Anatomy of Modern Courage: Highlights From the Career of Colonel Kevin A. "Mike" Gilroy

Patricia K. Seinwill, Major, USAF

"Courage is fear holding on a minute longer."

—General George S. Patton

"Superman Stuff"

It was the end of September 1966. The F-105F Wild Weasel had been in the Vietnam theater for three months. The aircraft's record so far was not stellar. After 45 days in combat, only one of six aircraft was still flyable. Of the eight crews that had deployed to Takhli, "four guys were killed, three wounded, two POWs [Prisoners Of War] and two guys quit." Captain Kevin A. "Mike" Gilroy not only needed a new jet, but a new pilot. Pilot Major Glenn Davis needed an Electronic Warfare Officer (EWO). When new jets arrived at Takhli Air Base, Thailand, Davis asked Gilroy to join him.

After flying together for the better part of a month, Davis and Gilroy easily melded into an effective crew. Well suited in temperament and flying styles, they had earned the respect of the single-seat F-105D pilots. "We had a reputation for not losing wingmen, and more importantly when we flew SAM [Surface to Air Missile] coverage for the strike force, no one got shot down by SAMs."²

On one particular mission, Davis and Gilroy were to fly strike support against a military barracks west of Hanoi. However, bad weather in the target area caused them to divert to the secondary target in an area northwest of Hanoi, known by the Wild Weasel crews as "a piece of cake." With few air defenses in the target area, this mission was going to be an "easy counter" towards their 100 missions required to rotate back to the states. Davis and Gilroy agreed that after a pass over the quiet target area to ensure the strike package could accomplish their mission, they would go "SAM hunting" down on the flats southwest of Hanoi. This area was heavily defended with SAMs and Anti-Aircraft Artillery (AAA) and had become a problem for the strike packages. Their wingman was a single-seat F-105D pilot who was looking forward to a quiet, safe mission. He was less than pleased about the thought of going over the flats, telling Gilroy, "You're going out on the flats when you don't have to? You guys are out of your minds."



F-105F taxiing on ramp

The walk-around inspection of their jet found that they did not have a full load of bombs, missiles and rockets. Their maintainer took the situation personally, but the crew took it in stride. Colonel Gilroy remembered, "It was a beautiful day at Takhli Royal Thai AB [Air Base], I was flying with someone I respected and trusted, we'd gotten a good airplane, a full load of gas, some missiles and a cannon, and were going to go kill some SAM sites. Life doesn't get any better than that!" After take-off they flew to the original target. As expected, there was little-to-no defensive activity in the area, so the crew, with their reluctant wingman, headed to the flats southwest of Hanoi. 6

There still wasn't much activity on the scope, just a few Firecans [anti-aircraft artillery fire control radar] probably looking toward some Navy planes out over the Gulf of Tonkin. I turned up the sensitivity of my receiver and could just make out a very weak SAM radar from amidst the noise. It wasn't strong enough to generate an exact bearing, but common sense told us that it was directly ahead. Good. The SAM signal gradually grew stronger as we closed the gap with Hanoi at a rate of eight miles a minute. The signal was now growing strong enough for me to get a reasonable indication of its location.

"The SAM site is at 11 o'clock, Glenn."

"Roger. It's probably that site just south of Hoa Binh. That's the one that hammered those guys from Korat, yesterday. Let's go pay him as visit."

While Davis flew the aircraft directly at the SAM site, Gilroy provided him heading corrections. The tactic at that time was to fly as close as they could to the SAM site and launch a Shrike at the radar. The smoke from the Shrike would mark the site, allowing the crew and their wingman to follow-up with their bombs, rockets and 20 millimeter (mm) cannon against the missile launchers, control vehicles and the remaining SAM equipment. Relying on his experience as a Weasel pilot, Davis launched a Shrike at the offending SAM site. Moments later the missile

warning equipment began to flash and shriek as the target site fought back. Calmly Gilroy informed Davis it was a "valid launch." Davis warned his wingman, "Avenger flight has a valid launch. Take it down, Avenger," ordering a descent to use the ground clutter to confuse the missile.⁸

