

# A Review of the FBI's Handling of the Brandon Mayfield Case



UNCLASSIFIED EXECUTIVE SUMMARY

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Oversight and Review Division  
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## **EXECUTIVE SUMMARY\***

In May 2004, the Federal Bureau of Investigation (FBI) arrested Brandon Mayfield, an Oregon attorney, as a material witness in an investigation of the terrorist attacks on commuter trains in Madrid, Spain, in March 2004. Mayfield had been identified by the FBI Laboratory as the source of a fingerprint found on a bag of detonators in Madrid that was connected to the attacks. Approximately two weeks after Mayfield was arrested, the Spanish National Police (SNP) informed the FBI that it had identified an Algerian national as the source of the fingerprint on the bag. After the FBI Laboratory examined the fingerprints of the Algerian, it withdrew its identification of Mayfield and he was released from custody.

As a result of these events, the Office of the Inspector General (OIG) initiated an investigation into the misidentification, investigation, and detention of Mayfield. We sought to determine the causes of the misidentification and to assess the FBI Laboratory's responses to the error. We also examined whether the FBI used the USA PATRIOT Act (Patriot Act) in connection with the investigation of Mayfield, whether the FBI targeted Mayfield because of his Muslim religion, and whether the FBI's representations to the United States District Court in support of the requests for a material witness warrant and search warrants were accurate. In addition, we examined Mayfield's conditions of confinement and whether they were consistent with the material witness statute.

### **I. Background**

On March 11, 2004, terrorists detonated bombs on several commuter trains in Madrid, Spain, killing approximately 200 people and injuring more than 1,400 others. The SNP recovered fingerprints on a bag of detonators connected with the attacks and transmitted them to INTERPOL with a request that the FBI Laboratory provide assistance in identifying the fingerprints. On March 19, the FBI Laboratory's Latent Print Units (LPU) identified a United States citizen, Brandon Mayfield, as the source of one of the fingerprints on the bag, referred to as Latent Fingerprint Number 17 (LFP 17). Mayfield's fingerprints had been initially retrieved, along with others, as a potential match to LFP 17 based on a computerized search of millions of fingerprints in FBI databases. This automated search by the FBI's Integrated Automated Fingerprint Identification System (IAFIS) generated a list of 20 candidate prints from the FBI's Criminal Master File. An FBI examiner then began side-by-side comparisons of LFP 17 and the potential matches, one of which was Mayfield's fingerprint. Following a detailed comparison of LFP 17 and Mayfield's known fingerprint, the examiner concluded that Mayfield was the source of LFP 17.

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\* This Executive Summary includes a limited amount of information that the Federal Bureau of Investigation (FBI) considered to be classified or law enforcement sensitive and therefore could not be publicly released. To create this public version of the Executive Summary, the Office of the Inspector General (OIG) redacted (deleted) the portions of the Executive Summary that were considered classified or sensitive by the FBI and we indicated where those redactions were made.

This conclusion was verified by a second LPU examiner and reviewed by a Unit Chief in the LPU, who concurred with the identification.

As a result of this identification, the FBI immediately opened an intensive investigation of Mayfield, including 24-hour surveillance. The FBI determined that Mayfield was an attorney in Portland, Oregon. The FBI also learned, among other things, that Mayfield was a Muslim who had married an Egyptian immigrant, had represented a convicted terrorist in a child custody dispute in Portland, and had contacts with suspected terrorists. However, the FBI's investigation did not turn up any information specifically linking Mayfield to the Madrid train attacks.

As part of the investigation, the FBI obtained authority to conduct covert electronic surveillance and physical searches of Mayfield pursuant to the Foreign Intelligence Surveillance Act of 1978 (FISA).<sup>1</sup> The FBI's electronic surveillance of Mayfield began on [REDACTED]. The FBI also conducted searches of Mayfield's law office on [REDACTED], and of the Mayfield residence on [REDACTED].

On April 13, the FBI learned that the SNP Laboratory's examination of Mayfield's fingerprints had yielded a "negativo" (negative) result. The FBI therefore dispatched an examiner to meet with the SNP in Madrid on April 21 to explain the basis of the FBI's identification of LFP 17 as belonging to Mayfield. At the end of that meeting, the SNP Laboratory representatives said they would reexamine Mayfield's fingerprints and LFP 17 in light of the FBI's presentation.

In early May, the FBI began receiving media inquiries about a possible American suspect in the Madrid bombings case. The FBI became concerned that its investigation of Mayfield would become publicly known and that Mayfield might flee or destroy evidence. As a result, on May 6 the FBI and Department of Justice (DOJ) attorneys applied to the United States District Court in Oregon for a warrant to detain Mayfield as a "material witness"

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<sup>1</sup> FISA provides for the use of, among other things, covert electronic surveillance and physical searches to gather foreign intelligence information. To obtain FISA authorization to conduct covert surveillance and searches, the government must submit a written application to a special court, the Foreign Intelligence Surveillance Court (FISA Court), which has the authority to grant or deny the application. The written application must establish, among other things, probable cause for the FISA Court to find that the target of the surveillance and searches is either a foreign power or an agent of a foreign power, and that a significant purpose of the surveillance and searches is to obtain foreign intelligence information. A foreign power is defined broadly to include any group engaged in international terrorism.

pursuant to 18 U.S.C. § 3144.<sup>2</sup> The FBI and DOJ also applied to the Court for criminal search warrants for Mayfield's home and office. The FBI submitted affidavits to the Court in support of these requests. On the basis of the representations in these affidavits, the Court issued the material witness warrant and the criminal search warrants.

