THE BUREAU OF ALCOHOL, TOBACCO, FIREARMS AND EXPLOSIVES' AND FEDERAL BUREAU OF INVESTIGATION'S ARSON AND EXPLOSIVES INTELLIGENCE DATABASES

EXECUTIVE SUMMARY

The two principal federal agencies responsible for compiling data related to arson and explosives incidents in the United States are the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) and the Federal Bureau of Investigation (FBI). To collect such data, the ATF created the Arson and Explosives National Repository (Repository) and the FBI created the Bomb Data Center (BDC). Over each of the past 3 years, the ATF received about 1,800 reports of arson and 700 reports of bombing incidents. During that same time, the FBI received about 900 reports of bombing incidents annually.[1]

Both the ATF's Repository and the FBI's BDC maintain databases that collect and disseminate information for statistical analysis and research, investigative leads, and intelligence. The databases maintained by the Repository are the Arson and Explosives Incident System (AEXIS) and the Bombing Arson Tracking System (BATS). In addition, the ATF maintains N-Force, a case management system that is available only to ATF law enforcement personnel. The database maintained by the FBI's BDC is the Automated Incident Reporting System (AIRS), which is accessible through Law Enforcement Online (LEO).[2]

Information in these databases help investigators identify suspects, case-specific similarities regarding explosive and incendiary device construction, methods of initiation, types of fuels and explosives used, and methods of operation in explosives or arson cases. The databases are also designed to help investigators link thefts of explosive materials with criminal misuse of the explosives. Lastly, the databases can assist federal, state, and local law enforcement and fire agencies track criminal cases involving arson and explosives.

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[1] The BDC does not normally receive and record arson-only incidents.

[2] LEO is a restricted online service that provides a secure means of communication for federal, state, and local law enforcement and public safety personnel.

Scope of Office of the Inspector General Audit

The Office of the Inspector General (OIG) audited the operation of the ATF's and the FBI's databases that compile information on arson or bombing incidents. Our audit objective was to examine overlap between the systems and evaluate whether the Department of Justice (Department) has efficiently and effectively collected, and made available to the federal, state, and local law enforcement community, information involving arson and the criminal misuse of explosives.

We focused on the ATF and the FBI database systems and their policies and procedures to collect and disseminate arson and explosives data. We visited ATF Headquarters in Washington, D.C.; the FBI's BDC in Quantico, Virginia; Louisiana State University (LSU) in Baton Rouge, Louisiana, where contract staff enter data into the FBI's database; the Glendale, Arizona, Fire and Police Department; and the Maine State Fire Marshals Office in Gardiner, Maine.[3]

We interviewed ATF and FBI officials who manage the database systems; LSU contract staff; and representatives of 48 federal, state, and local field offices and the United States Fire Administration concerning the operation and use of the databases. We also reviewed system controls and data entry and retrieval procedures, and we performed tests of system accuracy and timeliness.

Findings

Duplication of Effort

We found that the Department has not efficiently and effectively collected and made available to the federal, state, and local law enforcement community information relating to arson and the criminal misuse of explosives. Specifically, the similar responsibilities of the ATF and the FBI in compiling data have resulted in duplication of effort, confusion and duplicate reporting of incidents by state and local agencies, and a lack of uniformity in the reporting process. The overall purposes of the ATF and the FBI databases are similar, and many data fields in each system are identical. As a result, customers do not have a single, comprehensive source for obtaining intelligence information on arson and explosives matters to assist in their investigations. This condition stems partly from statutory and

[3] The Glendale, Arizona, Fire and Police Department and the Maine State Fire Marshals Office in Gardiner, Maine, were the only two state or local law enforcement agencies in which the ATF's new BATS system was used at the time of our audit.

regulatory overlap concerning the responsibility to compile data, and also because of a lack of agreement between the ATF and the FBI on how to ensure that duplication is avoided.

On January 14, 2004, we briefed Office of the Deputy Attorney General (ODAG) officials about the results of our audit work. In March 2004, the Attorney General directed the ATF and FBI to identify options and make recommendations concerning the possible merger of their databases. The ODAG was to review the ATF's and FBI's recommendations and report to the Attorney General. On July 6, 2004, we advised the ODAG that we had not seen any changes in the conditions we described in our January briefing.

On August 11, 2004, the Attorney General directed: 1) the ATF and the FBI to consolidate all of the Department's arson and explosives incidents databases, including, but not limited to, the ATF's BATS, and the FBI's AIRS, into a single database; and 2) that all consolidated arson and explosives incident databases be maintained by the ATF (See Appendix VI for details of the Attorney General's August 11, 2004 directive). On the basis of our analysis of the strengths and weaknesses of each system, we are recommending what features the consolidated system should have. Implementation of our recommendations will eliminate duplication of effort, ensure consistency in reporting practices, and facilitate sharing of intelligence among law enforcement agencies.

Data Accuracy

We tested the accuracy of a sample of the intelligence information in the ATF's AEXIS and BATS databases and the FBI's AIRS database by comparing a sample of database output to source documents. Although we found errors in both the ATF and the FBI systems, the ATF's databases were much more reliable than the FBI system with respect to data accuracy.

ATF. Our review of the AEXIS database found a total of 10 errors among the 1,584 data fields (0.6 percent) we tested.[4] Our review of the BATS database found 3 errors among the 244 data fields (1.2 percent) we tested. The errors occurred because data from source documents was not entered into the system correctly. These errors were not detected by the ATF's system for sampling a

[4] We also examined 26 records entered into the Explosives Tracing feature of AEXIS and found 16 errors. Because this feature does not generate a report, we were unable to determine the number of applicable fields to calculate an error rate.

percentage of output documents for accuracy. Some of the errors in AEXIS occurred because the selection of options within the AEXIS drop-down menus was too limited and the available options did not adequately describe information included on source documents.

FBI. Our review of the AIRS database found a total of 730 errors among the 7,481 data fields (9.8 percent) we tested. The BDC and contract staff who entered the data stated that many errors occurred because a feature within the AIRS automatically completes certain fields based on outdated information entered previously into LEO. Additionally, contract staff stated that data was lost when the BDC upgraded the system, and the BDC's management controls were insufficient to detect or prevent the errors.

Timeliness of Data Entry and Responsiveness to Customers

To test the timeliness of data entry and responsiveness to customer requests, we: 1) examined a judgmental sample of data submitted by contributing agencies to determine how quickly it was entered into the ATF's AEXIS and the FBI's AIRS databases, and 2) surveyed a sample of agencies to determine how quickly the ATF and the FBI responded to their inquiries. We found that data in the ATF's AEXIS system was more current than data in the FBI's AIRS system, and we found significant weaknesses in the AIRS data entry process. We also found that the ATF and the FBI responded fairly quickly to requests from outside customers, but neither had implemented controls to track the timeliness of its responses.

ATF. The ATF's staff stated that information is entered into the AEXIS database as soon as it is received. However, we could not verify this because the ATF did not date stamp documents and the AEXIS database did not have automated indicators to show when data is entered.

The ATF did not record the dates of outside requests for intelligence information or the dates of its responses. However, the requesting agencies we surveyed provided favorable ratings on the ATF's timeliness. According to our interviews with agencies submitting requests to the ATF, 7 agencies indicated they received information they requested from the ATF immediately, 2 within 1 day, 13 within a week, and only 1 in a week or more.

FBI. Similar to the ATF, the FBI's BDC staff and contract LSU data entry staff did not date stamp source documents used to populate

the AIRS database. Further, the FBI had no indicators to determine when the documents were entered into the system. However, we found a large backlog of source documents containing data that had not been entered into AIRS by contract LSU staff. In August 2003, data from at least 5,745 Activity Reports and 770 Incident Reports were more than 4 years old and still had not been entered into the system. This occurred because the BDC accumulated reports without entering them into the system or sending them to LSU to be entered. According to LSU staff, as of July 2004 the backlog has been eliminated.

As with the ATF, the FBI did not record the dates of outside requests for intelligence information or the dates of its responses. Again, agency officials provided favorable ratings on timeliness. According to our surveys of agencies submitting inquiries to the FBI, three agencies indicated they received the information they requested from the FBI immediately, two within a day, four within a week, and only one in a week or more.

The details of our work are contained in the Findings and Recommendations section of the report. Our audit objectives, scope, and methodology are contained in Appendix I.

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INTRODUCTION

Background

The two principal federal agencies responsible for collecting data related to explosives incidents in the United States are the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) and the Federal Bureau of Investigation (FBI). These two agencies collect and compile information supplied by federal, state, and local law enforcement agencies regarding arson and the illegal use of explosives. The ATF received about 1,800 reports of arson and 700 reports of bombing incidents over each of the past 3 years. (On August 19, 2004, FBI officials commented that many of the reports claimed by the ATF were furnished by the FBI and were already entered into the FBI's database.) The FBI received about 900 reports of bombing incidents annually during that period. The FBI does not normally receive and record incidents involving only arson.

