FOLLOW-UP AUDIT OF THE
BUREAU OF ALCOHOL, TOBACCO, FIREARMS
AND EXPLOSIVES
FORENSIC SCIENCE LABORATORIES
WORKLOAD MANAGEMENT

U.S. Department of Justice
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FOLLOW-UP AUDIT OF THE BUREAU OF ALCOHOL, TOBACCO, FIREARMS AND EXPLOSIVES FORENSIC SCIENCE LABORATORIES
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EXECUTIVE SUMMARY

The Bureau of Alcohol, Tobacco, Firearms and Explosives’ (ATF) forensic science laboratories support the ATF’s mission of enforcing federal criminal laws relating to firearms, explosives, arson, alcohol, tobacco, and the regulatory functions associated with the firearms and explosives industry. In the course of their investigations, ATF Special Agents submit to the laboratories for the purpose of forensic analysis evidence that includes firearms, explosives, fire accelerants, fire devices, and debris from explosives and fire scenes.

The ATF’s three regional forensic laboratories are located near Washington, D.C., and San Francisco, and in Atlanta. The laboratories are units of the Office of Laboratory Services, which is part of the ATF’s Office of Science and Technology. Each of the regional laboratories primarily serves an assigned group of states. In fiscal year (FY) 2005, the ATF laboratories performed over 2,600 forensic examinations on evidence from crimes involving arson, explosives, and firearms, with an authorized staff of 106 positions and a budget of approximately $16 million.

The ATF laboratories’ forensic chemists, firearm and toolmark examiners, fingerprint specialists, and document examiners (who we collectively refer to as examiners) support the ATF’s 23 field divisions by performing and reporting the results of forensic examinations in the disciplines of:

- arson,
- automated ballistic identification,
- explosives,
- firearms and toolmarks,
- latent prints,
- trace evidence, and
- questioned documents.

In addition to providing forensic services, examiners perform duties outside the laboratories, such as providing training, crime scene assistance, and court testimony.
This audit was performed by the Department of Justice, Office of the Inspector General (DOJ OIG) as a follow-up to the Department of the Treasury Office of Inspector General (Treasury OIG) report OIG-01-068, CRIMINAL ENFORCEMENT: ATF Forensic Science Laboratories Need to Improve Workload Management, issued in April 2001. The DOJ OIG is following up on an audit performed by the Treasury OIG because the ATF was transferred to the Department of Justice in January 2003 as a result of the Homeland Security Act.

The Treasury OIG audit found that the ATF laboratories did not always provide timely service, did not properly prioritize workloads, and did not consistently follow established case file controls. The Treasury OIG recommended that the ATF ensure that laboratories are adequately staffed, work performed outside the laboratory is coordinated, incoming evidence is better prioritized, and management controls are followed. In its response to the findings and recommendations, ATF management substantially agreed with the Treasury OIG and identified specific corrective actions it would take to address the issues raised.

For the DOJ OIG audit, our objectives were to determine whether the forensic laboratories were providing timely service, effectively prioritizing workloads, and following two specific case file management controls that were identified in the Treasury OIG audit as weaknesses. The weaknesses identified by the Treasury OIG were that not all closed case files contained evidence control cards as required and that laboratory analysts were not always recording the number of hours spent performing examinations and writing reports on the evidence control cards. In conducting this audit, we focused on the regional forensic laboratories that analyze and maintain custody of evidence submitted by the ATF field divisions. We interviewed officials from the ATF’s Office of Laboratory Services, managers and staff at each of the three laboratories, and Special Agents who had requested laboratory services. We also reviewed records at each of the three forensic laboratories and analyzed workload data published by the Office of Laboratory Services.

**Timeliness of Completed Exams**

The Treasury OIG used a 30-day standard to define timely service in its audit report in 2001. The formal performance standard for the Office of Laboratory Services for 2005 calls for requested examinations to be completed within 30 days in 30 percent of firearms cases, 35 percent of explosives cases, and 40 percent of arson cases during FY 2005. The Director of Laboratory Services told the DOJ OIG that he has adopted a long-term goal to complete all examinations within 30 days of receiving the
evidence. We found that a 30-day turnaround time is commonly identified by the forensic community as a standard that forensic laboratories should try to achieve, but that it is generally not met for 100 percent of examinations because of resource constraints.

We used a 30-day standard for this audit to compare our findings with those of the Treasury OIG and to determine how far the ATF is from meeting this long-term goal. We also consider 30 days a reasonable goal toward which laboratories should work because of the potentially serious consequences of delayed forensic examinations. These effects include the costs of wasted investigative time and delayed trials, and the more serious possibility that additional crimes may be committed by offenders who are not identified and arrested quickly.

To evaluate timeliness, we obtained and analyzed data from the Office of Laboratory Services’ Forensic Automated Case and Exam Tracking System (FACETS), a database system used by the ATF’s regional laboratories to track and manage submitted forensic evidence.1 The data included all forensic examinations that were completed from October 1, 2003, through May 13, 2005, or were pending at that time. As shown in the following chart, we found that 2,871 examinations (63 percent) were not completed within the 30-day standard. Of the 2,871 examinations not completed within 30 days, more than half took more than 90 days to complete. The average turnaround time for all examinations was 95 days.

<table>
<thead>
<tr>
<th>Processing Time</th>
<th>Number of Examinations</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-30 Days</td>
<td>1,705</td>
<td>37</td>
</tr>
<tr>
<td>31-60 Days</td>
<td>889</td>
<td>19</td>
</tr>
<tr>
<td>61-90 Days</td>
<td>492</td>
<td>11</td>
</tr>
<tr>
<td>&gt; 90 Days</td>
<td>1,490</td>
<td>33</td>
</tr>
<tr>
<td>Totals</td>
<td><strong>4,576</strong></td>
<td>100</td>
</tr>
</tbody>
</table>

Source: DOJ OIG analysis of FACETS data

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1 In response to two of the recommendations in the Treasury OIG report, the ATF stated that it planned to replace FACETS with a modern laboratory information management system, which would permit the automated, regular exchange of case information between agents and the laboratory.
In its 2001 report, the Treasury OIG attributed the laboratories’ processing delays to the large backlogs of examination requests, an inability to hire sufficient staff, and the staff’s other duties outside the laboratories that competed for their time, such as providing instruction and crime scene assistance. In general, the DOJ OIG found that these same factors contributed to the laboratories’ average processing times and that the ATF had not implemented some of the corrective actions it proposed in response to the Treasury OIG’s report.

**Backlogged Examinations**

The DOJ OIG found that the number of backlogged examinations had decreased since the Treasury OIG audit, but the backlog still remained significant. The DOJ OIG audit compared the backlog reported in the Treasury audit to FY 2005 backlog figures, and found that the total backlog of 1,289 examinations had been reduced to 983 examinations. The DOJ OIG determined that 64 percent of pending examinations represented in the recent data were more than 90 days old, 47 percent were more than 180 days old, and 23 percent were a year or more old. We further analyzed the backlog by type of examination to determine if the number of cases in specific disciplines had increased or decreased, and how long it would take to eliminate it. We found that the backlog varied by examination type from approximately 2 to 8 months in terms of workload. The backlog was increasing for arson and questioned documents and was decreasing for explosives, firearms, fingerprints, and trace examinations. For examinations decreasing backlogs, it would take between 6 and 10 years to eliminate the backlog if the laboratories continued to complete examinations at the FY 2005 monthly rate.

Following the Treasury OIG audit, ATF management planned to provide each field division with a list of cases with pending examinations so that field divisions could identify cases that could be deleted from the backlog. According to the Treasury OIG report, the ATF management had provided each field division with a list of cases that were at least a year old as of May 1999, which resulted in 94 inactive cases being removed from the laboratories’ backlogs. The ATF repeated this process in November 2000, and removed an additional 85 cases. The DOJ OIG found that ATF management had not provided these reports to the field divisions since November 2000 and therefore had not continued this effort to clear the backlog. According to the Director of Laboratory Services, FACETS does not

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2 The ATF’s Office of Laboratory Services reports a “backlogged” examination as any requested examination that has not been completed at a given point in time, even those pending for less than 30 days.
produce such reports in a usable format; however, the Director anticipated that electronic communications between field divisions and the laboratories using the new information management system would facilitate the timely removal of backlogged examinations associated with inactive cases. At the time of our audit, the ATF had not implemented the new information management system, although its acquisition had been planned since at least 2001.

Inability to Hire Sufficient Staff

In response to the Treasury OIG’s recommendation that the ATF ensure the laboratories are adequately staffed, in 2001 the ATF stated it would increase the total number of positions within the Office of Laboratory Services by 19. However, the DOJ OIG found that, rather than increasing, the number of positions available within the three regional forensic science laboratories in FY 2005 had instead decreased by two from the number of positions that existed in FY 2000. The number of vacancies noted at the laboratories in 2001 had not changed significantly as of September 2005.

In addition, the ATF proposed in 2001 to centralize its laboratory personnel functions, and to attract, hire, and retain experienced personnel. The DOJ OIG found evidence these actions had been taken, but we concluded that they had no effect on reducing the time it took the ATF to fill vacant/open positions. Moreover, the average of 9 months to 1 year that vacancies remained unoccupied in 2001 increased to 14 months during FYs 2004 and 2005. According to the Director of Laboratory Services, the extended time it took to hire replacement personnel was partially due to the fact that the ATF had implemented a new hiring process. Three of the replacement actions we reviewed were in San Francisco, and laboratory officials there stated that because of the high cost of living, it is difficult to locate qualified personnel at a salary commensurate with their qualifications.

Given the examiner vacancies, the DOJ OIG found that the staffing level in FY 2005 was not sufficient to both manage the incoming workload and reduce the existing backlog. Consequently, backlogged requests continued to interfere with the timely analysis of incoming examinations requests.
Other Duties Outside the Laboratories

In response to the Treasury OIG’s recommendation that the ATF ensure that laboratory managers coordinate the amount of outside work performed by laboratory personnel to limit the negative effect on the laboratory’s workload, the ATF stated it would centralize and coordinate all training requests, and evaluate all requests for laboratory assistance at crime scenes to ensure that a valid need existed. The DOJ OIG found evidence that these actions had taken place and concluded that laboratory officials were reasonably managing the demands for these services.

Effect on ATF Investigations

To determine how the Office of Laboratory Services’ management of its workload affected ATF investigations, the DOJ OIG reviewed ratings and comments from Special Agents on customer satisfaction cards that were returned with laboratory reports. The cards ask respondents to rate the laboratory’s performance in three areas: service, timeliness, and reports/statements. Only 23 percent of the recipients of 4,576 laboratory reports included in our universe returned the customer satisfaction cards, and those respondents were overwhelmingly satisfied with the service and laboratory reports provided by the regional forensic laboratories. However, a minority of respondents (10 percent) expressed at least some dissatisfaction with the time it took the laboratories to complete examinations and issue reports.

We also obtained supplemental information through 22 telephone interviews from a judgmental sample of Special Agents regarding their satisfaction with the service provided by the regional forensic laboratories. We asked questions about the effect processing delays had on investigations, and whether the agents ever used state and local laboratories instead of the ATF laboratories.

Based on those interviews, it appears that delayed receipt of laboratory reports did not adversely affect investigations in most instances, primarily because of the absence of a suspect or because of a confession. However, about 30 percent of the Special Agents we interviewed stated that they were less than satisfied with the timeliness of the service provided by the laboratories. Additionally, because of delays at ATF laboratories, most of the Special Agents we contacted told us that they had at least some laboratory examinations (primarily latent prints) performed at state and local laboratories.
We concluded that the questions on the customer satisfaction cards should be revised to ask more specific information about the effect of the analysis on investigations, such as whether the analysis was received in time to be of assistance on a case, or if it was not, what the negative effect was on the progress of any investigation or the outcome of a case.

**Priority System**

The Treasury OIG recommended the ATF develop a priority system for incoming evidence submissions to support its investigative priorities. In response, the ATF stated that a new priority system was under development. The DOJ OIG found, however, that the new priority system had not been implemented by FY 2005, 4 years after it was proposed as a corrective action. Additionally, the ATF had not established a methodology for classifying its non-expedited work, which accounts for about two-thirds of all submissions. Non-expedited examinations were completed on a first-in, first-out basis, which did not account for the varying degrees of importance of these examinations.

As shown in the following chart, examinations completed on submissions for which expedited service was requested were generally completed in a more timely manner than other examinations. However, 46 percent of examinations for which expedited service was requested were not completed within 30 days.

**Percentages of Expedited vs. Non-Expedited Examinations Completed (by Days)**

![Chart showing percentages of expedited vs. non-expedited examinations completed by days](chart.png)

Source: DOJ OIG analysis of FACETS data
Under the current priority system, requests for expedited service have to be justified according to informal criteria and have to include a copy of the ATF’s Report of Investigation to assist laboratory personnel in performing examinations. We found that these management controls were not always followed. While almost all expedited submissions we reviewed included justifications, 19 percent did not meet the ATF’s informal criteria. Additionally, 42 percent of case files reviewed were missing the required Report of Investigation.

Quality Assurance

It is crucial that forensic results be of high quality to ensure reliable results. While the issue of quality was not addressed in the Treasury OIG’s 2001 audit, the DOJ OIG performed a limited assessment to ensure that the ATF had a quality assurance process in place.

We found the ATF had a quality assurance process that the Office of Laboratory Services followed to ensure the quality of its services. The three regional forensic laboratories are accredited and internal quality reviews are performed periodically by the Office of Laboratory Services.

OIG Conclusions and Recommendations

The OIG’s follow-up review to the Treasury OIG’s 2001 audit report found that forensic science examination processing times had not significantly improved in the past 4 years. Two-thirds of completed forensic examinations continued to take more than 30 days to complete, and about one-third of examinations took more than 90 days. While customers of the ATF laboratories appreciated the quality of work produced, interviews with Special Agents in field offices continued to reflect dissatisfaction with the processing times, and more than half of the agents we spoke with used other laboratories at times to obtain more timely results. We also found that the ATF laboratories follow a quality assurance program that ensures its laboratories are accredited by the American Society of Crime Laboratory Directors/Laboratory Accreditation Board and the laboratories comply with the ATF’s Office of Laboratory Services Policy and Procedures Guidelines.

Although the ATF had implemented several corrective actions as a result of the Treasury audit, other corrective actions that could have had a significant impact on laboratory workload management had not been implemented.
The ATF did not increase the number of examiner positions in the forensic laboratories, and the time it took to fill examiner vacancies had increased. For example, the DOJ OIG found that the staffing level in FY 2005 could not manage the incoming workload in combination with the existing backlog in light of examiner vacancies.

The ATF also did not implement a new priority system as it had stated it would. The priority system currently in place does not adequately identify evidence submissions that are appropriate for expedited service. No standard process is in place to classify all examination requests so that they are processed in a timely manner. Although after the 2001 Treasury OIG audit the ATF said a new priority system was under development, the new system had not been implemented when the DOJ OIG conducted its audit in FY 2005.

Finally, the ATF did not implement a new information management system, so it did not realize the anticipated benefits associated with the new system. The ATF also did not continue its initial efforts to clear the backlog of requests for examinations that were no longer needed. We found that staffing was adequate to manage the incoming workload but, as a result of never clearing the backlog, backlogged requests continued to interfere with the timely analysis of incoming examination requests.

The DOJ OIG recommends seven improvements that focus on managing the incoming workload and existing backlog, developing and implementing a revised priority system, and developing strategies to reduce the time it takes to fill examiner vacancies. Without taking these or similar actions, the backlog, inadequate priority system, and vacant examiner positions will continue to interfere with the laboratories’ ability to handle the incoming workload of evidence on a timely basis, and more serious consequences may occur if delays in performing the work allows offenders to commit additional crimes.

We recommend that the ATF:

- Develop and implement a plan to eliminate the backlog in each regional forensic science laboratory.
- Develop and implement a plan to manage unusually high incoming workloads that are associated with resource-intensive cases.
- Develop agreements and contracts with other laboratories to perform forensic work to provide support when the demand for examinations is unusually high and to help eliminate the backlog.
• Develop and implement a priority system for managing all incoming evidence submissions. The system should support the ATF’s investigative priorities and establish realistic time standards for completion.

• Ensure that Special Agents are educated on the new priority system and comply with its requirements.

• Develop and implement a plan to reduce the time it takes to fill examiner vacancies.

• Revise the questionnaire being sent to customers by requesting more specific feedback about the impact of the forensic analysis on the progress of investigations and outcomes of cases.
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INTRODUCTION

The Bureau of Alcohol, Tobacco, Firearms and Explosives’ (ATF) was transferred to the U.S. Department of Justice (the Department) in January 2003 as a result of the Homeland Security Act. The Treasury Department’s Office of Inspector General (Treasury OIG) conducted an audit of the ATF’s forensic science laboratories and issued its report in 2001. The Department of Justice Office of the Inspector General (DOJ OIG) conducted a follow-up audit during 2005, which is the basis for this report, that assessed ATF forensic science laboratories workload management.

