

Fortifying Remote Warriors

Addressing Wellness Issues among Intelligence Airmen

CAPT TYLER TENNIES, USAF

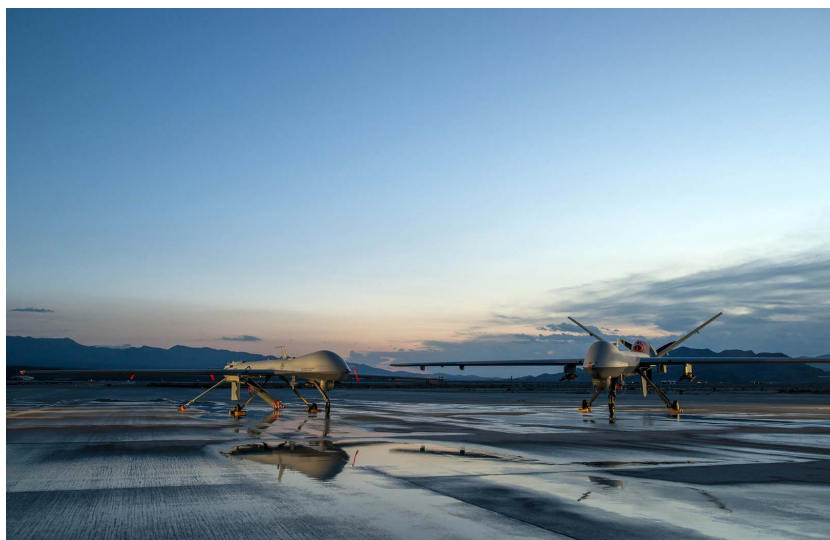
Disclaimer: The views and opinions expressed or implied in the Journal are those of the authors and should not be construed as carrying the official sanction of the Department of Defense, Air Force, Air Education and Training Command, Air University, or other agencies or departments of the US government. This article may be reproduced in whole or in part without permission. If it is reproduced, the Air and Space Power Journal requests a courtesy line.

Advancing technology has allowed for the birth of a new generation of war fighters. These war fighters conduct remote operations (also known as telewarfare) that include the operation of remotely piloted aircraft (RPA), processing intelligence within the distributed common ground system (DCGS), and cyber operations. Many people assumed that physically removing these “remote warriors” from the battlefield would prevent incidents of mental health problems.¹ However, research and first-hand accounts are painting a different picture. In an interview with the *New York Times*, an RPA operator shared a haunting memory of a past strike operation. The operation targeted a terrorist facilitator and was carried out with the terrorist’s child nearby. The deadly strike spared the child, but following, “the child walked back to the pieces of his father and began to place the pieces back into a human shape.”²

The impact of these types of operations is having a resounding effect on the force. Airmen assigned to support the RPA and DCGS missions are showing signs of occupational burnout, psychological distress, and post-traumatic stress disorder (PTSD). A 2014 study of USAF intelligence analysts working in the DCGS found that approximately 20 percent have symptoms of distress that is 13 percent higher than their nonintelligence peers within the same organization.³ There is no doubt that these remote warriors are suffering from preventable psychological injuries. Leaders can fortify intelligence Airmen conducting remote operations through mental preparation, tailored residency training, and optimizing their work environment.

Situation

Intelligence Air Force specialties executing remote operations commonly include operations intelligence analysts (1N0X1), geospatial-intelligence analysts (1N1X1), and intelligence officers (14N). Studies conducted from 2009–15 have found that Airmen supporting DCGS and RPA operations have a large population suffering from occupational burnout, distress, and PTSD. These injuries reduce combat effectiveness and increase the need for medical intervention. Proper preparation and care can mitigate the effects, but first, let’s look at each injury in more detail.



USAF Photo by SSgt Vernon Young Jr.

Figure 1. Remote warriors operate the MQ-1 Predator & MQ-9 Reaper.