To collect such data, the ATF operates the Arson and Explosives National Repository (Repository) and the FBI operates the Bomb Data Center (BDC). The Repository and the BDC both maintain databases that collect and disseminate information used for statistical analysis and research, investigative leads, and intelligence. The information contained in these databases is available to federal, state, and local law enforcement agencies to assist them with their investigations of arson, bombing, and explosive incidents. The databases maintained by the ATF's Repository are the Arson and Explosives Incident System (AEXIS) and the Bombing Arson Tracking System (BATS). The database maintained by the FBI's BDC is the Automated Incident Reporting System (AIRS).

Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF)

Until March 2003, the ATF was within the Department of the Treasury. With the passage of the Homeland Security Act of 2002, the regulatory and revenue collecting functions relating to alcohol and tobacco were realigned within the newly created Alcohol and Tobacco Tax and Trade Bureau of the Department of the Treasury. The ATF was transferred as a bureau to the Department of Justice (Department), where it has the following responsibilities:

- Suppressing and preventing crime and violence through enforcement, regulation, and community outreach.

- Supporting and assisting federal, state, local, and international law enforcement.

- Providing training programs in support of criminal and regulatory enforcement functions.

On September 30, 1996, Public Law 104-208 (110 Stat. 3009), the Omnibus Consolidated Appropriations Act of 1997 (Act), was enacted. The Act amended the Federal Explosives laws in Title 18, United States Code (U.S.C.), Chapter 40. As amended, section 846(b) authorizes the Secretary of the Treasury to establish a national repository of information on incidents involving arson and the suspected criminal misuse of explosives. This section also requires all federal agencies having information concerning such incidents to report the information to the Secretary. This includes information regarding arson and explosives incidents investigated by a federal agency, as well as other sources (e.g., a state or local agency) and criminal dispositions, if any. In addition, the law provides that the repository will contain information on incidents voluntarily reported to the Secretary by state and local authorities. The Secretary gave the ATF the responsibility to establish the Repository.

ATF Databases

AEXIS. In 1975, the ATF Headquarters Explosives Division established a database of explosives incidents known as the Explosives Incidents System (EXIS). With the addition of arson incidents to the database in 1998, EXIS was appropriately renamed the Arson and Explosives Incident System (AEXIS). As set forth in Title 18 U.S.C. 846(b), all federal agencies are required to report information concerning explosives and arson incidents to the ATF's Repository. Although state and local submissions are voluntary, many such law enforcement agencies routinely submit information to the Repository.

Data used to populate the AEXIS system originates from law enforcement agencies. The predominant contributor is the ATF itself. Data is also contributed by state and local law enforcement agencies. The Repository's policy is to accept only data that is specific to fire, arson, bombings, and other criminal misuse of explosives, such as theft and recoveries of explosive materials.

ATF agents, field staff, and outside law enforcement agencies also request data from Repository staff. In most cases, requests for information on arson and explosives cases are made in writing. The

Repository also receives written requests from the general public, academia, and professional associations, but information released to such requestors is limited to general statistical data.

According to ATF staff, more than 100,000 reports have been entered into the EXIS and AEXIS databases since their creation in 1975. Data from ATF agents, which accounts for most of the data in AEXIS, is automatically transferred and manually accepted into AEXIS from N-Force, a case management system that is available to ATF staff. The N-Force system is designed as a single point of data entry system. Case information is entered once, and can be used in multiple areas throughout the system. In addition, N-Force automatically generates and formats reports and forms by extracting data previously entered into the system. The AEXIS Incident Reports derived from N-Force include the following data:

Nature of Incident: Bombing, attempted bombing, recovery of explosive devices (IED), accidental explosion, hoax device, theft of explosives, recovery of explosives, and lost or missing explosives.

Reporting Agency Data: Agency name, address, telephone number, and department case number.

Incident Data: Date, time, address, target, structure, motive, entry method, device delivery, dollar loss, incident involvement, suspects (name, social security number, birth date), and arresting agency.

Device Data: Component type, common name, brand name, component use, manufacturer, country, material, quantity (amount, units, model number, length, width, diameter, color, height, percent, and leg wire length).

In addition, AEXIS provides the ATF with the following features:

- Tracing feature within AEXIS. The Repository provides explosives tracing services for duly authorized law enforcement agencies in the United States and those in many foreign countries. Tracing is the systematic tracking of explosives from manufacturer to purchaser (and/or possessor) for the purpose of aiding law enforcement officials in identifying suspects involved in criminal violations, establishing stolen status, and proving ownership.

Explosives manufacturers, importers, wholesalers, and retail dealers in the United States and foreign countries cooperate in the tracing effort by providing, on request, specific information from their records of manufacture, importation, or sale of explosives.

- Theft and loss feature within AEXIS. Title XI of the Organized Crime Control Act of 1970 (18 U.S.C. Chapter 40) requires all possessors of explosives materials to report theft or loss of such explosive materials. The reporting requirements apply to thefts from or losses by individuals as well as businesses.

  Any person who has knowledge of the theft or loss of any explosive materials from their stock must report the theft or loss within 24 hours of discovery to the ATF and to appropriate local authorities.[5]

Access to AEXIS is given to all Repository employees designated as authorized users. Each user must be cleared for top-secret accessibility by the ATF headquarters. However, only certain designated personnel have administrator privileges, which allow them to change information already in the system. Passwords are required at all levels of entry into the AEXIS system, including the web-based versions.

ATF officials stated that at the headquarters level, the ATF's Information Services Division receives reports of any unauthorized access attempts from within the ATF and from outside hackers. We observed that all computer hardware, including servers, is located in secure areas that are locked and accessible to only the ATF authorized personnel.

Bomb Arson Tracking System (BATS). BATS is a new ATF database designed to serve the ATF and the nation's fire and investigative agencies by providing a comprehensive system for reporting and sharing information on bombing and arson incidents. Similar to AEXIS with regard to the type of information it collects, BATS is unique in that it is accessible to its users on-line. At the time of our review, BATS was in the pilot phase and was deployed only to the Maine State Fire Marshals Office and the Glendale, Arizona Fire and Police Department. When BATS is fully deployed, the ATF expects that

[5] According to Regulations at 27 CFR § 55.30, implementing section 842(k), the report of theft or loss must be made by telephone and in writing to the ATF.

law enforcement agencies will be able to share real-time information in a secure system dedicated to fire and post-blast incidents. According to the ATF, BATS will also offer bomb squad staff the ability to see real-time data about improvised explosive and incendiary devices being used nationwide. At the time of our review, ATF staff said the system contained about 900 reports. They also said that BATS will eventually be used instead of AEXIS, although a specific timetable had not been established.

ATF System Under Development

DFuze. DFuze is a stand-alone system that will enable international law enforcement and allied government organizations to collect, store, retrieve, and print data related to a particular incident, explosive device, perpetrator, group involved, and method of bomb delivery. Each organization will be able to populate the system with its own data and intelligence, as well as have the ability to share this data with other agencies when needed.

Implementation of the DFuze system began in June 2004; as of July 2004 the system has been populated with incidents of international origin. In addition, DFuze contains technical reference information related to national and international arson and explosives. As of late June 2004, about 930 records and 2,275 technical and media references had been entered in the system. A total of seven licensed users were authorized to use the system. The authorized users consisted of individuals from the ATF National Repository and the ATF's Colombia and Mexico offices.

The data fields within DFuze are designed to give different countries' organizations the ability to translate data field labels into their own language and to create additional records while retaining the core database structure. Data fields are standard to all versions of DFuze used within the international community and are designed to ensure consistency.

DFuze provides investigators and analysts with built-in tools for imaging, record transmission and receipt, high-speed data search, multi-media intelligence management, and the ability to hard copy reports. Further, DFuze offers a multilingual user interface whereby menus are translated to the language selected by the end user.

Federal Bureau of Investigation (FBI)

Pursuant to 28 U.S.C. 534, the Attorney General is responsible for acquiring, collecting, and classifying crime records and related information. The Uniform Federal Crime Reporting Act of 1988 clarified the obligations of the Attorney General, FBI, and other federal agencies. This Act recognizes that the FBI "compiles nationwide criminal statistics for use in law enforcement administration, operation, and management and to assess the nature and type of crime in the United States." It also provides that "the Attorney General shall acquire, collect, classify, and preserve national data on federal criminal offenses as part of the Uniform Crime Reports" (UCR) authorized under 28 U.S.C. 534. The Act further specifies that "the Attorney General may designate the Federal Bureau of Investigation as the lead agency for purposes of performing the functions authorized by this section" and requires that:

> *All departments and agencies within the federal government (including the Department of Defense) that routinely investigate complaints of criminal activity shall report details about crime within their respective jurisdiction to the Attorney General in a uniform manner and on a form prescribed by the Attorney General.*

This statutory requirement has been supplemented by Attorney General regulations published at 28 C.F.R. 0.85(f), which provide that the Director of the FBI "shall…operate a central clearinghouse for police statistics under the Uniform Crime Reporting Program."

