Abstract: The United States Air Force (USAF) must leverage truth to defuse adversarial claims to plausible deniability. A fictional scenario of an RC-135 shootdown by a Russian private military company (PMC) conveys the implications of failure with information warfare (IW). Today, the USAF lacks the ability to counter plausible deniability in the information environment with the tempo and speed required to outpace and outthink its adversaries. Three recommendations are offered. First, the USAF should operate outside of current geographic constraints. Second, the USAF should shift to a problem-centric strategy independent of intelligence collection platforms. Lastly, the USAF should shift its information warfare posture from reactive to proactive in today's dynamic information environment.

By William Heitshusen

"Our foundation has to be truth. We need to get truth into the environment every way we can and be able to publicly disclose what those adversaries are doing."

- Lt Gen Timothy Haugh

As the nation pivots to great power competition, the United States and its allies must compete in the information environment while grounding their messaging in truth. Plausible deniability has emerged as a critical center of gravity for adversaries of the United States. Anti-democratic forces use information to exploit perceived weaknesses of free nations, erode existing
international rules, and promote authoritarian governance. China steals and Russia lies with its \textit{dominance} in the arena of information warfare (IW). In 2019, the United States Air Force (USAF) activated Sixteenth Air Force (16 AF) to focus \textit{IW capabilities} to generate insights, compete now, and prepare for escalation. However, the Air Force currently lacks the ability to counter plausible deniability with the tempo and speed required to outpace and outthink its adversaries in today’s information environment. In response, three recommendations are presented. First, the USAF should operate outside of current geographic constraints. Second, the USAF should shift to a problem-centric strategy independent of intelligence collection platforms. Finally, the USAF should shift its information warfare posture from reactive to proactive in today’s dynamic information environment. A fictional scenario frames the importance of IW and conveys the implications of failure.

\textbf{Scenario}

Consider a peacetime scenario of the near future: an RC-135 with a crew of 30 Airmen is flying a mission over international waters off the coast of a North African nation. A surface to air missile (SAM) system purchased, deployed, and operated by a Russian private military company (PMC) locks onto the aircraft. In an instant, the aircraft disappears from air traffic control's radar. Debris is scattered over the Mediterranean Sea and 30 American lives are lost, brought down by a SAM fired from within the African state's borders. In the aftermath, the Russian president promises to investigate the shootdown and expresses sympathy for the American lives lost. Meanwhile, online articles from Russian-funded media proxies flood the news cycle with stories that question the legality of the aircraft's presence in the airspace. Doctored videos surface online attributing SAM operators to the local militia. The call for retaliation among US policymakers is disjointed and public support quickly diminishes due to Russia's plausible deniability.

In this scenario, the United States has lost an information warfare battle. The adversary employed speed and tempo to dictate the decision making of the United States. The inability to publicly attribute the action to the Russian state hamstrung decision makers. As a result, Russia coerces American airpower to operate outside all SAM threat rings. Russia can further project anti-access and area denial of territory, home and abroad. The result is accomplished below the threshold of declared war, facilitated by the adversary's well-developed information warfare strategy.

\textbf{Competing with Information Warfare}

Information warfare needs to be at the forefront of strategic emphasis for the United States. Failure in this arena will lead to military defeat and avoidable loss of life. The USAF must improve in critical areas to dictate tempo and speed upon the adversary in the information environment.

First, the USAF must operate outside of current geographic constraints. Military forces of the United States have operated under multiple iterations of the \textit{Unified Command Plan} (UCP) and associated Combatant Commands (CCMDs) since 1946. Today, the UCP provides \textit{operational} instructions, command and control of the armed forces, and impacts how the forces are organized, trained, and resourced. CCMDs are split into \textit{two categories}: functional and
geographic. Functional CCMDs have transregional responsibilities to provide unique capabilities in support of geographic CCMDs in their areas of responsibility (AOR). Geographic combatant commands (GCCs) operate within a defined geographic AOR and have a distinctive regional military focus.

In today's operating environment, geographic boundaries and regional focus do not limit adversaries of the United States. GCCs are antiquated and ill-suited for great power competition. Geographically, the PMC forces originated from Russia in the US European Command (USEUCOM) AOR. However, the PMC forces conducted operations within the geographic boundaries of US Africa Command's (AFRICOM) AOR. In the current UCP construct, cooperation between multiple geographic CCMDs requires deliberate coordination. In the coming years, the USAF and the Department of Defense must develop a new joint warfighting concept applicable across domains and geographic boundaries. The development of a unified command-and-control system is a step in the right direction. In 2020, the vice chairman of the Joint Chiefs of Staff expressed this sentiment, "What I’ve noticed is that, as opposed to everything I've done my entire career, the biggest difference is that in the future there will be no lines on the battlefield."

