



CURTIS E. LEMAY CENTER

FOR DOCTRINE DEVELOPMENT AND EDUCATION



AIR FORCE DOCTRINE PUBLICATION (AFDP) 3-0 OPERATIONS AND PLANNING

APPENDIX B: SPECIALIZED PLANNING PERSPECTIVES

Last Updated: 04 November 2016

The information below describes planning considerations that are specifically applicable to various operations the Air Force conducts in and from the air, space, and [cyberspace domains](#). Commanders and planners should be aware that each function and operation has specialized planning considerations.

SPACE OPERATIONS PLANNING

Space operations should be integrated into the [joint force commander's](#) (JFC's) planning processes to magnify joint force effectiveness. Global space forces support multiple theater and national [objectives](#) and are controlled by the commander, United States Strategic Command (CDRUSSTRATCOM). Most space planning is thus done by United States Strategic Command (USSTRATCOM). Space planners participate in day-to-day global and functional intertheater operations through the joint functional component command for space (JFCC SPACE); supported by 14th Air Force and the [Joint Space Operations Center](#) (via the 614th [Air Operations Center](#) [AOC]), at the direction of CDRUSSTRATCOM. Planning for use of space assets should be integrated throughout the plans developed and executed by all [combatant commanders](#) (CCDRs), whether geographic or functional.

Space Integration Considerations

Integration of theater space requirements should consider both a global and a theater perspective. Global integration is the responsibility of CDRUSSTRATCOM. Theater integration is the responsibility of the geographic CCDR and the component commander designated as the space coordinating authority (if the CCDR does not retain this authority). During conflicts including Operation DESERT STORM, Operation ALLIED FORCE, Operation ENDURING FREEDOM, and Operation IRAQI FREEDOM, several space-related considerations surfaced that may have directly impacted US military success. Planners should take the following actions when developing [courses of action](#) (COAs):

- ✦ Determine theater requirements in terms of desired [effects](#), not specific tactics or assets.
- ✦ Consider theater missile warning requirements, such as timeliness, tolerance of false reports, coverage, and data distribution.
- ✦ Identify accuracy requirements so positioning, navigation, and timing assets can be better deployed and employed.

- ✦ Consider increasing bandwidth needs (voice, data, imagery, and video communication) through arrangements with communications experts (A6 or J6), the local or regional frequency manager(s), and the space integration experts who are liaisons to USSTRATCOM's JFCC SPACE, the regional satellite communications support center, or the global satellite communications support center.
- ✦ Account for space-based [intelligence, surveillance, and reconnaissance](#) (ISR) and assessment requirements.
- ✦ Make use of military and consider availability of civilian space-borne meteorological support assets.
- ✦ Gain understanding of the [operational environment](#), including full knowledge of threats (both man-made and natural) to friendly space operations.
- ✦ Consider integrating [nonkinetic](#) space control capabilities into the operation plan, if appropriate.
- ✦ Consider strikes on adversary space control capabilities and alternatives for possible loss of friendly space capabilities.
- ✦ Consider the potential benefits of permitting an adversary unrestricted use of space assets to allow for friendly exploitation of adversary information.

CYBERSPACE OPERATIONS PLANNING

Planning for Ongoing Operations

The speed of operations in cyberspace compresses traditional decision cycles. Nonetheless, the [observe-orient-decide-act](#) (OODA) loop remains a valid construct for decision-making in cyberspace despite the greatly accelerated speed of operations. In cyberspace, actions and responses can take fractions of a second, so prior planning and preemptive actions are necessary—both offensively and defensively—to ensure friendly freedom of action. Cyberspace planners participate in day-to-day global and functional intertheater operations through Air Force Space Command (via 24th Air Force) and the 624th Operations Center at the direction of the commander, United States Cyber Command (USCYBERCOM). General planning considerations for the continuous, cyclic, and iterative nature of ongoing operations in cyberspace are:

- ✦ Strategic plans should include all [instruments of power](#) (IOPs) in order to prepare for possible simultaneous effects across all levels of warfare and multiple domains.
- ✦ Planning should include protection from adversary operations that may be targeting across multiple domains.
- ✦ Planners should interface with appropriate ISR and operational organizations to prepare for the possible effects from cyberspace operations, to include effects on the plans themselves.
- ✦ Planners should integrate cyberspace capabilities into the overall operation plan, as appropriate.

- ✦ Theater requirements should be determined in terms of desired effects, not specific tactics or assets.
- ✦ Planners should consider the potential benefits of permitting an adversary wide, or even unrestricted, use of cyberspace assets, to allow for friendly exploitation of intelligence information.

