Strategy Research Project

MODIFYING INTRATHEATER AIRLIFT FOR IRREGULAR WARFARE

BY

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Intratheater airlift is an important aspect of Irregular Warfare. Dispersed operations involved in the many aspects of irregular warfare require the deployment, resupply, and redeployment and medical evacuation of forces to conduct these operations. As the personnel are spread over larger geographic areas, the ability to meet the needs of this force falls on intratheater airlift. This need for intratheater airlift to support irregular warfare is spelled out in Department of Defense, Air Force and Army doctrine. It is also has historical examples of supporting United States forces and host nation forces in Southeast Asia. This experience was not maintained and the Air Force has developed its current airlift force to support traditional warfare operations. The Air Force Special Operations Command is attacking the need for short takeoff and landing aircraft to support irregular warfare, but the general purpose forces are not responding to the need for a more varied airlift aircraft. The utility of using airlift for building partner capacity in aerospace operations has also been undersized. An airlift structure that supports U.S. irregular warfare operations should also support partner capacity with experienced aircrew and maintenance personnel with aircraft appropriate for the host nation.

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MODIFYING INTRATHEATER AIRLIFT FOR IRREGULAR WARFARE

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ABSTRACT

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Intratheater airlift is an important aspect of Irregular Warfare. Dispersed operations involved in the many aspects of irregular warfare require the deployment, resupply, and redeployment and medical evacuation of forces to conduct these operations. As the personnel are spread over larger geographic areas, the ability to meet the needs of this force falls on intratheater airlift. This need for intratheater airlift to support irregular warfare is spelled out in Department of Defense, Air Force and Army doctrine. It is also has historical examples of supporting United States forces and host nation forces in Southeast Asia. This experience was not maintained and the Air Force has developed its current airlift force to support traditional warfare operations. The Air Force Special Operations Command is attacking the need for short takeoff and landing aircraft to support irregular warfare, but the general purpose forces are not responding to the need for a more varied airlift aircraft. The utility of using airlift for building partner capacity in aerospace operations has also been undersized. An airlift structure that supports U.S. irregular warfare operations should also support partner capacity with experienced aircrew and maintenance personnel with aircraft appropriate for the host nation.

MODIFYING INTRATHEATER AIRLIFT FOR IRREGULAR WARFARE

The current wars in Afghanistan and Iraq have impacted the United States (US) military not just in terms of the loss of American lives and treasure, but also in terms of its focus on how it will fight a war. Since World War II, the Department of Defense's focus has been almost entirely on traditional warfare, "that between regulated militaries of states with the object to defeat an adversary's armed forces."[1] Doctrine and tactics continued to revolve around traditional warfare despite the collapse of the Soviet Union and the lack of a threat from any near peer competitor. Despite focusing on a large state threat, the US has been involved throughout this same time period in much smaller wars. These wars have not always fit the definition of traditional warfare, but instead are classified as irregular warfare (IW), "a struggle among state and non-state actors for legitimacy and influence over the relevant population(s)."[2] The current wars in Afghanistan and Iraq have forced the Department of Defense (DoD) to change focus and realize that irregular warfare should be as "strategically important as traditional warfare."[3] This change in focus affects all US forces, not just ground forces.

The United States Air Force (USAF) plays a vital role in irregular warfare and must change its focus to maximize its contributions. The USAF's greatest contributions in IW include the following: kinetic effects from a variety of aircraft; intelligence, surveillance and reconnaissance (ISR); and airlift.[4] Airlift provides a significant asymmetric advantage, enabling commanders to rapidly deploy, sustain, reposition and redeploy land forces.[5] The primary form of airlift for these operations is intratheater airlift, "the air movement of personnel and materiel within a geographic combatant commander's area of responsibility."[6] This paper will focus on redefining the

requirements for intratheater airlift to support the Joint Force Commander's requirement to conduct theater specific irregular warfare campaigns.

