

From: [Tauber, Sarah](#)
To: [Hull, Jason](#); [Fitzmaurice, Stacey](#); [Mancuso, Donald](#); [Smith, Darryl M](#); [Prosnitz, Susan <TSA OCC>](#); [Wheaton, Kelly <TSA OCC>](#); [Kent, Linda <TSA OCC>](#)
Cc: [Brooks, Alvin](#); [Walker, Robert](#); [Silata, Michael](#)
Subject: SPOT Factor and Optimization Study Briefing - Follow Up
Date: Tuesday, July 16, 2013 1:04:59 AM

Folks,

I think that everyone agreed that they were fine with the changes to the Behavior Reference Guide? If that correct, I would suggest the following steps. We are meeting with OTWE tomorrow but this is how I would propose moving forward pending their input.

Jen King historically, as SME, held the pen on the Reference Guide so we would suggest that OSC send us a final draft and we post the new version on ishare. That can be done quite easily. She was our gate-keeper for the language on the referral sheet. Are there changes contemplated for that?

We would also suggest doing a Captivate training on the two indicators, which will involve two/three slides on each indicator and a script that we can narrate, which we will run by OCC.

This will be posted on ishare and shared with the NTT to reaffirm how to teach the indicators and ensure standardization. Darryl, let's talk tomorrow because we would love Donnie's help if he would like to assist on this since it is indicator based. Or, Alvin/Robert can lead if you would prefer. Up to you all.

Finally, the revised version of the SOP, which hopefully goes into circulation this week removes no longer has a copy of the indicators or the referral sheet so that will not be impacted. We did discussed the issue of surrendered items, which may need to be tweaked. However, I would like OCC to look at the draft as a whole for legal sufficiency before we get into one-off changes.

Thanks

From: [Itami, Brian](#)
To: [Kerner, Francine](#); [Bestler, Margot <TSA.OCC>](#); [Prosnitz, Susan <TSA.OCC>](#); [Wheaton, Kelly <TSA.OCC>](#); [Bauer, John D <TSA.OCC>](#); [Ruggeri, Amy <TSA.OCC>](#); [Flory, Gillian <TSA.OCC>](#); [Pilcher, Marc <TSA.OCC>](#); [Thompson, Mardi <TSA.OCC>](#); [Kent, Linda <TSA.OCC>](#); [Hull, Jason](#); [Smith, Darryl M](#); [Tauber, Sarah](#)
Subject: SPOT Factors and Optimization Study Documents
Date: Thursday, July 11, 2013 12:53:07 PM
Attachments: [Melendez Statement.doc](#)
[AIR Validation Study - Deception Indicator.pdf](#)
[AIR Validation Study - Fear Indicator.pdf](#)
[AIR Indicator Review Draft - Fear Indicator.pdf](#)

All,

Kelly asked me to circulate the following documents in advance of the Monday meeting as part of the discussion Francine would like to have on the origination of the two indicators. The first is a copy of a statement by Jose Melendez-Perez made to the 9/11 Commission and used by Carl Maccario and the SPOT program creators in the drafting of the indicators. Melendez was an INS agent who denied entry to Mohammed al-Qahtani in 2001 based in large part upon al-Qahtani's behaviors; al-Qahtani was the planned 20th hijacker for the September 11 attacks. The other three documents are excerpts from AIR's studies into the SPOT program. They provide statistical data regarding the correlation to various outcomes (e.g. LEO arrest or prohibited item discovery) and frequency of the fear factor under review as well as the frequency of the deception factor under review. New national password to open the three AIR documents.

Thank you,

Brian

Brian Itami

Attorney-Advisor, Criminal Enforcement

571-227-(b)(6)

Seventh public hearing of the National Commission on Terrorist Attacks Upon the United States

Statement of Jose E. Melendez-Perez to the National Commission on Terrorist Attacks Upon The United States

January 26, 2004

Background

I am a 26 year honorable veteran of the U.S. Army and am currently on my 12th year as an immigration inspector, now working for Customs and Border Protection under the Department of Homeland Security. I began my career with the Immigration and Naturalization Service in 1992 where I was first assigned to Miami International Airport and subsequently transferred to Orlando International Airport, where I currently work.

