

The Horsefly, Rover Joes, and the Birth of the Mosquitoes

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Paths to the Present
FLASHBACK

A Brief History of Airborne Forward Air Controllers-Part 1

Oh they say the T-6 wasn't made for combat

And I'm here to tell you that is so.

But I'll fly another mission in the morning

Although I'm not convinced I ought to go.

All ye pilots gather 'round to hear my story

Do not talk of jets and Baker 29's

For this evening we'll observe one minute's silence

In memory of "Mosquitoes" on the line

- Lt Brockmeyer, 6147th Tactical Control Squadron (Airborne)

One hot summer day two Lieutenants, James A. Bryant and Frank G. Mitchell began testing a concept. Hopping into two borrowed Army L-17s, they began to control F-80 air strikes over the Korean frontline. Despite flying in the underpowered, highly vulnerable platform, Bryant and Mitchell controlled over 20 strikes that day. The next day, July 10, 1950, flying T-6s, they interdicted 117 trucks, 38 tanks, and 7 halftracks, and directed airstrikes that destroyed a bridge in Pyongyang. The Air Force did not invent the concept of "Forward Air Control" in Korea. Forward Air Controllers (FACs) are about as old as aircraft themselves, though historically they have only been positioned on the ground. From the ground, FACs directed incoming airstrikes with everything from radios to cloth panels. Their job is to assist the incoming Close Air Support (CAS) aircraft providing aid to troops on the ground. By guiding these aircraft they helped put ordnance on target and keep it away from friendly forces. The Army Air Force even tested Airborne Forward Air Controlling in World War II. This placed a FAC airborne to direct the strike from the air, but the Army did not formally retain this airborne system after the end of war. The Air Force found itself inventing and reinventing Airborne Forward Air Controllers again and again in Korea, Vietnam, and beyond.

The Airborne FAC mission embodies one of the most basic uses for aircraft since the dawn of flight, visual reconnaissance (VR). Flight granted the military access to the highest of high grounds from which to observe the enemy, gain insights on their position, numbers, and movements. Once aircraft became weapons themselves, flyers could use their position in direct support of friendly troops on the ground. First the Army used balloons under the United States Army Signal Corps' Ballon Squadron to conduct VR of Confederate forces during the American Civil War. Then, during World War I aircraft flew observation missions over enemy lines to survey the enemy position. The first rec-

instance of someone performing the function of Forward Air Controller in United States history, was by a Marine unit. It was 1927 in Nicaragua and Marines on the ground, pinned down by enemy fire, used cloth panels to guide fellow Marine pilots to their aid by coordinating an air strike from the ground.

In World War II, the Army expanded on this ground FAC concept. Famously, some of these ground FACs were called “Rover Joes” in honor of their British counterparts called “Rover David” and “Rover Patty.” These Rover Joes were veteran pilots, armed with a radio and an AN/ARC-1 Jeep, tasked to maintain communication with pilots in the air conducting air strikes. They began their mission in 1943, and positioned themselves on the high ground to direct the strike. They usually rode in two or three-man teams, using a system which connected the Rover Joe to the Tactical Air Controller (TAC) who would assign aircraft to the strike, and then both the



Piper L-4 “Grasshopper” 1947

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Rover Joe and the TAC would talk to the aircraft conducting the strike. This system continued to expand through WWII.

The Army then experimented with the “Pineapple” system. Pineapples flew below the bomb line, or the line that marked the closest an aircraft could strike to a friendly position without calling down to ground forces in order to ensure they were not in bomb range. These aircraft went after enemy vehicles, as well as other targets, between this line and the front. The experiment expanded when the Army decided to add the L-4 “Grasshopper” and the L-5 “Sentinel” to the mix. Using a concept that originated in Italy, FACs would use these light liaison aircraft to coordinate with the TAC and Rover Joe to relay target information. Then, they could all work with the incoming aircraft to conduct the strike on the target. This system called “Horsefly” operated as a highly effective method to connect the TAC, Pineapple aircraft, Rover Joes and Grasshoppers together in order to deliver effective CAS.

