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IN
DEFENSE OF THE NATIONAL AVIATION INFRASTRUCTURE

by

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BIOGRAPHY

Colonel Michael Hafer graduated from the United States Air Force Academy in 1987 and is serving on active duty in the Air Force. He currently attends the Air War College at Maxwell Air Force Base. As a career mobility pilot his operational experience includes over 4,300 flight hours logged in C-130E, KC-10A, C-21A, C-20B and C-37A aircraft. He flew combat and combat support missions during Operations JUST CAUSE, DESERT STORM, PROVIDE COMFORT, ALLIED FORCE and ENDURING FREEDOM. His staff tours include assignments to the Tanker/Airlift Control Center as a Special Assignment Airlift Mission Director; Air Mobility Command as a Command and Control Systems Implementation team lead; United States Transportation Command working in the Deployment Division; and Headquarters, United States Air Force as a Current Operations staff officer, developing force sourcing solutions to meet Combatant Commanders requirements. He has commanded an operational flying squadron and a deployed expeditionary operations group.

INTRODUCTION

“Please remove your shoes and place them in the bin. All laptops must be removed from their cases. Place all coats, jackets and sweaters in the bins along with any metal objects including cell phones, keys, jewelry and watches. Be sure to hold onto your boarding pass and a government issued ID.” We have heard it dozens of times and can probably all repeat it by heart, but does it really make us safer? Just one look at the seven-mile stare of the Transportation Security Officer (TSO) behind the x-ray machine display and one wonders how these individuals keep their sanity after watching hundreds of images flash before their eyes every hour. Meanwhile, small squads of TSOs do nothing more than constantly shuffle empty bins from one end of the security checkpoint to the other. The only person who appears dutifully focused stands just on the opposite side of the magnetometer as the last hurdle before entering into America’s airport transportation network. These officers are the front-line defense against terrorism and crime at our nation’s airports. All the while, air travelers inadvertently attempt to subvert their process by demanding faster processing lines and less intrusive security measures. The TSA faces two dialectically opposing challenges; speed up the security screening process, but provide a safer, more comprehensive search.

The TSA now claims that 83% of passengers only wait 10 minutes or less to enter the security checkpoint area.¹ Once cleared to pass into the checkpoint screening area most passengers exit in less than three minutes. This means TSOs have less than 15 minutes to identify and stop a criminal or terrorist from boarding an aircraft within the United States. The TSA boasts fielding state of the art x-ray machines, body imaging technology and explosive

¹ Mr. Edmund “Kip” Hawley, *Statement of Kip Hawley before the US House of Representatives Transportation and Infrastructure Subcommittee on Aviation*, (Washington, DC; 24 July 08), http://www.tsa.gov/press/speeches/072408_hawley_aviation_security.shtm.

trace detection systems which cost the US taxpayer hundreds of millions of dollars. Entrusted with this technology are the 43,000 security officers of the TSA who screen 2 million passengers per day². And yet we continue to read reports of how individuals continually smuggle guns, knives and explosives aboard aircraft and thereby defeat the agents with their high-tech detection devices. Prima facia evidence suggests a hole exists within our airport security process. That hole may be caused by an over-reliance on technology and a blatant disregard of our most powerful weapon; the agent who stands the watch. Ultimately, our security is called into question and solutions must be found. A gap in our homeland defense could have devastating effects on all of us.

This paper will provide an analysis of the capability of the Transportation Security Administration to provide security and protection to the United States airline transportation system--part of our critical infrastructure. We will first take a reflective look at the origin and development of the Transportation Security Agency and its strategy for executing its mission. That will be followed by examining some of the major criticisms levied against the TSA and the areas where it has failed. This paper will then conclude with a discussion of the challenges for the TSA in the future and what can be done to increase the effectiveness of the organization.

² Transportation Security Administration, *Passenger Screening*, http://www.tsa.gov/what_we_do/screening/security_checkpoints.shtm.

TODAY'S SECURITY ENVIRONMENT

The Ever-present Threat

To begin the discussion about air transportation security one must ask a fundamental question: Why do terrorists routinely choose to attack airliners? Bruce Schneier, a security technologist and author, provided a succinct analysis during an interview discussion with TSA Administrator Edmund “Kip” Hawley when he posited:

“...airplanes make particularly attractive targets for several reasons. One, they’re considered national symbols. Two, they’re a common and important travel vehicle, and are deeply embedded throughout our (US) economy. Three, they travel to distant places where the terrorists are. And four, the failure mode is severe: a small bomb drops the plane out of the sky and kills everyone.”³

When this “attractiveness” is coupled with the instantaneous capability of the mass media, it becomes readily apparent that terrorists will try to strike again via the skies made accessible by our very own airline industry. One can only imagine how a small tactical victory could have monumental strategic impact if terrorists were to succeed again in the aftermath of all the security measures implemented after the attacks of September 11th. Based upon the attempts of terrorists post 9/11, we can reasonably assume there will be future attempts to infiltrate our security via the commercial aviation industry.