Occupational Burnout and Psychological Distress

Symptoms of occupational burnout vary across a continuum that encompasses three dimensions: emotional exhaustion, cynicism, and professional efficacy.⁴ Individuals considered “burned-out” on the continuum would feel emotionally drained, callous toward their duties, and contribute little to their organization. In contrast, engaged individuals strive for excellence and are confident in their contribution to the unit’s mission.⁵ Individuals who are experiencing occupational burnout will degrade mission effectiveness through complacency or reduced attention on the job. Similar to burnout, distress affects an analyst’s cognitive performance. The characteristics of psychological distress are negative emotional, behavioral, physical, and cognitive symptoms such as anger, poor sleep, or difficulty concentrating.⁶ Remote warriors within the DCGS and RPA communities are vital to proper weapons employment, protecting manned aircraft, and overwatching ground forces. Combat duties demand an analyst’s undivided attention, which occupational burnout and distress prevents. Furthermore, the high-pressure demands of combat duties amplify the risk of depression, anger, and suicidal ideation. Later, we will review a firsthand account of the pressure placed on intelligence Airmen during weapons employment and how it affected their well-being. The demands of combat operations, combined with a lack of necessary life skills, are contributing to the effects of distress, and proactive measures are needed.

Post-Traumatic Stress Disorder

In addition to burnout and distress, remote warriors are showing signs of PTSD. One study found that 2–5 percent of Airmen are suffering PTSD symptoms, which may include memory loss, detachment from others, outbursts of anger, and hypervigilance.⁷ Albeit, this is lower than the high average of 17 percent found in returning veterans of Iraq and Afghanistan, it is still alarming.⁸ It is normal for individuals who have witnessed horrible events to have painful memories, anxiety, guilt, or unpleasant dreams.⁹ However, these normal responses can transition into PTSD symptoms if not correctly managed by the individual. Sometimes this requires assistance from peers or professionals to process the experience. If not properly managed, an Airman may be removed from operational teams to receive necessary medical care and reduce mission readiness.

Additionally, Airmen may suffer symptoms of PTSD long after they separate from active duty, stressing personal relationships, and further taxing medical care through the Veteran's Administration. For instance, analysts assigned to the DCGS were at a higher risk of substance abuse and some reported symptoms of insomnia, depression, or nightmares up to three years after separating from the military.¹⁰ So, what is causing almost a quarter of the intelligence analysts supporting remote operations to suffer from mental health injuries?



USAF Photo by TSgt Nadine Barclay

Figure 2. Many Airmen supporting remote combat operations are suffering from distress and post-traumatic stress disorder.

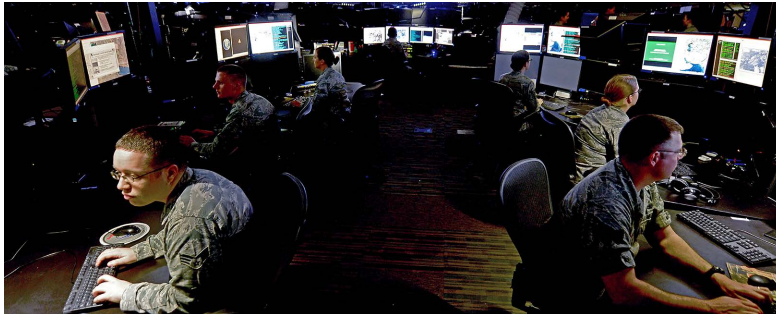
Contributing Factors

Nature of Remote Combat. Airmen conducting remote operations experience combat differently than any generation before. Historically, warriors would be separated from society when they left for war. Battles would end at nightfall, and warriors would sit around the campfire to debrief the day as they prepared for the next morning's battle. As technology advanced, battles became continuous fights that lasted for days and gave rise to increasing rates of psychological trauma. This trauma has gone by many names such as "shell shock" or "Gulf War syndrome."¹¹ Remote warriors now face continuous combat from the home front. In the words of Lieutenant Colonel Ogal, a military psychologist supporting the DCGS, "They are literally from combat to cul-de-sac in a short drive."¹² For example, DCGS analysts processing full-motion video (FMV) must stay "eyes-on," or they may miss a critical detail. Even in cases of violent rape, beheading, or torture, they watch every second in high-definition.¹³ Then, they review the feed in detail and write what occurred in an intelligence report.

