

U.S. Air Force Methodology for Overarching Joint Training Policy for Joint Interoperability

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ABSTRACT

The Air Force Operational Training Infrastructure (OTI) 2035 Flight Plan established the Air Force vision for future training and how best to achieve readiness. Annex L of the Flight Plan – entitled “Strengthen Joint/Interagency Interoperability”, has an objective to maximize the ability to conduct frequent, relevant and realistic Joint training through the interoperability of the operational training infrastructure. The Chief of Staff of the Air Force indicates a relevant and realistic operational training environment is a critical step to achieving readiness and also supports his priorities of strengthening Joint teams. Modeling and Simulation (Live, Virtual and Constructive) capabilities are integral components of the OTI and critical enablers to the readiness of our warfighters. To fully meet the objective of frequent, relevant and realistic joint training, multiple challenges must be addressed. There are ongoing efforts to offer technical solutions to specific joint interoperability problems such as standards, common authoritative data, cybersecurity, and modifications to our various simulations and simulators. These technical efforts to provide the proper simulation environment need to continue, but Department of the Defense (DoD) must overcome challenges pertaining to policy and instructions that drive joint training requirements and the synthetic environment. A review of Air Force policy and instructions are explored. Based on preliminary reviews of existing Air Force policy and instruction, more tightly coupled, overarching policy directives are required for frequent joint training.

The team hypothesized that the policy issue spans the Services as it pertains to joint training. Without closely coupled joint training policy across the entire DOD, frequent, relevant joint training is at risk. The proper mix of directives, tasks, and appropriate simulated environment will guide joint training and increase readiness. This paper will identify gaps within the Air Force and provide solutions for closing the seams.

ABOUT THE AUTHOR

Dr. Lillian Campbell-Wynn currently serves as a Modeling and Simulation Technology advisor to the Air Force Agency for Modeling and Simulation (AFAMS). In this role, she coordinates with Air Force Major Commands (MAJCOMs) to capture training requirements for modeling and simulation capabilities. She collaborates with other services, industry and academia in identifying potential technological solutions, policy creation or implementations that may address the issues or challenges. Prior assignments include Simulation Training and Instrumentation Command, now Program Executive Office Simulation Training and Instrumentation as a Chief Information Officer (CIO), Deputy CIO, and Information Technology Program Manager. Special assignments include working as a Program Analyst at Army Material Command, Army Modeling and Simulation Office, International Defense Cooperation Office, American Embassy, Paris France and Information System Command. Dr. Campbell-Wynn has served as the Air Force’s lead to the U.S. Air Force’s Mentor Protégé’ program influencing the teaming of small and large business for contracts in modeling and simulation. Education includes a Bachelor of Business Administration, Texas A&M, Masters of Business Administration, Florida Institute of Technology. Masters of Science in Information Resources Management, Syracuse University, Masters and Doctorate of Modeling and Simulation, Industrial Engineering, University of Central Florida, National Defense University, CIO certification.

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BACKGROUND

The role of the Air Force is to defend the United States and protect its interests through airpower, guided by the principles of joint operations and the tenets of airpower. Air Force doctrine is guided by the principles of joint operations. The Air Force presents airpower as a unitary construct – senior doctrine binds Airmen together instead of presenting the Air Force as a collection of tribes broken out in technological stovepipes. General Curtis E. LeMay stated “at the heart of warfare lies doctrine (Tillman, 2009). It represents the central briefs for waging war in order to achieve victory.” Policy and doctrine are closely related, but they fundamentally fill separate requirements. Policy can direct, assign tasks, prescribe desired capabilities, and provide guidance for ensuring the Armed Forces of the United States are prepared to perform their assigned roles; implicitly, policy can therefore create new roles and a requirement for new capabilities. It is not always clear when a void is identified whether filling it will require new (or revised) doctrine or policy (or perhaps both). As a general rule, if the need can only be adequately addressed by using such prescriptive words as “shall” and “must,” then the void is in policy.

Department of Defense Directive 1322.18 prescribes, the Secretaries of the Military Departments, shall: establish and conduct individual, collective, and staff training programs and, to the maximum extent possible, align training schedules, curricula, and syllabi to support joint and integrated operations training (England, 2009). Joint Staff J7 (JS/J7) successfully created a joint Memorandum of Agreement for Joint Interoperability and an associated strategy. The strategy focused on the implementation of standards for developing and integrating training capabilities that will achieve effective, cost efficient and timely solutions for education, joint training, exercises and mission rehearsal (Waldhauser, 2016). This important document outlines the intent of the joint staff to ensure interoperability of service capabilities to support joint training.