Airlift is required for insertion, extraction, resupply, and to conduct emergency medical evacuation of ground forces. The USAF cannot maintain the same intratheater airlift force that it developed for traditional warfare and meet these same requirements for irregular warfare. First, I will discuss why airlift is an important aspect of IW and explore how this is not new for the USAF, but it has to be relearned. This process is being pushed forward with changes in doctrine and requirements from our current wars in Afghanistan and Iraq. Second, I'll describe how the current state of the USAF intratheater airlift force remains focused on traditional warfare, but changes are slowly being accomplished. The USAF has a new smaller airlifter, the C-27J, on the horizon and airdrop has enjoyed great success with employment of more precise capabilities. The force that is changing the most to meet airlift requirements for IW has been Air Force Special Operations Command (AFSOC) as they have expanded airlift aircraft and personnel to meet the diverse requirements of IW. While this is important, it does not bring the General Purpose Forces (GPFs) into a better position to support IW airlift requirements. Next, I'll discuss the future of airlift in irregular warfare. The USAF needs to have aircraft that can meet the varied needs of IW. This requires an intratheater fleet including: C-17s; C-130s; helicopters; and short takeoff and landing (STOL) fixed-wing aircraft, those aircraft capable of takeoff and landing in less than 1,500 feet.[7] These aircraft must be possessed by both the USAF GPFs and Special Operations Forces (SOFs). Finally, US forces must assist the host nation air force by developing their capabilities and capacity to conduct airlift operations in support of their ground forces

conducting future counterinsurgency operations. This concept, known as Building Partner Capacity (BPC) is a critical component of IW.

Airlift is an Important Aspect of Irregular Warfare

The differences between IW and traditional warfare are based on the focus of operations, the center of gravity. Instead of focusing on the defeat of another armed force to change the policies or the government, IW seeks to undermine a group, government or ideology by influencing the population.[8] This different focus changes the nature of how ground forces are postured throughout the area of operations. Traditional warfare had established forward lines of troops that marked the point of conflict. In IW the adversary is often dispersed within the population. To secure and influence the population, friendly ground forces must also be dispersed with the population to positively influence their security and promote good governance. This results in forces conducting operations in much smaller teams at increasing distances from one element to the next in a non-contiguous environment that creates challenges for resupply and medical evacuation.[9] This requires airlift to conduct operations delivering fewer personnel and less cargo to even smaller airstrips requiring STOL aircraft. The missions have also proven challenging for helicopters due to the distances and the speed desired for medical evacuation. Due to the lower amount of supplies required at small Forward Operating Bases (FOBs), airdrop is also an effective option for resupply. The need for airlift of US and host nation forces also provides an opportunity to work with the host nation to build its own airlift capability. All three of these requirements, STOL aircraft, airdrop, and BPC, are not new to airlift and each was demonstrated during IW operations in Southeast Asia of the late 1960s.

One of the most significant IW airlift efforts supported the counterinsurgency (COIN) operations in South Vietnam. The operations were led by the Civilian Irregular Defense Group (CIDG) and by 1967 they comprised seventy remote camps throughout South Vietnam.[10] Supplies for these camps were controlled and distributed through a single main supply base in Vietnam to five forward supply points via USAF C-130 or C-123 aircraft or by boat.[11] Shorter haul distribution from supply points to the camps was by: C-123; C-7; helicopter; small, STOL-capable, single-engine aircraft; or truck.[12,13] By 1968, over ninety percent of all cargo was moved to the camps by air. The ownership of the aircraft varied over the life of the program. C-130 and C-123 aircraft were USAF and the C-7 Caribou were initially Australian and United States Army (USA) which switched to USAF ownership in 1967. Helicopters were both USA and USAF.[14] As the Vietnamese Rangers took over the U.S. Special Forces advisory role in 1969, the Vietnamese Air Force also took over the resupply mission utilizing both fixed wing and helicopter transport. By 1971, U.S. forces were only a back-up for resupply missions conducted by Vietnamese forces.[15] While airland delivery of supplies was the primary workload, airlift forces also conducted insertion, extraction, and medical evacuation operations. The troops for reinforcement operations were normally flown by C-130 to nearby fields and then brought in by helicopter. Airdrop operations were used to set up new camps and conduct sweeps in the areas around the camps. While operations in South Vietnam were more centered on support of U.S. forces, operations in Thailand focused more on BPC with Thai forces.