My job requires me to know the difference between legitimate travelers to the U.S., and those who are not. This includes potential terrorists. We received terrorist and other types of alerts, such as on document fraud and stolen passports, prior to September 11, but we all consider these alerts in a different light now.

The national security element of my job means that training and experience is important. In my case, training for my job as inspector has been threefold. The first was my 26 years in military service, where I learned effective listening skills, observation of body language, and determination of motives. Second, when I joined the INS, I was required to attend training at the Law Enforcement Training Center where I received approximately (16) hours of training in interview skills, sworn statements, and document fraud. Third, my experience on the job as Immigration Inspector for the past eleven years has greatly improved my skills in detecting document fraud, observing body language and understanding different cultures, including Saudi nationals, many of whom come with their families via the Orlando International Airport on their way to Disney World. Saudi nationals were held to the same legal standards as everyone else. However, service wide they were treated with more "tact". For example, in order to accommodate the Saudi culture, female Saudis unwilling to unveil were inspected by female inspectors, if available. This remains the case today.

In Orlando, as in any other port, an immigration inspector can only return someone foreign back home, for whatever reason under the Expedited Removal law, if the inspector is to be able to substantiate the recommendation. Supervisors for the most part support inspectors who have enough proof to substantiate removing someone. It is my belief that some supervisors in Orlando and nationwide remain intimidated by complaints from the public, and particularly by Congressional letters, about refusing admission to certain aliens. Because of these complaints, supervisors tend to be wary of supporting the inspector who recommends an adverse action against an alien.

I do not know how often people are removed from the United States, nor can I tell you before 9/11 how many Saudis entered the country or how many were refused. However, I can tell you that according to the records we have in Orlando, approximately ten Saudi nationals have been turned around for various reasons. In regard to the incident on August 4, 2001 which I am about to talk about, I note that another inspector on duty that day made a comment that I was going to get into

trouble for refusing a Saudi national. I replied that I have to do my job, and I cannot do my work with dignity if I base my recommendations on refusals/admissions on someone's nationality.

The primary inspection officer is the first official that an international traveler comes in contact with. The officer's responsibility is to verify the passenger's travel documents for validity, the purpose of their trip, and check entry/exit stamps for past travel history. In addition, inspectors query databases for passengers who maybe on a lookout list for various reasons, (i.e., terrorism, criminal records, outstanding arrest warrants, etc.). Before 9/11, some of the databases available in 2001 were: (a) TECS-Treasury Enforcement Communication System, (b) CIS-INS Central Index System, (c) NAILS-National Automated Index Lookout System.

The Encounter on August 4, 2001

On August 4, 2001, I was assigned as a secondary inspection officer at the Orlando International Airport. My supervisor alternates inspectors between primary and secondary inspection, and on this day I was assigned to secondary inspection. At approximately 1735 hours, I was assigned the case of a Saudi national who had arrived on Virgin Atlantic #15 from London, Gatwick Airport. As Saudis coming through Orlando to travel to Disney World are common, I had plenty of line experience with Saudis. In this particular case, the subject was referred to secondary inspection because the primary inspector could not communicate with him and his arrival/departure form (I-94) and Customs Declaration (C-6059B) were not properly completed.

I first queried the subject's name, date of birth, and passport number through the above systems with negative results. Subject's documents appeared to be genuine. A search of subject and his personal belongings were also negative. Subject was enrolled in IDENT and photographed. In addition, a complete set of fingerprints was taken on form FD-249 (red).

Through my INS training and military experience, my first impression of the subject was that he was a young male, well groomed, with short hair, trimmed mustache, black long sleeve shirt, black trousers, black shoes. He was about 5'6", and in impeccable shape, with large shoulders and a thin waist. He had a military appearance. Upon establishing eye contact, he exhibited body language and facial gestures that appeared arrogant. In fact, when I first called his name in the secondary room and matched him with papers, he had a deep staring look.