Like the ATF's Repository, the FBI's Bomb Data Center (BDC) also provides a system for collecting data related to arson and bombing incidents. According to FBI staff, the BDC's system contained data from over 72,000 reports as of April 2004.[5]

According to FBI officials, since 1972 the BDC has collected and reported bombing information to public safety agencies and other interested parties. The BDC also provides technical training in explosive device recognition and handling to all public safety bomb disposal personnel.

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[5] The BDC began as the National Bomb Data Center in 1970. It was initially funded through the Law Enforcement Assistance Administration and managed by the International Association of Chiefs of Police. In 1972, the administration of the program was transferred to the FBI.

The BDC is now responsible for a wider range of duties, including:

- Gathering information on bombing incidents in the United States.

- Exchanging information on bombing incidents with international bomb data centers.

- Researching and developing public safety bomb technician related tools and techniques.

FBI Database

Automated Incident Reporting System (AIRS). The BDC contracted with Louisiana State University (LSU) as part of the Law Enforcement Online (LEO) project to develop AIRS. The AIRS database is designed to give law enforcement agencies the capability to report incidents online through LEO involving explosive and incendiary bombings, hoax bombs, recoveries of explosives, military ordnance and improvised explosive devices. In its September 23, 2004, response to the draft report, FBI officials said the FBI implemented the COBRA system in 1998 as part of an FBI program to equip state and local bomb squads recognize and detect materials involving weapons of mass destruction. According to the FBI, accredited bomb squads have had the ability to enter data directly into AIRS since 1999. However, the BDC advised us on October 1, 2004, that COBRA data had not yet been entered into the AIRS database.

The FBI also contracted with LSU to perform data entry of Incident and Activity Reports into the BDC's AIRS database. In July 2002, LSU personnel began providing data entry support via AIRS' online system in LEO to assist the BDC to eliminate its backlog of Incident and Activity Reports. According to BDC staff, as reporting agencies acquire access to LEO they will eventually be authorized to enter data directly into AIRS.

Within LEO there are several layers of passwords needed to access the system. After non-FBI agencies receive approval from the BDC, the agencies are allowed access to statistical information available in the database as a read-only user. Unauthorized attempts to access either the AIRS or LEO systems are monitored by the information technology division at FBI headquarters. All AIRS-capable

computers are located in the BDC office, which is secured from outside access.

FBI System Under Development

Explosives Reference Tool (EXPeRT). According to FBI officials, EXPeRT is a Windows-based system being developed to meet the FBI's current and future forensic and technology needs. The system will permit immediate online search and retrieval of case documentation and reference material to aid examiners in forensic examinations.

The EXPeRT database will include all FBI forensic examination reports pertaining to cases involving explosives, rather than bombing Incident Reports or preliminary information. It will include only FBI forensic analyses and reported results that have undergone FBI peer review. According to FBI officials, an unclassified version of the database will be available to state and local crime laboratories in fiscal year (FY) 2005.

FINDINGS AND RECOMMENDATIONS

DUPLICATE SYSTEMS ARE MAINTAINED BY THE ATF AND FBI FOR REPORTING ARSON AND EXPLOSIVES INCIDENTS

We found that the ATF and the FBI systems for collecting and disseminating arson and explosives intelligence are duplicative. Although the respective systems have some unique features, their overall purpose is the same and many of the data fields are identical. This condition occurred because both the ATF and the FBI are charged with similar responsibilities for collecting and disseminating such information, and the two agencies have not collaborated to develop a single system that serves the needs of their customers. As a result, customers do not have a single source to which they report incidents or a consolidated source for obtaining information to assist in their investigations.

In addition, we found significant differences in the ATF's and FBI's performance in managing their databases. We found minimal errors among the data fields tested in the ATF's AEXIS and BATS databases. However, we found a significantly higher error rate among the data fields tested in the FBI's AIRS database. Errors in the ATF and FBI databases occurred because of system limitations and because of inadequate polices and procedures for receiving and entering data. Customers of both the ATF and FBI provided favorable responses regarding the timeliness of services. However, in August 2003, the FBI's BDC had a backlog of 5,745 Activity Reports and 770 Incident Reports that had not been entered into AIRS by contract Louisiana State University (LSU) staff, resulting in intelligence information being unavailable to customers in a timely manner. According to LSU staff, as of July 2004 the backlog has been eliminated.

Duplication in Reporting

The overall purpose of the ATF and FBI database systems is the same: to collect, and make available to the law enforcement community, information related to incidents of bombing or arson. We found duplication of effort and a lack of consistency in reporting practices among the agencies that report arson or explosives intelligence information to the ATF and the FBI.

In the course of our audit, we interviewed a judgmental sample of 48 federal, state, and local law enforcement agency officials by telephone (See Appendix III). Our sample included bomb squads, sheriff's departments, police departments, ATF and FBI field offices, and the United States Fire Administration. The agencies we contacted served 11 of the largest cities in the United States, as follows:

New York City
Los Angeles
Chicago
Houston
Philadelphia
Phoenix
San Diego
Dallas
San Antonio
Detroit
Atlanta

We asked representatives of the agencies, "To which federal agencies do you normally report incidents?" We also asked, "How do you decide to which agency you report arson or explosives incidents?" As the following chart shows, we found little consistency to whom the 48 agencies reported data.

	Agency Reported Data To			
Agency Interviewed	**ATF Only**	**FBI Only**	**ATF & FBI**	**Neither**
ATF Field Offices	**6**			
FBI Field Offices		**7**	**1**	
US Fire Administration	**1**			
Non-Federal Agencies	**5**	**10**	**15**	**3**

Four of the 15 non-federal agencies that reported to both the ATF and the FBI indicated they report all incidents to both agencies. One of the 15 indicated it reported "most" incidents to both the ATF and the FBI. Three of the remaining ten indicated they report "some" incidents to both the ATF and the FBI. Seven of the FBI field offices were not reporting incidents to the ATF as required by Title 18, United States Code (U.S.C.), Chapter 40, section 846(b).

The reporting policies among the non-federal agencies were inconsistent, and they differed widely regarding the criteria they used

for deciding to whom they report incidents. Examples of responses to our questions regarding reporting policies include:

- Agency "prefers" reporting to the ATF
- Agency will "report arson to ATF if the sheriff decides it can be used by ATF"
- Agency believes it is "mandated to send to FBI"
- Agency believes terrorism must be reported to both ATF and FBI
- Agency believes "domestic crackpot" incidents should be reported to the ATF but "domestic terrorist" incidents should be reported to the FBI

The lack of consistent policies and practices among reporting agencies on where to report arson and explosives incidents can create confusion on the part of the reporting agencies and duplication in reporting.

Legislative History Resulting in Duplication

ATF

On September 30, 1996, Public Law 104-208 (110 Stat. 3009), the Omnibus Consolidated Appropriations Act of 1997 (Act), was enacted. The Act amended the Federal Explosives laws in Title 18, U.S.C., Chapter 40. As amended, section 846(b) states, in part:

> *The Secretary (of the Treasury) is authorized to establish a national repository of information on incidents involving arson and the suspected criminal misuse of explosives. All Federal agencies having information concerning such incidents shall report the information to the Secretary pursuant to such regulations as deemed necessary to carry out the provisions of this subsection. The repository shall also contain information on incidents voluntarily reported to the Secretary by State and local authorities.*

This section clearly requires all federal agencies having information concerning incidents involving arson and suspected criminal use of explosives to report the information to the Secretary. This

includes information regarding arson and explosives incidents investigated by a federal agency, as well as by other entities, such as state and local agencies. The Secretary gave the ATF the responsibility to establish the repository and collect such information.

The ATF established its primary database (AEXIS) for collecting this information. At the time of our review, the ATF reported that AEXIS contained over 100,000 detailed records of bombings, thefts of explosives, recovered explosives and devices, and ATF fire investigations dating back to 1975.

FBI

In 1988, Congress passed Public Law 100-690 entitled "The Uniform Federal Crime Reporting Act of 1988," which required that standardized reporting of crime from law enforcement agencies with law enforcement programs be reported automatically on a monthly basis, under prescribed specifications, to the FBI. The Uniform Crime Reports, as authorized under Title 28, United States Code (U.S.C), Section 534, were to be administered by the FBI. This section states, in part:

> *The Attorney General shall acquire, collect, classify, and preserve identification, criminal identification, crime, and other records… and … exchange such records and information with, and for the official use of, authorized individuals of the Federal government, the States, cities, and penal and other institutions.*

The reports submitted under this requirement compiled nationwide criminal statistics for use in law enforcement administration, operation, and management and assess the nature and type of crime in the United States. In addition, under Title 28, Code of Federal Regulations (C.F.R), Section 85(f), the FBI was designated to operate a central clearinghouse for police statistics under the Uniform Crime Reporting Program, and a computerized nationwide index of law enforcement under the National Crime Information Center (NCIC).

