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NSA Site Access: Twenty-Fifth Air Force's \$95M+ Problem

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Organizational Action Project Report #3

NSA Site Access: Twenty-Fifth Air Force's \$95M+ Problem

Shane A. Smith 26 November 2018

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I. EXECUTIVE SUMMARY

This OAP examined and addressed security clearance-based delays for Twenty-Fifth Air Force (25 AF) airmen at National Security Agency (NSA) sites and other locations with the organization's mission systems. The approximate personnel cost associated with this issue was \$95.98M at the beginning of the OAP cycle. Across the enterprise, 985 airmen were unable to perform their missions. Opportunities for improvement were sought across all steps of the security clearance process.

Tracked data consisted of: 1) open National Background Investigation Bureau (OPM/NBIB) priority personnel security investigations and DoD Consolidated Adjudication Facility (DoD CAF) adjudications, 2) NSA Military Affairs Division (MADO) security holds, and 3) counter-intelligence polygraph (ci-polygraph) requirements. Using this institutional data, Air Force Instruction (AFI) 65-503 (US Air Force Cost and Planning Factors) was utilized to apply costs to define the original state of affairs and determine the impact of improvements.

A sample list of actions taken includes: 1) Applications for intelligence-related personnel are now given a priority label at military entrance processing stations, 2) four contract clearance screeners were added to the basic military training workforce, 3) a personnel processing code requiring a current ci-polygraph in order to get movement orders was added to certain assignments, 4) MADO authorized site-to-site transfers, 5) MADO agreed to accept security information packages six months prior to arrival, and 6) a Clearance Workforce Verification System contract was awarded to create a web-based solution to handle transfer paperwork. The impact of all actions taken will not be seen until 2019 and beyond.

During the reporting period (January-October 2018), the total personnel unable to access NSA sites or systems in our three categories dropped from 985 to 822—a 17 percent decrease. Commensurately, total personnel costs decreased from \$95,984,348 to \$80,136,624, a net improvement of \$15,847,724.

The total number of security investigations requiring OPM/NBIB closure and DoD CAF adjudication increased from 446 to 550 personnel—a 23 percent rise. The personnel costs contained in this category rose from \$43,462,786 to \$53,631,963—up \$10,169,177. Although the category was a net negative for this period, I maintain that without the actions taken this year that figure could be as much as 122 cases, or \$11.9M, higher.

CI-polygraph numbers changed little over the reporting cycle. In January, 90 personnel were waiting, while in October the total was 99. The costing data moved from \$8,768,965 to \$9,645,862—an increase of \$876,897. One unit's tracking error late in the project eliminated what was projected to be a roughly \$3M gain.

MADO holds improved the most. The number fell from 449 to 173—a 61 percent improvement. The associated personnel costs dropped from \$43,752,597 to \$16,858,799, a \$26,893,798 improvement. Holds greater than 30 days fell from 173 airmen at the beginning of the project to 93 at the conclusion—down by 46 percent. While every hold matters, these longer-term ones are especially troubling to our wings.

Factors impacting data outcomes included: 1) field unit data reporting errors, 2) OPM/NBIB priority processing slowed from 100 to 154 days, 3) DoD CAF adjudication time increased from 14 to 76 days, 4) average new cases added outpaced those closed/adjudicated by 21 per month, and 5) the Air Force's migration to a new security information system, a system that NSA does not use yet.

This OAP project was not designed to overhaul the structure of the clearance process. It pursued operational improvements to gain the most from the current system. Future researchers should focus on an approach akin to the operational innovation described by Michael Hammer where an entirely new way of doing business alters the security clearance process to achieve breakthrough change.

II. INTRODUCTION

This Organizational Action Project (OAP) explored the personnel costs to Twenty-Fifth Air Force due to security clearance-based delays for airmen working at National Security Agency sites or on its systems. This was, and remains, a serious mission readiness issue and addressing it directly tied to supporting our commander's posted priorities. While many commentators focus on the security leaks that have periodically occurred at the National Security Agency, few really scrutinize the unintended consequences of decisions made in the wake of the furor generated by those events. This project attempted to help bridge that gap.

As will be demonstrated later, the personnel costs associated with this issue were substantial, totaling over \$95M annually at the beginning of the project. Though significant, and on first glance potentially daunting, addressing security clearance-based delays is not insurmountable. Steps taken this year eliminated over \$15M of that cost. These actions will bear fruit into the future. Of note, the effect of some initiatives detailed herein will not be seen until 2019.

What follows is a description of the overall issue by reviewing those intelligence leaks, examining the literature related to unintended consequences, and describing my organization, as well as the security clearance process itself. Following that, Twenty-Fifth Air Force specific data is examined to show the impact by dissecting the issue into its constituent parts, including the investigation and review by the National Background Investigation Bureau and Department of Defense Consolidated Adjudication Facility, the counter-intelligence polygraph requirement, and the National Security Agency's Military Affairs Division review. After that, the steps taken to improve the situation throughout the year are explored. A variety of initiatives were enacted, ranging from process and procedural changes to technical solutions and personnel actions.

III. REVIEW OF NSA INTELLIGENCE LEAKS

Security measures are intended to prevent the loss or transfer of classified material to unauthorized parties. That being said, intelligence leaks, especially those concerning the National Security Agency (NSA), persisted as major news items in recent years. The biggest of these stemmed from the actions of Edward Snowden, a Booz Allen Hamilton contract employee who worked as a computer system administrator. When Snowden began leaking parts of the over 1.7 million documents he illegally removed on a thumb drive to the *Washington Post* and *Guardian* newspapers in June 2013, the story became a dominate headline, resulting, for example, in 988 entries in the *Washington Post* and 747 in the *New York Times* over the next six months.¹

Other NSA related incidents include Harold T. Martin III, Reality Winner, Thomas Drake, and Katharine Gunn. The Federal Bureau of Investigation (FBI) arrested Martin, another Booz Allen Hamilton contractor, in August of 2016 for taking terabytes of classified documents from NSA, some purportedly related to hacking tools. An additional contractor, Reality Winner, was arrested in June 2017 for removing classified information related to Russian attempts to influence the 2016 U.S. Presidential election and leaking it to a reporter. Moving further back in time, Thomas Drake was indicted in 2010 for allegedly giving classified information to a *Baltimore Sun* reporter in 2005, while Katharine Gun, a British citizen and Government Communications Headquarters employee, leaked an NSA memo relating to the United Nations to the *Observer* during the period prior to the Iraq War, causing diplomatic issues for the United

¹ The full designation of NSA is the National Security Agency/Central Security Service. Glenn P. Hastedt, "The Press as an Agent of Oversight: The NSA Leaks," *International Journal of Intelligence and CounterIntelligence* 29, no. 1 (November 2015): 26-27, 32; Michelle Van Cleave, "What It Takes: In Defense of the NSA," *World Affairs* 176, no. 4 (November/December 2013): 57, 61; Bob Toxen, "The NSA and Snowden: Securing the All-Seeing Eye," *Communications of the ACM* 57, no. 5 (May 2014): 44.

States. These only represent some incidents tied to NSA, not others like PFC Bradley Manning, Shamai Lebowitz, Stephen Jin Woo Kim, and Jeffrey Sterling of the U.S. Army, FBI, Department of State, and the Central Intelligence Agency respectively.²

The highlighted cases show that the insider threat is real and a legitimate area of concern for intelligence organizations. Security procedures are necessary to protect the data that helps protect American citizens and the country's national security interests from adversaries. Leaks have occurred and they create pressure on organizations to act since each occurrence damages national security, diplomatic relations with allies, cooperation with foreign intelligence organizations, and the intelligence community's credibility with the public. This pressure has generated a bias toward conservatism and caution in the intelligence community as it relates to making decisions about the security clearance process.³

Nevertheless, military personnel as a category, the issue at hand for this OAP, does not appear to really be an area in need of tightening. Other than the Manning case, incidents have not been related to military personnel. Even with Manning, clearance processing was not the

² Government Communications Headquarters is more commonly referred to as GCHQ and is the British equivalent of the NSA. Michael V. Hayden, "Beyond Snowden: An NSA Reality Check," *World Affairs* 176, no. 5

⁽January/February 2014): 13; Martin Bright, "Katharine Gun: Ten years on what happened to the woman who revealed dirty tricks on the UN Iraq war vote?," *Guardian*, March 2, 2013,

https://www.theguardian.com/world/2013/mar/03/katharine-gun-iraq-war-whistleblower; David Wise, "Leaks and the Law: The Story of Thomas Drake," *Smithsonian Magazine*, August 2011,

https://www.smithsonianmag.com/history/leaks-and-the-law-the-story-of-thomas-drake-14796786/; Josh Gerstein, "Alleged leaker Reality Winner said she stuffed NSA report in her pantyhose," *Politico*, September 27, 2017, https://www.politico.com/story/2017/09/27/reality-winner-nsa-document-pantyhose-243236; Tim Shorrock, "Why Does Wikileaks keep publishing U.S. state secrets? Private contractors," *Washington Post*, March 16, 2017, https://www.washingtonpost.com/posteverything/wp/2017/03/16/the-reason-wikileaks-receives-so-

many-u-s-state-secrets-private-contractors/?utm_term=.edd89798835c; Jack Detsch and Jeff Stone, "NSA arrest highlights struggle to prevent insider threats," *Christian Science Monitor*, October 7, 2016, https://www.csmonitor.com/World/Passcode/2016/1007/NSA-arrest-highlights-struggle-to-prevent-insider-threats.