I had the impression of the subject that he had knowledge of interview techniques and had military training. Upon my initial review of the subject's paperwork and documents, I noticed that he did not have a return airline ticket or hotel reservations. Upon learning that the subject did not speak English (or at least that is what he wanted us to believe), I contacted an Arabic interpreter from the Department of Justice's interpreter's list.

My first question to the subject (through the interpreter) was why he was not in possession of a return airline ticket. The subject became visibly upset and in an arrogant and threatening manner, which included pointing his finger at my face, stated that he did not know where he was going when he departed the United States. What first came to mind at this point was that this subject was a "hit man". When I was in the Recruiting Command, we received extensive training in questioning

techniques. A "hit man" doesn't know where he is going because if he is caught, that way he doesn't have any information to bargain with.

The subject then continued, stating that a friend of his was to arrive in the United States at a later date and that his friend knew where he was going. He also stated that his friend would make all the arrangements for the subject's departure. I asked him if he knew when his friend was to arrive in the United States and he responded that he was to arrive in three or four days. I asked him what the purpose of this trip was and how long he wanted to stay. He responded that he would be vacationing and traveling through the United States for six days. At this point, I realized that his story did not seem plausible. Why would he be vacationing for only six days and spend half of his time waiting for his friend? It became apparent that the subject was being less than truthful concerning his true intentions.

At this time, I again asked him where he was going to stay. He said, "A hotel". I then told him that without knowledge of the English language or a hotel reservation he would have difficulty getting around Orlando. He answered that there was someone waiting for him upstairs. When asked the person's name, he changed his story and said no one was meeting him. He said he was to call someone from his residence that would then contact someone locally to pick him up. I then asked the subject for the person's phone number and he refused to provide it stating that it was, "...none of my business". He stated that it was a personal matter and that he did not see any reason for me to contact that person. The subject was very hostile throughout the entire interview that took approximately 1-½ hours.

Subject was in possession of \$2,800.00 United States dollars and no credit cards. This amount did not appear sufficient for a six-day vacation plus a hotel room and return ticket since a one-way ticket to Dubai, where he originated from, would cost approximately \$2,200.00 USD. When confronted with this fact, he responded that his friend was going to bring him some money. I then asked, "Why would he bring you some money"? He replied, "Because he is a friend". I then asked, "How long have you known this person"? He answered, "Not too long".

I said to myself, I'd like to place him under oath. I wanted him to understand the consequences of making a false statement. He agreed to be placed under oath, but when I asked the first question, he said, "I won't answer." The Arabic interpreter said to me that something was not right here.

At this point, I gave my supervisor a synopsis of the case and explained my suspicions that this individual was malafide, (i.e., that his true intent in coming to the United States was not clear and he appeared very evasive). After presenting the case to my supervisor, he felt that Assistant Area Port Director (AAPD) should be contacted for further instructions. Normally, second line supervisors such as AAPD are not contacted in such matters, but because of the facts that we had provided no specific grounds for removal, higher up confirmation was needed. My supervisor then proceeded to call the AAPD at home to explain the case and get concurrence for removal. After my supervisor presented the facts to AAPD, he then asked to speak directly with me.

The AAPD asked numerous questions concerning the case. I explained that apart from not having a return ticket and possibly not having sufficient funds, the subject appeared to be malafide. I further

explained to the AAPD that when the subject looked at me, I felt a bone chilling cold effect. The bottom line is, "He gave me the creeps". You just had to be present to understand what I am trying to explain. The AAPD then asked if I had tried to place him under oath. I replied that I had tried to place the subject under oath, but the subject refused to answer my questions. The AAPD then stated that under Section 235.1 (a) (5) of the Immigration Nationality Act an applicant could be required to state, under oath, any information sought by an Immigration Officer regarding the purpose and intentions of the applicant in seeking admission to the United States. The AAPD further stated that he was convinced from what I had stated and my beliefs about the subject that the individual was malafide and should be allowed to withdraw his application or be set up for Expedited Removal.

