INTELLIGENCE PROJECT

Forging a Democratic Decision Advantage

Eight Decades of Allied Intelligence Sharing

Heidi von Stein
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HARVARD Kennedy School
BELFER CENTER
for Science and International Affairs

REPORT
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About the Intelligence Project

The Intelligence Project seeks to build a new generation of intelligence practitioners prepared to serve in a rapidly changing world and to help future policymakers and intelligence consumers understand how best to interact with intelligence to gain a decision advantage. Building on multi-disciplinary research being conducted at the Belfer Center, from history to human rights and cyber technologies, the Intelligence Project links intelligence agencies with Belfer researchers, Faculty, and Kennedy School students, to enrich their education and impact public policy.

About the Author

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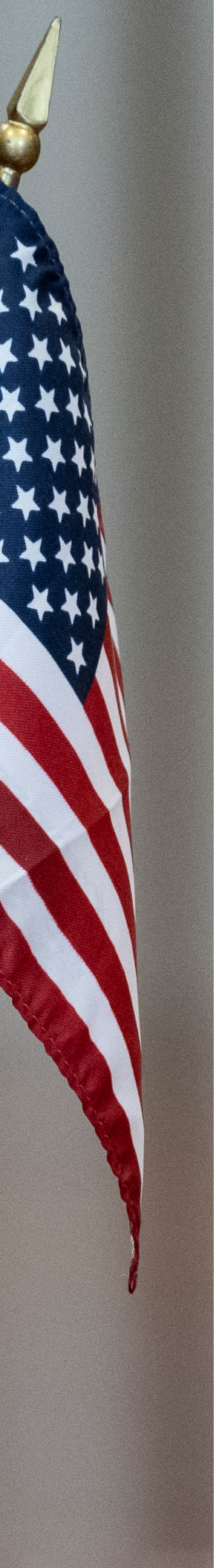

Abstract

2023 marked eighty years since the wartime adoption of the BRUSA Agreement between Great Britain and the United States. This 1943 document codified the growing relationship between U.S. and U.K. signals intelligence organizations and included policies governing the exchange of personnel and joint regulations for handling sensitive material.[1] Security directives and protocols aligned operational processes between the democratic governments, setting new cooperative standards for nation-states battling authoritarian regimes. Victory led to the 1946 UKUSA Agreement, a more formal document that served as the bedrock of what became the 'Five Eyes' alliance of the U.S., U.K., Canada, Australia, and New Zealand.[2] Over subsequent decades, allies possessing shared geopolitical interests and democratic values relied upon complementary, individual operational strengths for the shared benefit of the alliance overall. Routine intelligence sharing calcified as an operational norm, and structured interdependence evolved to support a decision advantage for allied democracies. These historical inflection points identify useful parallels for national leaders today as they navigate current geopolitical turbulence and anticipate future challenges beyond the horizon.

Introduction

Since the early 1940s, American and British organizations have shared signals intelligence to support policy decision-making on both sides of the Atlantic. Initially, collaboration was driven by the shared goal to defeat the Axis powers with the understanding that integrating resources afforded Allies access to German and Japanese intelligence that far exceeded individual national capabilities. Britain's overseas territories and Dominions further supported collection, decryption, and dissemination efforts, significantly increasing the pool of signals intelligence available. Historians and practitioners claim this synergetic relationship provided a comparative advantage that was consequential in the formulation and execution of wartime strategies and helped to shorten the war by years, save countless lives, and bring about an Allied victory.[3]

After the war's conclusion, the U.S. and U.K. deepened signals-sharing collaboration to counter the Soviet Union. As the Soviet threat intensified, like-minded democracies Australia, Canada, and New Zealand were formally brought into the UKUSA partnership, taking on the moniker 'Five Eyes' that continues to the present day.[4] Their commitment to continue sharing secret foreign intelligence was grounded in operational necessity and the realities of geography. Yet, by acting together, driven by shared national interests and core values, this synergy resulted in a democratic decision advantage over authoritarian competitors. While all members of the alliance may not have held equal resources, each made contributions providing distinct, equitable value to an interdependent model. Processes, procedures, tools, and techniques faced continuous refinement and adaptation to meet the collection requirements of the Cold War.

To overcome extraordinary collection barriers inherent in closed, oppressive societies, partners innovated and shared advanced capabilities, notably reconnaissance and advanced satellite architecture. Five Eyes fulfilled its primary mandate of monitoring developments in the Soviet Union to inform leaders entrusted to contain the spread of communism and prevent direct conflict. While for some, the collapse of the Soviet Union and the end of the Cold War rendered Five Eyes redundant, collaboration continued. The fifty-year relationship had proven to be a game-changer, a force-multiplier, and far too valuable to dismantle.

The immediate post-Cold War years marked an era of American unipolarity. Yet the world's only remaining superpower and allies were forced to keep pace with the rapid advancement of a globalized world of technology and capabilities. Empowered nonstate actors and transnational terrorism defined new threat vectors capable of exploiting natural vulnerabilities within open democratic societies. As with World War II and the Cold War, the geopolitical landscape following 9/11 necessitated fine-tuning the intelligence machinery for a Global War on Terror. Once again, legacy processes, procedures, systems, and capabilities adapted to detect and deter terrorist networks. Partners invested unparalleled amounts of resources, developed and shared next-generation collection and analytical capabilities, and aligned foreign and domestic policies to stand as a bulwark against globally dispersed terrorist organizations. The challenges of the 1990s through the 2010s tightened partnerships, creating a stronger alliance better prepared for an emerging security paradigm: great power competition with authoritarian regimes.

Much scholarship is dedicated to Five Eyes' historical contributions to strengthening member states' national security and keeping populations safe. This article adds to the narrative by incorporating recently declassified documents to present not only a richer study of that history but also to reveal the consequential elements of the network's resiliency: Interdependence, grounded in shared democratic values, geopolitical interests, strong interpersonal relations, common threats, and operational necessity. By examining interdependent efforts during World War II, the Cold War, and the Global War on Terrorism and how partners perceived and responded to evolving threat landscapes, scholars and practitioners might better understand historical lessons that can be applied in the modern day. Thus, reflections on the historical intersection of national interests and democratic values provide insight for those seeking to adapt partnerships for intelligence sharing across the globe.

One key lesson drawn from the past: when confronted with common international threats, partner states' commitment to unity was unwavering. Independent national signals entities operated and cooperated as a single organization. Over a half-century of activities and operations generated increasing levels of interdependency far beyond what the architects had envisioned. This allied effort produced results far greater than the sum of any individual state. Unpacking this 'democratic decision advantage' can help policymakers consider new questions

on intelligence reform today. Bound by interlinked networks, shared democratic values, geopolitical interests, and strong interpersonal relationships, Five Eyes has served as the first line of defense in upholding global stability and democratic security for over eighty years.

Seeds of Cooperation: Values, Interests, and Operational Necessity in 1940

Increased wartime intelligence cooperation between the U.K. and the U.S. began as early as April 1940, almost two years before Washington formally entered the war.[5] Bonded by common democratic values and a shared goal to defeat fascist regimes in Germany and Japan, President Franklin Roosevelt and Prime Minister Winston Churchill took steps to optimize maritime strategy and exchange intercepted and decrypted German and Japanese signals communications. [6] Their initiatives set into motion the coordinated efforts of the British and American intelligence entities that would continue for over seventy-five years to the modern day.

Roosevelt's willingness to cooperate with Churchill was logical, necessary, and underpinned by national self-interest. By the summer of 1940, after Hitler's forces swept through France and most of Western Europe, an invasion of the British Isles seemed inevitable. Roosevelt believed the U.K., the last democracy standing, could not survive and understood that a British defeat would have severe consequences for the U.S.[7] Specifically, should London fall, the security of the Northern Hemisphere was at risk, as well as American interests abroad.[8]

Against this backdrop, Washington supported London through legally compliant initiatives, such as Destroyers for Bases, the Lend-Lease Program, and the sharing of enemy signals intelligence (SIGINT).[9] Early cooperation between the two nation's signals intelligence entities was informal and decentralized, yet deepened after American Army and Navy signals delegations visited the British Government Code and Cipher School (GC&CS) to discuss cryptologic analysis.[10] During the American visit to Bletchley Park in February 1941, the secret home of GC&CS north of London, the budding services recognized the advanced capabilities and sophistication of the British cryptologic organization.