A restructuring of the UCP is not a new concept. In 2002, proponents advocated substituting multiple joint task forces (JTFs) for the service-centric subcomponent commands. For example, replace United States Air Forces in Europe (USAFE) with several regional JTFs to focus on specific operational tasks. Replacing CCMDs with a joint interagency has also been discussed. The joint interagency would possess regional responsibility for all aspects of US foreign policy. Lack of fiscal sustainability, physical infrastructure requirements, and lukewarm Congressional support have derailed previous restructuring attempts. The Air Force must explore more efficient ways to dictate speed and tempo in the information environment while organizational change at the CCMD level evolves to meet strategic needs.

Second, the USAF must shift to a problem-centric strategy independent of intelligence collection platforms. Within 16 AF, the distributed common ground system (DCGS) is the Air Force's primary ISR processing, exploitation, and dissemination (PED) weapon system. Airmen assigned to DCGS across the globe produce actionable intelligence from a variety of sensors to include the U-2, RQ-4 Global Hawk, MQ-1 Predator, and MQ-9 Reaper. Since its inception in 1994, DCGS operated with a platform-centric approach. A team of Airmen were assigned to an aircraft and executed the PED process to deliver intelligence to tactical warfighters. This model worked well during the counter-insurgency operations faced by the USAF in the post-9/11 world. However, the exponential growth of data collection and a pivot to great power competition have forced a change in tactics for DCGS units. DCGS Next Generation aims to fuse multi-source data from
across the intelligence community. Rather than limit the PED process to one platform/sensor, DCGS Next Generation utilizes analysis and exploitation teams (AETs) to converge on holistic problem sets with intelligence from multiple sources at a time.

The USAF must scale the problem-centric approach utilized by DCGS Next Generation to the larger intelligence enterprise. GCCs should work with 16 AF to tailor problem sets that balance theatre requirements with a worldwide sight picture. Sixteenth AF emphasizes the concept of convergence to produce problem-centric intelligence. Convergence is the integration of capabilities that leverage access to data across separate functions in a way that both improves the effectiveness of each functional capability and creates new information warfare outcomes.

However, implementation of the problem-centric approach across Air Force will be difficult. Sixteenth AF is the largest NAF in the USAF with 44,000 personnel. The organization brings together ten Air Force Wings, which include: two cyberspace wings (67 CW and 688 CW), three reconnaissance wings (9 RW, 55 Wing, and 319 RW), three ISR wings (70 ISRW, 363 ISRW, and 480 ISRW), the USAF's sole weather wing (557 WW), and the Air Force Technical Applications Center (AFTAC). Sixteenth AF must facilitate access to data across these wings and leverage authorities within its organization to deliver results. Deliberately applied, the generation of problem-centric intelligence allows the USAF and GCCs to impose speed and tempo upon the adversary's decision-making process.

In the scenario, the Russian PMC represents a potential problem set. First, 16 AF should define PMC activity as a worldwide collection priority in collaboration with GCCs. Next, 16 AF's operational staff should facilitate the convergence of intelligence from multiple platforms assigned to USAFRICOM and USEUCOM. Lastly, 16 AF should leverage the intelligence product to demonstrate the PMC's association with Russian interests and highlight the organization's activity within the African nation. The final critical area for improvement requires a change in strategic posture.

The USAF must shift its information warfare posture from reactive to proactive in today's dynamic information environment. The 2018 National Defense Strategy (NDS) recognizes the increasingly complex global security environment, characterized by overt challenges to the free and open international order. The NDS highlights the re-emergence of long-term, strategic competition with Russia and China. These nations seek to compete below the threshold of open warfare, exploiting information warfare to achieve their ends. Russia has demonstrated the effectiveness of proactive campaigns in the information environment.

In late February 2014, the interim Ukrainian government signaled their intentions to sign an association agreement with the European Union. Russia responded with an invasion of eastern Ukraine, culminating in the annexation of Crimea and the Treaty of Accession of the Republic of Crimea to Russia. Facilitated by a proactive information warfare strategy, Russia successfully captured the Crimean Peninsula in less than a month. Within Ukraine, the Russian information campaign convinced the local population that Ukraine's interim government resulted from an illegitimate coup. Russian President Vladimir Putin publicly stated to a world audience that Russia had no plans to annex Crimea. The denial strategy created confusion on the international
stage. The manipulation of information subsequently facilitated the covert takeover of Crimea by "little green men" associated with the Russian military.

The USAF must establish clear objectives with information warfare and deliver outcomes with these stated goals. In the fictional scenario, eliminating geographic bias and promoting the problem-centric approach undercut Russia's claim to plausible deniability after the shootdown of the RC-135. The proactive establishment of Russian PMC activity as a publicly defined objective of 16 AF's information warfare efforts may prevent the shoot down from occurring. The USAF must pursue a public, proactive information warfare strategy with defined objectives to outpace and outthink the enemy's decision-making process.

**Vignettes**

Public disclosure is the key to disarming plausible deniability of malicious actions conducted by adversaries of the United States. Vignettes from civilian investigative journalists and historical efforts of the United States demonstrate the effectiveness of truth in the information environment. The first examples highlight use of information by the United States against the Soviet Union during the Cuban Missile Crisis of 1962 and the shootdown of a commercial airliner in 1983.