A Blocking Force: The TSA

Looking to prevent future terrorist strikes from the skies, President Bush signed into the law the Aviation and Transportation Security Act on November 19, 2001. Part of this act formed the TSA and aligned it under the Department of Transportation.⁴ Hastily constructed as a stop-gap measure to fill a security void, it was later transferred to the Department of Homeland Security on March 1, 2003 in order to achieve unity of effort. Now just short of eight years old,

³ Kip Hawley (Head of the TSA), interview by Bruce Schneier, 30 July 2007, <http://www.schneier.com/interview-hawley.html>.

⁴ *Aviation and Transportation Security Act*, Public Law 71, 107th Cong., Sec. 114, 19 Nov 2001.

the TSA exercises a \$4.75 billion budget (FY 2007 appropriation) and for FY 2008 is just short of \$7 billion. This budget covers our entire transportation network to include the security of our roadways, railroad system, mass transit systems, shipping ports, and airports.⁵

The Strategy: Checkpoint Evolution

Mr. Edmund “Kip” Hawley, Assistant Secretary of Homeland Security, outlined his “Checkpoint Evolution” strategy before the House Committee on Transportation and Infrastructure Subcommittee on Aviation on 24 July 2008. Mr. Hawley based his security strategy upon three primary resources; people, process, and technology. His desire focuses on upgrading security effectiveness at checkpoints at all of the nation’s airports. He envisions a system which constantly adapts to an ever-changing threat and environment. This system incorporates innovation and technology to make travel safer and less stressful.⁶

People. Mr. Hawley identified people as his largest investment. The TSA employs 43,000 TSOs located across 450 airports throughout the country.⁷ This year, the TSOs will receive an extensive 16-hour retraining program in order to reshape their approach to security. He wants TSOs who are “more analytical security professionals and less checklist-oriented.” The new training program will meld together the latest intelligence from the field, the newest bomb detection tactics, and an infusion of human factors.⁸

The TSO’s tools are essential to a new screening technique called SPOT, Screening Passengers by Observation Technique. The TSA fielded a new sub-class of TSO called Behavior Detection Officers (BDO). BDO’s are trained to scan crowds of people and identify high-risk passengers solely by their behavior. The science behind this technique shows that

⁵ *Department of Homeland Security Act*, Public Law 295, 109th Cong., Stat 120, 4 Oct 2006.

⁶ Mr. Edmund “Kip” Hawley, *Statement of Kip Hawley before the US House of Representatives Transportation and Infrastructure Subcommittee on Aviation*, (Washington, DC; 24 July 08), http://www.tsa.gov/press/speeches/072408_hawley_aviation_security.shtm.

⁷ Transportation Security Administration, *Passenger Screening*, http://www.tsa.gov/what_we_do/screening/security_checkpoints.shtm.

⁸ Mr. Edmund “Kip” Hawley, *Statement of Kip Hawley before the US House of Representatives Transportation and Infrastructure Subcommittee on Aviation*, (Washington, DC; 24 July 08), http://www.tsa.gov/press/speeches/072408_hawley_aviation_security.shtm.

individuals who are hiding something will make involuntary muscle movements. The BDOs are trained to identify these movements via non-intrusive observation. Once an individual is identified they are singled out and subject to a more rigorous screening process.⁹ This shift in tactics underscores the need for the TSA to field an officer who must possess mature judgment and an analytical mind vice a checklist operator. This officer requires the skill and judgment of a detective vice that of a night watchman.

Process. The first preventative measure for the TSA begins with solid intelligence. The Department of Homeland Security interacts with the National Intelligence community and relies upon a feed of timely information in order to prevent terrorist and criminal activity. The goal is to stop suspect activity at its origin, preferably overseas, before it can enter into our transportation system. If it cannot be prevented early on, then the intelligence can serve as a warning signal for potential activity in a specific area or to be on the lookout for a potential device. In this new strategy the TSA must remain a vital consumer of timely, actionable intelligence enabling constant vigilance and a keen situational awareness for an incoming threat. The primary objective looks to halt terrorist activities at the point of origin before they enter the US transportation system. It should be noted that the TSA only currently envisions itself as a consumer and not a producer of intelligence information. This issue will be addressed later in the recommendations section.