The United States did not use Airborne FACs in every theater of World War II, and while the concept proved itself effective provisionally, massive post-war demobilization caused the idea to dissipate after the war ended.

When the conflict in Korea ramped up in the summer of 1950, the Air Force found itself trying to solve new problems of how best to deliver CAS to men fighting on the Korean front. Rover Joes dusted off their radios and AN/ARC-1 Jeeps to direct airstrikes once again in Korea



Pulling a "Rover Joe" AN/ARC-1 Jeep over a hill in Korea
Robert Futrell *"The United States Air Force in Korea 1950-1953"*

but, the mountainous, fast-paced Korean front was very different from the battlefields of WWII.



Original patch artwork for the 6147th Tactical Control Squadron (Airborne) "Mosquitoes"

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By the beginning of the Korean War, the Rover Joe AN/ARC-1 Jeeps had seen better days, and troops found them highly unsuited for use in the country. Most of the Jeeps had to be put out of commission within a week of deployment. Even if the Jeeps were able to handle the terrain, the lack of visibility and fluid frontline made directing airstrikes from the ground nearly impossible. One example of this issue happened early on, directly after the North Korean invasion of South Korea on June 25, 1950, and during the following evacuation of American dependents from Korea June 26-28, 1950. After a day of evacuation, the Fifth Air Force sent two Tactical Air Control Parties (TACPs) to the country to provide cover for the evacuation. However, the Jeeps given to the Parties struggled against the rough, mountainous terrain of Korea, causing them to break down, and they were

ultimately not fast enough to maintain consistent visual on the enemy.

Absence of effective FAC exacerbated the already strenuous problem of CAS in Korea. A lack of airbases in the country meant that aircraft flying in Korea had to come from Japan. Pilots responding to a call for CAS had about 10 to 15 minutes from when they entered the country to drop ordinance on a target before they needed to return to Japan due to fuel restrictions. The Rover Joes struggled to find a target and coordinate with the TAC and TACP fast enough to direct an airstrike in this time frame, leading to unanswered CAS requests.



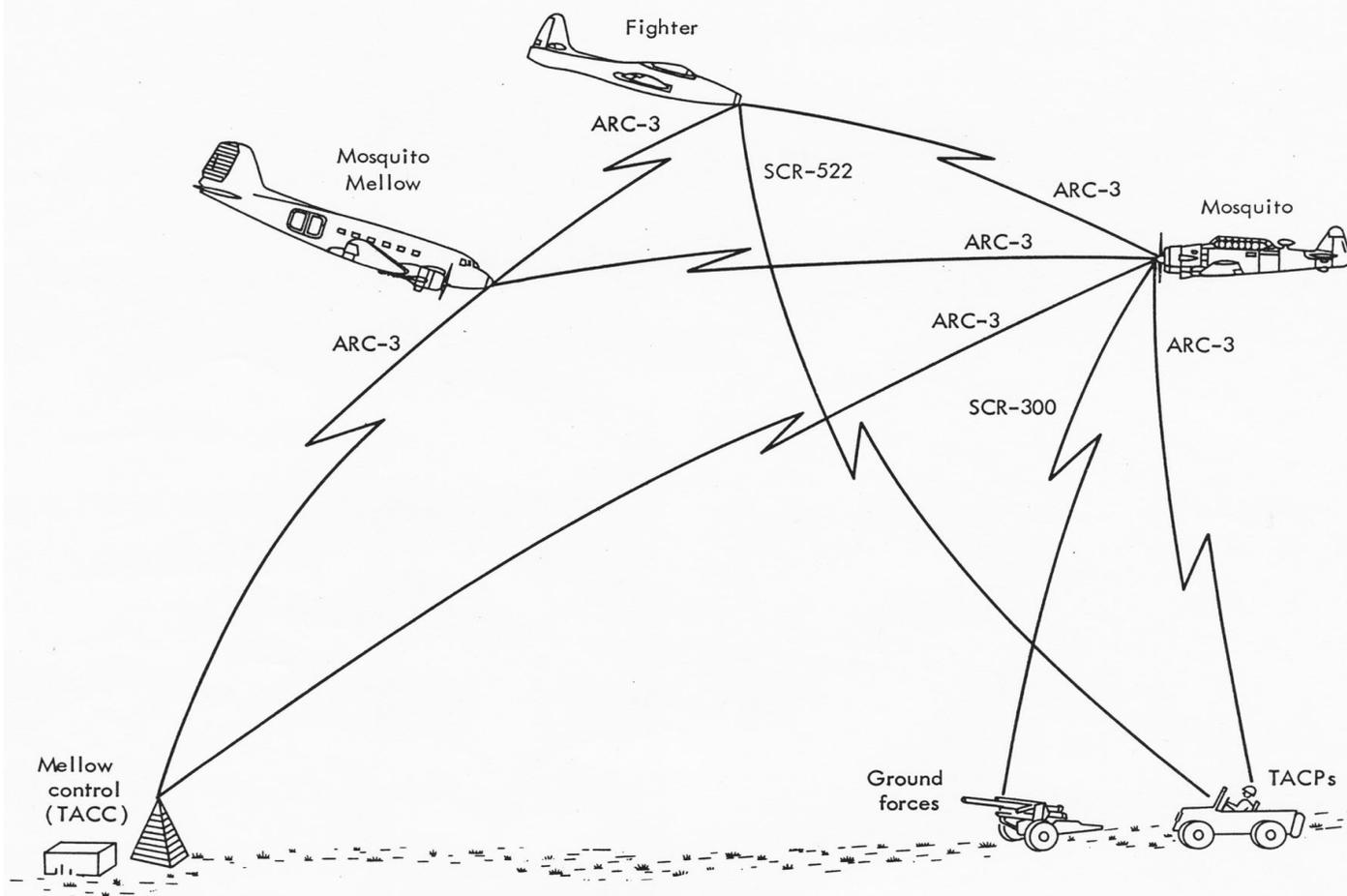
Flight Operations Building at K-47 in Chunchon, Korea.