³ Derek B. Johnson, "NBIB confirms 700,000 security clearance backlog," FCW, September 6, 2017,

https://fcw.com/articles/2017/09/06/nbib-phelan-clearance-backlog.aspx; Deb Riechmann, "Security Clearance Points to Problems with Access to Secrets," *Military.com*, September 12, 2017, https://www.military.com/daily-news/2017/09/12/security-clearance-points-problems-access-secrets.html.

area that would have prevented his act. As Bob Toxen described in his article, "The NSA and Snowden: Securing the All-Seeing Eye," there were a number of technical solutions capable of thwarting Edward Snowden, but I also argue they would have stopped Manning as well.⁴ As a result, the project worked toward unraveling some unnecessary impediments that have evolved over the years. Some of which may have arisen as a result of that pressure to act. Essentially, while intelligence leaks have certainly occurred at the hands of individual actors, the well-intended security decisions designed to protect the nation's secrets led to negative unintended consequences for mission accomplishment. For context, this report will now briefly discuss the nature of unintended consequences.

IV. DECISIONS AND UNINTENDED CONSEQUENCES

a. Nature of Decision-Making

Anyone that has occupied a leadership position can attest to the notion that decisionmaking is an inexact process made with imperfect information. There are constraints which impact the decision maker's ability to reach the best choice. As highlighted by Herbert Simon, "complex circumstances, limited time, and inadequate mental computational power reduce decisions makers to a state of 'bounded rationality.'"⁵ Additionally, Diana Young, Adam Goodie, Daniel Hall, and Eric Wu underscore that "the goal of any decision maker is to make the most optimal decisions possible with a minimal amount of cognitive strain or effort."⁶ In this pursuit decision makers utilize coping strategies that Young, et al., characterize as *noncompensatory* (information filtration, acceleration) and *compensatory* (more holistic

⁴ Toxen, "The NSA and Snowden," 44, 46-49; Detsch and Stone, "NSA arrest highlights struggle to prevent insider threats"; Shorrock, "Why Does Wikileaks keep publishing U.S. state secrets? Private contractors."

⁵ Leigh Buchanan and Andrew O'Connell, "A Brief History of Decision Making," *Harvard Business Review*, January 2006, https://hbr.org/2006/01/a-brief-history-of-decision-making.

⁶ Diana Young, Adam Goodie, Daniel Hall, and Eric Wu, "Decision making under time pressure, modeled in a prospect theory framework," *Organizational Behavior and Human Decision Processes* 118, no 2 (July 2012): 179.

evaluation of options), while the addition of time pressure results in "speed-accuracy tradeoffs," resulting in inferior outcomes. Time pressure further affects risk aversion with consequent decreases in willingness to pursue a course of action perceived as risky as time pressure increases, something likely pertinent to the subject under consideration in this report.⁷

Given the complexity of the decision-making process and the effects pressure induces, it is unsurprising that Andrew Cortell and Susan Peterson state that institutions tend to be "sticky" and that "they are characterized by long periods of stasis and change only in response to significant crises or critical junctures."⁸ In addition, they discuss the nature of path dependency in these cases, showing how policy responses to new stimuli are built on the foundation of previous institutional actions and structures. Denis Smith and Dominic Elliott, however, using the case of Hurricane Rita in 2005, demonstrate how decision responses to significant crises themselves generate unintended consequences.⁹ Whether inside or outside a crisis context, holding with Lucia Helena Martins da Silva and Karina De Dea Roglio, one sees that "from the moment a decision maker takes a decision and the resulting action is implemented, such decision produces consequences beyond those intended."¹⁰

b. Unintended Consequences Definitions

Various authors define the concept of unintended consequences in their work. Cortell and Peterson defined it as "those policy, procedural, and/or institutional consequences that diverge from the goals sought by the agents who originally established or altered the

⁷ Ibid., 179-180, 187.

⁸ Andrew Cortell and Susan Peterson, "Limiting the Unintended Consequences of Institutional Change," *Comparative Political Studies* 34, no. 7 (September 2001): 774.

⁹ Ibid.; Denis Smith and Dominic Elliott, "Exploring the Barriers to Learning from Crisis," Management Learning 38, no. 5 (2007): 526; Lucia Helena Martins Da Silva and Karina De Dea Roglio, "Enhancing the Strategic Decision-Making Process: Unintended Consequences as a Source of Learning," *Latin American Business Review* 16, no. 1 (2015): 5.

¹⁰ Ibid.

institution."¹¹ Patrick Baert stated, "I refer to a particular effect of purposive action which is different from what was wanted at the moment of carrying out the act, and the want of which was a reason for carrying it out."¹² Guowei Jian claimed the phrase "refers to the consequences that would not have taken place if a social actor had acted differently but that are not what the actor had intended to happen."¹³ For Da Silva and Roglio, an *"unintended consequence means a surprise that happens in one of two ways: (1) the consequence was not anticipated in the phase of analyzing possible courses of action in the decision-making process; (2) there were unpredicted changes during the implementation."¹⁴*

A number of authors are more succinct in their phraseology. For example, Rodger Dean Duncan specified, "In politics and business, 'unintended consequences' is the handy term for outcomes that are not the ones foreseen by a purposeful act."¹⁵ Some, particularly complexity theorists, even speak of a law of unintended consequences, highlighting a belief in the inescapability and unpredictability of these outcomes ("second-order effects") and encouraging caution to decision makers as a result.¹⁶ On the other hand, while agreeing that accurate predictability remained a bridge too far, Perri 6 (aka David Ashworth) argued that patterns do in fact exist and that unintended consequences are not random events.¹⁷

¹¹ Cortell and Peterson, "Limiting the Unintended Consequences of Institutional Change," 771.

¹² Patrick Baert, "Unintended Consequences: A Typology and Examples," *International Sociology* 6, no. 2 (June 1991): 201.

¹³ Guowei Jian, "Unpacking Unintended Consequences in Planned Organizational Change: A Process Model," *Management Communications Quarterly* 21, no. 1 (August 2007): 6.

¹⁴ Da Silva and Roglio, "Enhancing the Strategic Decision-Making Process: Unintended Consequences as a Source of Learning," 6.

¹⁵ Rodger Dean Duncan, "Unintended consequences: Minimizing the 'Oops Factor' in Decision Making," *Forbes*, June 22, 2015, https://www.forbes.com/sites/rodgerdeanduncan/2015/06/22/unintended-consequences-minimizing-the-oops-factor-in-decision-making/#33722c49671b.

 ¹⁶ David W. Stowe and Craig A. Jeffrey, "Risk Management in Isolation is Risky," *Financial Executive*, March 2008, 26; Perri 6 (aka David Ashworth), "Explaining Unintended and Unexpected Consequences of Policy Decisions: Comparing Three British Governments, 1959-74," *Public Administration* 92, no. 3 (2014): 673.
¹⁷ Ibid., 689.

c. Robert Merton's Characterization

For a characterization of the phenomenon, this report turns to the modern progenitor of unintended consequences literature, Robert Merton. Merton, who approached this issue from a societal or institutional level in his influential 1936 article, identified five limitations to accurately predicting the consequences of actions taken: 1) *ignorance*, 2) *error*, 3) *immediacy of* actor interest, 4) basic values, and 5) public predictions of future developments. Ignorance entails the current state of knowledge and the necessity of taking action even in the face of incomplete information. *Error* involves simply making an incorrect decision for the situation at hand or a flaw in executing the chosen course of action. Whether stemming from an incorrect or incomplete understanding of the circumstances or not, this results in an unintended outcome. The immediacy of actor interest results in short-term focused decision-making at the expense of a long-term orientation. For Merton, Adam Smith's theory of the "invisible hand" of economics belongs in this category. *Basic values* require actions without analyzing and examining the full range of options because certain actions are essentially required due to that belief system. Duty becomes the measure of merit over selecting the most optimum option. Merton placed Max Weber's description of the Protestant work ethic and capitalism under this heading. Finally, Merton held that public predictions of future developments essentially corrupted the experiment, if you will, leading to almost self-fulfilling prophecies. The prediction itself became a new component in the equation that drove the scenario toward unintended consequences.¹⁸ "Thus, to

