussion with USAF officials, March 16, 2017.

¹⁹ Author discussion with USAF officials, June 27, 2017.

²⁰ Author telephone discussion with USAF officials, July 6, 2017.

²¹ Author discussion with USAF officials, June 27, 2017.

²² Author discussion with USAF officials, June 29, 2017.

Key Challenges

Despite the potential for SAF/IA to exercise some influence on the SP3, SC advocates face significant challenges in systematically integrating SC into USAF planning and programming deliberations. This section outlines these challenges.

Inability to Place Security Cooperation on the Same Plane as Other Important Air Force Activities

The fundamental challenge for SC advocates within USAF is their inability so far to place SC in a bureaucratic context in which it can be measured and compared with other major USAF activities. According to SAF/IA officials, the BP “core function did not work because [SC] is so pervasive in all the USAF does; it didn’t make sense given the need to balance [SC activities] across all programs.”²³ Stated somewhat differently by one AETC official, SC’s problem is that it is “nebulous and conceptual” and thus “doesn’t fit into the planning process.”²⁴ Even if SC had a solid strategic foundation, asserted an AFMC official, it would still face the challenge of being an “enabler (like information technology) rather than an end state” around which USAF could organize.²⁵ Still, several interviewees acknowledged that USAF had managed to incorporate crosscutting support functions, such as command and control, into its core planning and programming processes. For their part, ACS CFL officials noted that it had been a challenge for them to establish relationships across various logistical activities in USAF for planning and programming purposes but that they had managed to do so. Although SC was “less mature” than ACS in an organizational sense, perhaps USAF should begin thinking about the two activities in a similar way.²⁶

Lack of Leadership Emphasis on Security Cooperation Integration into the Strategy, Planning, and Programming Process

Part of the reason that SC is not treated the same as other important activities is the lack of interest until very recently among top USAF leaders in integrating SC into core planning and programming processes. CSAF has called himself an international air chief and recognized the essential role of allies and partners in fulfilling USAF’s mission (Goldfein, 2017), yet this favorable perspective has not, so far, had much effect on how USAF conducts its institutional business during a time of funding constraints, force structure reductions, and readiness

²³ Author discussion with USAF officials, March 6, 2017.

²⁴ Author discussion with USAF officials, May 31, 2017.

²⁵ Author discussion with USAF officials, June 29, 2017.

²⁶ Author discussion with USAF officials, June 29, 2017.

concerns.²⁷ In recent years, SAF/IA has acquired the status of first among equals within the SC realm (see AFPD 16-1, 2015, p. 7), yet many in the USAF international affairs community still view it primarily as an advocate for one component of SC (i.e., foreign military sales [FMS]). Furthermore, its authority does not extend to important USAF international activities, such as multinational exercises, operational engagement talks, and counterpart visits.²⁸ Finally, MAJCOM leaders have been reluctant to play a significant SC role. Reportedly, the previous ACC commander declined to take responsibility for the BP core function, stressing “the need to be ready for the high-end fight” and claiming that SC was not the primary focus of his organization.²⁹

Lack of Security Cooperation Knowledge and Experience Within the Greater Air Force

Another disadvantage for SC in terms of its integration into the SP3 is the lack of knowledge and experience of what SC is and what its relationship is to other USAF activities. According to AETC officials, it might be possible to insert SC considerations into USAF strategic guidance, “but we don’t have the knowledge to describe the impact” that SC has on other USAF activities and objectives.³⁰ Similarly, HAF/A8 officials wondered how one might define SC’s effects in terms of, for example, access to markets or the contribution of partner capabilities to combined operations. This would be necessary in order “to discuss SC as part of a [planning/programming] trade-off” or to incorporate it into core function interdependency assessments.³¹ Currently, “there is no one with international affairs expertise within CFLs to ask about international impact,” say ACC officials. Ideally, there would be a position for an SC program manager who would not be responsible for individual PEs but rather “would focus on capability gaps and how to fill them” via SC and then incorporate his findings into the CFSP.³²

Security Cooperation Not a Program-Based Activity That Can Be Managed Like Most Other Air Force Activities

As indicated earlier, another SP3 challenge for SC is that it is not PE-based activity that can be managed like most other USAF activities. One of the main things that doomed the BP core function was that it never amounted to much programmatically. Narrating BP’s short history, an AETC official stated that his organization had “racked and stacked all the [USAF] programs”

²⁷ At this writing, USAF was in the process of developing courses of action for better integrating SC into decisionmaking (author discussions with USAF officials, July 21, 2017, and August 4, 2017).

²⁸ Author discussion with USAF officials, June 27, 2017.

²⁹ Author discussion with USAF officials, June 27, 2017.

³⁰ Author discussion with USAF officials, May 31, 2017.

³¹ Author discussion with USAF officials, March 16, 2017.

³² Author discussion with USAF officials, June 27, 2017.

that were clearly dedicated to SC. In so doing, they discovered “that 80 percent of the program [resources] we can’t touch” because they were tied to DoD programs for which USAF was simply the executive agent. Most of the remaining 20 percent of BP resources were devoted to a single program: Light Mobility Aircraft. When the leadership removed that program from BP’s portfolio, “there was nothing left” for the CFL to manage. So USAF “killed BP” and dispersed its programs among the remaining core functions.³³ The problem with this solution is that SC programs do not compete very well in this environment. At Pacific Air Forces, for example, only one PE is considered SC-dedicated, three-quarters of whose resources are used to fund Pacific Angel exercises, and the rest (only \$4.4 million per year) are divided among numerous smaller activities.³⁴ Such activities are not worthy of consideration within the context of USAF strategic planning, in which a planning choice must have a floor value of \$250 million, which means that SC is implicitly aggregated within higher-value proposals that often have little to do with SC.³⁵

Security Cooperation Not Currently Emphasized in Air Force Planning and Programming Guidance

Compounding the problem of SC’s virtual invisibility programmatically is the fact that SC factors are mostly absent from planning and programming guidance. Some MAJCOM interviewees thought that it might be reasonable to include SC considerations within the SPG. Currently, USAF strategic guidance contains language regarding the importance of working with partner nations, but it does not specify what needs to be done and what the impact would be of not doing it.³⁶ Still, ACC officials were skeptical that partner-nation contributions in terms of those nations’ shares of aircraft, munitions, and pilot training would be nearly comparable to U.S. contributions and said that, “unless a partner-related choice was good for us, we wouldn’t [make] it.” But they did think that there might be a role for SC in the core function interdependency analysis managed by the Director of Studies, Analyses and Assessments (HAF/A9). Currently, two noncore crosscutting functions are included in this analysis (electronic warfare and operational training infrastructure); conceivably, SC could be added to the mix.³⁷ None of MAJCOM or CFL officials interviewed had much use for SAF/IA’s Flight Plan in its current form. For their purposes, the flight plan would need to specify what SC initiatives should be funded in the next five, ten, and 20 years. Furthermore, it would need to show the “relationships between SC and other USAF equities,” the capabilities offered by SC, and the risk to USAF of not having these capabilities.³⁸

³³ Author discussion with USAF officials, June 13–14, 2017.

³⁴ Author telephone discussion with USAF officials, July 6, 2017.

³⁵ Author telephone discussion with USAF officials, July 6, 2017.

³⁶ Author discussion with USAF officials, June 29, 2017.

³⁷ Author discussion with USAF officials, June 27, 2017.

³⁸ Author discussion with USAF officials, June 29, 2017.

Personnel Shortages Limit the Ability of Security Cooperation Professionals to Integrate Security Cooperation into the Strategy, Planning, and Programming Process

Because of personnel shortages and legal restrictions, SC professionals within the MAJCOMs are unable to shed much light on SC's importance to the Air Force. For example, at ACC, the international affairs office is rarely involved in the command's planning and programming process. The bulk of ACC's international affairs staff is funded via the administrative fee attached to FMS and so cannot legally perform duties that pertain to USAF-funded SC initiatives. The remainder of the staff, which is DoD-funded, is too overloaded with current operations "to do studies to figure out what's missing [with respect to SC] in [ACC's] core functions."³⁹ AMC international affairs officials also stressed that their reduced levels of action officers and support personnel left them unable to take on new responsibilities. Asked whether the international affairs office could insert an SC perspective into AMC planning and programming if it had more manpower, they said yes. But without more funding, they will continue to "look at things" from a strictly command perspective.⁴⁰

Capability Development and Acquisition

Like SP3, USAF's CD/A processes are service-level components of larger DoD systems—in this case, JCIDS and the DoD acquisition system. JCIDS identifies, assesses, validates, and prioritizes joint military capability requirements by considering the full range of potential materiel and nonmateriel solutions (i.e., doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy) (Air Force Instruction [AFI] 10-601, 2013, pp. 6–7). Starting with approved materiel requirements, DoD's acquisition system develops and executes a plan for managing the production of weapons and other defense articles according to prescribed milestones (MSs) and performance and financial standards in collaboration with private industry.

To develop its capability requirements, USAF draws from a range of national, DoD, and joint operational sources. Overarching strategic guidance comes from the National Security Strategy (Trump, 2017), the National Strategy for Homeland Security (Homeland Security Council, 2007), the National Defense Strategy (DoD, 2018), the Quadrennial Defense Review (QDR) (Hagel, 2014), and the National Military Strategy (Joint Chiefs of Staff, 2015). In addition, the Defense Planning Guidance, the Guidance for Employment of the Force, the Chairman's Risk Assessment, and the Joint Strategic Capabilities Plan provide a DoD framework for assessing the service's needed capabilities.⁴¹ Finally, capability requirements must be linked to Unified

³⁹ Author discussion with USAF officials, June 27, 2017.

⁴⁰ Author discussions with USAF officials, June 13–14, 2017.

⁴¹ The Defense Planning Guidance is a document internal to personnel within the presidential administration. None of these documents is available to the public.

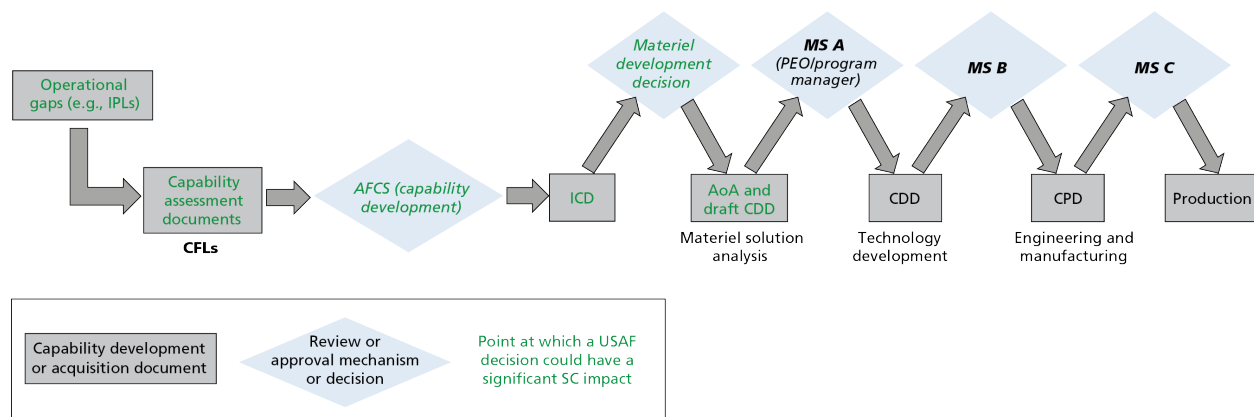
Command Plan–assigned missions, CCMD operations or contingency plans, and other joint concepts and constructs (AFI 10-601, 2013, p. 6).

A principle important both to JCIDS and to USAF’s capability development process is that the process of identifying required capabilities “should not presuppose a specific solution [materiel or nonmateriel] or end item [type of equipment].” Furthermore, the process should rely on analysis and seek to explore and compare alternative ways of meeting the warfighter’s demand for “suitable, safe, and interoperable” capabilities that are also “affordable” and “mitigate mission risk” (AFI 10-601, 2013, p. 6).

End-to-End Description of the Process

Figure 2.2 presents a simplified version of USAF’s capability development and acquisition processes, with an emphasis on capability development. It includes important process elements (documents and review and approval mechanisms) and points in the processes at which USAF decisions could have a significant SC impact.

Figure 2.2. Air Force Capability Development and Acquisition Process: Major Documents and Review/Approval Mechanisms



SOURCES: AFI 10-601, 2013; interviews with USAF officials involved in capability development and acquisition.

NOTE: IPL = integrated priority list. ICD = initial capabilities document. AoA = analysis of alternatives. CDD = capability development document. CPD = capability production document. PEO = program executive officer.

In brief, the capability development process commences with the identification of an operational gap, generally based on a priority CCMD need expressed in the CFSP. This can cause a CFL to request a capability-based assessment (CBA) to determine the nature of the capability requirement and assess the extent of any capability shortfalls within the context of USAF. If its request is approved, the CFL undertakes the assessment, in collaboration with a high-performance team of subject-matter experts from relevant USAF components and presents a draft CBA document to the members of the AFCS responsible for capability development. If the CBA is approved, the CFL proceeds to develop an ICD, which recommends a materiel or

nonmateriel (or a combination of materiel and nonmateriel) approach to satisfy specific capability gaps. The ICD is then submitted to the capability development corporate structure for review and approval. If the ICD recommends a materiel development decision and it is approved, an AoA is conducted to compare the effectiveness and cost of feasible capability alternatives. In addition, a draft CDD provides information required for technological development.

At this point, USAF and DoD leadership—via the Air Force Requirements Oversight Council (AFROC) and the Joint Requirements Oversight Council (JROC), respectively—decide whether to begin the acquisition process (MS A). If so, a PEO or program manager is chosen to supervise the acquisition effort. In addition, the CFL produces a final CDD, which contains a detailed description of the technology development strategy. The next decision is whether to enter the engineering and manufacturing phase of acquisition (MS B). If the decision is positive, the CFL develops a CPD, which defines an increment of useful, supportable, and technically mature capability that is ready for a production decision (MS C). Upon approval of the CPD, production begins.

Interviews with USAF officials at the HAF and MAJCOM levels and a review of the relevant DoD and service documentation indicate multiple decision points along the CD/A continuum at which SC advocates might exert influence so as to ensure that partner militaries can benefit as much as possible from the development of USAF capabilities. These points include the identification of operational gaps, the conduct of the CBA, the review of the CBA within the AFCS, the development of the ICD and the materiel development decision, and the development of the AoA and draft CDD. Like in the SP3 case, these key decision points are located in the first stage of the combined CD/A process—that is, prior to the initial acquisition decision (MS A). After this point, any substantial modifications to the procurement program to address SC concerns could prove very costly or cause lengthy production delays.

Operational Gaps

As indicated earlier, the motivation for a capability development initiative starts with a prioritized operational gap or shortfall identified in the CFSP.⁴² Such a gap or shortfall could be derived from an examination of a CCMD's IPL, a joint urgent operational need, or a joint emergent operational need as seen through the lens of DoD and USAF strategic guidance and supporting analysis and operational capability requirement documents provided by the regional USAF component (AFI 10-601, 2013, p. 9). Contained within the CFSP, the CFL's assessment of operational gaps and risks, along with potential materiel and nonmateriel solutions and associated costs, becomes the basis for the CBA (AFI 10-601, 2013, p. 8). This suggests several possible entry points for an SC advocate interested in shaping the description or assessment of an operational gap that relates to partner militaries: within service component staff, the CCMD staff, or the CFL organization.

⁴² Author discussion with USAF officials, March 16, 2017.

Capability-Based Assessment

The CBA is the first formal study in the capability development process. For a CFL, it consists of the following activities: analyzing what is required for the warfighter to accomplish a designated USAF mission with an approved concept of operation (defining the capability required), comparing the capability required with the capabilities provided by any existing and programmed systems (gap analysis), and identifying associated gaps and redundancies. The final step of the CBA is to analyze the full doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy spectrum to determine what gaps can be closed or mitigated without the acquisition of new materiel (AFI 10-601, 2013, p. 34). Although an SC advocate might find it difficult to argue that a partner capability can fully fill a gap in a USAF requirement, the advocate might be able to convince the CFL that certain partner needs or capabilities should be accounted for in the CBA requirement definition or gap analysis.

Air Force Corporate Structure (Capability Development)

All of the major capability development documents—including the CBA, the ICD, the AoA, the CDD, and the CPD—must be critiqued by the members of the AFCS responsible for capability development. Recently, this organization has been reformed and expanded in “an effort to inject strategic thinking into the [capability development process] and align efforts across the Air Force.”⁴³ Although the AFROC still exists, it functions as a final reviewer and approver once the new Capability Development Council (CDC) and Capability Development Working Group (CDWG) have completed their more-thorough documentary vetting.⁴⁴ One level down from the AFROC, the CDC establishes strategic objectives for USAF capability development activities, validates the prioritization of capability gaps, directs capability development activities, and serves as the primary USAF decisionmaking body for capability development decisions. The CDWG supports the CDC by reviewing and assessing capability development progress and recommending prioritization of USAF capability gaps, strategic opportunities, and capability development efforts. HAF/A5/8 chairs the CDC. Standing members of the council come from various HAF organizations, not including SAF/IA, although other two-star stakeholders are “strongly encouraged” to attend council sessions when matters relating to their areas of responsibility are being discussed. Cochaired by a colonel-level representative from HAF/A5 and SAF/AQ, the CDWG membership reportedly is broader than that of the CDC, including “all HAF, MAJCOM, CFL, and total force stakeholders” (“Charter for Air Force Capability Development,” 2016). Therefore, there is at least the potential for SAF/IA to raise issues related to the SC impact of capability development decisions within the AFCS if it chooses to do so.

⁴³ Author discussion with USAF officials, June 29, 2017.

⁴⁴ Author discussion with USAF officials, March 16, 2017.

Initial Capabilities Document

If the CBA is accepted by the Air Force council and approved by the AFROC and, possibly, the JROC, the next step is for the CFL sponsor to draft an ICD that describes the new capability requirements, as well as the associated capability gaps and risks of not filling them. The following are also included in the ICD: a concept of operations that indicates desired operational outcomes and outlines how the envisioned capabilities are to be employed, an initial affordability assessment, recommendations on mitigating the capability gap, and a determination of readiness to proceed with an AoA study plan in the event that a materiel solution is recommended (AFI 10-601, 2013, p. 37). Once drafted, the ICD is assessed and reviewed via the AFCS in a similar fashion to the CBA, providing SAF/IA or another SC advocate an opportunity to express a partner-oriented view of the proposed new capability.

Analysis of Alternatives

Two additional sets of documents are required of a CFL sponsoring a materiel capability prior to the initial acquisition decision: the AoA and the draft CDD. The AoA is an analytical comparison of the operational effectiveness, suitability, risk, and life-cycle cost of alternatives that satisfy validated capability needs described in the approved ICD (AFI 10-601, 2013, p. 7). Its purpose is to explain “the tradespace for new materiel solutions to satisfy an operational capability need,” as well as to provide the analytic rationale for the capability performance attributes specified in subsequent CDDs. Ideally, the AoA study team includes both members drawn from the initial phase of the requirement analysis effort and representatives from additional HAF elements, MAJCOMs, USAF agencies, and possibly other services (AFI 10-601, 2013, p. 38). Presumably, an international affairs representative could also be included in the study team if adequate justification were provided.