Planning For Major Operations and Campaigns

In addition to day-to-day ongoing missions, operations in cyberspace can be planned as part of major operations and campaigns. In these cases, planning should be fully integrated into the [joint planning process](#) (JPP) at the JFC level and the [joint planning process for air](#) (JPPA) at the component level. This kind of operational planning does not significantly differ from planning for operations in other domains in terms of processes.

During the execution stage of [major operations and campaigns](#), cyberspace operators should work in conjunction with the [joint force air component commander's](#) (JFACC's) time-phased air, space, and cyberspace scheme of maneuver for a given tasking period, synthesizing commander's guidance, desired effects, supported components' schemes of maneuver, friendly capabilities, and likely enemy courses of action, and allocating friendly resources against approved targets.¹

INFORMATION OPERATIONS PLANNING

[Information operations](#) (IO) remain a key enabler for joint force operations. One of the JFC's priorities in any conflict should be achieving decision superiority over the adversary. This entails gaining and maintaining information superiority as well as controlling the [information environment](#). Much of this can be accomplished through IO capabilities within the cyberspace domain.

IO can create strategic effects (both desired and undesired), even when employed at the joint force component level (as by the joint force air component commander [JFACC]).

The specific activities of IO should support the commander's objectives by:

- ✦ Conveying selected information and indicators to target audiences.
- ✦ Helping shape the perceptions of targeted decision-makers.
- ✦ Helping to secure friendly information (particularly in cyberspace).
- ✦ Protecting against espionage.
- ✦ Protecting against sabotage and other adversary intelligence gathering activities.
- ✦ Communicating desired unclassified information about friendly activities.

¹ For more information, see AFDP 3-12, [Cyberspace Operations](#).

In terms of strategy, operational design, and planning, IO should be explicitly integrated into COA selection and planning efforts as early as possible. In fact, Joint Publication (JP) 5-0, [Joint Operation Planning](#), identifies “informational flexible deterrent operations,” which can be implemented by the President or Secretary of Defense (SecDef). The informational IOP should be integrated into planning as early and at the highest levels possible. Examples of [operational-level](#) effects that influence operations functions can contribute include:

- ✦ Hindering an adversary’s ability to strike by creating confusion in the operational environment.
- ✦ Slowing or ceasing an adversary’s operational tempo by causing hesitation, confusion, and misdirection.
- ✦ Reducing an adversary’s [command and control](#) (C2) capability while easing the task of the war-to-peace transition.
- ✦ Using IO capabilities instead of physical destruction to prevent or lessen reconstruction costs during the war-to-peace transition.
- ✦ Influencing adversary and neutral perceptions of leaders, military forces, and populations, away from adversary objectives to US objectives.
- ✦ Disrupting adversary plans, thereby enhancing US plans and operations.
- ✦ Negatively impacting an adversary’s ability to lead by affecting their communications or understanding of the operational environment.
- ✦ Disrupting the adversary commander’s ability to focus combat power.
- ✦ Influencing the adversary [commander’s estimate](#) of the situation.
- ✦ Conducting IO actions that reduce friendly vulnerabilities to physical and cyberspace attacks.
- ✦ Protecting forces during humanitarian operations from [asymmetric](#) and insurgent threats.

ELECTRONIC WARFARE PLANNING

[Electronic warfare](#) (EW), in the form of electronic attack, electronic protection, and EW support, is waged to secure freedom of action in portions of the [electromagnetic spectrum](#) (EMS). EW is conducted to secure and maintain freedom of action for friendly forces in the electromagnetic operational environment and to deny the same to adversaries. It can create significant standalone effects, as well as support military operations by generating various levels of control, denial, detection, exploitation, and related effects through the EMS. EW is a vital part of all phases of operations and campaigns. The JFC commonly empowers the JFACC to organize, execute, and oversee the conduct of EW through a joint electronic warfare cell (EWC) in the AOC. The EWC coordinates with other planning and [targeting](#) activities to develop and monitor EW plans and operations in support of the JFC. The EWC should be able to plan EW in order to support air, space and cyberspace efforts as well as provide EW support to ground, maritime, and special operations. In response to the [air tasking order](#)

(ATO), wing and unit staffs and individual aircrews conduct detailed tactical planning for specific EW missions. The EWC is usually represented throughout the tasking cycle as well as having a small plans element operating outside the cycle. The representatives in the different divisions and teams (strategy, [targeting effects team](#), etc.) concentrate on the basic components of a given tasking cycle day, while the plans element ensures continuity with the EWC's overall EW planning.