The organization was well-versed in the realm of intelligence, considering management of the vast British Empire required collecting and assessing developments within its territories. For the Americans, whose tools and techniques were comparatively underdeveloped, this was an opportunity to learn from the world's most experienced and far-reaching intelligence organization at the time. Despite some disparity in expertise and experience between London and Washington, policymakers viewed a combined framework as a mutually beneficial arrangement where both nations gained access to otherwise unattainable intelligence.

While at Bletchley Park, the Americans revealed their success in breaking Japan's diplomatic cipher code machine "Purple" and gifted their hosts a replica of its analog.[11] Presumably, this marked the first sharing of sensitive equipment and set the tone for trusting relations to develop. Transatlantic visits continued in both directions, eventually prompting the embedment of liaison units into the signals departments of each other's services.[12] American personnel worked alongside their British counterparts in the U.K. and British representatives with their corresponding American colleagues in the U.S. These first steps initiated positive momentum of informal, collegial cooperation that fostered substantive progress upon which a lasting relationship would develop in the years ahead. Collaboration between the U.S. and the U.K. would deepen, along with increased support from British outposts and Dominions, including Canada, Australia, and New Zealand.

BRUSA: Wartime Success and SIGINT as a Force Multiplier

America's entrance into the war in December 1941 necessitated modifying the U.S. - U.K. collaborative relationship. First, American and British maritime assets required a coordinated strategy and increased intelligence sharing.[13] While the U.S. Navy was experienced in sharing signals with the British through prewar escort operations, wartime activities proved infinitely more complex. The dual-nation naval convoys and operations needed more precise, timely, actionable information about enemy movements and intentions. Thus, direct communication links were set up between the American, British, and Canadian

agencies to pool and share SIGINT. Essentially, the links merged the three nations' services to operate almost as a "single organization."[14]

A second modification pertained to the U.S. Army in the wartime theaters. This development required that the Army be taken more deeply into the systems, processes, and procedures of Allied SIGINT sharing. The Army's integration was codified in the 1943 British-USA Communications Intelligence Agreement in regard to certain "Special Intelligence" (BRUSA).[15] BRUSA formalized operational cooperation to support wartime objectives by obliging the U.S. War Department and the British GC&CS to "exchange completely all information concerning the detection, identification, and interception of signals from, and the solution of codes and ciphers used by, the military and air forces of the Axis power, including secret services" and personnel.[16] Moreover, BRUSA regulated security measures pertaining to the dissemination of Ultra "special intelligence."[17] Closely guarded as one of the U.K.'s most valued intelligence assets, Ultra was SIGINT derived from decrypted German communications that passed through the Enigma encryption machine.[18] The division of labor was also specified, with the Americans targeting Japanese military and air traffic and the British focusing on German and Italian traffic.[19]

The impetus behind BRUSA was to enhance and formalize SIGINT sharing, regulate and maintain the security and secrecy of Ultra, and allow U.S. Army personnel to gain experience in cryptography. Several hundred Americans took up residence in Bletchley Park, working alongside the British to hone their codebreaking and analytical skills.[20] The BRUSA Agreement produced a synergetic relationship between the signatories and, by association, with the British Dominions of Australia, Canada, and New Zealand to maximize resources and avoid duplication by dividing tasks and sharing intelligence, tools, and techniques. The bilateral arrangement fostered, if not institutionalized, cooperation and interdependency amongst the intelligence agencies and generated trust and strong relationships amongst the SIGINTers.[21]

The wartime efforts of the Allies' signals intelligence services have been credited as being decisive in victory.[22] As no nation alone was capable of victory, the shared SIGINT served as a force multiplier, providing expanded coverage and almost real-time information on enemy movements, if not advanced warning on enemy intentions. SIGINT informed wartime strategy and, in some cases, influenced battle outcomes.

The largest and most complex operation relying on SIGINT was the Allied invasion of Normandy, with the partners pooling intelligence on German force compositions, locations, intentions, and the German perception of Allied intentions.[23] Although it is impossible to assess precisely how the war or specific battles would have played out without intelligence collaboration, consumers of Allied SIGINT have credited it as shortening the war and saving hundreds of thousands of lives.[24]

British Network Advantage and Early Interdependence

The British brought to the partnership advantages no other partner could - superior SIGINT capabilities, geography, and relationships.[25] The British Army and Royal Navy gained experience and honed codebreaking and cryptanalytical skills during World War I and established intelligence facilities throughout the empire, including listening and intercept stations at home, in Europe, Africa, and Asia.[26] Tools and techniques were refined throughout World War I, and holistically developed relationships were established in key locations. By the war's end, the U.K. laid claim to roughly 100 intercept stations collecting enemy traffic.[27] Unknowingly or unintentionally, the British had created an informal process of international intelligence collaboration sustained by a network of working relationships in strategic locations.

Britain's signals collection was magnified significantly through the expansive geographic spread of its overseas empire, which provided vast tracks of real estate for collection sites and established relationships with local authorities that eased the acquisition of staff and critical resources. The combination of advanced capabilities, geographic reach, and colonial relationships enabled the U.K. to collect signals in areas of the world that otherwise would be unreachable. The intelligence gained served not only British interests but also those of its allies. For example, the U.K. could help bolster an ally's national defense by sharing SIGINT relevant to its specific area. Specifically, from colonial outposts in the Southwest Pacific, British SIGINT was especially beneficial to Australia and New Zealand, whose SIGINT services were in the development stages with limited reach.[28]

This wartime arrangement was unique in that sovereign nations voluntarily surrendered their most secretive intelligence as well as the tools and techniques employed for collection and decryption. Cooperation was born more out of necessity than binding bilateral or multilateral, formal or informal agreements, as a British defeat would have negatively impacted the economic and security interests of the U.S., Canada, New Zealand, and Australia. By pooling country-specific natural and national advantages, each nation strengthened its national security and protected economic interests. Indeed, the five nations were unified by the urgency of the war, yet other evolving threats prompted the continuation of signals intelligence-sharing in peacetime.

The Road to UKUSA

As the war was winding down, British and American cryptologists and military leadership assessed that an emerging Soviet threat was replacing the Axis one: "The disturbed conditions of the world" drove the suggestion that continued cooperation would be mutually beneficial.[29] The proposal was unprecedented. Historically, with the conclusion of a conflict, the U.S. downgraded, if not completely disbanded, intelligence enterprises, which were reserved for wartime, not peacetime.[30] However, with the Allies remaining in Europe as occupying powers and the Soviet's increasingly belligerent behavior, there were compelling arguments to maintain and harness the synergetic benefits of the BRUSA partnership.

In the Fall of 1945, incentivized by the changing security landscape, President Harry S. Truman authorized continued cooperation in a one-sentence memorandum, and therein laid another foundational stone for the UKUSA Agreement: "The Secretary of War and the Secretary of the Navy are hereby authorized to direct the Chief of Staff, US Army and the Commander in Chief, US Fleet, and Chief of Naval Operations to continue collaboration in the field of communication intelligence between the United States Army and Navy and the British, and to extend, modify or discontinue this collaboration, as determined to be in the best interests of the United States."[31] While short on words, the memorandum's impact was powerful - it granted the military service leaders considerable flexibility to manage the bilateral relationship, prioritize intelligence tasks, and determine what was in America's 'best interests.' Unforeseeable at

the time, considering the rapid pace of evolution of the intelligence space, the managerial flexibility would allow the Chiefs to implement operational and personnel exchange programs that would further intensify cooperation and strengthen interpersonal relationships.

A year later, the collaborative arrangement was formalized in the 1946 UKUSA Agreement between the U.S. State-Army-Navy Communication Intelligence Board (STANCIB) and the London Signals Intelligence Board.[32] The seven-page secret document outlined the terms of the relationship and committed signatory agencies to a wide range of intelligence cooperation pertaining to intercepted foreign communications. UKUSA clarified regulations related to sharing products, methods, and techniques, as well as dissemination and security. This included: "(1) collection of traffic, (2) communication documents and equipment, (3) traffic analysis, (4) cryptanalysis, (5) decryption and translation, (6) communication organizations, practices, procedures, and equipment."[33] Secrecy was critical and revealing the Agreement's existence to third parties was forbidden.