He [Davis] lowered the nose, pushed up the power and headed for the site. It was now a matter of visually acquiring the missiles and dodging them, while hoping that our Shrike found its way to the radar and put it out of commission. The Weasels had the edge in this battle - we could dodge; SAM sites can't. Of course, we had only a semi-dumb, short range missile with a 150-lb. warhead, while the enemy had a fairly sophisticated weapon system operated by a four-man crew, with information fed to it from several other radars. One SAM site usually had another site providing overlapping coverage, as well as dozens of anti-aircraft guns in the vicinity. He also had six missiles which could go twice as far and twice as fast as our Shrikes and which had 300-lb. warheads. Still, we felt we had the advantage, as long as we didn't screw up by getting too high, too low, too slow, or too stupid.⁹

Once the crew had a visual on the missile, Davis began maneuvering to increase their advantage. With a second missile detected visually, Davis pulled up sharply directly into the missile, a tactic taught at Nellis that the crews did not quite believe at the time. The maneuver was successful as both missiles flew past the crew and detonated behind them. Before they could congratulate themselves, Gilroy called out, "Launch at nine o'clock."

A quick look at my scope showed the radar signal from the first site had gone off the air, indicating a probable hit from our Shrike; it was hard to tell as we were the center of attraction for several SAM and AAA sites, and the scope was cluttered with signals. "I see smoke from our Shrike at the first site," Glenn confirmed.

At least the radar was disabled. We could go in and destroy the vans and missiles as soon as we could stop dodging. "I've got two missiles in sight," called Glenn.

We descended to about 50 ft. above the ground, doing around 700 kts. This was too close to the deck to dodge missiles, but they wouldn't be able to track us at such a low altitude. Seconds later the first missile roared overhead, followed shortly thereafter by another. They were at least 500 ft. away, but looked a lot closer. "I'm going to climb a little and see if I can put a Shrike into this guy from point blank range," Glenn calmly announced. 10

As the crew climbed back to 4,000 feet, Gilroy's equipment indicated two more SAMs were tracking the crew. Yet another missile flight was launched on the crew as Davis continued to fly directly at the second site to setup for another attack. After the second Shrike launch, they began yet another descent to again confuse the missiles. At this point, Gilroy noticed they no longer had a wingman. When Davis queried his location, their wingman admitted he was lurking in the relative safety of Thud Ridge. Davis directed him to go home as he was over 40 miles away and

had provided little help anyway.¹¹

Flying low the crew surmised the missiles from the third SAM launch had lost them in the ground clutter and continued their flight back to the first SAM site to destroy the remaining equipment. Again in Gilroy's words, "We had the time, gas, and the inclination for just one more pass and made good use of it." Using his 20mm cannon, Davis ripped rounds through two missile launchers and the associated control vans. Their adopted mission for the day complete, the crew headed for home, remaining at 50 feet off the deck to avoid more launches. This, of course, left them prime targets for AAA, and they were raked by gunfire twice on their way out of the hornets' nest.

We had killed one SAM site, got a probable hit on another, shot up several anti-aircraft gun positions, dodged six missiles and thousands of anti-aircraft shells and had been the sole focus of the Hanoi defensive network. Just another routine Weasel mission and a lot of fun. Nine more just like it and we would earn an Air Medal.¹²

No one would argue that Gilroy and Davis's actions were anything but courageous. However, what does one mean by this word, "Courage"?

Definitions of Courage

"Courage is willpower."

—Lord C. M. W. Moran

Scholars provide a variety of descriptions and theories on the concept of courage. Lord Moran wrote about his experiences in World War I as an Army doctor. He described courage as a moral quality, "the fixed resolve not to quit; an act of renunciation which must be made not once but many times by the power of the will." A more recent source is Dr. Ben Shalit. Serving as the Chief Psychologist of the Israeli Navy during the Six Day War in 1967, his perspective is somewhat different. Shalit defines courage situationally; "Courage is the right act at the right time and in the right place. It must be an act that is perceived to be outstanding in a setting it can drastically affect. The same act in a different setting may be even perceived as cowardly." He also offers the Israeli Shuhan dictionary's definition as "strength, power and might." Highlighting the situational aspect of courage, Dr. Rueven Gal studied Israeli soldiers after the 1973 Yom Kippur War. In this study, he determined four situations that would lead to heroic acts: isolated groups fighting with their back to the wall; face-to-face combat; a self-sacrificing situation; or the hero fighting to the last bullet. Gal concludes that because all but seven percent of the cases he studied could be placed in one of these categories, the situation, not the person, generates heroic acts. 16

There are many examples of how Colonel Gilroy's experiences over the skies of North Vietnam fit the various definitions of courage. Anthony Kellett defined courage as "triumph of willpower over fear." However, when asked about whether he felt fear on his missions, Colonel Gilroy stated, "not very often." Lord Moran writes of courage as the "fixed resolve to not quit." We see this exemplified in the numerous passes Davis and Gilroy took over SAM sites. Similarly, Shalit's definition works well for the Weasel missions, "the right act at the right time and in the right place." ²⁰