In addition to viewing the graphic realities of war, young Airmen are also under pressure to make life or death decisions. FMV analysts are trained to understand how the video may trick their minds into seeing something that is not there. Due to this, they are the members of the FMV team who can officially make determinations of what is happening. An example of this would be identifying if a person is holding a rifle or a broomstick. With this responsibility, analysts often initiate the use of deadly force by establishing if the activity meets the strike criteria prescribed in the rules of engagement. They play a vital role in deciding who is on the receiving end of a kinetic strike or not. During an interview, Staff Sergeant Kimi (pseudo name) working in the 480th Intelligence, Surveillance, and Reconnaissance Wing (ISRW) relates how this pressure affected her and prompted her to reach out for medical support:

"To this day I still think about it, but it's been a couple of years," she said with a heavy sigh. "I made the correct decision but knowing that I could have made the wrong one, and a lot of people could have died because of a wrong decision—I just could not stop thinking about it."¹⁴

Even with making the right decision, Staff Sergeant Kimi had reoccurring memories of the event due to combat stress. With this in mind, it's fair to assume that Airmen who made the wrong call are also having difficulty processing these stressful life experiences. Both the violent nature of remote combat and high-pressure decisions place analysts in positions ripe for psychological injuries. Operational stress exacerbates the situation by making individuals more susceptible to burnout, distress, and PTSD.



USAF photo

Figure 3. Intelligence Airmen at a distributed ground site remotely conduct combat operations.

Operational Stress

Long Hours. Remote warriors consistently reported long hours, shift work, sustained vigilance, and processing FMV as their highest stressors.¹⁵ The ever-increasing demand for intelligence support, combined with a lack of trained Airmen, is putting a huge burden on the remote force. From 2003–09, RPA sorties increased 10-fold and then rose again from 2013–17 while the workforce largely stayed consistent in size.¹⁶ The 480th ISRW Surgeon General put it this way: “You’ve got the same number of Airmen doing the same number of mission hours but with a 1,000-percent increase in those life-and-death decisions, so of course their job is going to get significantly more difficult.”¹⁷ In many squadrons, commanders have put their Airmen into 12-hour shifts. This often creates a 14-hour workday when accounting for premission planning, briefings, training, and other necessary tasks. However, these demands are putting our Airmen at risk of psychological injuries. Research shows that 1-in-10 Airmen working more than 51 hours a week had symptoms of distress and were four times as likely to suffer symptoms of PTSD.¹⁸

Rotating Shifts. In addition to analysts working long hours, most of the force is young and has never experienced shift work. They do not have the necessary life skills or training to understand their circadian rhythm, nor how to adjust it in a healthy manner. Many analysts are using excessive amounts of caffeine, over-the-counter medications, or alcohol to adjust their sleep cycles. This agitates the problem since caffeine and alcohol both lower the quality of sleep.¹⁹ The use of such drugs can easily become a negative cycle, where an individual uses caffeine to stay awake and alcohol to fall asleep. From 2017–18, the author observed the effects of shift work firsthand in an RPA Operations Center. During this period, he worked with several of his Airmen who suffered from insomnia and difficulty focusing. Most Airmen had difficulty sleeping due to inexperience with shift work. They

did not understand the effects of sunlight, artificial light, and caffeine on their bodies' sleep rhythms. Additionally, many Airmen attempted to switch their sleep schedules on their days off, preventing adjustment to their circadian rhythms and increasing fatigue. It's also concerning that many Airmen were averaging only three to four hours of sleep a night. After five or more days of only four hours of sleep, mental performance is the same as having stayed awake for 24 hours, which is the equivalent of being legally drunk.²⁰ This is an unacceptable level of performance for Airmen engaged in combat operations. It's also a real danger while deployed-in-place. In the US, lack of sleep is a leading cause of vehicle accidents. In 2015, approximately 90,000 accidents were linked to drowsiness with 33,000 injuries and 736 fatalities.²¹ Poor sleep and fatigue are lowering our Airmen's combat performance and leaving them at a higher risk of a severe accident.