Draft Capability Development Document

The draft CDD is produced following the approval of the AoA. This document provides the information necessary to start the technological development phase of the acquisition process. In particular, it identifies key performance parameters (KPPs), key system attributes, and other performance characteristics of the proposed capability (AFI 10-601, 2013, p. 44). It is conceivable that SC-related objectives, such as partner interoperability and exportability, could be among the parameters, attributes, or characteristics outlined in the draft CDD.

Systematic Consideration of Security Cooperation Impact

This section discusses whether SC advocates have been able to inject their data and perspectives into the capability development analyses, documents, and structures described earlier. It shows that, so far, their influence on CD/A has been limited at best.

Security Cooperation Not Considered Much in Initial Capabilities Development

CFLs acknowledge that they do not currently focus very much, if at all, on SC requirements in the early stages of capability development. According to one ACC official, there would be only one reason for focusing a CBA on a U.S. ally: “if the issue was between developing a capability ourselves or relying on someone else.” However, he suggested that this kind of an issue was more likely to arise in relation to other services than with respect to partner-nation militaries.⁴⁵ This official thought that SC factors could be considered earlier in the capability development process, but that would entail additional costs during a period when USAF is under pressure to reduce costs. The official mentioned the example of the Distributed Mission Operations capability for combat training exercises, testing, and experimentation now being fielded by USAF, which key U.S. allies have expressed an interest in acquiring. Involving them in determination of requirements for this capability might have been useful, albeit difficult because of classification issues. In general, “few countries can afford to invest in development like the U.S.; they believe what is good for the USAF is good for them.” Furthermore, the official considered weapon systems too complex to factor in SC early on: “It would slow the development process, which is already too slow.”⁴⁶ The official noted that allied and partner interoperability is a consideration later in the capability development process (e.g., in the building of architectures and interfaces), which is discussed in the CDD.⁴⁷ However, none of these comments suggested that USAF conceivers could not incorporate SC factors early in the process, even if, in the end, they do not drive development.

When Partners Are a Focus of Capability Development Decisions

There have been a few cases in which SC partners have been an early focus of USAF capability development decisionmaking—the most important being the codevelopment of the F-35 fighter aircraft. Although MAJCOM capability developers are normally concerned about meeting U.S. rather than foreign-partner goals, in the case of the F-35, it was preordained that allies would be involved in the acquisition of the system. Thus, this was to be an international development effort from the start. However, ACC officials question whether the F-35 case provides a good example of how SC might be further embedded in the capability development process. In their view, the international aspect of F-35 development was “largely political” (e.g., involving the determination of cost shares): “JCIDS documents were an afterthought.”⁴⁸ One sign of the lack of deliberate SC planning is the current challenge of finding an appropriate

⁴⁵ Author discussion with USAF official, June 27, 2017.

⁴⁶ Author discussions with USAF officials, June 13–14, 2017.

⁴⁷ Author discussion with USAF officials, June 27, 2017.

⁴⁸ Author discussion with USAF officials, June 27, 2017.

funding mechanism to support the ferrying of aircraft and provision of tactical manuals to the nine foreign partners involved in codeveloping the F-35.⁴⁹

The ill-fated Light Attack/Armed Reconnaissance (LAAR) aircraft, also known as OA-X, is an example of a USAF system that was developed at least in part with the idea that it would be purchased by developing partner nations under threat from insurgents and terrorists. In this case, the proposal for 15 aircraft and training crews to be based at Nellis Air Force Base (AFB) successfully navigated the capability development process, received JROC approval, and was programmed and budgeted—only to have the funding pulled by Congress because of concerns about contract selection (see the OA-X case study in Chapter Three). According to ACC, there will be partner-related implications from developing the latest version of the OA-X, “but they won’t drive what is in the requirements documents”; instead, the focus will be on satisfying U.S. capability needs.⁵⁰

Deputy Under Secretary of the Air Force for International Affairs Involved in the Acquisition Process

Although it is not currently a player in developing capabilities, SAF/IA is heavily involved in the acquisition process when existing systems are being considered for transfer to foreign partners. In fact, the directive that governs all DoD acquisition states that exportability and other international partnership factors must be “considered” in the acquisition process. However, DoD Instruction (DoDI) 5000.02 does not spell out what this means in terms of component responsibilities (Interim DoDI 5000.02, 2013). SAF/AQ’s acquisition process model briefing includes several backup slides related to “international cooperation.”⁵¹ However, SAF/IA officials assert that there is nothing in USAF official documents about exportability. Furthermore, they perceive the CFLs and MAJCOMs as not viewing exportability as a broad USAF requirement but rather as a SAF/IA responsibility for which they are paying.⁵² Nevertheless, these officials pointed to an example in which the focus on exportability had had an impact on the USAF acquisition process: higher-level antitamper security and technology to address the problem of the loss of equipment in battle. Although injecting SC considerations into acquisition can be expensive, in this case, partners pay for the extra antitamper protection through higher per-unit cost.⁵³

⁴⁹ FMS-funded international affairs personnel at ACC with the requisite expertise are not legally permitted to undertake these tasks in the case of partner nations that codeveloped the F-35 rather than purchasing it via FMS (author discussion with USAF officials, June 27, 2017).

⁵⁰ Author discussion with USAF officials, June 27, 2017.

⁵¹ Author discussion with USAF officials, January 31, 2017.

⁵² Author discussion with USAF officials, March 1, 2017.

⁵³ Author discussion with USAF officials, May 15, 2017.

Key Challenges

Several challenges limit the consideration given to SC factors in capability development. This section describes these challenges.

Operational Gap Analyses Do Not Normally Include Partners

One of the reasons that SC plays a minor role in capability development is that USAF operational gap analyses mostly ignore the role that allies and partners might play in future wartime scenarios. MAJCOM leaders acknowledge that the “Force of the Future” will rely more on partners than present forces do, but the United States cannot compel foreign nations to join it in coalition operations. As an example, ACC officials pointed to international pilots assigned to USAF positions who cannot take on certain missions because of restrictions imposed by their governments (as well as U.S. classification policies).⁵⁴ Unwilling to accept the risk of including partners, operational gap analyses are mostly U.S.-only exercises, thereby failing to account for what foreign militaries could provide (with or without additional SC) to alleviate current or future gaps. If anything, MAJCOMs tend to view international partners as a near-term liability. In this zero-sum perspective, the requirements on USAF exceed its capacity with respect to, for example, munitions, aircraft, and pilots, and partners are seen as detracting from USAF’s ability to increase capacity—by drawing from the same procurement lines, taking the same undergraduate pilot courses, and degrading the quality of training exercises.⁵⁵

Core Function Leads Face Constraints on Including Security Cooperation in Capability Gap Assessments

Aside from their uncertainty and skepticism regarding partner participation in coalition operations, MAJCOMs and CFLs face other constraints on including SC considerations in their assessments of capability gaps. These include the fear of losing out in the battle for budgetary resources and the need for CCMD buy-in before factoring in partner capabilities. According to ACC officials, if they created a capability gap with an international dimension, such as in precision strike or surveillance aircraft, that would only encourage DoD budgeters to decrement CFL resources, assuming that foreign-partner forces would fill the gap in lieu of USAF. But even assuming that they had an incentive to incorporate partners into their capability assessments, the CFLs were not likely to do so on their own. This is because most USAF capability gaps are filtered through the CCMDs in the form of IPLs. Thus, a CCMD would have to favor establishing a capability gap that pertains to a partner’s military rather than to the U.S. military. ACC officials believed that U.S. European Command (EUCOM) might be amenable to such an initiative because of the relative reliability, durability, and utility of NATO military partnerships.

⁵⁴ Author discussion with USAF officials, June 27, 2017.

⁵⁵ Author discussion with USAF officials, June 27, 2017.

However, other CCMDs weight the contributions of partners differently in terms of their proximity to the fight, capability level, alliance strength, and history of operating with the United States.⁵⁶

Major Commands Resistant to Making Security Cooperation Factors Key Performance Parameters

As previously noted, SC factors are considered in later stages of the CD/A process. However, these factors rarely become KPPs, making them potentially vulnerable to being set aside by program managers because of cost and scheduling demands. For their part, AMC officials resisted the idea of adding an SC-related KPP to an overloaded and dysfunctional requirement system.⁵⁷ In particular, they did not think it wise for exportability to “drive the process,” except in certain instances, such as the F-35 and munition procurement. In their view, this might harm USAF readiness by denying forces the needed aircraft and trained pilots.⁵⁸ Still, they allowed that U.S.–partner interoperability was a factor that should be captured in CDDs, albeit, in most cases, as a key system attribute, a more numerous and lower-priority characteristic than a KPP.⁵⁹

Conclusions

The SP3 and CD/A process offer both opportunities and challenges to those in the international affairs community who are attempting to ensure that senior USAF decisionmakers consider the relationship of SC to achieving service- and national-level objectives. On the one hand, each process includes points at which SAF/IA or another SC advocate could inject SC considerations into CFL, MAJCOM, and HAF discussions, analyses, and documentary reviews. In both cases, the most-advantageous decision points appear to be relatively early on in the process—when high-level, crosscutting issues can still be raised and the cost of making changes to a plan, program, or weapon system is not excessive. With respect to the SP3, these points are mostly in the planning stage: the SPG, the CFSP and planning-choice development, AFCS for planning, the programming guidance, and the core function POMs. For CD/A, they are located in the operational gap analyses, the CBA, the capability development corporate structure, the ICD, the AoA, and the draft CDD.

On the other hand, there are few indications that SC is being seriously or systematically considered within the context of either of the two processes. At the planning entry level, SC is not normally a concern of the CFLs in their development of CFSPs and draft planning choices. The principal SC advocate, SAF/IA, has only a minor role in programming. Theoretically, it can

⁵⁶ Author discussion with USAF officials, June 27, 2017.

⁵⁷ Author discussions with USAF officials, June 13–14, 2017.

⁵⁸ Author discussion with USAF officials, March 1, 2017.

⁵⁹ Author discussions with USAF officials, June 13–14, 2017.

exert influence on USAF planning and programming as a member of the corporate structure. Although there is little evidence that it has done so to this point, the establishment of SCEGS provides a potential mechanism for SAF/IA to offer informed, community-based inputs to the corporate structure. If anything, capability development is less-fertile ground for SC than SP3. With very few exceptions, partner militaries are not a focus of CBAs. Furthermore, SAF/IA plays no role in capability development, although it is involved in acquisition when export decisions are being made.

Although they are not insurmountable, the challenges to increasing SC's influence on planning, programming, and capability development are substantial, particularly in an operationally demanding, resource-constrained environment when foreign partners are often perceived more as resource takers than as providers. Key SP3 challenges include the pervasive character of SC, which has prevented it from acquiring a functional home; the lack of senior-leader emphasis on integrating SC into core planning and programming processes; the lack of SC knowledge and experience within the greater USAF; the lack of large SC programs that can compete with non-SC programs as planning choices and POM initiatives; the near absence of SC in planning and programming guidance documents; and personnel shortages that limit the ability of SC professionals to integrate SC into plans and programs at the MAJCOM level. Capability development challenges include the exclusion of partner militaries from operational gap analyses; CFLs' lack of incentive for developing partner-focused capabilities and deference to CCMDs with varying levels of interest in SC; and MAJCOM resistance to selecting SC factors, such as interoperability, as KPPs.

Notwithstanding the difficulties of institutionalizing SC within USAF, there is openness within HAF and the MAJCOMs and CFLs to considering SC's impact more systematically in the SP3 and the CD/A process. However, they will need more-detailed guidance and analysis on SC requirements and gaps, as well as on the risks of not filling these gaps. For the most part, this will probably need to come from SAF/IA because there is reluctance within reduced MAJCOM international affairs staffs to taking on strategic-level work when they can barely manage their current operations.

Chapter Three. Four Case Studies of Security Cooperation–Related Decisions

In this chapter, we discuss four case studies of SC-related programs to provide greater insight into USAF core processes and the impact of SC considerations at various decision points in these processes. The four case studies are (1) UPT; (2) light-attack aircraft, also known as the OA-X or LAAR; (3) the C-17 SAC, including the HAW; and (4) the AAA. We selected these programs based on their relevance to planning, programming, and CD/A processes, as well as their impact on the USAF ability to conduct SC. We also added two other criteria that were important to our sponsor: whether the program is SC-focused (or SC-dedicated) and whether the program is materiel- or non-materiel-oriented. To achieve some diversity across our case studies, we selected one case to represent each of the four combinations of the two criteria (see Table 3.1). These four cases are intended to be illustrative and are not necessarily representative of all SC-related programs. They do, however, provide important insights into core USAF decisionmaking processes.

Table 3.1. Criteria for Four Air Force Cases of Security Cooperation–Related Programs

Nature of Case	Focus of Case	
	SC	Not SC
Materiel	C-17 consortium	OA-X
Nonmateriel	AAA	Pilot training

Our presentation of each of the four case studies follows a similar format. Each begins with a brief introduction and background of the case that includes a discussion of the origin of the requirement, the key stakeholders, and the directive that supported the initiative. The background also includes a timeline of the initiative and a brief discussion of the evolution of the case. In the second part of each case study, we focus on the decisionmaking processes involved—either the SP3 or the CD/A. We consider where and when SC inputs were successful and when they were missed, what organizations conveyed the inputs, and which stakeholders challenged the inputs. Where applicable, we note the decision points that could have incorporated SC considerations but did not and what went right or wrong at each decision point.

In the third section of each case study, we discuss the outcome of the decisions on U.S. partners and the United States’ relations with its partners, as well as on USAF’s ability to OT&E to meet SC requirements. We conclude each case study with a discussion of the lessons that can be drawn from USAF decisions concerning each program or initiative, focusing on the type of SC injections that were most effective and what might have been done to prevent some of the

missed opportunities. Because each case is unique, we evaluate these lessons somewhat differently. In some cases, we evaluate the observed impact of SC injections in USAF decisions, while, in others, where decisions have yet to be made, we consider potential impacts. And in one case, that of the OA-X aircraft, we evaluate lessons of both SC impacts of a past USAF decision (to cancel the OA-X) and potential impact of future decisions (regarding the revival of the OA-X program).

We also consider whether each case provides generalizable lessons that might be codified into core processes. Finally, we draw the lessons learned from all four case studies at the end of the chapter to consider how together they might help to inform our recommendations.

Case Study I: Specialized Undergraduate Pilot Training

The specialized UPT (SUPT) program is a nonmateriel case with a dual mission to train U.S. pilots and provide military training to foreign partners to meet U.S. SC objectives (see Table 3.2). The program is linked directly to the SP3 through the Aircrew Training and Distribution Requirements (ATDR) process, which is used to integrate domestic and international requirements. The SUPT case demonstrates how USAF core institutional processes have largely been able to satisfy international needs for UPT to this point, according to U.S. defense officials, in part because of a reduction in USAF pilot production in the past decade.⁶⁰ However, this positive outcome has depended on adequate training capacity for U.S. and partner forces, which might not be available in the future as the demand for U.S. pilot training increases.

Table 3.2. Case Study of Security Cooperation–Related Program: Pilot Training

Nature of Case	Focus of Case	
	SC	Not SC
Materiel	C-17 consortium	OA-X
Nonmateriel	AAA	Pilot training

Background

The SUPT program is a 52-week academic and flying training course designed to prepare U.S. student pilots to fly a full spectrum of aircraft and flying missions. It is also USAF’s primary pilot training program available to international partners within the United States.⁶¹

⁶⁰ Author discussions with USAF officials, May 31, 2017, and July 19, 2017.

⁶¹ Students enter the program after receiving basic undergraduate flying courses. SUPT is a two-track program, with initial training on the T-37 followed by a second track consisting of either bomber-fighter training on the T-38 aircraft or tanker-airlift training on the Beech T-1A Jayhawk aircraft. Euro-NATO Joint Jet Pilot Training is the

International students from more than 20 partner nations participate in SUPT alongside USAF students to obtain advanced flying training, which serves as a vehicle for achieving, either directly or indirectly, DoD SC goals. According to DISCS, “the U.S. international military training program may be one of the most important security cooperation (SC) engagements the U.S. has with another country.” DISCS points specifically to the importance of international training in sustaining U.S. relationships with foreign partners: “Long after a country purchases, utilizes, and disposes of U.S. military equipment, what remains are the experiences the international military student (IMS) had during training” (Defense Institute of Security Assistance Management, 2008).

The international component of SUPT is an example of security assistance overseen by the U.S. Department of State and managed by DoD, which includes the training of foreign personnel as authorized under the Foreign Assistance Act of 1961 (Public Law 87-195, 1961) and the Arms Export Control Act of 1976 (Public Law 94-329, 1976), as amended and codified in Title 22 of the U.S. Code. This means that foreign participation in SUPT courses is largely covered by partner-nation tuition—that is, funded by the partner via an FMS case or through a U.S.-funded grant program, such as the Foreign Military Financing program (Defense Institute of Security Assistance Management, 2008).

As a matter of DoD policy, USAF has both domestic and international training responsibilities. On the one hand, the department is charged with training U.S. air, space, and cyberspace forces “for the conduct of prompt and sustained combat operations, military engagement, and security cooperation” (DoDD 5100.01, 2010). On the other hand, it is responsible for conducting military education and training with “eligible foreign countries and international organizations” under the direction of the Under Secretary of Defense for Policy and the Defense Security Cooperation Agency (DoDD 5132.03, 2016, p. 11). According to one USAF official, “international training requirements are not separate from U.S. requirements; they are within the same pipeline.”⁶² To help accomplish this dual training mission, USAF uses one basic planning process—ATDR—which is part of the SP3.

There are three principal international training planning and programming stakeholders within USAF: SAF/IA, AETC’s Air Force Security Assistance Training Squadron (AFSAT), and HAF/A3. For its part, SAF/IA has overall responsibility “for collecting, documenting, and submitting international flying training requirements” in accordance with ATDR. It also acts as an advocate for international training programs within the AFCS (AFI 11-412, 2009, p. 15). As the primary USAF training provider, AETC determines whether sufficient capacity exists to meet U.S. and international training requirements and, if not, what the shortfall is and how it

other primary pilot training program located in the United States. It is a multinationally manned and managed flying training program chartered to produce combat pilots for NATO (Defense Institute of Security Cooperation Studies [DISCS], undated; “Specialized Undergraduate Pilot Training,” undated).

⁶² Author telephone discussion with USAF official, July 19, 2017.

might be overcome. AETC's subordinate organization AFSAT is responsible for assigning international students to available positions in USAF training courses, which entails keeping track of those in the training pipeline from various partner nations. As the HAF staff element in charge of training, HAF/A3 manages the ATDR process, including requesting and aggregating requirement data from training customers, as well as capacity data from training providers; working with customers and providers to narrow the requirement/capacity gap; and making the final decision regarding the distribution of available training slots to USAF forces and international partners.

Decisionmaking Processes Involved

Decisions on the integration of domestic and international requirements center on the ATDR process. The ATDR process is intended to provide "a disciplined, time/sequence based set of procedures for establishing, collecting, validating and documenting flying training production requirements for all formal training conducted by or for the Air Force" (AFI 11-412, 2009, p. 31). As indicated earlier, the ATDR "parallels and syncs" with the SP3 (AFI 11-412, 2009, p. 15), which means that the total time to complete the process is almost four years and includes three ATDR cycles "in some stage of activity at any given time" (AFI 11-412, 2009, p. 37).