Of Gal's four categories of courage,²¹ Colonel Gilroy and his fellow Weasels demonstrated all but face-to-face combat. The Wild Weasels were often fighting in a two-ship formation or alone against a very well armed enemy, situations which fit well into Gal's category of an isolated group fighting with their back to the wall. The nature of the Weasel mission, as well, fits the self-sacrificing situation. Many Weasel crewmembers made the ultimate sacrifice to enable the strike packages to deliver their ordinance. Finally, the "hero fighting to the last bullet" applies to many Weasel sorties, when the Weasel crews were literally completely out of ammunition, vectoring in their wingman to deliver his ordinance to ensure the safety of the following strike mission.

Finally, when asked about how he would define courage Gilroy stated, "Courage to me is you look at something and say, 'I think I am going to die here, but I am going to do it anyway.' You should never allow yourself to get to the point when you think those sort of thoughts." Instead he said that you should always be in control of the situation.

There were times when things got a little exciting. Usually they happened really fast. You were reacting not thinking. Reacting to the situation so there's not ever any real chance for fear or a requirement for courage, you were just doing what your natural reaction is to cope with that situation.²²

Types of Courage

"It is curious—curious that physical courage should be so common in the world, and moral courage so rare."

-Mark Twain

US Marine Corps doctrine states that there are two types of courage: physical courage to overcome your fears and moral courage to do what is right.²³ Physical courage is the type of courage most often seen on the battlefield. It is having the strength to take the hill or bomb the well-defended target. Professor Richard Gabriel, writing about the effects of the Vietnam War on the American military, argues that this physical courage is "required of the soldier if he is to be a good leader."²⁴ This courage varies from soldier to soldier. While there are many contributing factors, certainly upbringing, age and marital status all affect a soldier's ability to "withstand stress, nervousness or fear."²⁵

Colonel Gilroy's experiences in the skies over North Vietnam are clearly examples of physical courage. Throughout his 100 missions supporting the air war, he and his pilots showed great courage and sacrifice, flying into well-defended areas to engage lethal SAMs, enabling the strike packages to accomplish their missions. The Wild Weasel missions were a critical part of the Rolling Thunder campaign. This support did not come without a cost: 26 total aircraft were shot down, and 42 Weasel pilots and EWOs were either missing or killed in action or became POWs.²⁶

Moral courage, on the other hand, is much less definable. Gabriel calls it "ethical courage" and states that it "requires a willingness to deal with difficult situations without fear, to accept the risk and responsibility, and if need be, to be willing to bear the cost of a course of action that one believes is right."²⁷ He goes on to argue that a pre-requisite for good officership is that "a good"

officer is courageous enough to disagree with his superiors when he feels the issue involved is important."²⁸

Just because someone exhibits physical courage, however, does it automatically follow that he or she will have moral courage as well? Colonel Gilroy again gives us an example of this type of courage, not in the skies over Vietnam, but in the Pentagon. While in charge of electronic warfare programs in the Office of the Secretary of Defense (OSD), Colonel Gilroy disagreed with the Air Force leadership on the maintainability of the EF-111 aircraft. Under great pressure to approve the program as slated, Colonel Gilroy identified the deficiencies through OSD. When the Chief of Staff of the Air Force became aware of Colonel Gilroy's recommendation to cancel the program, the AF applied even greater pressure on him, warning him that it would be detrimental to his AF career. Although the EF-111 manufacturer eventually addressed some of these maintenance problems, the high cost of maintaining the aircraft was a significant factor contributing to its early retirement. Despite his accurate recommendation, Colonel Gilroy was not promoted again, although he had pinned on colonel with just 15 years commissioned service.²⁹

Courage and Fear

"You gain strength, courage, and confidence by every experience in which you really stop to look fear in the face. You must do the thing which you think you cannot do."

-Eleanor Roosevelt

Courage cannot be clearly defined without discussing fear. Lord Moran defined four degrees of courage based on fear: men who did not feel fear; men who felt fear but did not show it; men who felt fear and showed it but did their job; and men who felt fear, showed it and shirked. He went on to explain, "The story of modern war is concerned with the striving of men, eroded by fear, to maintain a precarious footing on the upper rungs of this ladder." However, Lord Moran doubted his own concept that there is a man without fear. Instead, he believed that courage is the overcoming of this effect. Lieutenant Colonel A. T. A. Browne, having investigated self-inflicted wounds during the invasion of Normandy, also sees the connection. He argues that "fear is the absence of courage," and "most soldiers feel fear, but there are many who overcome it." The US Marine Corps echoes this view. "Courage is not the absence of fear. It is the ability to face fear and overcome it."