Fitness. Airmen within the DCGS are more likely to not conduct personal physical training, have poor nutrition, and are at higher risk of obesity.²² A lack of exercise and poor nutrition further degrade mission effectiveness through decreased alertness and concentration. They also increase the risk of chronic disease and illness. The long hours, rotating shifts, and everyday demands of life leave many too drained to hit the gym. Conversely, Airmen who find the time to maintain an active lifestyle have increased productivity, improved health, and miss fewer days of work.²³ It is also well understood that exercise releases stress-reducing chemicals into the blood that have the potential to improve mental well-being. However, operational stress and the accompanying fatigue discourage Airmen from taking proactive steps leaving them at higher risk.²⁴

Fortifying Airmen. In 2007, the DOD Task Force on Mental Health established four goals to combat the effects of sustained combat operations on the force. These goals include a culture of support for psychological health, a continuum of excellent care, sufficient and appropriate resources, and empowered leaders who advocate mental resilience.²⁵ Within the US Special Operations Command, the Preservation of the Force and Family (POTFF) program is working to address many of the goals.²⁶ Within the DCGS, Airmen resiliency teams (ART) have been established to address the needs of intelligence analysts conducting remote operations.²⁷ Both the POTFF and ARTs consist of psychologists, social workers, chaplains, and medical specialists embedded within operational units. These teams provide support, training, and counseling services to our Airmen on the front line. The POTFF and ART members often have the same security clearance as the members they support. This access is useful because it allows the "docs" to understand the mission and work environment first-hand. It also allows Airmen a way to disclose the events that may be bothering them without the fear of compromising classified information.



USAF Photo by SrA Kristoffer Kaubisch

Figure 4. Fatigued Airmen decrease combat effectiveness and are at a higher risk of off-duty accidents.

However, this support is in operational units. This is too late as proactive steps need to be taken early in the training pipeline. The 17th Training Group (TRG) at Goodfellow AFB, Texas has taken a step in the right direction by incorporating chaplains into intelligence training classrooms. These chaplains advise instructors and address student issues early.²⁸ This is undoubtedly a positive measure, but it should be a part of a layered approach that starts by mentally preparing Airmen.

Mental Preparation

According to the Diagnostic and Statistical Manual of Mental Disorders, intense fear, helplessness, or horror are causes of PTSD.²⁹ Stress inoculation can reduce the effects of traumatic events by preparing people for what they will be exposed to.³⁰ Currently, the geospatial and intelligence analysts are the only Airmen with AFSCs listed who receive tailored resiliency training during their apprentice course. This is laudable, but we are missing a large population of analysts supporting the remote fight. Operations intelligence analysts and intelligence officers work alongside our geospatial analysts but receive no tailored resiliency training to prepare them for assignments in the remote mission. For example, a survey in 2017 found that one in five DCGS analysts witnessed a rape while on the job.³¹ Witnessing a rape with an inability to stop the violent act may cause feelings of intense helplessness. However, with proper mental preparation, we can reduce the effects associated with witnessing violence. Similarly, to how vaccination works, we can expose Airmen to the realities of their future work in a con-

trolled and supportive manner. By doing so, they will be better prepared for combat and reduce the chances of feeling the intense emotions listed as PTSD triggers.