The Aircrew Training and Distribution Requirement Process

Development of Unconstrained Requirements

At the beginning of the annual ATDR cycle, HAF/A3 issues a data call to lead MAJCOMs (for active-duty requirements), Air Force Reserve Command, Air National Guard, and SAF/IA (for international requirements) for graduate and UPT requirements (AFI 11-412, 2009, p. 31). From an international standpoint, the need for security assistance training could arise from a new system sale, ongoing requirements from a prior sale, or a non-equipment-related training case. This information is regularly conveyed to SAF/IA by U.S. embassy SC office (SCO) officials or partner nations and documented by AFSAT in its country purchase listing and training matrix following quarterly conferences with SAF/IA. The latter uses these documents to create a requirement projection product, which it submits to HAF/A3 each fall (SAF/IA, 2013a, p. 4).⁶³

HAF/A3 aggregates the unconstrained training requirements for U.S. and international customers and validates them for compliance with Air Force policy and CSAF guidance.

⁶³ SAF/IA's role in the training requirement projection process

is simply to acknowledge the number of training slots requested for a partner, and brief any issues that might cause that number to shift dramatically. For example, if the SCO advises AFSAT that Oman is requesting 10 F-16 training slots through the FYDP [Future Years Defense Program], the SAF/IA [country director] should be able to consult with AFSAT and the SCO to determine if this is viable given the size of the fleet, the funding available from the country, and their long-term intent for the platform. (SAF/IA, 2013b)

Validated requirements for undergraduate flying courses, such as SUPT, are compiled in the Undergraduate Program Requirements Document (AFI 11-412, 2009, p. 32).

Development of Constrained Requirements

Once the data call inputs have been compiled, HAF/A3 forwards these unconstrained requirements to the training commands (AETC, in the case of international requirements). These commands then conduct an analysis to identify (1) physical capacity and resource constraints on their ability to meet customers' training requirements and (2) what would be required to overcome these limitations (where possible). The results of this analysis are documented in a shortfall report provided to HAF Director of Operations and briefed to the AFCS. In the event of a requirement shortfall, the requesting agency (SAF/IA, for international requirements) is "given the opportunity to address the limiting factors or implement a training prioritization plan" (AFI 11-412, 2009, p. 33).

HAF/A3 then produces the PPG letter that contains a list of prioritized constrained requirements reflecting the constraints identified in the capacity analysis and corporate review. The key training input to the POM process, this document either prioritizes training in relation to existing capacity or proposes additional resources to satisfy a training initiative that demands more than can be delivered with existing capacity (AFI 11-412, 2009, pp. 33–34).

Distribution of Available Training Quotas

Chaired by HAF/A3 and usually hosted by AETC, the annual program flying training conference makes final training adjustments prior to the execution of the POM. During the two-week conference, action officers from customer and provider organizations evaluate each training course and, where capacity fails to meet program requirements, a prioritized distribution is established (AFI 11-412, 2009, p. 35). This venue provides an opportunity for SAF/IA's regional divisions to decide which partner nations will be given first priority for available international training quotas in courses, such as SUPT, based on preferences expressed by the CCMDs.⁶⁴ This information is then provided to AFSAT for program execution (SAF/IA, 2013a, p. 4).

Requirement Challenges Within the Aircrew Training and Distribution Requirement Process

The primary international training program stakeholders in USAF, as well as outside observers, agree that the method currently used to estimate the training requirements of partner nations over time is not ideal. However, they disagree about the seriousness of the problem, particularly as it relates to SUPT, as well as USAF's ability to create something that is substantially better than the current system. For example, in a study conducted for SAF/IA, Deloitte Consulting concluded,

⁶⁴ Author discussion with USAF officials, May 31, 2017.

The Air Force's inability to accurately forecast international training has the potential to undermine State and Defense Department efforts to build lasting partnerships through security cooperation programs [and] disrupt execution year USAF training programs by affecting operational scheduling of training classes that are tightly resourced to meet the USAF's needs. (quoted in SAF/IA, 2013a, p. 3)

Some USAF interlocutors indicated that the unconstrained requirement provided by SAF/IA for SUPT in fiscal year (FY) 2018 was “a shocking number” and questioned whether partner nations would be able to fill their requested quotas. It was their hope that “someone could produce a validated requirement that goes beyond next year and the year after for internationals.”⁶⁵

Other USAF training officials acknowledged that the exercise of developing unconstrained SUPT requirements is a “guessing game” and a “wasted effort.” In their view, this is largely due to a shift in the FMS customer base in recent years from NATO allies, with established air forces and the ability to conduct long-range personnel planning, to Middle Eastern partners, with emerging air forces and an inability to generate a consistent stream of qualified training candidates. For example, they noted, “Saudi Arabia may have [a] goal of 100 new pilots, but it only has 25 people in language training [English language proficiency being a prerequisite for pilot training], so it can't possibly meet its goal in the near term.”⁶⁶ Nevertheless, from these officials' perspective, the informal process of winnowing down an initial aspirational partner request to a more realistic figure works fairly well in the case of SUPT:

SAF/IA knows about how many SUPT slots to ask for based on experience and information from AFSAT on the number of international candidates in the language pipeline. A partner may ask for 150 slots, but there are only 70 in the pipeline, so SAF/IA asks for somewhat less—say, 50.⁶⁷

What is more, SAF/IA has tried and failed to develop a more formalized process for reviewing and submitting international flying training requirements to USAF that would obviate the need for making unrealistic unconstrained training requests, “with the expectation that international allocation shortfalls will be prioritized by SAF/IA prior to the execution year” (SAF/IA, 2013b). According to one longtime training planner, the process for determining foreign training requirements is “more art than science.” This is because the process is “localized,” with each country's training requirements potentially changing year by year. Furthermore, “although the United States can encourage partners to make certain choices, they may choose differently.” Most countries are generally consistent in their requirements, but “there is always the possibility that some country may want something new.” Thus, one USAF official doubted that SAF/IA could ever make accurate training projections more than two years prior to

⁶⁵ Author discussion with USAF officials, May 31, 2017.

⁶⁶ Author telephone discussion with USAF official, July 19, 2017.

⁶⁷ Author telephone discussion with USAF official, July 21, 2017.

execution. The three- to five-year figures it provides to HAF/A3 for the FYDP are no more than historical averages, which change as it receives more-specific information from partners and SCOs. Although these projections might not be wildly off in the aggregate, they might be so at the individual country level.⁶⁸

Distribution and Execution Challenges

For SAF/IA, the most challenging aspect of meeting training requirements comes within the first six months of the execution year. At this point, it often becomes clear that there is insufficient USAF capacity (e.g., training aircraft, instructors, or maintenance personnel) to meet all validated U.S. and international training needs, so cuts need to be made. For the most part, the process of making cuts—which involves negotiations among training customers and providers facilitated by the program flying training conference—works well in terms of satisfying the basic requirements of both groups, according to SAF/IA. However, problems arise when there are big structural changes in USAF, such as the transition from the C-130H transport aircraft to the newer J version, which can drastically reduce the number of available training slots for partners. In such cases, SAF/IA works with AETC and HAF/A3 to squeeze in partners when openings arise.⁶⁹ However, there is a limit to what can be done in such circumstances. Although it acknowledges the importance of maintaining good relations with partners, the law requires HAF/A3 to consider the needs of U.S. active and reserve forces above those of international partners when distributing available training quotas. HAF/A3 can ask the former whether they are willing to surrender some of their quotas to SAF/IA but will not overrule them if they decline to do so.⁷⁰ Officials from all three organizations concede that “international training will never be a priority over USAF training in the execution year” (SAF/IA, 2013b).

Other international training challenges can occur during the execution phase after course allocations have been distributed to partner nations. AFSAT, the organization responsible for placing international students in USAF schools, notes numerous instances in which international registrants do not show up for their registered courses, including SUPT, often because they do not meet course prerequisites—in particular, English language proficiency. Although SAF/IA provides AFSAT with a prioritization list for filling the seats of no-shows, some USAF officials contend that this group represents a significant loss to the U.S. taxpayer, given that international registrants can withdraw from undergraduate flying courses close to the start of class without incurring a penalty.⁷¹ Others allow that no-shows are “annoying” but dispute the assertion that they represent much, if any, financial burden. Reportedly, SAF/IA requested an audit of

⁶⁸ Author telephone discussion with USAF official, July 19, 2017.

⁶⁹ Author telephone discussion with USAF official, July 19, 2017.

⁷⁰ Author telephone discussion with USAF official, July 21, 2017.

⁷¹ Author discussion with USAF officials, May 31, 2017.

international training courses from the past several years to address the no-show issue. The audit concluded that, 95 percent of the time, partner nations paid for the courses in which they had enrolled, demonstrating that international training could be a moneymaker, not a loser, for the U.S. government.⁷²

Capacity Challenges

Although related to the requirement and distribution issues discussed earlier, the major challenge to the future of international UPT stems from the need to greatly increase the number of new USAF pilots. In a recent commentary, former Vice Chief of Staff of the Air Force Gen Larry O. Spencer stated that USAF had lost 30 percent of its personnel and nearly 60 percent of its combat-coded fighter squadrons since the end of the 1991 Gulf War (Spencer, 2017). According to *Air Force Magazine*, by the fall of 2015, USAF was 511 fighter pilots short of its needs, and, if trends continued, the deficit would exceed 700 by the fall of 2017 (or 20 percent of the 3,500 fighter pilot positions authorized in 2016) (see Skowronski, 2016). Thus, there is a desperate need for the training system to begin generating more undergraduate pilots, thereby putting pressure on the portion of the system used for international training. This is because, although the international slice of overall training is quite small, international students make up a substantial share of SUPT trainees on the T-38 aircraft.⁷³

We found some important differences between SAF/IA and AETC perspectives on the relationship between training capacities for U.S. and foreign airmen. For SAF/IA, the proper response to the problem of an increasing demand for U.S. and international UPT is not to restrict the number of foreign students in order to accommodate more U.S. students but rather to expand the size of the overall training “pie” for both U.S. and international students. However, in the view of SAF/IA training officials, the path to such a “win-win” solution has been blocked by an ingrained “philosophical” belief within the USAF training community that international requirements must be met with training capacity developed for, but not fully utilized by, USAF (so-called excess capacity)—rather than capacity developed in part for international students in

⁷² Author telephone discussion with USAF official, July 21, 2017.

⁷³ Comparing the number of U.S. and international trainees in the USAF aircrew training system, we find that international students make up about 5 to 6 percent of total throughput in the platforms and courses for which they are eligible. This does not include platforms on which international students are not trained (e.g., F-22, B-2, U-2, and MC-130). Rather, it includes only platforms on which they receive some training (e.g., C-130E, C-130J, C-17, E-3, SUPT, and F-16). For SUPT specifically, the percentage of international students starting the T-6 program is close to the overall percentage of international students in the training system: 8.5 percent or 87 of the 1,020 candidates entering SUPT in FY 2016. However, 83 of those international students tracked to the T-38 after six months of flight training rather than the T-1, and the T-38 pipeline is much smaller than the T-1 pipeline. Those 83 international students in FY 2016 were part of a total T-38 program of 292 students, or 28 percent of the overall throughput for that year; the other four students (from Japan) were part of a T-1 pipeline that produced 665 students (0.6 percent international) (author email correspondence with USAF official, September 21, 2017).

accordance with the department's legal obligation to provide foreign-partner training.⁷⁴ In confirmation of the presumed relationship between excess U.S. capacity and international training, AETC interviewees told the RAND team that, with the exception of one cooperative (Euro-NATO Joint Jet Pilot Training) and one combined training program (the F-35), "security cooperation [i.e., tuition-based security assistance training, such as SUPT] feeds off Air Force processes." Although the latter might be important "in a theater or global sense," AETC's focus is "on training USAF airmen." In so doing, it is able to offer "collateral" benefits to foreign partners.⁷⁵

Aside from their philosophical differences, SAF/IA and AETC differ on one another's responsibilities for proposing and justifying changes in USAF capacity that would allow for additional international training if needed. According to SAF/IA officials, AETC has not been fully complying with its ATDR obligation to furnish a capacity and shortfall assessment based on the training requirements submitted by the MAJCOMs and SAF/IA and validated by HAF/A3. AETC does state what it can and cannot do based on existing plant capacity, as well as what it would take to meet the total USAF requirement. However, according to SAF/IA officials, "for years, [AETC has] not said what it would take to meet international requirements."⁷⁶ AETC officials counter that such an analysis depends on obtaining more-accurate and longer-term (more than two years in the future) partner training requirements from SAF/IA. SAF/IA's current flight plan calls for more training capacity for international students, but it does not provide a detailed description of the requirements underlying its request.⁷⁷ AETC will do what it takes to produce more international pilots if HAF/A3 tells it to do so and the POM provides it with the means. But it is SAF/IA's job, not AETC's, to advocate for international training capacity within the AFCS.⁷⁸ SAF/IA, conversely, considers it within AETC's purview, as a programming MAJCOM, to seek additional money to fund international training requirements.⁷⁹ Although SAF/IA "can support" AETC's efforts, "it can't advocate" for more training capacity resources.⁸⁰

Security Cooperation Impact on Decision Outcomes

The impact of decisions concerning the SUPT case—and, more broadly, USAF international security assistance training—are mostly potential rather than actually observed. As Table 3.3

⁷⁴ Author telephone discussions with USAF officials, July 19, 2017, and July 21, 2017.

⁷⁵ Author discussion with USAF officials, May 31, 2017.

⁷⁶ Author telephone discussion with USAF official, July 21, 2017.

⁷⁷ Author discussion with USAF officials, May 31, 2017.

⁷⁸ Author discussion with USAF officials, May 31, 2017.

⁷⁹ This is not an insurmountable difference in perspectives, but resolving it might require senior-leader intervention.

⁸⁰ Author telephone discussion with USAF official, July 21, 2017.

indicates, upcoming SP3 decisions on UPT slots pose risks to U.S.–partner relations, partner operational capability, and USAF legal or regulatory adherence. The extent to which these risks are realized or averted will depend on how well the major international training stakeholders—SAF/IA, AETC, and HAF/A3—can understand, articulate, and balance U.S. and foreign-partner training requirements in the face of a serious USAF pilot shortage, inherent uncertainty about international training demand, and philosophical and organizational differences regarding their international training roles and responsibilities.⁸¹ In addition, it will depend on how effectively they can collaborate to procure additional resources for expanded training capacity that would meet the needs of U.S. and foreign customers.⁸²

Table 3.3. Security Cooperation Impact in the Pilot Training Case

SC Impact Category	Risk to USAF SC	Opportunity for USAF SC	Impact	
			Observed	Potential
U.S.–partner and air force–air force relations, access	x	—	Positive relationship with most training partners but partner demand exceeding supply	Deterioration in partner relations if international training quotas reduced
Partner operational capability	x	—	Increase in partner pilot training in the past ten years	Decrease in international pilot training due to increased need for U.S. training
USAF legal or regulatory adherence	x	—		Inability to meet security assistance training obligations
USAF SC workforce	—	—		
Acquisition efficiency	—	—		
USAF institutions and processes	x	x	Have been able to plan and account for increased level of international training, but execution-year conflicts over international training allocations	Distribute more U.S. and international quotas given increased training resources

NOTE: — = no risk or opportunity identified.

⁸¹ HAF/A3 is in charge of the ATDR process. However, it depends on SAF/IA and the MAJCOMs for requirement and capacity inputs, and it tries its best to balance everyone’s interests. That said, HAF/A3 can decide not to accept SAF/IA’s international requirements. It has not done so to date but could do so in the future unless a deal can be struck with SAF/IA (author discussions with USAF officials, May 31, 2017, July 19, 2017, and July 21, 2017).

⁸² Although it is predictable that there will be an increase in training demand for both U.S. and international training, and the size of the increase could probably be projected in rough, aggregate terms, training requirement projection for both U.S. and international pilots is an inexact, not particularly rigorous process, according to the training officials with whom we spoke.

Impact on U.S. Partners

Over the past ten-plus years, USAF has been able to offer partners an increasing share of training slots. This is because, when USAF cut its pilot production because of force structure reductions, more openings could be filled with international students. In spite of the added challenges associated with foreign training (e.g., providing English language instruction and dealing with the issue of student no-shows), international SUPT quotas have grown significantly in recent years from 30 in 2005, to 60 in 2010, to 80 in 2015. This latter figure includes 76 quotas allocated for T-38 training and four quotas for T-1 training intended for Japan.⁸³ According to some USAF interlocutors, AETC has been “steadfast” in planning and accounting for the increasing level of international pilot training, even without knowing the requirement more than two to three years in advance.⁸⁴

However, all three international training stakeholders acknowledge that the situation in FYs 2018 and 2019 will be different. With the push to train more U.S. pilots, the number of SUPT quotas allotted to international students will likely be reduced—although it is not clear by how much. Currently, SAF/IA is engaged in a “wide-open conversation” with AETC and ACC on lowering the international number. Still, one official said that he is skeptical about the need for significant reductions, given that “ACC hasn’t demonstrated that it can absorb the number of [U.S.] pilots it says it wants.”⁸⁵ HAF/A3 will work with SAF/IA “to get the lowest acceptable number possible.” But if the international requirement remains too high and USAF components do not volunteer to give up slots to SAF/IA, international undergraduate training might have to be cut to below the required level for the first time.⁸⁶ What the impact of this outcome would be on specific partner operational capabilities in the near to long term is unknown at this time—as is the extent, if any, to which such an outcome would cause the United States to violate its contractual commitments to provide security assistance training to foreign partners.

Impact on U.S. and Air Force Relations with Their Partners

The USAF international affairs community has been able, for the most part, to maintain positive relations with foreign purchasers of security assistance training. Although certain Middle Eastern customers, such as Saudi Arabia, traditionally request many more training slots than are eventually allotted to them, SAF/IA has “gotten pretty good at fending off their complaints” by explaining that it attempts to “give the partner as many slots as they can reasonably consume.”⁸⁷ This has proven a successful strategy so far, given that the partners with

⁸³ Author telephone discussion with USAF official, July 19, 2017.

⁸⁴ Author discussion with USAF officials, May 31, 2017.

⁸⁵ Author telephone discussion with USAF official, July 19, 2017.

⁸⁶ Author telephone discussion with USAF official, July 19, 2017.

⁸⁷ Author telephone discussion with USAF official, July 19, 2017.

the greatest flying training expectations have not demonstrated an institutional capability to provide qualified pilot candidates at a level that matches their aircraft purchases. Still, some USAF training officials note that they have often heard complaints from NATO ally Norway regarding its inability to obtain the FMS training it had requested from USAF because other partners, such as Iraq, have been accorded a higher training priority.⁸⁸ Partners' "confusion and aggravation" over their training allocations is reportedly exacerbated by "the constant execution year battles" within the U.S. government related to the division of available international training slots (SAF/IA, 2013b). Several of our USAF interlocutors did not see this situation as getting any better in the future. Indeed, they envisioned an almost inevitable clash between U.S. and international interests with respect to pilot training. They note that USAF might be

content with the current number of training quotas [for international partners], but partners want more. Saudi Arabia wants more than 100 [quotas] for itself to support its F-15 purchase. The USAF does not have enough resources [too little "iron"] to fill international and Air Force needs.⁸⁹

As indicated earlier, the potential risks to U.S. efforts to help build partner capabilities, improve U.S.–partner interoperability, and sustain political and military relationships, which are exemplified by the SUPT case, ultimately stem from two presumptions: (1) USAF will not have the training capacity to adequately meet both U.S. and SC requirements, and (2) the USAF push to increase the number of new U.S. pilots will reduce SUPT slots for foreigners to a problematic level in the near future. Behind these presumptions are two others: (1) USAF will not soon be receiving sufficient additional resources to cover the combined training deficit, and (2) USAF cannot ask for funding to meet international training requirements per se. As one training official explained the dilemma,

We face a huge training shortfall on the active-duty side. We will still fight for the FMS requirement, but it is more difficult to justify than before. The law says DoD can only sell partners "excess" equipment and training, and that "excess" no longer exists.