EW planning requires a broad understanding of enemy and friendly capabilities, tactics, and objectives. Employment of EW assets should be closely integrated into, and supportive of, the commander's overall planning effort. This planning requires a multidiscipline approach with expertise from operations (ground, air, space, cyberspace, and information), intelligence, logistics, and weather.

The EWC should incorporate EW into the [air operations directive](#). They should also work with the AOC's strategy plans team to develop EW annexes to [operations plans](#) (OPLANs), as well as branch and [sequel](#) plans. Finally, the EW representative should work with the strategy assessment team to assess the effects created by EW.

NUCLEAR OPERATIONS PLANNING

The commander, United States Strategic Command (USSTRATCOM) and JFCs plan for the employment of nuclear weapons by US forces in a manner consistent with national policy and strategic guidance. Conditions leading to US employment of nuclear weapons may not necessarily lead to an all-out exchange of [weapons of mass destruction](#). However, the employment of nuclear weapons *is always a Presidential decision*. As with all military actions, nuclear targeting and attack functions are accomplished in accordance with our obligations under international law, international agreements and conventions, and the [rules of engagement](#) (ROE) approved by the President and the SecDef.

USSTRATCOM is tasked through the [Unified Command Plan](#) and the [Joint Strategic Capabilities Plan](#) (JSCP) to provide nuclear planning. The JSCP's nuclear supplement establishes parameters and constraints that are the basis for nuclear targeting. It defines the threat to be countered, provides the projected threat environment, and levies requirements on the targeteers in terms of the desired effects, including such considerations as probability of damage. Additional guidance is also provided by geographic CCDRs' OPLANs and [Chairman, Joint Chiefs of Staff](#) emergency action procedures. Nuclear operations planning should be integrated into operation plans to create effects needed to achieve the supported CCDR's desired objectives.

Since the fundamental role of nuclear weapons is to deter nuclear attack and defend the vital interests of the United States and its partners, advance planning is critical to the effective use of these weapons. Targeting guidance and plans should be current, tied to national and theater intelligence assessments, and satisfy specified objectives. However, as stated before, their use is always a Presidential decision. Complete destruction of enemy forces may not be required to create the desired effects; rather, containment and a demonstrated will to employ additional nuclear weapons may suffice to achieve national objectives. Other considerations for [nuclear operations](#) include:

- ✦ **Preplanned Options.** Preplanned options are a means of maintaining centralized control while minimizing the impact on response time.

- ★ **Emerging Targets.** Requirements may arise to strike follow on and newly emerging targets in support of the desired national [end state](#).
- ★ **Adaptability.** Adaptive plans provide the increased flexibility to strike newly discovered targets as expeditiously as possible, but do increase risk.

IRREGULAR WARFARE PLANNING

Irregular warfare (IW) is defined as “violent struggle among state and non-state actors for legitimacy and influence over the relevant population(s) (JP 1, *Doctrine for the Armed Forces of the United States*). IW favors indirect and asymmetric approaches, though it may employ the full range of military and other capabilities in order to erode an adversary’s power, influence, and will. The term evolved from efforts to define those conflicts that manifest in violent (and sometimes non-violent) adversarial actions, but typically lack traditional nation-state force-on-force confrontations. While IW has been a common aspect of conflict throughout history, it is becoming more prevalent for several reasons. First, various global trends enable non-state actors to effectively use irregular means to challenge the legitimacy of nation states internally, resulting in failed or weakly governed nations that are vulnerable and exploited to challenge regional stability and US strategic interests. Second, the demonstrated technological superiority of advanced militaries such as the United States’ and the prohibitive costs of obtaining or maintaining such advanced capabilities force many, including some nation states, to adopt asymmetric strategies to challenge US interests—often combining both traditional and IW strategies and capabilities. Planners should fully understand IW and be prepared to simultaneously conduct both IW and traditional warfare in many situations.

According to the *IW Joint Operating Concept*, the IW problem is that adaptive adversaries, such as terrorists, insurgents, and transnational criminal networks, present asymmetric threats to partner nations that cannot readily countered by traditional military means alone. These threats:

- ★ Compete with partner nations for legitimacy and influence over relevant populations.
- ★ Are enmeshed in the population of partner nations.
- ★ Extend their reach and impact regionally and globally through use of communications, cyberspace, technology, and personal relationships fostered by providing services in underserved areas.
- ★ Require long-term efforts to address.

As a result, these challenges compound the IW planning problem for the joint force:

- ★ Complex political, cultural, religious, and historic factors, as well as the diverse populations involved are difficult to understand in sufficient depth.
- ★ The use of direct military force can backfire by rallying opposition.
- ★ The non-military nature of many aspects of these conflicts fall outside the sole competence of the military instrument.