In addition, the National Incident Based Reporting System (NIBRS)[6] was formulated under the Uniform Crime Reporting Program.

[6] The NIBRS is an incident-based reporting system through which data is collected on each single crime occurrence. The data is designed to be generated as a by-product of local, state, and federal automated records systems. The NIBRS collects data on each single incident and arrest within 22 offense categories made up of 46 specific crimes.

Law enforcement agencies report crimes within their designated regions and the data is compiled into the UCR. This data collection responsibility is handled by the Criminal Justice Information Services Division (CJIS) within the FBI.

The legislative mandate for the ATF's responsibility to collect and maintain information on arson and explosives incidents is specific and clear. The legislation affecting the FBI is less specific, and the authorization for the BDC to collect and report such data is not as clear and is only implied by the Uniform Crime Reporting Act.

Comparison of ATF and FBI Database Systems

As noted earlier, the purpose of the ATF's and FBI's databases is to collect, and make available to the law enforcement community, information related to incidents of bombing or arson. To determine how the ATF and FBI achieve this purpose, we examined the ATF's AEXIS and BATS systems and the FBI's AIRS system and compared the accessibility, data collection features, user interfaces, data fields, types of outputs, and data sharing capabilities of each. In doing so, we identified overlapping and unique features, and where possible, we noted system advantages and weaknesses. We also tested system accuracy of the ATF's and FBI's databases, and assessed the timeliness of data entry and response time to inquiries by system customers. A summary of the features of each database is found in Appendix IV.

Accessibility

AEXIS. The ATF's AEXIS system was developed for arson and explosives specialists to assist in the collection, maintenance, evaluation, and dissemination of information for determining criminal activity patterns, trends, and motives. The AEXIS system is an enhancement of the ATF's Explosives Incident System, which was developed in 1974 and implemented in 1975. AEXIS contains information on over 70,000 arson cases and 40,000 bombings dating back to the early 1920s.

The AEXIS system is available primarily to ATF Repository staff. Some Repository staff members have administrator privileges, which enable them to change information within the system. In each of the ATF field divisions, one person is authorized to have limited access to AEXIS, and that person is designated as the contact person for the whole field division. A web-based access system is available for authorized state and local agencies to have read-only rights to parts of

the AEXIS system, whereby queries can be performed to obtain statistical information. Also, state and local law enforcement agencies may contact the Repository to obtain information, but direct access to AEXIS is not available to individuals outside of the Repository.

Comments we received from system users regarding accessibility indicated they would like to have greater online access and a secure system to download information via the Internet.

BATS. The ATF's BATS system is a web-based, Oracle database that provides ATF and state and local law enforcement agencies with access to real-time nationwide information on fire investigations, arson, bombings, and other criminal misuse of explosives. The BATS system was developed by ATF, with participation by law enforcement agencies responsible for fire, arson, and post-blast investigations. BATS has been operational since October 2003, contains about 1,280 records, and has about 140 users at two sites. Law enforcement agencies can use BATS in one of two ways: as a supplement to an existing records management system or as a new records management system.

BATS is made available to participating agencies through a software application that uses a secure Internet connection. Mandatory provisions for connectivity to the BATS application require that: 1) only government owned or leased computers are used to establish communication with the BATS software application, 2) all connections established with the BATS software application are made through a physical wire connection, and 3) under no conditions can connections be established through any type of wireless communication appliance or medium without written approval from ATF.

BATS is made available to law enforcement agencies that meet the following requirements:

- The agency must be a duly constituted, empowered, and regulated law enforcement agency, and the agency must have responsibility for the investigation of incidents involving arson and the suspected criminal misuse of explosives.

- The agency and the members of that agency that access the BATS system must have current National Crime Information Center (NCIC) access and user privileges.

- The agency must have an originating agency identifier (ORI) number.

In addition, agencies requesting access to BATS must:

- Submit a letter of interest from the Department Chief on departmental letterhead requesting BATS access,

- Complete and submit to ATF the required access forms,

- Participate in BATS security and operational training, and

Sign a memorandum of understanding (MOU) acknowledging participation in the BATS system.[7]

AIRS. The FBI's AIRS system is a web-based, Oracle database that tracks bombing incidents and activities in the United States and was designed by the BDC to meet the needs of explosives reporting and data warehousing. AIRS has been in operation since January 1998 and is now fully operational, with the exception of scheduled upgrades. AIRS is considered by the FBI to be the main method of communicating intelligence between FBI Special Agent bomb technicians and state and local accredited bomb squads nationwide.

AIRS is available nationwide via the secure Law Enforcement Online (LEO) network,[8] which is accessed through a virtual private network.[9] Within LEO, Special Interest Groups (SIG)[10] are established by the FBI for users who meet certain criteria. Users may access the

[7] Law enforcement agencies interested in acquiring access to BATS have to enter into an MOU which reads as follows: "This MOU is entered into by the United States Department of Justice, Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF), and the_____, hereinafter collectively referred to as "the parties." This MOU establishes and defines a partnership between the parties that will result in the operation and administration of an online secure Internet based intelligence and information system. This information system will be used by the parties for the collection, analysis, and dissemination of incidents involving arson and the suspected criminal misuse of explosives through ATF's Arson and Explosives National Repository Bomb Arson Tracking System (BATS) software application."

[8] LEO is a national interactive computer communications system and information service exclusively for the law enforcement community and can be accessed by an approved employee of a duly constitutional local, state, or federal law enforcement agency, or an approved member of an authorized law enforcement special interest group. The system provides a vehicle for these communities to exchange information, conduct on-line education programs, and participate in professional special interest and topically focused dialog. The information contained within LEO is for the sole use of members and may contain confidential and privileged information.

AIRS website by using a valid LEO username and password and be a member of an appropriate SIG.

SIG membership requirements for the bomb technician level are:

- Users must be graduates of the FBI Hazardous Devices School at Redstone Arsenal in Huntsville, Alabama.

- Users must be graduates of the United States Naval School Explosives Ordinance Disposal (NAVSCOLEOD).

- Users must be active bomb technicians that have been verified by the BDC.

SIG membership requirements for investigator access are:

- Users must be assigned by an agency to conduct bombing and/or arson investigations.

- Users must submit a letter to the BDC on agency stationary from a superior officer identifying the user as being responsible for bombing and/or arson investigations.

- Users must be active bomb technicians, but need not be graduates of the FBI Hazardous Devices School or NAVSCOLEOD. In addition, users must submit on departmental letterhead identifying themselves as an assigned bomb technician for the department.

Criteria for members who have investigator access must be verified annually by the BDC.

SIG membership requirements for current LEO members are:

- Users must fill out forms identifying their name, agency, and date of graduation from the Hazardous Device School.

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[9] A virtual private network is a security structure that utilizes a program to provide secure, encrypted channels between LEO users and the applications and data contained with the LEO network.

[10] SIGs are segmented areas with controlled access for specialized law enforcement groups. SIGs represent a special discipline area within the law enforcement profession and have their own members.

- Users must send a letter to the BDC identifying their name, agency, date of graduation from NAVSCOLEOD (for bomb technician access), or a letter from their department verifying they have bombing investigation responsibilities.

Comments we received from some system users indicated that they would like to be able to access data without having to go through a "middle man," and that it is very cumbersome to get into LEO.

The ATF's BATS and FBI's AIRS overlap significantly. They perform similar functions and the same types of agencies are eligible to participate in either system. In our judgment, the ATF's BATS database has the potential to be the easiest database to access by eligible users. AEXIS is very restrictive, and access to AIRS via LEO, which is less restrictive than AEXIS, can be difficult. However, as of the time of our review, BATS was in use at only two agencies, and only two more were expected to be using BATS by the end of 2004.

Data Collection

AEXIS. Data is collected for the ATF's AEXIS system electronically or in hardcopy format. Repository staff perform an electronic transfer into AEXIS by using N-Force,[11] a case management system used by ATF agents. Data transfer is performed via the tools menu located on the task bar within AEXIS. Prior to acceptance of data, Repository staff have the option of reviewing the transferred data and determining whether to include the data in AEXIS.

State and local agencies provide data via fax, mail, e-mail, and reports of investigations. In addition, data is collected from such sources as forensic lab reports from ATF chemists, bomb tech reports, photograph devices from crime scenes, evidence from the ATF laboratory in Maryland, and telephone calls from ATF forensic laboratory agents.