Of Lord Moran's four degrees of courage, the Weasel crewmembers most often displayed his second form, "men who felt fear but did not show it." However, we did occasionally see Lord Moran's fourth form, "men who felt fear, showed it and shirked" for example, in the actions of Gilroy and Davis' wingman on the flats southwest of Hanoi. Although this cowardice was rare among the Wild Weasel crews, it did occur occasionally. Colonel Gilroy remembers three occasions when a young lieutenant or captain came up to him at the bar the night before a mission and expressed the concern that he would not return from the mission the next day. Each time, Colonel Gilroy states, they did not come back. They were shot down. Thinking about it over the years, he realized that it was not as strange as it appeared at the time.

It was the training, the preparation, the airmanship and the self-confidence that allowed you to do these things. When they lost the self-confidence, they didn't have the bag of tools necessary to do the job. The next day they were a POW or they were dead.

They were very rare. Among warriors, courageous performance is the norm. Mediocre performance is the exception. Cowardice is certainly the exception. It isn't done. You want to be able to come back after the sortie, and go to the Stag Bar and sit there and have a drink and be one of the boys.³⁴



Col Gilroy at celebration of completion of 100 missions in Vietnam.

Training of Courage

"Duty, honor, country: those three hallowed words reverently dictate what you ought to be, what you can be, what you will be. They are your rallying point to build courage when courage seems to fail, to regain faith when there seems to be little cause for faith, to create hope when hope becomes forlorn."

—General Douglas MacArthur

If courage is the absence of fear or the overcoming of fear, can we train soldiers to be fearless, in essence to be courageous, or is it something that must be born into a human? Lord Moran proposed that some men have a higher threshold of fear just as some men have a higher threshold of pain. He also argued that there are no fearless men, that all men will feel fear eventually.³⁵

However, Browne believes that before 1914 soldiers were recruited from "men of stronger fiber who were less influenced by cultural and soft social conditions." These soldiers had a "natural courage." With the advent of the civilian soldier, he believed that with the proper selection of men who are then trained correctly, fear could be overcome.³⁶

If there is a relationship between courage and training, how do we train someone to be courageous? Shalit argues that courageous men have an unconventional personality. They are daring and creative, rebellious risk-takers or even sociopaths. However, Shalit does believe that the ability to overcome fear can be developed. He contends that we must train soldiers for unusual and unexpected moments and to think in an original way during those moments. He believes that small, elite groups of soldiers should be trained to question the status quo, to find a new and different way of accomplishing the mission. This outside-the-box thinking will give them the skills in battle to think of the unique or original solution to a seemingly hopeless situation.³⁷ Daring and creative, Davis and Gilroy are risk-takers. In Colonel Gilroy's words:

You go up and do something. You get back to the Stag Bar and your squadron commander comes up, buys you a drink, and he says, "great work today." It wasn't through great courage. It was something you were completely in control of the whole time and comfortable doing. It wasn't like oh geez, I am really scared, but I am going to do it anyway.³⁸

Shalit's recommendation to train for the unusual and unexpected correlates to the on-the-job training the Weasel crews experienced. Colonel Gilroy attributes much of the success of the Wild Weasels to their training in the skies over North Vietnam.

Most times we don't exhibit a lot of courage. We don't have to. You can do courageous things, but you don't do them with courage. You do them with training; you do them with preparation, with a little unique flying ability, which you hope you'd have or you wouldn't be in an airplane; a little experience, so that you are not expected to slay a dragon the first time you see a dragon and the self-confidence that all that gives you.³⁹

He also believes that while courage itself cannot be taught, "the skills to do courageous things can be taught." ⁴⁰

Group Cohesion

Keep your fears to yourself, but share your courage with others.

—Robert Louis Stevenson

Another important aspect of courage is group cohesion. Kellett argues that soldiers show more courage in small groups to "prove something to themselves and others." Shalit, too, sees the increase in courageous acts to protect peers, as groups get smaller. "Courage in the face of the enemy," he argues, is much easier within a small cohesive group. 42

The courageous acts of the Weasel crews support Kellett's belief that group cohesion leads to more courageous acts. Colonel Gilroy attributes a major part of the success of the Wild Weasel program to group cohesion.