Thailand began to see communist-fed insurgent operations in the northeast part of the country in the late 1950's and early 1960's. In 1962, the USAF evaluated the

situation and recommend police and civic measures to combat the insurgents.[16] In addition to these recommendations, the Air Force also identified the need for a light transport aircraft for access to the remote areas of northeastern Thailand.[17] The USAF began BPC operations in 1966 with the assignment of the 606th Air Commando Squadron to augment and train the Thai forces in COIN operations. The 606th provided its own aircraft for training and support including C-123s, UH-1s and light utility transports.[18] The Thai Air Force had C-47s, but began building a squadron of C-123s to fill the need for a light transport.[19] The USAF crews helped deliver medical supplies, perform medical evacuations, insert teams and deliver radios for villagers to inform the police of communist activities. The 606th also helped local residents build airstrips for the utility aircraft use so they could check on local security conditions.[20] At the peak of activity, the US Congress and Secretary of Defense directed the reduction of US participation in BPC operations with the Thai Air Force. USAF direct airlift support was terminated in January 1968, and the 606th was inactivated in June 1971.[21]

Both the operations in Vietnam and Thailand established a basis for airlift and airdrop operations in IW and provided an opportunity to develop units and doctrine for BPC. However, as the war faded from memory so did the doctrinal opportunities. In 1967, the USAF published Air Force Manual 2-5, *Special Air Warfare*, on the air aspects of psychological operations, counterinsurgency, and unconventional warfare.[22] In the 1970s, “special air warfare” became “special operations” and “counterinsurgency” became “foreign internal defense” (FID) as the guidance for these operations were reduced to just two paragraphs in Air Force Manual 1-1, *United States Air Force Basic Doctrine*.[23] This trend began to turn around in the 1980s and early 1990s with a growth

in emphasis on FID and low-intensity conflict. Air Force Special Operations Command (AFSOC) stood up the 6th Special Operations Squadron (SOS) to take over the role of FID as combat aviation advisors (CAA).[24] While this initiative provided a link to IW, the General Purpose portion of the USAF airlift fleet continued to shed small airlift capabilities. During the 1990s, the USAF got rid of its C-23 Sherpas, used to move fighter aircraft parts in Europe, and the C-27 Spartans, operating from Panama to support counterdrug efforts in of small jungle airfields. This left the Air Force's C-130 as its smallest intratheater tactical airlifter, an aircraft many countries, large and small, use as a heavy airlift aircraft. While the types of airlift aircraft have again dwindled, the current wars have spurred a resurgence in doctrine and an increased level of importance for IW.

The new doctrinal justification for more appropriately equipped airlift forces in IW begins with the Irregular Warfare Joint Operating Concept (JOC). This DOD document outlines the department's contribution to a U.S. Government and partner nation approach to conducting IW.[25] Under the heading of an IW "Solution," the JOC describes the need to provide support to distributed IW operations. This joint operating concept incorporates, "delivery of logistic and personnel support to potentially hundreds of small dispersed teams operating globally in permissive, contested and denied areas."[26] It also includes the requirement to conduct "emergency extraction and personnel recovery globally to all joint forces executing IW operations."[27] The USAF expands on the need for airlift in IW in Air Force Doctrine Document (AFDD) 2-3, *Irregular Warfare*, through the concept of Rapid Mobility. The Air Force will provide this Rapid Mobility by airlifting forces in a timely manner to the immediate area of concentration and resupplying those