Though not signatories to the Agreement or third parties, guidelines were provided for cooperation with the Dominions of Australia, New Zealand, and Canada. The U.K. was required to inform the U.S. of any agreements or arrangements made with or proposed to the Dominions. For its part, the U.S. was forbidden to make any arrangements with Australia and New Zealand without London's approval yet was permitted to negotiate bilateral agreements with Canada independently. The final regulations defined how intelligence would be shared and protected. The U.S. and U.K. would share all signals intelligence. London SIGINT Board approval was required before the U.S. could share with any British Empire or Dominion states (other than Canada), and joint U.S. - U.K. approval was required for dissemination to third parties.[34] Appendices stipulated the division of labor, authorized the embedment of liaison officials in each other's services, and allowed for unrestricted access to the other's operating agencies. [35]

The Agreement obliged the independent signals intelligence agencies of both nations to exchange personnel, divide tasks, and share tools, techniques, and information collected. The freedom and flexibilities Truman granted the signals agency leaders to manage the bilateral relationship were preserved in the UKUSA Agreement. Prioritizing and executing long and short-term operations were to be done through personal exchanges between agency directors of both countries.

Thus, upon regular consultation, the London SIGINT Board and STANCIB directors cooperated with each other yet operated their domestic agencies independently of the other. Maintaining these key features, the Agreement would be amended to include Canada (1949), New Zealand (1956), and Australia (1956). The addition of the British Dominions prompted a rebranding of UKUSA to 'Five Eyes,' a shortened version of AUS/CAN/NZ/UK/US, the five sets of eyes authorized to read intercepted communications.[36]

The Cold War: A Grand Defense of Democracy

The evolving security threat from the Soviet Union inspired continued British-American cooperation. Even before the war ended, relations with the Soviet Union were on a downward trajectory, with tense discussions over postwar peace settlements concerning Germany and Japan forewarning a clash of foreign policies between Moscow and Washington.[37] Other indicators of troublesome relations were unfolding across Europe and the Middle East, as the Soviets violated wartime commitments by failing to remove troops from Iran, honor the terms of the Lend-Lease Agreement, or implement democratic practices in Germany.[38] Expansionist intentions were on display, with Moscow pressuring Iran for oil concessions and Turkey for freedom of movement through the Turkish Straits.[39]

The growing divide was more formally evinced in Stalin's February 1946 pre-election speech to voters. Asserting that a world economic system dominated by capitalist nations competing for resources inevitably leads to war, Stalin declared the Soviet Union must counter the competitive environment with a more robust national defense posture. Specifically, he intended to bolster the armed forces.[40] The militant, anti-capitalist tone was not lost on western leaders.

Stalin's declarations and attempts to gain relative power and influence challenged not only the postwar order of international cooperation and permanent peace as envisioned in the Atlantic Charter but also threatened American and British national security and economic interests in Europe, the Middle East, and Asia. The international security landscape was evolving, with Soviet communism replacing Axis fascism as the premier security concern.

Shifting conditions in world order transformed national security interests well beyond American territory. Truman introduced sweeping changes to U.S. foreign policy and the national security apparatus. To safeguard American security and overseas interests, Truman sought to increase engagement abroad and offered substantial military, economic, and political aid to democracies under threat by Soviet totalitarianism. The recalibrated foreign policy to bolster democratic stability and shield vulnerable states from Soviet absorption required a legislative overhaul of the national security infrastructure.[41]

Under the 1947 National Security Act, American military and intelligence entities were restructured to better coordinate policies, reduce redundancies, and provide more robust security.[42] Existing entities were reorganized, and new ones were created, specifically, the National Security Council (NSC), the Department of Defense (DoD), and the Central Intelligence Agency (CIA). Beyond merging the Army, Navy, and Marine Corps into the DoD under the leadership of a Secretary of Defense, the Act also centralized the coordination of intelligence produced by numerous intelligence agencies under a Director of Central Intelligence (DCI). Thus, the CIA would serve as the principal intelligence advisor to the president and also the authoritative civilian intelligence agency with broad provisions to collect intelligence and develop next-generation technical systems, including signals, reconnaissance, and imagery.[43] The new framework had two notable systemic components. It legalized a permanent national intelligence body, highlighting intelligence's critical role in national defense in war and peacetime. It also further streamlined cooperation with UKUSA partner agencies, paving the way for easier and faster implementation of common practices and processes.

Similar to Truman, Churchill also foresaw a hostile future with the Soviets. Claiming Moscow's spreading influence in and control over parts of Eastern Europe was a global crisis requiring a firm western response, Churchill advocated that America and Britain stand together as a bulwark against Soviet political, military, and ideological ambitions to preserve peace and democracy.[44] The proposal was not driven purely by ideology or selflessness but rather by the realities of Britain's postwar status.

Britain emerged from the war with diminished economic, political, and military strength, leaving London with waning influence and ability to protect national and overseas interests. Domestically, the country's fragile economy, underpinned

by a structurally weak industrial base and overburdened by war debts and interest payments, prompted leaders to question if Britain could provide an adequate national defense posture.[45] Others feared the homeland was vulnerable to a Pearl Harbor-like surprise attack, possibly one laden with atomic weapons.[46] Internationally, Britain lacked the resources to protect its vital interests, notably oil facilities in Iran and control over the Suez Canal.[47] However, despite elevated security concerns and the need for a robust and timely forewarning system, austerity measures forced the British to scale back a critical component supporting national security – collecting signals.[48] Essentially, Britain's desire for continued collaboration with the U.S. was fueled not only by the threatening international landscape but also by domestic economic and security concerns that could not be mitigated solely with national capabilities.

Echoing World War II, common objectives, mutual threats, and inadequate yet complementing capabilities drove American and British SIGINT collaboration and reaffirmed the unifying factors of interdependency. Soviet communism and territorial grabs posed an existential threat to western democracies against which no one nation had the capabilities to defend. The geopolitical developments and evolving security threats were strategic issues of mutual concern, and building comprehensive intelligence capabilities through the UKUSA partnership to strengthen national strategies became essential for all five nations. If Germany and the Axis powers had pushed the U.S. and U.K. together, the Soviet Union kept them united.

Intersecting National Strengths and Growing Interdependency

The wartime experience created a system of interwoven architecture, resulting in an elaborate level of integration on a global scale while fostering close, trusting personal relations between key individuals in all five countries. The Dominions were bound through exchange programs, embassy liaisons, and interconnected communication links. Building on these established processes, the UKUSA partners were well-positioned to deepen ties and further cement the relationship by leveraging national strengths to confront the Soviet threat.

The same British contributions that strengthened the partnership during World War II were equally, if not more, valuable during the Cold War - superior cryptological capabilities and strategically located colonial outposts and established relationships. Although London had retracted militarily from numerous colonial sites, the intelligence architecture remained intact, as did personal contacts with locals.[49] The geographic spread of British outposts and installations was a key strategic advantage. Many were based in Asia, essentially encircling the Soviet Union and China, where the U.S. had no or comparatively weak assets and political relations. London also offered advantages regarding the Dominions. Fundamentally, Britain was the controlling channel through which cooperation with the Dominions was possible. Serving as manager and mentor, London could shape, enhance, and task the national intelligence services of Ottawa, Wellington, and Canberra. The partnership gained an enlarged pool of personnel amongst whom tasks could be divided and, more importantly, expanded geographic reach.

This combination significantly increased SIGINT, encompassing more targets in more locations. Presumably, Canada focused on the Soviet Union and parts of China, Australia monitored South and East Asia, and New Zealand covered the South Pacific and Southeast Asia.[50] Over time, the Dominions' capabilities and contributions increased, and together, they handled roughly 30% of the intercept and analytical workload for the British.[51] The expanded collection capabilities freed up American and British resources, allowing the U.S. to focus on the Caribbean, China, parts of the Soviet Union, the Middle East, and Africa, while the U.K. monitored Europe and the western portions of the U.S.S.R.[52]

The U.S. offered disproportionately more to the intelligence-sharing network as no other partner could match Washington's clout. As the guardian of the free world, the U.S. orchestrated and financed a collection of international bodies intended to maintain peace, promote democracy, and vitalize economies (e.g., The North Atlantic Treaty Organization, the United Nations, the Marshall Plan). Equally significant to underwriting security commitments were American investments to sustain this intelligence sharing alliance made up of democracies, strengthening member states' capabilities, and innovating next-generation technologies.