- ✦ Many irregular actors are proficient in waging the battle of the narrative.²
- ✦ The protracted nature of IW tests US staying power.
- ✦ Partner nations often cannot meet the needs of their society, which in turn affects their political legitimacy and strengthens the appeal of internal irregular threats.

Planning for conducting warfare in an irregular environment, therefore, involves some unique considerations. Unlike most traditional force-on-force state conflicts, success in IW usually requires a partner nation to achieve legitimacy and influence in the eyes of its population by addressing the conflict's root causes and providing security, good governance, and economic development. The Department of Defense's (DOD's) primary means of supporting this effort is to provide security cooperation to assist partner nations strengthen internal security, defend against external aggression, and act as trusted participants in regional security structures. Partner nations can then help prevent persistent or growing problems from turning into crises that may ultimately require costly US intervention.

The speed, range, flexibility, versatility, and persistence of airpower can enable a partner nation to secure and sustain legitimacy and support of its population, keys to IW success. Broadly speaking, airpower extends a nation's reach and brings rapid response (and improved situational awareness). These in turn can help partner nations establish the physical and virtual infrastructures essential for internal growth and well-being. Airpower can bolster all instruments of national power and provides visible, practical, and effective means to consolidate governance and provide for the populace.

In addition to how airpower contributes to operational and tactical success in particular IW situations, it is also important to emphasize how important developing the aviation enterprise of partner nations is to the United States from a strategic perspective. While the Air Force does not lead US government efforts and decisions concerning global aviation enterprise development, it has a huge stake in those decisions, in terms of enabling partner nations to effectively address mutual national interests and in gaining the US access in support of US strategic interests. Therefore, when Airmen plan and execute strategy and operations related to IW, they should keep this strategic viewpoint in mind and, as appropriate, advocate this perspective to ensure that:

- ✦ Partner nations have the aviation resources to achieve internal security and contribute to regional stability.
- ✦ The international community can effectively respond to crises anywhere in the world.
- ✦ The global aviation enterprise (both military and civilian) is safely operated, secure, and well-supported.
- ✦ The United States becomes the aviation security partner of choice.

In addition to conducting IW indirectly "by, with, and through" partner nations in this way, the US military also conducts IW directly through a combination of counterterrorism,

² In enduring interventions, there can be a continuing struggle to define the national and international discussion and debate in terms favorable to one side, causing a clash between competing narratives of the actors involved; this is often referred to as the "battle of the narrative." For more guidance, see Joint Doctrine Note 2-13, *Commander's Communication Synchronization*, 16 Dec 13.

unconventional warfare, foreign internal defense, counterinsurgency, and stability operations—usually when an irregular challenge that affects US strategic interests grows beyond a partner nation's ability to handle by itself despite US assistance. Planners for direct IW operations should carefully balance population and threat-focused action and will require extensive collaboration with non-DOD agencies, multinational partners, and partner nations as well as continuous, coordinated cyberspace operations and messaging. They also require an in-depth understanding of the relevant operational environment (including history, culture, causes of conflict, and partner nation capabilities). When feasible, plans for air, space, and cyberspace operations within an IW environment should:

- ★ Focus the commander's estimate on understanding the environment and the challenges and problems it presents.
- ★ Encourage and support partner nations' solutions to their problems of subversion, lawlessness, insurgency, terrorism, and other threats to internal security.
- ★ Place emphasis on efforts to develop and sustain self-sufficiency.
- ★ Be developed in close coordination with the other component commanders' processes to effectively exploit the air component's capabilities and limitations.
- ★ Be coordinated closely with other joint, US government, and partner nation organizations.
- ★ Determine a sustainable operations tempo as well as appropriate force requirements.
- ★ Consider the effect of sustained operations on assets and personnel.
- ★ Continually rely on feedback and assessment in order to shape operations and modify existing plans.
- ★ Provide for effective C2, awareness of the operational environment, and knowledge of efforts needed to build partners' capabilities to ensure effectiveness of IW plans.

See AFDP 3-2, [Irregular Warfare](#), for more information.