History and Mission

The ATF laboratory system traces its history from 1886, when Congress established a Revenue Laboratory as part of the Department of the Treasury (Treasury Department). This laboratory began examining alcoholic products in 1887. Over time, the laboratory’s responsibilities expanded to include the forensic analysis of firearms, explosives, fire accelerants, fire devices, and debris from explosives and fire scenes.

When the ATF was transferred to the Department of Justice in 2003, laboratory functions related to firearms, explosives, and arson also were transferred to the Department. Laboratory functions related to alcohol and tobacco, which are performed primarily for regulatory purposes, remained in the Treasury Department as the Scientific Services Division.

The laboratories directly support the ATF’s mission of enforcing federal criminal laws relating to firearms, explosives, arson, alcohol, tobacco, and the regulatory functions associated with the firearms and explosives industries. Laboratory services are provided to the ATF’s 23 field divisions located throughout the United States. Each field division is charged with carrying out the ATF’s mission within its assigned jurisdiction. In FY 2005, the ATF laboratories performed over 2,600 forensic examinations on evidence from crimes involving arson, explosives, and firearms with a staff ceiling of 106 positions and a budget of approximately $16 million.

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3 However, during fiscal year (FY) 2005, the ATF laboratories in the Department of Justice began analyzing tobacco products related to criminal cases.

4 Most evidence analyzed by the ATF forensic laboratories is submitted by ATF Special Agents. The laboratories only accept evidence from state or local authorities if special arrangements have been made with the ATF.
The Office of Laboratory Services

The Office of Laboratory Services is part of the ATF’s Office of Science and Technology. According to the ATF, the Office of Laboratory Services seeks to provide accurate and authoritative scientific information needed by the ATF in reducing violent crime and protecting the public. The goals of the Office of Laboratory Services are to:

- develop and maintain scientific excellence and lead in setting national and international standards in the ATF’s areas of expertise by developing partnerships and employing new technology,

- substantially advance and sustain the ATF’s strategic goals and programs, and

- provide timely services in ways that can be sustained.

The Office of Laboratory Services consists of the Director’s Office, the Fire Research Laboratory, and three regional forensic science laboratories that are located near Washington, D.C., and San Francisco, and in Atlanta. The following chart depicts the Office of Laboratory Services organizational structure as of September 30, 2005.
According to the ATF, the Director of Laboratory Services leads and oversees the laboratory system by performing strategic planning, obtaining resources, ensuring the quality of laboratory results, promoting research and staff development, and managing the forensic and fire research laboratories. The Director reports to the Assistant Director for Science and Technology, and administers an annual budget of approximately $16 million.

According to the ATF, a Quality Programs Office, which is part of the Director’s Office, helps the laboratories to: (1) meet national standards for quality, (2) maintain professional accreditation, (3) improve scientific and administrative standards, and (4) use computer systems. The office
develops and updates protocols and procedures, performs annual internal reviews of each laboratory, conducts quality workshops, and administers annual proficiency tests to laboratory personnel.

**National Laboratory Center**

In June 2003, the ATF opened a $135 million National Laboratory Center in Ammendale, Maryland. This complex houses the Office of Laboratory Services Director’s Office, the new Fire Research Laboratory, the Washington laboratory, and the Treasury Department’s Scientific Services Division laboratory.

![ATF National Laboratory Center Ammendale, Maryland](image)

Source: Office of Laboratory Services, Bureau of Alcohol, Tobacco, Firearms and Explosives

**Fire Research Laboratory**

According to the ATF, the Fire Research Laboratory was the first of its kind in the world and provides the capability to reconstruct fire scenes to determine how fires begin and spread. This laboratory provides the necessary facilities, equipment, and staff to work on important fire investigation issues such as fire scene reconstruction, flashover studies, validation of fire-pattern analysis indicators, the impact of accelerants on fire growth and spread, ignition studies, and electrical-fire cause analysis.^{5}

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^{5} Flashover is a dramatic event in a room fire that rapidly leads to the involvement of all combustibles within the room.
According to ATF publications, until the development of the Fire Research Laboratory, there were no fire measurement facilities in the United States, or elsewhere, dedicated to the specific needs of the fire investigation community. The Fire Research Laboratory, however, did not exist at the time of the Treasury OIG audit and does not perform the type of routine forensic testing that was reviewed in the Treasury OIG audit; we did not evaluate it as part of the DOJ OIG audit.

**Regional Forensic Science Laboratories**

Staff at the regional forensic science laboratories support the ATF’s 23 field divisions by performing and reporting the results of forensic examinations, providing training to law enforcement officials, assisting at crime scenes, and testifying in court. Staff also enter electronic images of bullets and cartridge cases recovered from crime scenes and suspect weapons into the National Integrated Ballistic Information Network (NIBIN).  

The three forensic laboratories receive and return evidence submitted for examination and track the evidence while it is at the laboratory. The laboratories accept evidence for cases in which the ATF has an open investigation and under special arrangements with state and local authorities. For example, the ATF has an agreement with the District of Columbia Metropolitan Police Department to perform fire debris analysis. However, approximately 96 percent of the requests for examination included in the universe for this audit were submitted by ATF offices. Each ATF field division sends evidence to the laboratory that serves its area, as shown in the following map, with the exception of documents requiring analysis in the San Francisco region. These are sent to either the Washington or Atlanta laboratories, because the San Francisco laboratory is not staffed to perform this type of testing.  

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7 Laboratory officials told the DOJ OIG that they discontinued their efforts to replace the single vacated document analyst position within the San Francisco laboratory in 2000, because the volume of work no longer justified a position. Western regional field offices were instructed to forward all document analysis requests to either the Washington or Atlanta laboratories.
Regional Forensic Science Laboratories’ Areas of Responsibility

Source: Office of Laboratory Services, Bureau of Alcohol, Tobacco, Firearms and Explosives

The Atlanta and San Francisco laboratories are located in office buildings scheduled for facility upgrades. According to the Director of Laboratory Services, the renovation projects are scheduled for completion in FY 2007, and the approved upgrade projects will provide additional space and greater efficiency for each laboratory. A picture of a forensic examination room at the Washington laboratory follows.
Services

The regional laboratories perform a variety of examinations using staff with expertise in diverse disciplines. Forensic chemists, firearm and toolmark examiners, fingerprint specialists, and document examiners (collectively referred to as examiners throughout this report) perform the following major types of examinations.

- **Arson Examinations** – Fire debris collected at suspected arson crime scenes is examined to identify accelerants, incendiaries, and incendiary device components. Identification of an accelerant provides evidence that a crime of arson was committed.

- **Explosives Examinations** – Evidence collected at explosive scenes is examined to identify explosives, blasting caps, fuses, timing mechanisms, energy sources, radio control components, igniters, containers, wires, tapes, and other component parts that may have been used to make an explosive device.
• **Firearm and Toolmark Examinations** – Examiners perform comparisons of markings on bullets and cartridge casings, serial number restoration, weapon operability testing, bullet trajectory determinations, crime scene reconstruction of shooting incidents, and distance and shot pattern determinations. Toolmark examinations generally relate to explosives and arson crimes, and include the comparison of fractures and impressions caused by cutting, drilling, gripping, and prying tools.

• **Automated Ballistic Identification** – Electronic images of markings on bullets and cartridge cases recovered from crime scenes and suspect weapons are entered into NIBIN for search and comparison against other bullets and cartridge cases.

• **Trace Evidence** – Examiners perform microscopic, chemical, physical, and instrumental comparisons of a wide variety of physical evidence collected at crime scenes. Such materials include tape, wire, glass, metal, plastic, adhesive, hair, paint, fiber, and paper. These examinations are conducted to identify materials that can connect a suspect to a crime scene.

• **Questioned Document Examinations** – Document examinations are performed to:
  
  o identify handwriting, hand-printing, mechanical impressions (such as typewriters), and counterfeit cigarette tax stamps;

  o detect altered and forged documents;

  o restore and decipher eradicated, obliterated, and charred documents; and

  o detect and decipher indented writings.\(^8\)

• **Latent Print Examinations** – Approximately 90 percent of evidence received in the forensic laboratory is examined for the presence of identifiable latent prints. In many instances, latent print analysis is requested in addition to other examinations. Evidence examined includes documents, component parts of explosives and incendiary

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\(^8\) An indented writing consists of indented marks on a sheet of paper or other material created from a document that was written above it.
devices, and firearms. Techniques used include dye staining, super glue fuming, laser, and traditional powder methods.

Examiners also testify as experts in court and provide training for Special Agents, inspectors, auditors, and other federal, state, and local law enforcement officials regarding the forensic analysis of evidence. In addition, examiners provide assistance at crime scenes, usually as part of one of the ATF’s four National Response Teams (NRT). These teams respond to major explosions and fire scenes nationally and internationally. An NRT consists of highly trained criminal investigators, forensic chemists, and explosive technology experts. The team responds to crime scenes within 24 hours, collects evidence, and performs preliminary forensic examinations on site.

Each regional laboratory has a mobile, rapid response laboratory. These rapid response laboratories operate in recreational-sized vehicles that are deployed to crime scenes requiring significant forensic services. The first mobile laboratory was acquired by the Washington laboratory in FY 2001 and has been deployed about two or three times per year.

**Workload**

From FYs 2003 through 2005, the three ATF forensic laboratories received requests for and performed nearly 10,000 examinations, which was between 2,500 and 4,000 per year. Evidence may be submitted for more than one type of examination, so the same evidence may be included two or more times in the number of examinations. For example, latent print examinations are generally requested in addition to other examinations performed and would be counted as a second or third examination.

The following table shows the number of examinations requested and completed for each of the forensic laboratories for the last three fiscal years.

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
<td>1,932</td>
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<td>1,681</td>
<td>1,566</td>
<td>1,141</td>
<td>1,181</td>
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<td>Atlanta</td>
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<td>977</td>
<td>805</td>
<td>819</td>
<td>775</td>
<td>797</td>
</tr>
<tr>
<td>San Francisco</td>
<td>985</td>
<td>1,011</td>
<td>900</td>
<td>835</td>
<td>660</td>
<td>696</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>3,716</td>
<td>3,727</td>
<td>3,386</td>
<td>3,220</td>
<td>2,576</td>
<td>2,674</td>
</tr>
</tbody>
</table>

Source: Office of Laboratory Services, Bureau of Alcohol, Tobacco, Firearms and Explosives
The preceding table shows instances in which more examinations were completed than were requested during this period. This was the case, for example, in all three laboratories for FY 2005, as is shown in the percentage columns. This occurs because the numbers of completed examinations also include examinations that were requested in a prior period. As a result, completed examinations can exceed the number requested in the same period. The preceding table also shows that the Washington laboratory generally performs more examinations than the other two forensic laboratories but it also employs more staff.

The following chart reflects the number of examinations performed by all three forensic laboratories by each major type of examination during the past three fiscal years.

Examinations Performed by Each Major Type of Examination
FY 2003 through FY 2005

According to ATF officials, the larger number of examinations performed during FY 2003 was attributable to the Washington, D.C., sniper 

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9 See the Backlog of Examination Requests section of this report for a discussion of the backlog.

10 This chart excludes data on comparative examinations, which the ATF’s Office of Laboratory Services discontinued tracking in FY 2005. Therefore, the total number of examinations for FYS 2003 and 2004 do not equal the total numbers listed in the previous table.
case, which involved an unusually heavy workload in the disciplines of firearms and latent prints.\textsuperscript{11}

\textit{Information System}

The regional forensic science laboratories use the Forensic Automated Case and Exam Tracking System (FACETS) to track and manage the forensic evidence submitted by field offices. FACETS was developed by the Office of Laboratory Services and upgraded in 1999 by the ATF’s Information Services Division. FACETS provides basic database functions and operates on each laboratory’s local area network. The system is used to record the receipt, disposition, and tracking of forensic evidence submissions. Additionally, the system creates standardized reports and tracks which examiner is assigned to perform each examination. FACETS, however, does not provide comprehensive laboratory information management functions and data.

The ATF had planned to replace FACETS with a modern laboratory information management system for a long time, since at least 2001. When our audit began, the planned implementation date for the new system was July 2005. However, as of December 2005, the implementation schedule for the new system projected that implementation would not be complete until March 2006.

\textbf{Laboratory Services Operating Plan}

The Director of Laboratory Services publishes an Operating Plan each fiscal year that describes objectives, tasks, and performance measures for the Office of Laboratory Services to support the ATF’s strategic plan. The plan for FY 2005, which was issued October 15, 2004, included an objective to improve the timeliness of forensic services for the ATF’s major case types, which are firearms, explosives, and arson cases. The plan also established targets for the percentage of cases of each type to be completed within 30 days of receipt of the evidence in the laboratories.\textsuperscript{12} The target percentages are listed in the following table.

\begin{table}[h!]
\centering
\begin{tabular}{|c|c|c|}
\hline
Case Type & Target Percentage \hline
Firearms & \textsuperscript{12} \hline
Explosives & \textsuperscript{12} \hline
Arson & \textsuperscript{12} \hline
\hline
\end{tabular}
\caption{Laboratory Services Operating Plan Targets}
\end{table}

\textsuperscript{11} John Allen Muhammad and Lee Boyd Malvo were convicted for the sniper attacks that killed 10 people and wounded 3 others in the Washington, D.C., area during October 2002. ATF officials advised us that the Washington laboratory received and test-fired over 100 firearms during the first 2 weeks of the sniper case, compared to an average of about 28 firearms examinations performed per month during FY 2004.

\textsuperscript{12} The 30-day standard is discussed in detail in the Timeliness of Completed Examinations section of this report.
FY 2005 Operating Plan Targets

<table>
<thead>
<tr>
<th>Type of Case</th>
<th>Percentage of Cases Targeted to be Completed Within 30 Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arson</td>
<td>40%</td>
</tr>
<tr>
<td>Explosives</td>
<td>35%</td>
</tr>
<tr>
<td>Firearms</td>
<td>30%</td>
</tr>
</tbody>
</table>

Source: Laboratory Services Operating Plan, FY 2005

The Operating Plan includes supporting tasks to enable the Office of Laboratory Services to achieve these targets. These tasks include filling vacant or new positions, implementing a contract for fingerprint examinations to help reduce the backlog, and reducing the amount of time examiners spend conducting training that is not sponsored by the ATF’s Assistant Director for Training and Professional Development. Additionally, the Director of Laboratory Services planned to improve the evidence submission process by publishing a new ATF directive and evidence submission form.

Prior Audit

The Treasury OIG issued Audit Report OIG-01-068, *CRIMINAL ENFORCEMENT: ATF Forensic Science Laboratories Need to Improve Workload Management*, in April 2001. The audit identified weaknesses in the management and services provided by the laboratories. Specifically, the audit found that the laboratories: (1) did not always provide timely service, (2) needed to prioritize the workload, and (3) needed to ensure that all closed case files contained evidence control cards and that the number of hours laboratory employees spent analyzing evidence and preparing reports was recorded. The prior audit recommended that the ATF ensure that:

1. The laboratories are adequately staffed with qualified personnel;

2. Laboratory managers coordinate the amount of outside work, such as training, performed by laboratory personnel to limit the negative effect on the laboratory’s workload;

3. The ATF develop a priority system for incoming evidence submissions to support its investigative priorities;

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13 The Treasury OIG report phrased the third item as "laboratories need to ensure case file management controls are followed," but the finding addressed only the two specific issues about recording hours and evidence control cards listed above.
4. Special Agents provide adequate justification for requests for expedited service and obtain proper supervisory signatures before submitting evidence transmittal forms to the laboratories; and

5. Laboratory employees ensure that all closed case files contain evidence control cards and record the number of hours spent analyzing evidence and preparing reports.

In the response to the report’s findings and recommendations, ATF management substantially agreed with the Treasury OIG and cited specific actions it had taken or would take to address the issues raised. The actions included increasing the personnel ceiling for the Office of Laboratory Services, developing a new laboratory priority system, implementing a new information management system, and minimizing the amount of time laboratory personnel spent outside the laboratory performing other official duties. The Treasury OIG concluded that the proposed corrective actions addressed the intent of the recommendations. During our audit we determined the current status of each issue, which is discussed in the Findings and Recommendations section of this report.