¹⁸ Robert K. Merton, "The Unanticipated Consequences of Purposive Social Action," American Sociological Review 1, no. 6 (December 1936): 900-904; Jian, "Unpacking Unintended Consequences in Planned Organizational Change: A Process Model," 6; George Engelhard, Jr. and Stefanie A. Wind, "Educational Testing and Schooling: Unanticipated Consequences of Purposive Social Action," Measurement: Interdisciplinary Research and Perspectives 11, no. 1-2 (2013): 33; Perri 6, "Explaining Unintended and Unexpected Consequences of Policy Decisions: Comparing Three British Governments, 1959-74," 675; Pavlin Mavrodiev, "Decisions and Their Unintended Consequences," (PhD thesis, ETH Zurich [Swiss Federal Institute of Technology in Zurich], 2014), 3-4, https://www.sg.ethz.ch/media/medialibrary/2014/11/Mavrodiev_Pavlin_ETH_22026.pdf.

the extent that the predictions...are made public and action proceeds with full cognizance of these predictions, the 'other-things-being-equal' condition tacitly assumed in all forecasting is not fulfilled."¹⁹

d. Nature of Unintended Consequences

At this point it is pertinent to address that all unintended consequences are not negative. In reality, they can be positive, negative, or neutral in nature. They may support the original goal of decision makers, undermine that goal, or have no effect on it whatsoever. Unintended consequences may occur close to the decision or not emerge until a later period. This time component complicates the assessment of pinpointing the correct nature of cause and effect. The greater the time lapse, the greater the difficulty in attributing connections.²⁰ Merton limits his approach to imputation of cause and effect to "those elements in the resulting situation which are exclusively the outcome of the action, i.e. those elements which would not have occurred had the action not taken place...These sum-total or concrete consequences may be differentiated into (a) consequences to the actor(s), (b) consequences to other persons mediated through (1) the social structure, (2) the culture and (3) the civilization."²¹

Multi-institutional or multi-departmental interactions are rife with opportunities to create incongruities that set the stage for unintended consequences, especially when combined with the inexactness of human agency.²² As Kenneth Goldberg highlights, "decisions made by one stakeholder...can have consequences on other stakeholders."²³ Interconnectedness, both within

¹⁹ Merton, "The Unanticipated Consequences of Purposive Social Action," 904.

²⁰ Ibid., 895, 897; Perri 6, "Explaining Unintended and Unexpected Consequences of Policy Decisions: Comparing Three British Governments, 1959-74," 674; Baert, "Unintended Consequences: A Typology and Examples," 202-203; Engelhard and Wind, "Educational Testing and Schooling: Unanticipated Consequences of Purposive Social Action," 33.

²¹ Merton, "The Unanticipated Consequences of Purposive Social Action," 895.

²² Cortell and Peterson, "Limiting the Unintended Consequences of Institutional Change," 774.

²³ Kenneth Goldberg, "Mitigating unintended consequences during crisis: improving the decision-making process," *Journal of Behavorial Studies in Business* 6 (October 2013): 1.

and across organizations, creates an inherent complexity. This engenders a fertile environment for unintended consequences, which challenges decision makers due to its effect on the action of policymaking and the concomitant ripples across organizational boundaries.²⁴

Richard Vernon further argues that unintended consequences are born from "the cumulative outcome of similar actions performed simultaneously or consequently by a number of actors" or "from the simultaneous or consecutive performance of dissimilar actions by individuals or groups...arising from a diversity of ends."²⁵ In Vernon's description, they are the net result of numerous independent actors making decisions perceived to be in their own best interest.²⁶ According to Merton, "precisely because a particular action is not carried out in a...vacuum, its effects will ramify into other spheres of value and interest."²⁷ Even if the limits to human reasoning and knowledge were overcome, this effect would survive with unintended consequences continuing unabated.²⁸ Based on the overall description presented in this section of the report thus far, this author readily agrees with Perri 6 that "unintended consequences are not 'problems' that can be 'solved'. Their actiology constitutes a condition to be managed."²⁹

V. RETENTION

With the concept of a condition to be managed in mind, this report turns briefly to a discussion of retention. Employee turnover and retention are key concerns for any organization, whether in the for-profit, not-for-profit, or government sectors. Human capital is vital to the health of an institution, particularly over the long-term. According to a 2018 survey briefing by

²⁴ Ibid., 2; Mavrodiev, "Decisions and Their Unintended Consequences," 4;

²⁵ Richard Vernon, "Unintended Consequences," *Political Theory* 7, no. 1 (February 1979): 59, 63.

²⁶ Ibid., 64.

²⁷ Merton, "The Unanticipated Consequences of Purposive Social Action," 902.

²⁸ Mavrodiev, "Decisions and Their Unintended Consequences," 4.

²⁹ Aetiology (etiology) is defined as the cause, set of causes, or manner of causation of a condition (https://en.oxforddictionaries.com/definition/aetiology); the study of causation

⁽http://www.dictionary.com/browse/etiology). Perri 6, "Explaining Unintended and Unexpected Consequences of Policy Decisions: Comparing Three British Governments, 1959-74," 690.

the Society for Human Resource Management and Globoforce, retention/turnover was the top concern for 47 percent of human resource managers. This was followed by recruitment at 36 percent. In combination, this shows that gaining and retaining talented employees for their organizations dominates the concerns of human resource managers.³⁰ This is unsurprising given that, as Robert Cardy and Mark Lengnick-Hall highlight, "human capital remains one of the few resources that can provide a sustainable competitive advantage."³¹

Thomas Lee, et al., provide some reasons for the human resource managers concerns. The process for new hires can cost 200 percent annual salary. Customers can be lost due to the damage turnover can induce to relationships. Experienced performers take that experience with them, which damages organizational performance and outcomes. Lee, et al., also discuss the dispiriting effect on those left behind due to the loss of teammates and the increased burdens that have to be carried until departing members are replaced, as well as how a "turnover spiral" can result.³²

Authors elucidate various approaches to improving employee retention. Lori Goler, et al., highlighted that turnover occurs because an employee's "job wasn't enjoyable, their strengths weren't being used, and they weren't growing in their careers."³³ Hence, improved retention centers on managers finding ways to "enable them to do work they enjoy, help them play to their strengths, and carve a path for career development that accommodates personal priorities."³⁴

³⁰ "Using Recognition and Other Workplace Efforts to Engage Employees," Society for Human Resource Management, January 24, 2018, https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/pages/employee-recognition-2018.aspx.

³¹ Robert L. Cardy and Mark L. Lengnick-Hall, "Will They Stay or Will They Go? Exploring a Customer-Oriented Approach to Employee Retention," *Journal of Business and Psychology* 26, no. 2 (2011): 213.

³² Thomas W. Lee, Peter Hom, Marion Eberly, Junchao (Jason) Li, "Managing employee retention and turnover with 21st century ideas," *Organizational Dynamics* (September 2017): 1.

 ³³ Lori Goler, Janelle Gale, Brynn Harrington, and Adam Grant, "Why People Really Quit Their Jobs," *Harvard Business Review*, January 11, 2018, https://hbr.org/2018/01/why-people-really-quit-their-jobs/.
³⁴ Ibid.

Cardy and Lengnick-Hall's employee equity model "predicts that investment in a combination of socialization and training activities that create strong identification with a firm's mission, values, and ethical orientation will yield loyalty, satisfaction, and retention."³⁵ They further posit three main themes in relation to employee retention decisions: 1) employees will respond in kind to their perception of how the organization treats them, 2) employees evaluate whether or not their impression of the firm's "brand equity" aligns with how they perceive themselves, and 3) an employee's feeling of connectedness to the organization, which they evaluate through investments in their development, impacts their decision.³⁶

Two further items, in particular, ring true for the subject of this report. First, Amy Benton illuminated that "an important component of POS [perceived organizational support] is the idea that stressors will reduce POS to the extent that they are perceived as controllable by [the] organization."³⁷ Second, Lee, et al., added that "on-boarding activities are crucial for stemming quits among new hires who are most quit prone primarily because they fail to 'learn the ropes' or find that organizational realities are worse than they had initially expected."³⁸

As this report progresses through the discussion of the main topic at hand, security clearance-based delays, echoes of violations of these retention concepts will be apparent. While this report will not examine the direct impacts on retention of the workplace access issue, anecdotal evidence over my almost twenty-four-year career suggests an effect. What is more, 2017 retention statistics for first-term airmen in the cryptologic Air Force Specialty Codes

³⁵ Cardy and Lengnick-Hall, "Will They Stay or Will They Go? Exploring a Customer-Oriented Approach to Employee Retention," 214.

³⁶ Ibid., 214-215.

³⁷ Amy D. Benton, "Understanding the diverging paths of stayers and leavers: An examination of factors predicting worker retention," *Children and Youth Services Review* 65 (2016): 71.

³⁸ Lee, et al., "Managing employee retention and turnover with 21st century ideas," 2.

(AFSC) leaves room for this speculation.³⁹ The overall average reenlistment rate for these AFSCs in FY17 was 50 percent, while the most affected group, 1N3s, reported in at 40.2 percent. For reference, the Air Force's average for first-term airmen in all AFSCs was 63.4 percent. This potential downstream unintended consequence of upstream decisions made relative to security accesses is worthy of more focused research by someone in the future.