SUPPORT PLANNING

The JPP and the JPPA involve detailed planning for the placement and support of friendly forces. The JPP and JPPA are the processes through which the COMAFFOR and staff accomplish support planning. The COMAFFOR and staff should be able to maintain awareness of the status of forces, recognize what support capabilities are needed where, and direct resources to minimize operational constraints and the potential for unplanned operational pauses. Air Force resources are limited and are designed to serve the needs of a wide variety of commanders and their personnel in dispersed areas around the world. [Combat support](#) (CS) personnel at the operational level should understand the total commitment of CS resources necessary to support the entire theater, as well as the impact this has across the entire Air Force. *Centralized control and decentralized execution, coupled with effective [reachback](#) and distributed operations, are critical to maintaining the balance between the supply and adequacy of*

Air Force combat support resources necessary for combat operations in new or existing theater locations.

In permissive environments, early negotiations with the partner's authorities conducted through the US Embassy are essential for effective base support and expeditionary site planning. Issues to be negotiated in various agreements include access rights, status of US forces in country, rights to carry arms, rights to use of real property and disposition of property upon mission completion, tax concerns, host nation support to forces, the role of the host nation security or police forces in providing base defense and security for US military forces, and other issues determined by the JFACC. Throughout every step of this process, the staff judge advocate general should provide legal counsel and the negotiated settlements may be documented in a memorandum of understanding (MOU).

Threats to an airbase may exist in all environments, but more so in uncertain and hostile environments. The Air Force uses a "threat continuum" to describe them, and commanders should recognize that any given threat may be present at any point along the continuum. Commanders should consider the effects that might be produced by the threat, not just the nature of the threat itself. A threat can be small in execution, but produce large-scale effects. These threats can undermine mission capability as severely as they can sabotage engagement with enemy forces.³

Commanders should prepare for a variety of [chemical, biological, radiological, and nuclear](#) (CBRN) environments using CS capabilities to support continued operations, regardless of the CBRN environment.⁴

Base Support and Expeditionary Site Planning

Base support and expeditionary site planning are foundations of Air Force expeditionary operations. Base support and expeditionary site planning govern the process of expeditionary site surveying that provides the focus, guidance, integration, and prioritization of the actions of site survey teams. Site surveying provides the capability to rapidly assess potential operating locations through the effective collection, storage, and use of extensive site data to support warfighter decision-making. Expeditionary site surveys should be conducted pre-conflict when possible. The initial site survey team collects data on the site characteristics ("what's there?") and determines the site's potential use in supporting operations. The objective of the first series of actions is to begin developing the common installation picture ("can we do it?"). Planners can identify operating locations and develop recommendations for the theater's aircraft beddown plan ("does it make sense?"). Follow-on site survey teams (usually composed of unit level personnel) collect additional data and determine the site's capability to support and sustain specific operations. An initial site survey, at a minimum, should include an airfield survey (pavement survey, available ramp space, fuel capabilities, etc.), a threat assessment, and a beddown assessment.

³ For further information, see Air Force Doctrine Publication (AFDP) 3-10, [Force Protection](#), and Air Force Tactics, Techniques, and Procedures (AFTTP) 3-10.1, *Integrated Base Defense*.

⁴ For further information, see AFDP 3-40, [Counter-Chemical, Biological, Radiological, and Nuclear Operations](#).

Operational planners armed with accurate and detailed location information can make informed deployment decisions. During Operation ALLIED FORCE, Operation ENDURING FREEDOM, and Operation IRAQI FREEDOM, operational planners were challenged to make the most of the limited resources on hand such as time, airlift, equipment, and personnel to maximize military operational effectiveness. In response to a natural disaster (volcano, tsunami, etc.), US forces may mobilize to support humanitarian relief operations. Although not usually opposed by the local sovereign governments, local insurgent considerations and diplomatic or political constraints and restraints might make the security of the airfields used less certain. The COMAFFOR's staff should accomplish extensive planning to ensure that facilities, personnel, and materiel that will be on the ground for such an operation are moved in as quickly as possible, adequately protected and sustained during operations, and effectively recovered as soon as possible after mission objectives are achieved.

In accordance with base support and expeditionary site planning principles, effective beddown and sustainment planning permits the Air Force to maximize the effects of force application while operating with limited resources. During the planning process, it is essential for planners to oversee CS capabilities and their resource requirements for the entire theater and understand the impacts at all levels of war. Impacts should be rapidly coordinated with theater movement planners and Air Force depots to ensure the location is programmed into necessary support systems.⁵

HEALTH AND MEDICAL PLANNING

In today's environment, detailed planning to support all aspects of force health protection and surveillance of intentional use of biological and chemical warfare is essential throughout all aspects of operations planning. It is vital this process begins early with comprehensive review of medical intelligence, early public health evaluation of environmental health threats, and comprehensive prevention and protection measures throughout support areas and forward deployed locations. Commanders should be prepared to support the requirement of their medical staff to provide necessary health data to medical surveillance and information systems.⁶

AIR MOBILITY OPERATIONS PLANNING

Air mobility plans should ensure the orderly deployment, sustainment, employment, and redeployment of forces and equipment. Air mobility operations also require integration and synchronization across the Air Force's functional and geographic AOCs, and simultaneous integration with US civil and military assets in addition to any coalition force and international partner assets. While transport by air may afford the most expedient means of transporting limited amounts of persons and cargo, transportation via US Navy Military Sealift Command ships could result in not only a more cost-effective means, but one that is more expedient overall in delivering larger quantities of equipment and supplies.