Additionally, we need to ask direct questions about the nature of combat operations. Many Airmen are not prepared to be a part of the kill chain and did not understand that they would be actively involved in combat. When Staff Sergeant Kimi talked with her recruiter before joining the Air Force, she expressed an interest in art and photography. With this in mind, her recruiter encouraged her to enlist as a geospatial analyst and said it was “like working with photography.”³² However, her work as an FMV analyst supporting weapons employment was far from a college art class. A survey of three intelligence units found that one of every five Airmen felt directly responsible for the death of an enemy combatant on more than 10 occasions.³³ Airmen should consider if they are comfortable executing the kill chain, and they need a chance to reflect on the seriousness of the duty. Our Airmen come from a society in which the violence of taking human life is prohibited and unacceptable.³⁴ As an organization, we need to walk new Airmen through the moral implications of the kill chain. This will allow analysts to effectively participate in the realities of their new profession and ensure members arrive at their squadrons prepared.

In addition to mental preparation, the intelligence career field should incorporate tailored resiliency education beyond baseline USAF Comprehensive Airmen Fitness. In 2012, the Air Force Security Forces Center instituted the Defender’s Edge program that incorporated training on fatigue countermeasures, adrenaline management, mental preparation, and killing.³⁵ Defender’s Edge was created to fill a void in training and meet the unique needs of security forces members. A similar program, tailored to the needs of intelligence professionals, may be developed to teach members and leaders the necessary skills to thrive in demanding operational environments. Programs like Defender’s Edge teach Airmen necessary life skills and continue to build an understanding of the ethical issues surrounding the application of deadly force. Topics such as sleep hygiene, the proper use of caffeine, circadian rhythm, fitness, and ethics must be covered during apprentice courses and built upon in operational units. Furthermore, our supervisors should be taught how to coach their Airmen through the demands of remote combat. Frontline supervisors are in the best position to identify and deal with problems early. Career field education and training plans (CFETP) should be revised to identify new skills for five-level and seven-level analysts. In addition to CFETPs, local training plans may be developed to fill necessary knowledge gaps. The table presents training items that may be integrated into a CFETP or a local master training plan.³⁶

Table. Sample AF Form 797, Job Qualification Standard

<i>Intelligence Operator Basic Skills</i>						
Task No.	Task, knowledge, and technical reference	Start date	Completion date	Trainer's initials	Trainee's initials	Certifier's initials
1	Fatigue management					
1.1	Describe the cognitive effects of 18 hours without sleep.					
1.2	Identify signs of fatigue in others.					
1.3	Describe the effects of light on sleep quality.					
1.4	Understand the effects of caffeine on sleep quality.					
1.5	Identify the proper amount of caffeine to mitigate fatigue and maximize alertness.					
1.6	Describe the effect of proper nutrition and exercise on mental alertness.					
2	Stress response					
2.1	Understand the effects of the sympathetic nervous system.					
2.2	Describe the physical effects of adrenaline.					
2.3	Understand the connection between the sympathetic and autonomic nervous systems.					
2.4	Identify the proper use of combat/tactical breathing.					
2.5	Identify the positive result of physical exercise on adrenaline management.					
3	Mental preparation					
3.1	Describe how the warrior mindset ties to the Oath of Enlistment and Airmen's Creed.					
3.2	Identify personal beliefs in regard to combat operations and the profession of arms.					
4	Use of deadly force					
4.1	Understand the difference between killing and murder.					
4.2	Understand the sources of military authority, use of force, and rules of engagement.					
4.3	Understand the possible emotions that may arise following violent events.					
4.4	List resources available for help.					

Work Environment

Remote combat dictates day and night operations, but the USAF should review how it structures RPA and intelligence units to ensure ideal shifts. Airmen working more than 51 hours a week are four times more likely to suffer PTSD symptoms.³⁷ With proper manning, commanders can ensure reasonable eight-hour work days and less than 50-hour work weeks. Additionally, the distributed aspect of remote warfare allows for the same mission to be operated within multiple locations and time zones. Intelligence leaders and mission planners should maximize opportunities to keep Airmen's circadian rhythms as natural as possible. Moving missions between organizations in sync with daylight hours can minimize the number of people working night shifts. This is currently in practice to a limited extent within the DCGS but has applications across the remote force.