General David Goldfein, the Chief of Staff of the Air Force (CSAF), promulgated that a relevant and realistic operational training environment is a critical step to achieving readiness and a priority in achieving readiness is through strengthening Joint teams and leaders. The CSAF is well versed in the joint training enterprise. While serving as the Director Joint Staff, General Goldfein signed the Chairman Joint Chiefs of Staff Instruction 3500.01H, establishing the Joint Training Policy for the Armed Forces of the United States in 2014 (Goldfein, 2014). This instruction’s purpose is to establish the Chairman of the Joint Chiefs of Staff (CJCS) policy for the use of the Joint Training System (JTS) in planning, executing, and assessing joint training. This policy instruction aligns nicely with the guidance contained in the Department of Defense’s “Strategic Plan for the Next Generation of Training” which speaks directly to joint training and joint education.

In 2017, the CSAF, signed the Air Force Operational Training Infrastructure (OTI) 2035 Flight Plan establishing the vision to train and achieve readiness (Goldfein, 2017). Successful OTI execution relies on thirteen Lines of Effort (LOE) each supplemented by separate Annexes. Annex L to the Flight Plan – entitled, “Strengthen Joint/Interagency Interoperability”, has an objective to maximize the ability to conduct frequent, relevant and realistic joint training through the interoperability of operational training infrastructure. Air Force Agency for Modeling and Simulation (AFAMS) is the lead agency for this LOE. OTI Flight Plan states that “many of the current deficiencies in the operational training infrastructure result from the lack of comprehensive policy. New policy must define the required quality of the training environment.

The views expressed are those of the author and do not necessarily reflect the official policy or position of the Department of the Air Force or the US Government.

To successfully achieve realistic joint training which will guide the appropriate simulation environment, AFAMS elected to access the relationships between DOD, Joint Staff, Air Force publications that direct joint training.

METHODOLOGY

AFAMS researched, reviewed, and analyzed existing guidance governing joint operational training. The purpose was to resolve the issues described in the Air Force Operational Training Infrastructure (OTI) 2035 Flight Plan – objective, “Maximize the ability to conduct frequent, relevant and realistic joint training through the interoperability of operational training infrastructure.” The reviewed focused solely on the Air domain. AFAMS reviewed various DOD, Joint Staff, and Air Force publications during the course of its survey.

The term guidance refers to Service policy directives or instructions that mandate joint activities. Policy directives and instructions are the documents that guide joint training requirements and in turn support Joint Mission Essential Task Lists (JMETLS) and Service Task Lists. Individual training events and exercise/mission rehearsals are planned to meet standards and conditions within the task lists.

In the case of collective training, the survey sampled documents governing joint training exercise participation. The collective training documents reviewed were AFI 10-204, Participation in Joint and National Exercises (under review) and AFI 10-251, Air Force Participation in Joint Training Transformation Initiative (JTTI) and Joint National Training Capability (JNTC) Events. In addition to reviewing the guidance AFAMS sampled joint training activities conducted. This later review served as a “snapshot” of composite training conducted by Air Force combat air forces. AFAMS annotated joint exercise participation conducted by three Major Commands (MAJCOMs).

In the case of individual training, AFAMS survey sampled training documents for aircrew, battlefield airman, and control and reporting center documents. Individual training documents that contained at least one reference to a joint training activity were annotated and captured. The sample size for the individual training documents reviewed was of twenty-one. Also reviewed was the Air Force training program instruction.

FINDINGS

The Air Force conducts some operational joint training at both the individual and collective levels, but Air Force joint training is not consistently implemented due to lack of an overarching USAF joint training policy document. Figure 1 below captures gaps in policy. Additionally, initial findings indicate in some cases when joint training occurs, it is not seamlessly managed or recorded within the Air Force. It was observed that the application of joint training within the individual air crew Mission Design Series (MDS) instructions is limited and not consistent. For example, the E3 MDS AFI does not reference joint training. The team concluded a gap exists between OSD policy and Air Force individual training implementation. It was observed a gap exists within joint operational training directives. The summary diagram of existing guidance highlights where we are lacking language for joint training within the USAF (see Figure 1).