The FBI arrested Mayfield on May 6 and executed the search warrants that same day, seizing evidence from his home and office. When Mayfield was brought before the Court on May 6, he denied that the fingerprint on the detonator bag was his and said he had no idea how it got there. The Court denied Mayfield's request to be released to home detention and he was incarcerated at the Multnomah County Detention Center (MCDC) in Portland, Oregon.

On May 17, the Court appointed an independent expert to review the FBI's fingerprint identification. On May 19, the independent expert concurred with the FBI's identification of LFP 17 as being Mayfield's fingerprint.

However, on the same day, May 19, the SNP informed the FBI that it had positively identified LFP 17 as the fingerprint of a different person, an Algerian national named Ouhnane Daoud. At the request of the Portland prosecutors, the Court released Mayfield to home detention on May 20. After reviewing Daoud's prints, the FBI Laboratory withdrew its identification of Mayfield on May 24, and the government dismissed the material witness proceeding.

The FBI initially provided a variety of explanations for the fingerprint misidentification, including the poor quality of the digital image of LFP 17, lack of access to the original fingerprint on the bag of detonators, and the similarity of LFP 17 to Mayfield's fingerprint.

After the FBI withdrew its identification, it convened a 2-day session with an International Panel of fingerprint experts to determine how the examination of LFP 17 failed and to make recommendations for changes in FBI fingerprint procedures. The Panel met at the FBI Laboratory in June 2004, and was provided information about the Mayfield case. Several panelists concluded that the initial examiner failed to conduct a complete analysis of LFP 17 before conducting the IAFIS search, which in turn caused him to disregard important differences in appearance between LFP 17 and Mayfield's known prints. Several panelists cited overconfidence in the power of IAFIS and the pressure of working on a high-profile case as contributing to the error. Some panelists

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<sup>2</sup> Pursuant to 18 U.S.C. § 3144, a court may order the arrest of a person if it appears that the testimony of the person is material to a criminal proceeding, and it is shown that it may become "impracticable to secure the presence of the person by subpoena."

stated that the verification was “tainted” by knowledge of the initial examiner’s conclusion. The panelists made recommendations for changes in the FBI Laboratory, including expanded documentation requirements and modified verification procedures.

On July 16, the FBI Laboratory issued a formal report identifying Daoud as the source of LFP 17.

In October 2004, attorneys for Mayfield filed a civil action against the FBI, DOJ, and several individuals. The complaint includes claims for violations of Mayfield’s civil rights, violations of the Privacy Act, and violations of the United States Constitution in connection with the FBI’s investigation and arrest of Mayfield.

## **II. The Methodology of the OIG Investigation**

The OIG’s investigation examined the conduct of the FBI in the Mayfield case. The specific objectives of the OIG’s investigation were: (1) to determine the causes of the fingerprint misidentification; (2) to assess the Laboratory’s responses to the error and, if appropriate, to make additional recommendations for changes in Laboratory procedures to prevent future errors of this type; (3) to determine whether the FBI unfairly targeted Mayfield in the fingerprint identification or in the ensuing investigation because of his religion; (4) to assess the FBI’s conduct in the investigation and arrest of Mayfield; (5) to assess the FBI’s conduct in making certain representations to the United States District Court in support of the requests for a material witness warrant and search warrants; and (6) to assess the conditions under which Mayfield was confined prior to his release.

The OIG’s investigation was conducted by a team of attorneys and a program analyst. The OIG interviewed approximately 70 individuals, including personnel from the DOJ Counterterrorism Section (CTS), the DOJ Office of Intelligence Policy and Review (OIPR), the FBI Laboratory, and the FBI Counterterrorism Division (CTD). In Portland, Oregon, the OIG interviewed personnel from the Portland Division of the FBI, the United States Attorney’s Office (U.S. Attorney’s Office), the United States Marshals Service (USMS), the Multnomah County Sheriff’s Office (MCSO), and the Multnomah County Detention Center (MCDC). The OIG also interviewed four officials of the SNP by telephone. In addition, the OIG interviewed two members of the International Panel of fingerprint experts convened by the FBI Laboratory, as well as the Executive Director of American Society of Crime Laboratory Directors/ Laboratory Accreditation Board (ASCLD/LAB), the organization responsible for accrediting the FBI Laboratory. Mayfield’s attorneys declined the OIG’s request to interview Mayfield.

In addition, the OIG reviewed thousands of pages of documents generated by the FBI, DOJ, the U.S. Attorney's Office, the USMS, and the MCDC pertaining to the fingerprint identification and the investigation, arrest, and detention of Mayfield. This documentation included e-mails, internal memoranda and reports, notes, briefing materials, policy and procedural manuals, timelines, and investigative records, as well as pleadings, transcripts, and orders from court proceedings.

In evaluating the causes of the fingerprint misidentification, the OIG consulted with three distinguished latent fingerprint examiners outside the FBI Laboratory: John D. "Dusty" Clark, formerly of the California Department of Justice and currently with the Western Identification Network; Michael R. Grimm, a Forensic Supervisor with the Virginia State Police; and John R. Vanderkolk, Regional Laboratory Manager for the Indiana State Police. These expert consultants were selected for their achievements and reputations within the latent fingerprint community and for the diversity of viewpoints that they have expressed within the latent fingerprint discipline.