But what happens if a suspected terrorist does arrive at an airport? That is where the Behavior Detection Officers come into play. In order for the BDOs to be effective, waiting lines and areas prior to the actual security checkpoint are being overhauled to become more serene and

⁹ Mr. Edmund "Kip" Hawley, *Statement of Kip Hawley before the US House of Representatives Transportation and Infrastructure Subcommittee on Aviation*, (Washington, DC; 24 July 08), http://www.tsa.gov/press/speeches/072408_hawley_aviation_security.shtm

soothing. A quieter and calmer pre-processing area makes behavior detection more effective and likely. Plus it makes the security process less stressful on the majority of passengers.¹⁰

Two other improvements in development by the TSA are the remote check-in process and the Diamond Self-Select program. Remote check-in via home computer or on-site kiosk streamlines the security process and alleviates a miss-match with names on the terrorist watch list. Providing some basic biographical information prior to showing up at the airport speeds the identification process and increases accuracy. Related to the remote check-in is the Diamond Self-Select program. This program reduces inconvenience to travelers and speeds processing by allowing the traveler to pick their airport travel “experience level” as they walk through the security checkpoint and is analogous to ski slope markers. Black diamonds are for very experienced travelers who can move quickly through the line and are very fluent with the process. A blue square is for the casual traveler who travels less frequent and may need limited guidance while walking through the checkpoint. The last category is the green circle lane for infrequent travelers, families, elderly and anyone requiring a greater need of assistance during processing. Both the self check-in and self-select processes aim at reducing confusion and chaos in the security checkpoints. This more controlled environment enables BDOs to operate with increased effectiveness.¹¹

Technology. Three major tools sit at the airport security technology forefront. They are Advanced Technology (AT) X-Ray, passenger imaging and bottled liquid scanners. The AT X-Ray provides a greatly enhanced color image which has the ability to target novel threat items. This capability enables screeners to detect small improvised explosive devices constructed out of ordinary and common items such as a popular child’s toy. The X-ray provides a multi-color,

¹⁰ Ibid

¹¹ Mr. Edmund “Kip” Hawley, *Statement of Kip Hawley before the US House of Representatives Transportation and Infrastructure Subcommittee on Aviation*, (Washington, DC; 24 July 08), http://www.tsa.gov/press/speeches/072408_hawley_aviation_security.shtm

two-dimension picture of items. Providing contrasts in densities not only allows the scanner to look inside of baggage but also enables vision inside of individual items within the baggage. AT detection will allow quicker, more decisive analysis of passengers' belongings without having to open their bags, thereby resulting in increased throughput.¹²

A similar technology is being applied to passengers as well. Passenger imaging allows TSOs to detect weapons, explosives, and other metallic and non-metallic items concealed under a travelers clothing without touching the individual. It essentially looks through clothing as if the passenger was wearing nothing at all.¹³ It can detect certain items hidden not only under clothing but also within skin creases and orifices. Two major draw backs to this technology are time and privacy. The passenger imaging device requires an individual to be pulled out of the security processing line and be handled by at least two TSOs. Not only does this slow up processing but it also requires a 2:1 minimum ratio for TSO to passenger handling. Also, this technology raises privacy concerns as the images are visually intrusive and can be stored onto other media.

Last are bottled liquid scanners. One of the largest issues facing today's passengers concerns flying with containers containing 3 ounces or more of any gel or liquid. The TSA will not divulge why travelers can travel with multiple bottles of less than 3 ounces but despite a vigorous public affairs effort travelers still surrender hundreds of products each day. To overcome this latest security challenge the TSA is testing bottled liquid scanners. These scanners have the capability to empirically determine the contents of a sealed container. This device will rapidly evaluate if the contents are safe for air travel. This is another non-intrusive

¹² Ibid

¹³ Ibid

instrument which can significantly improve security and appease air travelers but this technology consumes time and money.

Checkpoint Evolution appears to be a very sound strategy. But it is completely reliant upon mature, skilled and analytical security officers to make it work. Do the TSOs that the TSA employs today have the talent, skills and capability to effectively execute this strategy? This next section will take a closer look at the characteristics of that current work force.

A DYSFUNCTIONAL TEAM

External Issues with the TSA

There exists a seemingly endless supply of assaults on the TSA and its ability to effectively provide adequate security at our airports. It has become almost common place to read about an airport being breached by would-be terrorists. Equally as common are the multitude of allegations levied against agents which include criminal acts. But do these accusations have any validity? Below is a list of frequently occurring criticisms levied by the public and media.¹⁴

- Inability to detect/indentify prohibited items during routine screening¹⁵
- Employees intentionally avoiding security checks¹⁶
- Engaging in security theater¹⁷
- Failure to exercise prudent judgment and common sense
- Stealing from passengers' baggage¹⁸

Each of these issues deserves a closer look to understand the character traits manifested within TSO workforce.