The disparity in member states' national security threats and financial strength is noteworthy as this did not prevent unity, but rather drew them closer together. As no member possessed the resources, technology, and real estate to collect SIGINT

globally, including Washington, teamwork and cooperation far outweighed going it alone. The U.S. provided the bulk of financing, equipment, technology, and manpower, with the others contributing similar, albeit less, assets. This was a mutually beneficial, interdependent dynamic, with all five partners receiving access to otherwise unattainable intelligence. Five Eyes was structurally interdependent in purpose, design, and function as an instrument for policymakers in democratic states seeking a decision advantage.

SIGINT Priority: Monitor the Soviet Union

The policy pivot to contain the Soviet Union necessitated a better understanding of intentions, military capabilities, and developments in weaponry and other scientific technologies. Collecting intelligence on the Soviets was formidable. First and most daunting was its territorial spread.[53] By 1946, the U.S.S.R. was the largest country in the world, encompassing over six million square miles spread across two continents. More than double the size of the U.S., the U.S.S.R. had a 6000-mile east-to-west span, the bulk of which was above the 49th parallel. Second, the Soviet system was a closed, oppressive society with no free press, strict entry requirements for foreigners, heavily patrolled borders, random spot checks for identity papers, and a pervasive security services apparatus tightly monitoring the population.[54] Even if a human agent were to successfully infiltrate Soviet territory, obtaining actionable intelligence was challenging at best. Conditions hindered partner's ability to assess developments behind the Iron Curtain and exposed the limitations of their collection capabilities. The combined assets of the UKUSA partners were inadequate to meet policymakers' intelligence requirements, and the gap demanded greater collaboration to innovate new technical collection methods. Specifically, with limited physical accessibility, the partners were forced to resort to technical collection methods, such as aerial reconnaissance and signals interception.

As early as 1947, the British and other allies conducted low-level reconnaissance overflights of Soviet territory.[55] Most operations were flown primarily by British Royal Air Force crews and supported with American equipment, cameras, film, and aircraft. Taking off from the U.K., Japan, and other friendly territories, the flights provided imagery of Soviet industrial centers and military installations, including

naval bases, shipyards, and airfields. The information was critical to Washington, as leadership depended on the shared intelligence until the U.S. Air Force began its own (officially acknowledged) overflights in 1949, often in tandem with their British counterparts.[56] These early-year missions were a testament to the partner's cohesion, as they shared intelligence, equipment, and personnel to advance a common objective.

The U.S. improved reconnaissance capabilities with the introduction of the U-2 spy plane, a CIA asset capable of flying at 70,000 feet (presumably an altitude above Soviet detection) over a range of 3,000 miles and carrying 700 pounds of high-resolution camera equipment.[57] The U-2 flights began in 1956 and provided photo imagery of Soviet installations, yielding valuable intelligence on Soviet military capabilities and dispelling the American's belief that the Soviets were mass-producing missiles, including ones capable of long-range attacks.[58] Although the intelligence collected was informative and guided decision-makers' defense planning, posture, and policies, flights over the U.S.S.R. were short-lived. The 1960 shooting down of Gary Powers' aircraft prompted the termination of U.S. reconnaissance over Soviet territory and gave more urgency to develop satellite reconnaissance capabilities.[59] Other events, notably the launch of Sputnik and the invasion of South Korea, surprised, if not shocked, the UKUSA partners. These developments underscored the importance of strategic warning and contributed to the push to improve technical systems.[60]

Lacking intelligence from U2 overflights, American photoreconnaissance satellite programs filled the gap by providing broad area search and high-resolution imagery on Soviet launch sites, naval bases, radars, shipyards, and other key facilities related to missile and space programs.[61] Running parallel to the photoreconnaissance programs were signals collection satellite programs, which expanded collection and located and intercepted signals from defensive systems associated with radars and anti-ballistic missiles.[62] The reconnaissance and signals programs provided decision-makers with better situational awareness of developments within the U.S.S.R. With advancements in technology, these programs were continuously upgraded.

Deepening Interdependency: Advanced Technology and Pine Gap

The signals satellite programs proved to be a game changer, one that the Five Eyes partners capitalized on to increase their competitive advantage. Per the terms of the 1966 Joint Defence Space Research Facility Agreement, the U.S. and Australia established Pine Gap, a permanent, technologically advanced ground station in the Australian Outback.[63] Its primary mission was to operate signals intelligence satellites.[64]

Australia was an ideal location. Given its proximity to China and eastern Soviet Union, the Pine Gap facility magnified the geographic reach of collection by controlling and receiving data from Rhyolite satellites as they orbited the Asia Pacific region.[65] The Rhyolites, a product of CIA and private sector efforts, offered revolutionary intercept capabilities not possible from airborne systems or intercept systems on ships and submarines.[66] Parked essentially in fixed orbit 23,000 miles above the equator, the satellites covered a vast sliver of earth ranging from 60 degrees East to 150 degrees West, which included the U.S.S.R., China, the Middle East, and the entire Southeast and East Asia region. Essentially, all the critical areas of concern for the Five Eyes partners. The Rhyolites collected four categories of diplomatic, military, political, and commercial communication signals: telemetry (signals from ballistic missiles), radars (from ships or air defense systems), ground-to-satellite communications, and microwave emissions (telecommunication systems used to enable phone calls).[67] Thus, Five Eyes could sweep up communications and signals transmitted via radio, radiotelephone, microwave towers, and other satellites, including Soviet and Chinese communications, military activities, and signals related to nuclear detonations and intercontinental and anti-ballistic missile launches.

Launched in 1970, the first Rhyolite targeted primarily signals over two key Soviet missile sites in Kazakhstan, Sary Shagan and Tyuratam, and was intermittently redirected to monitor developments in Vietnam and the Indian-Pakistan War.[68] Missions were determined predominately according to CIA and later NSA requirements, and target areas changed to accommodate intelligence needs.[69] Capabilities expanded in 1973 with an additional satellite hovering over the Horn of Africa and sweeping up signals from ICBM launches over western Russia, thus allowing the first Rhyolite to collect signals over China and Vietnam more

frequently.[70] Each satellite had an estimated 20-meter-diameter intercept antenna, and the surface area from which it could collect signal emissions depended on the signal frequency being monitored. For example, if the Rhyolite was monitoring frequencies at 10GHz, it could only cover an area of 1,900 square kilometers. Monitoring frequencies at 1GHz expanded surface coverage to 190,000 square kilometers.[71] Thus, the two-satellite constellation allowed for variations in frequencies collected and the surface area covered, with one almost permanently fixed over Soviet ICBM and ABM testing sites.[72] The Rhyolites were an impressive display of American innovation and technological prowess, benefitting the U.S. as well as partner states.

Precise operations remain classified, however, given Australia's presumed area of responsibility and the satellites' capabilities, it is highly probable that SIGINT was collected on almost all significant events within range. Beyond collecting telemetry from Soviet systems - which helped partners craft defense strategies and verify arms limitations agreements - Pine Gap also monitored, and in some cases forewarned, events such as the North Vietnamese offensive against Saigon and Soviet airlift operations to Angola in the mid-1970s.[73]

Throughout the Cold War, the U.S. added more satellites with enhanced technologies to Pine Gap's stable, further increasing geographic coverage and the types of signals collected. Indeed, the democratic partners had a comparative advantage, yet each advancement in Soviet strategic weapons capabilities necessitated a corresponding development in Five Eye's capabilities to detect the new signals. Likewise, the American development of stealth technology and aircraft drove the Soviets to upgrade their early warning radar systems with advanced detector technology.[74] This became an escalatory cycle, and the Five Eyes' partners continued to improve systems, eventually developing larger satellites with intercept antennas capable of detecting "broadcasts from radios the size of a wristwatch."[75] Undoubtedly, emerging technologies generated advantages for both sides and maintaining scientific superiority became a continuous and expensive quest.

The addition of Pine Gap to the Five Eyes apparatus was transformative and essentially converted the partnership into a global intelligence agency. The ground station significantly enlarged the partners' collection capabilities, which in turn improved situational awareness and augmented the mission scope. Initially tasked to collect signals from communications, radars, ballistic missiles, and other strategic

weapons in the development and testing phase, the scope expanded to support military missions and verify arms control agreements.[76] Coverage was continuous and geographically magnified, resulting in more data collection, translation, and analysis, thus providing decision-makers with a broader and more precise picture of global developments closer to real-time than ever before.