For its part, AETC has adjusted its FY 2019 POM submission to increase the number of UPT squadrons, but that proposed increase provides capacity for only 1,402 new pilots annually rather than the 1,635 trained pilots HAF/A3 says are needed. Thus, the number of international SUPT slots must be reduced so as not to worsen the U.S. pilot shortage.⁹⁰

Some international training officials we engaged recognized the problem of limited training capacity, yet they objected to other stakeholders' view that this problem should be addressed through an examination of only U.S. needs. The Arms Export Control Act requires that DoD

⁸⁸ Author discussion with USAF officials, May 31, 2017.

⁸⁹ Author telephone discussion with USAF official, July 19, 2017.

⁹⁰ Author discussion with USAF officials, May 31, 2017.

provide equipment and training to eligible partners, so, legally speaking, an international training requirement is not different from a U.S. training requirement.⁹¹ If the “pie” needs to be expanded, both international and U.S. airmen should receive larger “slices.” These officials also seemed relatively sanguine that an acceptable solution would be found to the capacity issue: “There is light at the end of the tunnel from a funding perspective,” opined one official, and, if more training resources become available, the official said, HAF/A3 would have more flexibility to distribute quotas to international partners, returning the situation to what it had been historically (i.e., when international requirements were largely satisfied).⁹²

Lessons Observed

The overall lesson revealed by the SUPT case is that SC requirements can be incorporated into existing core processes when action officers within key stakeholder organizations have sufficient bureaucratic experience, partner-nation understanding, and willingness to collaborate with one another—and U.S. and partner needs for training are not in serious conflict with one another. That said, there might be ways in which the ATDR process could be improved in order to establish clearer, longer-term training requirements in cooperation with partner nations and identify steps that could be taken to mitigate gaps in training capacity to meet international, as well as U.S., requirements.

Although short term–oriented and sometimes contentious, the SUPT process has mostly worked for internationals, according to USAF training officials, but they acknowledge that it might not work as well in the future. As one interlocutor acknowledged, “the current process accepts whatever the Air Force can provide in the execution year,” rather than delivering “a realistic requirement” that could be used for mid- to long-term planning and programming purposes. Nevertheless, he is skeptical that an accurate and reliable forecasting method can be developed for international training that might reduce the “annual thrash” associated with dividing available training quotas among partner nations (SAF/IA, 2013b). The danger of continuing with the existing system, however, is that it depends on international and U.S. demand remaining more or less stable, a condition that has already begun to change. Not only are FMS cases on the rise, particularly among Middle Eastern countries, which will increase the demand for more trained pilots, but influential figures inside and outside USAF are also demanding that the department address an acute U.S. pilot shortage.

Without an increase in overall training capacity, more USAF demand for SUPT will likely lead to reduced partner training. The principal challenge for international UPT resides within USAF. Significant budget reductions since the end of the Cold War and increased demand for more pilots to make up for those leaving the service, in part because of an unrelenting operating

⁹¹ Author telephone discussion with USAF official, July 19, 2017.

⁹² Author telephone discussion with USAF official, July 21, 2017.

tempo (OPTEMPO), means that USAF needs to produce more new pilots than ever before.⁹³ Projected to achieve full production in 2019 or 2020, the training establishment is “coming close to exceeding its capacity to meet requirements.” According to one USAF training official, the biggest issue is the lack of available training aircraft and simulators.⁹⁴ One palliative approach would be to try to increase the aircraft utilization rate through improved maintenance, but this might not be feasible, nor would it necessarily make a substantial dent in the problem. Another option would be to open up a new training base, but that would be very expensive and would involve giving up operational aircraft for training. Ultimately, USAF “needs to decide whether [it] will put up with the shortfall or fix it” through the acquisition of additional training squadrons via the SP3.⁹⁵ Meanwhile, USAF is searching for ways to reduce the strain on training capacity in the near term, including cutting back on international pilot training—especially SUPT—given its lower institutional priority than U.S. active and reserve training.

Although SAF/IA has avenues within the AFCS for registering the impact of changes in international training, the solution to the problem of increased U.S. and international demand and limited training capacity will require a consensus among the major training stakeholders on objectives and responsibilities. From HAF/A3’s perspective, the international training requirement is fully documented in the POM, and it is the responsibility of the MAJCOMs to make up for any shortfalls (e.g., more flight training units), an unlikely prospect given USAF’s current OPTEMPO.⁹⁶ From AETC’s perspective, it is SAF/IA’s responsibility to advocate increased capacity for international training within SP3 and HAF’s responsibility to determine how such a proposed planning choice would be “racked and stacked against the Strategic Master Plan.” However, as pointed out earlier in this report, planning criteria are needed to assess SC in relation to other USAF activities.⁹⁷

SAF/IA gives HAF/A3 credit for recognizing the importance of security assistance training and “the political impacts” of making disproportionate cuts to international training quotas. Still, there is no formal process for balancing U.S. and international requirements, and one discussant believed it “unlikely that HAF/A3 leadership would be able to formally establish rules making [the training needs of] international partners equal to USAF training needs” (SAF/IA, 2013a, p. 9). Given that U.S. requirements will always be paramount, the only way to guard against excessive reductions to security assistance training might be to increase overall training capacity. As one USAF official opined, “Internationals will pay for increased training capacity”; the U.S. government needs to find a legal way to reimburse USAF for providing this capacity. Although an increasing number of air arms, including USAF, have decided to outsource some training

⁹³ Author telephone discussion with USAF official, July 21, 2017.

⁹⁴ Author telephone discussion with USAF official, July 21, 2017.

⁹⁵ Author telephone discussion with USAF official, July 21, 2017.

⁹⁶ Author telephone discussion with USAF official, July 21, 2017.

⁹⁷ Author discussion with USAF officials, May 31, 2017.

tasks to private companies as a cost-saving measure (Pocock, 2017). From one international training official’s perspective, using contractors is not an adequate solution to the SUPT capacity problem for international participants. In part, contractors “provide a different level of service.” Even if it were possible to find enough qualified civilian pilots, they could not match the ability of military instructor pilots to relate their firsthand experience to the degree that is needed in today’s sophisticated and complex threat environment. Furthermore, civilian training “won’t make partners equivalent to us”—that is, enable partner-nation pilots to operate in close coordination with their USAF counterparts during coalition air operations. Finally, contractors cannot “help maintain the air force-to-air force relationship,” which is essential not only for effective coalition operations but also for facilitating U.S. operational access to foreign territories. A long-term solution could require stakeholders to work together to advocate for an expansion of U.S. training production within the USAF decisionmaking process to meet both additional domestic and international requirements.⁹⁸ In sum, this case demonstrates why U.S. and partner requirements cannot be looked at independently but should be considered together.

Case Study II: Light-Attack Aircraft

The OA-X is a case in which a materiel solution was pursued to meet an operational gap. Although the central justification for the OA-X was not SC-dedicated, the case retained a prominent SC element (see Table 3.4). It is an example of a program that originated in an ad hoc fashion outside of traditional requirement processes and was later shepherded through established CD/A and planning and programming processes. Although the fate of the OA-X is still being debated, the case demonstrates the importance of strong leadership direction and alignment with a set of non-SC-related urgent requirements to ensure program consideration within core decisionmaking processes.

Table 3.4. Case Study of Security Cooperation–Related Program: OA-X

Nature of Case	Focus of Case	
	SC	Not SC
Materiel	C-17 consortium	OA-X
Nonmateriel	AAA	Pilot training

Background

USAF efforts to develop and field a light-attack aircraft have their modern origins in the mid-2000s in the midst of U.S. COIN and counterterrorism operations in Afghanistan (Operation

⁹⁸ Author telephone discussion with USAF official, July 21, 2017.

Enduring Freedom) and Iraq (Operation Iraqi Freedom). In these operations, dubbed irregular warfare (IW), the United States employed frontline jet fighter-bombers, including USAF A-10s, F-15Es, F-16s, and even B-1B bombers, to target individuals and small groups of insurgents, as well as vehicles and structures (USAF, 2013). These were very expensive assets to operate and required aerial refueling, and these IW operations consumed large amounts of flying hours from systems designed for conventional air employment while negatively affecting pilots' ability to maintain currency in their mission requirements. USAF sought a more efficient means of conducting IW from the air with cheaper but effective platforms that could be shared with partner air forces.⁹⁹

Although the light-attack aircraft initiative was initially presented as a materiel solution to address an operational gap in USAF's ability to engage in IW, it also had the potential for meeting SC objectives in terms of building the capacity of Iraqi, Afghan, and other foreign air forces. After originating in a relatively ad hoc fashion outside the traditional requirement processes that identify operational gaps, the OA-X was shepherded through the established CD/A and planning and programming processes based on its operational and SC benefits. But it was the rise and fall of leadership support that determined its fate, and it is strong leadership direction—aligned with a set of non-SC-related urgent requirements (USAF's pilot shortfall and readiness challenges)—that have recently revived it as a viable program. Like other significant acquisition programs, the OA-X now has a senior leader as a champion. Moreover, SC impact has not been a key determinant in either success or failure of the program.

Decisionmaking Processes Involved

The development of a light-attack capability centered on a relatively straightforward question that arose from the intense employment of frontline jets against insurgents: Does USAF need to use high-end aircraft against insurgencies in a semipermissive environment?¹⁰⁰ This question was raised among operators in Iraq and Afghanistan, as well as observers of operational and tactical lessons at ACC; it was not levied as a requirement from high-level guidance or a priority to fill an operational need (i.e., it originated in ad hoc fashion). As one interlocutor put it in a somewhat mixed metaphor, “why use a Porsche when you need a lawn mower?”¹⁰¹ A variety of USAF-focused factors played a role in this thinking—the need for airframes to support USAF pilot absorption, to help train joint terminal attack controllers and for other joint training, the desire to reduce airfield exposure (and increase the number of less capable airfields in theater that one could use), and high cost and vulnerability to readiness issues faced by intensive use of frontline jets. At the same time, the light-attack capability was being considered in a larger

⁹⁹ At the same time, USAF was also considering concepts for a light transport aircraft that could be operated by less developed partner nations.

¹⁰⁰ Author discussion with USAF officials, June 27, 2017.

¹⁰¹ Author discussion with USAF officials, June 27, 2017.

context of how USAF should enhance its IW capabilities (see, for example, Torres-Laboy, 2008; Torres-Laboy and Pietrucha, 2008; ACC, 2008; IW Task Force, 2009; and Mesic et al., 2010). Building partner capacity (BPC) and international training and interoperability—elements of SC—were seen as important parts of that. As early as 2005, two years after the beginning of Operation Iraqi Freedom, when the Iraqi insurgency was well underway, U.S. Air Forces Central Command (AFCENT) published a study on equipping the Iraqi Air Force for COIN (AFCENT, 2005).¹⁰² It had become “obvious” that COIN operations required a “local component of airpower.”¹⁰³

In 2007, members of ACC’s Joint Integration Division developed and pitched the concept of a light-attack and observation platform to ACC leadership, which approved of pursuing the idea. The division then developed an “enabling concept” for ACC’s fielding of the newly named OA-X to support “combatant commanders’ close air support, armed reconnaissance, building partnership capacity, and combat air forces training requirements” (Pietrucha, Saridakis, and Torres-Laboy, 2008, p. 3). Of interest for our purposes is that reference in the enabling concept to SC impact (in terms of “lack of exportable attack capability”) was only one of nine stated risks that USAF would face if it failed to procure the light-attack aircraft and continued COIN operations with existing platforms (Pietrucha, Saridakis, and Torres-Laboy, 2008, pp. 4–5). By 2009, the concept for a LAAR platform had entered the formal capability development process in USAF. In July, USAF’s Aeronautical Systems Center issued a capability request for information to industry for 100 fixed-wing, manned LAAR acquisition options with deliveries beginning in FY 2012 (AFMC, 2009, p. 2).¹⁰⁴ At the same time, USAF tasked Booz Allen Hamilton to prepare a quick-turn CBA—“an Analysis of Alternatives—like analysis for a decisional brief to CSAF”—for LAAR, published in August (ACC and AMC, 2009, p. iii).

At the end of 2009, however, USAF leadership made a decision to change both the scope and purpose of LAAR. The number procured by USAF was reduced significantly—to 15—and its purpose became solely SC—for training partners and BPC, no longer for supporting USAF COIN operations. It is unclear exactly why this decision was made, but interlocutors we engaged suggested that there were important detractors in USAF to the idea of this “high–low mix” of attack aircraft and the development of a “niche” IW attack platform. There was a fear, especially in light of evolving budget constraints during the recession (and subsequent budget sequestration), that a large OA-X buy would compete with procurement of USAF’s “crown jewel,” the F-35.¹⁰⁵ Focusing LAAR on SC would disentangle it from the USAF’s newest

¹⁰² That same year, the Air Staff commissioned RAND Project AIR FORCE to conduct a comparison of COIN aircraft for USAF use that also recognized their utility for partner nations.

¹⁰³ Author discussion with USAF official, June 13, 2017.

¹⁰⁴ According to one interlocutor, ACC expected a total buy of 120 LAAR aircraft (author discussion with USAF official, June 13, 2017).

¹⁰⁵ Author discussions with USAF officials, June 13, 2017, and June 27, 2017.

frontline jets. Following this decision, LAAR was included in DoD guidance and the 2010 QDR only as an SC tool. The QDR called for USAF to field it “in general purpose force units in order to increase their ability to work effectively with a wider range of partner air forces” (Gates, 2010, p. 29).

Once USAF leadership made the decision to rescope, “LAAR for BPC” became a program of record, and it continued through the CD/A process; system development and procurement were injected into the USAF POM at this time for delivery in FY 2014. The 15 LAAR aircraft were to be based at Nellis AFB in Nevada. Ten partner nations were identified as potential beneficiaries of the capability, including Afghanistan, Nigeria, and the Philippines.¹⁰⁶ Between March 2010 and July 2011, the AFROC and JROC validated and approved an ICD, a CDD, and a CPD, which brought LAAR through MS C of the acquisition system (see USAF, 2010, and Joint Requirements Oversight Council Memorandum 096-11, 2011). USAF awarded the production contract to Brazil’s Embraer and its Florida subsidiary Sierra Nevada for the A-29 after a competition with Hawker/Beechcraft’s AT-6 out of Kansas. Hawker/Beechcraft protested the awarding of the contract to its competitor and propelled issuance of stop-work orders; then the Kansas congressional delegation succeeded in having congressional funding for the program pulled. In light of these complications and the strong USAF interest in focusing on procurement of the F-35, CSAF canceled the program in 2013.¹⁰⁷

Following cancellation of LAAR, officials in ACC/A3 “kept the light attack aircraft alive on paper”—maintaining the large amounts of data that had been assembled, providing information, helping external advocates by “ghost-writing” articles—until development funds would again become available, always avoiding expenditures that would raise its profile and motivate efforts to kill it.¹⁰⁸ According to one observer, three successive ACC commanders liked the concept “but had higher priorities, [such as] the F-35.”¹⁰⁹

A new opportunity to officially revive the OA-X program arose at the end of 2016, when Senator John McCain released a white paper in which he called on USAF to procure 300 light-attack aircraft. Not one mention of partners or SC appeared:

[T]he Air Force should embrace a “high/low mix” of fighter aircraft. Very expensive fifth-generation technology is not needed in every scenario [W]hile sustaining the A-10 fighter fleet for close air support, the Air Force should procure 300 low-cost, light-attack fighters that would require minimal work to develop. These aircraft could conduct counterterrorism operations, perform close air support and other missions in permissive environments, and help to season pilots to mitigate the Air Force’s fighter pilot shortfall. The Air

¹⁰⁶ Author discussion with USAF officials, June 27, 2017.

¹⁰⁷ Author discussion with USAF officials, June 27, 2017; U.S. Government Accountability Office, 2011.

¹⁰⁸ Author discussion with USAF officials, June 27, 2017.

¹⁰⁹ Author discussion with USAF officials, June 27, 2017.

Force could procure the first 200 of these aircraft by Fiscal Year 2022. (McCain, undated, p. 13)

Senator McCain appeared to be raising arguments for the OA-X that were similar to the prevailing justifications made in the original enabling concept. General Goldfein—who was a proponent of the OA-X when he was ACC/A3 from 2009 to 2011—expressed agreement and ordered an OA-X “experiment” at Holloman AFB in New Mexico in August 2017, to allow companies to showcase the capabilities of their exportable light-attack aircraft; this would be followed ostensibly by an operational demonstration in a combat setting in U.S. Central Command (USCENTCOM). Although SC impact is not a focus, 22 partner nations were invited to observe the experiment. It is also important to note that the OA-X is an unusual program: It would be an already-exportable aircraft to which advanced USAF components would be added, rather than a USAF-only aircraft from which those components are subtracted in order to export it.¹¹⁰

Security Cooperation Impact of Decision Outcomes

Because the OA-X is not yet an operational capability and has been through a series of ebbs and flows, it is a challenge to point directly to measurable impacts on USAF capacity. However, one can at least consider them as examples of issues that could be raised at key decision points—and proponents have already incorporated them in OA-X concepts and arguments. Table 3.5 provides an assessment of how the decision outcomes in the OA-X case could affect potential opportunities and risks to USAF’s capacity for SC. In the case of the OA-X, the decision to cancel in 2013 can be seen as having an impact on the areas of relationships and access, operational capability, SC workforce, acquisition, and institutions. USAF likely lost opportunities and introduced increased risk in its SC capacity as a result of cancellation, yet those same opportunities could be exploited and risks reduced if the 2017 OA-X revival leads to operational capability and additional USAF SC capacity. New opportunities for SC impact in the areas of legal regulatory adherence and acquisition efficiency could be affected by a revival of the aircraft as well.

¹¹⁰ Author discussion with USAF officials, May 25, 2017.

Table 3.5. Security Cooperation Impact in the OA-X Case

SC Impact Category	Risk to USAF SC	Opportunity for USAF SC	Impact	
			Observed	Potential
U.S.–partner and air force–air force relations, access	—	x		Improvements in air force–air force relationships with less advanced partners; greater access to smaller airfields
Partner operational capability	—	x		Increase in interoperability, training opportunities, and operations-to-operations talks with broader range of partners
USAF legal or regulatory adherence	—	x		Simplification of technology transfer
USAF SC workforce	x	x	Constraints on pool of USAF advisors from program cancellation	Increase in and formalization of pool of USAF advisors
Acquisition efficiency	—	x		Increase in partners interested in buying U.S. equipment, larger orders bring unit costs down
USAF institutions and processes	x	x	Continuation of “management by crisis” in SC planning from program cancellation	More-systematic SC planning processes

NOTE: — = no risk or opportunity identified.