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14 Additional information on the ATF’s response to the findings and recommendations is provided in Appendix II.
FINDINGS AND RECOMMENDATIONS

Workload Management

The DOJ OIG found the ATF laboratories had slightly improved the processing times for forensic analysis since the time of the prior audit conducted by the Treasury OIG in 2001. However, approximately two-thirds of completed examinations continued to take more than 30 days to complete. Approximately 37 percent of the completed examinations we tested were completed within 30 days, compared with 33 percent found in the Treasury audit for FYs 1998 and 1999. The laboratories did reduce the percentage of examinations that took more than 90 days to complete, from 43 percent during the Treasury OIG audit to 33 percent during the DOJ OIG audit.

The improvements in timeliness of laboratory examinations were limited because the ATF had not yet accomplished several actions that were planned in 2001. These actions included implementing a revised priority system to expedite services more effectively, increasing the number of examiner positions at the forensic science laboratories, and implementing the planned information system that was expected to improve communications between field offices and the laboratories. The ATF also had not significantly reduced the size of its backlog of examination requests, causing incoming requests to be put on hold for analysis while backlogged requests were handled.

Background

ATF field offices, and occasionally state and local authorities, submit evidence to the forensic laboratories along with information on evidence submission forms, including specific requests for examinations. Agents may submit several batches of evidence, called submissions, at different times during an investigation. Each submission may include multiple items to be tested, and each item may need more than one type of examination. For example, nearly all guns on which firearms examinations are performed are also tested for latent fingerprints.

Submissions received at the laboratories are initially processed by an evidence technician, who records the information in FACETS. FACETS produces an evidence control card that is used, in part, to track the location
of evidence in the laboratory. The evidence control card is forwarded to a section supervisor, who assigns an examiner to perform the test. Most evidence submissions are processed on a first-in, first-out basis. Special Agents who need laboratory results quickly, or by a specific date, may request expedited service using the evidence submission form. If expedited service is requested, which was the case in approximately 30 percent of our sample, the section supervisor will review the supporting documentation to determine whether the circumstances justify moving the request ahead of other pending examination requests. The supervisor may contact the submitting agent to discuss the request. If the supervisor determines the submission warrants expedited service, then it will be processed ahead of other submissions.15

Tests on submissions that require more than one type of analysis are processed in the order determined appropriate by the laboratory. This is because one type of examination may destroy some evidence vital to another examination. For instance, explosives fragments are always examined by a chemist in the explosives section of the laboratory before a fingerprint specialist examines the fragments for latent prints. A fingerprint specialist always examines a firearm for latent prints before a firearms examination is performed. Examiners from the various disciplines routinely coordinate with one another, and with the submitting agents, in the handling of evidence. Occasionally, Special Agents cancel requests for examinations before the examinations are completed. This may happen as a result of a defendant’s pleading guilty, which makes the forensic examination unnecessary.

**Timeliness of Completed Examinations**

The Treasury OIG used a 30-day standard to define timely service in its audit report in 2001. It asserted that the goal was established by laboratory officials during the early 1980s as a target timeframe for completing examinations. However, the formal performance standard that existed in the Office of Laboratory Services’ Operating Plan for 2005 reflects the expectation that the 30-day goal would not be achieved for all examinations. The Operating Plan for 2005 called for requested examinations to be completed within 30 days in 30 percent of firearms cases, 35 percent of explosives cases, and 40 percent of arson cases during FY 2005. The plan also projected an increase of 5 percentage points for firearms and arson cases for each of the two subsequent fiscal years.

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15 Expedited service is discussed in more detail in the Priority System section of this report.
The Director of Laboratory Services told the DOJ OIG that he has adopted a long-term goal that was generally accepted among crime laboratory directors to complete all examinations within 30 days of receiving the evidence. We found that a 30-day turnaround time was commonly identified by the forensic community as a standard that forensic laboratories should try to achieve, but that generally was not met for 100 percent of examinations because of resource constraints. The following are examples of a 30-day standard.

- A census report sponsored by the Department’s Office of Justice Programs, Bureau of Justice Statistics (BJS), applied a 30-day standard for forensic results to its analysis of a survey of publicly funded forensic laboratories.\(^{16}\) The report estimated that publicly funded crime laboratories would need to increase staffing overall by approximately 20 percent to achieve a 30-day turnaround for all requests for forensic services. This was the only standard used for turnaround time in the report. The BJS also reported that achieving this turnaround would require resources worth more than $500 million, including staff, new and renovated facilities, additional and updated equipment, training, and improved laboratory information management systems. This report also defined a backlogged case as any case in which examination results have not been furnished in 30 days or more.\(^{17}\)

- A number of forensic laboratories run by state authorities set goals around 30 days for forensic results, but do not meet the goals. For example, the Florida Office of Program Policy Analysis and Government Accountability found in 1999 that the Florida Department of Law Enforcement Forensic Science Program had not yet achieved its standard of 35 days on average to complete laboratory service requests (not including serology and DNA). The Mississippi Legislature’s Joint Committee on Performance Evaluation and Expenditure Review found that the Mississippi Department of Public Safety’s Crime Laboratories’ average turnaround time for requests

\(^{16}\) The report, *Census of Publicly Funded Forensic Crime Laboratories, 2002*, issued in the BJS Bulletin for February 2005, was based on 305 responses to a survey of publicly funded forensic crime laboratories, including federal, state, and local laboratories.

\(^{17}\) The ATF’s Office of Laboratory Services uses the term “backlog” differently than it was used in the report cited above. Instead, the Office of Laboratory Services defines a backlogged examination as any requested examination pending at the end of the month, even for one day, when workload reports are prepared.
exceeded the 30-day turnaround goal in FY 2004. The Strategic Plan for the Arkansas State Crime Laboratory for FYs 2005 – 2009 sets a 30-day average turnaround as the standard for drug, latent print, questioned document submissions, and toxicology submissions associated with homicide cases and establishes an overall objective of completing 90 or 95 percent of submissions within 60 days.

- The American Bar Association’s Section of Criminal Justice adopted a recommendation in April 2004 regarding adequate funding for crime laboratories that states, “Timely analysis of forensic evidence is critical. Innocent defendants may languish in jail and the guilty may remain at large as evidence awaits analysis. A 30-day turnaround time would eliminate this problem. This is an aspirational goal that is not currently practicable.”

- The Department’s National Institute of Justice sponsored a meeting of federal, state, and local forensic scientists and administrators in 1997 to review forensic sciences status and needs. The report of the meeting stated that [forensic] “cases should be worked within 30 days of the crime, during the active police investigation” and that when forensic analyses are not available quickly, law enforcement efficiency is diminished and trials may be delayed, contributing to backlogs and delays in the court system.

- Audits of the United Kingdom’s Forensic Science Service and the Royal Canadian Mounted Police reflect timeliness standards around 30 days and describe problems the laboratories have meeting them.

We consider a goal of 30 days for the results of most forensic examinations a reasonable target toward which laboratories should work, but recognize that the standard is not being met and is not a realistic expectation for all examinations under current conditions. It is used in this report to compare our findings with the Treasury OIG audit and to demonstrate how far the ATF is from meeting this long-term goal. We also consider 30 days a reasonable goal toward which laboratories should work


because of the potentially serious consequences of delayed forensic examinations. These effects include the costs of wasted investigative time and delayed trials, and the more serious possibility that additional crimes may be committed by offenders who are not identified and arrested quickly.

Timeliness for the Period October 1, 2003, through May 13, 2005

To evaluate timeliness, the DOJ OIG obtained a data extract from FACETS that included information on all forensic examinations completed from October 1, 2003, through May 13, 2005 (the date the extract was performed). The extract also included data on all examinations that were pending or incomplete as of May 13, 2005. The extract included data elements for the laboratory receipt date of evidence submissions and examination finish dates, which we used to determine how long each examination took. In order to determine the reliability of the data extracted from FACETS, we compared FACETS data values with the source documents in case files. We determined that the FACETS data was sufficiently accurate and reliable for our use.\(^{20}\) Our timeliness findings are primarily based on our analysis of the FACETS data.

The laboratory data we analyzed included information on 3,757 cases. These cases were associated with 4,905 evidence submissions and 5,733 requested examinations. Of the 5,733 requested examinations, 4,576 (nearly 80 percent) were completed and 1,157 (20 percent) were pending on the date of the extract. Excluded from these numbers were 591 examination requests that had been canceled at the time of the extract.\(^{21}\)

As shown in the following table, of the total 4,576 examinations completed between October 1, 2003, and May 13, 2005, the DOJ OIG found that 1,705 (37 percent) were completed within 30 days and that 1,490 (33 percent) took more than 90 days to complete. The other 30 percent were completed between 1 and 3 months after receipt. The average turnaround time for these examinations was 95 days.\(^{22}\)

\(^{20}\) We found that the error rate (or deviations), for each data element that was important to our work was significantly low.

\(^{21}\) Our analysis is found in the Cancellations section of this report.

\(^{22}\) The Treasury OIG did not include an average turnaround time in its audit report.
Examination Processing Time

<table>
<thead>
<tr>
<th>Processing Time</th>
<th>Number of Examinations</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-30 Days</td>
<td>1,705</td>
<td>37</td>
</tr>
<tr>
<td>31-60 Days</td>
<td>889</td>
<td>19</td>
</tr>
<tr>
<td>61-90 Days</td>
<td>492</td>
<td>11</td>
</tr>
<tr>
<td>&gt; 90 Days</td>
<td>1,490</td>
<td>33</td>
</tr>
<tr>
<td>Totals</td>
<td><strong>4,576</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: DOJ OIG analysis of Forensic Automated Case and Exam Tracking System (FACETS) data

The following chart compares the processing times for the three laboratories on completed examinations included in our FACETS extract. As the chart indicates, all three laboratories completed examinations at roughly the same rate.

### Time Needed to Process Completed Examinations

**By Forensic Laboratory**

![Bar chart showing processing times by laboratory]

Source: DOJ OIG analysis of FACETS data

We also evaluated how long the laboratories took to complete requested examinations by type. As the following chart shows, the highest percentages of examinations completed within 30 days were for arson and firearms. As discussed in the Backlog section of this report, arson and

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23 Excluded from the calculations in this chart are examinations that were either not reviewed in the prior Treasury OIG audit, or are not performed in all three laboratories. For instance, document analysis is not performed at the San Francisco laboratory.
firearms had the smallest backlog of unexamined evidence in terms of backlog in months.

We compared the percentages of arson, firearms, and explosives examinations completed within 30 days with the targets established by the Office of Laboratory Services Operating Plan for FY 2005 for arson, firearms, and explosives cases.\(^{24}\) For arson and firearms examinations, the laboratories outperformed the established targets of 40 and 30 percent, respectively. However, only 25 percent of explosives examinations were completed within 30 days compared to a target of 35 percent that was completed within 30 days.

The preceding chart reflects data for all of FY 2004 and for FY 2005 through the date of our data extract, May 13, 2005. We also obtained summary data for all of FY 2005 from the Office of Laboratory Services. The differences between the two periods are compared in the following table.

\(^{24}\) This is not a direct measure of the target as stated in the Operating Plan. We could not use cases completed within 30 days to measure the ATF’s progress because different submissions in the same case may have been submitted more than 30 days apart. We also determined that the Office of Laboratory Services measured the targets using examinations rather than cases.
Percentage of Examinations Completed Within 30 Days
DOJ OIG Data Extract vs. FY 2005 Complete FY Data

<table>
<thead>
<tr>
<th>Type of Case</th>
<th>Target (Operating Plan for FY 2005)</th>
<th>Actual Percentage of Examinations Completed Within 30 Days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FACETS Data Extract for October 1, 2003 – May 13, 2005</td>
<td>ATF Data for All of FY 2005</td>
</tr>
<tr>
<td>Arson</td>
<td>40%</td>
<td>51%</td>
</tr>
<tr>
<td>Explosives</td>
<td>35%</td>
<td>25%</td>
</tr>
<tr>
<td>Firearms</td>
<td>30%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Source: Office of Laboratory Services (All of FY 2005, from FACETS) and DOJ OIG analysis of FACETS data

For FY 2005, the reported percentages of arson and firearms examinations completed within 30 days were slightly lower than those reported in the preceding table for our data extract, which included all of FY 2004 and only a portion of FY 2005, but continued to meet the targets set in the Operating Plan. The percentage of explosives examinations completed within 30 days continued to fall below the 35 percent target. According to the Director of Laboratory Services, the Office of Laboratory Services was able to exceed its target in arson and firearms cases because it had sufficient staff in these disciplines and because a greater portion of these cases included requests for expedited service. Conversely, the Office of Laboratory Services was not able to meet its target for explosives cases because of a shortage of forensic chemists and fingerprint specialists.

Our analysis of expedited processing times is included in the Priority System section of this report. We did find that a larger percentage of expedited requests were processed within 30 days than was the case for all examination requests.

Improvement in Timeliness

The following chart compares, by percentages of completed examinations reviewed, the processing times in the Treasury OIG report to the processing times the DOJ OIG found. This comparison is not based on precisely comparable data since the Treasury Department’s audit included 323 completed examinations from cases in which all examinations had been completed, and the DOJ’s review included all 4,576 examinations completed during a specific period, regardless of the status of other examinations.
requested in each case. However, this comparison provides a general assessment of the changes between the 1998-1999 sample of completed examinations and the DOJ OIG’s extracted data for all completed examinations between October 1, 2003, and May 13, 2005.

### Time to Complete Forensic Examinations

![Graph showing the distribution of time to complete forensic examinations]

Source: Treasury OIG Audit Report Number OIG-01-068, April 30, 2001, and DOJ OIG analysis of FACETS data

The Treasury OIG found that 67 percent of the sampled examinations were not completed within 30 days, compared with the DOJ OIG finding of 63 percent, and that 43 percent of the Treasury OIG’s sampled examinations took more than 90 days to complete, compared with the DOJ OIG finding of 33 percent. The total percentage of examinations completed within 90 days improved from 57 percent in 1998-1999 to 67 for the period covered in the DOJ OIG data extract. Despite this improvement, 63 percent, or almost two-thirds of examinations, were still not being completed within 30 days at the time of the DOJ OIG audit.

### Quality Assurance

It is crucial that forensic results be of high quality to ensure reliable results. While the issue of quality was not addressed in the Treasury OIG’s 2001 audit, the DOJ OIG performed a limited assessment to ensure that the ATF had a quality assurance process in place.

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25 The Treasury OIG’s audit reviewed 159 cases from FYs 1998 and 1999 in which all requested examinations were completed or canceled. Cases were selected from all three forensic laboratories, and included 264 evidence submissions and 323 completed examinations.
We found the ATF had a quality assurance process that the Office of Laboratory Services followed to ensure the quality of its services. The three regional forensic laboratories are accredited and internal quality reviews are performed periodically by the Office of Laboratory Services.

The American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB) operates an accreditation program for forensic laboratories to demonstrate that laboratory management, operations, personnel, procedures, equipment, physical plant, security, and safety procedures meet standards established by the organization. The standards are those the ASCLD/LAB has determined are appropriate to support valid forensic results. According to ATF officials, in 1985 the ATF forensic laboratories became the first federal forensic laboratories to be accredited by the ASCLD/LAB.

Currently, each of the three forensic science laboratories is accredited by the ASCLD/LAB in the disciplines of firearms and toolmarks, latent prints, and trace evidence, which includes the arson and explosives work performed by the laboratories. Additionally, since both the Washington and Atlanta laboratories perform questioned document analysis, they are also accredited in that discipline. Each accreditation covers 5 years.

We also reviewed the Office of Laboratory Services Policy and Procedures Guidelines to determine the ATF's policy regarding quality assurance reviews. According to ATF policy, a quality audit of each laboratory is to be conducted annually by a team selected by the Director of Laboratory Services and trained by the Quality Manager. Each audit is to verify that laboratory operations continue to comply with the requirements of its quality system. The reviews are performed using Laboratory Services Policy and Procedure Guidelines; discipline-specific methodology documents; and the principles, standards and criteria established in the ASCLD/LAB Accreditation Manual. Written reports are prepared following each audit, and each laboratory chief is given an opportunity to respond to the report and state the corrective actions taken.

The DOJ OIG reviewed the quality reports for each of the three forensic science laboratories for FYs 2004 and 2005. Each report addressed areas such as the handling and storage of evidence, laboratory security, calibration and maintenance of equipment, and compliance with the Office of Laboratory Services’ scientific methods and technical procedures, including proficiency testing, training, controls over reference standards, and peer review of work. Written responses addressing corrective actions were required on each finding. Based on our review of these reports, we concluded that the Office of Laboratory Services had a quality assurance
process in effect and that the forensic science laboratories were being held to its standards.

**Effects on Investigations**

The potential negative effects of forensic results taking more than 30 days have been identified by various studies (including the studies listed in footnote 19), but not quantified. The most serious potential consequences are that delays in identifying suspects and making arrests allow offenders additional opportunities to commit crimes, thereby endangering the public. It is also possible that the failure to provide results on a timely basis could hamper a defendant’s right to a speedy trial. Other potential negative consequences of delayed forensic results include wasted investigative time and delayed trials, both of which diminish the efficiency of the criminal justice system.