VI. PROJECT BACKGROUND, RATIONALE, AND METHODOLOGY

a. Twenty-Fifth Air Force

The Twenty-Fifth Air Force (25 AF) is headquartered at Joint Base San Antonio— Lackland, Texas. Twenty-Fifth is the United States Air Force's intelligence, surveillance, and reconnaissance (ISR) Numbered Air Force (NAF). Its lineage dates back to 1948 with the creation of the United States Air Force Security Service. Over the intervening timeframe, 25 AF has also been known as the Electronic Security Command, Air Force Intelligence Command, Air Intelligence Agency, and Air Force Intelligence, Surveillance, and Reconnaissance Agency. Its current designation occurred in September 2014. Approximately 30,000 active duty, National Guard, reserve, and civilian personnel are assigned to the NAF's headquarters, operations center, and seven wings at 75 locations around the globe. These personnel conduct ISR operations, as well as command-and-control activities, in support of national-level peacetime and tactical-level warfighting for all combatant commanders in the Department of Defense. Additionally, they provide multisource intelligence products, applications, capabilities, resources, and expertise. The NAF also serves as the Service Cryptologic Component responsible for all Air Force matters related to the NSA.

³⁹ The cryptologic AFSCs include: 1N3: Cryptologic Language Analyst, 1N4: Fusion Analyst, 1N2: Signals Intelligence Analyst, 1A8X1: Airborne Cryptologic Language Analyst, and 1A8X2: Airborne Intelligence, Surveillance, and Reconnaissance Operator.

In order to meet our mission, airmen must access work centers and aircraft. A longstanding issue exists with airmen moving to NSA locations (or sites with NSA equipment required to conduct the mission) and being unable to get cleared to work for extended periods of time—sometimes in excess of a year.

b. Security Clearance Process

A lack of security clearance processing timeliness is not a problem confined to our organization, nor is it a recent problem. The security clearance process has long suffered from lengthy delays; however, it has gotten worse. The National Background Investigations Bureau, a subordinate agency of the Office of Personnel Management, had a backlog of more than 709,000 cases (includes all security clearance levels) in September 2017, a significant increase over the 190,000-case backlog in 2014. Only 10 percent of top secret clearances are processed within the desired timeframe, down from 26 percent in 2016 and 59 percent in 2012. The Intelligence Reform and Terrorism Prevention Act of 2004 called for 80 percent of cases to be completed in 90 days. By the end of 2017, the average processing time for a top secret clearance exceeded 500 days. For reference, in 2014, the average was 77 days. Much of the blame for recent issues has fallen on the 2014 decision to cancel the contract of the United States Investigative Service, a private firm that handled approximately 60 percent of cases, after it suffered a major data breach. This change removed 65 percent of investigators from the process.⁴⁰

⁴⁰ Joseph Marks, "Yes, The Security Clearance Backlog is Getting Worse," *NextGov*, December 13, 2017, http://www.nextgov.com/cio-briefing/2017/12/yes-security-backlog-getting-worse/144534/; Johnson, "NBIB confirms 700,000 security clearance backlog"; Lyndy Kyzer, "Security Clearance Processing Times in 2017: Slow, Stagnant, Stalled," *ClearanceJobs.com*, December 27, 2017, https://news.clearancejobs.com/2017/12/27/state-security-clearance-processing-times-2017-slow-stagnant-stalled/; Nicole Ogrysko and Scott Maucione, "How a 3-year-old decision still haunts OPM's security clearance efforts," *Federal News Radio*, November 15, 2017, https://federalnewsradio.com/opm/2017/11/how-a-3-year-old-decision-still-haunts-opms-security-clearance-efforts/; Derek B. Johnson, "GAO: Security clearance problems far from fixed," *Defense Systems*, December 12, 2017, https://defensesystems.com/articles/2017/12/14/clearance-gao-johnson.aspx/; Merton Miller, "The State of the Security Clearance Process: How We Got Here and Where We're Going," *Clearancejobs.com*, 2018, 2, 6, https://about.clearancejobs.com/employers/recruiting-resources/the-state-of-the-security-clearance-process.

The security clearance process contains a number of steps. These include:

- 1. Airmen complete the electronic SF 86 (Questionnaire for Investigation Processing) in pursuit of Top Secret Sensitive Compartmented Information (TS/SCI) access
- 2. The initial processing office submits SF 86, electronic fingerprints, AF 2583 (request for security action)
- 3. Office of Personnel Management (OPM)/National Background Investigations Bureau (NBIB) opens investigation
 - a. Consists of FBI record checks, credit reports, reference/neighbor interviews, etc.
- 4. When OPM/NBIB opens the investigation and the National Agency Check (NAC) is completed, an interim SCI clearance can be requested/submitted to the DoD Consolidated Adjudication Facility (DoD CAF)
- 5. A subject interview must be completed and submitted to the DoD CAF when requesting interim SCI clearances, which consists of 11 prescreening questions
- 6. If an interim SCI is disapproved by the DoD CAF or the OPM/NBIB investigation is already closed, then the airmen must wait until the case is favorable adjudicated by the DoD CAF
- 7. DoD CAF will/can disapprove an interim SCI requests based on answers to prescreening questions, additional information in the Airman's record, or missing information
- 8. Airmen are scheduled for indoctrination into SCI access when OPM/NBIB investigations are favorable adjudicated by the DoD CAF
- 9. Polygraphs are administered as needed
- 10. NSA Military Affairs Division (MADO) adjudicates personnel for duty at NSA locations

Of note, NSA does not accept interim security clearances and has instituted a five-year

polygraph currency requirement for cyber personnel. The previous was seven years.

c. Methodology

For the purposes of this report, tracked data consisted of open OPM/NBIB priority

personnel security investigations (PSI) and DoD CAF adjudications, MADO security holds, and counter-intelligence polygraph (ci-polygraph) requirements for individuals requiring access to

NSA sites or systems. Of note, the report only tracked priority PSIs, not ones designated as

standard. MADO holds greater than 30 days in duration represented a major interest item. Data

was collected on a weekly basis. Moreover, while the motivation of the report was speeding up

the processing of airmen at NSA sites, OAP activity examined each step of the process

previously detailed for opportunities to make improvements. Fundamentally, opportunity to

improve the situation was seized wherever it could be found. Using the institutional data collected, I utilized Air Force Instruction (AFI) 65-503 (US Air Force Cost and Planning Factors) to apply costs to define the original state of affairs and determine the impact of improvements.

I was not organizationally sponsored, so I was not constrained in the pursuit of a project by my supervision. Given my line of work, one consideration I had to be attentive to was avoiding any topic that could stray into the classified realm. This project met that criteria.

As one of my six Divisions is responsible for personnel security, this OAP topic directly fell within my current positional responsibilities, but required us to interact with MAJCOM-level, Air Force-level, and National Security Agency security professionals to enact change. Initiatives in this space are important to my immediate commander and our upstream leadership. Furthermore, this issue directly nested within three of the four newly published organizational priorities: 1) Restore Readiness, Drive, Innovation, and Anticipate Tomorrow, 2) Develop and Strengthen our Dedicated Professionals and their Families, and 3) Plan and Execute Today's Fight.⁴¹ The significant loss of manpower and productivity entailed in the situation created a burning platform for change.

VII. TWENTY-FIFTH AIR FORCE DATA

As has been previously indicated, the principle objective of this OAP was to pursue solution sets that lower the time airmen spend unable to do their job at NSA sites or on NSA systems due to security clearance-based delays. Every day saved represented a cost savings for the US Air Force. The initial numbers were not heartening. I utilized January 12, 2018 data, as that coincided with the timing of RP1, to open the reporting cycle. On that date, we tracked 985

⁴¹ Twenty-Fifth Air Force Mission, Vision, Priorities—see Appendix A.

total airmen who were unable to access NSA sites or systems due to this issue. Three components made up that number (see FIGURE 1): 1) 446 priority personnel security clearance cases required either OPM/NBIB closure or DoD CAF adjudication, 2) 90 individuals required ci-polygraphs, and 3) 449 personnel were in MADO hold status (those in excess of 30 days totaled 173). Numbers in all tracked categories fluctuated from week-to-week as cases were removed and new ones added.



FIGURE 1: Total Personnel Unable to Access NSA Sites or Systems on 12 Jan 2018

The primary personnel affected fell into the following AFSCs:

- 1N3: Cryptologic Language Analyst
- 1N4: Fusion Analyst
- 1N2: Signals Intelligence Analyst
- 1A8X1: Airborne Cryptologic Language Analyst
- 1A8X2: Airborne Intelligence, Surveillance, and Reconnaissance Operator
- 3D: Client Systems (non-intelligence AFSC)
- 14N: Intelligence Officer
- 17D: Cyberspace Operations Officer (non-intelligence AFSC)

Based on data collected from the field, it was determined that roughly 78 percent of the numbers represented intelligence AFSCs. The largest number were 1N3s at 70 percent of the total.