I then proceeded to advise the subject that he did not appear to be admissible to the United States. He was offered the opportunity to voluntarily withdraw his application for admission. Subject chose to withdraw and signed the I-275. Along with another immigration inspector, I escorted subject to his departing gate for his removal. Before boarding the aircraft, the subject turned to other inspector and myself and said, in English, something to the effect of, "I'll be back". On August 4, 2001, subject departed foreign via Virgin Atlantic flight 16 to London with connecting flight to Dubai.

On September 11, 2001 while attending a meeting with the Warden at the Central Florida Processing Center (Department of Corrections) concerning the use of their range, a corrections officer came in and advised the Warden of the incident that had just occurred in New York City. As I watched the television, I could not help but think of the two cases I had processed in August concerning Saudi Nationals. I immediately contacted the Orlando Airport (I do not remember which officer I spoke with) but I asked them to look up the cases and contact the FBI agent assigned to the airport.

To the best of my knowledge, immigration officers made copies of this August 4, 2001 incident and provided that paperwork to the FBI. The FBI has never interviewed me. I do not recall ever speaking with GITMO officials. INS headquarters contacted me once. I have had no other contact with intelligence or law enforcement officials. Outside of legacy INS, the only government contact I have had about this incident came from the September 11 Commission this past fall, from your border team investigating the incident.

Mr. Melendez-Perez is currently a U.S. Customs and Border Protection Inspector at Orlando International Airport, Orlando, Florida. Prior to the formation of DHS, he was employed by the U.S. Immigration and Naturalization Service (INS) from November 15, 1992 to April 30, 2003.

He is a retired member of the United States Army where he served honorably for over 26 years. He served 2 tours of duty in Vietnam, 1965-1966 and 1969-1970. He was later assigned as a first sergeant to the U.S. Army Recruiting Command for approximately 15 years.

After his separation from the service, he began his career with INS in November 1992 at Miami International Airport as an inspector, and later as an inspector at Orlando International Airport. He has recently served for 6 months at the Federal Law Enforcement Training Center, Glynco, Georgia providing assistance to the fire arms program.

During his government service, Mr. Melendez has received training in interview skills, sworn statements and document fraud, as well as in effective listening skills, observing body language and determining a person's needs and/or motivations.

Page 2: Research Evidence

The second page of each indicator-specific section presents results of various analyses from several different sources. From AIR's previous work on Project Hostile Intent (2005-2011), we draw on findings from the SPOT Validation Study,² analyses updated here to include operational data through 2012; a literature review on behavioral indicators of suicide attack, for which results were mapped to the SPOT Referral Report;³ and preliminary results from interviews with subject matter experts (SMEs) and eyewitnesses to suicide attack.⁴ We have also included findings from a workshop report on behavioral indicators of suicide attack identified through an examination of proxy crimes.⁵

For each indicator, this second page consists of a multi-part table, which presents results from these various analyses. Below is a brief description of each section included in the table:

- *Frequency of Occurrence.* The percentage of time the particular indicator occurred, in proportion to all indicators observed, as well as the trend in indicator occurrence (up, down, stable). The reported results in this table section were updated from the SPOT Validation Study, to include operational data from 2006-2012.
- *Ranks.* In the SPOT Validation Study analyses, the degree of variation in the use of indicators was examined across a set of stable setting characteristics (Year, Quarter, Location, and Hub size). The indicators were ranked from most frequent to least frequent overall. This table also includes results of indicator use by Hub size as one example of potential consistency or variation in indicator use. Hub sizes included in the analyses were: Large, Medium, and Small. (Non-Hub Primary was excluded from analyses due to small sample sizes.). Ranks were designated into a quartile: quartile 1 (i.e., the 25% most frequently observed indicators); quartile 2 (i.e., the middle 50% of the indicators); and quartile 3 (i.e., the 25% least frequently occurring indicators). The reported results in this table section were updated from the SPOT Validation Study, to include operational data from 2006-2012.
- *Item-Level Predictive Utility.* The predictive utility of individual indicators was examined by calculating the association between the presence/absence of each SPOT indicator and the presence/absence of each of the four outcomes (*LEO Arrest, Possession of Prohibited/Illegal Items, Possession of Fraudulent Documents, and the Combined Outcome*). Significance tests that assessed the associations between indicators and