Given its intended ability to operate out of smaller, somewhat more-austere airfields than the USAF’s frontline combat aircraft, the OA-X could broaden opportunities for access to more locations. Related to access is that the prospect of U.S. pilots and maintainers operating aircraft similar to those of less advanced partners could open additional opportunities for closer air force–to–air force relationships and potentially provide one element of a larger geopolitical relationship with these partner nations. Along these same lines is that USAF likely lost opportunities to increase its capacity for expanding interoperability and training with a wider range of partner air forces that already fly light-attack aircraft and those that would be attracted to sharing a combat platform with USAF. Such opportunities for enhancing partner operational capability would likely present themselves if USAF deploys its own.

The decision to cancel the OA-X arguably introduced risk in USAF’s SC workforce by constraining the pool of USAF advisors who could train partner pilots and maintainers on the operation of the platform. Today, USAF is training Afghan (and soon Lebanese) air force pilots on the A-29 Super Tucano at Moody AFB in Georgia. However, it has been a major challenge for USAF to find instructor pilots with the requisite background; moreover, these instructor pilots had to be taken from other flying positions to become trained in the A-29 in order to instruct foreign pilots. As a result, USAF is relying in part on contractors to supplement the

USAF instructors.¹¹¹ With its own OA-X platforms in its force structure, USAF would have a ready-made pool of advisors with the skills needed to instruct partners on light-attack aircraft operations.

Although the effects of USAF OA-X procurement on acquisition efficiency are difficult to ascertain, it could be argued that a USAF light-attack operational capability would increase partner-nation interest in procuring the same exportable platforms from U.S. firms building the OA-X for USAF. Larger orders for the platform could help bring USAF's OA-X unit cost down, thereby reducing the overall cost of the USAF program—as well as the cost to partners and the U.S. taxpayer. This is an opportunity that USAF has exploited in other cases involving USAF-partner acquisition of equipment, including, most notably, the F-16 and F-35.

Finally, the addition of the OA-X to the USAF inventory could have an impact on the consideration of SC in USAF's institutional processes. Training the Afghan Air Force on A-29s is itself an example of “management by crisis” in an ad hoc manner outside the traditional core decisionmaking processes.¹¹² Having the OA-X in the USAF force structure could provide a foundation for more-structured planning of partner flying and maintenance training within the context of those traditional processes—similar to the way USAF and its partners have trained on the F-16 and F-35. The opportunity to plan for partner training even a year or two into the future would be preferable to “management by crisis.”

Arguably, the OA-X is a case in which SC impact and USAF readiness face parallel effects. Often, engagement with partner nations, particularly in exercises in which U.S. airmen cannot demonstrate their full capabilities for security reasons, is seen as a drain on readiness. The OA-X is quite different in that its incorporation into USAF would have positive effects on personnel and equipment readiness while enabling USAF to train and interoperate with foreign partners, including the least advanced among them. From an SC perspective, then, one could contend that the descope and cancellation of the OA-X in the early 2010s had a negative impact on risk to readiness and risk to SC, especially in light of the high OPTEMPO of frontline USAF jets in Operation Inherent Resolve. At the time, however, USAF was keen on not diverting the attention of decisionmakers in DoD and Congress from the higher-priority F-35 procurement.

Lessons Observed

Although the OA-X was conceived outside of USAF's established capability development and acquisition process, its subsequent incorporation into that process toward the end of the 2000s was due mostly to non-SC-related arguments. Given the program's scope, there needed to be leadership support, especially at ACC, and the arguments that carried the day were about core

¹¹¹ Author discussion with USAF officials, May 31, 2017. Although pilot training could have been outsourced entirely to contractors, this would have raised problems similar to those identified in the pilot training case study (e.g., different level of service, inculcating a USAF mind set, promoting air force-to-air force relationships).

¹¹² Author discussion with USAF officials, May 31, 2017.

USAF interests of readiness and the high–low mix of attack assets. When the OA-X program was stripped of these aims and descoped as a much smaller effort focused on SC and BPC, it became vulnerable to cancellation—especially in light of competing interests, such as the F-35 and sequestration-driven budget constraints. In the mid-2010s, these same readiness arguments—now even more urgent after high-intensity air operations against the Islamic State of Iraq and the Levant and years of constrained O&M and recapitalization resources—have revived the OA-X. It is notable that SC arguments are again secondary, leading one interlocutor to reflect that SC is just “tagging along.”¹¹³ The potential, or capacity, for SC is already built into the OA-X because it is based on already-exportable platforms; thus, SC impact is almost a “silent partner” to the core arguments about pilot shortages and aircraft life spans. Given the modern history of the light-attack aircraft program, the OA-X could again become vulnerable to reduction or elimination if SC becomes the sole justification. At the same time, if the SC-related elements of a program are made *too* silent, there is a danger of losing sight of potentially negative SC impacts that wholesale changes to the program could create.

At the same time, the alignment of personalities, urgent requirements, and congressional support bode well for the OA-X this time around. Support from USAF leadership—especially when a key senator (and chair of the U.S. Senate Committee on Armed Services) is involved—is critical to seeing the program to fruition. The current CSAF has long been a proponent of the program and explicitly sees SC as a core mission of his service. For a program of the potential scope of the OA-X, consistent leadership support—along with the requisite funding from Congress—will determine its eventual success or failure. With the support of CSAF as international air chief, USAF’s core decisionmaking processes can be required to factor in the potential SC impact of the OA-X once the program’s viability is assured.

Case Study III: C-17 Strategic Airlift Capability Consortium

Our third case, the SAC consortium, is an SC-dedicated materiel program designed to provide the United States and European nations with a shared fleet of C-17s to support national and international military efforts (see Table 3.6). SAC was initiated outside of the formal USAF decisionmaking process, yet subsequently entered the POM process to provide dedicated aircraft and manpower to the program. It provides an example of an SC effort that benefited from a high level of leadership support, industry backing, and partner-nation support, as well as an alignment with U.S. objectives to achieve greater multinational engagement in current operations.

¹¹³ Author discussion with USAF official, June 13, 2017.

Table 3.6. Case Study of Security Cooperation–Related Program: C-17 Consortium

Nature of Case	Focus of Case	
	SC	Not SC
Materiel	C-17 consortium	OA-X
Nonmateriel	AAA	Pilot training

Background

SAC is a consortium of 12 nations, including the United States, that jointly own and operate three C-17 aircraft out of Pápa Air Base in Hungary. SAC is a multinational program operating under a NATO charter and includes two non–NATO members (Sinks, 2015, p. 146). It functions as a time-share, with each nation paying for, and getting the use of, a specific number of flying hours on the three aircraft based on their needs (Tirpak, 2011, p. 38). As of 2017, the members of the consortium were Bulgaria, Estonia, Finland, Hungary, Lithuania, the Netherlands, Norway, Poland, Romania, Slovenia, Sweden, and the United States. With one-third of the total of flight hours (1,000), the United States is the largest contributor to the program, followed by Sweden (550), the Netherlands (500), and Norway (450).

SAC was initiated in 2006 out of the need, expressed by several U.S. allies and partners, for heavy cargo aircraft to meet their expeditionary needs, particularly those in support of the International Security Assistance Force in Afghanistan. The high cost of acquiring and sustaining such assets prompted them to consider a pooling and sharing option instead (Tirpak, 2011, p. 39; Tigner, 2009). USAF, particularly SAF/IA, played a pivotal role in initiating and advocating for SAC, which was established with a sense of urgency because Boeing was about to close its C-17 production line (Weisgerber, 2009, p. 39; Tirpak, 2011, p. 39).¹¹⁴ The program was initiated in 2006, with 12 nations signing a letter of intent to purchase and operate C-17 aircraft. This was followed by the North Atlantic Council’s establishment of a NATO Airlift Management Agency (NAMA) to manage and oversee the program and a 12-nation memorandum of understanding (MOU). The HAW was activated at Pápa and received its first of the three C-17s in July 2009; the HAW achieved full operational capability in 2012 (Knight and Bolkcom, 2008, p. 35; SAC Program, undated (c); SAC Program, undated (b); HAW, undated; NATO, 2015).

The program is planned to last for 30 years, at an estimated overall cost of \$5 billion (Tirpak, 2011, p. 41). Members of the consortium pay for their share of flying hours through financial or in-kind contributions. Examples of the latter include the United States donating one C-17 to the program and Hungary providing the air base at Pápa. NAMA is in charge of acquisition and sustainment activities. Described as “the first operational multinational military airlift unit in the world” (SAC Program, undated [c]), the HAW is responsible for executing SAC’s missions and

¹¹⁴ Also author email correspondence with USAF officials, September 21, 2017.

was manned at 145 personnel from the 12 member nations as of 2016 (SAC Program, undated [a]).

Decisionmaking Processes Involved

The initial impulse for the creation of the consortium came in 2006 from the EUCOM commander, who realized that some European countries could not afford some of the assets needed for them to support multinational operations. The EUCOM commander worked through the Senate Committee on Armed Services to address the problem. The Deputy Secretary of Defense subsequently decided to create a consortium for the United States and some of its allies to collectively own and operate several C-17s.¹¹⁵ The Deputy Secretary of Defense gave EUCOM responsibility for the operational aspect of the program in October 2008 (Strategic Planning Division, 2010).¹¹⁶ USAF oversees other aspects of the program. For instance, SAF/IA houses the MOU and is in charge of negotiations for the United States when an amendment to the MOU is required.¹¹⁷

Congress authorized funding for SAC in the FY 2008 National Defense Authorization Act. This legislation permitted USAF to make an in-kind contribution to SAC consisting of one C-17 from the U.S. inventory in exchange for its flying hours, a contribution estimated at approximately \$283.7 million (Pub. L. 110-181, 2008; AMC Office of History, 2013). Congress stipulated in the National Defense Authorization Act that this authority was given with the expectation that “the Partnership will give priority to airlift support for North Atlantic Treaty Organization (NATO) missions” and that the contribution of supplies and services would be made in the best interests of the United States, “on a reimbursable basis without an advance of funds, if similar supplies and services are furnished on a like basis to military aircraft and other state aircraft of the United States by the foreign country concerned” (Pub. L. 110-181, 2008, Subtitle D and § 9626[a][2]). Other members of the consortium paid for the two additional aircraft through FMS (Tigner, 2009).

Additional operation costs for the multinational consortium are appropriated once a year. NAMA, which was established to administer the program, serves as an interface, coordinating the funding from member nations to SAC (Strategic Planning Division, 2010). There is a ceiling in the MOU on how much the United States can contribute. Funding for the program was provided beginning in the FY 2010 POM under a general PE code.¹¹⁸ U.S. contributions are executed by USAFE; the funds are earmarked for that specific purpose and cannot be moved by

¹¹⁵ Author telephone discussion with USAF official, July 12, 2017.

¹¹⁶ Also author telephone discussion with USAF official, July 12, 2017.

¹¹⁷ Author telephone discussion with USAF official, July 12, 2017.

¹¹⁸ Author email correspondence with USAF officials, September 21, 2017.

USAFE or EUCOM to another program. In 2016, a long-awaited hangar was built on Pápa Air Base to facilitate the maintenance of the C-17 aircraft. This hangar was paid for by the members of the coalition in proportion to their flying hours.¹¹⁹ Boeing contractors located at Pápa provide logistics support for the aircraft (Tirpak, 2011, p. 41).¹²⁰

The MOU establishes rules to deconflict missions in case members want to use their flying hours at the same time. The 12 signatories agreed on the following prioritization of mission types:

1. employment or deployment of forces in support of NATO, European Union (EU), or United Nations (UN) military operations
2. response to actual or anticipated armed conflict or crisis where a SAC nation is involved
3. national emergencies in direct support of a SAC nation's citizens
4. national support of NATO, EU, or UN operations not covered in priority 1
5. national support of humanitarian operations
6. other national requirements (SAC Program, undated [a]).

The HAW commander is the ultimate authority on how SAC aircraft are used.¹²¹

At the management level, the United States plays a predominant role in the decisionmaking process for SAC. The two executive bodies for SAC are the NAMA Steering Committee and the NATO Airlift Management (NAM) Programme Board, which convene semiannually to examine recommendations from the various committees (e.g., advisory, personnel, policy and finance) that support the boards.¹²² Meetings include representatives from the 12 consortium members, the NAM Programme office, and the HAW leadership. The NAMA Steering Committee is always chaired by the United States—more specifically, by the Director of USAFE for Plans, Programs, and Analyses (A5/8/9).¹²³

At the operational level, the HAW is manned by personnel from all contributing nations, from pilots and loadmasters to security personnel (Tigner, 2009; NATO, 2015). The HAW commander and vice-commander positions rotate every two years among the four nations with the highest numbers of flying hours.¹²⁴ U.S. airmen in Pápa belong to the 3rd Air Force out of USAFE and represent a U.S. contribution to the program. Like its financial contribution, the number of personnel that the United States provides is in proportion to its flying hours. As a result, the United States contributes one-third of the personnel—mostly pilots and loadmasters

¹¹⁹ Author telephone discussion with USAF official, July 12, 2017.

¹²⁰ Tirpak notes, however, that “HAW personnel serve as crew chiefs.”

¹²¹ The commander should first consider “the immediate/emergency need to safeguard life of Participants’ citizens” and, if there is still a conflict between members, give the priority to the nation “with the highest number of declared Flight Hours” (SAC Program, undated [a]).

¹²² Author email correspondence with USAF official, June 23, 2017.

¹²³ Author email correspondence with USAF official, June 23, 2017.

¹²⁴ These four nations are the United States, Sweden, the Netherlands, and Norway (SAC Program, undated [a]).

and fewer ground support personnel. Their administrative chain of command goes to 3rd Air Force.¹²⁵

Pilot qualification, aircraft maintenance, and equipment are funded through FMS. In April 2017, a congressional notification detailed a \$300 million FMS case to continue to provide logistics support and equipment to the three C-17s (Defense Security Cooperation Agency, 2017). Such FMS cases are handled by the SAF/IA desk officer for NATO, who receives them from the NAM Programme office and transmits them to AFMC through the Air Force Security Assistance Center (SAC Program, undated [c]).¹²⁶

Security Cooperation Impact of Decision Outcomes

SC considerations represent an integral part of SAC and, as a result, were integrated into all the decisions related to the program, from its initiation to its sustainment today. SAC is a multinational program operating under a NATO charter that was explicitly created to enhance the ability of U.S. allies and partners to take part in multinational operations in Afghanistan and elsewhere. Although the United States played a decisive role in initiating and setting up the program and has a preponderant weight in the decisions relating to the program because it has the largest number of flight hours in the consortium, the HAW is an international entity, and the consortium's C-17s are certified and registered by SAC's host nation, Hungary (NATO, 2008).

Between 2009 and 2016, SAC was involved (along with the United States) in a variety of support missions, including NATO-led operations in Afghanistan; UN and EU operations in Mali against violent extremist groups; national and NATO exercises and training events in Europe; investigation into the crash of Malaysia Airlines Flight 17 over Ukraine, which also benefited from support from the U.S. intelligence community; and humanitarian relief operations in Haiti and Pakistan (Roulo, 2014; HAW, undated). It flew a total of 6,050 sorties for 1,728 missions, representing a total of 21,105 flight hours (SAC Program, undated [a]). SAC missions have also, upon the request of the United States, supported exercises in Poland and the Baltic states with U.S., Polish, Estonian, Latvian, and Lithuanian armed forces (EUCOM, 2014).

As intended, SAC has enhanced U.S. allies' and partners' ability to take part in multinational operations and support NATO, whether in Afghanistan or in eastern Europe. It has also promoted integration of U.S. NATO and non-NATO partners by including Finland and Sweden in the consortium. The April 2017 congressional notification of the FMS case for the continuation of logistics and equipment support for the SAC C-17 stated that "the proposed sale will advance U.S. and NATO policy goals of expanding the capabilities of strategic airlift to NATO allies and partners and sustain the ability to deploy in support of contingency operations outside of Europe" (Defense Security Cooperation Agency, 2017).

¹²⁵ Author telephone discussion with USAF official, July 12, 2017.

¹²⁶ Also author telephone discussion with USAF official, July 12, 2017.

SAC has also promoted interoperability between the United States and other members of the consortium. Members of the consortium provide pilots who get qualified, at SAC’s cost, to operate C-17 aircraft (Tigner, 2009). For their first qualification on C-17s, pilots are sent to Altus AFB in Oklahoma, and subsequent trainings are done by Boeing in the United Kingdom with simulator training, all as FMS cases (“Strategic Airlift Capability Training Moving to UK,” 2016; Boeing, 2016).¹²⁷ The training procedures at Altus were made more flexible, over time, to accommodate the regulations of those countries sending pilots for training—for instance, to ensure that they do not have a workweek longer than what would be legal in their home countries (Tirpak, 2011, pp. 40–41). As shown in Table 3.7, the C-17 SAC has presented the United States with important SC opportunities. The United States solidified its air force-to-air force relationships with a range of partners, both NATO and non-NATO members, by pooling airlift assets. Another expected benefit of the program was, as a 2008 memo describes it, to “enhance C-17 global capability and airfield access” (USAFE, 2008). U.S. partners involved in the consortium improved in capability, particularly in conducting out-of-area missions—one of the objectives of EUCOM’s Strategy of Active Security at the time the program was set up (EUCOM, 2008).

Table 3.7. Security Cooperation Impact in the C-17 Consortium Case

SC Impact Category	Risk to USAF SC	Opportunity for USAF SC	Impact	
			Observed	Potential
U.S.–partner and air force–air force relations and access	—	x	Improvements in air force–air force relationships between U.S. and NATO and non-NATO partners	Increase in interoperability
Partner operational capability	—	x	Increase in partner capacity for multinational operations, particularly within NATO	
USAF legal or regulatory adherence	x	—		U.S. withdrawal could not be implemented immediately, according to MOU; withdrawal of a partner could compel USAF to provide additional support
USAF SC workforce	—	—		
Acquisition efficiency	—	x		Increase in partners willing to continue to purchase U.S. platforms
USAF institutions and processes	—	x		Use of the concept of consortia as SC tool in the future

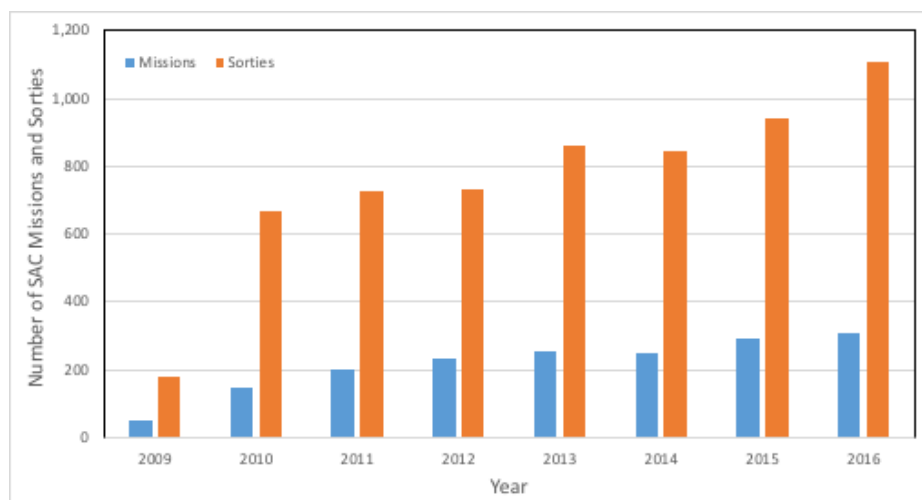
NOTE: — = no risk or opportunity identified.