Pine Gap generated multiple benefits. From an intelligence perspective, Pine Gap reduced the knowledge gap on the Soviets and other areas of concern and aided in shaping foreign and defense policies. The interconnected communications systems provided partners with almost real-time access to collected, translated, and analyzed data, thus improving situational awareness and decision-making.[77] It is well to remember the drive that prompted increased collaboration and bound the agencies closer together. Human intelligence (HUMINT) collection efforts in Soviet territory were mostly unsuccessful, with almost all operations ending in the capture or death of agents.[78] Reconnaissance overflights yielded valuable imagery intelligence (IMINT) of military installations and other assets of interest yet were politically risky and dangerous; as Soviet detection capabilities increased, so did the risks to pilots. Further, IMINT provided only a snapshot in time, not insights into a leader's intentions or plans. SIGINT, however, was a more prized category as data was continuously collected and relayed to a ground site with no risk to pilots or aircraft. Expectedly, SIGINT's value increased exponentially during the Cold War as the agencies became more technically proficient in satellites and support systems.

On an individual level, Pine Gap deepened personal relationships and reinforced trust. Developing the Rhyolites and building the facility required extensive collaboration that brought together CIA and NSA intelligence specialists, American and Australian government officials, and private sector scientists and engineers.[79] Yet, perhaps more helpful to strengthening relationships amongst the broader team of Five Eyes' personnel was the increase in daily interactions. Initially, Pine Gap was led by an American Director alongside an Australian Deputy Director and staffed with highly skilled officers from various agencies and partner countries.[80] The effect of having an intermixed and permanent staff on base strengthened interpersonal and inter-agency relations. Collaboration went beyond merely sending data back and forth or exchanging liaison officers. Australians, Americans, and other Five Eyes personnel were living, socializing, and working side by side in an isolated Outback valley. This shared space increased opportunities to interact, fostering cooperation and strong, trusting bonds at Pine Gap and across the Five Eyes community.

Irrespective of rank or position, relationships evolved through regular and fixed, formal and informal interactions, rotations across working divisions, and 24/7 communications channels.[81] These relationships reinforced cohesion and helped to defuse clashes and manage crises more easily and swiftly.

Cold War Success: Bound by National Interests and Democratic Values

The relatively stable bipolar balance of power during the Cold War was supported by Five Eyes SIGINT. Despite countless possibilities for flashpoints to erupt into direct superpower conflict, none occurred.[82] Allies were broadly informed of Moscow's strengths, weaknesses, and, at times, intentions. Beyond monitoring the U.S.S.R., Five Eyes observed almost all major events within this forty-plus-year period, helping leadership better understand the world's complexities.

Indeed, Cold War developments had the potential for miscalculation. In the early years, communism gained ground, as evidenced by the Iron Curtain, the Chinese Revolution, and the Korean War. Turbulent events and shifting landscapes unfolded in Indochina, the Taiwan Straits, and the Suez Canal. Sputnik launched, tensions flared in Berlin, and Gary Powers' U-2 was shot down. Hostilities continued to heat up from the 1960s to the late 1970s, producing a period dominated by regional conflicts and global uncertainty, such as the Cuban missile crises, the Vietnam, India-Pakistan, and Arab-Israeli wars, and the Soviet invasion of Czechoslovakia. Although rare, there were positive steps suggesting a warming of relations between democracies and totalitarian regimes. The U.S. and U.S.S.R. signed arms control and limitations treaties, and America sought rapprochement with China. Unfortunately, visions for a permanent peace were often short-lived as tensions were inevitably cyclical.

The 1980s saw Europe as the centerpiece of the Cold War struggle, with President Reagan diverging from the decades-long containment strategy to a more aggressive 'roll back' policy that was controversial, if not provocative. Following President Carter, Reagan advocated developing a missile defense system - "Star Wars" - and upgraded Pershing missiles stationed in Europe.[83] The Soviets

responded in kind by increasing ground troops in Poland, East Germany, and the Baltics while putting nuclear-capable bombers in East Germany on alert.[84] Tensions escalated when Moscow perceived NATO's Able Archer exercises in Europe and put its nuclear forces on high alert.[85] Animosities tempered in the latter half of the 1980s, with Moscow and Washington taking constructive measures to bury the arms race and defuse the hostile relationship.[86] Internal frailties, deteriorating economic conditions, and social unrest in the U.S.S.R. eventually led to its dissolution and marked the end of the Cold War.

The UKUSA partners played a crucial role in monitoring most, if not all, of these turbulent events and supplied member states' political leaders with strategic intelligence vital to crafting policies and pursuing national objectives. Under the principles of pooling resources and dividing tasks, each partner shared their best tools, techniques, and technologies for a unified strategic effect. Together, they developed collection, processing, analysis, and dissemination capabilities, split up global coverage based on geography and capabilities, and interconnected communications systems for timely and secure exchange of information. Their collection scope and missions continuously expanded with each jump in technology.

Mutual trust and strong interpersonal relations amongst key Five Eyes leaders created conditions for success, allowing partners to overcome internal strains and respond to external urgencies with agility and expertise. This period solidified Five Eyes' cooperation and unity while enhancing each partner state's national capabilities and security. Unwavering teammates, armed with superior technical capabilities, worked together to generate a competitive decision advantage. Linked by shared democratic values and common interests, the Five Eyes partners contributed to maintaining a relatively stable environment. More importantly, this collaboration weathered the challenges of the Cold War and succeeded in accomplishing the partners' main objective – avoiding war with the U.S.S.R.

A Global War on Terror

September 11, 2001. Roughly one hour after terrorist attacks struck the U.S., American airspace closed and over 4500 civil aircraft in flight scrambled to land at the nearest airport as soon as possible.[87] For over forty-eight hours, American airspace remained closed for civilian planes. With one exception. The plane carrying key British intelligence service leaders, including those from NSA's "best friend," GCHQ.[88] When the leaders of GCHQ, MI5, and MI6 landed in Washington, they were acting on instructions received from Prime Minister Tony Blair, in essence, 'to help the Americans however you can.'[89]

There was no definitive assessment of the situation beyond an instinctual reaction in CIA that this was al-Qaida.[90] Hours after the attacks, British intelligence leaders stood in Langley Headquarters offering unconditional support. This little-known event demonstrates the close bonds between the American and British governments and their intelligence agencies. This moment marked a new beginning of Five Eyes' global fight against terrorism. It was a watershed moment for the next generation that echoed the historical lessons of early WWII and a stark reminder that the world's security challenges remained far grander than any single state.

Terrorism was not a new security phenomenon. Indeed, the threat had been a national security concern for many countries, some for decades, if not centuries. Traditional acts of terrorism were predominately geographically confined and tailored to a specific grievance, such as the struggles between the IRA and the British government. This largely internal conflict raged for almost thirty years, making the U.K. the deadliest country in Western Europe in terms of terrorist-related deaths.[91] Nevertheless, this trendline of geographically isolated attacks to indiscriminate ones became increasingly apparent to all the partners of the Five Eyes countries.