² Costigan, T. E., Makonnen, Z. E., Taylor, T. S., Sawyer, K., Myers, T. L., & Toplitz, M. (2011). *SPOT referral report validation study final report: Volumes 1-4*. Washington, DC: American Institutes for Research.

³ Mullaney, H. A., Matheson, N. S., & Costigan, T. E. (2009). *Pre-incident indicators of suicide attack: Expanded literature review (Final draft)*. Washington, DC: American Institutes for Research.

⁴ American Institutes for Research (2010). *Preliminary review of interview data from Israeli subject matter experts and eyewitnesses*. Washington, DC: Author.

⁵ Department of Homeland Security Science and Technology Directorate (2011). *Workshop report: Practitioner-based behavioral indicators*. Washington, DC: Author.

~~**Sensitive Security Information (SSI)**~~

outcomes were computed for each 2x2 table (i.e., each indicator x outcome pair). Corresponding Pearson's χ^2 values and significance were computed; in instances when the Pearson's χ^2 assumption (that minimum expected cell counts are greater than 5) was not met, Fisher's exact test statistics and significance levels were reported instead.⁶

Odds ratio (OR) statistics were also produced for each pair in order to describe the ratio of the odds of a positive outcome among those exhibiting a given indicator to the odds of a positive outcome among those not exhibiting a given indicator. Confidence Intervals (CIs) associated with each OR were also produced. Note that the analyses were one-directional and focused on positive ORs only, or the extent to which the presence of indicators increased the odds of a given outcome.

These analyses were conducted with stratified subsets (i.e., the Operational SPOT dataset was randomly split into two subsets, balanced by year). This allowed for an examination of stability in the results. In the tables, we present only results from the first subset to simplify information presented. The reported results in this table section were updated from the SPOT Validation Study, to include operational data from 2006-2012.

- **Factor Analysis.** As part of the SPOT Validation Study analyses, AIR also conducted an exploratory factor analysis (EFA) of the SPOT Referral Report Section 2 indicators. This analysis served as an initial step in the examination of construct-related validity. (b)(3):49 U.S.C. § 114(r)

(b)(3):49 U.S.C. § 114(r)

(b)(3):49 U.S.C. § 114(r)

Again, the EFA was conducted with stratified subsets (i.e., the Operational SPOT dataset was randomly split into two subsets, balanced by year). This allowed for an examination of stability in the results. The results for the two subsets are presented in the summary table. Factor loadings greater than approximately .40 are considered strong; factor loadings between approximately .15 and .40 are considered moderate. Because the SPOT indicators are binary (i.e., presence/absence), for the purpose of this review the absolute magnitude of a factor is more important than the direction of the loading (i.e., positive/negative). Factor analysis results included in this table are based on 2006-2010 Validation Study data only.

(b)(3):49 U.S.C. § 114(r)

⁶ Fisher, R. A. (1922). On the interpretation of χ^2 from contingency tables, and the calculation of P. *Journal of the Royal Statistical Society*, 85, 87-94.

~~**Sensitive Security Information (SSI)**~~

WARNING: THIS RECORD CONTAINS SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 49 C.F.R. PARTS 15 AND 1520. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSONS WITHOUT A "NEED TO KNOW," AS DEFINED IN 49 C.F.R. PARTS 15 AND 1520, EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTIES OR OTHER ACTION. FOR U.S. GOVERNMENT AGENCIES, PUBLIC DISCLOSURE GOVERNED BY 5 U.S.C. 552 AND 49 C.F.R. PARTS 15 AND 1520.