To present a cost perspective to the Air Force, the following data was utilized. The average cost to the Air Force per year for pay and benefits is \$91,103 for an enlisted airman and \$169,197 for an officer. These figures include the 'with permanent change of station' (PCS) rate as that is applicable to virtually all of the individuals captured in the data. Further costs include foreign language proficiency pay (FLPP) for the 1N3s and 1A8X1s, selective retention bonuses (SRB) for certain enlisted AFSCs, and flight pay for 1A8X1s and 1A8X2s. FLPP is based on both how the language is categorized and the proficiency score. A minimum 2/2(reading/listening) score is required to graduate training and to receive FLPP. At 2/2, an individual receives \$125-\$200 depending on the language. An individual can receive no more than \$500 per month for one language or \$1000 for two or more languages at the highest score (4/4). SRBs are pertinent to the 1N3, 1N4, 1A8X1 and 1A8X2 career fields currently. This is based on a multiplier, base pay, and the length of reenlistment. For example, a Staff Sergeant (SSgt/E-5) in the 1N3 or 1N4 career fields reenlisting at the six-year point receives \$23,402 for a four your enlistment (\$2925.30 [base pay only per month] x 2 [career field multiplier] x 4 [number of years on reenlistment); whereas, a 1A8X1 and a 1A8X2 receive \$70,207 and \$46,805 respectively for the same timeframe. A maximum of \$90,000 is allowed. Flight pay for 1A8X1s and 1A8X2s is \$600 per month.⁴²

⁴² Secretary of the Air Force, US Air Force Cost and Planning Factors, AFI 65-503 (Washington, D.C.: Department of the Air Force, February 4, 1994, incorporating Change1, February 23, 2017); Secretary of the Air Force, Air Force Foreign Language Proficiency Bonus Program, AFI 36-4002 (Washington, D.C.: Department of the Air Force, June 16, 2015); Robins Area Audit Office, National Security Agency Access 480th Intelligence, Surveillance, and Reconnaissance Group, Fort Gordon, GA, F2017-0024-RES000 (Robins AFB, GA: Air Force Audit Agency, August 10, 2017); "Enlisted Air Force Ranks," Military.com, https://www.military.com/air-force/enlisted-ranks.html/; Stephen Losey, "Air Force cuts re-up bonuses for dozens of jobs — but you still have a chance to cash in," Air Force Times, February 6, 2018, https://www.airforcetimes.com/news/your-air-force/2018/02/06/air-force-cuts-re-up-bonuses-for-dozens-of-jobs-but-you-still-have-a-chance-to-cash-in/ and https://partner-mco-

Putting that all together yielded the following rough indication of annual costs. For the purposes of example, an enlisted SSgt in the 1N3 career field at the six-year mark of a career, who reenlisted for four years and PCSed to an NSA site, was utilized. This was a good representative of the population in question. Officers represented a small percentage of the population and were not factored in specifically. Base cost for pay and benefits were \$91,103. To this was added one year of their SRB at \$5,851. Since a 2/2 designated the minimum score required to earn FLPP that was used to calculate an annual figure of \$2,400 since most of our languages fall in the upper category. Together that yielded \$99,354 per 1N3 per year. In the same vein, a 1N4 cost \$96,954, a 1N2 or 3D \$91,103, a 1A8X2 \$98,303, and a 1A8X1 \$106,554.



FIGURE 2: Total Personnel Cost on 12 Jan 2018

archive.s3.amazonaws.com/client_files/1517949775.pdf/; Stephen Lousy, "Air Force ups monthly flight pay for officers, enlisted air crew," *Air Force Times*, August 25, 2017, https://www.airforcetimes.com/news/your-airforce/2017/08/25/air-force-ups-monthly-flight-pay-for-officers-enlisted-air-crew/

Applying those numbers to the 12 January 2018 figure of 985 personnel unable to gain the access needed to do their jobs produced an annual cost estimate of \$95,984,348.⁴³ (see FIGURE 2) OPM/NBIB closures and DoD CAF adjudication constituted \$43,462,786 of this figure with 446 personnel in that status, while ci-polygraphs represented \$8,768,965 due to 90 individuals on hold for that item.⁴⁴ For the third component, MADO holds, the estimate was \$43,752,597.⁴⁵ This yielded an average of \$97,448 per person per year. No allocation for initial training costs was factored in this total, which ranged from a low of \$51,286 for a 3D to a high of \$153,664 for a 1A8X1. For reference, an Air Force Audit Agency report placed the average cost at \$96,026 per person or \$263 per person per day.⁴⁶

These were only the dollar-based numerical costs. Missed in the numbers were the impacts on overall unit mission readiness, as well as reduced training and career development opportunities for those who continued to stay on mission due to lack of a backfill. Intelligence exploitation suffered as some items took longer than desired to process or simply were not processed. For those in leadership and supervisory positions, turnover frequently could not occur since one party was still 'outside-the-wire' as the incumbent departed for a new duty

⁴³ Assuming average total figure of 985 across the year, 78 percent intel AFSCs (70 percent 1N3s & 8 percent other intel AFSCs [1N4/1N2/1A8X1/1A8X2]) and 22 percent non-intel AFSCs. OPM/NBIB & DoD CAF: \$43,462,786 + ci-polygraph: \$8,768,965 + MADO holds: \$43,752,597 = \$95,984,348. No attempts to include officer data, which would be higher, were made due to the low numbers involved.

⁴⁴ OPM/NBIB & DoD CAF adjudication--1N3: 1): 312 [70 percent of 446] x \$99,354 [annual cost per person]=\$30,998,448; 1N4/1N2/1A8X1/1A8X2: 36 [remaining 8 percent of intel AFSCs] x \$98,229 [avg of the cost per year of those four AFSCs]=\$3,536,244; non-intel AFSCs: 98 [22 percent of total] x \$91,103 [enlisted average cost per year for pay and benefits with PCS]=\$8,928,094—total is \$43,462,786; CI-Polygraph—1N3 (63 x \$99,354)=\$6,259,302; 1N4/1N2/1A8X1/1A8X2 (7 x \$98,229)=\$687,603; non-intel AFSCs (20 x \$91,103)=\$1,822,060.

⁴⁵ MADO holds—1N3 (314 x \$99,354) = \$31,197,156; 1N4/1N2/1A8X1/1A8X2 (36 x \$98,229) = \$3,536,244; nonintel AFSCs (99 x \$91,103) = \$9,019,197. Total = \$43,752,597 (449 people).

⁴⁶ For additional training cost reference: 1N3 = \$111,400; 1N4 = \$56,506; 1N2 = \$60,102; 14N = \$70,109; 17D = \$64,456. Secretary of the Air Force, *US Air Force Cost and Planning Factors*, AFI 65-503, A18-1A, A18-1B; Air Force Audit Agency, "National Security Agency Access 480th Intelligence, Surveillance, and Reconnaissance Group Fort Gordon GA," Installation Report of Audit F2017-0024-RES000, Robins Area Audit Office (10 August 2017), Tab A page 2.

location. Besides, airmen in outside-the-wire status suffered a morale impact. Throughout technical training these airmen were told how great their jobs were going to be and how important they were only to arrive and be unable to perform those functions for an extended period. This was not just applicable to new technical school graduates. It also affected experienced personnel who transferred from one NSA site to another. While statistically relevant research data does not yet exist, as was previously stated, anecdotal indications point toward an impact on retention.

VIII. STEPS TAKEN

We tracked the data relevant to the issue and published it weekly via e-mail to an audience that included our NAF commander and our MAJCOM (Air Combat Command—ACC) Director of Intelligence, as well as some of their senior staff and our wing commanders. This kept the status of the issue fresh on all parties' minds and the lines of communication open. Our senior leadership was very engaged and quite concerned about results.

a. Priority Status

An important initial action my security office took was obtaining permission at the Secretary of the Air Force (SAF) and Headquarters Air Force (HAF) levels to designate 25 AF cases with a priority label. Code 'A' Priority status is designed to yield a 137-day expedited processing timeline for the OPM/NBIB investigation step in the process. The current average is 154 days from the time we designate a case so that goal is not being met. For comparison, OPM/NBIB averages 415 days for standard cases. The cost to the Air Force for the upgraded status is \$600 per case, a small expenditure compared to the personnel costs I calculated. We receive notifications of priority case requirements from our field units and forward those to OPM/NBIB. This process is extremely helpful in expediting cases. A number of steps were pursued to work in concert with and support this action.

b. SAF/AAZ Working Groups

After visiting our organization and being briefed on the current state of the issue, the Director, Security, Special Program Oversight, and Information Protection in the Office of the Secretary of the Air Force (SAF/AAZ) championed the organization of two security working groups that my security division participated in. The function of these meetings was to locate areas where the Air Force could make improvements in its procedures to gain some efficiencies in the clearance process. A number of action steps resulted from this effort.