Comments we received from system users regarding data collection were largely positive, such as "no room for improvement," "no complaints," and "timely, efficient." Some responders indicated, however, that ATF staff should be more readily available by telephone and that better communication is needed.

[11] N-Force is a case management system that supports the law enforcement operations of ATF; information within N-Force is entered once and can be used in multiple areas throughout the system.

BATS. Data is collected for the ATF's BATS system from investigators at the federal, state, and local level. There is no requirement to submit data in a specific format, as BATS accommodates virtually any type of data. Investigators may enter data from printed reports from their respective agency's case management system, or data may be entered into BATS directly, while being used simultaneously as a case management system. In addition, investigators can enter data from notes taken during the investigation of an incident. Passwords and user identifications are necessary to access BATS. No data is entered by Repository staff. All data is entered by law enforcement agencies outside the Repository.

AIRS. Data is collected for the FBI's AIRS system electronically or in hardcopy format via mail or fax. Authorized members of the BDC/SIG may enter bombing incidents and bomb squad activities directly into the system. Also, authorized LEO members may enter data on their incident and activities directly into AIRS. Further, electronic data from other database platforms such as Microsoft Access or Oracle can either be imported or exported into AIRS by BDC personnel. Future plans are for an "email to fax service" within AIRS, which will give reporting agencies the ability to electronically transmit their completed incident and activity report forms to the BDC.

All hard copy submissions of data must be reported on either an incident reporting form (FD-873) or the activity report form (FD-873a). Incident reports contain information on arson and explosives incidents that are investigated by the reporting agency and forwarded to the BDC. They provide significant details about specific occurrences. Activity reports contain information reported by bomb squads that may not be related directly to actual arson and explosives incidents but provide details of investigations of suspicious activities, devices, or threats. Only Special Agent Bombing Technicians or members of a bomb squad are given the choice to create activity reports within AIRS.

Comments we received from system users were mixed. Some were satisfied with the job the BDC was doing. Others were somewhat negative, indicating that the BDC could use more staff, information was not always current, and statistics were helpful but not timely.

In our judgment, a system in which data can be entered on-line directly by the reporting agency, such as the BATS system, has the advantage of furnishing real-time data. Such a system can also

minimize errors that occur when a second party transcribes information from a source document.

User Interface

AEXIS. Data in the ATF's AEXIS database can be entered or obtained through two forms of user interfaces. One interface addresses data elements that can be entered or obtained only by Repository staff. Outside agencies must contact Repository staff regarding such data. The second form addresses data elements that are available to all agencies that have read-only rights to use the web-based querying and reporting feature of AEXIS.

The user interface for Repository staff is patterned after Windows Explorer: it uses an expandable file structure for data storage. The file structure allows the user to browse all records that are part of a particular incident and view the contents of the record. The elements of this portion of the user interface for the AEXIS system provides numerous ways that Repository staff can interact with the system for productive use. Examples of elements follow:

- Incident selection browser that lists all incidents within a given period, with querying options
- Data validation within working sections
- Duplicate record reconciliation screens
- Review options prior to accepting/declining data
- Theft/loss reporting
- Tracing of explosives
- Automated data loading via web interface from federal reporting agencies
- Imaging system

The web-based querying and reporting interface offers users the capability to query AEXIS and view incident-related photographs, and provides data administration functions for reporting. The elements of the imaging and data administration are as follows:

- Four different querying input methods: text box, list box, drop down list box, and multiple select box

- Four querying tools that pull data and provide views of data from five data tables

- Querying tools that pull data from seven tables within the National Fire Incident Reporting System (NFIRS)[12]

- Query reporting systems that incorporate data from different databases: AEXIS, NFIRS, and the Uniform Crime Report[13]

BATS. The ATF's BATS system uses a Java based web browser designed to allow the user to navigate the system easily. Examples of user interface elements are:

- Incident maintenance to create and update records

- Incident search by incident, subject, or device

- Export agency information to other users

- Restricted/Unrestricted option for sharing data

- Geographic information system

- Edit features

AIRS. The FBI's AIRS user interface is built in a web format, whereby the features of AIRS can be accessed through easy to understand web-style controls. The elements of the user interface for the AIRS system provide numerous ways that the user can interact with the system to use it productively. Examples of interface elements are:

- Navigational buttons for moving from one section to another in a particular report

[12] The National Fire Incident Reporting System, maintained by the United States Fire Administration, represents the world's largest national, annual database of fire incident information, whereby local and state agencies submit incident and casualty reports as fires occur in their respective areas.

[13] The Uniform Crime Report is a system of collecting and analyzing crime statistics gathered on selected crimes by participating law enforcement agencies throughout the United States.

- Validation indicators per work section prior to completion of the entry of a report

- Search modes to perform simple and advanced searches

- Required field denotations for an agency's name, city, state, zip code, and bomb squad identification number

- Duplicate entry detection

- Computer generated report numbers

Each of the database systems has unique user interface features. Based on our review of the systems and feedback from the users, we did not conclude that the user interface features of any one system to be better than the others.

Data Fields

The most significant instances of duplication of effort were disclosed by our review of the data fields for each of the database systems. We found that the ATF's AEXIS and BATS systems, and the FBI's AIRS system collected 11 principal types of information:

- Date of incident
- Time of incident
- Type of incident
- Address of incident
- Target type
- Motive
- Method of delivery
- Incident summary
- Incident involvement
- Evidence components
- Reporting agency name, address, telephone number

Charts outlining each of the data fields for the ATF's AEXIS and BATS database systems, and for the FBI's AIRS database system are found in Appendix V.

In our judgment, a single, consolidated database that includes each of the data fields currently provided by AEXIS, BATS, and AIRS would effectively capture all necessary information concerning incidents of bombings or arson. In addition, we noted that AEXIS also

includes an explosives tracing feature and a theft of explosives feature, as described earlier in this report, which can provide useful information for linking thefts of explosive materials with criminal misuse of the explosives. Such data should also be captured by the consolidated database system.

Types of Outputs

AEXIS. The ATF's AEXIS system has the capability of generating automated statistical summary reports from a given data range, standard reports per record number, tracing reports, and canned reports based on data extractions from AEXIS, NFIRS, and the UCR.

BATS. The ATF's BATS system provides output via the following reports:

- Incident Reports that capture all data entered on an incident;
- Audit reports that allow agency managers to see what the users at a particular agency have entered at any given time; and
- Management reports that provide a manager of an agency with a variety of measures by which an assessment can be made of an agency's performance.

All BATS reports include both Portable Document Format (PDF) and HyperText Markup Language (HTML) formats and can be generated from the main menu within the BATS system.

AIRS. The FBI's AIRS system is capable of generating multiple output formats in PDF, HTML, or Excel. Reports can be generated using various scenarios, as well as simple or customized reports upon request.

Our review of the systems and feedback from the users did not show a discernable difference among the outputs of the three systems.

Data Sharing Capabilities

AEXIS. Data sharing capability within the ATF's AEXIS system is limited to authorized members of the Repository staff and the designated contact person at each ATF field division office. Requests for information from state and local agencies can be received by fax,

telephone, and emails. Repository staff respond to such requests to law enforcement agencies either by mail or telephone. In addition, approved law enforcement agencies may query the AEXIS system in order to obtain information from AEXIS, NFIRS, and the UCR, individually or collectively.

BATS. The ATF's BATS system contains a search feature that allows law enforcement agencies that have access to BATS to share real time data nationwide. Agencies can export their own agency's data to other agencies. In addition, if an agency is using BATS as an inter-agency case management system, information can be designated as restricted or unrestricted within BATS.

AIRS. Data can be shared from the FBI's AIRS system with authorized SIG members. Requests for information are received by mail, fax, and e-mail from non-SIG law enforcement agencies. Such requests are reviewed by BDC staff, which determines what information is available at BDC. The BDC staff then forward information to the requesting agency.

In our judgment, the accessibility of BATS users to one another's data is clearly an advantage in investigating incidents of bombing and arson. We believe that to be effective, a database should have this data sharing capability.

Accuracy

We found significant differences in the accuracy of the ATF and FBI databases when we compared system output to information obtained from source documents.

AEXIS. We tested the accuracy of the: 1) intelligence information in the ATF's AEXIS database, which included the theft and loss feature within AEXIS; and 2) tracing feature within AEXIS. For both of these tests, we compared a sample of database output to source documents. We drew our sample from a computer-generated list of documents for October 2001 - October 2003 furnished by the ATF.

We identified from the ATF report a universe of 1,361 input documents for AEXIS for the review period. We judgmentally selected a sample of 10 percent of the documents for verification, or a total of

136 documents. We were able to locate 64 of the documents,[14] which contained a total of 1,562 data entry fields. We found errors in 10 data entry fields, or 0.6 percent. The following summarizes the incidence of errors in AEXIS, by category:

AEXIS	Number of Errors
Incident Time	**5**
Incident Data	**1**
Incident Address	**1**
Agency Address	**2**
Motive	**1**
Total Number of Errors	**10**

The error rate we observed for the AEXIS database was very low and ATF officials were able to correct each of the above errors during the time of our review.