Between the 1980s and 1990s, American interests and citizens had become more vulnerable at home and abroad. In the 1980s, American civilians, military personnel, and government officials lost their lives through kidnappings, hijackings, or bombings in Europe and the Middle East.[92] Some attacks were random, such as the airport bombings in Rome and Vienna, while those in Lebanon, Kuwait, and Spain specifically targeted American military and diplomatic facilities. The decade ended with the downing of Pan Am Flight 103 over Scotland, killing 259 people, including 190 Americans, several of whom were U.S. intelligence specialists.[93]

In the 1990s, acts of terrorism targeting U.S. interests and citizens increased in scope, scale, and destruction and were not limited to foreign territory.[94] The 1993 World Trade Center bombing in New York City claimed six American lives, and an attack on CIA personnel outside agency headquarters in Virginia resulted in two more deaths. Later in the decade, Osama Bin Laden declared war on the West, calling for a global campaign to kill Americans. Attacks struck Americans in Pakistan and Sri Lanka, American military barracks and advisory offices in Saudi Arabia, U.S. embassies in Tanzania and Kenya, and the U.S.S. Cole in the Gulf of Aden. Collectively, the incidents of the 1990s took the lives of hundreds of American civilians and service members. Although there were numerous alarms and ample strategic warnings from CIA and other intelligence partners across the community, SIGINT remained tied to priorities as set by policymakers within a system that was slow-moving and ill-equipped to bridge the foreign and domestic divide.[95]

The United States, perhaps first among equals in the Five Eyes intelligence-sharing alliance, was too slow to recalibrate its existing capabilities to meet evolving requirements as the pace of terror-related events in the 1980s and 1990s accelerated. There is a compelling argument that the events of September 11 were the tragic result of two decades of complacency driven by a 'business as usual' attitude by policymakers.[96] The attacks demonstrated unprecedented sophistication in terms of coordination, reach, and destruction that could not be readily dismissed. Enhanced communications technology, coupled with the ease of moving money and people, allowed for greater efficiency in carrying out attacks on an international scale, making previously held notions of security no longer applicable. No longer confined to national boundaries or singular grievances, terrorism was now a global threat with the potential to claim thousands of lives. The new security landscape forced policymakers to revise national security priorities beyond traditional challenges to incorporate transnational issues and invest in the next generation of intelligence professionals, capabilities, and platforms to defend the homeland. Indeed, September 11 spawned the urgency to combat terrorism and incentivized the family of Five Eyes partners to unprecedented levels of unity and collaboration.

Reforming the National Security Apparatus

In response to the rise of global terrorism, President Bush's 2002 National Security Strategy called for the most comprehensive government restructuring since the 1940s, aiming to centralize and bolster homeland security and bring America's defense posture in line with twenty-first-century challenges.[97] Specifically, this would be accomplished through a new federal Department of Homeland Security (DHS) and a series of legislative reforms to America's national security apparatus, including the military and intelligence communities.[98] This whole-of-government effort would lead to the transformation of military forces, operations, and capabilities, including expanding overseas bases and ports while leveraging advanced technologies at a faster pace. The intelligence community would also be significantly overhauled and granted new authorities befitting the changed security environment.

First, since terrorism was both a foreign and homegrown threat, the intelligence agencies needed better integration with policymakers, law enforcement, and military officials. Thus, legal barriers that obstructed collaboration between domestic and foreign national security entities were modified through the USA PATRIOT Act, the Homeland Security Act, and the Intelligence Reform and Terrorism Prevention Act (IRTPA) of December 2004. With these barriers eliminated, the National Counterterrorism Center was created to centralize, analyze, and share domestic and foreign terrorist-related intelligence.[99]

Second, as the operational and organizational processes of the IC were styled for a different threat environment and not for cyberspace or terrorism, new legislation was enacted to give the IC the necessary authorities to fulfill its evolving mandate. Notably, changes were made in the parameters to obtain surveillance warrants with the Foreign Intelligence Surveillance Court (FISC) to expand surveillance operations.[100] New laws incorporated the digital domain and the NSA's role in exploiting data at rest. This was a significant change, as the NSA typically collected signals in transit. However, the digital revolution generated an enormous amount of data that was stored, never to be transmitted electronically - notes, files, spreadsheets, and other forms of data. The new authorities permitted the NSA to proactively collect data at rest versus waiting for it to travel over a cable or a satellite.[101]

Third, global threats demanded continuous surveillance worldwide, on land, sea, air, and in space, as well as the dissemination of intelligence on secure systems in real-time to more agencies, military leaders, and allies. These global tasks necessitated considerable changes: closer collaboration with private sector technology firms, sustained investments in the collection, analysis, and communications systems, and an overhaul of the security clearance process. An equally essential modification was to deepen collaboration amongst Five Eyes and with foreign partners. Guided by the belief that no nation alone had the resources to monitor and analyze terrorist groups globally, strengthening cooperation was vital. Analysts, often working on ambiguous, fragmented data concerning the operational and organizational structure of terrorist networks, could better fill in the gaps by sharing more pieces of the puzzle. In sum, these changes sought to harness America's unparalleled military, economic, and political strength to promote peaceful international relations and democracy. The war against terror groups of global reach and those exploiting technologies or seeking weapons of mass destruction would be indefinite.

The British government, responding to the events of September 11, the Bali bombings, and the Mombasa attacks, also made sweeping changes in the intelligence community, enacting new legislation to expand their authorities, increase funding for new hires, and drive technical development programs.[102] Like the U.S., the U.K. sought to identify and stop terror threats pre-emptively. The shift fundamentally changed the intelligence collection process. The services now required evidentiary intelligence suitable to convict suspects in court, necessitating closer collaboration amongst MI5, MI6, GCHQ, law enforcement entities, and foreign partners.[103]

GCHQ consolidated operations into a new, modern headquarters and invested substantial resources to upgrade IT systems and create advanced collection capabilities.[104] The services continued monitoring the proliferation of WMDs, organized crime, and threats to critical infrastructure while simultaneously investing additional resources in counterterrorism at levels never seen in the history of Great Britain. The pivot to counterterrorism revealed collection gaps that the intelligence services attempted to minimize through risk management assessments and increased collaboration with Five Eyes and other foreign intelligence partners.[105]

Australia, New Zealand, and Canada were relatively untouched by terrorist acts in a comparative light. Yet, their citizens and interests abroad had suffered attacks, and global trends confirmed a disturbing pattern – casualties per attack were rising.[106] It was September 11, however, that profoundly transformed the perception of vulnerability that Canberra, Wellington, and Ottawa could not ignore. Geographic remoteness to traditional terrorist flashpoints was no longer a protective shield. Planes seized as weapons made every nation vulnerable to mass casualty events, or in Canada's case, a launchpad from which to attack the U.S.[107] Like their American and British partners, Australia, New Zealand, and Canada elevated radical terrorism as a high-level national security threat and initiated a series of legislative reforms to protect their citizens. The reforms included additional funding, revised mandates, and enhanced powers for intelligence services to better identify, monitor, deter, and convict terrorists.

As in World War II and the Cold War, the five partners' assessments concerning the threat environment aligned, prompting them to make legislative reforms and provide the intelligence services with the necessary legal tools and resources to strengthen national security and Five Eyes' collective capabilities. The reforms highlighted the urgency and severity of the new security environment. Understanding international developments informed domestic security yet also highlighted the fact that a war on terrorism could not be fought or won in isolation. Perhaps no event since the origins of the UKUSA Agreement had there been such a monumental shift in the international security environment. The necessity of cooperation for a Global War on Terror surpassed even the Cold War in speed and urgency.

An Intelligence Enabled War Against Terrorism

The American intelligence community quickly suspected the September 11 attacks were orchestrated by Osama bin Laden, the leader of the Afghanistan-based terrorist group al-Qaida, who presumably enjoyed the support of the Taliban government in control of the country since the mid-1990s.[108] Within weeks of the assessment, President Bush announced the "war on terror begins with al-Qaida," soon thereafter, Operation Enduring Freedom began in Afghanistan

with an American and British bombing campaign targeting Taliban and al-Qaida-controlled regions.[109]

Five Eyes took on the challenge of fighting an asymmetric war based less on kinetic force and more on technological superiority and geographic proximity. Both of which required continuous support from the intelligence agencies' evolving capabilities.