In addition to the OIG's review, the DOJ Office of Professional Responsibility (OPR) also conducted an investigation into aspects of the Mayfield case that involved the conduct of Department attorneys. Initially, the OIG intended to investigate the entire Mayfield matter, including the conduct of DOJ attorneys working with the FBI. We believed that one DOJ oversight entity should investigate the matter, and we also concluded that the OIG had jurisdiction under Section 1001 of the Patriot Act to investigate allegations of civil rights or civil liberties abuse made against all DOJ employees, including DOJ attorneys. However, OPR disagreed, stating that it has the authority generally to investigate allegations involving the professional conduct of DOJ attorneys. Eventually, the Deputy Attorney General decided that OPR would investigate the conduct of DOJ attorneys in the Mayfield case and the OIG would investigate the actions of the FBI.

As a result, OPR (rather than the OIG) evaluated DOJ attorneys' conduct in the Mayfield case, such as the decision to obtain a material witness warrant and the accuracy and sufficiency of the evidence presented by attorneys in support of the warrant. In addition, OPR examined representations made by DOJ attorneys in connection with their request that Mayfield be held in custody and the decision by DOJ attorneys to include certain information about Mayfield in court pleadings.

### **III. Organization of the OIG Report**

The OIG's Report is divided into seven chapters. Chapter One provides an introduction to the report, including the methodology of the OIG's

investigation. Chapter Two sets forth a detailed chronology of events regarding Mayfield's fingerprint identification, investigation, arrest, detention, and subsequent release. Chapter Three provides background information regarding fingerprint identification issues, including a description of the operations of the FBI's LPU and an overview of the latent fingerprint examination process utilized by the Laboratory.

Chapter Four contains the OIG's substantive review of the causes of the erroneous fingerprint identification. Chapter Five presents a review of the Laboratory's responses to the error, including various reforms underway in the LPU, and additional OIG recommendations for the FBI Laboratory.

Chapter Six evaluates the conduct of the FBI with respect to its investigation and arrest of Mayfield. It addresses the issue of whether Mayfield was improperly targeted because of his religion, examines the FBI's use of FISA and the Patriot Act in the investigation, and assesses representations made by the FBI in affidavits submitted in support of the requests for a material witness warrant and criminal search warrants. Chapter Six also examines Mayfield's conditions of confinement. Chapter Seven summarizes the OIG's conclusions.

#### **IV. OIG Assessment of the Causes of the Misidentification**

In this section of the Executive Summary, we discuss the OIG's assessment of the causes of the FBI Laboratory's misidentification of LFP 17.

##### **A. The Primary Causes of the Error**

The OIG found several factors that caused the FBI's misidentification of the fingerprint. The unusual similarity between LFP 17 and Mayfield's known fingerprint was a major factor in the misidentification that confused three experienced FBI examiners and a court-appointed expert. However, we concluded that the examiners committed errors in the examination procedure, and that the misidentification could have been prevented through a more rigorous application of several principles of latent fingerprint identification.

##### **1. The unusual similarity of the prints**

In identifying Mayfield as the source of LFP 17, the FBI examiners relied in significant part on the relationship of "minutiae" or "points" within the prints. These points are places where individual ridges in the fingerprint end ("ending ridges") or split ("bifurcations"). Ten of the points in LFP 17 that were used to identify Mayfield were also later used by different FBI examiners to

identify Daoud as the source of the print. These 10 features in LFP 17 formed a constellation of points that was generally consistent with the constellation of points in the known fingerprints of both Mayfield and Daoud. The unusual similarity is reflected in the relative location of the points, the orientation of the ridges coming into the points, and the number of intervening ridges between the points. Although the OIG found no systematic study of the rarity of such an event, anecdotal reports suggest that this degree of similarity between prints from two different people is an extremely unusual circumstance.

Despite the unusual similarity in the relationship between points on the Mayfield and Daoud prints, however, Mayfield and Daoud did not have identical fingerprints. In several instances, a bifurcation in one print corresponded to an ending ridge in the other. There were also other subtle but important differences between the prints in the positioning of the features. But the unusual similarity in position and ridge counts was a critical factor that misled four examiners and contributed to their overlooking other important differences between LFP 17 and Mayfield's fingerprint.

In addition, the Mayfield case illustrates a particular hazard of the IAFIS computer program. IAFIS is designed to find candidate fingerprints having the most minutiae arrangements similar to the encoded minutiae from the latent print. These candidates should include the correct match of the print (if it is in the FBI database), but will also include the closest possible non-matches. In this case, the true source of the print was not in the IAFIS database, but the computer found an unusually close non-match. The enormous size of the IAFIS database and the power of the IAFIS program can find a confusingly similar candidate print. The Mayfield case demonstrates the need for particular care in conducting latent fingerprint examinations involving IAFIS candidates because of the elevated danger of encountering a close non-match.

## **2. Bias from the known prints of Mayfield**

The unusual similarity of the Mayfield and Daoud fingerprints was not the sole cause of the misidentification. The OIG found that a significant cause of the misidentification was that the LPU examiners' interpretation of some features in LFP 17 was adjusted or influenced by reasoning "backward" from features that were visible in the known prints of Mayfield. This bias is sometimes referred to as "circular reasoning," and is an important pitfall to be avoided. Having found as many as 10 points of unusual similarity, the FBI examiners began to "find" additional features in LFP 17 that were not really there, but rather were suggested to the examiners by features in the Mayfield prints. As a result of this process, murky or ambiguous details in LFP 17 were erroneously identified as points of similarity with Mayfield's prints.