~~Sensitive Security Information (SSI)~~

(b)(3) U.S.C. § 114(r)

•

- *Presence in SME and Eyewitness Interviews.* Information based on a preliminary review of data from interviews with 12 Israeli SMEs and four eyewitnesses. Behavioral indicators of suicide attack mentioned by participants were mapped to indicators on the SPOT Referral Report. Presence of the SPOT indicator in interview data was noted with a 'yes,' and absence of the SPOT indicator in interview data (i.e., no mention) was noted with a 'no.'
- *Presence in SME Workshop.* Information based a SME workshop on indicators of suicide attack identified through an examination of proxy crimes (DHS S&T, 2011). Behaviors identified were mapped to indicators on the SPOT Referral Report to the extent possible. Mention of a behavior exhibited by suicide attackers that was also a SPOT indicator was noted with a 'yes;' no mention of a particular SPOT indicator was noted with a 'no.'

~~Sensitive Security Information (SSI)~~

WARNING: THIS RECORD CONTAINS SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 49 C.F.R. PARTS 15 AND 1520. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSONS WITHOUT A "NEED TO KNOW," AS DEFINED IN 49 C.F.R. PARTS 15 AND 1520, EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTIES OR OTHER ACTION. FOR U.S. GOVERNMENT AGENCIES, PUBLIC DISCLOSURE GOVERNED BY 5 U.S.C. 552 AND 49 C.F.R. PARTS 15 AND 1520.

Table H-1. Operational SPOT Signs of Deception^a

Deception Indicators	2006		2007		2008		2009		2010		All Years	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
(b)(3); 49 U.S.C. § 114(f)												

Table H-5. Base Rate Study and Operational SPOT Comparison Data Signs of Deception

Deception Indicator	Base Rate Study		Operational SPOT Comparison	
	Frequency	Percent	Frequency	Percent
(b)(3):49 U.S.C. § 114(r)				

~~Sensitive Security Information (SSI)~~

Table 7-3: Associations Between Indicators and LEO Arrest

(b)(3)-4 U.S.C. § 114(r)



~~Sensitive Security Information (SSI)~~

WARNING: THIS RECORD CONTAINS SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 49 C.F.R. PARTS 15 AND 1520. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSONS WITHOUT A "NEED TO KNOW," AS DEFINED IN 49 C.F.R. PARTS 15 AND 1520. EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTIES OR OTHER ACTION. FOR U.S. GOVERNMENT AGENCIES, PUBLIC DISCLOSURE GOVERNED BY 5 U.S.C. 552 AND 49 C.F.R. PARTS 15 AND 1520.

Table 7-6: Stable and Significant Indicators Across Outcomes

(b)(3)-49 U.S.C. § 114(r)

--

WARNING: THIS RECORD CONTAINS SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 49 C.F.R. PARTS 15 AND 1520. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSONS WITHOUT A "NEED TO KNOW," AS DEFINED IN 49 C.F.R. PARTS 15 AND 1520. EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTIES OR OTHER ACTION. FOR U.S. GOVERNMENT AGENCIES, PUBLIC DISCLOSURE GOVERNED BY 5 U.S.C. 552 AND 49 C.F.R. PARTS 15 AND 1520.

~~Sensitive Security Information (SSI)~~

Table 7-7: Associations Between Indicators and LEO Arrest

(b)(3)4 U.S.C. § 114(r)

~~Sensitive Security Information (SSI)~~

WARNING: THIS RECORD CONTAINS SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 49 C.F.R. PARTS 15 AND 1520. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSONS WITHOUT A "NEED TO KNOW," AS DEFINED IN 49 C.F.R. PARTS 15 AND 1520. EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTIES OR OTHER ACTION. FOR U.S. GOVERNMENT AGENCIES, PUBLIC DISCLOSURE GOVERNED BY 5 U.S.C. 552 AND 49 C.F.R. PARTS 15 AND 1520.