Combating terrorism hinged on staying ahead of technological advancements in communications and the flow of information.[110] This would be a war driven by intelligence in a way that had not existed prior to the new century. Contrary to the Cold War processes of locating large, slow-moving platforms, such as Soviet tanks or ICBM sites, finding terrorists hiding in unknown caves was comparably more difficult.[111] Indeed, finding terrorists, in general, was challenging given that they were globally dispersed, exploited perceived weaknesses of Western societies, and possessed a fragmented hierarchy whereby few members had a comprehensive understanding of the network's organizational structure or plans.[112] Furthermore, the internet and telecommunications revolution transformed global connectivity, allowing remotely located terrorists to communicate instantaneously and securely via commercially available satellite phones or other devices. The technological leap made signals collection a crucial tool for locating terrorist groups and gaining insights into their organizational structure and intentions.[113]

The inverse scenario of an intelligence-driven war required a shift in operations and a stronger reliance on SIGINT sharing. Thus, Five Eyes prioritized operations to follow the movements of money, goods (weapons, chemicals, etc.), and people suspected of association.[114] With this targeted focus and new capabilities and techniques, including geolocating and metadata analysis, the NSA, GCHQ, and the other partners were able to determine patterns of how suspected terrorists' phones were used, which devices called each other, or how long conversations lasted. Piecing together the trends with other intelligence sources, analysts could assess what a person was doing and where they were located. The new analytical approach led to the elimination of several high-ranking al-Qaida leaders and set into motion the institutionalization of merging signals and imagery to better track, deter, and eliminate adversaries.[115]

The collection and analytical processes were supported by the long-established practice of dividing tasks and pooling results. Technical enhancements linked Five Eyes systems across more platforms on a deeper level than ever before. For example, overburdened with the enlarged coverage posture and more raw data than it could process, the NSA diverted raw data to Australia's Defence Signals Directorate and others for processing and analysis.[116]

The partners were also linked to a new tactical network that shared real-time signals and imagery intelligence on activities in Afghanistan and, later, Iraq.[117] Created by the NSA and dubbed Center Ice, the system was a considerable achievement as it integrated multi-sourced raw data and processed intelligence from numerous partners and shared it with allied combatants in the field instantaneously. Center Ice allowed for precision offensive operations as well as defensive actions to protect women and men in uniform. Allied soldiers encircled by enemies and facing imminent ambush communicated their situation in real-time through Center Ice, wherein overhead allied forces could track and eliminate adversaries.[118] This was an effective battlefield tool that would be continuously upgraded through technological advancement. All Five Eyes partners provided military assets to the Afghanistan operation along with 24/7 monitoring and actionable intelligence. The five-way communications made possible the longest deployment of a U.S. Navy vessel – measured in consecutive days at sea – since World War II.[119] The record-breaking deployment was an impressive display of maritime power projection and demonstrated the partners' superior intelligence collection and dissemination capabilities.

Despite leaps in technology, geography still mattered. Bases in Diego Garcia, Cyprus, and Australia were instrumental in collecting SIGINT and supporting military operations.[120] Intelligence collected globally and channeled into the five-way communications system served as a force multiplier and provided Five Eyes with tactical and strategic advantages. Through intensified collaboration, constant technological innovation, and the sharing of advanced tools and technologies, the Five Eyes partners strengthened their national comparative advantages and collective capabilities.

Convinced that Iraq possessed and produced weapons of mass destruction and supported terrorist groups, including al-Qaeda, the U.S. deemed the country an existential threat. Together with the U.K., Australia, and others, Washington

built a coalition to disarm the country and dismantle terrorists' networks.[121] The decision to invade Iraq was not universally supported by the political leaders of Five Eyes, with Canada and New Zealand refraining from joining their allies on the battlefield.[122] Remarkably, despite a very public break with American policy, both countries continued to supply mission-critical SIGINT. That political disagreement on policy and strategy in Iraq was overlooked by the Five Eyes nations was an extraordinary display of how resilient the relationships had become amongst members of this small community.

Five Eyes SIGINT supported the air campaign and allowed for safer maneuverability of ground troops by providing information on the locations and capabilities of Iraq's GPS jamming systems. Left unchecked, Baghdad could have disrupted the flight path of allied missiles or other assets dependent on GPS satellites.[123] NSA, GCHQ, and the partner agencies were no longer simply collecting SIGINT. They were now fully integrated into the command-and-control structure of the military branches delivering force.[124]

Sharpening Interdependency Against Common Threats

Relative to the security environments of World War II and the Cold War, the GWOT timeframe was fraught with an increase in threat actors with access to more vectors and opportunities to harm the citizens living in Five Eye countries. Asymmetric tactics, cyberspace, and globalization empowered adversaries with capabilities to inflict damage otherwise limited to major powers and often without any strategic forewarning. The globality of threats required cooperative approaches and continuous alignment of partners' vital national interests. This ultimately strengthened their interdependence. Indeed, the Five Eyes family of nations faced a new world that likely meant interdependence was more important than ever before.

All five partners strengthened their intelligence services by providing broader legal authorities and greater financial resources to enhance intelligence collection, analysis, and sharing on suspected terror groups or persons. Reforms permitted expanded surveillance, centralization, and streamlining of terrorist-related intelligence, and additional funding for upgrades to antiquated information

technology systems, plus increased investment in personnel. Training programs were revised and more tailored to the nuances of the portfolio. As approaches used to track and analyze the movements and intentions of groups differed from those employed for nuclear weapons, educational programs aligned to accommodate the new procedures.

The Five Eyes community took on more tasks and missions while maintaining coverage of traditional threats, including Russia, China, and North Korea. They assiduously learned from each other to improve tools, techniques, and capabilities. Liaison exchange programs were expanded, offering a wider range of personnel more opportunities to hone their skills and build cooperative relationships. Geography was relevant in the fight against terrorism as each partner had unique insights into certain regions and groups that the others lacked. This heightened the need to pool resources, divide labor, and share benefits. Across the board, collaboration bolstered each other's national security and intensified their interdependency.[125]

Applied History for the Next Generation

Since the 1940s, the governments of the U.K., the U.S., Canada, Australia, and New Zealand have supported an international rules-based system that produced seven decades of relative peace and prosperity defined by no major global wars, unprecedented economic growth, and a decline in global poverty.[126] The efforts to construct and maintain this global environment were underpinned by the combined activities of the five nations' intelligence agencies. This intelligence-sharing alliance, created during wartime and maintained in peacetime, was woven together by interdependency, grounded in synergetic operations, trust, and shared democratic values informing national interests to serve as a counterweight against common security threats. This relationship played a decisive role in navigating World War II, the Cold War, and the Global War on Terror by stopping fascists and dictators, avoiding nuclear war, and thwarting terrorist plots.

By pooling resources, dividing tasks, and sharing intel, the partners were more effective across the globe in collecting and analyzing intelligence that helped inform decision-making across all levels of democratic government. Actions and operations

saved lives, constrained tyrants, and hindered the flow of weapons, illicit drugs, and human trafficking. Partners met evolving security demands through shared innovation by adapting next-generation platforms to build upon a legacy of operational interdependence. This was true throughout the latter half of the twentieth century, continued in the first quarter of the twenty-first, and is likely to expand with common challenges on the horizon. Continued success requires maintaining evergreen strengths and exercising the organizational sinew that has propelled this alliance forward.

Throughout the alliance's existence, cooperation has ebbed and flowed in direct proportion to the gravity of the international threat environment. Eras such as World War II, the Cold War, and the Global War on Terror fostered intensified collaboration, interdependence, and trust. National leaders learned from their mistakes and continued to evolve to meet the demands of global security through aligned intelligence services. Although at times they were slow-moving to adapt with SIGINT priorities tied to other, less pressing threats, they eventually met policymaker requirements by better aligning intelligence capabilities and operations to meet the demands of the security environment.

Over decades and through shared experiences, the Five Eyes colleagues blended a unique culture of their own, above and beyond national passports or political party affiliations. Insiders claim that they share more information with each other than with their own national intelligence systems or domestic agencies.[127] Interpersonal relationships evolved and strengthened through formal and informal interactions, exchanges of personnel, rotations across working divisions, and 24/7 communication channels.[128] Initiatives calibrated mutual trust and made coordination the default operating mode. Cooperation was a layered process that evolved over time, beginning with sharing data and products, and eventually generating advanced capabilities that led to mutually beneficial outcomes. Ultimately, the partners achieved the most intimate layer of cooperation – sharing what one does not know or cannot do.[129] Revealing intelligence or capability gaps exposes vulnerabilities, and such confessions are rare in the world of espionage, reserved only for the most trusted partners.

The importance of trust and strong interpersonal relationships cannot be overstated. They are foundational elements of the partnership's cohesion, possibly more unifying than the UKUSA legal agreements. One only needs to observe

how quickly tensions subside or crises are managed.[130] Political strains over the American bombing campaigns in the Vietnam War or the 2003 American-led invasion of Iraq did not disrupt cooperation despite public fallout. Close personal ties among agency directors and high-level personnel overcame temporal political disruptions that are commonplace within democratic societies. Likewise, times of crises were met with swift reactions from partners. Hours after the September 11, 2001, attacks, senior leaders from Britain's intelligence services arrived in the U.S. offering unconditional assistance. Similarly, when the NSA's computer systems shut down in 1999, GCHQ ensured the continuity of America's SIGINT operations by taking on additional tasks.[131] Partners must rely on each other as no other domestic entities possess the infrastructure to handle the volume of signals traffic: Only NSA, GCHQ, Australian Signals Directorate, Communications Security Establishment Canada, and Government Communications Security Bureau [New Zealand].