### **3. Faulty reliance on extremely tiny (Level 3) details**

The OIG also found that the FBI examiners gave significant weight to the purported agreement between extremely tiny details in LFP 17 and Mayfield's fingerprint. These details, including shapes interpreted as individual pores, incipient dots between ridges, and ridge edges, are known as "Level 3" details. Because Level 3 details are so small, the appearance of such details in fingerprints is highly variable, even between different fingerprints made by the same finger. As a result, the reliability of Level 3 details is the subject of some controversy within the latent fingerprint community.

The OIG found that none of the purported Level 3 features in LFP 17 used to identify Mayfield corresponded to features in the known prints of the true donor (Daoud). Thus, unlike the case with larger details, the examiners were not confused by any unusual similarity in Level 3 details on the fingers of Mayfield and Daoud. Rather, they apparently misinterpreted distortions in LFP 17 as real features corresponding to Level 3 details seen in Mayfield's known fingerprints.

There were several indications available to FBI examiners at the time of the identification that the purported Level 3 similarities did not provide reliable support for the identification. Although several different examples of Mayfield's known fingerprints were available to the FBI, some of the details that the FBI examiners considered to be important were only visible on one version of those fingerprints, suggesting the possibility that these details were not reliable characteristics for identification. In addition, the examiners involved in the identification appear to have relied on selected Level 3 similarities, while dismissing or discounting other apparent Level 3 details, such as pores, ridge edge shapes, and small between-ridge details in LFP 17, that were not in agreement with the known Mayfield fingerprints. Several other examiners interviewed by the OIG questioned whether the clarity of LFP 17 was sufficient to support any reliance on Level 3 details. The OIG concluded that the examiners' reliance on Level 3 details in this case was misplaced and contributed to the erroneous identification.

### **4. Inadequate explanations for differences in appearance**

FBI fingerprint examiners are governed by the "one discrepancy rule" in which a single difference in appearance between a latent print and a known fingerprint must preclude an identification unless the examiner has a valid explanation for the difference. Latent fingerprint identifications are subject to a standard of 100 percent certainty. Implicit in this standard is the requirement that the examiner have equivalent certainty in the validity of each explanation for each difference in appearance between prints.

The OIG found that the available information did not support this degree of certainty for the explanations that the examiners adopted for several differences in appearance between LFP 17 and Mayfield's fingerprint. For example, the FBI recognized that the entire upper left portion of LFP 17 did not correspond with Mayfield's fingerprint. The examiners explained this difference as being the result of a separate touch, possibly by a different finger or a different person. This explanation required the examiners to accept an extraordinary set of coincidences. The OIG found that the support for this explanation was, at best, contradictory. Although there was a gap in the fingerprint separating the upper left portion from the rest of the print, the ridge flow was consistent across the gap, suggesting a single touch. Most of the "red flags" that would typically indicate a second touch were not present in LFP 17. Deposition pressure was consistent in both parts of the print, indicating that both areas were part of a single print. In light of this conflicting information, the FBI examiners should not have found sufficient certainty in the "double touch" explanation to support an identification.

There were several other differences between LFP 17 and Mayfield's known fingerprint. Although the explanations that the examiners gave for each difference were individually plausible, they cumulatively required too many rationalizations to support an identification with the requisite certainty. The OIG concluded that the FBI examiners did not apply a sufficiently stringent standard for their explanations and thereby failed to appropriately apply the "one discrepancy rule."

#### **5. Failure to assess the poor quality of similarities**

The OIG also found that the FBI examiners failed to give adequate consideration to the incomplete nature of the agreement in points between LFP 17 and Mayfield's fingerprint. As previously described, there was a constellation of as many as 10 points in LFP 17 that bore an unusual similarity to points in the Mayfield fingerprint. However, the limited clarity of LFP 17 prevented the examiners from making an accurate determination of the type of many of these points (that is, whether they were ending ridges or bifurcations). The OIG found that many of the points utilized by the FBI to support the identification suffered from this shortcoming (ambiguity as to feature type), and that accordingly the "quality" of the agreement was inadequate to support the conclusion of identification.

#### **6. Failure to reexamine LFP 17 following the April 13 Negative Report**

The FBI Laboratory missed an opportunity to catch its error when the SNP informed the FBI on April 13 that it had reached a "negativo" (negative) conclusion with respect to matching LFP 17 to Mayfield's fingerprints. At that

time, the FBI Laboratory did not adequately explore the possibility that it had erred in identifying Mayfield. Moreover, the FBI examiners did not attempt to determine the basis of the SNP's doubts before reiterating that they were "absolutely confident" in the identification on April 15, a full week before the FBI Laboratory met with the SNP. We believe that the FBI Laboratory's overconfidence in the skill and superiority of its examiners prevented it from taking the "April 13 Negativo Report" as seriously as it should have. A better response to a conflicting determination by another forensic laboratory would have been first to determine the complete basis for the other laboratory's disagreement before committing anew to the validity of the original determination, and also to arrange for a fresh examination of the relevant prints by a new examiner who had not previously committed himself to a particular conclusion. The FBI Laboratory took neither of these steps.

## **B.     OIG Assessment of Other Potential Sources of Error**

The OIG evaluated three additional factors that potentially caused the FBI's erroneous identification. While we can not definitively state that these factors were sources of the Mayfield error, they create sufficient potential for other erroneous identifications to merit discussion in this report and recommendations for changes in the FBI Laboratory.