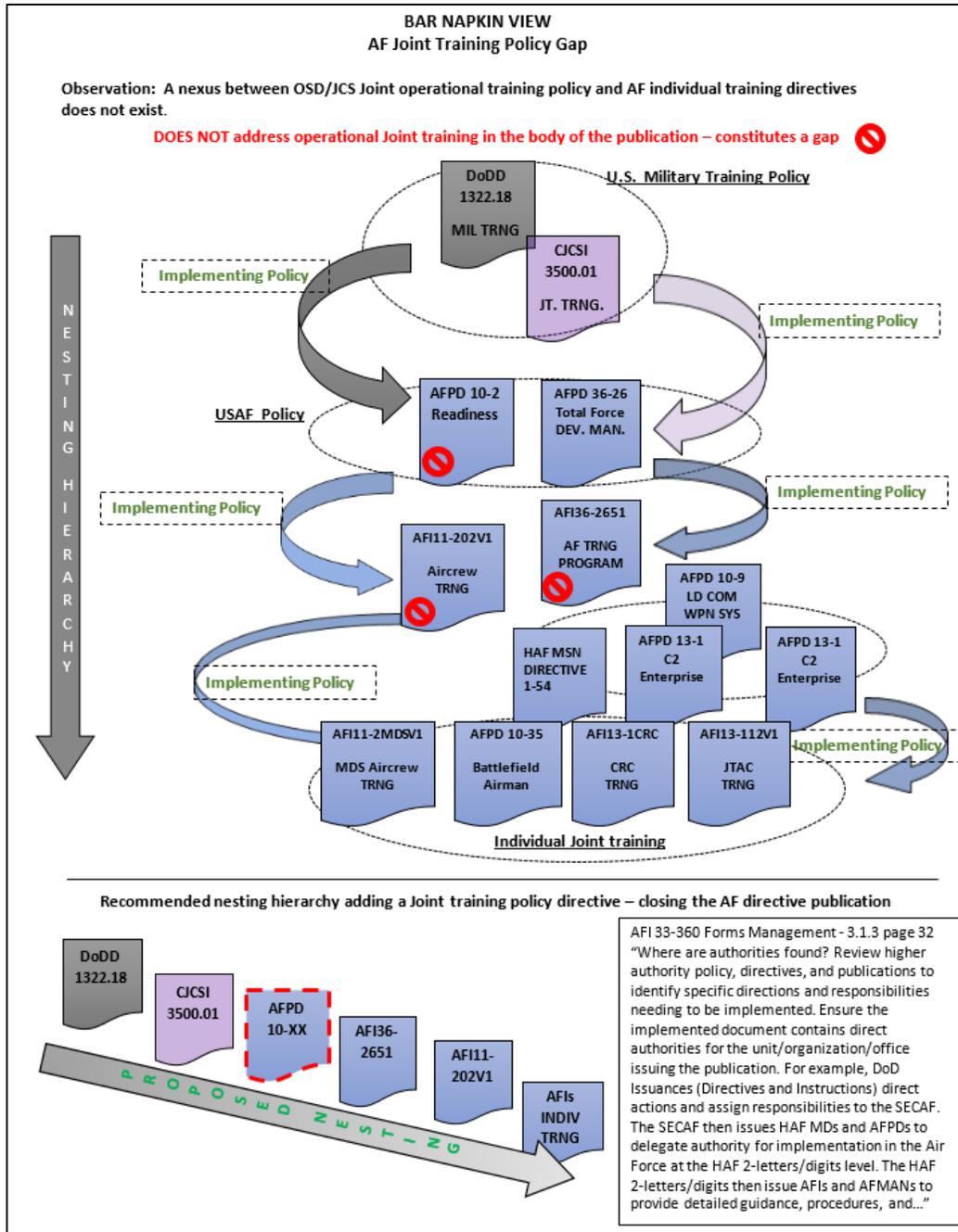


Figure 1 AF Joint Training Policy Gap

Figure 1 traces the nesting relationship of policy and highlights gaps in implementation. Figure 1 also highlights that there is no reference to joint training in the overarching air crew training instruction, AFI 11-202 Volume 1, Aircrew Training (June 2019). If joint guidance existed in this document, it would then impact guidance across all associated air crew MDS where appropriate (see Table 1). Additionally there is not a reference to joint training in AFI 36-2651, Air Force Training Program. DoDD 1322.18, Military Training, directs Service Secretaries to support joint and integrated operations training, but documentation for implementation is lacking.

In the individual air crew analysis, twenty instructions were reviewed. Fourteen contained some type of joint training reference and results are annotated (see Table 1).