The most serious charge levied sits at the top of the list: the inability to detect or identify prohibited items during routine screening. There is no shortage of reports on how easy it is to smuggle contraband material past airport screeners. These reports claim that TSOs are unable to detect weapons or bomb-making components 60-90% of the time. Based upon rudimentary evidence, the House Committee on Oversight and Government Reform requested the Government Accounting Office (GAO) conduct a covert test of the TSA's passenger screening process. The GAO evaluated 19 different airports within the United States and demonstrated a

¹⁴ "Transportation Security Administration," http://en.wikipedia.org/wiki/Transportation_Security_Administration , 9 Sep 08. Note: this list has been pared down to only include those issues with a frequent, well publicized rate of occurrence.

¹⁵ Government Accountability Office, *Aviation Security: Vulnerabilities Exposed Through Covert Testing of TSA's Passenger Screening Process*, GAO-08-48T, 15 Nov 07, 2.

¹⁶ Orlando News, "TSA Workers Skipping Orlando Airport Security Causes Concern", <http://www.local6.com/news/10958681/detail.html>, 8 Feb 07.

¹⁷ The Honorable Ron Paul, "TSA Bullies at the Airport", Texas Straight Talk, <http://www.house.gov/paul/tst/tst2004/tst112904.htm> ,29 Nov 04.

¹⁸ Mr. James Walker, Alabama Director, Alabama Homeland Security,(Presentation to Air War College, HSD Elective on 2 Sept 2008).

clear ability to board aircraft with bomb making materials. The GAO classified the specifics of the report but the agency decisively proved vulnerabilities exist within the screening process.¹⁹

The next two items, employees avoiding security checks and security theater, indicate an “above the law” attitude among security officers. Witnesses reported seeing TSOs who allow others to by-pass routine security checkpoints. They have been spotted carrying backpacks and other items into sterile areas without subjecting them to search or scanning and do so uncontested by other officers. These routinely include food and retail service employees, custodial staff, and aircraft servicing employees. When questioned about such practices, Mr. Hawley asserts that running 50,000 plus airport workers through security screening each shift would consume an inordinate amount of resources.²⁰ By his own admission, he recognizes that these employees could easily subvert the security process simply by having someone throw them a package over the proverbial fence.

The effectiveness of Behavioral Detection Officers remains yet to be proven. No formal reports have been published on this subject; however, several individuals claim to have passed effortlessly through screening areas with manufactured fake IDs and boarding passes while carrying prohibited items. Jeffrey Goldberg tested the TSA by creating false boarding passes on his laptop, hid his real driver’s license and lied about not having an ID, and carried pro-terrorist literature and paraphernalia.²¹ He successfully passed through security screening after a minor discussion with the shift supervisor for not carrying a valid form of ID. Despite his self-proclaimed actual nervousness, there was no apparent behavioral detection alert on his malevolent actions.

¹⁹ Government Accountability Office, *Aviation Security: Vulnerabilities Exposed Through Covert Testing of TSA’s Passenger Screening Process*, GAO-08-48T, 15 Nov 07, 2.

²⁰ Goldberg, Jeffery, *The Things He Carried*, The Atlantic, Nov 2008, <http://www.theatlantic.com/doc/200811/airport-security/3>

²¹ Ibid.

Bruce Schneier asserts that the American public is being lulled into a false sense of security by the TSA. He calls the TSA's actions security theater. This refers to processes or actions which give the illusion of increasing security while providing little to no actual value.²² Despite all the efforts of the security officers, it remains relatively easy to breach an airport's security.

In some cases it appears the TSOs prey upon the very travelers they are sworn to protect. There remains no shortage of allegations of overly intrusive searches of property and person. The reports continue to flow in about individuals being groped during pat-down inspections. These trends indicate a less than professional security force that selectively ignores their own procedures and abuse the power entrusted to them. These actions tear at the seams of our protective envelope and indicate character flaws within the TSOs. These protective servants add little to no overall value to our national security and, in some cases, work counter to it.

Internal Issues with the TSA

While the public report card on the TSA is not very favorable, what type of work culture and conditions do TSA employees face? Security officers endure a demanding work environment which greatly taxes their physical, mental and interpersonal skills. Their repetitive work is constantly challenged by a frustrated public who readily vocalize their displeasure. All these factors add up to the highest attrition rates within government service; 21-27% over the 2003 to 2007 time period.²³ To help overcome the staffing challenge and around the clock operations, the TSA resorted to part-time employment. Today part-time employees make up 24.6% of its work force.²⁴

²² Schneier, Bruce, *Beyond Fear: Thinking Sensibly about Security in an Uncertain World*, Copernicus Books, 2003.