First, the OIG examined whether the standard used by the FBI Laboratory for declaring an identification contributed to the error. The FBI Laboratory employs the "Ridgeology Standard" for identification, which does not require the agreement of a predetermined minimum number of characteristics (sometimes referred to as a "Numerical Standard"), but rather emphasizes the expert examiner's assessment of the quality of agreement as well as the quantity. The OIG concluded that the error would not necessarily have been avoided by the application of a Numerical Standard. The examiners believed that they had found at least 15 "points" in LFP 17 in agreement with Mayfield's fingerprint, which would have satisfied the 12-point threshold advocated by many proponents of a Numerical Standard, and the threshold used in several other countries (including Spain). The methodological errors committed by the examiners – such as applying circular reasoning and failing to apply the "one discrepancy rule" with adequate rigor – could lead to an erroneous identification under either the Ridgeology Standard or a Numerical Standard. However, we agree with the Laboratory's decision following discovery of the error to research and develop more objective standards for fingerprint identification.

Second, the OIG examined whether the FBI's verification procedures contributed to the error. FBI procedures require that every identification be verified by a second examiner. However, under procedures in place at the time of the Mayfield identification, the verifier was aware that an identification had

already been made by a prior FBI examiner at the time he was requested to conduct the verification. Critics of this procedure assert that it may contribute to the expectation that the second examiner will concur with his colleague. It was difficult for the OIG to assess whether the FBI's verification procedures contributed to the Mayfield error, primarily because the retired examiner who verified the Mayfield identification declined to be interviewed for this investigation, and because he was not required to document the features or mental processes that led to his conclusion. Yet, the OIG found it significant that the court-appointed expert reached the same conclusion regarding the identification. The pressures that might cause an FBI examiner to hesitate to dispute a colleague's identification should not have impacted the independent expert's impartiality. Thus, the OIG did not find compelling evidence that the FBI's verification procedures introduced a bias that prevented or discouraged the official verifier from challenging the identification in this case. The OIG believes, however, that the existing Laboratory procedures could be improved to assure that verifications involve complete and independent examinations and provide a more stringent safeguard against erroneous identifications.

Third, the OIG considered whether the pressure of working on a high-profile terrorism case was a significant contributing cause of the error in this case. We found no evidence to support this conclusion. FBI examiners work on many high-profile cases without committing such errors. In addition, the examiners were unable to identify most of the latent fingerprints submitted by the SNP as part of its investigation of the Madrid bombings, and the pressure to identify LFP 17 was no greater than the pressure to identify the other prints. The OIG did find, however, that the FBI Laboratory's stated criteria for reporting an "inconclusive" result from a latent fingerprint examination could result in implicit pressure on the examiner to make an identification in a difficult comparison in a case involving a particularly heinous crime, and the OIG recommends that the FBI take several specific steps to reduce any such pressure in the future.

### **C. The Role of Mayfield's Religion in the Identification**

The OIG also investigated whether the FBI fingerprint examiners were aware of and improperly influenced by knowledge of Mayfield's religion when they made the identification of LFP 17. We determined that the FBI examiners were not aware of Mayfield's religion at the time they concluded Mayfield was the source of LFP 17. The records available to the examiners did not reveal his religion, his marriage to an Egyptian immigrant, or his representation of other Muslims as an attorney. The OIG found no evidence that the FBI Laboratory had knowledge of Mayfield's religion until the FBI Portland Division learned this fact in the early stages of the field investigation, after the identification had been made and verified by the FBI Laboratory.

However, whether Mayfield's religion was a factor in the Laboratory's failure to revisit its identification and discover the error in the weeks following the initial identification is a more difficult question. By the time the SNP issued the April 13 Negativo Report, the Laboratory examiners had become aware of information about Mayfield obtained in the course of the Portland Division's investigation, including the fact that Mayfield had acted as an attorney for a convicted terrorist, had contacts with suspected terrorists, and was a Muslim. One of the examiners candidly admitted that if the person identified had been someone without these characteristics, like the "Maytag Repairman," the Laboratory might have revisited the identification with more skepticism and caught the error.

The OIG concluded that Mayfield's religion was not the sole or primary cause of the FBI's failure to question the original misidentification and catch its error. The primary factors were the similarity of the prints and the Laboratory's overconfidence in the superiority of its examiners. However, we believe that Mayfield's representation of a convicted terrorist and other facts developed during the field investigation, including his Muslim religion, also likely contributed to the examiners' failure to sufficiently reconsider the identification after legitimate questions about it were raised.

#### **D. Explanations Found by the OIG Not To Have Contributed to the Error**

The OIG found that several explanations for the error proposed by various sources, including FBI Laboratory spokespersons, were not persuasive.

First, the OIG reviewed the FBI's initial claim that the FBI's lack of access to the original evidence on which LFP 17 was deposited was a cause of the error. The FBI examiners made the identification of Mayfield based on a digital photograph provided by the SNP, and the examiners did not have access to the original bag with the fingerprint. Some FBI examiners suggested that this lack of access prevented the FBI from determining, from the positioning of several fingerprints on the evidence, that LFP 17 was made by a right middle finger, not by a left index finger (the Mayfield digit to which it was erroneously matched). Although the positioning of the prints on the evidence certainly suggested the possibility that LFP 17 was made by a right middle finger, that finger was not the only plausible digit. The OIG reviewed the evidence and concluded that, contrary to the FBI's claims, having access to the bag would not necessarily have prevented the LPU from misidentifying Mayfield.