It was one of the good things about the Wild Weasel program. In the old saying, the whole is greater than the sum of the parts. In the dictionary when they put synergism there they should put Wild Weasel...You feed off of each other. You always felt that we were never in a situation that we didn't have under control...I knew my job very well. I was really good at it. It was something that I had a natural ability to do. I was tickled to death that I was doing it...I had the complete confidence in the guys I was flying with. They were intelligent, they were aggressive and I knew that they were never going to run us into a mountain. We weren't going to run out of gas. We would always be in the right place to make sure no one ever got shot down by SAMs.⁴³

As can seen by the earlier narrative, Colonel Gilroy's description of his missions with Glenn Davis highlights the strong bond they made based on mutual respect for each other's flying skills, as well as friendship strengthened by shared experiences and post-flight shenanigans. Both Gilroy and Davis resemble Shalit's "unconventional personality," rebellious risk-takers who relied on each other's skills against a well-defended enemy. This close bond allowed them to thrive in a highly dangerous environment and accomplish their "superman stuff."

When asked how the restrictive ROE affected the comradery of the Weasel crews, Colonel Gilroy stated that although it made it tougher to do the mission, it also brought the crews closer together by "fighting against a common enemy." He said that the group cohesiveness was very important to their success. "You never want to embarrass yourself in front of your peers. You don't want to let them down. Unit cohesiveness in combat is a very important thing."

Legacy for the 21st Century Warrior

"A hero is no braver than an ordinary man, but he is braver five minutes longer."
—Ralph Waldo Emerson

So what lessons for today's Airmen can we draw from our discussion of Colonel Gilroy's exploits in Vietnam?

Colonel Gilroy attributed his success in combat to preparation, experience and skill. Most would argue that training leads directly to preparedness. If so, today's Airmen are some of the most highly prepared in the world. With the use of exercises such as RED FLAG, COPE THUNDER, and JOINT FORCES EXERCISE, aircrews from all military services, as well as from allied partners, participate in realistic air-to-air and air-to-ground training in a simulated robust air defense environment.

As Colonel Gilroy points out, experience, too, lends courage to the warfighter. Today's Airmen have a higher level of combat time than any generation since the Vietnam era. However, despite the extensive combat experience of today's Airmen, it is difficult to discern whether they fight as

Gal discussed to the last bullet or with their backs to the wall. Today's success in maintaining low loss rates in aerial combat has generated a different type of combat experience than faced by the Vietnam aviators. This is not to say that young Airmen flying in support of the ground troops in Operations Iraqi Freedom and Enduring Freedom do not show great courage and commitment to their mission. The lessons from Colonel Gilroy's experiences support the theory that they likely have the tools and capabilities to fight to the last man, whether they are required to do so or not.

Beyond competence in flight, Colonel Gilroy agreed with the scholars on courage that group cohesion could instill courage in Airmen. Today's Expeditionary Air Force concept operates much differently than that of the Vietnam era. Repeated 120-day rotations are bound to have an impact on cohesion and in the building of comradery and esprit de corps. It is also possible that political correctness has impinged upon traditional aircrew unit bonding. However, in any era, the close-knit community of flyers continues to thrive from the squadron stickers known as "zaps" to Friday afternoon "beer calls."

The enduring lessons of courage by Colonel Gilroy can be applied to all military members no matter what era. The concepts of training, experience, confidence, and comradery are as important today as they were in Colonel Gilroy's day. Perhaps even more so. As we fight an elusive enemy, the ability to overcome fear and do courageous acts continues to be a cornerstone for military operations.

Colonel Gilroy gave these parting thoughts about courage:

I'm not sure that I have ever displayed great courage. I've done things that other people have thought to be courageous, but have never thought before or while doing them, "Boy, this is really courageous." I studied and prepared myself for battle. Being well prepared, having a little experience at what you are doing, having some innate flying skills and the resultant self-confidence diminishes the need for great personal courage. That doesn't mean you won't do courageous things. You will. And others will probably think highly of your actions and praise your steely determination in the face of overwhelming combat odds. Smile politely. Thank them and continue to work hard at being the best you can be.⁴⁵

It may be a feature of those who repeatedly show courage not to view their actions as heroic. Perhaps it is part of their persona not to recognize that their actions may have been courageous. Despite his protestations to the contrary, Colonel Gilroy's commitment to excellence and self-sacrifice was unarguably courageous, providing inspirational examples for the warriors of the 21st Century of both physical and moral courage.