Irrespective of a partner state's size, budget, or capabilities, over time, the relationships became more interdependent than even the founders had envisioned in the first half of the twentieth century. Although some contribute more than others and benefits do not flow equally, there is no apparent hierarchical structure or "superpower strutting."[132] Intelligence collaboration is a team sport with each partner providing national and natural advantages that contribute to durable, synergetic interdependence. Furthermore, the partners understand intertwined systems and collaborative processes refined over seventy years make decoupling difficult and unacceptably detrimental to national and global security for all members.

Insiders such as Australian Security Intelligence Organization (ASIO) Director Mike Burgess contend that Five Eyes "is critically important [and] has made a difference to each nation's respective national security and should not be taken for granted."[133] While U.S. Ambassador Douglas Lute designates Five Eyes intelligence as the "gold standard" and the "relationship priceless,"[134] former NSA Director Michael Hayden maintains that indispensability has kept the intelligence relationships "fairly immune" to the broader political relationships, partly due to the similar interests, values, and policies of the five nations.[135] Even in areas of differing political opinions among nationally elected leaders, the intelligence agencies continue working together in common space. Their tenure and position as critical components within the national security system make their function in government a vital tool of statecraft. For the next generation of policymakers and intelligence professionals, it

is essential to understand the connective tissue that binds the alliance together and how tightly woven these relationships have become over the last seventy-plus years. Such understanding and appreciation can empower civil servants to build upon successful foundations and avoid mistakes of the past.

A classic lesson for intelligence systems demands that governments and operations remain at speed or ahead of new threat vectors. When threats outpace adaptation, vulnerability gaps expand, creating higher levels of risk to civilian populations. Expediting the ability of intelligence agencies to operate at pace in the twenty-first century is as real today as it was in previous times and will only increase tomorrow. This requires leveraging the competitive advantages of the network to propel the alliance forward. Failure to do so may negatively, perhaps irreversibly, impact global peace and stability.

Eyeing the Traits that Bind

The Five Eyes narrative reveals several consequential trends and commonalities that contributed to the unity of this transnational partnership and are found in each era, regardless of the security challenges faced: shared values, necessity, strong personal relationships, and urgency. Each of these dynamics points to the core strength that has come to define the resiliency of the intelligence alliance.

Driving at the onset were shared political values across all partner societies insomuch their form of government: democracy. Democratic systems define and shape people, their way of life, preferences, and priorities. These naturally occurring cultural, political, and social values lend strong support to common interests that often run from the frontline of society all the way to the highest political offices in each country. Even if leaders did not always agree at the highest level on policy issues, the lower functional SIGINT levels continued to operate in support of each other, demonstrating the partnership's enduring strength and resilience.

Necessity was another binding component. The partners recognized early on and normalized during WWII that the world was too large and security threats too diverse for any single country to manage alone. To varying degrees, each nation was constrained by geography, capabilities, or resources. These limitations operationalized long-term interdependence beyond the scope of a single war or

crisis. For national security to work across the board for all five nations, they had to work together.

A third sustaining factor was strong personal relationships. The UKUSA Agreement may be the legal bond formalizing cooperation, but the strong personal relationships formed the foundation upon which trust and collaboration grew and ultimately thrived. These deep connections enabled partners to manage unexpected emergencies or de-escalate internal strains before they spiraled out of control.

Urgency was a fourth common thread. Five Eyes' cooperation, though consistent, ebbed and flowed in energy and effort concerning priorities. Grave national security challenges and shifts in the international context brought partners together and often closer than before. Grave threats triggered intensified collaboration and have been observable throughout Five Eyes' history, from cracking Enigma during WWII, innovating advanced satellites to peer behind the Iron Curtain during the Cold War, and developing a multi-sourced intelligence platform with real-time distribution during the Global War on Terror.

Collectively, these factors were the core elements supporting Five Eyes' endurance, resiliency, and unity of effort in the past. If these conditions kept the partnership intact for decades, they also suggest appreciation for these conditions and historical lessons will strengthen cohesion. The most important lesson of history: despite the evolution and change in security environments, these relationships will endure no matter the obstacles or challenges.

A Return to the Past, Looking to the Future

Five Eyes' history helps to unpack complex organizational challenges and can inform new approaches to future challenges. The collapse of time and space combined with an increase in threat actors, vectors, and disruptive technologies has produced a more perilous security environment that moves faster and deeper than any prior era. Specifically, the rise of authoritarian states undermining democracies and the increasing use of the cyber domain as a platform for war.[136] A revanchist Russia, seeking to restore its status as a global power, is more forcibly exerting itself,

threatening peace and stability in Europe as well as the rules-based international order. In the Middle East, aggression by Iranian backed proxies and organizations hostile to allied democracies remind us that the march toward peace and stability can take generations to develop, but progress can be destroyed overnight. In Asia Pacific, tensions are once again on the rise. China's increasingly aggressive and provocative expansionist behavior in the region and beyond is a significant, long-term threat. If left unchecked, China's actions will negatively, perhaps even irreversibly, impact global stability.[137]

As the protective shield against authoritarianism, Five Eyes sits center stage in the face of these major threats, and how political masters respond may define the future of democratic security. Though many tools are at the disposal of national leaders, one clear competitive advantage for democratic states remains the indispensable alliance among the Five Eyes partners. How member states lead the democratic world and leverage this critical advantage may become a decisive moment in security competition, as was the case during WWII, the Cold War, and Global War on Terror. Simply said, Five Eyes must find new ways to do old things.[138]

However, there are several potential points of contention that could hinder Five Eyes' effectiveness in the future that require careful consideration. The partner states' political leaders must re-think and better align legal authorities, capabilities, and processes in all five nations, as even the slightest adjustments could be determinative for future outcomes.[139] Specific issues include expanding the powers of collection, sharing more information with like-minded states, and reforming declassification procedures are a starting point. Broadened collection authorities would require nations to properly balance liberty, security, and privacy. Laws should not be so personally intrusive that they border on authoritarian tactics or so ineffective that they invite exploitation by competitors in elections, civil society, and industrial sectors.

Regardless, one certainty remains: the pace, speed, and operational strengths of authoritarian competitors will push democratic states to the red line. National leaders need not throw out the same values, laws, and liberties that define our wellspring of democracy. Still, policymakers need to seriously consider how to better utilize the long-tested decision advantage through cooperative measures that enhance shared democratic values across national borders while mitigating the gravest threats against free societies.

Some have argued that the criteria for declassifying intelligence should be relaxed, with more information being released at a faster pace. Others have suggested the barriers that restrict sharing intelligence with outside parties should be eased. The Russia – Ukraine conflict has shown that having timely access to sensitive information shapes outcomes in a constructive way for national security policy. National discrepancies in personal data protection laws and regulations may be problematic and require greater alignment for productive cooperation. For instance, Europe's General Data Protection Regulation mandates significantly stronger data safeguards than the U.S.[140] Disagreements over supply chain security may also cause a rift amongst the five nations' political leaders.[141] American concerns over the safety of Chinese technologies and the potential exploitation of vulnerabilities have been a sticking point amongst the partners. Washington rightly contends products threaten national security and have pressured partners to reconsider competitive intention.

Whereas enlarging Five Eyes to include other like-minded nations would boost the force multiplying equation by adding capabilities, resources, and personnel, the prospect is unlikely. Modernization of intelligence-sharing relationships is best accomplished by intensifying existing ones. Formal expansion of Five Eyes stands to be too disruptive and would unsettle its long-standing stable structure that is only achieved over time. Exclusion is not hinged on Five Eyes' Anglo make-up but rather its shared history. If the alliance were to expand, it must readily consider the shared history and begin by learning from the past. Decades of collaborative experiences and deep mutual trust formed unparalleled relationships that cannot easily be replicated or expanded. If history informs the future, leveraging long-established processes and procedures will again meet the security demands of today and tomorrow.

Endnotes

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