²³ Transportation Security Administration, *The Facts on TSO Attrition Rates*, <http://www.tsa.gov/approach/people/attrition.shtm> , 22 Jul 08

²⁴ Ibid

Given such an important mission and a demanding environment it would seem the TSA would vigorously screen its potential employees. Congressman Ron Paul highlighted the fact that in its rush to field new security screeners, background checks were routinely omitted. There were some cases of convicted felons hired to fill vacant positions.²⁵ The negligence of astute hiring practices became evident when the New York Police Department was called in to arrest a band of TSOs for stealing from passengers' luggage.²⁶ The arrests were not isolated to one location or individual as multiple arrests were made at JFK and LaGuardia airports. The manifestation of such behavior indicates a major flaw in the administration's hiring practices. While Congressman Paul criticizes TSOs for having no special training, wisdom or experience, it can be argued that they actually possess many undesirable characteristics; characteristics which are contrary to the protection of our society.

²⁵ The Honorable Ron Paul, "TSA Bullies at the Airport", Texas Straight Talk, <http://www.house.gov/paul/tst/tst2004/tst112904.htm> ,29 Nov 04

²⁶ Ibid

ANALYSIS AND RECOMMENDATIONS

An Operational View

Mr. Hawley constructed a sound plan for improving our transportation security in the United States. His focus is right on target by engaging travelers with a well-trained work force, armed with the latest technology through a smooth effective and efficient process.

But this security system is only as good as the people operating it. The techniques and methods employed by TSA require officers that are astute and have an impeccable sense of judgment.

This strategy relies heavily on trustworthy operators who are professionals. These professionals must be committed to protecting the public and not preying upon them.

Mr. Hawley's vision for the future is to protect and defeat today's threat and "...be alert for clues of something new, different, and dangerous. ...have the wisdom and imagination to put measures in place now that will prepare us for the future."²⁷ The majority of the TSA work force is trustworthy, reliable and professional. However, in order to achieve his vision, he will need a dedicated, talented, highly-skilled team. The current TSA work force seems marginal at best and, based upon evidence presented, lack the competencies required for a more rigorous mission. Though armed with the latest technology, today's TSA still routinely fails at stopping yesterday's threat. They face a ten-fold challenge in trying to defeat the threat of tomorrow that does not even yet exist.

A gap exists between the talent the TSA currently has and what it needs to effectively execute their mission. The gap only widens as TSOs attempt to outthink terrorists by predicting their next move before they have even conceived it. As mentioned earlier, the TSA will provide its officers an additional 16 hours of training this year. Two work-day shifts cannot but fail to

²⁷ Mr. Edmund "Kip" Hawley, *Statement of Kip Hawley before the US House of Representatives Transportation and Infrastructure Subcommittee on Aviation*, (Washington, DC; 24 July 08), http://www.tsa.gov/press/speeches/072408_hawley_aviation_security.shtm

thwart a terrorist who devotes his life to seeing Americans die. The technology we see fielded today attempts at least to help fill the security gap. The AT X-Ray machines and body imaging devices endeavor to give the advantage to the inexperienced agent. At a minimum, these tools are necessary until a savvy pool of security officers can be developed and matured. But the TSA will always be one step behind until it fields professionals who are committed to outthinking and outmaneuvering terrorist planners.

There are two fundamental issues the TSA should embrace to improve its performance and effectiveness. They must first recognize people are their number one resource and their most effective weapon. No amount of technology can compensate for a disgruntled, poorly managed security officer. Work place apathy in this case will yield disastrous consequences. The TSO resource pool must be managed properly from the very beginning; therefore, the TSA must reexamine its hiring practices and take a serious look at the type of individuals it hires. It can only afford to hire quality and qualified candidates.

Secondly, the TSA's vision for the future will require a smarter, more experienced work force with acute situational awareness. They must possess the ability to spot and catch a petty criminal as well as the ability to sniff out an extensively trained, patient terrorist. That type of talent just does not walk in off of the street. Such talent can only be grown over time. It takes an investment of training dollars and many hours of "walking the beat" on the security screening line. The keen sense of judgment required by future TSOs may take years to develop. The TSA must implement appropriate actions now to ensure an adequate retention rate to provide experienced officers for tomorrow.

The dominant issue with the TSA today is the quality of its employees. Clearly mistakes were bound to be made they attempted to field 28,000 security agents as rapidly as possible. The

administration must now go back and correct those errors. At the same time it must begin hiring a steady flow of quality candidates and figure out ways to not only keep them around but grow them from the ground up. There is no substitute for experience because from experience evolves a “sixth sense” about what is normal and what is not. When you screen thousands of passengers every day for two or three years one knows what normal looks like. Once they have acquired that precious experience, the sixth sense, then the TSA will realize their vision of a force that can readily identify when something or someone is out of place and appears “new, different, and dangerous.” Mr. Hawley and the TSA must embrace his most valuable weapon in protecting America’s airports; the individual. He must take the axiom one step further in that his people are not his most important asset; the right people are. Today’s TSA is not fully endowed with the right people.