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These issues lead Bryant and Mitchell to reinvent the Airborne FAC concept, and as the first two official Air Force FACs, they proved the effectiveness of the tactic instantly. By 1 August 1950, the Air Force created the 6147th Airborne Tactical Control Squadron as the Air Force's Airborne FAC squadron, more commonly known as the "Mosquitoes." Mosquitoes primarily flew in the T-6 since it had the capacity to fly "low and slow" which enabled the FAC to maintain visual of the situation on the

ground. The Mosquito mission did not end with just conducting air strikes, they performed VR missions, supported emergency rescues, transported other FACs and dignitaries, and even fought in the information war by dropping leaflets and directing C-47s equipped with loudspeakers. They operated in a seemingly endless mission set as a critical part of all aspects of the air war in Korea, and flew constantly to support various missions within the conflict. The Mosquitoes became the eyes in the sky not just for incoming fighter-bomber craft but, also for leaders on the ground. The frontline in Korea was not easy to pick out, given how often the fighting changed, and many Mosquitoes ended up flying farther within enemy territory than they realized as a result of the fluid boundaries. Their VR, in many cases, was the most detailed vision leaders could get of the war behind the line.

As the importance of the Mosquitoes evolved and expanded, so did the Air Force's Tactical Air Control System (TACS). The need for a central airborne site for Command and Control became evident and evolved into the "Mosquito Mellow" concept. Using a C-47 as the platform, seven air controllers flew at 10,000-13,000 feet



Visual of the Mosquito Tactical Air Control System, including the Mosquito Mellow. Thanks to the use of various radio systems, ground forces, Mosquitoes, fighters, and the various TACs created an interconnected web of communications to deliver the best CAS to friendly ground forces.

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between the Tactical Air Control Center (TACC) and the front line. This system included the addition of a



T-6 with damage from an Anti-Aircraft Shell

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senior air controller onboard the Mosquito Mellow who had the authority to divert aircraft from one TACP to another, granting more flexibility to the air war over the Korean front-line.