User requirements, such as the overarching strategy, order of arrival, and duration of air mobility operations, drive air mobility operations. Once planners identify requirements, they can be prioritized, validated, allocated, and tasked. Most deliberate planning relies

⁵ For more information, see AFDP 4-0, [Combat Support](#).

⁶ For more information, see AFDP 4-02, [Medical Operations](#).

on standing OPLANs and [time-phased force and deployment data](#) products. The air mobility forces and capabilities available for tasking affect deliberate planning. Air mobility planners participate in day-to-day global, functional intertheater operations through 18th Air Force and the 618 AOC (Tanker Airlift Control Center [TACC]) at the direction of United States Transportation Command.

The methods used to fulfill requirements for air mobility operations depend on a number of factors:

- ★ **Threats and Integrated Defense.** Planners should integrate intelligence information on the threat lay-down, consider the area air defense plan, consider aircraft vulnerability, and determine the most appropriate assets and employment strategy.
 - ★★ **CBRN Threats.** Planners should take into account the logistical and asset transportation needs for maintaining individual protective equipment levels (protective suits and masks, medical countermeasures, decontamination kits, etc.).
- ★ **Cargo and Personnel.** The type of cargo, number of personnel, time constraint, and desired effect determine the asset and method of air mobility.
- ★ **Receiver Air Refueling Requirements.** Due to the diversity of air refueling missions, air mobility planners should consider how much fuel will be offloaded, where the refueling will take place, when rendezvous will occur, and the type of receiver (boom or drogue) and any partner nation caveats or limitations.
- ★ **Access.** Successful air mobility operations depend on a network of facilities, diplomatic clearances, airspace rules and restrictions around the globe, air refueling tracks, and usable destinations including airfields and drop zones.
- ★ **Basing and Airfield Suitability.** Planners should consider runway and taxiway width, runway length and surface conditions, runway orientation relative to surface weather effects, ramp considerations, pavement weight-bearing requirements, fuel capability, contingency and working [maximum on ground](#) (MOG) capacity, availability of aircraft servicing and loading equipment, and many other factors.
 - ★★ **MOG Considerations.** Planners should be most concerned with “working MOG,” the highest number of specific type aircraft able to operate in and out of an airfield or allowed on the ground during a given span of time, based on simultaneous support. This is different from the parking MOG, which is the number of aircraft that can fit, or be parked, on the ramp.
- ★ **[Host-Nation Support.](#)** Legal advisors should be consulted to determine what agreements already exist and whether status of forces agreements (SOFAs) or acquisition support agreements are in effect. SOFAs normally include such factors as status of personnel, operating rights and responsibilities, landing fees, duties, taxes, etc.
- ★ **[Airspace Control.](#)** Air mobility planners should consider air mobility operations in domestic, international, and military controlled airspace. For mobility operations in military controlled airspace, air mobility planners should request and coordinate the use of military controlled airspace. Once approved, planners should follow the airspace control plan and airspace control order (ACO).

- ★ **Communications.** Air mobility planners should understand and consider secure and non-secure voice and data link communications capabilities and limitations with airlift and tanker assets in planning air mobility operations. Planners should consider that communications with airlift and tanker assets should be maintained in order to maintain flexible use of these assets.
- ★ **Emission Control (EMCON)**. Planners should consider the use of EMCON procedures to reduce the amount of information regarding combat or politically sensitive missions that enemy forces could gather.
- ★ **Weather**. Planners need accurate, relevant, and timely weather information in order to adjust aircraft flow, loads, and timing to ensure effective, efficient, and safe task accomplishment. Weather personnel integrated into air mobility planning processes provide tailored data and information to exploit or mitigate weather effects.