In addition, we examined the Explosives Tracing feature of AEXIS. We identified from an ATF computer-generated report a universe of 261 records within our review period. We judgmentally selected a sample of 10 percent, or 26 total records, and found 16 errors.[15]

An ATF official stated that the ATF checks about 10 percent of the data entries for accuracy. The ATF officials stated that some of the errors we found resulted because of the limited selection of options available within the AEXIS drop-down menus. This system weakness limits the options that staff can choose to enter data from source documents. Thus, the options do not always adequately describe the details included on the source documents.

BATS. The ATF's BATS system began operating in calendar year 2003. The Maine State Fire Marshals was the first law enforcement agency to gain access to BATS information sharing. During our review, the Glendale, Arizona Fire and Police Department also deployed BATS.

[14] We were able to locate only 64 documents because ATF staff had destroyed the remaining 72 documents. According to ATF staff, they destroy documents at the end of each calendar year because of storage problems.

[15] The Explosive Tracing feature of AEXIS does not generate a report; therefore we were unable to determine the number of applicable fields to calculate an error rate.

We were able to test the accuracy of information in the BATS database by comparing a sample of system output to case files at the Glendale location, where we drew our sample from a computer-generated management report furnished by the Glendale Police Department for the period January 2001- February 2004. Staff of the Maine State Fire Marshals Office did not prepare or maintain source documents for entering data into BATS regarding bombing and arson incidents. Instead, field staff entered all information directly into laptop computers used on-site. After review by supervisors, the Maine data was then uploaded directly to the BATS server. Therefore, we were unable to verify the accuracy of system output at the Maine location by comparing it to source data.

At Glendale, we found that entries in 3 of the 244 data fields we tested, or 1.2 percent, contained errors because data was entered into the system incorrectly. Errors occurred in transcribing the zip code, the age of the subject, and the estimated damage caused by fire.

In addition, we noted at Glendale that not all data entered into the system was related to bombing and arson incidents. Contrary to the provisions of the MOU with the ATF, 5 of the 18 incidents were unrelated to bombing and arson, such as fires caused by malfunctioning household appliances. The Glendale's MOU with ATF states, "This information system will be used by the parties for the collection, analysis, and dissemination of incidents involving arson and the suspected criminal misuse of explosives through ATF's Arson and Explosives National Repository Bomb Arson Tracking System (BATS) software application."

Glendale officials told us their procedures had been discussed and cleared with ATF staff. Further, one Glendale official believed that all incidents should be included in BATS because a case initially identified as an accident could later become a case of suspected bombing or arson. Additionally, ATF staff had agreed that an incident may become an arson or explosives incident with criminal intent, and that the use of BATS should be more inclusive, rather than exclusive. In our view, however, populating the BATS system with data that is clearly unrelated to bombing and arson incidents is contrary to the intent of BATS and may result in time wasted by investigators who needlessly access and review this data.

AIRS. Authorized federal, state, and local law enforcement agencies that have access to LEO entered bombing incidents and bomb squad Activity Reports directly into LEO. This data is then used to populate

the BDC's AIRS database. Incident and Activity Reports submitted by federal, state, and local law enforcement agencies to the FBI's BDC are put into the system by BDC staff. Such reports are received by the BDC electronically, by mail, and by facsimile.

The FBI has a contract with LSU to enter data in LEO to assist the BDC to reduce its data backlog. According to LSU officials, contract staff have not received any formal policies or procedures for receiving data. LSU officials stated that whenever they need documents to enter, they simply call BDC officials to request that additional documents be sent to them. Also, there are no performance standards for timely entry. Moreover, we found that LSU had data entry instructions that had not been updated to reflect system upgrades.

We reviewed a judgmental sample of 351 Incident Reports and Activity Reports from a universe of about 10,000 reports. Our sample consisted of 58 Incident Reports entered by BDC staff, 213 Incident reports entered by LSU staff, and 80 Activity Reports entered by LSU staff.[16]

The 351 FBI reports contained a total of 7,558 data fields. Of these data fields, 730 (9.7 percent) contained errors. A summary of the incidence of errors follows:

Incident Reports

Incident Reports contain information on arson and explosives incidents that are investigated by the reporting agency and forwarded to the BDC or entered directly into AIRS. They provide significant details about specific occurrences.

Reporting Agency Data: (397 errors) These errors are significant because a law enforcement agency seeking additional information relating to an investigation might receive incomplete or inaccurate information and might be unable to easily contact the reporting agency.

[16] Only LSU staff entered data into AIRS from Activity Reports.

Reporting Agency Data	Number of Errors
Missing Data	31
Inaccurate Data	
Agency name	11
Agency city	24
Agency street	50
Agency state	5
Agency telephone number	132
Agency fax number	117
Bomb Squad ID	16
Responding agency number	5
Investigating agency number	2
Agency zip code	4
Total Number of Errors	397

Incident Type: (2 errors) This data field describes the type of incident reported, such as "recovered explosives," "bombing," and "hoax." We found two instances in which the type of incident was listed incorrectly. Although the error rate for this category was low, it is significant because an investigating agency seeking assistance on all incidents of a particular type would be unable to obtain complete information. In addition, statistical reports on the categories of incidents may be over or understated.

Incident Data	Number of Errors
Bombing Data	1
Recovery of IED	1
Total Number of Errors	2

Incident Details: (61 errors) As stated above, the errors in this category are significant because a law enforcement agency seeking data relating to an incident might not receive complete and accurate information to assist with its investigation.

Incident Details	Number of Errors
Missing Data	41
Inaccurate Data	
Incident start date/time	5
Incident end date/time	2
Incident street address	4
Incident county	2
Incident zip code	1
Target	1
Apparent Involvement	2
Narrative	2
Total Damage	1
Total Number of Errors	61

Device Data: (52 errors) This data field describes the type of device used in the incident, such as detonators, pipe bombs, and hoax device. The most significant number of errors we found in this category pertained to missing data. In 45 instances, we noted that information on the type of device used was included on the Incident Report but not entered in the system. In our view, this information is critical to investigations and its absence could adversely affect the progress of investigations.

Device Data	Number of Errors
Missing Data	45
Inaccurate Data	
Category	4
Device Type	1
Subtype	1
External Container	1
Total Number of Errors	52

Activity Reports

Activity Reports contain information reported by bomb squads that may not be related directly to arson and explosives incidents but that provides details of investigations of suspicious

activities, devices, or threats. Because of their investigative value, errors in data entry could have adverse effects similar to those described for Incident Reports above. The following tables cite the incidence of errors we noted in the sampled Activity Reports we reviewed:

Reporting Agency Data: (133 errors)

Reporting Agency Data	Number of Errors
Agency name	3
Agency street	15
Agency city	10
Agency state	5
Agency zip	4
Agency telephone number	44
Agency fax number	52
Total Number of Errors	133

Activity Type: (5 errors) This data field describes the type of activity performed by reporting agency staff, such as attending training, examining equipment, and disposing of explosives.

Activity Type	Number of Errors
Protective Detail	5

Activity Data: (80 errors)

Activity Data	Number of Errors
Activity start date/time	40
Activity end date/time	40
Total Number of Errors	80

The BDC personnel stated that errors occurred because there is a feature within the telephone and fax number fields that automatically completes information based on the law enforcement bomb squad's identification number. They said those errors could have occurred for the following reasons: 1) agents included personal contact information

on the source documents, and 2) information for the specific identification numbers changed but was not updated in the system. The BDC did not have an explanation for the remaining errors.

The LSU personnel believed that missing data occurred when the BDC upgraded the system and data was not transferred to the new system. Additionally, errors found in the incident time category were caused because the LSU staff did not enter data included on source documents.

Data entry errors occurred even though BDC technical staff stated they edit and perform quality assurance measures on all data submitted, and that every report received via the mail or data fax was reviewed and edited prior to data entry.[17]

Our tests showed that the FBI's error rates were significantly higher than the ATF's. We attribute this condition to system limitations and a lack of an effective second-party review system. However, the FBI is moving toward increased data entry on-line by reporting agencies. In our judgment, direct entry of data on-line should improve database accuracy.

Timeliness of Data Entry and Responsiveness to Customers

Based on our examination of available data and interviews with ATF and FBI customers, we did not find any significant problems concerning timeliness of responses. However, we found that the FBI had a significant backlog of Incident Reports and Activity reports that had not been entered into its AIRS database.

AEXIS. We reviewed a judgmental sample of ATF AEXIS report data to determine the length of time from receipt of data to the date of entry into the ATF database. The ATF staff stated that information is entered as soon as it is received. However, this could not be verified because the ATF did not date stamp documents. Further, the system did not have automated indicators to show when the data is entered into AEXIS.