forces already in place.[28] AFDD 2-3 goes on to note, “rapid repositioning of small teams through the air allows for a greater chance of tactical surprise across greater distances and difficult terrain.”[29] Finally it states, “mobility decreases the insurgent’s inherent tactical and strategic initiative by allowing timely government response and multiplying the [host nation] government’s reach for conducting security operations.”[30] The last doctrinal document noting the need for airlift in IW is from the U.S. Army Field Manual (FM) 3-24, *Counterinsurgency*. It notes, “airlift provides a significant advantage to counterinsurgency forces.”[31] The manual describes the ability of airlift to bypass weaknesses that insurgents have traditionally exploited enabling forces to operate in rough terrain and avoid lines of communication (LOCs) targeted by the insurgents.[32] Both the Air Force and Army documents also note another aspect of airlift in IW defined as Building Partner Capacity.

The Current State of Intratheater Airlift

A 2007 paper by the RAND Corporation, titled “Airlift capabilities for Future U.S. Counterinsurgency Operations,” lists three rules for airlift planning. The first rule is the airlift fleet should be structured first, foremost, and always for the wars that would pose the most serious threat to national interests.[33] The second rule is the airlift fleet should consist of several types of aircraft manifesting a significant variety of operational characteristics.[34] Finally the third rule is never abandon rule 1 to follow rule 2: the diversity of the airlift fleet should not be pursued to the point that it jeopardizes the ability of the overall force to perform its most critical missions.[35] For decades traditional warfare has been seen as this “most critical mission” and the USAF has structured itself accordingly. It currently maintains an airlift fleet consisting of C-5s, an intertheater

airlifter, C-17s, which operate both intertheater and intratheater, and C-130s, the primary intratheater airlifter. This complement maximizes the tons of equipment and personnel that can be airlifted and supports operations in traditional warfare. With the latest direction in DoD 3000.07 to treat IW on the same level as traditional warfare, this current aircraft mix does not meet the needs for a dispersed ground force operating in austere conditions in smaller teams. The current airlift General Purpose force does not have small, STOL aircraft for operations on short, rough runways, some at very high altitudes, which dot much of the undeveloped world.[36] General John Handy, then Commander of Air Mobility Command and US Transportation Command, noted the following in 2004:

> Where I have not been able to do what I've been asked to do, and it is a valid issue in Afghanistan today, is I don't have an aircraft to support that low-end scale of operations--2-3 pallets and 15-25 passenger capability, short-haul to get into very small strips.[37]

The composition of the General Purpose airlift force is not just a failure to react to changes in the importance of IW, but changes have also been stalled due to the high cost of building and sustaining the current airlift fleet. The USAF began this century concentrating on the C-17 acquisition program. However, several factors have changed that focus. The discovery of wing cracks in older C-130 aircraft and the lack of reliability of C-5 aircraft required a focus on recapitalizing these fleets as well as continuing to build the C-17 fleet. The current wars in Afghanistan and Iraq have taken a toll on the C-130s, piling up flying hours and forcing the grounding of many aircraft due to wing cracks and restrictions on others. This has forced an accelerated acquisition plan for the C-130J which is an even larger version of the older C-130s. The C-5 has been consolidated in the Air Force Reserve and Air National Guard and is in two separate

modification programs for engines and avionics. These projects left little money to explore other airlift options. Meanwhile, the U.S. Army was looking for a replacement for its C-12, C-23, and C-26 organic airlift aircraft and it needed help to reduce the workload on CH-47 helicopters, which was being used to fill part of the intratheater airlift requirement.[38] The problems meeting airlift requirements at small airfields in Afghanistan, noted above by General Handy, led the Air Force to join with the Army to develop and acquire a small airlifter leading to the selection of the C-27J Spartan. The process has already taken four years and no aircraft are yet available. The requirements for STOL airlift, airdrop and building partner capacity has not gone away, but is being partially met with contract aircraft and crews.