How do you develop and retain the right people, those that possess the talents needed for this new domestic security force? Spend more money on the work force and a little less on the equipment. Increasing salaries and offering bonuses for degrees in law enforcement and criminal justice would begin to attract those with a higher level of education. Individuals repeatedly demonstrate their ability to defeat the latest security device so accepting a decrease in equipment capability programs would be greatly outweighed by a smarter, better educated work force.

A major recommendation for improving the TSA’s security force is to overhaul their rank structure and accountability. The TSA appears to have frontline TSOs and a bureaucracy in Washington, D.C. and not much in between. The TSA would greatly benefit from a non-commissioned officer (NCO) corps and company grade officers in the field--mid-level professionals. The NCOs would be the honest brokers and watch for infractions of policy and sloppy or negligent behavior. They should reside and patrol the security lines at the airports in

order to correct problems on the spot or send individuals for retraining or even punishment if necessary. Right now airport observation cameras or irate travelers seem to be the only ones overseeing the frontline TSOs.

A company grade officer force could perform a multitude of managerial functions to include evaluations, exercises, gathering intelligence, overseeing crises, recommendations and a litany of other functions to develop a more effective force. Mostly, they would be responsible for their tactical battlefield, their specific airport, and ensure they fielded an effective blocking force. Right now there exists little to no sense of responsibility or ownership within the tactical environment. The TSOs are adrift without secondary leadership. Ownership and oversight provided by company grade officers and an NCO corps would strengthen the TSA's tactical/operational effectiveness.

More importantly, the fielding of such professionals will allow individuals to make a commitment to outthinking terrorists and not just be a baggage checker at the airport. They will develop the savvy to overcome 21st century transportation security challenges.

The Strategic Omission

Strategic direction within the Transportation Security Administration seems non-existent. Mr. Hawley refers to techniques such as behavior detection, AT X-rays, bottled liquid scanners, and travel document checking as strategies.²⁸ In the grand scheme of engaging terrorism these efforts are merely tactics. These "strategies" are at best operational-level efforts because they involve training and force evolution. They refer to avenues to educate the force and alter methods for airport security.

²⁸ Mr. Edmund "Kip" Hawley, *Statement of Kip Hawley before the US House of Representatives Transportation and Infrastructure Subcommittee on Aviation*, (Washington, DC; 24 July 08), http://www.tsa.gov/press/speeches/072408_hawley_aviation_security.shtm

Mr. Hawley fails to understand the true nature of strategic direction. A strategy matches the ends, ways and means in a congruent fashion to achieve specific objectives. To the ordinary traveler it appears the TSA's ways and means all focus on preventing potentially sharp objects and liquids from getting aboard aircraft. TSA's primary focus seems to target objects and not terrorists. Mr. Hawley constantly boasts success in fielding the latest high-tech device, which within days is defeated with a modicum of effort. Certainly it is not inferred that these efforts are without merit. Our airport security screening process must remain robust and effective, but that effectiveness can be enhanced by unity of effort at the strategic level. The focus should concentrate more on identifying individuals and organizations and their attempts to achieve a specific objective: transportation security.

A key element for identifying such individuals and organizations rests in our intelligence community. While the Mr. Hawley readily identified intelligence as a pillar in the administration's security plan, the TSA does not appear plugged in to our national intelligence capability. As an example of this, during a recent discussion a member of the Director of the Intelligence Staff, Office of the Director of National Intelligence, reported having no interaction with the TSA or with the Department of Transportation.²⁹ At the strategic level, communication and unity of effort become paramount to achieving objectives. It begs the question as to how the TSA receives its intelligence. It appears the administration acquires information from within its own organization and does not interact with other national level sources.

As a new comer to the intelligence community, the TSA must not only receive information but it should provide intelligence as well. The TSA's massive passenger data bases coupled with airport security cameras can provide useful data on suspect movement and perhaps

²⁹ ODNI and the Strategic Environment, Lecture, Office of the Director of National Intelligence, Air War College, Maxwell AFB, AL, 18 Sep 2008.

an indication of a potential event. Additionally, any intercepted devices or technologies can be dissected to their base components and traced backward to place of origin. Doing so would provide valuable information and possible evidence regarding terrorist activities. If the TSA fully interacts within the intelligence community and the inter-agency structure it could create a synergistic impact. The overarching philosophy is to thwart or arrest the perpetrators long before they enter the security checkpoint zone within the United States. The bottom line recommendation is for the TSA to aggressively participate within the intelligence community by not only being a consumer of intelligence but also a producer. Again, company grade level officers would provide the knowledge and skills necessary to participate within this arena.