First, on the officer front, Reserve Officer Training Corps (ROTC) cadets will now submit their security clearance paperwork in the fall of their junior year rather than waiting until after graduation, which had been the norm. This was also extended to include Air Force Academy (USAFA) cadets. Waiting until after graduation historically resulted in training and assignment delays. The security clearance paperwork for individuals designated as intelligence officers will also be placed in priority status. Headquarters Air Force Personnel Directorate (A1) is lead for monitoring ROTC detachment and USAFA compliance with this action.

Second, the Air Force Personnel Center (AFPC) now only assigns intelligence or cyber officers exiting technical training with fully adjudicated clearances to NSA locations. A "no interim clearance" designator is placed in the qualifications section to facilitate this. The change will catch Lieutenants and cross-trainees. Individuals with interims are sent to other assignment options. This is in keeping with NSA's prohibition on allowing individuals with interim clearances to access their sites or systems. Third, a test program was initiated to designate 1N2s (Signals Intelligence Analyst) and 1N4s (Fusion Analyst) as priority clearance cases at the Military Entrance Processing Station (MEPS). This is an early point in the military accessions process after discussions with a recruiter and prior to basic military training (BMT) at Joint Base San Antonio—Lackland, Texas. After starting the program with the 1N2s/1N4s, a decision was made to expand prioritization to all intelligence related AFSCs at MEPS.

Initial indications were not good. Personnel in these AFSCs continued to arrive at their duty locations without fully adjudicated clearances. Poor quality control of SF-86 (national security questionnaire) packages by personnel at MEPS allowed applications with errors to enter the system, slowing down the process. On the surface, I and an Air Education and Training Command Directorate of Intelligence, Surveillance, and Reconnaissance and Analysis, Assessments, and Lessons Learned (AETC A2/9) representative agreed that quality control of the SF-86 was likely not viewed as a priority, moving individuals through the system was. This is something AETC A2/9 took for action to engage their Air Force Recruiting Service (AFRS) counterparts about. AFRS is a subordinate organization of AETC.

Supporting this, a one-week data sample of personnel at BMT in October showed that 31 percent of trainees' paperwork had not been completed during the pre-BMT phase. However, on a more positive note, 22 percent already had fully adjudicated clearances half way through BMT. Obviously, more work remains to be done on this front.

Moving to another AETC site, trainees with follow-on assignments at NSA locations or who were not granted interim clearance status are being prioritized at the 17th Training Group (17 TRG) at Goodfellow Air Force Base in San Angelo, Texas. The 17 TRG processes about 3,300 intelligence airmen per year. Presently, approximately 2,400 of these need to be actioned at Goodfellow AFB; however, if the above MEPS initiatives improve that should fall toward zero for enlisted airmen. Moreover, a video teleconference including SAF/AAZ, OPM/NBIB, and my organization led to a decision by OPM/NBIB to explore a surge action for the cases currently at the 17 TRG in an attempt to close all cases prior to training conclusion to get those into the DoD CAF process.

Another initiative out of the working groups centered on a desire to move security paperwork review/screening from week four or five of BMT to week one. This was initially agreed to by AETC representatives. We discovered later, however, that it did not occur due to a reticence to interfere with the established BMT processes. Upon discovering this, we engaged with our AETC A2/9 colleagues and started other actions that will be further discussed later.

c. Navy Recruiting Training Command

We decided that a trip to the Navy's Recruitment Training Command (RTC) at Great Lakes, Illinois was warranted. RTC is the Navy's equivalent to Air Force BMT. The purpose of the trip was to review Navy clearance paperwork screening techniques to determine if there were any practices potentially applicable to the Air Force since the Navy has a high clearance acceptance rate with NSA.

One item that will not translate is that sailors, who are cryptologic technicians, intelligence specialists, and information technicians, spend their entire careers inside of 10th Fleet/Fleet Cyber Command, whereas Air Force airmen move between MAJCOMs. This gives the Naval Service Cryptologic component the ability to track sailors throughout their careers and identify any potential security concerns. Representatives interview sailors in these career fields during the first week of training to vet them, giving the Navy roughly a month head start on the Air Force process. Each sailor has a one-on-one interview, which is recorded. Furthermore, they are required to complete an 18-page security questionnaire to determine if they will continue to be sponsored for the career field they are slated for. If a determination is made that a sailor will be a difficult case, they are reclassified. Credit reports are also reviewed by screeners. For example, \$1,000 in delinquent debt will disqualify an individual, as will foreign national associations from countries designated as high threat. After this, all remaining cases are ranked with only 'clean cases' slated for NSA sites/missions.

Eight (RTC) interviewers cover 3,700 sailors per year. For comparison, the Air Force attempted to screen 5,200 airmen per year with four screeners, leading to a much less in-depth review. With this practice sailors have at least an interim clearance prior to completing RTC. Anyone disapproved for an interim is disqualified and reclassified into another career field. Navy processes result in a 99 percent acceptance rate with NSA—up from 80-87 percent prior to the institution of these actions. It is estimated that this reduces the number of sailors outside-thewire at NSA sites by more than 400 personnel.

d. AETC A2/9 Partnership

Out of this visit, a number of action items occurred in our partnership with AETC A2/9 to approach the BMT process. A2/9 provided a list of all AFSCs filling out the SF-86 at BMT so we could review its comprehensiveness. After review, we provided them a list of our affected AFSCs. Additionally, we pursued a list from MADO of items causing long-term holds/disqualifications from NSA facilities, as well as the 356-item questionnaire used by NSA, for potential incorporation into BMT screening and communication to recruiters.

AETC A2/9 also hosted a continuous process improvement event led by its Lean Six Sigma black belts in October. Post-event efforts were launched by multiple actors to: 1) develop a training guide for recruiters to better understand the paperwork involved and its importance, 2) establish clear standards for foreign contacts, 3) standardize all clearance screening forms, 4) submit interim clearance requests earlier at the Defense Language Institute, and 5) develop a more manpower efficient method for the recruiting service to submit priority investigations to OPM/NBIB. Another major item being investigated relates to paperwork collection. Presently, OPM/NBIB investigators are required to personally collect all documentation like high school diplomas, college transcripts, birth certificates, et cetera, when the Air Force already collects these. If OPM/NBIB proves able to accept the Air Force procured documents once law and policy are reviewed, it is estimated that up to half of the NBIB timeline could be eliminated. Other efforts are being worked but the above list provides a representative look.

In order to better match the manpower utilized by the Navy at RTC, my organization successfully pursued the funds to acquire four contractors to double the pre-screening staff at BMT. We received approval in August and the contractors began work in October. The total annual cost is \$311K. Improved screening should reduce SF-86 errors and omissions, which slow down the overall process, as well as lead to more effective disqualification procedures. An additional benefit is faster paperwork submissions for those who are reclassified into one of our AFSCs during BMT. Any improvements that eventually result will benefit the Air Force as a whole and not just our 25 AF units given all the AFSCs affected. The savings estimate for every day the contract screeners eliminate from the current timeline average is \$263 per person per day, a total of roughly \$216K per day at the current outstanding population of 822.

To put the importance of these AETC-related upstream processes into perspective, the average Air Force accession spends 120 days in the delayed entry program phase prior to starting BMT. Some spend as much as a year. If this valuable time is maximized by having clearance paperwork submitted early and accurately, more and more trainees should depart BMT with a fully adjudicated clearance in place. This would dramatically lower the number of personnel who cannot access NSA sites. Our contract BMT screeners will also enhance our ability to track data on the effectiveness of the upstream changes previously described.

e. MADO

An important event was the arrival of a new NSA MADO chief who was an excellent partner in pursuing positive change. This is key given that we have the ability to request, suggest, and propose but not to dictate actions in this relationship.

NSA now accepts site-to-site transfers. Formerly, an airman leaving one NSA site to PCS to another had to go through the entire MADO vetting process again. Previously approved non-reported foreign national association (NFNA) forms now also follow an airman between sites as long as no changes are required. The MADO goal is to process 'clean case' reviews within three business days of arrival. Clean cases include those with a fully adjudicated clearance, no unreported foreign national contacts, and an up-to-date ci-polygraph. Furthermore, foreign contact information can now be submitted to MADO prior to PCSing in order to help expedite processing.

In another change, security information packages (SIP) for PCSing airmen are being accepted up to six months out. MADO reps predicted that nearly 95 percent of those will be preapproved by the airman's arrival if submitted at least 120 days prior. To enable this, units need to monitor their gains rosters and submit the names as early as possible.

The site-to-site transfer process did not start smoothly. The core problem was a nonstandardized approach that resulted in requests being missed in e-mail queues. This was addressed by standardizing the subject lines of e-mail traffic. After that course correction, there was evidence that the change is actually achieving results. However, the process remains overly manual.

To address that, we pursued a web-based information technology solution called the Clearance Workforce and Verification System (CWVS—pronounced sea waves). A \$1.04M unfunded request was submitted into the headquarters FY18 unfunded requirements drill and we received notification in June that this request received funding approval from the 25 AF commander. Once implemented, it will work as follows: 1) an airman receives assignment notification for an NSA site, 2) they are directed to a URL to complete their SIP and foreign contact additional access sheet, 3) the security screening process starts, and 4) the gaining security office is notified automatically and can track paperwork as soon as the airman enters it.