We relied upon our interviews with agency officials who contacted the ATF to determine whether ATF responses were timely.

[17] Quality assurance examples include: reviewing reports for spelling, variances in types of devices used with description included in the narratives of reports, and determining whether the correct forms were used for reporting data to the BDC.

None of the agency officials we interviewed complained about the ATF's timeliness. Specifically, the agency officials who contacted ATF stated they received the information requested as follows:

How long did it take you to receive the requested information?	Agency Response
Immediately	7
Within 1 day	2
Within a week	13
A week or more	1

Based on these responses, it appeared that the ATF is responding to customer requests quickly. However, the ATF had not established controls, such as recording the date requests are received and responses are sent out, to monitor whether requests received were promptly answered.

BATS. Because users of ATF's BATS system enter data directly on-line and have access to one another's data, there is no delay in either data entry or retrieval.

AIRS. We found that the FBI's BDC had a large backlog of source documents containing data that had not been entered into the AIRS. In August 2003, data from at least 5,745 Activity Reports and 770 Incident Reports, a total of 6,515 documents, was more than 4 years old and still had not been entered into the system. We noted that reports sent to LSU were kept at the BDC until they had a full box of forms and that the BDC kept no record of the forms sent to LSU. According to LSU staff, however, as of July 2004 the backlog had been eliminated. On August 19, 2004, FBI officials indicated the contract with LSU was terminated.

We were unable to determine how quickly the FBI responded to requests for information because requests were not date stamped on receipt. However, the requesting agency officials we interviewed told us the FBI responded timely to their requests.

How long did it take you to receive the requested information?	Agency Response
Immediately	3
Within 1 day	2
A week or less	4
A week or more	1

Neither ATF nor FBI customers complained about the timeliness of the current systems. If the ATF and FBI consolidate their databases, and system users do data entry and retrieval from the database system directly on-line, we believe that timeliness should continue to be satisfactory.

ATF, FBI, and Departmental Efforts to Define Responsibility for Data Collection and Management

On November 15, 2001, the ATF issued Notice of Proposed Rulemaking No. 933, which proposed to amend 27 CFR Part 55, a federal regulation governing the activities of the ATF. The ATF proposed to require all agencies having information concerning incidents involving arson and the suspected criminal misuse of explosives, from whatever source received, to the ATF. The term "agency" was defined in the proposed regulations as each of the executive agencies and military departments, and the United States Postal Service. The proposal also specified the minimum types of data to be furnished to the ATF, which included "general information about the …incident."

The FBI disagreed with the proposed rules on several points. In its February 12, 2002, response, the FBI stated that: 1) it also had responsibilities for compiling data, and 2) that it retained the authority and responsibility for obtaining data concerning bombing incidents and other crimes involving explosives, including collection from other federal agencies. Additionally, the FBI stated that since its data compilation responsibilities may encompass the same data addressed by the ATF's proposed rule, the ATF should clarify in the regulation that the ATF did not supplant concurrent data compilation by the FBI. The FBI was also concerned about the proposed rules' definition of "from whatever source." Specifically, the FBI recommended three changes:

1. Adding "Nothing in this regulation shall be construed as modifying or otherwise affecting in any way the authority of

any other federal agency, including the FBI's National Bomb Data Center."

2. Changing "having information on incidents" to "having information on incidents derived from operations for which the agency exercises primary responsibility," and changing "must report the information" to "must report appropriate information."

3. Changing "General information about" to "Appropriate general information about."

In our view, the FBI did not want to relinquish its responsibilities for collecting data and countered the ATF's proposal by amending the wording of the proposed rule so that it, in effect, retained those responsibilities.

At the time of our review, the proposed rules were still pending. In July 2003, the ATF drafted a proposal to merge the common functions of the Repository and the BDC. Specifically, the ATF proposed to: 1) eliminate the cost of the ongoing maintenance and support of two reporting systems, 2) provide more efficient reporting procedures for state and local law enforcement agencies, and 3) maximize customer and stakeholder benefits by making full use of the Repository's capabilities. To achieve these objectives, the ATF recommended that the information and publication functions of the BDC be merged with the Repository as a single entity within the Department, and managed by the ATF.

Subsequent to the ATF's proposal, on March 4, 2004, the Attorney General created the Explosives Review Group (ERG) to identify options and make recommendations to ensure effective coordination of the Department's efforts concerning explosives. The Attorney General directed the ERG to be chaired by a senior level representative from ATF, and to include senior level representatives from the Office of the Deputy Attorney General (ODAG), the FBI, the Criminal Division, and the Office of Legal Policy. Among the topics to be addressed by the ERG was the coordination and possible merging of ATF and FBI databases relating to explosives investigations. The ERG was to submit options and recommendations to the ODAG by May 4, 2004, and the ODAG was to present options and recommendations to the Attorney General by June 4, 2004. As of July 14, 2004, the ODAG had not submitted its recommendations to the AG, but indicated to us that the ATF and FBI agreed in principle that the databases should be consolidated. On

August 11, 2004, the Attorney General directed: 1) the ATF and the FBI to consolidate all of the Department's arson and explosives incidents databases, including, but not limited to, the ATF's BATS, and the FBI's AIRS, into a single database; and 2) that all consolidated arson and explosives incident databases be maintained by the ATF (See Appendix VI for details of the Attorney General's August 11, 2004 directive).

Conclusion

Both the ATF and the FBI compile and disseminate data related to arson and the illegal use of explosives. This has resulted in duplication of effort by the ATF and the FBI and duplicate reporting of incidents by non-federal agencies. It also has resulted in confusion and a lack of consistency in the reporting process. This condition stems from statutory and regulatory overlaps concerning the responsibility to compile data, and continues to exist because of a lack of concurrence between the ATF and the FBI on how to ensure that duplication is avoided and uniformity is achieved.

The FBI's error rate for entering data into AIRS far exceeded the ATF's error rate for entering data into AEXIS. However, as the FBI migrates from data entry by BDC and LSU staff to data entry by reporting agencies, the error rate should decrease. The accuracy of the ATF's BATS system could not be fully assessed at the time of the review because it was still in the pilot stage and implemented in only two locations. The error rate for the BATS data we were able to review was very low. However, we found that much of the data entered was unrelated to bombing and arson incidents, and therefore contrary to the purpose of BATS.

We were unable to fully assess the timeliness of the ATF and FBI systems because neither was recording the dates that information was received from reporting agencies. Most agencies, however, responded favorably regarding the ATF's and FBI's timeliness on their requests for information. The most significant condition we observed regarding timeliness was the FBI's large backlog of Incident Reports and Activity Reports that had not been entered into AIRS, and the lack of controls for tracking the reports that were sent to LSU. The BDC simply sent boxes of Incident and Activity Reports periodically to LSU for data entry. This condition, according to FBI staff, was improving. Again, migration to direct entry by reporting agencies would alleviate this condition and prevent its recurrence.

To provide the law enforcement community with the most efficient and effective means of collecting arson and explosives intelligence, we believe that one reporting system should be established, which would eliminate duplication of effort and the confusion as to which system to use and rely on for such information. Ensuring accessibility to the system by appropriate users would enhance the ability of federal, state, and local law enforcement agencies to share valuable intelligence information about arson and explosives incidents and devices.

Based on our review of the databases currently managed by the ATF's Repository and the FBI's BDC, we compiled a list of suggested features, which we list below, that a consolidated system should have for reporting and sharing arson and explosives information within the law enforcement community. No one system we examined had all of these features.

Accessibility

- Internet accessibility
- Unrestricted access to eligible users

Data Collection

- Incident Information
- Reporting agency data
- Suspects/subject information
- Investigator information
- Evidence data
- Device details
- Uniform data collection
- Electronic submission
- Data security
- Imaging
- Theft/Loss reporting
- Tracing of explosives
- Procedures for rendering devices safe

User Interface

- User friendly controls
- Validation indicators
- Required field denotations
- Duplicate entry detection
- Edit/update capability

- User's reference tool
- Computer generated record numbers
- Search options
- Sorting options
- Edit/Update capability
- Geographic mapping capability
- User's reference tool

Data Field Categories

- Incident information
- Reporting agency data
- Suspects/subject information[18]
- Investigator information
- Evidence data
- Device details

Outputs

- Summary reports
- Ad hoc reports
- Audit reports for quality control review

Sharing capabilities

- Disclosure capability determined by contributor
- Import/export capability

We also found that both the ATF and FBI have encountered problems in maintaining their respective databases. The management of any consolidated system plays an important role in the effectiveness of data collection and sharing. We believe that the management of such a consolidated system should include the establishment of policies and procedures for collecting and disseminating data, responding timely to requests, ensuring the information is current and accurate, setting minimum access requirements for potential end users, and advertising the system to the law enforcement community. In our judgment, a single database having the features listed above with established policies and procedures would result in the most efficient and effective means of collecting and disseminating arson and explosives information.