¹²⁷ Also author telephone discussion with USAF official, July 12, 2017.

Lessons Observed

The SAC/HAW case is generally seen as a success. As outlined earlier, it fulfills some important U.S. SC objectives. After eight years of operation, all original SAC members are still present, and none has asked to have its hours cut down. SAC members are finding good uses for their flying hours, as evidenced by their exploration of options to increase aircraft capacity after the first C-17 of the fleet was taken out of service for maintenance in 2014 (according to a five-year schedule), reducing by one-third their ability to conduct missions (NATO Support and Procurement Agency, 2014). The number of SAC missions and sorties has also followed a general upward trend over the years, suggesting that the capability is found useful by its members (see Figure 3.1).

Figure 3.1. Number of Strategic Airlift Consortium Missions and Sorties, 2009–2016



SOURCE: SAC Program, undated (a).

From the very beginning, SAC has benefited from high-level attention through the involvement of the EUCOM commander, Congress, and the Deputy Secretary of Defense. This factor likely played an important role in allowing the program to get off the ground relatively quickly, with the United States providing the driving force behind the consortium.

The use of an MOU as the legal basis for the program also gives it a lot of stability, in that any amendment needs to be negotiated by the 12 SAC members. For the United States, SecAF is responsible for negotiating MOU amendments, although the signature authority belongs to OSD. If an amendment were to result in an increase in the U.S. cost share of the program, congressional involvement would be required to appropriate additional funds.¹²⁸ USAF funding

¹²⁸ Author email correspondence with USAF official, July 14, 2017.

is maintained for the program because it is considered a “must-pay bill” because of the MOU.¹²⁹ This stability is important because the costs of the program for each nation depends on other SAC members: If one were to cut its number of flying hours, others would have to pick up the difference in operational costs.

A final element of success of SAC has been its flexibility. SAC members can decline to participate in a particular mission if they wish to do so (although they cannot veto a mission). As a result, there is no requirement for unanimous approval of missions, and this has allowed each nation to use the program to best serve its needs (Weisgerber, 2009; Tirpak, 2011, p. 41).

Although SAC was implemented successfully and can be considered a positive example of USAF advocacy and development of an international consortium to meet operational demands, the process through which it was established was very much ad hoc. A lesson from this case might be that USAF would benefit from developing appropriate processes to ensure that similar requirements in the future are addressed even if they fail to gain the high-level attention that SAC enjoyed.

Case Study IV: Air Advisor Academy

The AAA is a nonmateriel, SC-focused program that was designed to provide predeployment training to U.S. airmen in the general-purpose force (GPF) engaged in training, advising, assisting, and equipping partner-nation air forces (see Table 3.8). The program is an example of an initiative that developed outside of the traditional capability development process only to later enter the USAF planning and programming process. It is also a case that demonstrates the importance of strong leadership support and links to force readiness and force protection in sustaining an SC program within the USAF decisionmaking process.

Table 3.8. Case Study of Security Cooperation–Related Program: Air Advisor Academy

Nature of Case	Focus of Case	
	SC	Not SC
Materiel	C-17 consortium	OA-X
Nonmateriel	AAA	Pilot training

Background

The AAA program evolved from the requirement to train U.S. airmen in the GPF to serve as air advisors and arose from U.S. rebuilding efforts in Iraq and Afghanistan in the mid-2000s. As USAF began to take on a larger role in the training and advising efforts undertaken by the Multi-

¹²⁹ Author email correspondence with USAF officials, September 21, 2017.

National Security Transition Command—Iraq and Combined Security Transition Command—Afghanistan, GPF airmen were increasingly called on to provide basic instruction to foreign pilots, maintainers, and support personnel on nontraditional aircraft in unfamiliar and unstable regions. This training and advising role, which was typically assigned to combat aviation advisors within AFSOC, was delegated to the GPF within USAF because of the extensive manning requirements of the mission and the need to provide support across a broad spectrum of air force development. Yet GPF airmen often lacked the cultural, language, and combat skills of combat aviation advisors and were often left unprepared to take on this new mission. The AAA was developed to ensure better force preparedness by providing specialized predeployment training to GPF air advisors serving first in Iraq and Afghanistan and eventually in other countries across all the geographic CCMDs.

The program began as an ad hoc course, developed outside of the traditional capability development process. It then entered the USAF planning and programming process, in which it became a program of record and was sustained and expanded over the course of a decade, despite facing institutional and budgetary constraints, which delayed its development. SC impact was a key determinant in the decisions made by USAF to develop and sustain its air advisor training capacity, yet other factors played a role in enabling the program to survive amid overriding strategic priorities and the threat of sequestration. The support of USAF leadership and key stakeholders at various echelons helped to sustain the program, as did a sense of urgency brought about by the need to ensure adequate force protection for U.S. airmen assuming air advisory roles in the field.

Key stakeholders of the AAA, who have played a major role in the program and have served as advocates within the programming process, include members of HAF, particularly in SAF/IA, who have responsibility for developing education and training policy, validating requirements, and advocating for resources; the MAJCOMs and air components (particularly AFCENT), which define training requirements and identify the number of personnel requiring training; AETC and AMC, which have responsibility for programming and budgeting, as well as for developing syllabi and identifying education and training requirements; and the AAA itself (which has been incorporated into the Expeditionary Operations School [EOS]), which is tasked with executing education and training to meet air force competency requirements (Lorenz, 2010).

Decisionmaking Processes Involved

The initial decision to provide predeployment training to U.S. airmen serving as advisors in Iraq and Afghanistan was made outside of the capability development process. Following a training accident in Iraq that resulted in the death of four U.S. airmen in 2005, AFCENT became acutely aware of the need to better prepare GPF airmen for their new advising mission. AFCENT's immediate response was to engage AFSOC and the U.S. Air Force Special

Operations School in developing an appropriate training course.¹³⁰ AFCENT then conducted an abbreviated combat aviation advisor course that provided a group of approximately 80 GPF airmen with instruction on foreign internal defense and culture and language training, as well as weapon training and survival, evasion, resistance, and escape techniques from July to August 2006.¹³¹ This ad hoc response established a successful prototype for air advisor training. However, it proved to be only a one-time effort because it did not have dedicated manpower or funding and because it was not designed to meet an enduring demand.¹³²

In March 2007, AFCENT appealed to CSAF to establish a permanent predeployment training program. AFCENT's proposal was presented in the form of an electronic staff summary sheet (SSS) that was endorsed by SAF/IA and backed by an integrated product team (IPT) that included HAF and MAJCOM representatives. The IPT determined that building airpower in Iraq and Afghanistan would require as many as 600 airmen per year to serve as air advisors and that there was a need for an AETC-led detachment to provide the necessary predeployment training. It also concluded that supplemental funding would be necessary to support this training, which had not been integrated into USAF's FY budget submission.¹³³ The IPT's recommendations appeared to facilitate CSAF's decision, made shortly after the SSS was submitted, to charge AETC to stand up a capability to train air advisors deploying to Iraq and Afghanistan.¹³⁴ Yet because this decision was made outside of the POM process, the detachment relied on Global War on Terrorism–related overseas contingency operation (OCO) supplemental funds and existing manpower to support the effort.¹³⁵

Once tasked by CSAF to establish an advisor training program, AETC developed two courses of instruction for GPF air advisors: one for Iraq and one for Afghanistan. It then

¹³⁰ A tiger team led by AFSOC developed the first air advisory course program of instruction in February 2006 (Long, 2008).

¹³¹ The training course was conducted by AFSOC's 6 Special Operations Squadron in conjunction with the Joint Special Operations University (Commander, USCENTCOM, 2006; AFSOC and U.S. Air Force Special Operations School, 2006).

¹³² Leaders of the Coalition Air Force Transition Team reportedly noted a markedly greater improvement in the performance of advisors who received training than in the performance of those in previous rotations (author discussion with USAF officials, 2008).

¹³³ The number of air advisors being sent to Iraq and Afghanistan was anticipated to rise from 201 to 506 from 2007 to 2008. The SSS included a request for \$15 million in FY 2007 in supplemental funding to support this effort (Lemkin, 2007).

¹³⁴ The SSS notes that the establishment of a training detachment did not receive unanimous support, stating that the Directorates of Manpower and Personnel and of Operations, Plans and Requirements "non-concurred"; however, CSAF requested that the proposal proceed (Lemkin, 2007).

¹³⁵ According to USAF officials, OCO (also known as war-related) funding was made available to USAF because it was permitted to provide training for U.S. troops (author discussion with USAF officials, June 27, 2017).

conducted a series of courses at Camp Bullis and Lackland AFB, both in Texas.¹³⁶ These courses, although they were supported by Global War on Terrorism supplemental funds, had no dedicated manpower or facilities. The program relied on AETC and AFSOC personnel, as well as civilian aviation contractors, to serve as instructors and drew classroom and training resources from various locations. Beginning in February 2008, AETC began conducting three-week training courses at USAF's Expeditionary Center (EC) at what was then McGuire AFB (now Joint Base McGuire–Dix–Lakehurst) in New Jersey, which provided more-comprehensive training facilities and support for the advisor training courses, yet the program continued to be conducted on a makeshift basis over a two-year period.

Academy Enters the Fiscal Year 2010 Program Objective Memorandum Process

Requests for permanent funding (total obligation authority and manpower) for air advisor training were made on an annual basis, as is custom for most programs being supported by OCO. However, these requests were not entered into formal USAF POM discussions until 2009, during a second POM process conducted after the start of the new administration, known as POM 10.5.¹³⁷ With this special POM injection, the AAA benefited at the time from support among USAF leadership and more broadly in DoD for IW. CSAF apparently accepted AETC's request to include the AAA into USAF's presidential budget request with little discussion, leading the academy to be included in the midyear POM. As a result, the AAA was designated more quickly than even AETC personnel anticipated to receive \$22 million in baseline funding (Lorenz, 2010).¹³⁸

Support for the AAA within USAF can be attributed to the results of a HAF-authorized tiger team study that recommended that USAF prepare to support partner air forces across all geographic commands and noted more pointedly CSAF's support for a new IW strategy that stated that USAF "will establish a permanent GPF advisory capability for steady-state protracted IW requirements [that] will include an aviation advisor schoolhouse" (USAF, 2009; Livingston, 2011). This decision also dovetailed with the establishment of BP as a USAF core function, leading the AAA to become part of AETC's CFSP.

IW and BP strategies were also discussed as the rationale for expanding the AAA. In seeking CSAF's endorsement of an air academy charter, the AETC commander noted that the academy was designed to support USAF's IW and BP activities and that there was a compelling need to institutionalize predeployment education and training for GPF air advisors, not only to support operations in Afghanistan and Iraq but also to support all geographic combatant commanders,

¹³⁶ Air advisor training was conducted at Camp Bullis from May to July 2007 and at Lackland AFB in eight two-week training sessions from August 2007 through January 2008.

¹³⁷ Author email correspondence with USAF official, September 21, 2017.

¹³⁸ Also author discussions with USAF officials, June 22, 2017.

adding that programming actions were already in place to expand the school in the FY 2012 POM to meet these new demands (Lorenz, 2010).¹³⁹

The expanded objectives for air advisor training were formalized in the AAA charter, which CSAF endorsed in April 2010. The charter stated that the program could be expected to reach an initial operational capability by the end of 2010. Initial operational capability was defined as the capacity to provide three weeks of training to 900 airmen deploying primarily to Afghanistan and Iraq. By 2014, the intention was to reach full operational capability, which was defined as the capacity to provide six weeks of training to 1,500 airmen preparing for deployments across all five geographic CCMDs.

Lack of Decision on Location Delays Stand-Up Until 2012

Although the AAA received baseline funding for FY 2010, a decision on the academy's location was not made until two years later. Because of political considerations surrounding military basing decisions, the location of the AAA was left to be determined in the charter and remained undecided. Training continued to be conducted in a "temporary" site at Joint Base McGuire–Dix–Lakehurst until 2012, when a decision was made to establish the academy at its existing location and therefore avoid subjecting it to strategic basing considerations.¹⁴⁰

Academy Offered as an Offset Soon After It Is Stood Up

Once a location decision was made, the AAA was officially stood up at McGuire AFB in July 2012. Six months later, in January 2013, the academy achieved full operational capability with the capacity to train up to 1,500 airmen (50 percent for Afghanistan and 50 percent for other geographic commands) providing a tailorable curriculum consisting of a 23-day course on air advisor skills, focused on either hostile environments in Afghanistan or Iraq or uncertain environments elsewhere, as well as a series of short courses providing advisor field craft, academics and specialized skills, and component campaign planning and leadership skills (Holm, 2013). Despite this progress, external budgetary concerns related to the Budget Control Act of 2011 and the resulting sequestration process led USAF to consider eliminating the program.¹⁴¹

AETC was forced to make cuts to its operating budget amounting to as much as \$3.3 billion across the FYDP to meet sequestration requirements. Facing such substantial constraints, AETC

¹³⁹ Also author discussions with USAF officials, June 22, 2017.

¹⁴⁰ McGuire AFB became a joint base in October 2009, when it was merged with the Army's Fort Dix Army Support Activity and the Navy's Naval Air Engineering Station Lakehurst.

¹⁴¹ The Budget Control Act of 2011 (Public Law 112-25), which was signed on August 2, 2011, created budget caps for a ten-year period ending in FY 2021. For DoD, the budget caps represented a reduction of roughly \$1 trillion over ten years. Full enforcement of the budget caps was delayed until January 2013, at which point "sequestration," or the automatic process of making across-the-board cuts, was triggered. A notable exception in the law is for war-related funding, also known as OCO funding (Matthews, 2013; Harrison, 2016).

leadership offered the AAA as an offset as part of the FY 2015 strategic trade process. SC concerns did not weigh heavily on this decision. Combat capabilities were a priority, and defense officials note that there is little time to consider SC in these pressure-filled deliberations to determine how to meet DoD's strict Budget Outlays Governing Execution Year requirements.¹⁴² However, this did not mean that the academy's impact was dismissed. The AETC Resource Allocation Programming Information Decision System at the time noted that there was an increasing requirement for air advisory training in FY 2015 but that it was simply not "fiscally viable."¹⁴³

AETC's decision to include the AAA as an offset resulted in cutting \$7.63 million in O&M funds and 19 manpower positions from the training program in USAF's FY 2015 budget request submission. This would leave the program without funds at the end of FY 2014, a year prior to the end of the five-year POM cycle. This placed the academy's fate in doubt until members of the Air Staff brought the issue to the USAF General Officer Steering Group and recommended that funding be restored (at a reduced level) to sustain the academy for an additional year.¹⁴⁴

Program Sustained Temporarily with Execution-Year Funding

The decision to sustain the air academy at a fiscally strapped time benefited from the advocacy of AETC staff and support within the USAF leadership. AETC staff presented the elimination of the academy as an "operational disconnect" that would prevent their command from providing the mandatory predeployment training necessary to support a request for forces for current operations in USCENTCOM and for providing critical mission training for assigned forces that would affect all MAJCOMs.¹⁴⁵ Their advocacy for the academy was supported by a HAF/A9 Office of Lessons Learned study that demonstrated a need for an enduring air advisory capability to ensure the readiness of USAF forces, which was presented to the steering group and ultimately contributed to USAF's leadership approval by the Air Force Council (or "three-star bundle") of a plan to keep the academy open on a short-term basis using OCO funds and provide long-term support for predeployment training within the USAF topline budget in the future.

In 2015, several decisions were made both within and outside the POM process that determined how the air advisor training would be sustained over the long term. First, informed by the recommendations of the General Officer Steering Group, HAF decided that responsibility for administering the AAA should be transferred from AETC to AMC, which volunteered to take responsibility for the program. Although HAF undertook a brief proposal process to ensure that other organizations (such as AFSOC) might not be better suited to provide the training, it

¹⁴² Author discussions with USAF officials, August 4, 2017.

¹⁴³ Author email correspondence with USAF official, August 7, 2017.

¹⁴⁴ As noted earlier, OCO funds were not subject to the sequestration process.

¹⁴⁵ Author email correspondence with USAF official, April 11, 2014, citing U.S. Air Force, 2014.

determined that AMC, which maintained an EC and an expeditionary school, would be the most viable option for maintaining the ground training component of air advisor training, with AETC retaining MAJCOM responsibilities and responsibilities for aircrew training on non-USAF aircraft.¹⁴⁶

This decision to transition air advising training to the EOS resulted in the AAA being deactivated soon after it was stood up. No longer an independent schoolhouse, the academy was downsized to become a flight within the EC. Although it was disruptive, this change in structure had little impact on continuity of training because the EC continued to provide air advisor courses and retained many of its instructors and leadership staff. AMC's EOS took on a larger role in training air advisors as a result, integrating the curriculum with its broad range of expeditionary skill training courses. AETC remained a key stakeholder in the program, serving as a MAJCOM sponsor, with key long-time staff continuing to provide leadership and policy guidance.¹⁴⁷ SAF/IA also maintained its role as the advocate for the program. Despite the disruption that this process caused, the transition was generally perceived as a "good-news story" for advocates of the academy because it allowed air advisor training to continue.

Advisor Training Considered in Fiscal Year 2016 Discussions Under Air Mobility Command

Following the transition to the EOS, funding for air advisor training was again requested through the programming process. Air advisor training was included as a PE within AMC's program budget request for the 2016 POM, accounting for \$2.5 million per year within the EC baseline budget to absorb air advisor training.¹⁴⁸ Thus, air advisor training continues to be offered to a wide range of USAF personnel, including pilots, maintainers, and airmen providing air combat support who are engaged with partners across all of the CCMDs. As of April 2017, the EOS provided airmen with as much as six weeks of modular training that includes core advising skills; specialized language, culture, and regional studies; and advanced force-protection skills.¹⁴⁹ Now integrated within the EOS, the program offers courses for specific regions, including a special track for Mobility Support Advisory Squadrons preparing for deployments in Africa.

¹⁴⁶ Author email correspondence with USAF official, September 22, 2017.

¹⁴⁷ AETC continues to have responsibility for ensuring that air advisor education and training customer requirements are consolidated and validated and that the air advisor education and training curriculum meets requirements and for scheduling students to attend air advisor education and training courses. AMC serves as the SC activity manager (AFPD 16-1, 2015).

¹⁴⁸ This \$2.5 million included one officer and two noncommissioned officers, covering contract academy instructors and government personnel (author email correspondence with USAF official, September 25, 2017).

¹⁴⁹ Air reservists, for example, receive two weeks of general field-craft training in a hostile environment, three weeks of basic and advanced air advising skills, and a final week of specialized air advisor field-craft training (Joyner, 2017).

Moreover, in becoming part of a larger training program under the EC, air advisor training was able to enter into the POM cycle again for FY 2016 within AMC’s budget submission—and ultimately receive baseline funding support for five years. As part of the larger AMC budget, air advisor training might be less likely to be offered as an offset in the future. Defense officials have noted that, “while the academy stuck out as a separate program [in the past], it is now “buried in a portfolio of programs It would take killing the whole [EOS] to cut air advisor training (and) would require surgery to take the manpower from AMC.”¹⁵⁰ Therefore, air advisor training might be better insulated from budget cuts as a small, integrated SC effort that is less likely to be discussed in USAF programming and resourcing discussions.