Moreover, Airmen executing the remote operations mission for more than two years are at a higher risk of distress.³⁸ Ideally, a two-year controlled tour would be implemented, to reduce the incidents of distress while bringing in a fresh set of analysts, similarly to how the USAF addresses dwell time between traditional expeditionary deployments. However, controlled tours may not be practical for all organizations. In September 2017, the 480th ISRW instituted the Combat Readiness Sustainment Program (CRSP) to address this very issue. The CRSP provides intelligence Airmen the opportunity to step out of shift work and focus on readiness training, resiliency, and relevancy.³⁹ The 480th ISRW has yet to realize the results of CRSP, but it may have broad lessons for the remote warrior community.



USAF Photo by TSgt Samuel King Jr.

Figure 5. Airmen who maintain a physically active lifestyle have increased productivity and improved health.

Conclusion

Recent studies have shown that almost a quarter of the Air Force's remote warriors are suffering from occupational burnout, psychological distress, or PTSD. After 17 years of continuous combat operations, USAF intelligence professionals need to mentally prepare Airmen for the realities of combat, provide tailored training in resilience to meet their needs, and structure units to maximize their combat performance. Changes to the operating environment, such as sun-synchronous operations, have the potential to increase our Airmen's combat effectiveness and well-being. These operational changes will take time, but we can change training today. The 17th TRG can incorporate mental preparation and discuss the ethical use of deadly force in the classroom while career field managers work to incorporate resiliency skills into enlisted CFETPs. Squadron commanders can work with their training teams and wing support agencies to develop localized training meeting their Airmen's needs today. Over time, this layered approach will yield a new generation of fortified and more capable intelligence professionals that thrive while conducting remote combat operations. ★

Notes

1. Eyal Press, "The Wounds of the Drone Warrior: Even Soldiers Who Fight Wars from a Safe Distance Have Found Themselves Traumatized. Could Their Injuries be Moral Ones?" *New York Times Magazine*, 13 June 2018, www.nytimes.com.
2. Press, "The Wounds of the Drone Warrior."
3. Lillian Prince et al., "Reassessment of Psychological Distress and Post-Traumatic Stress Disorder in United States Air Force Distributed Common Ground System Operators," *Military Medicine* 180 (March 2015): 171–78, www.ncbi.nlm.nih.gov/.
4. John K. Langley, "Occupational Burnout and Retention of Air Force Distributed Common Ground System (DCGS) Intelligence Personnel," (PhD diss., Pardee RAND Graduate School, 2012), 10, www.rand.org/.
5. Langley, "Occupational Burnout and Retention," 10–12.
6. Wayne Chappelle et al., "Symptoms of Psychological Distress and Post-Traumatic Stress Disorder in United States Air Force 'Drone Operators,'" *Military Medicine* 179 (August 2014): 63–70, www.ncbi.nlm.nih.gov.
7. Chappelle et al, "Symptoms of Psychological Distress," 64; and Lt Col Dave Grossman, retired, and Loren Christensen, *On Combat: The Psychology and Physiology of Deadly Conflict in War and in Peace*, 3rd ed. (Warrior Science Publications, 2008), 279.
8. Chappelle et al., "Symptoms of Psychological Distress," 64.
9. Field Manual (FM) 22-51, *Leaders' Manual for Combat Stress Control*, 29 September 1994, 35, www.enlistment.us.
10. Kris Ostrowski, "Psychological Health Outcomes within USAF Remotely Piloted Aircraft Support Career Fields" (master's thesis, Embry-Riddle Aeronautical University, 2016), 39, 91.
11. Lt Col David Grossman and Loren Christensen, *On Combat: The Psychology and Physiology of Deadly Conflict in War and in Peace* (New York: Hachette Book Group, 2013), 23–24.
12. Sarah McCammon, "The Warfare May Be Remote But The Trauma Is Real," NPR, 24 April 2017, www.npr.org.