The USAF is highly experienced in the use of long haul, intertheater, contract airlift when needed, but the current wars have added the need to contract intratheater airlift. In 2004, US Transportation Command contracted with Presidential Airways to provide STOL airlift and airdrop in Afghanistan with the Casa C-212, a twin engine turboprop aircraft.[39] This contract airlift has proven useful and US Transportation Command has renewed the contract multiple times.[40] Using a civilian contractor to supply forward bases during IW can become a problem if there are threats to the aircraft in the area being resupplied. Although some militaries use the C-212 aircraft, those used by Presidential Airways do not have defensive systems, to counter surface-to-air missiles, or hardened aircraft systems, to handle high levels of battle damage. Contracting STOL civilian aircraft for Afghanistan was possible since it's considered a permissive environment, but this was not considered possible in Iraq in 2004 due to the high threat levels.[41] While there is always a level of threat in an active war, Presidential

Airways has not lost any aircraft in Afghanistan due to hostile fire, although it has had one fatal aircraft crash due to pilot error.[42] In addition to the lack of protection, contract aviation does not have the capability to support BPC operations. The contractors do not have the experience in the aviation advisor role or the instructor crewmembers to teach a new host nation Air Force how to conduct just the airlift mission, let alone ISR and strike options. Another good aspect of the contract airlift has been the ability to conduct small resupply airdrops to dispersed outposts. The C-212s have been able to drop 500 pound door bundles from low altitudes providing resupply without the need for landing or the use of helicopters.[43] While this is an advantage, the small size of the drops and low altitudes make this a limited method of resupply when using contract airlift.

Airdrop, as a subset of the resupply mission, is one area that the USAF has made great advances. The ability to support dispersed operations with new levels of accuracy makes the current intratheater fleet of C-130s and C-17s the perfect aircraft for this mission. Airdrop has been part of resupply since World War II, but it was generally an interim method until the forward line of the battle reached the unit being supplied. Then regular airlift, rail, and trucks took over the supply mission. One of the biggest problems with airdrop as a method of resupply has always been the required size of a drop zone and the number of troops needed to secure a dropzone. During emergency resupply, dropzone size is not an issue, although recovery may be a problem if the drop lands off the intended landing area. For day-to-day airdrop operations, it's better to have a large, clear area to maximize the survivability of the load being dropped. The large clear area is needed since obstructions, such as rocks and trees, can damage the object being dropped and unexpected winds can push the drop

off the intended dropzone. Drops off the dropzone may be unrecoverable due to terrain or landing in areas controlled by enemy forces. The current conflict in Afghanistan has resurrected airdrop as a regular method of resupply. The size of the country, dispersed operations, and poor roads combined with the Improvised Explosive Device (IED) threat have driven commanders to look for other methods of resupply. The size of the country makes rotary wing impractical for units located far from logistic hubs and the roughness of the terrain makes carving out STOL airstrips for every FOB impractical. This requirement sped the development of multiple precision airdrop systems. These accurate systems allow much smaller drop zones, reducing manpower demands for ground units, and they allow airdrops at much higher altitudes, moving aircraft out of the ground threat envelope. These developments allow the use of airdrop for resupply to be expanded to many more ground units including those in rough terrain or even urban environments. This makes airdrop a significant capability in IW and can offset the threat in a non-permissive environment. While airdrop has become a reliable means for resupply, the ability to land and remove personnel, especially wounded is a critical part of supporting all operations. Therefore, while the C-130 and C-17 will dominate the airdrop mission, the STOL aircraft remains a requirement for supporting IW.