The Cuban Missile Crisis and the events that unfolded on the floor of the United Nations (UN) Security Council marked an epochal moment in the Cold War. Millions of Americans were fixed to their televisions in October 1962 as Adlai Stevenson, US Ambassador to the United Nations, presented irrefutable evidence of Soviet aggression to the world. Up to this point, the Soviet Union maintained that its military presence in Cuba was solely for the defensive purpose of countering American aggression towards its ally. In a brilliant display of diplomatic acumen, Ambassador Stevenson directly addressed his Soviet counterpart, "Let me ask you a simple question: Do you, Ambassador Zorin, deny that the USSR has placed and is placing medium and intermediate-range missiles and sites in Cuba?" After evasions from the Soviet Ambassador, Stevenson stated that he was prepared to present evidence to the UN Security Council of this fact. With President John F. Kennedy's backing, Stevenson presented declassified aerial photographs that depicted nuclear-capable Soviet missiles with a range of 1,000 miles positioned on the island of Cuba. The desired impact of the revelation was swift and immediate. Described by a diplomat in attendance, "No other proof could have been more irrefutable...the UN could not debate away the iron reality of the aerial photographs, nor could the world." The use of strategic narrative and a proactive use of information defused a period of brinkmanship and ultimately led to the removal of nuclear weapons from Cuba. Two
decades later, President Ronald Reagan would similarly use information to expose reckless Russian action to the world.

On the morning of September 1, 1983, a Soviet Su-15 shot down Korean Air Lines Flight 007 (KAL 007). The Boeing 747 aircraft crashed into the Sea of Japan, killing all 269 on board, including 61 Americans and US Congressman Larry McDonald. An investigation, led by the International Civil Aviation Organization (ICAO), concluded that the commercial airliner had drifted 365 miles off course and into Soviet airspace due to gross navigational error. The Soviet Union refused to accept responsibility for the shootdown and blamed the United States for provocation. The Soviet Union claimed the airliner resembled an American RC-135 reconnaissance aircraft in terms of its flight path and appearance at night. Both of these claims were quickly refuted by the United States. The silhouettes of a Boeing 747 and RC-135 are easily distinguishable. Furthermore, the only RC-135 in the area landed before the incident took place. In a televised address to the nation, President Reagan disclosed the intercepted air-to-ground radio transmissions from the Soviet Su-15. After playing the recording, the President stated, "Those were the voices of Soviet pilots…he says he has locked on the radar which aims his missiles, has launched those missiles, the target has been destroyed." The strategic use of information defused the Soviet Union's claim to plausible deniability and exposed a contrast between the nation's words and deeds on the international stage. Next, the contemporary work of a civilian investigative journalism effort showcases the power of truth.

Bellingcat is an investigative journalism organization that specializes in the use of open-source and social media information. The organization is a self-described independent international collective of researchers, investigators and citizen journalists. Bellingcat leveraged YouTube video, social media geolocation, and published phone conversations to implicate Russian military involvement in the shootdown of Malaysian Airlines Flight 17 (MH17). Recently, the organization exposed a long-running FSB operation that stalked and poisoned Russian opposition figure Alexey Navalny in an attempted assassination. The inherent strength of Bellingcat's open-source methods is the ability for anyone with an internet connection to access, analyze, and verify their analysis and conclusions. As described in a recent Foreign Policy article, Bellingcat's transparency about its investigative process makes it difficult to refute and presents a challenge for Russia to dodge responsibility. The US intelligence community would do well to study the methodology of Bellingcat and identify what information is available via its own open-source tools and partners.
Conclusion

The United States has entered a renewed period of great power competition. Plausible deniability has long been a cornerstone of adversary strategy in the information environment. From the Cuban Missile Crises to the shootdown of KAL007, countries like Russia seek to obfuscate the truth to circumvent international condemnation. As presented in the fictional scenario, continued shortcomings with information warfare will result in military defeat and avoidable loss of life. The USAF must combat this strategy with truth. The USAF currently lacks the ability to counter plausible deniability in the information environment with the tempo and speed required to outpace and outthink its adversaries. The IW efforts of the USAF must make changes to shore up these deficiencies. Truth is a strength of the Democratic form of government; the USAF must leverage its IW capabilities to compete and win in the information environment.

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Social Caption: Anti-democratic forces leverage plausible deniability. Read how the USAF can use information warfare to compete with the power of truth.

TAGs: Information Warfare, IW, RC-135, DCGS, accelerate change, Great Power Competition, GPC, Russia, plausible deniability, misinformation, disinformation, New Rules of War, Bellingcat, MH17, Cuban Missile Crisis, KAL007, NSS, NDS, GCC, ISR, strategy, intelligence, decision making, C4ISR, Air Force, convergence, organizational change, culture, national security, strategy, technology, 16 AF, USAF