Table 1 Individual/Aircrew Joint Training

TABLE1 – Individual Joint Training – Survey Samples		
Reference	Joint Training	Type of Effort or Initiative
AFI 13-112V1 Joint Terminal Attack Controller Training Program	Yes	The training program must be tailored to meet the unit’s Joint Mission Tasks List (JMTL) and the aligned Army unit’s Mission Essential Tasks Lists (METL). In addition, units must style the training program towards preparation for contingency taskings in IAW the Global Force Management Allocation Plan (GFMAP) and the unit’s Designed Operational Capability (DOC).
AFI 11-2B-2V1 B-2 AIRCREW TRAINING	Yes	<ul style="list-style-type: none"> GLOBAL POWER TRAINING. The goal of Global Power sorties is to increase unit combat capability by providing robust and realistic training opportunities in the global arena, involving multiple Areas of Responsibility (AOR). Global Power missions are not intended to be an aircrew training requirement only, but rather a requirement for the entire unit, allowing each part of the war fighting team an opportunity to gain valuable experience. The benefit of these missions is to provide units with practice in joint operations, foreign country coordination, non-standard mission planning and range activities, international flight planning, physiological aspects of long duration flights, aircraft phase flow and weapons load training. MC Responsibility. The Mission Commander (MC) is responsible for planning, coordinating, briefing, executing, and debriefing joint/composite force employment packages. MCCs, once certified, are authorized to lead joint/composite force missions.
AFI 11-2A-OA-10V1 A/OA-10-- Aircrew Training	Yes	<ul style="list-style-type: none"> Commanders are encouraged to establish guidance and goals aimed at achieving greater Joint interoperability. FAC (A) Ground Training. Prior to beginning local FAC (A) flying training, UPs will successfully complete formal FAC (A) academics at an accredited school. The FAC (A) Joint Firepower Course (FACJFC) at the Air Force Air Ground Operations School (AGOS) is the primary formal course, unless specified otherwise by MAJCOM/A3. Mission Commander (MCC) Responsibilities. The MCC is responsible for planning coordinating, briefing, executing, and debriefing joint/composite force employment packages.
AFI 11-2B-1V1 B-1 Aircrew Training	Yes	<ul style="list-style-type: none"> The MC is responsible for planning, coordinating, briefing, executing, and debriefing joint/composite force employment packages. Mission commanders, once certified, are authorized to lead joint/composite force missions. Simulator training. The MC candidate will plan, brief, fly, and debrief a minimum of one joint/composite force DMO long-haul mission under the supervision of a weapons officer.
AFI 11-2C-130V1 C-130 Aircrew Training	Yes	<ul style="list-style-type: none"> Joint Airborne and Air Transportability Training (JA/ATT) Missions. When participating in JA/ATT missions, unqualified and non-current crewmembers may be utilized in their respective crew positions provided they are supervised by an instructor or flight examiner. Comply with direct supervision requirements of AFI 11-401 when carrying passengers (including paratroopers). Modular Airborne Fire Fighting System (MAFFS)—Specialized equipment mounted in the cargo compartment used to dispense flame retardants in support of joint firefighting missions with the US Forest Service
AFI 11-2F-15EV1 F-15E Aircrew Training	Yes	<ul style="list-style-type: none"> MC Responsibilities. The MC is responsible for the plan, coordination, brief, execution, and debrief of large force packages (including joint/composite forces). MCCs, once certified, are authorized to lead large force missions. MCCs may delegate authority and responsibility for a portion of the mission to a deputy MC. For example, an F-15E MC tasked with an A/G role may delegate OCA MC duties to an OCA flight lead who is MC certified. Joint Force Training (JFT). Scenarios employing integrated aerospace, land or naval forces. Examples include JAAT, CAS with FAC, airdrop escort, etc. Only one event may be logged per mission (if an AAR separates missions, a maximum of two events may be logged per sortie).
AFI 11-2F-16V1 F-16 Pilot Training	Yes	Mission Commander (MCC) Mission. Special capability mission. Mission where the pilot acted in the capacity of a MCC for a joint/composite mission responsible for two or more types of aircraft with four or more total aircraft, or more than four own MDS aircraft versus a minimum of two pre-planned adversary aircraft. May be logged in conjunction with baseline training requirements.
AFI 11-2F-22AV1	Yes	<ul style="list-style-type: none"> The MCC is responsible for planning coordinating, briefing, executing, and debriefing joint/composite force employment packages in Global Strike and/or Global Persistent