Security Cooperation Impact of Decision Outcomes

USAF’s decisions to establish and maintain support for a GPF air advisor training program have had a noticeable impact on partner relations and access, operational capability, and SC workforce development. It is also possible to point to potential opportunities for developing USAF’s capacity for SC that have yet to be achieved because of the uneven course of the AAA’s evolution. Table 3.9 provides a summary of the SC risks and opportunities posed by USAF decisions and both the observed impact and the potential impact had USAF consistently supported air advisory training.

Table 3.9. Security Cooperation Impact in the Air Advisor Academy Case

SC Impact Category	Risk to USAF SC	Opportunity for USAF SC	Impact	
			Observed	Potential
U.S.–partner and air force–air force relations and access	—	x	Improvements in engagements in Iraq	Allow for more-enduring relationships
Partner operational capability	—	x	Increase in partner capacity	
USAF legal or regulatory adherence	—	—		
USAF SC workforce	—	x	Reduction in deaths from insider attacks	
Acquisition efficiency	—	x		Impact on partner procurement
USAF institutions and processes	—	x		Raise visibility of SC

NOTE: — = no risk or opportunity identified.

Although relationships are difficult to measure, the decision to provide predeployment training to air advisors was widely viewed as being beneficial to U.S. engagements in Iraq and

¹⁵⁰ Author discussion with USAF official, June 22, 2017.

Afghanistan. Leaders of the Coalition Air Force Transition Team in Iraq remarked that U.S.–Iraqi interactions improved after USAF approved the first round of predeployment training for air advisors in 2006.¹⁵¹ Language and cultural training, even in an abridged form, proved helpful in making air advisors more socially aware and at least less likely to harm relations between the U.S. and Iraqi or U.S. and Afghan air forces after AETC established a training detachment in 2008 (West, 2009). Moreover, in its annual report to Congress, DoD noted that air advisors played a key role in building an enduring strategic relationship with Iraq (DoD, 2010). Still, the point can be made that the AAA’s impact could have been greater had it been initiated earlier and with greater depth.¹⁵² Had USAF planners considered SC impacts prior to 2005 as they prepared to engage in training operations in Afghanistan and Iraq, USAF might have been able to take advantage of opportunities to develop better and more-enduring relationships with Afghan and Iraqi airmen.

The AAA was similarly helpful in increasing partner operational capacity yet might have had a greater impact had it been able to train more advisors earlier and with greater consistency. Under AETC’s direction, the academy educated and trained more than 5,000 students from 2007 to 2014 for deployment across all the CCMDs (Keltz, 2014). This training enabled advisors to relate better to their foreign counterparts and provide more-effective flying, maintenance, and ACS instruction and advisory support, which can be linked to increased capacity. Still, the uncertainty and disruption that affected the air advisor training prevented the academy from meeting its full potential, thus introducing some risk to the SC workforce. As one defense official noted, it was difficult for AETC to meet its training targets because it “did not own the academy long enough for it to get off the ground.”¹⁵³

The decision to develop and sustain the air advisory training also had an impact on the USAF workforce in providing U.S. airmen not only with the ability to work with foreign partners but also with the combat skills necessary to protect U.S. forces in unstable environments. Although it is difficult to make a direct correlation between training and the casualty rates in such circumstances, there is evidence that the number of coalition deaths from insider attacks declined as air advisor training reached full capacity. After first rising in 2012 and 2013, the number of deaths decreased significantly in 2014, 2015, and 2016.¹⁵⁴ Concerns about force protection played a role in AETC’s decision to continue funding the air advisor training with OCO funding in 2014. USAF might have experienced more casualties in Afghanistan and Iraq and incurred

¹⁵¹ Author discussions with USAF officials, 2008.

¹⁵² Iraq’s decision to require a withdrawal of U.S. forces from the country in 2011, although it was based on a range of factors, clearly demonstrated that there was room for improvement in U.S. partner relations.

¹⁵³ Author discussion with USAF officials, June 14, 2017.

¹⁵⁴ Force protection was a key driver in the establishment of the academy in 2012, following an insider attack in Afghanistan in 2011 in which nine NATO Air Training Command—Afghanistan advisors were killed. The number of coalition deaths from insider attacks rose in 2012 and 2013; they decreased significantly in 2014, 2015, and 2016 (Joyner, 2017; Tucker and Sayedi, 2016).

greater risk to its forces in air advising missions in other countries across the world had it not made this decision to sustain the training program.

The AAA might have an indirect impact on acquisition efficiency: Predeployment training can enable air advisors to influence partner-nation procurement decisions. Good relationships between U.S. air advisors and partner air forces and successful training can increase the likelihood that a partner purchases additional U.S. aircraft. Afghanistan, for example, purchased multiple U.S. aircraft in recent years. Foreign acquisitions could likely be improved with more-consistent air advisory training, with perhaps additional courses provided to future advisors on the security assistance (Foreign Military Financing and FMS) process that they could use in their discussions with foreign partners.

Air advisory training might also have an indirect impact on the consideration of SC in USAF's institutional process in that the program itself helped raise the visibility of SC within the corporate structure and set an example of how a program can evolve from an ad hoc offering to a program of record and continue to be sustained despite severe budget constraints. Although the AAA could have benefited from more-effective and consistent consideration within USAF core decisionmaking processes, it could provide important lessons that could be applied to other SC-related efforts in the future.

Lessons Observed

The AAA case demonstrates how SC programs can evolve from outside USAF's capability development or programming processes to respond to immediate force requirements only to later become part of the formal POM process. In many respects, the case can be viewed as a successful example of SC inputs into the decisionmaking process, but it also provides some caveats regarding how SC inputs can be made most effectively. The importance of considering the requirements for engaging with foreign partners early on in U.S. planning was made evident in the decision to initiate air advisory training. In later stages, the case reflects the importance of maintaining consistency in support to avoid delays in delivering training (or establishing a designated location for a schoolhouse) and for adopting a more systematic process for considering SC inputs during the budget decisionmaking process to avoid uncertainty and disruption.

The case also reflects the benefits of receiving strong leadership support (from SAF/IA, as well as within HAF and the Joint Staff) in both establishing and sustaining SC-focused programs and for linking such programs with broader national strategic goals. The fact that the USAF IW strategy included a specific mention of the need to build an aviation advisor schoolhouse to meet protracted IW requirements was undoubtedly helpful in making the case to include the AAA in the FY 2010 POM.

At the same time, in 2016, the AAA case illustrated that it can also be beneficial to integrate SC-focused efforts within broader USAF programs to enable them to remain "below the line" of

MAJCOM offset considerations. This would be particularly true at a time of declining defense budgets.

Another important lesson might be that SC alone cannot be expected to be a priority when USAF is facing severe budget constraints. Maintaining U.S. combat capability will take precedence in programming and resourcing decisions, particularly when difficult cuts need to be made. However, in a case like air advisor training, an argument can be made for sustaining an SC program (with execution-year dollars if necessary), if the program is considered critical to ensuring the protection of U.S. airmen and the readiness of U.S. forces. As noted in the OA-X case, air advisor training was most vulnerable when SC was the sole justification for maintaining a program.

At the same time, the AAA illustrated that, over the long term, it can be beneficial to integrate SC-focused efforts within broader USAF programs. Although air force advisor training was ultimately sustained during sequestration, it was saved by becoming part of a larger EOS and remained safely below the line of MAJCOM cuts in FY 2016. Now subsumed within the AMC budget, air advisor training appears less likely to be offered as an offset or subject to budget battles in the future.

Case-Study Lessons

Despite the unique character and circumstances of each case study, several common lessons can be drawn from the pilot training, light-attack aircraft, C-17 consortium, and AAA cases. Table 3.10 summarizes the case-study lessons that are integrated in this section. First, three of the cases (OA-X, C-17 HAW, and AAA) evolved outside traditional USAF decisionmaking processes in an ad hoc manner to respond to immediate requirements, only to later become part of the formal POM process. Although this did not necessarily prevent the development of successful programs (at least in the case of SAC or the AAA), the programs likely would have had a greater impact had they been considered earlier and more consistently within the USAF capability development or planning and programming process.

Table 3.10. Summary of Case-Study Lessons

Nature of Case	Focus of Case	
	SC	Not SC
Materiel	C-17 consortium • Developed ad hoc • Critical leadership support • Integrated program	OA-X • Developed ad hoc • Will require leadership support • Precedence of U.S. readiness
Nonmateriel	AAA • Developed ad hoc • Critical leadership support • Became integrated program	Pilot training • Precedence of U.S. readiness • Integrated SC component's possible need to expand with USAF training

Second, we found that active, consistent support of top leadership within USAF was critical to both initiating and sustaining programs. Leadership support was particularly effective when an SC initiative was linked to broader strategic goals, such as building U.S. IW capacity or increasing multinational engagement in ongoing operations. Such initiatives are more likely to receive the backing of OSD and Congress (which has been critical to the SAC and OA-X cases).

Third, we found that SC considerations were often not the decisive factor in determining the fate of SC-related programs. Core USAF interests in maintaining combat capability and readiness always took precedence in programming and resourcing decisions, especially with competing interests, such as the F-35 and budget constraints. Yet, when SC programs were associated with the protection of U.S. airmen or readiness for ongoing missions, they received greater attention. In most cases, SC impact became the “silent partner” to the core arguments about pilot shortages and aircraft life spans. This was made particularly evident with the light-attack aircraft program when discussions about the OA-X were revived by focusing on force readiness issues and could be true for future discussions on increasing pilot training capacity.

Fourth, we learned that it can be beneficial to integrate SC-focused efforts within broader USAF programs to enable them to remain below the line of MAJCOM and HAF offset considerations. Individual programs appeared to be the most vulnerable when they stood out as distinct SC activities. This was true for the AAA, which was more safely incorporated in the EOS within the AMC budget. Similarly, when SAC was tied to a multinational agreement with a designated funding authorization, it appeared to be largely protected from being submitted as an offset.

Finally, across all cases, there was evidence of a need to present SC considerations in a more systematic manner within the USAF decisionmaking process to ensure that SC implications could be raised to USAF leadership in a consistent and timely fashion. Whether considering the expansion of U.S. training production, building a new light-attack aircraft, or training air advisors, greater coordination and advocacy were clearly needed to ensure that USAF could take advantage of existing opportunities and avoid risks and expense of considering SC too late in the process to be most effective, as each of these cases has demonstrated.

Chapter Four. Options and Recommendations for Factoring Security Cooperation Impact into Core Air Force Decisionmaking Processes

The research reported in Chapters Two and Three tells a story of a key USAF activity—SC—that is underrepresented in core USAF decisionmaking processes and not systematically or explicitly factored into decisions that could impact USAF’s capacity to engage with foreign partners. Given that SC is a core USAF mission, *top leaders who rely on inputs from core processes to make decisions are not well served by those processes when it comes to fully understanding the SC implications of those decisions*. At the same time, it should be noted that this lack of systematic incorporation into the SP3 and CD/A has not prevented USAF from making important contributions to DoD efforts to engage partners.

The following findings help summarize the research presented in Chapters Two and Three:

- *Although SC is stated as a high priority in DoD and USAF strategic guidance and statements, that priority does not translate into systematic treatment of SC impact at lower echelons.* Cooperation with allies and partners in support of vital U.S. interests receives pointed emphasis in U.S. diplomatic and military strategy, theater plans, and USAF planning guidance. However, SC impact does not appear as a systematic, explicit component of trade-offs that inform decisions at the CFL level, at which plans, programs, and concepts are built and fed into the corporate structure. As such, not only do decisions that might affect USAF’s capacity to work with foreign partners lack consideration of SC impact, this impact is not visible to high-level USAF decisionmakers, including CSAF and SecAF. Decisions on some SC-dedicated programs that reach the four-star level are considered carefully in terms of the effects on U.S. partnerships, but these leaders cannot make judgments on SC-affecting trade-offs into which SC impact is not factored.
- *Important foundational analyses of USAF capabilities and gaps do not consider contributions of allies and partners.* USAF’s analytic community derives operational needs and gaps from analysis of scenarios and requirements of the CCMDs. Analyses help justify USAF programs, as well as adjustments to USAF capabilities and development of new ones. But existing and potential contributions of foreign partners in ameliorating some of these gaps often do not appear in these analyses, so there is little to drive future SC efforts and consideration of impact in USAF processes. Many argue that the United States cannot count on other countries to join coalition operations—and thus must plan to fight alone—and that USAF-favored programs that are duplicative of allied capabilities will be cut to free up resources for other activities. These are not unreasonable arguments, and they must be addressed head on if partner capabilities are to be systematically incorporated into operational analyses.
- *SC initiatives at times are developed ad hoc.* One implication of the finding earlier is that SC-dedicated efforts can originate in an ad hoc fashion outside traditional decisionmaking processes. This is not necessarily bad, but it leads us to ask what might

be missed by not having a more dedicated effort to identify and prioritize gaps in USAF SC capacity.

- *SC as a mission lacks commonality with other mission and process structures.* The SC mission faces two perennial challenges to systematic incorporation into core USAF decisionmaking processes. First, defining adequate metrics that measure SC output comparably to metrics used for other competing missions is very difficult. Planners and programmers say that they encounter a lot of “arm-waving” regarding SC “goodness” rather than concrete analysis that would enable them to prioritize SC impact in relation to other impacts during “rack-and-stack” exercises. Second, as a pervasive activity, many USAF resources supporting SC are difficult to differentiate from non-SC resources in the databases that make up the USAF program. PEs identified as dedicated to SC do not represent the entirety of USAF’s SC effort, yet PEs represent the lingua franca of the planning and programming community. The challenge, then—in the face of the commonly stated mantra that, “if it ain’t in the program, it ain’t”—is to consider and adjudicate SC impact in cases in which there is no identifiable, separable PE.
- *The later in a process that SC impact is raised, the more challenging it is to successfully incorporate SC considerations into decisions on USAF programs.* Seeking to make important changes to the POM during deliberations within the corporate structure or to insert exportability or other factors related to foreign partners in the latter stages of acquisition is inherently more difficult and less likely to succeed than if SC impact were systematically incorporated in the early stages of planning and concept development. Inertia can play a role in this observation. One can speculate that there would be more resistance to making significant programmatic changes late in the programming or acquisition process without intervention by top USAF leadership or OSD. On the other hand, if SC impact were “normalized” as a factor in planning and concept development, it would have more opportunities for consideration not only at lower decisionmaking echelons but also at the highest levels, at which it would be visible as a factor.
- *Although still new, SCEGS has had positive effects on socializing SC across USAF and synchronizing SC activities.* Not all of our interlocutors across the headquarters or MAJCOMs had heard of the new SCEGS effort to better integrate and synchronize SC in USAF. Those who had were generally complimentary about progress at socializing and broadening the understanding of SC throughout the force, sharing information, and deconflicting or synchronizing SC activities. However, the impact on core processes and on establishing SC requirements and priorities remain unclear.

The four case studies of SC-related programs provided further evidence of some of these findings. Three of our four case studies were developed ad hoc—not from CCMD IPLs or analyses of operational gaps but by experienced professionals who noted emerging needs or opportunities from empirical observation of ongoing operations or events. Active, consistent support of top leadership within USAF was critical both to initiating and sustaining programs and was particularly effective when an SC initiative was linked to broader strategic goals, such as building U.S. IW capacity or increasing multinational engagement in ongoing operations. SC considerations were often not the decisive factor in determining the fate of programs not dedicated to SC, and, in some cases, SC became the “silent partner” to the core arguments about such critical combat capability and readiness issues as pilot shortages and aircraft life spans.

Likewise, it was beneficial to integrate SC-focused efforts—which appeared to be the most vulnerable when they stood out as distinct SC activities—within broader USAF programs to enable them to remain below the line of offset considerations. Finally, there was evidence of a need to present SC considerations in a more systematic manner within the USAF decisionmaking process to ensure that SC implications could be raised to USAF leadership in a consistent and timely fashion.

An Approach to Analyzing Security Cooperation Impact

There is broad agreement among the subject-matter experts we engaged during our research that understanding, expressing, and utilizing SC risk and opportunity are among the challenging aspects of factoring SC impact into core decisionmaking processes. Our goal in the research presented here is to bring SC into discussions about efficacy of programs and concepts, thus raising awareness of the opportunities and risks as they pertain to working with international partners. Our sense is that SC *can* be more systematically taken into account, perhaps similarly to other issues whose risk is accounted for (e.g., readiness, manpower, training) with targeted efforts earlier in the planning stages. Here, we suggest the beginnings of a framework by which to illuminate the opportunities and risks that OT&E decisions might bring to USAF SC with partner air forces and, ultimately, to measure the impact of those activities. We have opted for a structured yet simple and easy-to-use framework that is targeted at USAF planners and conceivers at the MAJCOM echelon and that can be carried through the corporate structure to make SC impact visible in trade-offs considered by USAF leadership, thereby leaving an audit trail that shows how SC fared in deliberations.

Table 4.1 depicts a notional risk matrix based on the case-study summary tables that could be used to bring SC impact into deliberations about trade-offs in the SP3 and CD/A processes. It draws inspiration from risk matrices found in CFSPs that the CFLs prepare to justify planning choices and programs. It is qualitative in nature and meant to precipitate systematic discussion about how plans and concepts might affect USAF's capacity to engage foreign partners. The matrix employs the SC impact categories introduced in Chapter One and applied in Chapter Three to consider risk and opportunity demonstrated by the case studies. Each category would have a set of standard questions that planners and conceivers might address in terms of the level of risk or opportunity that a program or initiative presents to USAF's ability to conduct SC. Risk and opportunity would be rated low, moderate, or high, and a justification for the ratings could be provided that identifies the gaps, improvements, and other effects that a program or initiative might create were it to be approved, denied, or canceled. In cases in which no known linkage with SC can be found, the risk or opportunity would be rated "not applicable." For illustrative purposes, the risk matrix in Table 4.1 is rated according to a notional light mobility aircraft to be developed for both USAF and partner nations. The intention is that such a risk matrix would be

offered for any SC-affecting program being considered for initiation, cancellation, or changes in resources (e.g., F-16 flying hours, UPT, or a new aerial refueling tanker).

Table 4.1. Illustrative Matrix of Security Cooperation Risk and Opportunity (Notional Light Mobility Aircraft Example)

CF Capability: Partnering		Specified Proposed CF Planning Choice, Program, or Capability (e.g., Notional Light Mobility Aircraft)		
SC Impact Category	Sample Question: How Might the Planning Choice, Program, or Capability Affect . . .	Risk to USAF SC	Opportunity for USAF SC	Justification for Rating
Geopolitical or access	USAF relationships with partner air forces	Not applicable	High	Improves air force–air force relationships with less advanced partners; helps counteract Russian and Chinese inroads to partners; provides greater USAF access to austere airfields; enables a lower-visibility U.S. presence
Operational	Interoperability with partner air forces	Not applicable	High	Interoperability, training, and opportunities for operations-to-operations relationships with a broader range of partners; permits greater USAF use of partner ACS; makes other partner capabilities, such as ISR or strike, addable later
Legal or regulatory	International, multilateral, or bilateral agreements	Not applicable	Moderate	Simplifies tech transfer because platform candidates are off the shelf and therefore available to partners; makes regional multilateral agreements more likely for mutual support of humanitarian assistance and disaster relief
Workforce	The development of USAF aviation advisors	Not applicable	Moderate	Because they are part of USAF inventory, increases pool of USAF trainers and advisors
Acquisition	The U.S. industrial base through the sale of U.S. equipment	Some	Moderate	Increases partner interest in buying U.S. goods; because orders are larger, brings unit costs down; adds some risk if partners do not place orders
Institutional	SC planning in USAF	Not applicable	Some	Supports more-deliberate SC planning; creates organizations that can be tasked for both operations and SC

The sample questions in Table 4.1 are representative and should be expanded to other issues related to each SC impact category. They provide a good starting point for planners and conceivers to consider in their deliberations about the risks and opportunities associated with SC with partner air forces. For the *geopolitical or access* category, questions to be addressed could include how a planning choice, program, or concept might affect

- USAF relationships with advanced partners, emerging partners, or nascent partners
- U.S.–partner relationships on a government-to-government level
- alignment of U.S. and partner interests

- overflight rights
- access to existing or new locations overseas.