FBI spokespersons also offered another explanation immediately after the error was discovered: that the FBI was working with a degraded or distorted third-generation digital image of LFP 17 provided by the SNP. The OIG found

that although there was a modest improvement in clarity in the photographic image of LFP 17 that the SNP eventually made available to the FBI, the quality of the digital image initially supplied to the FBI did not cause the error.

We also examined the suggestion made by Laboratory spokespersons that the initial examiner should have determined that LFP 17 was not “of value” for identification because there were many lines of separation or demarcation in the fingerprint creating interruptions to ridge flow. The OIG found that this explanation was inconsistent with the Laboratory’s subsequent determination that the fingerprint was in fact suitable for comparison and could be identified as being made by Daoud. The OIG concluded that the purported interruptions to ridge flow within LFP 17 were not a cause of the erroneous identification.

We also considered the suggestion by some members of the International Panel that the FBI examiners were misled by an excessive faith in the IAFIS technology. The OIG did not find this explanation to be persuasive. The FBI examiners were aware that many IAFIS searches do not result in identifications, and the initial examiner conducted IAFIS searches of at least seven other latent fingerprints submitted by the SNP without declaring an identification. IAFIS did not suggest a single candidate to the FBI examiners; it generated a list of candidate fingerprints from which the initial examiner found Mayfield.

## **V. OIG Assessment of the FBI Laboratory’s Responses to the Error**

Following discovery of the misidentification, the FBI Laboratory initiated several actions, including: (1) an internal review of LPU policies and procedures, (2) a review of prior IAFIS identifications from digital prints, (3) a monthly review of prisoners scheduled for capital punishment who may have been convicted or sentenced based on an FBI fingerprint identification, and (4) corrective action with respect to the examiners involved in the Mayfield misidentification.

The OIG concluded that these are significant steps, and we concur with many of the reforms that the Laboratory has adopted, particularly with respect to the development of more objective criteria for declaring an identification, revision of the Standard Operating Procedures (SOPs) to provide greater detail and more specific procedures, and establishment of meaningful minimum documentation requirements for identifications. These reforms will result in significant modifications of practices in the LPU of the FBI Laboratory that we believe will help prevent future errors.

However, we found that the actions proposed by the Laboratory were not fully responsive to the issues raised by the Mayfield misidentification and that additional or more specific modifications to Laboratory practices should be adopted. Accordingly, the OIG made additional recommendations. These include recommendations that the Laboratory develop criteria for the use of Level 3 details to support identifications, clarify the “one discrepancy rule” to assure that it is applied in a manner consistent with the level of certainty claimed for latent fingerprint identifications, require documentation of features observed in the latent fingerprint before the comparison phase to help prevent circular reasoning, adopt alternate procedures for blind verifications, review prior cases in which the identification of a criminal suspect was made on the basis of only one latent fingerprint searched through IAFIS, and require more meaningful and independent documentation of the causes of errors as part of the Laboratory’s corrective action procedures.

## **VI. Analysis of the Investigation, Arrest, and Confinement of Mayfield**

The OIG also reviewed the FBI’s conduct in the investigation and arrest of Mayfield that followed the FBI Laboratory’s identification of him as the source of LFP 17. This portion of our review included an examination of whether the FBI used the Patriot Act in connection with the investigation and an assessment of the role of Mayfield’s religion in the FBI’s field investigation. We also examined the accuracy and completeness of the FBI’s representations in affidavits filed in support of the material witness and criminal search warrants. Finally, we examined the effect of media leaks on Mayfield’s arrest and issues related to his conditions of confinement.

### **A. Effect of the Patriot Act on the Mayfield Investigation**

In the following sections, we summarize the OIG analysis of the Patriot Act provisions that may have had an impact on the Mayfield investigation. We concluded that the Patriot Act amendments to FISA did not affect either the government’s decision to seek FISA search and surveillance authority in the Mayfield case or the scope of information the government collected about Mayfield pursuant to FISA. We found that the FBI likely would have sought and been able to obtain FISA authorization for the searches and surveillance even without the Patriot Act amendments to FISA. We also found that, contrary to public speculation after Mayfield’s arrest, the FBI did not use certain provisions of the Patriot Act in the Mayfield case. However, the Patriot Act did affect the sharing of information about Mayfield with law enforcement agents and intelligence agents and the amount of information that the government collected [REDACTED].

## **1. Sections 218 and 504 of the Patriot Act**

As mentioned previously, the FBI obtained authority to conduct covert surveillance and searches of Mayfield pursuant to FISA. To obtain FISA authority, the government must submit an application to the FISA Court certifying that a significant purpose of the requested surveillance and searches is to gather foreign intelligence information. The application must also establish probable cause for the FISA Court to find that the target of the requested surveillance and searches is either a foreign power or an agent of a foreign power. A foreign power is defined broadly to include any group engaged in international terrorism.

Prior to the Patriot Act amendments, FISA required the government to certify that "the purpose" of the requested surveillance was to gather foreign intelligence information. In assessing such requests, the Department of Justice and courts applied the "primary purpose" test. This allowed the use of FISA-derived information in a criminal case only if the primary purpose of the FISA surveillance or search was to gather foreign intelligence information rather than to conduct a criminal investigation.

Beginning in the 1980s, the Department of Justice developed procedures that limited the circumstances under which information from intelligence investigations could be shared with criminal prosecutors and criminal law enforcement personnel. As a result, a "wall" developed between Department intelligence personnel and criminal personnel that limited information sharing. In addition, while pre-Patriot Act FISA-derived information could be shared freely with intelligence agencies such as the Central Intelligence Agency (CIA) and the National Security Agency, that same information could not be shared with criminal law enforcement officials without consultation and approval from senior officials in the Department of Justice.