SPECIAL OPERATIONS PLANNING

Special operations (SO) missions are often high-risk operations, with limited windows of execution, and often require first-time success. Given the limited size and sustainability of [special operations forces](#) (SOF), adequate support is vital to the success of the mission and should be properly planned. When employed, SOF are presented with their own intact C2 structure, which facilitates their integration into joint force plans, helps them retain cohesion, provides control mechanisms to address specific SO concerns, and helps coordinate their activities with other components and supporting commands. The following are some common SOF planning considerations:

- ★ **C2 of SOF** is executed within a SOF chain of command. The commander, Air Force Special Operations Air Component (COMAFSOAC) is the senior SOF Airman and presents AFSOF to a JFC. As with the COMAFFOR, the COMAFSOAC is the single Airman in charge of AFSOF issues. The C2 structure for SOF depends on objectives, security requirements, and the operational environment. In complex environments SOF have found supporting to supported command relationships are extremely agile and beneficial to both SOF and conventional forces.
- ★ **Mission Rehearsal** is often a critical element of special operations mission preparation. Often, rehearsal of certain mission elements is necessary because of the inherent complexity and high risk associated with these missions. However, due to mission requirements, rehearsals may not always be feasible. SOF also operate within dynamic tasking cycles that meet the JFC's needs, thus it may be challenging when SOF are not operating with the JFACC's forces and normal JFACC ATO timeline constraints.
- ★ **Security.** Operations security, communications security, and physical security are vitally important to SOF. SOF habitually operates from secure training sites and employment bases, in order to shield the small, tailored forces from the attention of hostile intelligence collectors.
- ★ **Intelligence.** Special operations planning and execution are intelligence-intensive, requiring timely and accurate intelligence information. Tailored, all-source intelligence, surveillance, and reconnaissance information is vital in support of SOF. All-source intelligence should be broad in scope, yet adequately detailed.

- ✦ **Communications.** C2 communications should enable SOF operators to rapidly deploy and dynamically operate on a global scale with assured connectivity and security in all environments. Tactical communications are carried by SOF airborne and supporting or supported ground forces to communicate with command elements and other SOF in operational missions to locate, capture, strike, or kill enemy forces. Interoperability between tactical communications and C2 networks is critical.
- ✦ **Planning and Execution Coordination.** The special operations component deconflicts and coordinates all special operations with the JFACC via the special operations liaison element (SOLE). The SOLE is fully integrated into the AOC in order to integrate, coordinate, and deconflict special operations planning and execution (all operations, not just SOF air), with the JFACC.

AFSOF limitations. Years of operational experience have led to understanding key AFSOF limitations. Commanders should understand:

- ✦ AFSOF cannot be quickly reconstituted or rapidly expanded, due to the lengthy time required to recruit, train, and educate AFSOF operators. Improper employment of these forces runs the risk of rapidly depleting their capabilities.
- ✦ AFSOF are not a substitute for conventional forces. In most cases AFSOF are not organized, trained, sized, or equipped to conduct sustained conventional combat operations. Using AFSOF to conduct or support conventional operations may inhibit their ability to conduct SO.
- ✦ Most AFSOF missions require non-SOF support. AFSOF are not structured with robust logistic and sustainment capabilities. Therefore, AFSOF frequently rely on external support. Limited SOF logistical capacity frequently requires support from conventional force structures supplemented by HN or contracted support.
- ✦ AFSOF operations in non-combat areas could have additional restrictions placed upon them by the Ambassador or Chief of Diplomatic Mission, which may limit access or otherwise affect operations. ⁷

UNMANNED AIRCRAFT SYSTEM (UAS) PLANNING

[Remotely piloted aircraft](#) (RPA)⁸ and other UAS bring capabilities such as persistence, flexibility, autonomy, and efficiency to the JFC. However, there are some unique issues commanders and planners should consider when employing these systems.

- ✦ **Allocation and Tasking.** The JFC's process for determining component UAS allocation and tasking is no different than for manned aircraft. However, long endurance, theater-ranging RPA may allow transferring tasking and support to multiple users during a single mission. If an RPA is retasked to support another commander's objectives during a mission, close coordination among all parties is required.

⁷ For additional information, see [JP 3-05, Special Operations](#), and [AFDP 3-05, Special Operations](#).

⁸ When referring to Air Force category four and five unmanned aircraft operated by a pilot, it is an RPA. (AFDP 3-52, [Airspace Control](#).)

- ✦ **Command and Control.** UAS generally rely on a nearly continuous stream of communications for both flight and payload control. Communications availability, frequency deconfliction, and bandwidth protection, are important considerations. Some UAS have a beyond-line-of-sight control capability and may conduct remote split operations (launch/recover site not collocated with mission control site), which can add flexibility but present unique basing and C2 challenges.
- ✦ **Mission Planning.** UAS should be included in the development of the ACO, ATO, and [special instructions](#), and should follow all planning guidance and procedures. Except for smaller UAS that will not likely conflict with other airborne operations, all UAS should be included on the ATO for deconfliction. Note: Inclusion of UAS on the ATO does not imply any change in command relationships or tasking authority. Detailed planning for lost link, loss of positioning data, and other emergency procedures and recoveries is required due to UAS dependence on information and control data links.