**Interviews with Special Agents**

The Treasury OIG reported in 2001 that it was unable to quantify the effect processing delays had on ATF cases. However, based on interviews with eight Special Agents from around the country, the Treasury OIG reported that agents indicated that they needed quicker turnaround times for their evidence submissions and told auditors that processing delays made it more difficult for them to track leads and locate witnesses. The agents also said that because of these delays, they accepted fewer cases requiring forensic examinations from state and local officials than they might otherwise accept, and often outsourced simple examinations to state and local laboratories.

The DOJ OIG also obtained information from Special Agents regarding their satisfaction with the service provided by the regional forensic laboratories. We randomly selected 14 Special Agents who had received laboratory reports within the 90-day period prior to the start of our audit. To assess the impact of examinations that took a long time to complete, we confined our selection to those reports that were dated 180 days or more after the exhibits were first received in the laboratories. Additionally, we randomly selected another 8 Special Agents who had been waiting for laboratory reports on uncompleted examinations for more than 180 days. We conducted telephone interviews with these Special Agents and asked questions about the effect processing delays had on investigations and whether the agents ever used state and local laboratories instead of the ATF laboratories.
Based on these interviews, we found that delayed receipt of laboratory reports did not adversely affect investigations in most instances, primarily because of the absence of a suspect or because of a confession. However, about 30 percent of respondents stated that they were less than fully satisfied with the timeliness of the service provided by the laboratories. Additionally, because of delays at ATF laboratories, more than half of the Special Agents we contacted told us that they had at least some laboratory examinations (primarily latent prints) performed at state and local laboratories. A laboratory official told us that they were aware that agents occasionally use state and local laboratories for some examinations but were unsure how often this occurs. The ATF does not systematically track requests for services that are sent to other laboratories.

**Laboratory Surveys of Special Agents**

To survey customers about their satisfaction with the management of the Office of Laboratories Services workload, the ATF laboratories sent customer satisfaction cards with returned laboratory reports to Special Agents who submitted evidence for analysis. The cards asked respondents to rate the laboratory’s performance in three areas: service, timeliness, and reports/statements. Service could be rated as “very good,” “good,” “poor,” or “very poor.” Timeliness and reports/statements could be rated “very satisfied,” “satisfied,” “fairly satisfied,” or “not satisfied.” The cards also included a few blank lines for comments.

The Treasury OIG reported in 2001 it was unable to obtain a representative sample of the customer satisfaction cards to review because laboratory officials had stopped sending them out for comment. According to the audit report, officials told the Treasury OIG that the ATF stopped using the cards because the feedback received showed a general dissatisfaction with the amount of time it took to obtain test results.

In response to the Treasury OIG report, the ATF re-implemented the practice of sending customer satisfaction cards to recipients with laboratory

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26 In follow-up conversation with eight of the Special Agents who had said that they had used state and local laboratories, we were advised that these examinations were performed at no cost to the federal government.

27 Appendix V contains a copy of the customer satisfaction card the Washington and Atlanta laboratories send out with each laboratory report. An electronic version sent by San Francisco captures essentially the same data items.

28 A laboratory official we interviewed did not agree that the laboratories had completely stopped sending the cards.
reports. The Washington and Atlanta laboratories attached a blank copy of
the card to each laboratory report mailed out. The San Francisco laboratory
sent an electronic version of the card on a quarterly basis to field divisions
for which a report was issued during the previous quarter.

We reviewed the customer satisfaction cards at the regional
laboratories and matched the responses in the cards to the universe of
examinations we were reviewing. Only 23 percent of the recipients of the
4,576 laboratory reports included in our universe returned the customer
satisfaction cards to the laboratories. The following tables show the ratings
for the examinations we reviewed.29

### Responses in Customer Satisfaction Cards

<table>
<thead>
<tr>
<th>Service</th>
<th>Very Good</th>
<th>Good</th>
<th>Poor</th>
<th>Very Poor</th>
<th>% Poor or Very Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2%</td>
</tr>
<tr>
<td>902</td>
<td>126</td>
<td>16</td>
<td>1</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Customer Satisfaction Cards on file at each of the
three regional forensic laboratories

### Responses in Customer Satisfaction Cards

<table>
<thead>
<tr>
<th>Timeliness</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Fairly Satisfied</th>
<th>Not Satisfied</th>
<th>% Fairly Satisfied or Not Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>775</td>
<td>163</td>
<td>70</td>
<td>34</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: Customer Satisfaction Cards on file at each of the
three regional forensic laboratories

29 Response totals in the following three tables differ slightly because not all respondents rated all three areas.
Responses in Customer Satisfaction Cards
Reports/Statements

<table>
<thead>
<tr>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Fairly Satisfied</th>
<th>Not Satisfied</th>
<th>% Fairly Satisfied or Not Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>909</td>
<td>129</td>
<td>2</td>
<td>1</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Customer Satisfaction Cards on file at each of the three regional forensic laboratories

As noted in the preceding tables, respondents were overwhelmingly satisfied with the service and reports provided by the regional forensic laboratories. However, a minority (10 percent) of respondents expressed at least some dissatisfaction with the time it took the laboratories to complete examinations and issue reports. The following are examples of negative comments about timeliness taken from the cards.

**Washington**

- “I know everyone is busy, but almost six months to turn a bombing case around is ridiculous.”

- “Outstanding service as always, but the slow turn around time hurts the investigation and prosecution.”

- “I had to postpone a hearing twice because the fingerprint analysis was not done. September to January seems like a long time to get this done. This is a firearms part.”

**Atlanta**

- “Other than the time taken to complete this analysis, my experience with the lab and its employees have been good. Taking nearly 2 years to conduct an analysis is very poor and borderline embarrassing.”

- “The Atlanta Lab has simply become useless due to the lengthy turnaround times. Most agents use local labs rather than deal with ATF Atlanta Lab. This submission took 18 months. Unacceptable!”

- “Time - of course 9 months is too long. But the staff and chemists are excellent, and so are the reports.”
San Francisco

• “. . . It took 21 months to get the information, thus it was of no use. The defendant has been sentenced and is serving time. If it is going to take this long, it would be good to contact the agent before you start the work, because they might not need it anymore and it would save the examiner’s time.”

• “The fingerprint analysis took approximately 6 months, but the toolmark analysis was done in a timely manner. Examiner [Name Deleted] was very helpful. I would like to see a quicker turn around time for fingerprint analysis.”

• The examiner “was very helpful, polite, and professional, but due to the backlog of cases awaiting examination, she was not able to look at the evidence in my case in a timely manner. The evidence was sent back to me and I sent it to a local lab for fingerprint analysis. I appreciated [Name Deleted] candor in telling me about the backlog so I could make other arrangements. . . . Hire more examiners ASAP.”

While the comments above are mostly negative, they only represent 10 percent of respondents. The other 90 percent of respondents said that they were either “satisfied” or “very satisfied” with the timeliness of service. This suggests that some results are not needed by investigators within 30 days, which is discussed further in the Priority System section of this report.

We believe that customer satisfaction cards provide one method for obtaining customer feedback, but the current questions posed by the laboratories need to be revised. More specific questions should be asked, such as whether the analysis was received in time to be of assistance on a case, or if it was not, what the negative effect was on the progress of an investigation or the outcome of a case.

Based on interviews with Special Agents and our analysis of feedback on customer satisfaction cards, we found that most agents were satisfied with the timeliness of service provided by the regional forensic laboratories. However, approximately 10 percent of Special Agents who returned customer satisfaction cards to the regional forensic laboratories voiced dissatisfaction with the timeliness of service provided. We did not identify any systemic quality problems or any instance in which the most serious potential consequences of delayed results had occurred.
In its 2001 report, the Treasury OIG determined that processing delays were caused by the laboratories’ large backlogs of examination requests, the inability to hire sufficient staff to keep pace with the workload, and the staff’s other duties outside the laboratories that competed for time, such as providing training and crime scene assistance. The DOJ OIG assessed the status of these causes and the related corrective actions from the Treasury OIG’s audit, including the ATF’s plan to implement a new priority system. The DOJ audit also evaluated ratings and comments about the timeliness of laboratory services from ATF Special Agents in field offices. With the exception of duties outside the laboratories, we generally found that the same causes identified by the Treasury OIG were still contributing to the processing times for forensic examinations and that the ATF had not implemented some of the corrective actions that were intended to address the causes. The following sections of the report address the causes for processing delays and the status of ATF corrective actions.

**Backlog of Examination Requests**

The DOJ OIG audit assessed the backlog of uncompleted examination requests by grouping them according to the length of time each had been in the laboratories. The following chart shows the distribution of the backlog by the length of time the examinations requests had been on hand. The numbers at the tops of the bars are the total number of examination requests that had not been completed as of May 13, 2005. The percentages shown to the side of each bar are the percentages of the total backlog.

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30 The backlog analysis in this section includes all requests for examinations that had not been completed, not only requests that were more than 30 days old.
As the preceding chart indicates, 64 percent of pending examinations had been in the laboratory more than 90 days. We also determined that 47 percent of all pending examinations were more than 180 days old and 23 percent were a year or more old.

We further analyzed the backlog by type of examination to determine whether it had increased or decreased, and we then estimated how long it would take to completely eliminate the backlog at the current staffing level. To conduct our analysis, the results of which are shown in the following tables, we used data from the Laboratory Services Workload Report for FY 2005, dated September 30, 2005. We calculated the average number of examinations received and completed each month (columns C and D) by dividing total figures on the Workload Report by 12. We calculated the “Backlog in Months” (column E) to measure the backlog as represented in months of work only for comparison with information in the Treasury OIG report. (For this calculation, we did not factor in additional work received

31 Some of these examinations may be canceled in the future due to reasons such as plea bargains, which may make the examinations unnecessary. The subject of cancellations is discussed in more detail later in this section of the report.

32 Each month the Office of Laboratory Services produces a Laboratory Services Workload Report that tracks the total number of examinations received, completed, and backlogged for the fiscal year, up through the end of the month that is being reported. Information in the report is based on FACETS data.

33 This was calculated by dividing the backlog (column B) by the average number of examinations completed in a month during FY 2005 (column D).
to calculate “Backlog in Months.”) The DOJ OIG audit determined whether the backlog had increased or decreased (positive and negative numbers in column F) during FY 2005. If the backlog had decreased, we then calculated the number of months it would take to eliminate the decreasing backlog (column G) by dividing the total backlog (column B) by the decrease per month (column F). This assessment assumed the laboratories will continue to complete examinations at the FY 2005 monthly completion rates (column D).

### Analysis of Examinations Backlog
**Office of Laboratory Services**

<table>
<thead>
<tr>
<th>Category</th>
<th>Backlog on 9/30/05</th>
<th>Average No. Examinations Received per Month</th>
<th>Average No. Examinations Completed per Month</th>
<th>Backlog in Months</th>
<th>Backlog Change per Month</th>
<th>Backlog Increase or Months Needed to Eliminate It</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arson</td>
<td>43</td>
<td>24.6</td>
<td>24.3</td>
<td>1.8</td>
<td>0.3</td>
<td>Increase</td>
</tr>
<tr>
<td>Explosives</td>
<td>177</td>
<td>40.3</td>
<td>41.9</td>
<td>4.2</td>
<td>-1.6</td>
<td>111 Months</td>
</tr>
<tr>
<td>Firearms</td>
<td>130</td>
<td>37.0</td>
<td>38.5</td>
<td>3.4</td>
<td>-1.5</td>
<td>87 Months</td>
</tr>
<tr>
<td>Prints</td>
<td>534</td>
<td>90.3</td>
<td>97.4</td>
<td>5.5</td>
<td>-7.1</td>
<td>75 Months</td>
</tr>
<tr>
<td>Documents</td>
<td>44</td>
<td>7.7</td>
<td>5.8</td>
<td>7.6</td>
<td>1.9</td>
<td>Increase</td>
</tr>
<tr>
<td>Trace</td>
<td>55</td>
<td>14.3</td>
<td>15.0</td>
<td>3.7</td>
<td>-0.7</td>
<td>79 Months</td>
</tr>
</tbody>
</table>

Source: DOJ OIG analysis of data provided by the Office of Laboratory Services, Bureau of Alcohol, Tobacco, Firearms and Explosives

As the preceding table indicates, the backlog in months for the three forensic laboratories together varied by discipline from about 2 to 8 months, and increased in the disciplines of arson and questioned documents. For the remaining four categories (explosives, firearms, prints, and trace), we project that it would take between 6 and 10 years to eliminate the backlog at the rate examinations were completed in FY 2005.

We compared the average number of examinations received and completed each month (columns C and D). The preceding table indicates that the forensic laboratories were collectively able to complete an average number of examinations that was at least equal to the average number of examination requests received each month for explosives, firearms, latent prints, and trace examinations. For arson and questioned document examinations, the shortfall resulted in increases in the number of months needed to eliminate the backlog. This suggests that the laboratories should be able to provide forensic reports to field offices within 30 days in response to most examination requests if the existing backlog could be eliminated.
We also analyzed the backlog at each of the three forensic science laboratories to identify any significant variations that might exist between them.

Washington: As demonstrated in the following table, the Washington laboratory’s backlog varied from about 2 to 13 months, increased in one of six categories (questioned documents), and remained constant in another category (arson). For four categories (explosives, firearms, prints, and trace), at the rate of reduction during FY 2005, it would take between 4 and 15 years to eliminate it. While filling the vacant positions listed should help eliminate the backlog in all but one category (questioned documents), additional actions will be needed to completely eliminate the backlog in a more timely manner.  

### Analysis of Examination Backlog
#### Forensic Science Laboratory – Washington

<table>
<thead>
<tr>
<th>Category</th>
<th>Backlog As Of 9/30/05</th>
<th>Average No. Examinations Received per Month</th>
<th>Average No. Examinations Completed per Month</th>
<th>Backlog in Months</th>
<th>Backlog Change per Month</th>
<th>Backlog Increase or Months Needed to Eliminate It</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arson</td>
<td>20</td>
<td>9.7</td>
<td>9.7</td>
<td>2.1</td>
<td>0.0</td>
<td>No Change</td>
</tr>
<tr>
<td>Explosives</td>
<td>62</td>
<td>16.4</td>
<td>17.7</td>
<td>3.5</td>
<td>-1.3</td>
<td>48 Months</td>
</tr>
<tr>
<td>Firearms</td>
<td>105</td>
<td>20.7</td>
<td>21.3</td>
<td>4.9</td>
<td>-0.6</td>
<td>175 Months</td>
</tr>
<tr>
<td>Prints</td>
<td>296</td>
<td>33.3</td>
<td>36.8</td>
<td>8.0</td>
<td>-3.5</td>
<td>85 Months</td>
</tr>
<tr>
<td>Documents</td>
<td>37</td>
<td>4.4</td>
<td>2.8</td>
<td>13.2</td>
<td>1.6</td>
<td>Increase</td>
</tr>
<tr>
<td>Trace</td>
<td>38</td>
<td>10.0</td>
<td>10.3</td>
<td>3.7</td>
<td>-0.3</td>
<td>127 Months</td>
</tr>
</tbody>
</table>

Source: DOJ OIG analysis of data provided by the Office of Laboratory Services, Bureau of Alcohol, Tobacco, Firearms and Explosives

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34 Appendix III shows a list of vacant positions in the three forensic laboratories as of September 30, 2005.
Atlanta: The Atlanta laboratory’s backlog varied from about 1 to 4 months (column E below), increased in two categories (arson and questioned documents), and remained constant in a third (prints) (column G below). In three other categories (explosives, firearms, and trace evidence), at the rate of reduction during FY 2005, it would take between 10 months and 6 years to eliminate the backlog. Since there were no vacant positions in Atlanta as of September 30, 2005, no additional assistance was planned.