F-22 Pilot Training		<p>attack missions. Mission commanders, once certified, are authorized to lead joint/composite force missions.</p> <ul style="list-style-type: none"> Tactical Event. Joint Force Training (JFT). Scenarios employing integrated aerospace and land/naval forces. Examples include CAS with FAC, airdrop escort, etc. Only one event may be logged per sortie (EXCEPTION: If an AAR separates events, a maximum of two events may be logged per sortie).
AFI 11-2KC-10V1 KC-10 Aircrew Training	Yes	<p>M261–Airlift Deployment Operations. Event trains crew members in duties and crew coordination required to effectively and safely operate the aircraft in the worldwide airlift role. Accomplishing this event should ensure that each individual can effectively perform specific tasks and responsibilities of their crew positions in a dynamic, real-world, operational environment involving the airlift system. Ideally, event would be accomplished on joint airborne air transportability training (JA/ATT), special assignment airlift missions (SA/AM) or AMC channel mission with multiple cargo legs; however, squadron commander will determine or define which airlift missions (CONUS and/or OCONUS) are suitable for mission certification training.</p>
AFI 11-2MQ-1&9V1 MQ-1&9-- Aircrew Training	Yes	<p>Tactical/Basic Skills Events. Joint Force Training. Scenarios employing integrated ground, aerospace, land, and/or naval forces from other services. Maximum of one event may be logged per sortie.</p>
AFPD 10-35 Battlefield Airmen (BA)	Yes	<ul style="list-style-type: none"> BA directly lead, control, and/or execute operational air and space power functions in the forward battlespace independent of an established airbase or its perimeter defenses. Comprising several Air Force Specialties, BA primarily operate in the land domain removed from traditional airbase support, logistics, and sortie generation efforts. BA may be employed unilaterally or as part of an AF, joint, interagency or multinational force, to support Combatant Commander (CCDR) objectives and may operate under the most austere conditions for extended periods. Train: Training of BA is accomplished via individual AFSC curriculums tailored to the specialized missions of each functional area. Commonalities in individual BA training will be identified for inclusion in a shared training program designed to efficiently provide specialized instruction and prepare BA candidates for follow-on training and the rigorous nature of BA surface operations. BA training will prepare BA to perform the missions they are required to conduct IAW the National Military Strategy, the Joint Strategic Capabilities Plan, applicable Operational Plans, and Designed Operational Capability statements.
AFI 13-1CRCV1 Control and Reporting Center (CRC)- Training	Yes	<ul style="list-style-type: none"> Event Operations. An event operation is logged for training accomplished during the following: live flying, virtual/constructive missions, MTEs, or Joint Exercises (JE). Training Event Definitions. Dynamic Targeting (DT) – Dynamic targeting is the active process of identifying, prosecuting, and effectively engaging emerging targets. The primary focus of dynamic targeting is the prosecution of Joint Force Commander (JFC) designated and prioritized time sensitive targeting (TST) and functional component-critical targets. Mission Training Program (MTP) Requirements. Category II (CAT II). Small scale DMO events interfacing the CRC with a DMO capable weapons system to execute TTPs and focused mission type training. The MTE includes an operational data link with at least two data link capable units participating when possible. CAT II also includes training with other external agencies and is not limited to the DMO environment. Mission Training. Category III (CAT III). Multiple external agencies usually on Distributed Mission Operations Network (DMON) or Joint Training Exercise Network (JTEN). Large scale training exercises interfacing crews into a multi-unit distributed scenario. The MTE includes an operational data link with at least two data link capable units participating. The training emphasis is centered on accomplishing the interactions which are essential to CRC operations and must include interfacing with another element of the TACS. (T-3). This may include a higher headquarters element and at least one other Air Force or joint/combined service element. Units are encouraged to participate in large scale joint exercises i.e. Virtual Flags (VF), Fleet Synthetic Training-Joint (FST-J) events, Joint Kill Chain Events, Warfighter Focused Events (WFE), Red Flag, etc.
AFI 11-2F-15V1 F-15 Aircrew Training	Yes	<ul style="list-style-type: none"> The MCC is responsible for planning coordinating, briefing, executing, and debriefing joint/composite force employment packages. Mission commanders, once certified, are authorized to lead joint/composite force missions. <p>Tactical Events. Joint Force Training (JFT). Scenarios employing integrated aerospace and land/naval forces. Examples include JAAT, CAS with FAC, airdrop escort, etc. Only one event may be logged per sortie (EXCEPTION: If an AAR separates events, a maximum of two events may be logged per sortie).</p>
AFI 11-2F-35AV1	Yes	<ul style="list-style-type: none"> Mission Commander (MCC) Upgrade. The MCC is responsible for planning coordinating, briefing, executing, and debriefing joint/composite force employment packages. Certified MCCs are authorized to lead joint/composite force missions.