Section 218 of the Patriot Act amended FISA to replace the phrase "the purpose" with the phrase "a significant purpose." Accordingly, the government can now obtain a FISA warrant by showing that the collection of foreign intelligence information is a "significant purpose" of the investigation, rather than the primary purpose as under the previous standard. In addition, Section 504 of the Patriot Act amended FISA to specify that intelligence investigators conducting FISA surveillance or searches may consult with criminal investigators to coordinate efforts to investigate or protect against international terrorism.

To determine if the Patriot Act affected the course of the Mayfield investigation, the OIG examined whether the government, prior to the Patriot Act, would have sought FISA authority to conduct covert searches and



surveillance of Mayfield, and whether FISA authority could have been obtained under the more rigorous pre-Patriot Act primary purpose standard.

Based on our interviews and review of the evidence known to the FBI when it made the decision to seek emergency FISA authority, we concluded that the government likely would have proceeded with a FISA application even before the Patriot Act. Witnesses from the FBI and DOJ who worked on the Mayfield matter and had both pre-Patriot Act and post-Patriot Act experience stated that even before the Patriot Act, the government would have treated the Mayfield matter at the outset primarily as an intelligence case rather than a criminal case. All of the witnesses stated that the primary purpose at the outset of the Mayfield investigation was to collect foreign intelligence information and that the prospect of criminal prosecution of Mayfield was incidental. In addition, some of the witnesses expressed doubts that the government could have obtained the electronic surveillance information it sought had it attempted to use traditional criminal investigative methods.

We concluded that the Patriot Act did not affect the government's decision to pursue FISA search and surveillance authority in this matter. Further, we believe that the government could have met the more stringent primary purpose standard that existed prior to enactment of the Patriot Act.

However, we found that the Patriot Act did affect the government's dissemination of intelligence information about Mayfield. By dismantling the "wall" between criminal and intelligence investigators, the Patriot Act allowed the government to freely share intelligence information about Mayfield gathered in the FISA surveillance and searches with prosecutors and other criminal law enforcement officials. In addition, Section 203 of the Patriot Act allowed the government to share grand jury information with the intelligence community, some of which could not have been obtained and shared through intelligence methods prior to the Patriot Act.

## **2. National Security Letters**

[REDACTED]

[REDACTED]. Section 505 of the Patriot Act relaxed the certification requirements for issuing NSLs to allow issuance upon a showing that the information sought is "relevant" to an authorized investigation to protect against international terrorism, rather than requiring specific and articulable facts that the information sought pertained to an agent of a foreign power. [REDACTED]

[REDACTED]

### **3. Other Patriot Act provisions**

The OIG found that, contrary to some public speculation about the Mayfield case, certain other Patriot Act provisions either were not used in or had no significant effect on the Mayfield investigation. For example, Section 213 of the Patriot Act authorizes delayed notification of the execution of criminal search warrants, which are sometimes referred to as “sneak and peek” searches. We found that there were no such searches conducted in the Mayfield investigation. The covert searches that were conducted of Mayfield’s home and office before his arrest were not conducted pursuant to criminal search warrants. After his arrest, the searches were based on overt criminal search warrants and the Patriot Act was not implicated in those searches.

Another provision of the Patriot Act, Section 206, amended FISA to allow the government to seek multi-point or “roving” wiretaps. [REDACTED]

[REDACTED]

### **4. Conclusion regarding the impact of Patriot Act amendments on the Mayfield investigation**

In sum, the OIG concluded that the Patriot Act amendments to FISA did not affect the government’s decision to seek FISA authority in the Mayfield case and did not affect the scope of information the government collected about Mayfield pursuant to the FISA surveillance and searches. We also found that the FBI did not use certain provisions of the Patriot Act in the Mayfield case, such as those relating to delayed notification searches. Moreover, the evidence indicated that, even prior to the Patriot Act, the FBI would likely have sought and been able to obtain identical FISA authorization for the searches and surveillance of Mayfield that it conducted.

However, the Patriot Act did permit a significant amount of information about Mayfield to be shared with a wide variety of law enforcement agents and intelligence agents that could not have been shared prior to the Patriot Act. By dismantling the wall between intelligence and criminal investigations, the Patriot Act allowed the government to freely share intelligence information about Mayfield gathered in the FISA surveillance and searches with prosecutors and other criminal law enforcement officials. The Patriot Act also allowed the government to share grand jury information with the intelligence

community that could not previously have been shared. In addition, the Patriot Act affected the amount of information the government collected

We did not find any evidence that the FBI misused any of the provisions of the Patriot Act in conducting its investigation of Mayfield. However, the increased information sharing allowed by the Patriot Act amplified the consequences of the FBI's fingerprint misidentification in the Mayfield case.

#### **B. The Role of Mayfield's Religion in the Investigation**

The OIG evaluated whether Mayfield's religion improperly influenced the FBI's actions in the field investigation and arrest of Mayfield. As discussed previously, the OIG concluded that the FBI did not initiate its investigation of Mayfield because of his religion. The FBI Laboratory examiners did not know Mayfield's religion when they made the initial fingerprint identification. Similarly, when the Laboratory's fingerprint identification was communicated to the FBI CTD and the Portland Division, neither entity knew about Mayfield's religion. The FBI first learned of Mayfield's religion only after it had opened a full field investigation of Mayfield to gather all intelligence available on him. Thus, we concluded that Mayfield's religion played no role in the FBI's decision to initiate a full field investigation of Mayfield.