GLOBAL INTEGRATED ISR PLANNING

The AOC is the best location to integrate the JFC's theater-wide airborne ISR capabilities, to include [reachback](#) and distributed ISR support. JP 3-30, [Command and Control for Joint Air Operations](#), also states the responsibilities of the JFACC include "planning, coordinating, allocating, and tasking assigned airborne ISR assets to accomplish and fulfill JFC tasks and requirements." Subtasks of this responsibility include:

- ✦ Identifying and managing JFACC ISR requirements.
- ✦ Managing JFC (theater-level) requirements in conjunction with other Service components and with validation from the JFC.
- ✦ Tasking theater airborne ISR assets to satisfy the JFC's and JFACC's requirements.

Experience has shown that centralized control of ISR capabilities under the JFACC provides joint components with the most capability in the most efficient manner, since the JFACC's AOC staff is manned and trained to best allocate and employ these capabilities in accordance with the JFC's priorities.

Joint Intelligence Preparation of the Operational Environment

Joint intelligence preparation of the operational environment (JIPOE) is a systematic continuous process of analyzing the threat and environment to provide the commander with the situational awareness and understanding necessary for decision-making. JIPOE is an effective analytical process used during peacetime and during hostilities at all levels of command, from the JFACC in support of JPPA to the JFC in support of the JPP.

JIPOE focuses intelligence for the commander and the commander's supporting C2 elements. JIPOE facilitates getting "inside" the enemy's decision-making cycle. Specifically, JIPOE focuses on the interrelationship between the threat and environment and the effect of that interaction on both friendly and enemy courses of action. JIPOE results in the production of adversary courses of action, named areas of interest, and

high-value targets, which are inputs to the JFC and JFACC planning, intelligence collection, and targeting processes.

Air Force intelligence entities at all levels, in cooperation with federated US national-level and international partners, should use JIPOE principles, focusing on environmental and threat characteristics and activities, which significantly enhance Air Force operations.⁹

WEATHER PLANNING

Air Force weather operations are critical to a commander's battlespace awareness across the range of military operations. Few military endeavors, including those of adversaries, are immune to the effects of the environment. Neglected or ignored, weather can adversely affect even the most carefully planned and executed campaigns and operations.

Anticipation of weather's effects should be an integral part of planning, Air Force weather operations help anticipate when the natural environment will affect friendly and enemy air, space, and surface operations, possibly offering friendly force commanders an exploitable asymmetric advantage. Air Force weather operators constantly monitor, assess, and report the state of the natural environment. To be relevant to decision-makers, Air Force weather experts should know the past, current, and future state of the atmosphere and space environment and then translate these into impacts on operations. In essence, weather operations provide two distinct yet related basic functions: 1) describing past, current, and future environmental conditions, and 2) enabling the exploitation of environmental information at key decision points through expert weather planning.¹⁰

HOMELAND OPERATIONS PLANNING

AOCs provide a full spectrum of planning for airpower operations in support of operations in the homeland. The Air Force Northern (AFNORTH) AOC provides support for homeland operations in the continental United States (CONUS) North American Aerospace Defense Command (NORAD) region and United States Northern Command for planning within the CONUS, Puerto Rico, and the US Virgin Islands. The Pacific Air Force's AOC supports United States Pacific Command for planning within Hawaii, Guam and other US Pacific territories and atolls. The 618 AOC (TACC) supports homeland operations through effective use of air mobility capabilities to achieve combatant commander requirements.

Memoranda of agreement (MOA) or MOUs with CONUS communities, and Hawaii and US Pacific territories, as well as standing OPLANS and execute orders with homeland-based military units normally assigned to other combatant commands, can clarify such issues as response procedures and capabilities, and reimbursement of costs. MOAs and MOUs provide a means to answer numerous questions from other government agencies and [nongovernmental organizations](#) before a disaster or accident occurs, and

⁹ For more information on intelligence operations in general and ISR, see AFDP 2-0, [Global Integrated Intelligence, Surveillance, and Reconnaissance Operations](#).

¹⁰ For more information on weather considerations, see AFDP 3-59, [Weather Operations](#).

allow for planning how military units respond, what local authorities expect of them, and what they are allowed to do.¹¹

¹¹ For more information, see AFDP 3-27, [Homeland Operations](#).