F-35 Aircrew Training		FAC(A) Ground Training. Pilots designated for the FAC(A) special capability must have completed a Joint FAC(A) Training and Standardization Board (JFTSB) sanctioned 50 AF111-2F-35AV1 13 SEPTEMBER 2010 academic program at one time during their career IAW AETCI 13-102, Operations Information File, unless specified otherwise by MAJCOM/A3. The FAC(A) Joint Firepower Course (JFC) at the Air Ground Operations School (AGOS) meets this requirement. While graduation is not a course entry prerequisite, it is required prior to performing operational FAC(A) duties. If a FACJFC class is not readily available, OG/CCs may approve UPs to attend another accredited FAC(A) course.
AFI 11-202V1 Aircrew Training	None – no specific reference to Joint Training was found	This instruction implements AFPD 10-2, Readiness, AFPD 11-2, Aircraft Rules and Procedures, and AFPD 11-4, Aviation Service. It establishes the USAF aircrew training program that supports Air Force objectives and is applicable to all units assigned to or gained by major commands (MAJCOM) and HQ USAF direct reporting units (DRU) and applies to commanders, operations supervisors, and aircrews assigned or attached to all flying activities of these MAJCOMs and DRUs.
AFI 11-2C-5V1 C-5 Aircrew Training	None	
AFI 11-2CV-22V1 CV-22 Aircrew Training	None	
AFI 11-2E-8V1 E-8 Aircrew Training	None	
AFI 11-2KC-135V1 KC-135 Aircrew Training	None	
AFMAN 11-2UH-1NV1 UH-1N Helicopter Aircrew Training	None	
AFI 11-2E-3V1 E-3 – Aircrew Training	None	

Collective joint training guidance and training events were reviewed. Events that either were sponsored by or participated in by Air Force units were documented. ACC, PACAF, and USAFE all host various collective joint training exercises.

Air Force Instruction 10-204, Participation in Joint and National Exercises provides guidance regarding Air Force participation in the Joint Exercise Program (JEP) and the National Exercise Program (NEP) and addresses the Combatant Commander Exercise and Engagement portion of the Department of Defense Training Transformation Program. It outlines exercise guidelines and responsibilities, and establishes organizations and tools for the oversight and management of Air Force support for and participation in these exercises. It establishes and provides guidance for the Air Force Joint Exercise Coordination Team (AFJECT), the Exercise Integrated Process Team (EIPT) and the Exercise General Officer Steering Group (EGOSG). It outlines major actions associated with the exercise cycle. This instruction is currently under review and already directs new processes in place of the AFJECT and EIPT.

Air Force Instruction 10-251, Air Force Participation in Joint Training Transformation Initiative (JTII) and Joint National Training Capability (JNTC) Events provides guidance and responsibilities for Air Force MAJCOMs that are engaged as the Air Component for Joint exercises and training. Documentation from the analysis of collective joint training is provided (see Table 2).

Table 2 Collective Joint Training

TABLE 2 – Collective Joint Training – Survey Samples	
Exercise	Type of Effort or Initiative
Headquarters Air Force (HQ AF) Joint Exercise Program (JEP)	The JEP is a principal means for CCDRs to maintain trained and ready forces, exercise their contingency plans, and support their campaign plan engagement activities. CCDR designated JEP events train to both mission capability requirements described in the command joint mission-essential task list (JMETL), as well as support theater and/or global/world-wide security cooperation requirements as directed in campaign plans. CCDR designated JEP events include CCMD Service component, joint, and multinational training events. Joint National Training Capability (JNTC)-accredited Service and U.S. Special Operations Command (USSOCOM) training program events are included within the JEP.
National Exercise Program (NEP)	The NEP consists of operations based exercises involving department and agency principals and Presidential participation. These exercises address U.S. Government (USG) strategic- and policy-level objectives and challenge the national response system. DoD participates in the NEP through the Chairman's Exercise Program.
Air Combat Command (ACC) Virtual Flag	The 705th CTS performs its mission by executing Numbered Air Force-scale events focused on exercising the Theater Air Control System (TACS) while integrating theater Area of Responsibility (AOR) Operation Plans (OPLANS); supporting multiple applications, such as Air Expeditionary Forces (AEF) spin-up, preparation for major combat operations, data interchange, test and evaluation, tactics, techniques and procedures validation, Live, Virtual and Constructive (LVC) range integration, experimentation and decision support analysis.
Red Flag/Nellis	414 CTS performs realistic combat training exercises involving the air forces of the United States and its allies, is coordinated at Nellis Air Force Base, Nev., and conducted on the vast bombing and gunnery ranges of the Nevada Test and Training Range. It is one of a series of advanced training programs administered by the United States Air Force Warfare Center and Nellis and executed through the 414th Combat Training Squadron
Green Flag East/West	549 CTS performs an advanced, realistic, and relevant Air to Surface training exercise, preparing joint and coalition warfighters to meet combatant commander requirements across Air, Space, and Cyberspace. It is conducted in conjunction with US Army National Training Center exercises at Ft Irwin, CA and at the Joint Readiness Training Center (JTRC) at Ft. Polk LA. It is a Joint exercise administered by the US Air Force Air Warfare Center and Nellis AFB through the 549th Combat Training Squadron.
Blue Flag	Blue Flag provides doctrinally correct air, space, and cyberspace crisis action planning. It also provides command and control training for joint and coalition air components and operational-level headquarters in a constructive environment.
Pacific Air Force (PACAF) Pacific Sentry	A field training exercise that focused on joint training integration among U.S. forces. It was designed to exercise U.S. Pacific Command headquarters staff and command components in a real-world, operational level of war scenario
Talisman Saber	Is designed to train Australian and US Forces in planning and conducting Combined Task Force operations, which will help improve ADF/US Military combat readiness and interoperability.
Ulchi Freedom Guardian	Ulchi-Freedom Guardian is the name of the military exercise previously known as Ulchi-Focus Lens, a combined military exercise between South Korea and the United States. The exercise is the world's largest computerized command and control implementation, involving 50,000 South Korean troops alongside 17,500 U.S. troops in 2017, and mainly focuses on defending South Korea from a North Korean attack.
Key Resolve	Is the name (as of 2015) for the military exercise previously known as RSOI, which stands for Reception, Staging, Onward Movement, Integration (and even earlier as Team Spirit). It is an annual command post exercise (CPX) held by United States Forces Korea, and conducted with the Republic of Korea Armed Forces.
Yama Sakura	Yama Sakura is a computer simulated command post exercise designed to strengthen military operations and ties between the U.S. Army and the Japan Ground Self-Defense Force. Yama Sakura is a yearly command post exercise between I Corps and the JGSDF sponsored by USARJ and the Japanese Ground Staff Office.
Red Flag/Alaska	RED FLAG-Alaska. Each exercise is a multi-service, multi-platform coordinated, combat operations exercise and corresponds to the designed operational capability of participating units. In other words, exercises often involve several units whose military mission may differ significantly from that of other participating units. RED FLAG-Alaska planners take those factors into consideration when designing exercises so participants get the maximum training possible without being placed at an unfair advantage during simulated combat scenarios.