While the General Purpose Air Force has recognized the need for a smaller airlifter in IW, only AFSOC is moving forward to meet the requirement today. It has expanded its airlift capabilities with the creation of two new squadrons. The 319th SOS was activated in 2005 and the 318th SOS was activated in 2008 to provide intratheater support for special operations forces.[44] Each unit operates the U-28A, a variant of the Pilatus PC-12, a single-engine turboprop with several configuration options. The U-28A

is certified to land on dirt and grass strips and is equipped with weather radar and a suite of advanced communication and navigation gear.[45] This aircraft can deliver 10 passengers or 3,000 pounds of cargo to runways half the size required by the C-130. In addition to the U-28s AFSOC is also purchasing ten Polish PZL M28 Skytruck aircraft and Bombardier Q200 aircraft, each two-engine turboprops.[46] These aircraft will provide cargo and passenger loads larger than the U-28, but still smaller than a C-130. The addition of these aircraft will provide the STOL airlift to facilitate the movement of personnel and equipment in support of IW special operations missions. The biggest drawback of buying these civilian aircraft is the lack of defensive systems and built in survivability. This can be partially mitigated through airdrop if used in areas with high concentrations of small arms threats.

While not built for high threat environments, the smaller civilian based aircraft are especially suitable for shaping operations as part of a theater engagement plan. They provide a small footprint, in terms of both aircraft size and support personnel required, plus civilian based aircraft don't stand-out like a much larger, grey C-130s when an overt military presence is not desired. The use of civilian based aircraft, especially those without large military markings, reduces the political sensitivities in some countries where an "overt" US presence may be more detrimental than "no US presence." This sensitivity to the host nation's political environment directly addresses the core IW relationship between the host nation government and population. Smaller civilian aircraft are not just purchased, but also contracted to perform numerous missions. In Operation Enduring Freedom-Trans Sahara, aircraft are leased to support forward deployed personnel and provide reliable medical evacuation.[47] The use of

civilian aircraft also allows a host nation to work with USAF personnel to gain experience and be able to buy the same aircraft for themselves.

The need for host nations to build airlift capacity is a vital part of IW. Currently the USAF has only one squadron that has the internal capability to help build a host nation Air Force, the 6th SOS. Its mission is to assess, train, advise and assist foreign aviation forces in airpower employment, sustainment and force integration. Squadron advisors help friendly and allied forces employ and sustain their own airpower resources and, when necessary, integrate those resources into joint and combined operations.[48] USAF doctrine notes' "The best way to apply airpower in IW is often by, with, and through the host nation's air force.[49] The 6th SOS is currently expanding in size, but it cannot handle all of the global BPC requirements and shaping operations simultaneously.[50] However, the use of civilian STOL aircraft by other special operations squadrons allows AFSOC to build a broader cadre of pilots, maintainers and planners with experience handling these aircraft. This gives them a well to tap when the 6th SOS needs assistance with additional personnel. When host nations adopt aircraft in the current USAF GPF inventory the GPF provides the experienced aircrew and maintenance personnel to fill this BPC need on an ad hoc basis. Currently USAF GPF instructors are working with Iraqi forces to fly and maintain their fleet of C-130 aircraft.

The Future of Airlift in Irregular Warfare

The USAF needs to expand beyond the current General Purpose airlift force and mission perspective and look to options used by SOF and other countries to meet all the airlift requirements of IW. The USAF will still meet the majority of intratheater airlifter requirements with the C-130. The aircraft has advanced defensive systems and is built