In addition, we concluded that the field investigation of Mayfield was not improperly influenced by the FBI's knowledge of Mayfield's religion. Some government witnesses acknowledged, however, that Mayfield's religion was a factor in the investigation. The FBI learned that the SNP believed the Madrid bombings had been carried out by radical Muslims. Thus, several DOJ and FBI witnesses stated that they expected to discover in investigating the case that the suspects would be Muslim. For example, a Portland Assistant United States Attorney (AUSA) called Mayfield's religious beliefs a "mildly corroborating factor." Other FBI witnesses said Mayfield's religion was not a factor in the investigation, but that his contacts with other suspected terrorists were.

We concluded that the FBI's field investigation of Mayfield was initiated because of and largely driven by the identification of his fingerprint on evidence associated with the train bombings, not by his religious beliefs. We believe the FBI would have sought covert search and surveillance authority irrespective of Mayfield's religion. Moreover, we did not find evidence suggesting that the investigation was prolonged because Mayfield is a Muslim.

In our view, the FBI's field investigation appropriately sought information about a subject who had been positively identified by the FBI Laboratory as having left a fingerprint on a bag of detonators found in Madrid. When the FBI

Laboratory continued to declare that the fingerprint was Mayfield's, we do not believe it was unreasonable for FBI agents to aggressively pursue this investigation.

**C. The FBI's Participation in the Preparation of the Material Witness and Criminal Search Warrants**

Several FBI agents, a Laboratory Supervisory Fingerprint Specialist, and the FBI's Legal Attaché in Madrid participated in the preparation or review of the affidavits submitted to the United States District Court in support of the material witness and criminal search warrants. We examined the accuracy and supportability of representations made in these affidavits.<sup>1</sup>

We found that the affidavits contained several inaccuracies that reflected a regrettable lack of attention to detail. In addition, we found the wording of the affidavits to be troubling in several respects. In particular, the affidavits provided an ambiguous description of the April 21 meeting between the FBI and the SNP, which apparently led the judge to believe that the SNP had agreed with the FBI's fingerprint identification. In fact, the SNP had only agreed to conduct a reexamination of LFP 17. Finally, we believe the material witness warrant affidavit contained an unfounded inference concerning the likelihood of the existence of false travel documents regarding Mayfield.

**D. The Role of Media Leaks in the Arrest of Mayfield**

The FBI discovered in early May 2004 that several media outlets had inquired about an American suspect in the Madrid bombings. This information caused the FBI, in conjunction with the DOJ CTS and the Portland U.S. Attorney's Office, to obtain a material witness and criminal search warrants on May 6. The media leak disrupted the FBI's investigative plan, which had called for the FBI to finish its intelligence gathering and analytical work concerning Mayfield near the end of May. The FBI then intended to approach Mayfield in early June and attempt to interview him voluntarily, but not necessarily arrest him.

We found insufficient evidence to conclude that anyone in either the FBI or the DOJ caused or contributed to the leak of information about Mayfield in

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<sup>1</sup> The Portland U.S. Attorney's Office participated in the drafting, editing, and approval of the final versions of the affidavits. The DOJ CTS reviewed the affidavits (for legal sufficiency) and made a recommendation to the Deputy Assistant Attorney General and Assistant Attorney General of the Criminal Division regarding the final versions of the affidavits. The Deputy Assistant Attorney General and the Assistant Attorney General were involved in the review and approval of the final versions of the affidavits. As noted previously, DOJ OPR evaluated the conduct of DOJ attorneys in this case.

order to facilitate his arrest. Further, we did not find sufficient evidence to determine who leaked this information about Mayfield to the media.

### **E. The Conditions of Mayfield's Confinement**

After Mayfield was arrested on the material witness warrant and the Court denied his request to be released to home detention, the USMS assigned Mayfield to be confined at the MCDC. From May 6 until May 12, he was housed in the administrative segregation unit where he was kept in his cell for up to 22 hours per day. On May 12, the MCDC moved Mayfield to the less restrictive protective custody unit, where he was still housed in a solitary cell but was permitted more recreation time outside his cell.

We found that Mayfield's conditions of confinement did not violate the material witness statute. We also did not find evidence that Mayfield was mistreated during his confinement. We found that he was housed under conditions that were consistent with the normal practices of the USMS and the MCDC for criminal defendants and material witnesses.

However, the OIG found that the MCDC failed to communicate important information about Mayfield to appropriate prison personnel, including the instruction to keep him separated from other prisoners for his own safety and the fact that he had been booked under an alias to protect grand jury secrecy. These failures resulted in an inadvertent disclosure of the alias to the media and an unnecessary confrontation between Mayfield and a correctional officer who did not know who he was and confronted Mayfield about his true identity.

### **F. Recommendations**

As a result of our investigation, we provided a series of recommendations to the FBI to address the problems we found in the Mayfield case. While we did not find any intentional misconduct by FBI employees, either in the Laboratory or by those conducting the FBI field investigation, we did find performance issues by various FBI employees. Most significantly, we found a series of systemic issues, particularly in the FBI Laboratory, that helped cause the errors in the Mayfield case. While the FBI Laboratory has taken significant steps to address these issues, we made a series of additional recommendations to the FBI to address the Laboratory issues raised by the Mayfield misidentification. We believe our recommendations, if fully adopted, can help prevent similar errors in the future.