Notes

- 1. Col Kevin A. Gilroy (Ret), interview with author, 28 January 2006.
- 2. Gilroy, interview with author, 28 January 2006.
- 3. Ibid.

- 4. Ibid.
- 5. Kevin A. Gilroy, "First In... Wrong Way Out," Journal of Electronic Defense, 22, no. 10 (October 1999): 37.
- 6. Ibid.
- 7. Ibid., 38.
- 8. Ibid., 38.
- 9. Ibid., 39.
- 10. Ibid., 39.
- 11. Ibid., 39.
- 12. Ibid., 39.
- 13. Charles McMoran Wilson Moran, The Anatomy of Courage (London: Constable, 1945), 67.
- 14. Ben Shalit, The Psychology of Conflict and Combat (New York: Praeger, 1988), 97.
- 15. Shalit, Psychology, 97.
- 16. Dr. Rueven Gal, as quoted in Anthony Kellett, Combat Motivation: The Behavior of Soldiers in Battle (Boston: Kluwer Nijhoff Publishing, 1982), 301.
- 17. Ibid. 300-1.
- 18. Gilroy, interview with author, 4 March 2006.
- 19. Moran, The Anatomy of Courage, 67.
- 20. Shalit, Psychology, 97.
- 21.Gal (in Kellett) Combat Motivation, 301.
- 22. Gilroy, interview with author, 4 March 2006.
- 23. US Marine Corps, "Marine Corps Values: Honor, Courage and Commitment" http://www.marines.com/page/usmc.jsp?pageId=/page/Detail-XML-Conversion.jsp?pageName=Core-Values&flashRedirect=true.

- 24. Richard A. Gabriel, To Serve with Honor, A Treatise on Military Ethics and the Way of the Soldier (Westport, Connecticut: Greenwood Press, 1982), 170.
- 25. Blair A. Keithley, "Dimensions of Professional Ethics for the Modern United States Military" (master's thesis, Naval Postgraduate School [US] 2002), 51.
- 26. Mike Natasi, "The Wild Weasels 'Daredevils of the Skies," Military History On-Line, http://www.militaryhisotryonline.com/vietnam/airpower/wildWeasel.aspx.
- 27. Gabriel, Serve with Honor, 170.
- 28. Ibid.
- 29. Gilroy, interview with author, 28 January 2006.
- 30. Moran, Anatomy of Courage, 5.
- 31. Ibid., 6.
- 32. A. T. A. Browne, "A Study of the Anatomy of Fear and Courage in War," The Army Quarterly and Defense Journal 106, no. 3 (July 1976): 297, 301.
- 33. US Marine Corps, "Marine Corps Values: Honor, Courage and Commitment" http://www.marines.com/page/usmc.jsp?pageId=/page/Detail-XML-Conversion.jsp?pageName=Core-Values&flashRedirect=true.
- 34. Gilroy, interview with author, 4 March 2006.
- 35. Moran, Anatomy of Courage, 10-11.
- 36. Browne, "Fear and Courage", 299-300.
- 37. Shalit, Psychology, 111-114, 117.
- 38. Gilroy, interview with author, 4 March 2006.
- 39. Gilroy, interview with author, 4 March 2006.
- 40. Gilroy, interview with author, 4 March 2006.
- 41. Kellett, Combat Motivation, 301.
- 42. Shalit, Psychology, 115.
- 43. Gilroy, interview with author, 4 March 2006.

- 44. Gilroy, interview with author, 4 March 2006.
- 45. Gilroy, undated letter to author.

Contributor

Major Patricia K. Seinwill, USAF (BA, University of Northern Iowa; MA, University of Oklahoma; MS, Air University) is currently the Chief of the MQ-1 Predator/MQ-9 Reaper Branch working for the Undersecretary of the Air Force for Acquisition. In this capacity, she is responsible for over \$5B in program funds. Previous assignments include tours as an assignment officer at The AF Personnel Center and an AETC instructor navigator/electronic warfare officer. Major Seinwill is a senior navigator/electronic warfare officer with 2500 hours in the RC-135 and T-43 aircraft, having flown reconnaissance operations worldwide, including Operations Iraqi Freedom, Enduring Freedom, Southern Watch and Deny Flight. She is a gradate of Squadron Officer School and Air Command and Staff College and also serves as an adjunct Professor at Vanderbilt University.