U. S. Air Force Europe (USAFE)	
Austere Challenge	The US European Command (EUCOM) conducts a computer-assisted global command-and-control exercise, named Austere Challenge, in Germany. It is aimed to train multi-combatant command coordination in fictitious scenarios. Thousands of US soldiers in in designated countries take part in the exercise with a focus on European security bi-annually.
Juniper Cobra	Exercise Juniper Cobra is a five-day combined military exercise between Israel and the United States involving Army and USAF. The exercise exists to strengthen American-Israeli military cooperation against regional threats, and promote long-term security
Joint Warfighter Assessment	The purpose is to: Integrate and assess future force concepts and capabilities in a multi-echelon live and constructive training exercise enhancing joint and multinational combat readiness.

In the case of aircrew training, the top level guidance, AFI 11-202, Volume 1 does not direct joint training. Without specific wording at the top level of aircrew training, joint training may or may not be directed by platform specific AFI 11-2 volumes as evidenced by Table 1. In the case of collective training, AFI’s 10-204 and 251 adequately address joint training events and the survey samples in Table 2 show the Air Force’s current participation.

AIR FORCE FLIGHT PLAN OBJECTIVES VERSUS AIR FORCE TRAINING INSTRUCTIONS

Air Force OTI Flight Plan Objective

The Air Force OTI Flight Plan objective is to maximize the ability to conduct frequent, relevant and realistic joint training through the interoperability of operational training infrastructure. This objective seeks to enable inter-service collaboration to maximize training system interoperability, capacity for the Air Force warfighters to train in joint environments, and realism in scenario creation for integrated operations. The OTI Flight Plan, while signed by the CSAF, is not an USAF training directive nor a training instruction.

Aircrew Training Instructions

Air Force Instruction 11-202 Volume 1, Aircrew Training, establishes the USAF aircrew training program that supports Air Force objectives and is applicable to all units assigned to or gained by MAJCOMs and HQ USAF direct reporting units (DRU) and applies to commanders, operations supervisors, and aircrews assigned or attached to all flying activities of these MAJCOMs and DRUs. It assigns responsibilities to Lead MAJCOMs to develop and manage, in coordination with user commands, the appropriate AFI 11-2 MDS Specific Volume 1, to establish aircrew ground and flying training requirements, regardless of mission designation and command of assignment. It makes no mention of joint training.

Joint Training Disconnects

Table 1 highlights some joint training disconnects. The review revealed that not all MDS Specific Volume 1 training instructions specify a joint training task or activity. Some do (e.g. B-2 Global Power Training) while others don’t; and, in some cases the absence of a joint training reference does not imply those systems do not conduct joint training (e.g. E-3).

Collective Training Instructions

AFI 10-204 and AFI 10-251 support the OTI objective to maximize the ability to conduct frequent, relevant and realistic joint training through the interoperability of operational training infrastructure.