~~Sensitive Security Information (SSI)~~

Table 7-17: Operational SPOT Rank Standard Deviations by Category and Indicator

(b)(3) 49 U.S.C. § 114(r)

~~Sensitive Security Information (SSI)~~

WARNING: THIS RECORD CONTAINS SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 49 C.F.R. PARTS 15 AND 1520. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSONS WITHOUT A "NEED TO KNOW," AS DEFINED IN 49 C.F.R. PARTS 15 AND 1520. EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTIES OR OTHER ACTION. FOR U.S. GOVERNMENT AGENCIES, PUBLIC DISCLOSURE GOVERNED BY 5 U.S.C. 552 AND 49 C.F.R. PARTS 15 AND 1520.

~~Sensitive Security Information (SSI)~~

(b)(3), 49 U.S.C. § 114(r)

Table 7-19: Indicator Inconsistencies—Year

BEH#	Label	Inconsistencies Within Year		
		LEO Arrest	Possession of Serious Prohibited/Illegal Items	Possession of Fraudulent Documents
(b)(3), 49 U.S.C. § 114(r)				

~~Sensitive Security Information (SSI)~~

WARNING: THIS RECORD CONTAINS SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 49 C.F.R. PARTS 15 AND 1520. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSONS WITHOUT A "NEED TO KNOW," AS DEFINED IN 49 C.F.R. PARTS 15 AND 1520. EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTIES OR OTHER ACTION. FOR U.S. GOVERNMENT AGENCIES, PUBLIC DISCLOSURE GOVERNED BY 5 U.S.C. 552 AND 49 C.F.R. PARTS 15 AND 1520.

Table F-10. Operational SPOT Frequency of Indicators by Year

BEH#	Indicator Label	2006		2007		2008		2009		2010		All	
		Frequency	Percent of Cases	Frequency	Percent of Cases	Frequency	Percent of Cases	Frequency	Percent of Cases	Frequency	Percent of Cases	Frequency	Percent of Cases
(b)(3)-4 U.S.C. § 114(r)													

Table F-27. Subset 1 and Subset 2 Relative Risk to LEO Arrest

	LEO Arrest	
	Subset 1	Subset 2
<p>(b)(3) 49 U.S.C. § 114(r)</p>		

Table F-28. Subset 1 and Subset 2 Relative Risk to Possession of Serious Prohibited/Illegal Items

	Possession of Serious Prohibited/Illegal Items	
	Subset 1	Subset 2
(b)(3).4 U.S.C. § 114(r)		

Table F-29. Subset 1 and Subset 2 Relative Risk to Possession of Fraudulent Documents

	Possession of Fraudulent Documents	
	Subset 1	Subset 2
(b)(3), 49 U.S.C. § 114(r)		

Table F-30. Relative Risk to LEO Arrest for BaseRate Study and Operational SPOT Comparison Data

	LEO Arrest	
	Base Rate Study Data	Operational SPOT Comparison Data
(b)(3), 49 U.S.C. § 114(r)		

Table F-31. Relative Risk to Possession of Serious Prohibited Items for Base Rate Study and Operational SPOT Comparison Data

	Possession of Serious Prohibited/Illegal Items	
	Base Rate Study Data	Operational SPOT Comparison Data

(b)(3)49 U.S.C. § 114(f)

Table F-32. Relative Risk to Possession of Fraudulent Documents for Base Rate Study and Operational SPOT Comparison Data

	Possession of Fraudulent Documents	
	Base Rate Study Data	Operational SPOT Comparison Data
(b)(3)-4 U.S.C. § 114(r)		

~~Sensitive Security Information (SSI)~~

Table F-33. Operational SPOT: Indicator Rank by Year^a

(b)(3)-4 U.S.C. § 114(r)



~~Sensitive Security Information (SSI)~~

~~Sensitive Security Information (SSI)~~

Table F-33. Operational SPOT: Indicator Rank by Year^a

(b)(3), (4) U.S.C. § 114(r)