### Analysis of Examination Backlog
**Forensic Science Laboratory – Atlanta**

<table>
<thead>
<tr>
<th>Category</th>
<th>Backlog As Of 9/30/05</th>
<th>Average No. Examinations Received per Month</th>
<th>Average No. Examinations Completed per Month</th>
<th>Backlog in Months</th>
<th>Backlog Change per Month</th>
<th>Backlog Increase or Months Needed to Eliminate It</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arson</td>
<td>10</td>
<td>8.2</td>
<td>8.0</td>
<td>1.3</td>
<td>0.2</td>
<td>Increase</td>
</tr>
<tr>
<td>Explosives</td>
<td>46</td>
<td>9.8</td>
<td>10.5</td>
<td>4.4</td>
<td>-0.7</td>
<td>66 Months</td>
</tr>
<tr>
<td>Firearms</td>
<td>9</td>
<td>8.6</td>
<td>9.5</td>
<td>0.9</td>
<td>-0.9</td>
<td>10 Months</td>
</tr>
<tr>
<td>Prints</td>
<td>93</td>
<td>31.8</td>
<td>31.8</td>
<td>2.9</td>
<td>0</td>
<td>No Change</td>
</tr>
<tr>
<td>Documents</td>
<td>7</td>
<td>3.3</td>
<td>3.0</td>
<td>2.3</td>
<td>0.3</td>
<td>Increase</td>
</tr>
<tr>
<td>Trace</td>
<td>14</td>
<td>3.0</td>
<td>3.6</td>
<td>3.9</td>
<td>-0.6</td>
<td>23 Months</td>
</tr>
</tbody>
</table>

Source: DOJ OIG analysis of data provided by the Office of Laboratory Services, Bureau of Alcohol, Tobacco, Firearms and Explosives

San Francisco: The San Francisco laboratory’s backlog varied from about 2 to 5 months and increased in four categories (arson, explosives, firearms, and trace). For the other category (fingerprints), at the rate of reduction during FY 2005, it would take more than 3 years to eliminate the backlog. Filling a vacant supervisory position and two vacant forensic chemist positions in San Francisco will help with the arson, explosives, and trace evidence backlog. However, no additional assistance is planned for the backlog of firearms and fingerprint examinations.
## Analysis of Examination Backlog

**Forensic Science Laboratory – San Francisco**

<table>
<thead>
<tr>
<th>Category</th>
<th>Backlog As Of 9/30/05</th>
<th>Average No. Examinations Received per Month</th>
<th>Average No. Examinations Completed per Month</th>
<th>Backlog in Months</th>
<th>Backlog Change per Month</th>
<th>Backlog Increase or Months Needed to Eliminate It</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arson</td>
<td>13</td>
<td>6.8</td>
<td>6.6</td>
<td>2.0</td>
<td>0.2</td>
<td>Increase</td>
</tr>
<tr>
<td>Explosives</td>
<td>69</td>
<td>14.0</td>
<td>13.8</td>
<td>5.0</td>
<td>0.2</td>
<td>Increase</td>
</tr>
<tr>
<td>Firearms</td>
<td>16</td>
<td>7.8</td>
<td>7.7</td>
<td>2.1</td>
<td>0.1</td>
<td>Increase</td>
</tr>
<tr>
<td>Prints</td>
<td>145</td>
<td>25.3</td>
<td>28.8</td>
<td>5.0</td>
<td>-3.5</td>
<td>41 Months</td>
</tr>
<tr>
<td>Trace</td>
<td>3</td>
<td>1.3</td>
<td>1.2</td>
<td>2.5</td>
<td>0.1</td>
<td>Increase</td>
</tr>
</tbody>
</table>

Source: DOJ OIG analysis of data provided by the Office of Laboratory Services, Bureau of Alcohol, Tobacco, Firearms and Explosives

The following chart compares the backlog in months for each discipline for each of the three forensic laboratories. Using data from the three preceding tables, we calculated the backlog in months (column E) by dividing the backlog (column B) by the average number of examinations completed in a month during FY 2005 (column D). As the chart indicates, the Washington laboratory had the largest examination backlog in all disciplines except for explosives and trace examinations, but it also performed between 1.5 and 1.7 times as many examinations as each of the other two forensic science laboratories.

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The San Francisco laboratory does not perform questioned documents examinations.
Backlog Reduction

The DOJ OIG audit compared the backlog reported in the Treasury OIG audit report as of September 30, 1998, with the backlog reported in the Laboratory Services Workload Report for FY 2005. The DOJ OIG found that the total backlog of 1,289 examination requests reported in the Treasury OIG audit had been reduced to 983 examination requests as of September 30, 2005. Although the backlog had decreased, it remained significant. The following chart compares the 1998 backlog reported by the Treasury OIG with the DOJ OIG findings for the backlog size at the end of FY 2005. In the chart, the backlog for the two audit periods is presented in months of work at the rate examinations were being completed in 1998 and 2005, respectively.
As the preceding chart shows, when the DOJ OIG analyzed the differences in the backlog measured as months of work, the backlog in the disciplines of latent prints and questioned documents increased and the backlog in the disciplines of arson, explosives, and firearms decreased. According to the Director of Laboratory Services, the backlog in latent print and questioned documents examinations increased as a result of a shortage of qualified examiners and an increase in the number of latent print examinations requested.

Cancellations

Not all of the backlogged requests for examinations are performed, nor do they all need to be completed. Some requests are canceled based on changes in an ATF case. For example, a case may end with a plea bargain, making the forensic analysis unnecessary. Other requests for examination may wait in the backlog for so long that Special Agents use other laboratories for the forensic work. Eleven percent of the examination requests in our universe that were no longer pending had been canceled.

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36 Trace evidence examinations were not tracked as separate examinations in 1998, so those examinations are not included in this chart.
The DOJ OIG audit analyzed the time between the date of the examination requests and date of the cancellations for 585 canceled examinations in the FACETS data extract.\(^{37}\) The following table shows by days the number and percentage of examinations that were canceled. As the table shows, almost half of the cancellations were for examination requests that were more than 6 months old. This fact supports anecdotal information from Special Agents that the delay in obtaining results was the reason for the cancellation in some instances. One agent indicated that he had canceled a latent print examination because of the delay in obtaining results from the ATF laboratory and then arranged for a local laboratory to perform the examination.

**Number of Days before Examinations were Canceled**

<table>
<thead>
<tr>
<th>Days</th>
<th>Number of Examinations</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-30</td>
<td>134</td>
<td>23%</td>
</tr>
<tr>
<td>31-60</td>
<td>55</td>
<td>10%</td>
</tr>
<tr>
<td>61-90</td>
<td>41</td>
<td>7%</td>
</tr>
<tr>
<td>91-180</td>
<td>102</td>
<td>17%</td>
</tr>
<tr>
<td>&gt;180</td>
<td>253</td>
<td>43%</td>
</tr>
</tbody>
</table>

Source: DOJ OIG analysis of FACETS data

According to the Director of Laboratory Services, supervisors were required to screen cases over 6 months old on a monthly basis to eliminate the examinations no longer required. However, as one agent commented, this process may not have been effective, and there were no procedures in place to ensure that Special Agents would advise the laboratories in a timely fashion when the examinations were no longer needed.\(^{38}\)

In response to the discussion of the backlog in the Treasury OIG audit report, ATF management identified corrective action to provide each field division with a list of all cases with pending examinations on a quarterly basis, so that field divisions could identify cases that could be deleted from the backlog. The ATF indicated it had provided each field division with a list of cases that were at least a year old as of May 1999, which resulted in 94 inactive cases being removed from the laboratories’ backlogs. The ATF repeated this process in November 2000, and removed an additional

\(^{37}\) The total number of canceled examinations in the FACETS data extract for the period October 1, 2003, through May 13, 2005, was 591. However, six examinations did not include the date the examination was canceled, and so are not included in this analysis.

\(^{38}\) See first comment under San Francisco on page 28.
85 cases. The DOJ OIG was unable to determine the number of examinations associated with these cases from the Treasury audit report, but the number of examinations is at least equal to the number of cases reported.

The DOJ OIG found that ATF management had not provided these reports to the field divisions since November 2000 because, according to the Director of Laboratory Services, FACETS does not produce such reports in a usable format. However, the Director anticipated that electronic communications between field divisions and the laboratories using the new information management system would facilitate the timely removal of backlogged examinations associated with inactive cases. As previously stated, however, the new system had been in the planning stages at least since the time of the Treasury audit report in 2001, and still had not been implemented by December 2005.

Backlogged examination requests add to processing delays by postponing the start of work on new evidence submissions. In addition, the growing backlog in some disciplines could further add to processing delays. The DOJ OIG concluded that, while filling vacant positions should provide some relief, laboratory officials need to develop plans that specifically address eliminating the backlog of examinations. The plans could include: (1) working with field divisions to prioritize the existing backlog, (2) eliminating requests for examinations that are no longer needed, and (3) outsourcing examinations to other laboratories until the existing backlog has been eliminated.

Resource-Intensive Cases

The Treasury OIG found that between FYs 1995 and 1998, the laboratories devoted significant resources to several high-visibility cases, including the Murrah Federal Building bombing in Oklahoma City, the Trans World Airlines Flight 800 investigation, and the Olympic Park bombing in Atlanta. According to the Treasury OIG, transferring resources to these cases adversely affected the amount of time that was available to laboratory employees for work on routine evidence submissions and had contributed heavily to the size of the backlog.

Recently, the laboratories again devoted significant resources to resource-intensive investigations, such as the Washington, D.C., sniper case. According to laboratory officials, during the first 2 weeks of the sniper investigation (in the Fall of 2002), the Washington laboratory performed over 100 firearms examinations, compared with an average of about 28 firearms examinations per month during FY 2004. These weapons
were seized from other suspects or used in other crimes and were tested to determine if they were also used in the sniper case.

Exceptional resource-intensive cases can reasonably be expected to be part of the ATF laboratories’ workload for the foreseeable future. Accordingly, the laboratories need to plan for managing the workloads that are associated with resource-intensive cases while continuing to process more routine examinations. The DOJ OIG believes that proper planning will help keep the backlog of examination requests to a manageable level. Additionally, the Office of Laboratory Services also could consider entering into agreements and contracts with other laboratories to provide support when the demand for examinations is unusually high.

Inability to Hire Sufficient Staff

Personnel Ceiling and Allocation

Laboratory officials and the Treasury OIG identified inadequate staffing as one reason for processing delays, leading to large backlogs of uncompleted examinations. The Treasury OIG 2001 audit report recommended the ATF ensure that laboratories were adequately staffed. In response to the report, the ATF Director authorized an increase in the ceiling for the Office of Laboratory Services from 115 in FY 2000 to 134 positions for FY 2001.

During the DOJ OIG audit, ATF officials stated that the personnel ceiling for FY 2005 was 106 positions, which represents a net decrease of 28 positions from the reported FY 2001 level of 134. The net decrease may be explained by the fact that the Scientific Services Division maintained 28 positions within the Department of the Treasury when the ATF laboratories became part of the Department of Justice in 2003. However, while the FY 2005 number of authorized positions was 106, only 90 of these positions were filled by the end of the fiscal year. Budgeted positions and actual staffing levels at the laboratories as of September 30, 2005, are shown in the following table.
### Office of Laboratory Services Staffing
#### September 30, 2005

<table>
<thead>
<tr>
<th>Activity</th>
<th>Positions Budgeted</th>
<th>Positions Filled</th>
<th>Positions Vacant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director's Office</td>
<td>10</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Fire Research Laboratory</td>
<td>12</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>22</strong></td>
<td><strong>20</strong></td>
<td><strong>2</strong></td>
</tr>
<tr>
<td>Washington</td>
<td>40</td>
<td>29</td>
<td>11</td>
</tr>
<tr>
<td>Atlanta</td>
<td>23</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>San Francisco</td>
<td>21</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>84</strong></td>
<td><strong>70</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>106</strong></td>
<td><strong>90</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Source: Office of Laboratory Services, Bureau of Alcohol, Tobacco, Firearms and Explosives

To determine if the regional forensic laboratories experienced any increase in the number of positions to help process forensic examinations in a more timely manner, we obtained additional information about how positions were allocated within the Office of Laboratory Services for FYs 2000 and 2005, which are compared in the following table.
Positions in the Office of Laboratory Services
FY 2000 and FY 2005

<table>
<thead>
<tr>
<th>Position Description</th>
<th>FY 2000</th>
<th>FY 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Ceiling</td>
<td>115</td>
<td>106</td>
</tr>
<tr>
<td>Treasury Department’s Alcohol and Tobacco Laboratory</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>Office of Laboratory Services Total without Alcohol and Tobacco Positions</td>
<td>87</td>
<td>106</td>
</tr>
<tr>
<td>Management Positions in the Director’s Office</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Positions to Implement the Safe Explosives Act (added in 2004)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Positions to Create a DNA Section (added at the Washington Laboratory in 2005)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Fire Research Laboratory Positions</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Positions for Regional Forensic Laboratories to Perform Ongoing Work</td>
<td>80</td>
<td>78</td>
</tr>
</tbody>
</table>

Source: Office of Laboratory Services, Bureau of Alcohol, Tobacco, Firearms and Explosives

We found the number of positions available in FY 2005 for the regional forensic laboratories to perform ongoing work decreased by 2 from the 80 positions in the FY 2000 allocation, as indicated in the last row of the preceding table. Regardless of the ceilings that were reported (up to 134 for FY 2001), there has been a small net decrease in staff resources to perform that portion of the forensic mission that remained unchanged from 2001 to the present.

Filling Vacancies

The number of vacancies in the laboratories also has not changed significantly between the two audits. At the time of the Treasury OIG’s audit, the regional forensic laboratories collectively had 10 vacancies out of an allocation of 80 positions, and it usually took from 9 months to 1 year to hire new employees. The vacancies represented approximately 12 percent of the positions allotted to the laboratories. The Treasury OIG reported that

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39 The positions listed are excluded from our calculation of the Positions for Regional Forensic Laboratories to Perform Ongoing Work because: (1) Management Positions in the Director’s Office are not staff for the regional laboratories, (2) Positions to Implement the Safe Explosives Act were for a new mission assigned to the ATF in FY 2004, and therefore are not relevant to a comparison of current positions to the positions in FY 2001 for ongoing work, (3) Positions to Create a DNA Section are for work not previously performed at the laboratories, and therefore are not relevant to a comparison of current positions to the positions in FY 2001 for ongoing work, and (4) the Fire Research Laboratory, which was established in FY 2003, does not perform the type of routine forensic testing that was reviewed in the Treasury OIG audit, and therefore are not relevant to a comparison of current positions to the positions in FY 2001 for ongoing work.
the difficulty in hiring experienced personnel resulted from the ATF’s inability to compete with the salaries and benefits offered by private industry and because of the length of time needed to complete the hiring process, during which potential employees may find jobs elsewhere. In response to the 2001 Treasury OIG audit, ATF managers reported they had centralized all administrative personnel functions within the Office of Laboratory Services and were using recruitment incentives and a pay demonstration project in order to attract and retain highly qualified personnel.40

As of September 30, 2005, there were 11 vacant positions, representing approximately 14 percent of the positions authorized for the laboratories.41 Eight of the vacancies were at the Washington laboratory and three were in San Francisco; none were at the Atlanta laboratory. The vacancies occurred as a result of promotions, retirements, internal transfers, or resignations. According to the Director of Laboratory Services, the long hiring time resulted in part from the implementation of a new hiring process, which initially extended the time it took to hire replacement personnel. Further, laboratory officials stated that the three positions in San Francisco were difficult to fill because of the high cost of living there, and it was difficult to locate qualified personnel at a salary commensurate with their qualifications.

The DOJ OIG found that the length of time positions were vacant increased slightly since the prior audit. We also found that positions filled by external candidates during FYs 2004 and 2005 were vacant for an average of 14 months as shown in the following table.

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40 The Personnel Management [Pay] Demonstration Project for Designated Critical Positions, authorized by Congress, is a pilot pay banding and performance management system that is intended to enhance the federal government’s ability to recruit, develop, and retain highly qualified employees for critical scientific, technical, and engineering positions.

41 The Office of Laboratory Services had obtained authorization to establish a new three-person DNA section at the Washington laboratory in FY 2005. Although these positions are currently vacant and are listed in Appendix III, they do not have any bearing on the forensic examinations under discussion in this report and are not included in our analysis of vacant positions.
### Months to Fill Vacant Forensic Science Examiner Positions

**FY 2004 and FY 2005**

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Position</th>
<th>Date Position Previously Vacated</th>
<th>Date Filled</th>
<th>Months Vacant</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco</td>
<td>Forensic Chemist</td>
<td>11/1/03</td>
<td>6/6/04</td>
<td>7 Months</td>
</tr>
<tr>
<td>San Francisco</td>
<td>Fingerprint Specialist</td>
<td>1/25/04</td>
<td>2/7/05</td>
<td>12 Months</td>
</tr>
<tr>
<td>Washington</td>
<td>Forensic Chemist</td>
<td>1/3/03</td>
<td>1/23/05</td>
<td>25 Months</td>
</tr>
<tr>
<td>San Francisco</td>
<td>Fingerprint Specialist</td>
<td>2/21/04</td>
<td>1/10/05</td>
<td>11 Months</td>
</tr>
</tbody>
</table>

**Average** 14 Months

Source: Office of Laboratory Services, Bureau of Alcohol, Tobacco, Firearms and Explosives

During the DOJ OIG audit, ATF managers told us they were making a concerted effort to hire experienced personnel whose training period would be shorter, making them productive sooner. However, we found that the ATF’s efforts did not reduce the time it took to fill vacant positions. Long periods during which allocated positions were unoccupied contributed to the examination processing delays at laboratories where these vacancies existed. Accordingly, we believe the ATF should take additional measures to reduce the time it takes to fill vacant positions, such as requiring priority attention to filling all open laboratory positions.