to withstand battle damage. This will be the primary choice in hostile environments. The C-130 is also an excellent aircraft for airdrop operations with the latest precision airdrop capabilities and the ability to handle loads of up to 42,000 ponds. However for many countries, the C-130 is actually the strategic airlifter and they have much smaller aircraft for moving smaller numbers of personnel and supplies. While the C-130 and C-17 can easily land and takeoff from dirt landing strips, they require over one-half mile of runway for most operations. The C-27J, the GPFs newest airlifter, will also need graded airstrips and it does not meet the 1,500 foot takeoff and landing requirement for STOL aircraft at maximum gross weight.[51] Potential smaller aircraft would include most that are considered "bush planes" used in wilderness areas throughout the world today. These aircraft are designed to land on unimproved surfaces in very short distances. Since they are intended for use in austere regions of the world they are designed to be simple and reliable. Another advantage to operating small aircraft is the lower overall operating cost. Many C-130 missions are flown in theater with a less than full aircraft load in order to make timely deliveries. A smaller aircraft could deliver these light load flights when available, thereby not using the more expensive aircraft. The biggest drawback of small civilian aircraft is the lack of both defensive countermeasures for surface-to-air missile threats and the ability to withstand battle damage such as small arms fire or shrapnel. Fixed airfields provide insurgents with the precise location that an aircraft will be low and slow and it becomes a matter of waiting for an insurgent to strike an approaching or departing aircraft. In this sense, operating in IW can be more dangerous for an airlifter since "the location of threats may be harder to predict and the frequency [of attacks] may be greater than in conventional operations."[52] All of the

USAFs primary airlifters must currently have defensive systems on board to operate in the Iraqi and Afghan theaters. These systems have proven very effective. However, these systems are not free and take up valuable space on small twin or single-engine aircraft. The insurgent threat to airlift aircraft at a fixed landing site can be mitigated by expanding the secure area, using defensive systems, or it can be reduced or eliminated through airdrop. Airfields more likely to come under attack can be restricted to aircraft with defensive systems only or dictating when aircraft can land or airdrop, such as night or when protected by orbiting aircraft capable of striking attacking forces.

The types of aircraft needed are important, but the Air Force balance of GPF and SOF aircraft is equally important. SOF cannot be the sole owner of STOL aircraft and two recently activated airlift squadrons cannot manage airlift for all forces involved in IW. The GPF must adopt more varied aircraft, beyond the C-27J and including true STOL capacity, to provide the airlift capabilities needed by ground forces. Higher level guidance is provided in three documents regarding the use of GPFs in IW. The 2006 Quadrennial Defense Review notes "General Purpose Forces will continue to support and play a leading role in stability operations and counterinsurgency, and a greater role in foreign internal defense."[53] In the IW JOC, one of the supporting ideas was "expanding the role of GPFs to support and execute IW."[54] Also, the 2009 Quadrennial Roles and Missions Review report noted:

> When operational environments dictate that joint force presence remains unobtrusive, SOF will play a leading role. General Purpose Forces will continue to play a leading role in operational environments where a large-scale presence is warranted to provide security to a population.[55]

The General Purpose USAF must be structured to meet the needs of ground forces throughout IW. The USAF cannot simply use the two airlift squadrons in AFSOC to

meet the variety of requirements in IW. The General Purpose Air Force should combine the C-27J and smaller STOL aircraft to form active-duty squadrons that can meet the airlift needs of forces in dispersed, non-contiguous operations. These should be collocated with C-130 squadrons to take advantage of intratheater airlift experience and be able to move maintainers and aircrew between different airframes to gain experience for supporting BPC operations. This will also produce a deeper base of personnel to draw from to supplement BPC operations or move into the 6th SOS as combat aviation advisors.

Building partner capacity is a mission for both GPF and SOF forces. The use of smaller aircraft, both those designed specifically for the military and those primarily for civilian use; provide a common knowledge base that will help in BPC operations. If the USAF, both GPF and SOF, have aircraft that better match what smaller militaries would fly, it creates a greater pool of instructor pilots that can help build a partner nation's air force. Due to the small size of the USAF's only BPC squadron, GPF pilots have been training in small aircraft and then immediately deploying to Iraq to be instructors and advisors with very little experience in the aircraft. This experience is vital when teaching in a combat environment. As noted above, we have been successfully using GPF personnel in FID and BPC missions that are not trained as combat aviation advisors and this is not a Special Operations-only mission. The 6th SOS can retain core aviation advisor capabilities, but they can be augmented from other units flying similar aircraft. This is already happening in Iraq as C-130 crewmembers from across the Air Force are tasked to support and train the Iraqi C-130 operations. The USAF needs a pool of

experience that can match the requirements of a host nation whether they are ready for C-17s or a Pilatus PC-6.