~~Sensitive Security Information (SSI)~~

~~Sensitive Security Information (SSI)~~

Table F-33. Operational SPOT: Indicator Rank by Year^a

(b)(3);4; U.S.C. § 114(r)



~~Sensitive Security Information (SSI)~~

Table E-3: Variance Accounted For by Factor Solutions

		Number of Factors					
		3	4	5	6	7	15
Variance Accounted For by Factor	1	(b)(3):49 U.S.C. § 114(r)					
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						
	10						
	11						
	12						
	13						
	14						
	15						
Total Variance Accounted For							

Similar results were obtained for obliquely rotated models. This was expected given (b)(3):49 U.S.C. § 114(r) among obliquely rotated factors. Factor correlations ranged from (b)(3):49 U.S.C. § 114(r) depending on the number of factors in the model. (b)(3):49 U.S.C. § 114(r) indicated that the orthogonally rotated solutions were preferred.

Model Stability

The best EFA solutions—(b)(3):49 U.S.C. § 114(r)—were next tested on the second subset of Operational SPOT data to examine model stability. Overall, the (b)(3):49 U.S.C. § 114(r) appeared the most stable. While there was some natural fluctuation in factor loadings across samples, this model had the same sets of items loading together on each factor.

(b)(3):49 U.S.C. § 114(r) showed stability in (b)(3):49 U.S.C. § 114(r); however, (b)(3):49 U.S.C. § 114(r) great variability, with substantially different loadings (b)(3):49 U.S.C. § 114(r). Therefore this factor model was found to be less stable and not worth further consideration.

Model Interpretation

The resulting (b)(3):49 U.S.C. § 114(r) accounted for (b)(3):49 U.S.C. § 114(r) of variance and included (b)(3):49 U.S.C. § 114(r) indicators with loadings (b)(3):49 U.S.C. § 114(r) (see Appendix Table G-2 for factor loadings). There is variation in guidance about interpretation of factor loadings, with recommended ranges of

~~Sensitive Security Information (SSI)~~

minimal loadings from (b)(3):49 U.S.C. § 114(r) due to lack of information in the data (i.e., data sparseness), we considered lower factor loadings in model interpretation (including interpretation of some items with factor loadings lower than (b)(3):49 U.S.C. § 114(r)). Thus, the factor solution must be considered with caution and as only a first step in a process aimed to understand the extent to which there may be underlying constructs among the set of indicators for the Operational SPOT dataset. Again, the intent of this analyses and proposed explanation of the emerging (b)(3):49 U.S.C. § 114(r) is to provide a first look at the ways in which the indicators are being used in combination. Moreover, it is important to note that the explanation of any resulting model from an exploratory factor analysis is subject to interpretation. The following interpretation, using the factor loadings for Subset 1,³² was developed by qualified team members with experience related to: (1) the Section 2 indicators, (2) an educational background in human behavior, and (3) deception detection theory and research. Of course, other interpretations are worth consideration and future research should include further testing of interpretations and theories related to any factor analysis results (these or other analyses).



Several of these negative loadings suggest (b)(3):49 U.S.C. § 114(r). Also, the factor loading for other hostile and uncooperative behaviors such as (b)(3):49 U.S.C. § 114(r) are quite low, as are the loadings for (b)(3):49 U.S.C. § 114(r).

³² Factor loadings for Subset 2 are included in Appendix Table G-2 and are virtually identical to Subset 1 loadings.

~~Sensitive Security Information (SSI)~~

WARNING: THIS RECORD CONTAINS SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 49 C.F.R. PARTS 15 AND 1520. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSONS WITHOUT A "NEED TO KNOW," AS DEFINED IN 49 C.F.R. PARTS 15 AND 1520, EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTIES OR OTHER ACTION. FOR U.S. GOVERNMENT AGENCIES, PUBLIC DISCLOSURE GOVERNED BY 5 U.S.C. 552 AND 49 C.F.R. PARTS 15 AND 1520.