The TSA could benefit significantly by aggressively inserting itself into the interagency community. The Department of Transportation's security concerns span a wide array of modes and challenges. Not only must the TSA guard against terrorist acts in airports but it must also watch our nation's seaports, rail yards, and inter- and intrastate highway system. Clearly each one of these "portals" becomes a vulnerability to our national security. Therefore the TSA, in coordination with Department of Homeland Defense must engage with , must work very closely with the multitude of other federal government agencies engaged in preventing terrorist activities within the United States. We exclude the DHS/TSA from our national security decision making at our own peril. TSA's involvement must become more of a coordinated effort rather than merely throwing scarce tax dollars at high-tech machines run by an inexperienced, fresh-off-the-street work force.

The TSA's need for actionable, reliable intelligence and a reliance on other federal entities provides additional arguments for the development of an "interagency coordination body" for national security efforts as proposed by Dale, Serafino and Towell in their article

Organizing the U.S. Government for National Security. One proposal advocates establishing a new coordinator post within the Presidential Cabinet or NSC with the overall all purpose of consolidating security efforts and the ability to control some resources to achieve unity of purpose.³⁰ The TSA's effectiveness depends upon its ability to stay plugged into the national security efforts. But where does it plug in? Creating an agency responsible for national security, with directive authority could provide unity of effort and reduce the number of agencies committed to homeland security.

Working in close coordination with other governmental agencies will produce synergistic effects which will increase the security for all citizens, but before the TSA can plunge itself into such an arena, it must establish its own identity. Currently the organization has not produced any doctrine or overarching strategic direction documents. Doctrine generally represents the best practices on how to accomplish the core mission. Doctrine accumulates lessons learned from the past and publishes those lessons as a set of best practices. Without identifying its core competencies through doctrine the administration will become merely reactionary to the latest threat because best practices are never established.

But doctrine does not stand alone, the success of an organization rests at the intersection of doctrine and leadership.³¹ General Lance Smith makes this point by asserting:

“Through judicious selection of the relevant parts of doctrine for a given situation, leaders can take full advantage of their knowledge, training, and experience to make critical mission decisions.”³²

Without this foundation of doctrine and strategic direction, the TSAs leadership is adrift. Its operations are not codified. The front line leaders and TSOs have no foundation from which to form the basis of their efforts. Without a doctrinal foundation the knowledge, skills and

³⁰ Dale, Catherine, et al, *Organizing the US Government for National Security: Overview of the Interagency Reform Debates*, Congressional Research Service Report for Congress, April 18, 2008, p. 4.

³¹ Smith, Lance L. Maj Gen, *Leadership and Doctrine*, AU-24 Concepts for Air Force Leadership, Air University Press, Maxwell AFB, 2001, p 347.

³² *Ibid*, p. 347.

experience are never passed on. Each TSO becomes nothing more than a temporary night watchman guided by the latest policy shot out of TSA headquarters. Because there exists no foundation from which to build, the TSA will encounter great difficulty in fielding a security force of professional officers who have the judgment and intrinsic motivation to thwart terrorists within our national airport infrastructure.

CONCLUSION

A security technologist recently stated that two changes since 9/11 have made flying today safer: reinforced cockpit doors and passengers who realize they must resist hijackers.³³ Outside of that, he believes we should invest our money only in intelligence, investigations and emergency response.³⁴ His conclusions are partially correct in that we need better intelligence, especially in the human intelligence category and a more robust, coordinated investigation capability. But he falls far short of understanding what the concentrated efforts of our national instruments of power can bring to bear in defending our national transportation infrastructure.

There can be no doubt that a determined terrorist threat exists and desires to strike on US soil again. To meet that security challenge within our transportation system we must overhaul our national security system. This means starting at the top by fielding a national agency, like the NSC, but one that is directive and accountable--not just advisory. This will allow us to eliminate redundancies across multiple agencies which are all aimed at the same tasks like the FBI, CIA, DHS, DoD, DoS, DoT and the multitudes of others that follow. Such an agency will direct and guide our security efforts at home and abroad in one consolidated strategy.

Doing so will clarify roles and assign specific responsibilities for direct engagement. Within this engagement arena the TSA, who currently has responsibility for transportation safety, will have clear, defined channels for interagency communications. Opening the pathways for interagency involvement acts as a force multiplier and increases our effectiveness and efficiency.

One of the primary interagency engagements calls for the TSA to become more active in the intelligence community. Their resources must provide information and not just consume

³³ Goldberg, Jeffery, *The Things He Carried*, The Atlantic, Nov 2008, <http://www.theatlantic.com/doc/200811/airport-security/3>

³⁴ *Ibid*, p2.

data. They become the eyes and ears on a secondary front, within our borders. They could potentially provide the clue required to expose a terrorist ring or network. Intelligence must be a two-way street.