Overall, the Mosquito concept proved highly effective but was considered to be an underused asset during the Korean War. For example, due to a lack of resources and manning, the Mosquitoes could not convert any of the VR they conducted into formal, polished intelli-



*Mosquito "Ready Room" outside K-47 Chunchon, Korea
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gence. Additionally, Mosquitoes did not fly at night, the T-6 did not have the navigational capacity to do so, the Squadron did not have the manpower, and the ability to conduct VR was significantly reduced in the darkness. This limited the effectiveness of strikes because the enemy could take advantage of the cover of darkness to move vehicles, weapons, and other targets without fear of an airstrike against them.

In order for the concept to work, the Mosquitoes had to fly low and slow over a target, making them highly vulnerable to ground fire and flak. Pilots who dared to fly this mission put themselves directly in harm's way, and as a result, 20 T-6s were lost in the first six months, totaling to 16 fatalities.

The end of the Korean War brought with it another wave of military drawback. Unlike the end of WWII, the Airborne FAC concept

did survive the end of the Korean War. A school to train FACs opened in May 1953, but the class was quickly terminated with the signing of the cease-fire in July. In the long term the Air Force taught the tactic very little, hindering its retention by a peacetime force. When war broke out in Vietnam, the concept would have to be reinvented once again.



*Factory Rebuilt LT-6G flying in Korea
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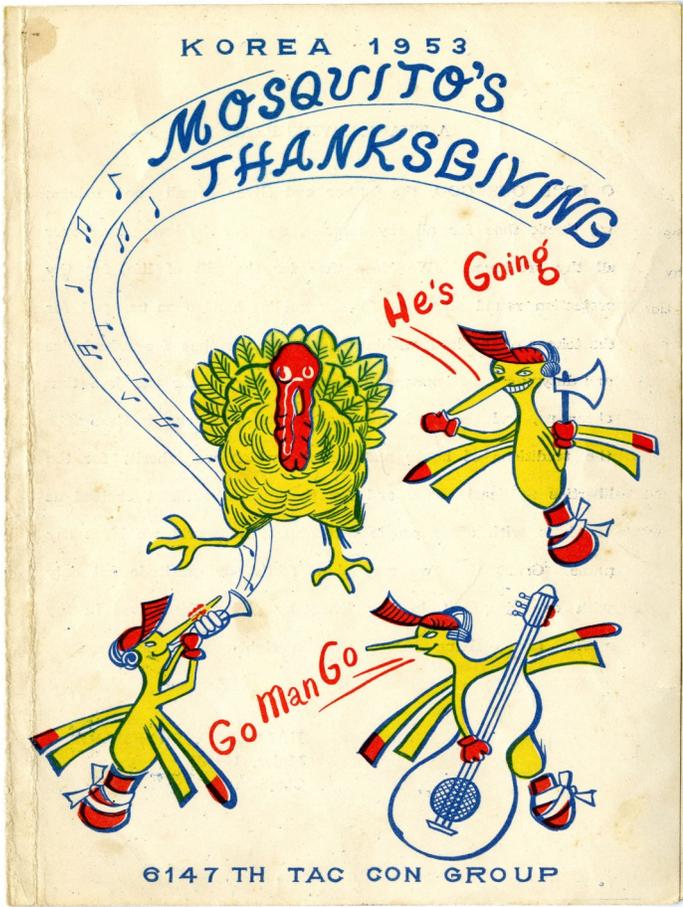
C-47 “Skytrain” fitted out as a “Mosquito Mellow”

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T-6D next to an AN/ARC-1 “Rover Joe” Jeep. This T-6 is on display at the National Museum of the United States Air Force

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Menu for Thanksgiving Dinner with the 6147th Tactical Air Control Squadron (Airborne) in 1953.

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Royal Canadian Regiment pilot (right) flying the FAC mission as a "Mosquito"

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Mosquito Pilot and Observer flying in the T-6 over Korea.

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Marylin Monroe on her visit to Korea as part of her USO tour in 1954, sporting a jacket with the "Mosquito" patch

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Former Mosquito, Col. Jack Taylor (ret.) talking with SSgt Luna at Scott, AFB during a 6147th Reunion. Taylor spent time as a POW after being shot down during the Korean War and later became the Director of the Air Force Ballistic Missiles Division at Wright-Patterson AFB, Dayton, OH.

Air Force Photo

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