Joint Training Exercises

Table 2 shows a wide range of joint training exercises that span the tactical, operational, and strategic levels for those units, staffs, and individual participants. The purpose of which is to ensure these activities help command and subordinate units achieve and maintain readiness, fulfill OPLAN taskings and appropriately respond to contingencies, such as natural disasters or terrorist incidents.

RECOMMENDATIONS

Three courses of actions (COAs) were developed as a result of the research and findings.

COA1 – Do nothing and continue to experience the same limitation that currently exists. This may impact warfighter readiness or lead to negative training if we are not exercising how we actually conduct real world operations jointly.

COA2 – Close the gaps in policy and instructions by modifying existing policy and/or instructions such as the Air Force Instruction for Air Crew Training (AFI 11-202vol1). Even though this is a top level instruction, it does not make any references to joint training, which is contrary to how we actually engage in a real world operation. A modification to an existing policy may be made by submitting an AF Form 847, “Recommendation for Change of Publication.” This is an efficient method to address the CSAF’s goal to maximize the ability to conduct frequent, relevant and realistic joint training through the interoperability of operational training infrastructure. Departmental instruction for aircrew training - AFI 11-202V1, would serve as an appropriate policy directive to capture the Air Force’s desire to emphasis joint training, but limited to aircrews only.

COA3 – Establish an overarching Air Force Policy Directive that addresses the OTI joint training objectives and span of mission design series. Tie the directive to the JMETLS and the appropriate synthetic environment to exploit these. This document in turn would be implemented by instructions and/or other policy documents. In terms of content and substance, the Joint Training Policy for the Armed Forces of the United States, CJCSI 3500.01H, as signed by Lt Gen David Goldfein, 25 April 2014, could serve as a template for creating a new policy document. This instruction would provide the CSAF joint training policy to all units assigned to or gained by all MAJCOMs and HQ USAF direct reporting units (DRU) and applies to commanders, operations supervisors, and aircrews assigned or attached to all flying activities of these MAJCOMs and DRUs. It specifies that joint training is focused on the Joint Mission-Essential Tasks. It fully supports readiness and helps command and subordinate units achieve and maintain their designed operational capability, and their ability to fulfill OPLAN taskings and appropriately respond to contingencies, such as natural disasters or terrorist incidents. This instruction applies to individual and collective joint training programs. It affirms the role of the commander and directors in the training and readiness of their organizations.

COA3 was selected and recommended to Headquarters USAF/A3T, the office for Operations and Training as well as the Air Crew Total Force Management Division (USAF/A3TF). To date, activities are focused more on COA2, modifications to some existing policies. This is a partial solution, but is some movement forward. AFI 11-202 is under review by the MAJCOM communities and USAF/A3TF. Comments and inputs from this study were submitted for inclusion. AFI 10-204, Air Force Service Exercise Program and Support to Joint Exercise National Program (Kelly, 2019) was recently updated. Input and comments based on our study were incorporated.

SUMMARY AND FUTURE ACTIVITIES

AFAMS was tasked under the Air Force Operational Training Infrastructure (OTI) 2035 Flight Plan to research, review, and analyze guidance and operational Joint training activities conducted by the United States Air Force. The survey sampled policy directives and instructions directing individual and collective Joint operational training activities. The research also included a sample of an overview of specific joint training events. This led to documentation of these activities to capture the “as is” condition.

The results of the survey produced observations and in turn recommendations. It was observed that the application of joint training within the individual air crew MDS instructions is limited and not consistent. It is also revealed that we have more details in our policies and instructions on collective training and appear to be exercising joint training more in this area than individual air crew training. To emphasize again, the AFI 11-202V1, Aircrew Training, does not reference joint training nor does the AFI 36-2651, Air Force Training Program. DoDD 1322.18, Military Training, directs Service Secretaries to support joint and integrated operations training. The team concluded a gap exists between Office of the Secretary of Defense (OSD) policy and Air Force individual air crew training implementation.

In an attempt to operationalize the OTI Flight Plan and meet the CSAF vision of joint interoperability between the services and maximize the use of appropriate modeling and simulation capabilities to maximize readiness, AFAMS recommends new USAF overarching policy directive to mitigate the gap in coordination with the other services. This can occur by creating an overarching policy directive signed by the CSAF designed to align Air Force policy and

subsequent implementation directives with OSD and joint policy. This approach will be more challenging, but can be achieved and will force modifications to existing publication throughout the USAF for the appropriate mission areas.

All policy changes and instructions should be coordinated with the USAF MAJCOMS other DoD services. Further research is required to include the Cyber and Mission forces. The Joint Mission Essential Tasks lists must be coordinated with the Combatant Commands (COCOMs) and services.

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