### Other Duties Outside the Laboratories

The Treasury OIG cited the time examiners were spending performing duties outside the laboratories as a contributing factor to the laboratories’ inability to provide timely services. These outside duties included training, crime scene assistance, and expert testimony in court.

The DOJ OIG found that the number of days staff spent working on other duties had generally declined from FYs 1998 through 2002, but in FY 2003, this time spent on other duties almost doubled and stayed high for FY 2004, as shown in the following table. According to laboratory officials, national-interest investigations such as the Washington, D.C., sniper case were the cause for the dramatic increase from the FY 2002 total of 788 days to the 1,327 days in FY 2003. For FY 2005, the number of days per year spent on duties outside the laboratories again declined to a level similar to the earlier years.
**Days Spent on Duty Outside the Laboratories**  
**FY 1998 through FY 2005**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>389</td>
<td>397</td>
<td>334</td>
<td>359</td>
<td>403</td>
<td>461</td>
<td>421</td>
<td>354</td>
</tr>
<tr>
<td>Crime Scene Assistance</td>
<td>313</td>
<td>324</td>
<td>258</td>
<td>182</td>
<td>239</td>
<td>552</td>
<td>367</td>
<td>265</td>
</tr>
<tr>
<td>Court Appearances</td>
<td>223</td>
<td>176</td>
<td>213</td>
<td>291</td>
<td>146</td>
<td>314</td>
<td>257</td>
<td>206</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>925</strong></td>
<td><strong>897</strong></td>
<td><strong>805</strong></td>
<td><strong>832</strong></td>
<td><strong>788</strong></td>
<td><strong>1,327</strong></td>
<td><strong>1,045</strong></td>
<td><strong>825</strong></td>
</tr>
</tbody>
</table>

Source: Treasury OIG Audit Report Number OIG-01-068, April 30, 2001, and Office of Laboratory Services, Bureau of Alcohol, Tobacco, Firearms and Explosives

To put into perspective the number of days examiners spent working outside the laboratories, we determined that the outside duty days for FY 2005 represented about 4 positions for the year. This represented approximately 5 percent of the staff time for the year of the total positions allocated to the regional laboratories for that year.

In response to the Treasury OIG audit, ATF managers said the Office of Laboratory Services would coordinate all training requests and that laboratory supervisors would evaluate all ATF requests for laboratory assistance at crime scenes, other than the ATF’s National Response Teams’ (NRT) activities, to ensure there was a valid need to send personnel into the field. Based on the DOJ OIG’s interviews with the Director of Laboratory Services and the laboratory chiefs, we found that laboratories were managing the demands for these services reasonably well. The management of each of these outside duties is discussed below.

**Training**

The ATF’s Office of Training and Professional Development (TPD) sponsors programs each year for ATF personnel and state and local government officials and requests instructor support for some of these programs from the Office of Laboratory Services. Additionally, Special Agents-in-Charge (SAC) of field divisions occasionally request instructor support for ATF-sponsored training events. During the DOJ OIG audit, the Director’s Office coordinated all training requests. For example, in

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42 We calculated the equivalent number of positions (4) for FY 2005 by dividing the number of days spent performing outside duties (825) by the average number of work days in a year (217). We arrived at that figure by subtracting 20 annual leave days, 13 sick days, and 10 holidays from 260 weekdays in a year.
one instance we reviewed, the Director’s Office advised a field office that due
to current workloads, the Office of Laboratory Services was unable to
provide instructor support outside of TPD-sponsored training events.

**Crime Scene Assistance**

In addition to the crime scene assistance provided as part of one of
the ATF’s National Response Teams, SACs also make requests for crime
scene assistance. In these instances, laboratory chiefs may approve or
disapprove the SAC’s requests. The laboratory chiefs consider whether they
have enough qualified staff to meet the request with the objective of
minimizing the time examiners spend away from the laboratories. According
to the laboratory chiefs we interviewed, laboratory personnel provide crime
scene assistance when the laboratory chief agrees that assistance is needed
or when required by higher authority.

**Court Appearances**

Examiner appearances in court are based on the receipt of a
subpoena. Section chiefs within the laboratories and examiners coordinate
with the appropriate prosecutor regarding the necessity, timing, and length
of the appearance.

**Priority System**

Because laboratories were not adequately staffed to meet all demands
immediately, evidence submissions were prioritized to maximize the
laboratories’ effectiveness. The Treasury OIG found that the ATF did not
develop formal criteria for determining which evidence submissions should
receive expedited service, but instead used informal criteria. The ATF also
did not establish a methodology for classifying non-expedited work, which
accounted for more than two-thirds of all submissions. These examinations
were completed on a first-in, first-out basis, which did not account for the
varying degrees of importance of the non-expedited examinations. The
Treasury OIG recommended that the ATF develop a priority system for
incoming evidence submissions to support the ATF’s investigative priorities.
In response, ATF management stated that a new priority system was under
development.

However, the DOJ OIG found that the new priority system had not
been implemented at the time of our audit, four years after it was proposed
as a corrective action. According to laboratory officials, the project lapsed
because of the need for extensive internal coordination and because of
administrative delays related to the reorganization of the ATF under the
Department of Justice. The new system was to include a revised evidence transmittal form, an ATF Directive to implement the system, and six priority classifications including date deadlines, significant incidents, and court requirements. Because the new system had not yet been implemented, we re-evaluated the priority issues raised in the Treasury OIG audit.

Effectiveness of the Priority System

We found that approximately 30 percent of the submissions in the FACETS data extract we used were submitted as expedited requests. Submitting agents who needed examination results quickly, or by a specific date, requested expedited service using the evidence transmittal form. Agents might specify a date by which the results were needed, but were not required to do so. A section supervisor reviewed requests for expedited service to determine whether the circumstances justified moving the request ahead of other pending examination requests, and might contact the submitting agent or the agent’s supervisor to discuss the request. If the section supervisor at the laboratory determined it was appropriate to provide expedited service, the submission was processed ahead of others. The DOJ OIG found that expedited examinations were generally completed in a more timely manner than other examinations, as shown in the following chart.

![Percentages of Expedited vs. Non-Expedited Examinations Completed (by Days)](chart)

Source: DOJ OIG analysis of FACETS data

As shown in the preceding chart, 54 percent of expedited examinations were completed within 30 days, compared with 30 percent of non-expedited examinations. Seventeen percent of expedited examinations took more than 90 days to complete, compared with 39 percent of non-expedited examinations. However, while priority examinations were generally
performed in a more timely manner than non-expedited ones, 46 percent of examinations for which expedited service was requested were not completed within 30 days. Thus, almost half of expedited examination requests were not completed on an accelerated basis, or even within the 30-day long-term timeliness goal.

Because multiple examinations may be requested on each submission of evidence, some of the expedited examination requests that were not completed within the first 30 days were not the first examination performed on a submission. We analyzed the information to determine how many of the expedited requests completed after the first 30 days were the first examination completed for the submission. Of the 636 (46 percent) expedited examination requests that were not completed within the first 30 days, 392 (62 percent) were the first examinations completed for the submission.

We recommend that the ATF develop and implement a priority classification system that ranks all incoming evidence submissions in a way that supports ATF investigative priorities.43

Authorization and Justification for Expedited Service

To qualify for expedited service, examination requests have to be authorized and justified. All requests for examinations are supposed to include a copy of the ATF’s Report of Investigation to assist laboratory personnel in performing the examination. To request expedited service, agents mark the evidence transmittal form and explain why expedited service is necessary. (See Appendix IV for a copy of the evidence transmittal form.)

The criteria to justify expedited service are informal. The laboratories generally expedite the processing of evidence submissions when:

- agents are about to make an arrest,
- agents need the examination results to follow-up on a lead or meet a court date,
- the incident involves death or is high-visibility, or

43 The draft priority system that was designed to replace the current system does not classify every submission, but focuses on high priorities.
• the supervising agent believes that examination results are needed quickly.

The Treasury OIG judgmentally selected 284 case files to test the ATF’s priority system. These 284 case files included 614 examination requests on 390 evidence submission forms. Of the 390 evidence submissions, 116 included requests for expedited service, while 274 did not.

The Treasury OIG found that:

• 44 percent of the 116 requests for expedited service did not contain adequate explanations to justify expedited service,

• 23 percent of the 274 submissions that did not request expedited service did not contain Reports of Investigation, and

• 49 percent of all submissions reviewed were not signed by supervisors.

Based on these results, the Treasury OIG concluded that questionable priorities were being assigned to cases and that Special Agents were not always properly justifying their requests for expedited service.

The DOJ OIG analysis is based on a statistical sample of evidence submissions from all examinations completed between October 1, 2003, and May 13, 2005, or pending on May 13, 2005. Our sample included 465 evidence submissions from 440 cases, of which 220, 126, and 119 submissions were from the Washington, Atlanta, and San Francisco laboratories, respectively. Of the submissions we reviewed, 113 (24 percent) included requests for expedited service.

The DOJ OIG found that most of the expedited submissions in our statistical sample contained justifications. Only 3 of 113 expedited submissions (approximately 3 percent) did not include justifications. Of the 113 expedited submissions we reviewed, 36 submissions (approximately 32 percent) were not signed by a supervisor and 22 submissions (approximately 19 percent) did not meet the ATF’s informal criteria discussed above. The table below presents our results by laboratory.

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44 The sample included 169 case files which were closed during FY’s 1998 and 1999 and 115 case files which were open at the time the Treasury OIG conducted its field work.
We compiled information from the submissions we reviewed to determine how many expedited requests were associated with each of the informal criteria listed above. Using the informal criteria, we categorized the justifications included in these requests as follows.

- **Trial/Grand Jury** – when the examination results were needed for a trial or grand jury proceeding.
- **Arrest/Follow Lead** – when examination results were required in order to make an arrest or follow-up on an investigative lead.
- **Supervisor’s Experience** – when in the opinion of the supervising agent the examination results were needed quickly.
- **High-Visibility** – when the incident being investigated had local, regional, or national interest.
- **Death** – when the incident being investigated included a death.
- **Other** – when the request did not include justification or the justification did not fall within any of the preceding categories.

The following table shows the number of requests and percentages by category, for the 113 requests for expedited service that we reviewed.
Justification Included in Requests for Expedited Service

<table>
<thead>
<tr>
<th>Type Justification</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trial/Grand Jury</td>
<td>34</td>
<td>30%</td>
</tr>
<tr>
<td>Arrest/Follow Lead</td>
<td>30</td>
<td>27%</td>
</tr>
<tr>
<td>Supervisor’s Experience</td>
<td>17</td>
<td>15%</td>
</tr>
<tr>
<td>High-Visibility</td>
<td>8</td>
<td>7%</td>
</tr>
<tr>
<td>Death</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>113</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: DOJ OIG on-site review of laboratory records at the three regional forensic laboratories

For each submission in our sample, we also determined whether a Report of Investigation was included in the case file. We found that in 42 percent of the case files we reviewed, the submitting agent did not furnish the laboratory a copy of the Report of Investigation. Laboratory personnel often needed the report to assist in the examination of the evidence. When the report was not available, examiners had to contact the agent for a copy, further delaying the process.

Presence of a Report of Investigation (ROI) In Case Files

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Number of Case Files Reviewed</th>
<th>Number of Case Files Without an ROI</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
<td>207</td>
<td>76</td>
<td>37%</td>
</tr>
<tr>
<td>Atlanta</td>
<td>122</td>
<td>60</td>
<td>49%</td>
</tr>
<tr>
<td>San Francisco</td>
<td>111</td>
<td>47</td>
<td>42%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>440</strong></td>
<td><strong>183</strong></td>
<td><strong>42%</strong></td>
</tr>
</tbody>
</table>

Source: DOJ OIG on-site review of laboratory records at the three regional forensic science laboratories

In its 2001 audit report, the Treasury OIG recommended that the ATF Director ensure that Special Agents provide adequate justification and obtain proper supervisory signatures before submitting evidence transmittal forms to the laboratories.

In response to this recommendation, the Director of Laboratory Services and the Assistant Director of Science and Technology met with the 23 field division directors in November 2000 and discussed: (1) agents’ failures to include a Report of Investigation with evidence submissions, (2) cases being marked for expedited service without evidence of supervisory review or proper justification, and (3) the mislabeling of submitted evidence. The Treasury OIG also reported that field division directors said that laboratory supervisors should contact agents’ supervisors
immediately when any of the above issues were encountered and that laboratory supervisors were planning to follow up on that advice.

Laboratory managers initiated two other actions in FY 2001 to educate submitting agents on evidence submissions. First, the *Agents Guide to the ATF Laboratories* was distributed to all new agents, was placed on the ATF Intranet, and was added to the 2001 edition of the ATF Reference Library CD-ROM. Second, laboratory managers developed an advanced training program for agents on collecting and submitting evidence to the laboratory. The training was to be held at three divisions during FY 2001. The Treasury OIG report noted that ATF management believed improved procedures and more agent education would shorten case turnaround times and ultimately, reduce case backlogs.

During the DOJ OIG audit, the Director of Laboratory Services told us he would address the SACs in October 2005 and again would discuss the requirement for Special Agents to correctly complete evidence transmittal forms and include a copy the Report of Investigation with the evidence submission.

In the interim, we conducted 22 telephone interviews with a judgmental sample of ATF agents. The questions we asked included whether the agents were familiar with the ATF priority system for laboratory examinations. About one-third of the agents we interviewed were unfamiliar with the priority system for laboratory examinations.

*Priority System Conclusion*

The DOJ OIG found that the priority system in place during our audit resulted in shorter processing times for some expedited examination requests, but did not ensure that expedited examination requests were performed within the first 30 days and did not effectively identify examinations for expedited service without intervention by section supervisors in the laboratories. Section supervisors sorted out competing requests, not all of which were properly authorized or justified. Sometimes supervisors in the laboratories had to contact submitting agents to determine the basis for expedited service when information included with the evidence was insufficient to make this determination.

The problem described above occurred because requests for expedited service were based on informal criteria, the criteria were not always used as the reasons for requesting expedited service, and the priority system did not account for the relative importance of examination requests that were submitted as non-expedited requests. We found that some agents were not
familiar with the informal criteria. It is also likely that the long processing times for many examinations contributed to the number of expedited requests agents submitted. Agents may have been motivated to request more examinations on an expedited basis when they did not expect to receive results from a forensic examination for several months.

We recommend that the ATF develop and implement a priority system that would classify all evidence submissions into multiple tiers defined to support ATF priorities. The timeliness standard for different tiers could vary. For example, a three-tier system might establish timeliness goals for three separate classes as: (1) within 30 days, (2) within 90 days, and (3) as time permits. This lowest priority category might be confined to exhibits from investigations in which the examinations by themselves were unlikely to produce any leads, and which lacked any other leads and did not involve the loss of life.

**Case File Management Controls**

The Treasury OIG 2001 report identified two specific problems in the area of case file management controls: (1) not all examiners recorded the number of hours spent analyzing evidence or the number of hours spent preparing reports, and (2) not all closed case files contained evidence control cards. The DOJ OIG audit found that ATF management had not implemented the new laboratory information management system that would produce accurate and meaningful reports.

The ATF’s case file management controls are identified in the *Laboratory Services Policies and Procedures Guidelines* (Guidelines). The Guidelines require that the laboratory evidence control specialist create a case file for any physical evidence accepted by the laboratory and that each case file contain an evidence control card for each evidence submission.\(^{45}\) The purpose of the evidence control card is to document the chain of custody for the evidence while it is at the laboratory. The Guidelines further state that examiners should initial the evidence control card, note the date of return to the evidence control specialist, and record the number of hours they spent examining and preparing the report on the card when they return evidence to the evidence control specialist. The Guidelines also specify that the evidence control cards will be retained by the laboratories after the

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\(^{45}\) The original evidence control card is not maintained in the case file while the evidence is at the laboratory, but is maintained in an evidence room separate from the evidence and case file, as a basic control for tracking the evidence while it is in the laboratory. When the case is closed and all evidence has been returned to the originating office, the evidence control card is then placed in the case file.
evidence is returned to the submitting office. In response to the Treasury OIG’s findings, ATF management noted that adherence to the Laboratory Services Policies and Procedures Guidelines would be addressed in annual internal reviews of the three forensic science laboratories.