The second, *operational* category of impact should cover issues related to

- interoperability with partner air forces
- intelligence-sharing arrangements with U.S. allies and partners
- training and other capacity-building activities with partners, including English language training
- USAF–partner air force dialogue regarding operational challenges and lessons.

Legal or regulatory issues could include questions that address

- adherence to international, multilateral, or bilateral agreements
- transfer of U.S. technology to partner nations
- USAF ability to operate lawfully in foreign nations.

The *workforce* category would provide insight into risk and opportunity related to SC professional manpower, including effects of decisions on

- development of language-qualified, culturally attuned, regionally oriented airmen, including aviation advisors
- development of SC planners in USAF
- manpower requirements in SC-related positions
- career progression for SC professionals in USAF.

The fifth category, *acquisition*, would assess opportunity and risk that planning choices and initiatives might present in terms of effects on

- the industrial base through sale of U.S. equipment to partners
- collaboration with partners on research, development, test, and evaluation
- U.S.–partner procurement of common equipment that promotes interoperability and sustainment
- unit cost of equipment procured by both the United States and foreign partners.

Finally, the *institutional* category would help demonstrate effects of planning and concept development decisions on

- USAF capacity for planning, executing, and assessing SC
- systematic incorporation of SC into core USAF decisionmaking processes
- enhancement of processes internal to the SC community
- management of USAF SC-related human capital
- development of metrics to support assessment of SC impacts in USAF decisionmaking.

In the near term, systematically discussing a risk matrix with these kinds of questions could quickly inject SC into core processes at their earliest stages. Over time, it might be possible to develop metrics that would facilitate more-standardized deliberations than might be enjoined through these questions. Systematic incorporation of SC impact is likely to be an evolutionary process, and this drives our recommendations, to which we now turn.

Recommendations

Informed by our research, we have developed recommendations for systematically factoring SC impact into core USAF decisionmaking processes. These recommendations are guided by a range of considerations. First, they are based on the idea that, although SC impact might not drive many decisions and could, in fact, accumulate risk in the face of higher priorities in a budget-austere environment, it is critical to make SC impact visible and explicit to decisionmakers as they consider trade-offs. Decisions having a negative effect on SC might still be made, but at least the decisionmaker will understand that effect ahead of time. The goal here is not to render SC the highest priority but to normalize it and improve transparency in existing core processes. Second, the recommendations draw from our observation that systematically accounting for SC impact earlier in each core process is key to helping normalize it in USAF decisionmaking. Third, our proposals are intended to be complementary to the SCEGS approach. That approach is designed to draw HAF and CFL planners and programmers into a parallel governance structure for centralized discussions of SC issues. Conversely, our proposals encourage systematic but decentralized deliberations of SC-related issues within the existing core processes, which can then be carried through the AFCS and, in selected cases, into SCEGS as well. Finally, the actions that USAF can take to systematically incorporate SC will involve an evolutionary, step-by-step process that will take some time to develop and implement. Thus, we divide our recommendations into those that could be implemented in the near term (in a year's time) and those for the medium to long term (in two or more years). We also present them in the context of the two core processes reviewed in our research.

Recommendations for Consideration in the Near Term (One Year)

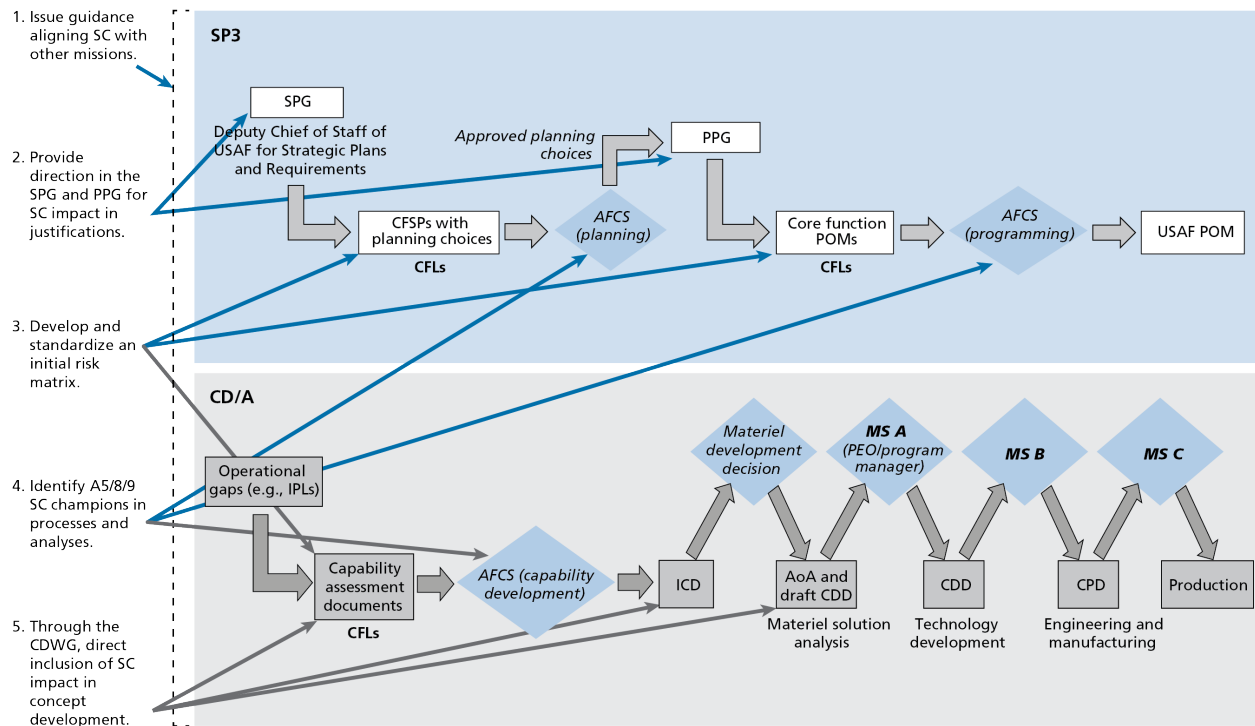
In the near term, USAF can begin to set the conditions for including SC impact in the early stages of planning, programming, and concept development. The following proposals draw from our research to encourage systematic consideration of SC in the core USAF SP3 and CD/A decisionmaking processes. Figure 4.1 ties these near-term proposals to key touch points in these processes as depicted in Figures 2.1 and 2.2 in Chapter Two:

1. *Issue USAF-wide guidance declaring alignment of SC with other missions and activities in core processes.* This guidance—in the SMP or other strategic communication from the leadership to the rest of the service—would provide notice that USAF will implement congressional and DoD requirements regarding SC by normalizing its consideration in planning, programming, and concept development. It could also put the imprimatur of CSAF and SecAF on the effort.
2. *Provide detailed direction in the SPG (for planners) and in the PPG (for programmers) on including SC impact assessment in justifications.* The SPG stipulates that, in developing, analyzing, and justifying proposed planning choices, planners should assess their potential impact on certain categories of resources and activities (such as manpower, readiness, and training). The results of these analyses remain visible and explicit as planning choices make their way through the corporate structure. The SPG should, in the

future, stipulate that SC be included as one of the items against which planning choices—whether SC-related or SC-dedicated—should be analyzed for risk and opportunity, alongside other more-traditional categories. The PPG should also mandate that every initiative, disconnect, and offset have an SC impact assessment, if applicable. In this way, SC becomes an element of the POM process as the corporate structure deliberates over and integrates the USAF program.

3. *Provide detailed direction through the CDWG to conceivers to factor SC impact into concept development deliberations and products.* In its responsibility to ensure that capability development takes into account USAF-wide considerations and stakeholders, the CDWG should task conceivers to assess the SC impact of their initiatives in CBAs, ICDs, and other key JCIDS documents. We considered cases in which SC-dedicated programs were developed ad hoc outside the formal CD/A process. Of interest is how SC impact might be considered early on in the cases of more-traditionally formulated capabilities. Assessment of SC impact at these early stages of concept development should also help drive later analyses of performance parameters and acquisition strategies to ensure that potential foreign-partner equities are taken into account in AoAs and draft CDDs (even if they do not become KPPs whose incorporation into new systems is required). All of this would help ensure that SC impact is properly considered prior to MS A and designation of acquisition program management.
4. *Develop and standardize risk matrices (with impact areas and questions to address) as an initial step to factor SC impact into SP3 and CD/A deliberations and analyses.* As described in the previous section, such risk matrices would serve as prompts for discussion and incorporation of SC impact into analysis of USAF programs and capabilities. They would be included in CFSPs, as well as POM submissions, beside risks assessed in other mission areas or activities and could be used as well to consider and drive analysis of SC issues in the development of CBAs and ICDs.
5. *Identify Air Staff personnel in the Directorates of Strategic Plans, Programs, and Requirements and of Studies, Analyses and Assessments who can serve as champions of SC issues in Air Staff processes and analyses supporting the corporate structure.* Important operational functions of the SC mission now reside in the Directorate of Operations (HAF/A3), but there do not appear to be staff in the strategy, planning, programming, requirement, and analysis functions of the Air Staff with portfolios that involve systematically tracking and advocating SC issues in core USAF processes at the headquarters level. Such personnel could serve as the “eyes and ears” of HAF/A3, SAF/IA, and SCEGS in these processes for the purposes of supporting the development of planning, programming, and concept development guidance and flagging potential challenges and opportunities during process implementation.

Figure 4.1. Proposed Near-Term Actions to Systematically Incorporate Security Cooperation Impact in Core Air Force Decisionmaking Processes



Recommendations for Consideration in the Medium to Long Term (Two-Plus Years)

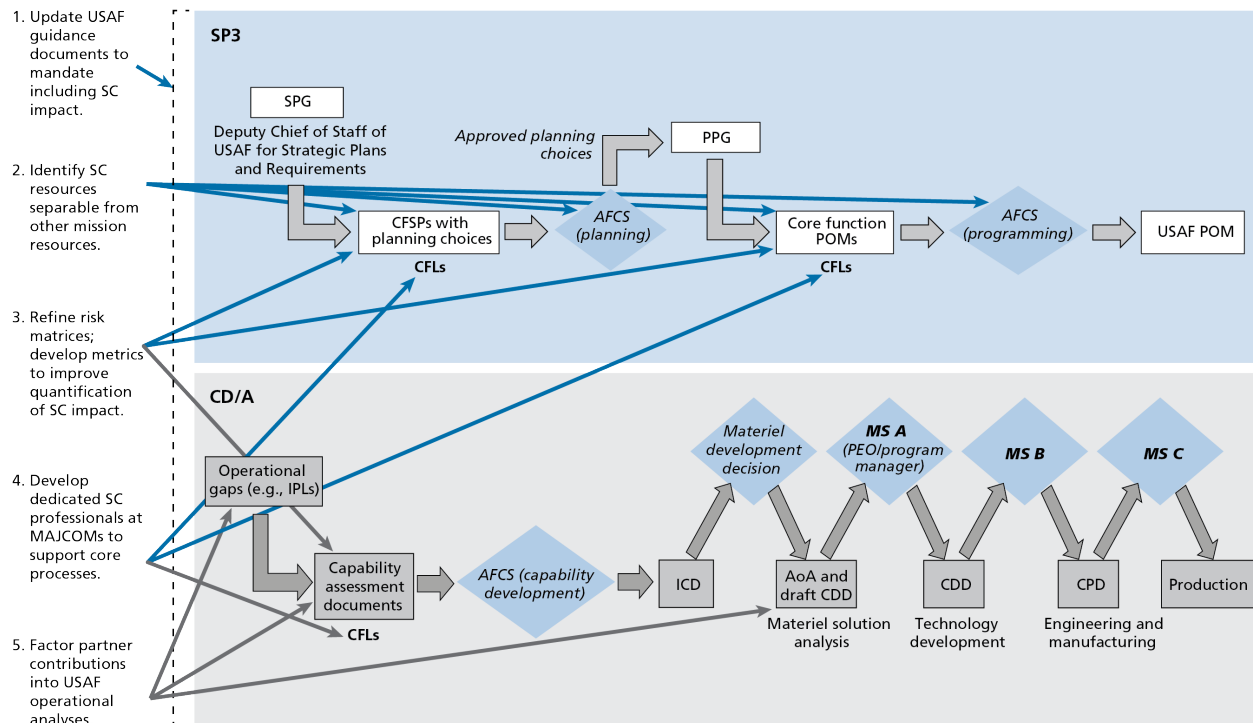
The following recommendations build on the near-term proposals earlier to normalize assessment of SC impact in core USAF decisionmaking processes over the medium to long term. Figure 4.2 ties these longer-term proposals to key touch points in these processes, again as depicted in Figures 2.1 and 2.2 in Chapter Two:

1. *Update USAF directives and instructions to mandate consideration of SC risks and opportunities.* As indicated in Chapter Two, there is little treatment of SC in SP3- and CD/A-related USAF directives and instructions, with the exception of those dedicated to it (e.g., AFD 16-1, *Security Cooperation*) (AFPD 16-1, 2015). Future iterations of these documents should define SC as a topic of deliberation and analysis and identify relevant stakeholders and their roles and responsibilities.
2. *Develop mechanisms to factor partner capabilities into USAF operational and interdependency analyses.* In light of the high priority given to coalition operations in DoD guidance—and the constraints on resources that USAF faces as it seeks to meet global demands—USAF should place greater emphasis on capturing allied and partner contributions to potential contingency operations and major-war scenarios. This should include the gamut of capabilities that foreign partners could provide—from air superiority and global mobility capabilities to air-base operations. Although one cannot predetermine which partners will join a U.S. coalition in any given contingency, a full accounting of risk to U.S. operations (and therefore identification and prioritization of operational gaps) is not possible without understanding how partners might help

ameliorate that risk. More-comprehensive operational analyses that include partner capabilities could help motivate USAF strategic prioritization and planning, capability development, and SC planning. We contend that this is part and parcel of CSAF's role as international air chief.

3. *Identify resources for SC within USAF that are separable from other mission resources.* One of the "holy grails" of the SC community is finding a way to break out resources used for SC from other activity categories that make up a PE. The difficulty in identifying SC resources is that USAF has limited treatment of SC in planning and programming. This was evidenced by the failure of the BP core function in the first half of the 2010s, in which "captured" resources were limited to a small number of relatively minor PEs. The challenge is in differentiating resources going to a pervasive activity from other, more-germane resources—for example, differentiating core USAF flying hour, training, and equipping resources in the F-16 PE from those that involve working with partners in exercises, exchanges, and other SC activities.
4. *Refine risk matrices and develop other assessment techniques to improve qualification and quantification of SC impact.* The risk matrix we have suggested in this report is a first step to qualitatively injecting SC into SP3 and CD/A analyses on a systematic basis. But it does not yet render SC impact as an activity whose effectiveness and outcomes can be assessed in a way that allows straightforward comparison with other USAF activities. For example, planners might be able to correlate changes in flying hours with levels of readiness, but linking flying hours with the USAF capacity to engage partner air forces is somewhat more difficult, and the requisite analysis has not been done. If SC activities are to be "racked and stacked" in trade-off analyses and prioritized in the same way as other USAF programs, progress on measuring USAF's capacity for SC is critical.
5. *Develop dedicated SC professionals at the headquarters and MAJCOM levels to support assessment of SC impact and shepherd resulting deliberations and analyses within the core processes.* It is likely to be challenging to implement our recommendations in an environment in which there is a virtual freeze on staff levels after a period of downsizing. Existing international affairs staffs in the MAJCOMs might not be adequate to sustain the focus on incorporating SC impact in core processes under current circumstances. And although SAF/IA and HAF/A3 are principal advocates of SC in HAF, we have identified a need for dedicated SC professionals in the Directorates of Strategic Plans, Programs, and Requirements and of Studies, Analyses and Assessments to participate in the core processes at that level. In light of congressionally mandated efforts to define, build, and track an SC workforce within DoD, USAF could consider defining a limited number of SC analysts in HAF and the MAJCOMs as SC workforce requirements.

Figure 4.2. Proposed Mid- to Long-Term Actions to Systematically Incorporate Security Cooperation Impact in Core Air Force Decisionmaking Processes



Concluding Remarks

As mentioned in Chapter One, at this writing, USAF was considering changes to how it plans, programs, and conducts capability development, including potential evolution of the corporate structure and the existence and roles of core functions and CFLs. Even if USAF were to reorganize and replace CFLs with some other entity, the functions that the CFLs carry out—planning, programming, and conceiving of capabilities against which USAF OT&Es—would remain. In our research, we sought to identify improvements that could be made regardless of the final process structure. Thus, our recommendations are focused more on activities and echelons than on specific corporate entities and should be applicable across a range of different structures. Planners, programmers, conceivers, and requirement officials would still need to execute their functions, albeit in a different corporate setting. In short, whatever new corporate structures USAF adopts, SC impact must be factored into decisions and trade-offs in the early parts of the process and at lower echelons (e.g., MAJCOMs), at which plans are implemented and programs built.

Implementation of any recommendations on SC must be visibly and forcefully supported by USAF's top leadership, especially CSAF and SecAF. CSAF in particular should be a vocal advocate of institutionalizing and normalizing SC in USAF. Without this advocacy, USAF will tend to fall back on more—deeply ingrained and traditional perceptions of processes and decisions on OT&E. According to some of our interlocutors, without CSAF's strong, consistent support of

including SC impact systematically in core processes, SC will either continue to be ignored (and not even appear on the “roster” as mentioned earlier) or just be treated as yet another box to check with no real consideration behind it.

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Security cooperation (SC) is a key component of U.S. national security strategy, a high priority in U.S. Department of Defense guidance, and a key mission of the U.S. Air Force (USAF). USAF must explicitly factor SC into its plans and programs for organizing, training, and equipping the force. This report reviews two core USAF decisionmaking processes—the strategy, planning, and programming process and the concept development and acquisition process—to determine the extent to which decisionmakers consider SC impact and to recommend ways to make such considerations systematic and explicit.

The authors explored four case studies of SC-related programs and initiatives to draw lessons from their decision outcomes: (1) undergraduate pilot training, (2) the light-attack aircraft, (3) the C-17 Heavy Airlift Wing, and (4) the Air Advisor Academy. They tell a story of this key USAF activity that is underrepresented in core USAF decisionmaking processes and not systematically or explicitly factored into decisions that could affect USAF's capacity to engage with foreign partners.

The authors recommend that, regardless of any change in corporate planning structure, USAF factor SC impact into decisions and trade-offs in the early stages of organizing, training, and equipping processes and make these trade-offs explicit to top USAF decisionmakers.



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