CWVS will benefit all services, not just the Air Force. MADO estimates that it will save \$7.2M per year in service personnel costs on the low end. My estimate is that at least \$1.4M per year in cost savings will benefit the Air Force. Work began to create the tool in September. The timeline for implementation is one year, so the results that accrue from it will not be apparent by the end of this OAP cycle.

Another issue we tackled related to personnel joining the Air National Guard at NSA sites. Individuals, who cleared the MADO vetting process and were working at a site as civilian employees, contractors, or as active duty airmen, were being required to repeat MADO vetting to gain access while in National Guard status. This was true even if the individual remained an NSA civilian employee during the week and performed as a National Guard member on the weekends. Essentially, they were being treated as two separate people for processing purposes. My security office engaged MADO leadership on this topic and it was quickly changed, removing those people from the backlog.

f. CI-Polygraphs

Turning to the ci-polygraph front, the Air Force Office of Special Investigations (AFOSI) agreed to stand up a two-person detachment at Offutt Air Force Base, Nebraska to address Air Force ci-polygraph requirements at that location. This primarily addresses our personnel at the 55th Wing. Two years of data demonstrated that the volume of demand warranted the stand up of this unit.

Additionally, I recommended that a personnel processing code (PPC) be added to the billets of all airmen PCSing to one of our overseas groups. This PPC code will require that an airman have a current ci-polygraph prior to being issued orders for the move. This is key in overseas locations given that all airmen arrive with a 'date estimated return from overseas' (DEROS). The DEROS establishes when a PCS from an overseas location will happen. Thus, outside-the-wire time overseas is even more costly for the organization in mission terms than stateside. Higher headquarters approved the code's addition.

Finally, the Director of NSA mandated that all individuals working in the computer network operations line of effort now have a ci-polygraph within the last five years as opposed to the previous standard of seven years, affecting roughly 600 of our airmen and placing greater demand on the system. My security team worked with AFOSI to draft a plan to rapidly handle 55 individuals who were immediately affected. As part of that process, AFOSI representatives indicated that the organization could handle the increased demand. For reference, these 600 airmen will now be due every five years, while our remaining 3,400 will continue to be on the seven-year cycle.

IX. RESULTS

a. Overall

Visible results of our actions taken to date were evident. Conversely, given the nature of some changes, as well as the fact that others will not be in place by the end of the OAP reporting cycle, the results of many will not occur during this project period. The largest issue remains the OPM/NBIB processing timeline. Be that as it may, we pursued any opportunity at any step in the process, to include those either upstream or downstream from OPM/NBIB, in an attempt to achieve effects. Given the scope of the issue, every day saved was important.





During the reporting period, the total personnel unable to access NSA sites or systems in our three categories (1—OPM/NBIB & DoD CAF security investigations, 2—ci-polygraphs, and 3—MADO holds) dropped from 985 on 12 January 2018 to 822 on 26 October—a 17 percent decrease. (see FIGURE 3) Commensurately, total personnel costs dropped from \$95,984,348 to \$80,136,624, a net improvement of \$15,847,724. (see FIGURE 4)



FIGURE 4: Total Personnel Costs of the Process b. OPM/NBIB & DoD CAF

Digging deeper into these numbers, one sees that the total number of 25 AF security investigations requiring OPM/NBIB closure and DoD CAF adjudication increased from 446 to 550 personnel—a 23 percent increase. Consequently, the personnel costs contained in this category rose from \$43,462,786 to \$53,631,963—up \$10,169,177. (see FIGURES 5 & 6)

Five factors impacted the direction of the data throughout the OAP cycle. First, we noticed a negative trend in DoD CAF timeliness. On 12 January, the average adjudication time was 14 days, a figure that rose to 99 days by the end of June. It rested at 76 days at the end of October. Second, OPM/NBIB processing of priority cases also slowed. When we began monitoring in March, cases were closing in an average of 100 days. That climbed to 154 days by October.

Third, average new case additions outpaced those closed and adjudicated by 21 per month throughout the OAP period. In total 226 more were added than processed. Given that, a rolling average of 672 cases pending rather than the 550 we finished with was likely if upstream actions were not already having effects. If accurate, those upstream changes potentially resulted in a savings of about \$11.9M.



FIGURE 5: 25 AF Priority Security Investigations Requiring Closure & DoD CAF Adjudication



FIGURE 6: Personnel Costs of OPM/NBIB Closure & DoD CAF Adjudication

Fourth, these numbers were affected by a 100-person spike in July due to inaccurate previous reporting by two subordinate organizations. These were not new arrivals but individuals the units did not report for priority status on their arrival. This created a large bump in the backlog. Due to the difficulty of determining when all of those personnel arrived, I did not adjust the previous months' totals even though the starting points for each month in this OAP were likely higher. More serious than the data tracking was the time lost in getting personnel access to accomplish their jobs.

Fifth, a technical complication for DoD CAF processing arose during the year. DoD replaced the Joint Personnel Adjudication System (JPAS) with the Defense Information System for Security (DISS). NSA continues to use JPAS only and we discovered that the two systems were not communicating, necessitating the entry of DoD CAF adjudications into both systems on an individual by individual basis. Not all adjudicators were entering data into both. We became aware of this in October as we dug into the rise in the DoD CAF backlog.

My security shop now manually reviews our entire list each week to ensure favorable adjudications are accounted for. Additionally, MADO is attempting to get DISS accounts for its personnel. Another step we are pursuing with our MAJCOM is placing a civilian employee or contractor permanently in DoD CAF to serve as our liaison. This individual could work on technical issues like the above as they arise, as well as attempt to keep our cases processing in a timely manner. This concept remains in the discussion stage.

c. CI-Polygraph

CI-polygraph numbers changed little over the reporting cycle. In January, 90 personnel were waiting on ci-polygraphs. This figure was 99 in October. (see FIGURE 7) The costing data moved from \$8,768,965 to \$9,645,862, an increase of \$876,897. (see FIGURE 8) This area was also affected by a data reporting issue. One subordinate organization did not account for 44 personnel requiring ci-polygraphs, a situation that was uncovered in September and that accounts for the large increase in requirements seen in Figure 7. Essentially, this wiped out the gains

made in this category for the year. As with the OPM/NBIB and DoD CAF data, no attempt to recalculate the previous months' totals was attempted.



FIGURE 7: Personnel Requiring CI-Polygraphs



FIGURE 8: CI-Polygraph Personnel Costs

d. MADO Holds

The area with the largest improvement was MADO holds. Resting at 449 in January, the number fell across the reporting period to 173. This yielded a 61 percent improvement. Moreover, the personnel costs tied up in this grouping, which totaled \$43,752,597 in January, fell to \$16,858,799, a savings of \$26,893,798 to the Air Force. (see FIGURE 9) Noteworthy is that holds greater than 30 days fell from 173 airmen in this group at the beginning of the project to 93 at the conclusion—down by 46 percent. (see FIGURE 10) While every hold matters, these longer-term ones are especially troubling to our wings.



FIGURE 9: Total MADO Holds & Associated Personnel Costs

While there is no doubt that the direct MADO-related actions heavily influenced the improvements in this number, as the last step in the process, I maintain that its improvement was also aided by initiatives taken to speed up and/or improve the steps upstream, something that will play an even larger role as time passes. On note, however, is that MADO lost four case screeners due to reassignment. This contributed to the total number of MADO holds leveling off

and in the rise of the number of cases greater than 30 days. This is something we will need to monitor.