The key in BPC is “providing the right tech rather than low tech or high tech.”[56] The C-130 may not be the right aircraft for BPC in most countries, since they do not have a strong basis of experienced aerospace personnel that can handle complex aircraft systems. “The current USAF inventory emphasizes high tech, thus constraining the available options for BPC through technical transfer.”[57] The USAF is also constrained to buy almost exclusively US built aircraft due to legislative requirements. However, the expense of these higher technology USAF aircraft may lead many nations to look to foreign rather than US suppliers for IW capable aircraft.[58] The USAF will need to look outside of US suppliers to meet the aircraft requirement for STOL aircraft to support US ground forces and the need for a more affordable right tech solution for a host nation. If US squadrons use these same aircraft they not only gain experience in them, but they have an opportunity to pass the experiences on to a host nation. As BPC actions are conducted, these aircraft should be sold to the host nation under a foreign military sales contract. The U.S. squadrons could then replace these aircraft with even newer ones and thereby meet U.S. STOL airlift needs, while being ready for the next BPC opportunity. The additional benefit of replacing aircraft more frequently is preempting the need to upgrade aircraft due to changing safety and navigational requirements.

Conclusion

This paper is not describing any new revolutionary thinking for intratheater airlift. The knowledge and basis for supporting a large IW effort with intratheater airlift was

used for operations in Southeast Asia over forty years ago. Although these lessons were buried over the years, the ideas remained and began to resurface in the 1980s and 1990s. The wars in Afghanistan and Iraq have caused a resurgence of doctrine that is driving changes in the USAF. Although the Air Force has taken steps to make some of these changes, the airlift GPFs remain oriented to support traditional warfare with the C-130 as the smallest available airlift asset. Meeting theater requirements with contract airlift alone is not a long term option and is not useful in BPC operations. AFSOC has taken the lead in developing small, STOL airlift options to support SOF operations throughout the world and this can be used to develop the same for GPFs supporting IW. Following the AFSOC model for acquiring STOL, commercial aircraft for the GPF Air Force will greatly enhance the ability of the United States to conduct dispersed airlift operations in a semi-permissive air environment. Finally, the Air Force must be structured to build partner nation airlift capability within host nations to develop an effective airlift capacity to support IW operations and reduce the US presence.

The USAF must continue to pursue a mixture of airlift forces that meet the needs of all forces in any type of operation. This requires variety in the mix of airlift aircraft and the involvement of those with aviation experience at all levels of planning. Effective intratheater airlift provides an advantage to all military operations, especially IW. The elevation of IW to the level of importance of traditional warfare recognizes the lives, treasure and effort put into such operations. The lessons from Afghanistan and Iraq cannot be buried like those from Southeast Asia.

Endnotes

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[9] U.S. Department of Defense, *Quadrennial Roles and Missions Review Report*, (Washington, DC: U.S. Department of Defense, January 2009), 21.

[10] Ray L. Bowers, *Tactical Airlift* (Washington D.C.: Office of Air Force History, 1983), 417.

[11] Ibid., 418.

[12] Ibid., 419.

[13] Ibid., 34. The C-123 aircraft was a twin-engine, high-wing aircraft produced from an earlier glider design. Those fitted with two additional jet engines, the C-123K, could carry a 10,948 pound payload and takeoff in 2,802 feet over a 50 foot obstacle with a range of 1,573 nautical miles. The C-7 was also a twin-engine high wing aircraft purchased for its durability and short takeoff and landing distance. The C-7 could carry 6,219 pounds and takeoff in 1,200 feet over a 50 foot obstacle with a range of 544 nautical miles.

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