*Hours Spent Analyzing Evidence or Preparing Reports*

To evaluate the forensic science laboratories’ compliance with case file management controls, the Treasury OIG reviewed the 159 closed case files, which contained the results of 397 examinations for 264 submissions. The Treasury OIG found that 57 percent of the examinations did not include a record of the number of hours that examiners had spent analyzing evidence or preparing reports. The Treasury OIG concluded that if case file management controls were not followed, laboratory managers would not be able to determine how much time employees spent conducting examinations or the number of hours required to complete cases.

The DOJ OIG followed up on the weaknesses reported by the Treasury OIG. We used the statistical sample previously discussed for testing the effectiveness of the priority system. Our sample included 442 completed examinations from the 465 evidence submissions included in our review. As the following table indicates, the DOJ OIG found that the hours spent analyzing evidence or preparing reports were not recorded for 14 percent of the examinations reviewed. Therefore, we found significant improvement in the percentage of records containing information on examiner hours spent analyzing evidence and preparing reports.
Completed Examinations That Did Not Include Information On Hours Spent Analyzing Evidence Or Writing Laboratory Reports

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Number of Exams Reviewed</th>
<th>Number of Exams Missing Hours</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Treasury Data</td>
<td>DOJ OIG Data</td>
<td>Treasury Data</td>
</tr>
<tr>
<td>Washington</td>
<td>81</td>
<td>212</td>
<td>77</td>
</tr>
<tr>
<td>Atlanta</td>
<td>217</td>
<td>123</td>
<td>149</td>
</tr>
<tr>
<td>San Francisco</td>
<td>99</td>
<td>107</td>
<td>2</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>397</strong></td>
<td><strong>442</strong></td>
<td><strong>228</strong></td>
</tr>
</tbody>
</table>

Source: Treasury OIG Audit Report Number OIG-01-068, April 30, 2001, and DOJ OIG on-site review of laboratory records at the three regional forensic science laboratories

**Missing Evidence Control Cards**

The Treasury OIG found that 19 percent of closed case files were missing evidence control cards. As the following chart indicates, the DOJ OIG found an evidence control card for every evidence submission reviewed. We concluded that the ATF took effective action to ensure that laboratory personnel complied with the two specific case file management controls identified as problems in the Treasury OIG audit.

**Submissions with No Evidence Control Cards**

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Number of Submissions Reviewed</th>
<th>Number Submissions Without Evidence Control Cards</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
<td>57</td>
<td>220</td>
<td>34</td>
</tr>
<tr>
<td>Atlanta</td>
<td>137</td>
<td>126</td>
<td>15</td>
</tr>
<tr>
<td>San Francisco</td>
<td>70</td>
<td>119</td>
<td>1</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>264</strong></td>
<td><strong>465</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

Source: Treasury OIG Audit Report Number OIG-01-068, April 30, 2001, and DOJ OIG on-site review of laboratory records at the three regional forensic laboratories

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46 Of the examinations selected for our review, 119 had either been canceled or were not completed at the time of our audit and therefore are not addressed in this chart.
Lack of New Information Management System

In response to the Treasury OIG audit report, ATF management also stated that acquisition of the new laboratory information management system would permit the development of accurate, meaningful reports to track examiner hours and eliminate the complex flow of documents that is often the cause of incomplete files cited in that report. As previously stated in this report, the new system had not been implemented at the time of the DOJ OIG audit. However, the new system is now projected to be in place by March 2006. According to a laboratory official, implementation of the new system was delayed because of problems modifying an existing commercial software package to meet the needs of the forensic science laboratories. The commercial software that had originally been selected when the ATF was part of the Treasury Department worked well for the regulatory functions performed on alcohol and tobacco products, but needed modification to meet the forensic laboratories’ needs. The modifications have required extensive testing and re-testing, causing the delay in implementation.

Conclusion

Extended processing times identified in the 2001 Treasury OIG audit report continued into the period audited by the DOJ OIG, with minor improvement. Two-thirds of completed forensic examinations continued to take more than 30 days to complete, and about one-third of examinations took more than 90 days. ATF laboratories were appreciated widely for the quality of work produced, and we found that the Office of Laboratory Services was following its quality assurance program. However, some comments from Special Agents in field offices continued to reflect dissatisfaction with the processing times, and some agents used other laboratories to obtain more timely results.

It is crucial that forensic results be of high quality to ensure reliable results. The DOJ OIG found that the ATF had a quality assurance program in place and that the Office of Laboratory Services followed the program to ensure the quality of its services. The program included annual quality reviews of all laboratories and the ATF’s participation in a professional accreditation process.

Although the ATF implemented several corrective actions planned as a result of issues identified in the Treasury OIG audit, other corrective actions that could have had a significant impact on workload management were not implemented. For instance, the ATF did not increase the number of positions in the regional forensic laboratories, did not implement a new priority system, and did not implement a new information management
system. The DOJ OIG audit also found that the ATF did not continue initial efforts to clear the backlog of requests for examinations that were no longer needed, and the time it took to fill examiner vacancies had not been reduced.

The DOJ OIG audit found that the staffing level in FY 2005 could manage the incoming workload of evidence, but not in combination with the existing examination backlog and the length of time it took to fill examiner vacancies, which remained a problem. The laboratories had no plan regarding how to clear the existing backlog, reduce the time it takes to fill vacancies, and manage resource-intensive cases so that routine work will not create a backlog of requests that cannot be addressed within a reasonable time. As a result, resource-intensive cases can be expected to continue to contribute to the existing backlog in the future.

The Treasury OIG found that the ATF did not develop formal criteria for determining which evidence submissions should receive expedited service, but instead, used informal criteria. The ATF also did not establish a methodology for classifying non-expedited work. Although the ATF designed a revised priority system, the DOJ OIG found that it had not been implemented and did not address all submissions.

Questionnaires such as customer satisfaction cards provide a method for obtaining customer feedback, but the current questions used by the laboratories do not request specific responses and need to be revamped. More specific questions should be included, such as whether the analysis was received in time to be of assistance on a case, or if it was not, what the negative impact was on the progress of an investigation or the outcome of a case.

Our recommendations focus on managing the incoming workload and existing examination backlog by developing and implementing a revised priority system and a plan to eliminate the backlog, and developing approaches to reducing the time it takes to fill examiner vacancies. Otherwise, the backlog, inadequate priority system, and vacant examiner positions will continue to interfere with the laboratories’ ability to handle the incoming workload of evidence on a timely basis. Serious consequences may occur if delays in identifying suspects, making arrests, and bringing offenders to trial allow offenders to commit additional crimes.
Recommendations

We recommend that the ATF:

1. Develop and implement a plan to eliminate the backlog in each regional forensic science laboratory.

2. Develop and implement a plan to manage unusually high incoming workloads that are associated with resource-intensive cases.

3. Develop agreements and contracts with other laboratories to perform forensic work to provide support when the demand for examinations is unusually high and to help eliminate the backlog.

4. Develop and implement a priority system for managing all incoming evidence submissions. The system should support the ATF’s investigative priorities and establish realistic time standards for completion.

5. Ensure that Special Agents are educated on the new priority system and comply with its requirements.

6. Develop and implement a plan to reduce the time it takes to fill examiner vacancies.

7. Revise the questionnaire being sent to customers (customer satisfaction cards or an electronic version of similar questions), by requesting more specific feedback about the impact of the forensic analysis on the progress of investigations and outcomes of cases.
STATEMENT ON INTERNAL CONTROLS

In planning and performing our audit of the ATF’s forensic science laboratories, we considered management controls for the purpose of determining our auditing procedures. This evaluation was not made for the purpose of providing assurance on the ATF’s internal controls for forensic science laboratory services as a whole.

As discussed in the Findings and Recommendations section of this report, we found that the ATF has taken effective action to ensure that laboratory personnel comply with the two specific case file management controls identified as problems in the prior audit. We did not identify any additional weaknesses.

Because we are not expressing an opinion of the ATF’s forensic laboratory’s internal controls as a whole, this statement is intended solely for the information and use of the ATF in managing its forensic science laboratories. This restriction is not intended to limit the distribution of this report, which is a matter of public record.
STATEMENT ON COMPLIANCE WITH LAWS AND REGULATIONS

The ATF forensic laboratories operate under standards set in the *ATF Laboratory Services Policy and Procedure Guidelines* and by the American Society of Crime Laboratory Directors / Laboratory Accreditation Board’s (ASCLD/LAB) *ASCLD/LAB Accreditation Manual, 2003 Edition*.

To obtain reasonable assurance that the ATF complied with laws and regulations that, if not complied with, could have a material effect on the ATF laboratories’ workload management, we tested the forensic laboratories’ accreditation status and compliance with ATF standards related to laboratory quality assurance procedures, case file management controls, and inspection and corrective action procedures. Except for instances of noncompliance identified in the Finding and Recommendations section of this report, we did not identify any instances of noncompliance.
APPENDIX I

OBJECTIVES, SCOPE, AND METHODOLOGY

Objectives

The objectives of the audit were to determine whether the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) forensic laboratories were: (1) providing timely service, (2) prioritizing their workload effectively, and (3) ensuring case file management controls were followed.

Scope and Methodology

The audit was performed in accordance with the Government Auditing Standards issued by the Comptroller General of the United States, and included tests and procedures necessary to accomplish the objectives.

This audit was performed as a follow-up to a Department of the Treasury, Office of Inspector General (OIG) Report OIG-01-068, CRIMINAL ENFORCEMENT: ATF Forensic Science Laboratories Need to Improve Workload Management, issued on April 30, 2001. Neither the Treasury OIG nor the DOJ OIG evaluated the operational efficiency with which the laboratories processed evidence.

Generally, the audit focused on the regional laboratories that analyze and maintain custody of evidence submitted by ATF field divisions. We performed fieldwork at the following locations.

Office of Laboratory Services Ammendale, MD
Forensic Science Laboratory-Washington Ammendale, MD
Forensic Science Laboratory-Atlanta Atlanta, GA
Forensic Science Laboratory-San Francisco Walnut Creek, CA

The audit generally covered the period October 1, 2003, through May 13, 2005, the date of the extract we obtained from the Office of Laboratory Services’ management information system. In addition, we analyzed some additional data regarding ATF operations for FY 2005 as a whole.

We interviewed officials from the ATF’s Office of Laboratory Services and managers at each of the three forensic science laboratories we visited.

To obtain background information related to the ATF’s performance of forensic services, we:
• reviewed information on the ATF’s mission, its laboratories, services, customers, and strategic plan;

• reviewed audit and inspection reports issued previously to identify findings and recommendations related to the ATF forensic laboratories, and determined the status of issues addressed in the Department of the Treasury, OIG Audit Report OIG-01-068;

• reviewed the ATF’s Laboratory Services Policies and Procedures Guidelines;

• assessed the professional accreditation status of the forensic science laboratories through interviews and review of documentation and inspection reports; and

• reviewed the ATF’s guidelines for Special Agents about evidence handling and communication with the laboratories.

To assess the timeliness of laboratory services and overall customer satisfaction, we:

• analyzed data to determine turnaround times from the receipt of exhibits by laboratories to the issuance of the laboratory report(s);

• analyzed data on factors previously reported as having contributed to processing delays (These factors include backlog, resource demands for high-visibility investigations, hiring lag, and outside duties for laboratory examiners such as crime scene assistance, court appearances, and training support.);

• reviewed customer satisfaction cards on file at each of the three forensic science laboratories;

• surveyed a judgmental sample of Special Agents on laboratory examinations that took more than 180 days to complete to determine the effect these processing delays had on the investigations; and

• questioned Special Agents as to their overall satisfaction with the services provided by the laboratory.

To assess the effectiveness of the ATF’s laboratory examination system of priorities, we:
• reviewed ATF policy and procedures regarding the assignment of priorities to exhibits forwarded to the forensic laboratories for examination; and

• reviewed case files at each laboratory for a statistical sample taken from the ATF’s Forensic Automated Case and Exam Tracking System (FACETS) to determine whether the priorities assigned exhibits were adequately supported, consistent with ATF policy, and properly authorized.

To assess the effectiveness of management controls over laboratory case files, we:

• reviewed ATF policy and procedures on laboratory case files, and

• reviewed case files at each laboratory for a statistical sample taken from FACETS to determine whether evidence control cards were prepared on each evidence submission and whether laboratory personnel had documented the hours spent examining exhibits and preparing laboratory reports on the evidence control cards.
DEPARTMENT OF THE TREASURY OIG’s FINDINGS AND RECOMMENDATIONS, AND ATF MANAGEMENT’S RESPONSE

The following findings, recommendations, and management responses to the recommendations are extracted from the following Department of the Treasury, Office of Inspector General, audit report: CRIMINAL ENFORCEMENT: ATF Forensic Science Laboratories Need to Improve Workload Management, Report Number OIG-01-068, April 30, 2001. The ATF’s response to the Treasury OIG report, which was included as Appendix 3 in the report, was dated March 27, 2001, and discussed management actions taken by the ATF as of that date.

Finding 1: Laboratories Did Not Always Provide Timely Service

Recommendations:

1. The ATF Director should ensure the laboratories are adequately staffed with qualified personnel.

Management Comment. ATF management agreed the laboratories must be adequately staffed with qualified personnel. In response to this recommendation, ATF management:

- authorized an increase in the full-time equivalent (FTE) ceiling of Laboratory Services from 115 to 134 for FY 2001;
- centralized all administrative personnel functions within the Office of the Director of Laboratory Services, in an effort to improve the laboratory recruiting process;
- is making immediate use of available recruitment incentives, including bonuses and the Pay Demonstration Project, to attract and retain highly qualified personnel;
- made a concerted effort to hire experienced personnel whose training period will be shorter, making them productive sooner; and
- is reviewing the re-implementation of customer satisfaction cards, with a focus on how to capture the data being generated, and how to use it effectively to improve services.
ATF management indicated its efforts have resulted in an overall reduction of backlog cases. Examination backlog was reduced 10 percent in FY 1999 and an additional 13 percent in FY 2000.

2. The ATF Director should ensure laboratory managers coordinate the amount of outside work performed by laboratory personnel to limit the negative effect on the laboratory’s workload.

**Management Comment.** ATF management indicated the duties of forensic chemists and examiners are not limited to examining cases and providing expert testimony on their findings. As technical experts, they are responsible for continuing their professional development through training and interaction with peers outside of ATF. They are also developing new methods of analysis: training others, both inside and outside the ATF; and providing assistance at significant crime scenes.

To ensure laboratory personnel are only assigned outside work that is of strategic importance to their development or ATF’s mission, ATF management has:

- coordinated all ATF-funded training requests to effectively allocate this workload laboratory-wide;

- required all field division directors to submit requests for non-ATF funded training to the Director of Laboratory Services, which has significantly reduced the number of field divisions’ requests and ensured only the most important requests are forwarded;

- required laboratory supervisors to evaluate all ATF requests for laboratory assistance at crime scenes (other than National Response Team call-outs) to ensure there is a valid need to send personnel into the field;

- provided each field division with a list of cases that were one year old or older, as of May 1999, which resulted in 94 inactive cases being removed from the laboratories’ backlogs [ATF repeated this process in November 2000, and removed an additional 85 cases from the backlog];

- committed to providing each field division with a list of all pending cases on a quarterly basis, which would help field division directors to better manage their operations and permit additional cases to be removed from the backlog; and
• required employees to work closely with the courts to ensure their physical presence is absolutely required when they are asked to testify in the prosecution of individual cases.

ATF management indicated these changes have reduced the number of days laboratory employees spend on outside work, as shown in the following chart:

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Testifying in Court</td>
<td>223</td>
<td>176</td>
<td>213</td>
</tr>
<tr>
<td>Providing Assistance at Crime Scenes</td>
<td>313</td>
<td>324</td>
<td>258</td>
</tr>
<tr>
<td>Providing Training</td>
<td>389</td>
<td>397</td>
<td>334</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>925</strong></td>
<td><strong>897</strong></td>
<td><strong>805</strong></td>
</tr>
</tbody>
</table>

**Finding 2: Laboratories Need to Prioritize Their Workload**

**Recommendations:**

1. The Director of ATF needs to ensure the ATF develops a priority system for incoming evidence submissions which supports the ATF’s investigative priorities.

**Management Comment.** ATF management indicated Field Operations officials are responsible for determining whether Special Agent service requests are in line with the ATF’s investigative priorities. However, Laboratory Services has taken steps to assist in this process by recommending a new priority system for forensic examinations. Laboratory Services developed this system by working jointly with agents, laboratory examiners, and a cross-section of the field divisions. The new priority system is one part of several proposed improvements, including a new Evidence Transmittal Form that could be completed electronically, and an Evidence Submission Checklist to be used by submitting Special Agents. These innovations were nearing completion and will soon be reviewed by Field Operations.

2. The Director of ATF needs to ensure Special Agents provide adequate justification and obtain proper supervisory signatures before submitting evidence transmittal forms to the laboratories.