FIGURE 10: MADO Security Holds Greater Than 30 Days

X. NEXT STEPS/OTHER THOUGHTS

Over the period of this OAP, the overall OPM/NBIB backlog continued to increase, growing from 709,000 cases at the conclusion of 2017 to 750,000 in July 2018. The Air Force piece of that was 79,000. With about 75 percent of the total cases affecting DoD, Congress included a provision in the National Defense Authorization Act for Fiscal Year 2018 to move DoD's cases away from OPM/NBIB to its own purview. The President took this one step further by proposing a move of the entire process from OPM to DoD. DoD plans to carry out the guidance over a phased three-year plan. At the conclusion of that plan, Defense Security Service will own the process in its entirety, including NBIB's personnel. The Director of National Intelligence (ODNI) will remain the executive agent for security clearance policy, requiring DoD and ODNI to reach agreement on any policy changes DoD wants to pursue.⁴⁷

⁴⁷ United States, *National Defense Authorization Act for Fiscal Year 2018*, Public Law 115-91, 115th Congress, December 12, 2017, 244-250, https://www.congress.gov/115/plaws/publ91/PLAW-115publ91.pdf; Lindy Kyzer, "Security Clearance Processing Times Continue to Creep Upward," *Clearancejobs.com*, July 18, 2018, https://news.clearancejobs.com/2018/07/18/security-clearance-processing-times-continue-to-creep-upward/;

One such change is a move to a 'Continuous Evaluation' system (CE). Once CE is implemented only those records of personnel that carry certain flags will go through the full reinvestigation process. All others will process through the CE system, which monitors databases from government and commercial sources. If a flag is noted, the individual's file will be evaluated against a set of guidelines to determine if any further processing will occur. Ultimately, CE is designed to reduce investigator's field work by 90 percent.⁴⁸

Debate exists on whether moving clearance processing to DoD or enacting CE are the correct steps to address the process. One argument is that the transition from OPM to DoD will take more time than expected and that it will not be a 'clean' change. Essentially, for these commentators, the clearance process is moving from one large bureaucracy to another. Another is that the pure emphasis on speed is, in the end, going to put security in jeopardy. The CE process is, some argue, going to miss a large number of criminal and other negative activity when fully implemented. Irrespective of these discussions, in the currently foreseen best-case scenario, getting the backlog to a manageable level is not expected before March 2021.⁴⁹

Returning specifically to the issue at hand, even with all the improvements we made this year, the current average case still takes around 282 days from application start to a person being

Scott Maucione, "Air Force working with NBIB, OPM to speed up clearance process," *Federal News Network*, April 19, 2018, https://federalnewsnetwork.com/air-force/2018/04/air-force-working-with-nbib-and-opm-to-speed-security-clearance-process/; Erich Wagner, "Moving Security Clearance Processing Out of OPM Won't Fix the Backlog," *Government Executive*, August 7, 2018, https://www.govexec.com/management/2018/08/moving-security-clearance-processing-out-opm-wont-fix-backlog/150346/; Lyndy Kyzer, "5 Things We Know About the Security Clearance Process—And What We Don't," *Clearancejobs.com*, July 2, 2018,

https://news.clearancejobs.com/2018/07/02/5-things-we-know-about-the-security-clearance-process-and-whatwe-dont/; Lyndy Kyzer, "White House Reorganization Moves Security Clearance Background Investigations Under DoD," *Clearancejobs.com*, June 21, 2018, https://news.clearancejobs.com/2018/06/21/white-housereorganization-moves-security-clearance-background-investigations-under-dod/.

⁴⁸ Of note, CE will apply only to periodic reinvestigations, not to initial investigations, the topic covered in this OAP. Kyzer, "5 Things We Know About the Security Clearance Process—And What We Don't".

⁴⁹ Wagner, "Moving Security Clearance Processing Out of OPM Won't Fix the Backlog"; Maucione, "Air Force working with NBIB, OPM to speed up clearance process"; Kyzer, "Security Clearance Processing Times Continue to Creep Upward"; Kyzer, "5 Things We Know About the Security Clearance Process—And What We Don't".

able to work at an NSA site or on one of its systems. Although this is far better than the average for just the OPM/NBIB process under the 'normal' scenario, much improvement continues to be needed.

One final note is that there are two actions that NSA could take to almost eliminate the 822 current cases and prevent a future build up. First, allow airmen to work with a signed 'consent to polygraph' form while they await an appointment. Second, allow airmen to work after an interim security clearance has been granted. This would put them in line with the other 'three letter' combat support agencies like the National Geospatial-Intelligence Agency (NGA) and the Defense Intelligence Agency (DIA). These are actions we will continue to pursue.

XI. CONCLUSION

At the beginning of this OAP, 985 airmen were unable to perform their mission due to security clearance-based delays at NSA sites or at locations with its systems. This is a significant problem, impacting our operations and, I believe, our retention of talented personnel. It is also one that impacts not just 25 AF but the entire U.S. government. In all likelihood, many of the process steps that cause the problems are the unintended consequences of well-intentioned actions taken in the aftermath of intelligence leaks or data breaches.

Over the course of the project, a number of steps were taken to address this roughly \$95M matter. For example, applications for intelligence-related personnel are now given a priority label at MEPS and four contract screeners were added to the BMT workforce to help with the OPM/NBIB & DoD CAF backlogs. Personnel moving to the Republic of Korea now have a PPC code requiring a current ci-polygraph in order to get movement orders. MADO agreed to authorize site-to-site transfers and to accept security information packages up to six months prior to arrival. Additionally, a CWVS contract was awarded and this web-based solution for paperwork transfer should be in place by the last quarter of 2019. Many other initiatives are in progress but these serve as a representative sample. Moreover, partnerships, like those with AETC A2/9 and the MADO Chief, were key to improving the situation over the project period.

Figure 11 demonstrates the impact seen to date. Overall, a \$15,847,724 (17 percent) improvement occurred. By the project's conclusion, the number of airmen unable to access their work centers dropped from 985 to 822. MADO holds improved by 61 percent, dropping from 449 personnel to 173. Those cases greater than 30 days fell by 46 percent, a major improvement. Although the OPM/NBIB & DoD CAF numbers indicated a net negative for this period, as I argue in the main text, I believe that without the actions taken that figure could be as much as 122 cases, or \$11.9M, higher. CI-polygraph numbers ended up essentially treading water for the OAP period. A data reporting issue by one organization wiped out what was going to be an approximately \$3M gain in that category. As a reminder, the impact of all actions taken as a result of this OAP will not be seen until 2019 and beyond.

	CHANGE IN PERSONNEL COST SUMMARY		
	January	October	Net
OPM/NBIB & DoD CAF	\$ 43,462,786	\$ 53,631,963	\$ (10,169,177)
CI-Polygraph	\$ 8,768,965	\$ 9,645,862	\$ (876,897)
MADO Holds	\$ 43,752,597	\$ 16,858,799	\$ 26,893,798
NET SAVINGS			\$ 15,847,724

FIGURE 11: Change in Personnel Cost Summary

Besides dealing with a problem as ingrained as this one is to start with, one hindrance to progress was some data tracking issues by certain of our field units that resulted in the late addition of about 144 people and, more importantly, in time lost processing the cases. Another item that will continue to require attention is educating personnel in recruiting and at MEPS locations on the importance of timely and accurate processing of security clearance applications. Technical issues such as the information sharing problem that arose between JPAS and DISS also require continued focus. That item further serves as a warning to closely monitor for similar issues when CWVS goes online.

After all the actions taken to date, the areas that continue to require the most attention are OPM/NBIB's and DoD CAF's processes. Essentially, it could be argued that the nature of the system itself remains flawed. This OAP project was not designed to overhaul the structure of the security clearance process. It pursued what are in essence "operational improvements" to gain the most from the current system. What is really needed from future researchers is an approach more akin to the "operational innovation" described by Michael Hammer where an entirely new way of doing business alters the security clearance process to achieve breakthrough change.⁵⁰

⁵⁰ Michael Hammer, "Deep Change: How Operational Innovation Can Transform Your Company," *Harvard Business Review OnPoint*, April 2014 (R0404E), 1-2.

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XIII. APPENDIX A



XIV. ABSTRACT

NSA Site Access: Twenty-Fifth Air Force's \$95M+ Problem

This Organizational Action Project (OAP) examined and addressed security clearance-based delays for Twenty-Fifth Air Force (25 AF) airmen at National Security Agency (NSA) sites and other locations with that organization's mission systems. The approximate personnel cost associated with this issue was \$95.98M at the beginning of the OAP cycle. Across the enterprise, 985 airmen were unable to perform their missions due to this problem. Given its significance, the OAP focused on discovering initiatives that could be pursued at any stage of the security clearance granting process.

Data relevant to the issue was collected from our field units and published weekly to senior leaders in the organization. Tracked data consisted of open National Background Investigation Bureau priority personnel security investigations and DoD Consolidated Adjudication Facility adjudications, NSA Military Affairs Division (MADO) security holds, and counter-intelligence polygraph requirements. Using this institutional data, Air Force Instruction (AFI) 65-503 (US Air Force Cost and Planning Factors) was utilized to apply costs to define the original state of affairs and determine the impact of improvements.

A representative, though not all-inclusive, list of actions taken includes: 1) Applications for intelligencerelated personnel are now given a priority label at Military Entrance Processing Stations, 2) four contract clearance screeners were added to the Basic Military Training workforce, 3) a personnel processing code requiring a current ci-polygraph in order to get movement orders was added to certain assignments, 4) MADO authorized site-to-site transfers, 5) MADO agreed to accept security information packages six months prior to arrival, and 6) a Clearance Workforce Verification System contract was awarded to create a web-based solution to handle transfer paperwork. By the conclusion of the OAP reporting cycle, a \$15.8M (17 percent) improvement occurred. The impact of all actions taken will not be seen until 2019 and beyond.

The findings and results of this project highlight that addressing a significant and potentially daunting multiorganizational problem like security clearance-based delays is not insurmountable. This OAP pursued operational improvements to gain the most from the current system. The project was not designed to overhaul the structure of the security clearance process. This author posits that what is really needed from future researchers is an approach more akin to the operational innovation described by Michael Hammer where an entirely new way of doing business alters the security clearance process to achieve breakthrough change.