The TSA must develop and field coherent doctrine and disciplined training practices. The TSA must first clearly define itself in terms of identity and purpose in order to chart a true strategic direction. By establishing a singleness of purpose, the administration can then prioritize its resources to achieve specific, objectives. The administration must codify its purpose and objectives through doctrine and a strategic plan. Without such documents it will continue to be a reactionary entity chasing the latest perceived threat from an elusive enemy and the enemy will remain one step ahead.

All of these efforts will be for nothing if the frontline TSOs lack disciplined oversight. Mid-level leadership, similar to the military's NCOs and company grade officers can fill the gap which currently exists at our nation's airports. These mid-level personnel would provide a conduit ensuring a continuous, two-way flow of doctrine, training, policies, intelligence and other operational concepts to our frontline troops at the airport. They can evaluate and enforce standards and practices. Most importantly, while these individuals enforce professional standards, they also commit themselves to outthinking the terrorists. They will live and breath security. They become the bastion of professionalism which the TSA currently lacks.

The TSA in its current status appears as little more than a public works program. TSO effectiveness is hit or miss and lacks structure and professionalism. Our country needs to address our security issues not by fielding another agency, like the DHS, but rather consolidate its efforts into a single, directive agency fully engaged across the interagency arena. The TSA needs to define itself fully through doctrine and rigorous training, which it currently lacks. Our

TSOs don't fail because they aren't capable; they fail because they lack direct, disciplined leadership. Inserting a well trained, professional mid-level leadership cadre could fill the gap between concepts of security and actually being secure. It is no longer enough to have a guard at the gateway to protect us and throwing money at this issue via technology will not make us any safer. Fielding a professional force armed with knowledge, skill, and judgment will be far more effective in protecting our airline industry than any machine the US taxpayers will ever purchase.

APPENDIX A: ACRONYMS

AT X-ray – Advanced Technology X-ray

BDO – Behavior Detection Officers

CIA – Central Intelligence Agency

DHS – Department of Homeland Security

DoD – Department of Defense

DoS – Department of State

DoT – Department of Transportation

FBI – Federal Bureau of Investigations

FY – Fiscal Year

GAO – Government Accounting Office

ID – Identification

NCO – Non-commissioned officer

NSC – National Security Council

SPOT – Screening Passengers by Observation Technique

TSA – Transportation Security Administration

TSO – Transportation Security Officer

BIBLIOGRAPHY

Aviation and Transportation Security Act. Public Law 71. 107th Cong., Sec. 114, 19 Nov 2001.

Dale, Catherine, Nina Serafino, Pat Towell. *Organizing the US Government for National Security: Overview of the Interagency Reform Debates*. Congressional Research Service Report for Congress. April 18, 2008.

Goldberg, Jeffrey. *The Things He Carried*. The Atlantic. Nov 2008.
<http://www.theatlantic.com/doc/200811/airport-security/3>.

Government Accountability Office. *Aviation Security: Vulnerabilities Exposed Through Covert Testing of TSA's Passenger Screening Process*. GAO-08-48T. US Government printing office. Washington, DC. 15 Nov 07.

Hawley, Edmund "Kip", Director of the Transportation Security Administration. *Statement of Kip Hawley before the US House of Representatives Transportation and Infrastructure Subcommittee on Aviation*. 110th Cong., Washington, DC; 24 July 2008.
http://www.tsa.gov/press/speeches/072408_hawley_aviation_security.shtm.

Office of the Director of National Intelligence. *ODNI and the Strategic Environment*. Lecture. Air War College, Maxwell AFB, AL, 18 Sep 2008.

Orlando News. "TSA Workers Skipping Orlando Airport Security Causes Concern".
<http://www.local6.com/news/10958681/detail.html>. 8 Feb 07.

Paul, Ron The Honorable. *TSA Bullies at the Airport*. Texas Straight Talk.
<http://www.house.gov/paul/tst/tst2004/tst112904.htm>. 29 Nov 04.

Schneier, Bruce. *Beyond Fear: Thinking Sensibly about Security in an Uncertain World*. Copernicus Books. New York, NY. 2003.

Schneier, Bruce. *Interview with Kip Hawley*. 30 July 2007. <http://www.schneier.com/interview-hawley.html>.

Smith, Lance L. *Leadership and Doctrine*. AU-24 Concepts for Air Force Leadership. Air University Press. Maxwell AFB, AL. 2001.

Transportation Security Administration. *Passenger Screening*.
http://www.tsa.gov/what_we_do/screening/security_checkpoints.shtm.

Transportation Security Administration. *The Facts on TSO Attrition Rates*.
<http://www.tsa.gov/approach/people/attrition.shtm>. 22 Jul 08.

Walker, James. Director of Alabama Homeland Security. Lecture. Air War College, Homeland Security Elective. 2 Sept 2008.