13. McCammon, "The Warfare May Be Remote."
14. McCammon, "The Warfare May Be Remote."
15. Chappelle et al., "Symptoms of Psychological Distress," 63; and Prince et al., "Reassessment of Psychological Distress," 172.
16. Jean Otto and Capt Bryant Webber, "Mental Health Diagnoses and Counseling Among Remotely Piloted Aircraft Pilots," *Medical Surveillance Monthly Report* 20, no. 3 (March 2013): 3, www.ncbi.nlm.nih.gov/; and Press, "Wounds of the Drone."
17. Press, "Wounds of the Drone."
18. Chappelle et al., "Symptoms of Psychological Distress," 67.
19. FM 6-22.5, *Combat and Operational Stress Control Manual for Leaders and Soldiers*, March 2009, 4-3, www.globalsecurity.org/.
20. FM 6-22.5, *Combat and Operational Stress*, 4-6; and Grossman and Christensen, *On Combat*, 25.
21. US Department of Transportation, *Traffic Safety Facts: Drowsy Driving 2015* (Washington, DC: National Highway Traffic Safety Administration, October 2017), 1.
22. Ostrowski, "Psychological Health Outcomes within," 39.
23. Air Force Instruction 1-1, *Air Force Standards*, 7 August 2012, 25, https://static.e-publishing.af.mil/production/1/af_cc/publication/afi1-1/afi1-1.pdf.
24. Grossman and Christensen, *On Combat*, 27.
25. DoD Task Force on Mental Health, *An Achievable Vision: Report of the DoD Task Force on Mental Health* (Falls Church, VA: Defense Health Board, 2007), 8.
26. Special Operations Command (SOCOM), "SOCOM HQ—Preservation of the Force and Family," Headquarters, SOCOM, www.socom.mil.
27. Peter Holstein, "Airmen Resiliency Team Provides 480th ISR Wing with Medical, Psychological and Spiritual Care," Surgeon General Office of Public Affairs, 24 May 2017, www.airforcemedicine.af.mil.
28. A1C Zachary Chapman, "Goodfellow Continues to Improve Training," *Air Education and Training Command News*, 16 April 2018, www.aetc.af.mil.
29. Grossman and Christensen, *On Combat*, 279.
30. Lt Col Dave Grossman, *On Killing: The Psychological Cost of Learning to Kill in War and Society* (Boston, MA: Little, Brown & Company, 2009).
31. McCammon, "Warfare May Be Remote."
32. McCammon, "Warfare May Be Remote."
33. Press, "Wounds of the Drone."
34. Brig Gen S. L. A. Marshall quoted in Department of the Army Pamphlet 600-65, *Leadership Statements and Quotes*, 1 November 1985, 12, www.au.af.mil.
35. Security Forces Center, *Defenders Edge Facilitator Handbook* (Lackland AFB, Texas: U.S. Air Force Security Forces Center, 2012).
36. AFI 36-2201, *Air Force Training Program*, 15 September 2010, 61-62, <http://pubs.afmentor.com/>.
37. Chappelle et al., "Symptoms of Psychological Distress," 67.
38. Chappelle et al., "Symptoms of Psychological Distress," 67-68.
39. 480th Intelligence, Surveillance, and Reconnaissance Wing, "480th ISRW Institutes Combat Readiness Sustainment Program," *25th Air Force News*, 30 October 2017, www.25af.af.mil.

Capt Tyler Tennies, USAF

Captain Tennies (AAS, Community College of the Air Force; BS, Henley-Putnam University; MS, Michigan State University) is a flight commander for the 8th Intelligence Squadron, JB Pearl Harbor-Hickam, Hawaii.

Distribution A: Approved for public release; distribution unlimited.

<https://www.airuniversity.af.edu/ASPI/>