**Management Comment.** The Director of Laboratory Services and the Assistant Director of Science and Technology met with the 23 field
divisions’ directors in November 2000. At that time they discussed the following issues: (1) agents’ failures to include a Report of Investigation with evidence submissions, (2) cases being marked as expedite without evidence of supervisory review or proper justification, and (3) the mislabeling of evidence exhibits submitted. The field division directors indicated laboratory supervisors should contact agent supervisors immediately when any of the above issues were encountered. Laboratory supervisors were planning to follow up on this advice.

Laboratory managers initiated two other actions in this fiscal year [2001] in their efforts to educate submitting agents. First, the *Agents Guide To The ATF Laboratories*: (1) is being distributed to all new agents training classes, (2) has been placed on the ATF Intranet, and (3) will be added to the upcoming edition of the ATF Reference Library CD-ROM. Second, laboratory managers have developed an advanced training program for agents regarding the collection and submission of evidence to the laboratory. It was scheduled to be held on-site at three divisions during FY 2001.

Management believed that by improving procedures and providing more education to submitting agents, the laboratories would realize additional improvement in case turnaround times and ultimately, reduce case backlogs.

Finally, the pending acquisition of a modern Laboratory Information Management System to replace the outdated FACETS will permit the automated, regular exchange of case information between agents and the laboratory. This will allow continuous updates in status and immediate notification of changes in priority.

**Finding 3: Laboratories Need to Ensure Case File Management Controls are Followed**

**Recommendation:**

1. The Director of ATF needs to ensure laboratory employees comply with all established case file management controls. All closed case files should contain evidence control cards and document the number of hours laboratory employees spent analyzing evidence and preparing laboratory reports.

**Management Comment.** ATF management indicated the audit report correctly noted the laboratories were not complying with *Laboratory*
Services Policies and Procedures Guidelines [Guidelines] in some instances. The [Guidelines] were written for the purpose of establishing standard best practices for laboratory operations. If the laboratories establish a new practice or improve a current practice, the [Guidelines] must be updated.

As a result of the [Treasury] audit, the ATF has taken corrective action to ensure evidence control cards are placed in all case jackets promptly when laboratory reports are completed and cases are closed. They have also taken corrective action to ensure examiner hours are recorded. The ATF addressed adherence to this standard, and all other [Guidelines] in its annual internal review team audits of the three forensic science laboratories.

In addition, ATF management indicated the acquisition of [a laboratory information management system] to replace the outdated FACETS will permit the development of accurate, meaningful reports that track examiner hours. The new [laboratory information management system] will also eliminate the complex flow of documents that is often the cause of incomplete files cited in the report.
## APPENDIX III

### VACANT POSITIONS AT THE THREE FORENSIC SCIENCE LABORATORIES AS OF SEPTEMBER 30, 2005

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Position</th>
<th>*Salary Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
<td>Chief, Arson &amp; Explosives Section II</td>
<td>$74,000-$118,000</td>
</tr>
<tr>
<td>Washington</td>
<td>Forensic Chemist</td>
<td>$52,500-$118,000</td>
</tr>
<tr>
<td>Washington</td>
<td>Forensic Chemist</td>
<td>$52,000-$118,000</td>
</tr>
<tr>
<td>Washington</td>
<td>Chief, Firearms Section</td>
<td>$74,000-$118,000</td>
</tr>
<tr>
<td>Washington</td>
<td>Chief, Identification Section</td>
<td>$74,000-$118,000</td>
</tr>
<tr>
<td>Washington</td>
<td>Fingerprint Specialist</td>
<td>$74,000-$118,000</td>
</tr>
<tr>
<td>Washington</td>
<td>Fingerprint Specialist</td>
<td>$74,000-$118,000</td>
</tr>
<tr>
<td>Washington</td>
<td>Fingerprint Specialist</td>
<td>$74,000-$118,000</td>
</tr>
<tr>
<td>Washington</td>
<td>DNA Technical Leader</td>
<td>$74,000-$118,000</td>
</tr>
<tr>
<td>Washington</td>
<td>DNA Specialist</td>
<td>$52,000-$118,000</td>
</tr>
<tr>
<td>Washington</td>
<td>DNA Specialist</td>
<td>$52,000-$118,000</td>
</tr>
<tr>
<td>Atlanta</td>
<td>No Vacancies</td>
<td></td>
</tr>
<tr>
<td>San Francisco</td>
<td>Chief, Arson &amp; Explosives Section</td>
<td>$82,500-$128,000</td>
</tr>
<tr>
<td>San Francisco</td>
<td>Forensic Chemist</td>
<td>$57,000-$128,000</td>
</tr>
<tr>
<td>San Francisco</td>
<td>Forensic Chemist</td>
<td>$57,000-$128,000</td>
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</tbody>
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*Note: These are location-specific salary ranges in the Personnel Management Pay Demonstration Project for the pay bands in which these positions were advertised. Chief/leader positions were advertised in pay band 3; examiner positions were advertised in both pay band 2 and pay band 3.*
# APPENDIX IV

## ATF EVIDENCE TRANSMITTAL FORM

<table>
<thead>
<tr>
<th>DEPARTMENT OF THE TREASURY</th>
<th>Page 1 of 1 pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUREAU OF ALCOHOL, TOBACCO AND FIREARMS</td>
<td></td>
</tr>
<tr>
<td>FORENSICS SCIENCE LABORATORY</td>
<td></td>
</tr>
<tr>
<td>6002 AMMENDEALE ROAD</td>
<td></td>
</tr>
<tr>
<td>AMMENDEALE, MARYLAND 20705</td>
<td></td>
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<tr>
<td>PHONE #</td>
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</tbody>
</table>

## TO: BUREAU OF ALCOHOL, TOBACCO AND FIREARMS

## FROM:

## 3. TITLE OF INVESTIGATION

## 4. INVESTIGATION NUMBER

## 5. NUMBER OF PACKAGES

## 6. EXPEDITE (explain in comments section)

## 7. TYPE OF INVESTIGATION

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<tr>
<td></td>
<td>FIREARMS</td>
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<td></td>
<td>EXPLOSIVES</td>
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<td></td>
<td>ARSON</td>
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<td>OTHER</td>
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## 8. INTRA-AGENCY ROUTING AFTER LABORATORY EXAMINATION (mark an "X" in appropriate box)

### EXPLOSIVE TECHNOLOGY BRANCH

### FIREARMS TECHNOLOGY BRANCH

### RETURN TO CONTRIBUTOR

### OTHER

## 9. ATTACHMENTS INCLUDED IN THIS SUBMISSION (mark an "X" in the appropriate boxes) *ATTACH PRELIMINARY/STATUS ATF F 3270.2:

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<tbody>
<tr>
<td></td>
<td>ATF F 3400.16</td>
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<td>PHOTOGRAPHS</td>
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<td>DIAGRAMS</td>
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<td>OTHER</td>
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## 10. COMMENTS/SPECIAL INSTRUCTIONS

## USE EVIDENCE LOG/INVENTORY NUMBERS

## EXHIBIT #

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</table>

## DESCRIPTION/REMARKS

## 11. SUBMITTED BY (Name)

## 12. TITLE AND OFFICE

## 13. DATE

## 14. REVIEWED BY (Name)

## 15. TITLE AND OFFICE

## 16. DATE

**MISSION OF THE ATF LABORATORIES:** To produce the accurate and authoritative scientific information needed by Law Enforcement and Compliance Operations in protecting the public and collecting the revenue.

**ATF F 7123.7A (6-93)**
# APPENDIX V

## CUSTOMER SATISFACTION CARD

**U.S. Department of Justice**  
**Bureau of Alcohol, Tobacco, Firearms and Explosives**  
**Customer Feed Back Form**

---

We want to be more responsive to the needs of the laboratory users. Please give us your reviews on the Laboratory's performance and return the completed card.

**Laboratory No.** __________________________ **Examiner** __________________________

1. How was the service the Laboratory provided in this analysis?

   - Very Good □
   - Good □
   - Poor □
   - Very Poor □

2. How satisfied were you with the time taken by the Laboratory to complete this analysis?

   - Very satisfied □
   - Satisfied □
   - Fairly satisfied □
   - Not satisfied □

3. Were you satisfied with the reports/statement sent to you by the Laboratory?

   - Very satisfied □
   - Satisfied □
   - Fairly satisfied □
   - Not satisfied □

**Comments:**

---

Please return the response card to the Forensic Science Laboratory. Thank you.

**ER** ______________ **RF** ______________

ATF Form 7110.12  
Revised April 2004  
U.S.GPO:2004-304-380/7310
APPENDIX VI

THE ATF’S RESPONSE TO THE DRAFT REPORT

U.S. Department of Justice
Bureau of Alcohol, Tobacco, Firearms and Explosives
Office of the Director

Washington, DC 20226

MAR - 1 2006

603010:CGC
8310

MEMORANDUM TO: Assistant Inspector General for Audit

FROM: Director

SUBJECT: Follow-up Audit of the Bureau of Alcohol, Tobacco, Firearms and Explosives Forensic Science Laboratories’ Workload Management

The Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) appreciates the opportunity to respond to the recommendations from the Office of the Inspector General’s (OIG) above-cited draft report. Although we were previously aware of and were acting to improve the areas included in your findings, we appreciate this independent evaluation process to help us improve our ability to effectively plan and manage our resources more efficiently.

In general, ATF concurs with the findings and recommendations of your report and will address each recommendation in a corrective actions report. Our responses to your recommendations are as follows:

Recommendation 1 – Develop and implement a plan to eliminate the backlog in each regional forensic science laboratory.

ATF Response – We agree that a plan should be developed and implemented to address the backlog of forensic cases. In addition, we believe that this plan should address meeting the minimum turnaround time of 30 days on all cases. This plan should take into account ATF staffing needed, contract staffing needed, possible process improvements, and staff demands outside of forensic examination. ATF will develop and implement a plan to address the backlog of forensic cases. This plan will be fully implemented by February 1, 2007.
Assistant Inspector General for Audit

Recommendation 2 – Develop and implement a plan to manage unusually high incoming workloads that are associated with resource-intensive cases.

ATF Response – We agree that a formal plan should be developed and implemented to manage workloads from resource-intensive cases. Laboratory Services has such a plan and has implemented it on several occasions (e.g., the sniper investigation). This plan involves redirecting cases from the impacted laboratory to one of the other two laboratories. In addition, needed personnel can be detailed to the impacted laboratory from one of the other two laboratories. Laboratory Services will refine and implement a plan to manage workload increases associated with resource-intensive cases. This plan will be implemented by October 1, 2006.

Recommendation 3 – Develop agreements and contracts with other laboratories to perform forensic work to provide support when the demand for examinations is unusually high and to help eliminate the backlog.

ATF Response – We agree that such agreements and contracts with other laboratories to provide forensic support to Laboratory Services would be beneficial. ATF does not agree that this is a corrective action that should be pursued at this time. The OIG report shows that most, if not all, public forensic laboratories face significant backlogs. The OIG recommendation would also require ATF to overcome significant accreditation issues. This is made more difficult since our laboratories are pursuing international accreditation in 2007. Laboratory Services is currently using contract forensic examiners as technicians to process evidence. Due to quality assurance demands, they must work under the direct guidance of an ATF examiner. As a result, the impact that they have on the backlog is not as great as hiring another ATF examiner.

ATF will continue to look for opportunities to use contracts or agreements with other laboratories. Laboratory Services will continue to supplement ATF staffing with contract personnel when feasible.

Recommendation 4 – Develop and implement a priority system for managing all incoming evidence submissions. The system should support the ATF investigative priorities and establish realistic time standards for completion.

ATF Response – We agree that the plan to implement a priority system for managing all incoming evidence submissions should be completed. The system we have developed depends upon the supervisory special agent to ensure that the priority requested is in line with ATF investigative priorities. The system we have developed then requires the
Assistant Inspector General for Audit

forensic examiner and the submitting agent to negotiate a realistic time for completion based on the priority and complexity of the case.

ATF will implement this basic priority system with the implementation of the new Evidence Transmittal Form (ATF F 7120.7A). This will be accomplished by July 1, 2006.

Recommendation 5 – Ensure that special agents are educated on the new priority system and comply with its requirements.

ATF Response – In conjunction with the deployment of the new priority system, ATF will ensure that both the Office of Field Operations and Laboratory Services provide training in its use. ATF will develop and provide appropriate training for the users of the new priority system. This training will be accomplished at least 30 days before the implementation of the new priority system.

Recommendation 6 – Develop and implement a plan to reduce the time it takes to fill examiner vacancies.

ATF Response – We agree that a formal plan needs to be developed and implemented to reduce the time it takes to fill examiner vacancies. Laboratory Services has been meeting with the Human Resources Division weekly to monitor the progress in filling examiner vacancies and to address problems in the process.

ATF will expand its current effort to include the development and implementation of a formal plan to reduce the time it takes to fill examiner vacancies. This plan will be implemented by June 1, 2006.

Recommendation 7 – Revise the questionnaire being sent to customers by requesting more specific feedback about the impact of the forensic analysis on the progress of investigations and outcomes of cases.

ATF Response – We agree that the Customer Feed Back Form (ATF F 7110.12) should be revised. We also agree that the revision should try to capture information about the significance that the forensic analysis played in the investigation. However, we do not agree that the questionnaire feedback should include information about the outcome of the case. First, the forensic report should be received by the special agent early in the investigation, so the outcome of the case is generally not known. Second, the objective of the forensic scientist is to provide quality and timely examination of the evidence submitted. This is done without regard to the guilt or innocence of a suspect or the final
outcome of the case. The forensic analysis is but one small part in determining the outcome of a case. The investigation and prosecution are far more important to the case. ATF will develop a new questionnaire (paper and/or electronic) that will provide improved feedback information on the performance of each laboratory and the examiner associated with each laboratory report of examination. This new questionnaire will be implemented by December 1, 2006.

Should you have any questions or require additional information concerning this response, please contact Ms. Carol Campbell, Audit Liaison, at (202) 927-8276.
The OIG provided a draft of this audit report to the ATF for review and comment. The ATF’s response is included in Appendix VI of this final report. The ATF generally concurred with each of the seven recommendations. Our analysis of the ATF’s response to the recommendations is provided below.

Status of Recommendations

1. **Resolved.** This recommendation is resolved based on the ATF’s agreement to develop and implement a plan to address the backlog of forensic cases. The recommendation can be closed when we receive documentation supporting the development and implementation of the plan.

2. **Resolved.** This recommendation is resolved based on the ATF’s agreement to develop and implement a formal plan to manage workloads from resource-intensive cases. The recommendation can be closed when we receive documentation supporting the development and implementation of the plan.

3. **Resolved.** This recommendation is resolved based on the ATF’s concurrence that agreements and contracts with other laboratories would be beneficial and the ATF’s stated intent to look for opportunities to use contracts or agreements with other laboratories. However, we are concerned that the ATF also states, somewhat contradictorily, that it does not agree that the recommended corrective action should be pursued at this time. The ATF bases this position on the belief that our report concludes that most, if not all, public forensic laboratories face significant backlogs and a belief that the recommendation would require the ATF to overcome significant accreditation issues. We disagree. While our report provides some discussion of backlogs at public laboratories, the discussion focuses on the use of the 30-day time standard at such laboratories and compliance with that standard by the ATF. We did not make conclusions regarding the general status of backlogs in public laboratories, and our report should not be read as a comprehensive assessment of backlogs in public laboratories. In addition, our recommendation is not focused on the ATF’s use of public laboratories and applies equally to the use of accredited private laboratories.
This recommendation can be closed when we receive documentation supporting the ATF’s efforts to seek opportunities to use agreements or contracts with other laboratories.

4. **Resolved.** This recommendation is resolved based on the ATF’s agreement to implement a priority system for managing all incoming evidence submissions. The recommendation can be closed when we receive documentation supporting implementation of the system.

5. **Resolved.** This recommendation is resolved based on the ATF’s agreement to ensure that special agents are educated on the new priority system. However, the ATF did not address how it will ensure that special agents comply with requirements of the new system. The recommendation can be closed when we receive documentation supporting completion of the training and the method to be used to ensure compliance with the system.

6. **Resolved.** This recommendation is resolved based on the ATF’s agreement to develop and implement a plan to reduce the time it takes to fill examiner vacancies. The recommendation can be closed when we receive documentation supporting development and implementation of the plan.

7. **Resolved.** This recommendation is resolved based on the ATF’s agreement to revise the questionnaire being sent to customers. We understand the ATF’s objection to always obtaining feedback on case outcomes, but we continue to believe that the ATF should solicit information on case outcomes that were significantly affected, positively or negatively, by the forensic analyses performed. The recommendation can be closed when we receive documentation supporting implementation of the revised questionnaire.