[18] On August 19, 2004, FBI officials indicated they did not want to include subject and suspect data, or data related to juveniles due to Privacy Act and other concerns.

Recommendations

We recommend the Department:

1. Consolidate the Repository and BDC databases under ATF management in accordance with the Attorney General's August 11, 2004, directive, in order to eliminate duplication of effort, ensure consistency in reporting, and facilitate sharing of intelligence among eligible law enforcement agencies.

Pending the implementation of Recommendation 1, we recommend the ATF:

2. Ensure that BATS users adhere to the MOU and require that data used to populate the BATS database involve only arson and the suspected misuse of explosives.

Pending the implementation of Recommendation 1, we recommend the FBI:

3. Develop and implement policies, procedures, and performance standards to ensure timely and accurate data entry into AIRS.

4. Migrate to direct data entry by reporting agencies.

STATEMENT ON COMPLIANCE WITH LAWS AND REGULATIONS

We audited the collection of information involving arson and criminal misuse of explosives by the Bureau of Alcohol, Tobacco, Firearm, and Explosives (ATF) and the Federal Bureau of Investigations (FBI). The audit period covered January 2001- July 2004, and included a review of selected activities and documents.

In connection with the audit and as required by the standards, we reviewed: 1) procedures used to collect and disseminate arson and explosives data, 2) access to databases, and 3) whether duplication of effort exists between databases.

Our audit included examining, on a test basis, evidence about policies and procedures, laws, regulations, and Office of Management and Budget (OMB) Circulars. The specific laws and regulations for which we conducted tests are contained in the relevant portions of:

- Public Law 104-208 (110 Stat. 3009), the Omnibus Consolidated Appropriations Act of 1997
- Title 18 U.S.C. 846(b)
- OMB Circular A-123

Except for instances of non-compliance identified in the Findings and Recommendations section of this report, the ATF and the FBI were in compliance with the laws and regulations referred to above. With respect to the laws and regulations not tested, nothing came to our attention that caused us to believe that the ATF and FBI were not in compliance with the referenced laws and regulations cited above.

STATEMENT ON MANAGEMENT CONTROLS

In planning and performing our audit of the ATF's and the FBI's Arson and Explosives Intelligence Databases, we considered the ATF's and the FBI's management controls for the purpose of determining our auditing procedures. This evaluation was not made for the purpose of providing assurance on ATF's and the FBI's management controls as a whole.

As discussed in the Finding and Recommendations section of this report, we found weaknesses in the ATF's and the FBI's systems for ensuring data accuracy, and weaknesses in the FBI's system for ensuring timely data entry.

Because we are not expressing an opinion of the ATF's and the FBI's management controls as a whole, this statement is intended solely for the information and use of the ATF and the FBI in managing their arson and intelligence databases. This restriction is not intended to limit the distribution of this report, which is a matter of public record.

APPENDIX I

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

Objectives

The objective of the audit was to examine overlap between the Bureau of Alcohol, Tobacco, Firearms, and Explosives' (ATF) and the Federal Bureau of Investigation's (FBI) databases that compile information on arson and bombing incidents and evaluate whether the Department of Justice (Department) has efficiently and effectively collected, and made available to the federal, state, and local law enforcement community, information involving arson and the criminal misuse of explosives.

Scope and Methodology

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

Generally, the audit focused on the ATF's and the FBI's policies and procedures used to collect and disseminate arson and explosives data. We also evaluated the methodologies used to populate each database system with intelligence information. We tested the accuracy of a sample of the information contained in each system by comparing system data with source documentation. We determined whether maintenance of both the ATF's and the FBI's databases resulted in duplication of effort. We evaluated how the law enforcement community is informed on the systems.

The audit period covered January 2001 through July 2004 and we performed fieldwork at the following locations:

ATF Headquarters	Washington, D.C.
FBI Bomb Data Center	Quantico, VA
Louisiana State University	Baton Rouge, LA
Glendale, AZ Fire and Police Department	Glendale, AZ
Maine State Fire Marshals Office	Gardiner, ME

To obtain background information related to how the Department can most efficiently and effectively collect, and make available information involving arson and criminal misuse of explosives for ATF; BDC; LSU; Glendale, Arizona, Fire and Police Department; and the Maine State Fire Marshals Office, we reviewed:

- A list of key personnel and contact information of individuals responsible for system administration and maintenance.
- Criteria applicable to the environment and operations (laws, regulations, policies, and procedures).
- The operations manual or plan.
- A copy of the budgets.
- Prior reports of audits and inspections.[19]
- Policies and procedures used to collect and disseminate data included in the databases.
- The contract between the FBI and LSU.
- The memorandum of understanding between ATF and the Glendale, Arizona, Fire and Police Department and the Maine State Marshals Office.

To evaluate what data was collected and reported, and how collected data was imported into the databases, we:

- Interviewed officials and reviewed written policies and procedures to determine procedures for collecting data submitted to the agencies, and the protocol for access to the databases.
- Assessed whether data was received via hard copy or electronically.
- Interviewed officials and reviewed written policies and procedures to obtain the criteria used to determine whether information received was entered into the databases.

[19] We found no prior audit or inspection reports that related to our audit objectives.

- Interviewed officials and reviewed written policies and procedures to determine whether data was verified for accuracy prior to entry into the databases.

- Interviewed officials and reviewed written policies and procedures to determine whether the databases detected duplicate entries.

- Reviewed data documents for a sample of report data to determine the length of time from receipt of data from source documents to the date of entry into the databases.

- Tested a sample of documents used to populate the databases with intelligence information.

To assess who had access to the databases and how access was obtained, we:

- Interviewed officials and reviewed written policies and procedures to determine how access to the databases was allowed.

- Interviewed officials and reviewed policies and procedures for informing and training the law enforcement community on policies and procedures concerning the availability and use of the database.

- Interviewed officials and reviewed written policies and procedures to determine how outside requests for information from the database were processed.

To assess whether duplication of effort existed by maintaining multiple databases, we:

- Reviewed the format and type of data provided by the databases to investigators, law enforcement personnel, and any other systems users.

- Evaluated if data outputs could be customized for individual queries.

To assess the usefulness of the ATF's Repository and the FBI's Bomb Data Center databases in conducting investigations, we:

- Contacted representatives of the United States Fire Administration; and ATF field offices, FBI field offices, and state and local agencies that serve 11 of the largest cities in the United States.

APPENDIX II

SURVEY QUESTIONNAIRE AND RESULTS

1. **Does your agency report arson or explosives incidents, or both, to a federal agency?**

   YES *NO*

   46 *2*

2. **To which federal agencies do you normally report incidents?**

   ATF *FBI* *OTHER (BOTH)* *NONE*

   13 *17* *16* *2*

3. **How do you decide to which agency you report arson or explosives incidents?**

   Responses varied

Separate Questions and Responses About the ATF

1. **Has your agency ever requested information about arson and explosive incidents from the ATF for investigative purposes?**

YES	*NO*	*N/A*
21	*24*	*3*

2. **How often have you contacted the FBI's Bomb Data Center in the past 12 months?**

Responses varied

3. **How do you typically request the information?**[20]

MAIL	*FAX*	*PHONE*	*E-MAIL*	*OTHER*
0	*4*	*14*	*6*	*6*

4. **How was the information typically provided to you?**

MAIL	*FAX*	*PHONE*	*E-MAIL*	*OTHER*
7	*4*	*11*	*11*	*5*

5. **How long did it take you to receive the requested information?**

Responses varied

6. **What was the nature of the information requested?**

Responses varied

[20] Responses to question numbers 3 and 4 exceed the 20 "yes" responses to question 1 because some agencies indicated they reported to both the ATF and the FBI.

7. How helpful was the information with your investigation?[21]

ESSENTIAL	*VERY HELPFUL*	*SOMEWHAT HELPFUL*	*NOT HELPFUL*
2	*14*	*3*	*0*

8. What suggestions do you have about improving the way you provide information to or get information from the ATF?

Responses varied

[21] The number of responses to this question is less than 20 because the question was not applicable for one agency.

Separate Questions and Responses About the FBI

1. **Has your agency ever requested information about arson and explosive incidents from the FBI for investigative purposes?**

YES	*NO*	*N/A*
16	*26*	*6*

2. **How often have you contacted the FBI's Bomb Data Center in the past 12 months?**

Responses varied

3. **How do you typically request the information?**[22]

MAIL	*FAX*	*PHONE*	*E-MAIL*	*OTHER*
2	*2*	*9*	*7*	*4*

4. **How was the information typically provided to you?**

MAIL	*FAX*	*PHONE*	*E-MAIL*	*OTHER*
4	*2*	*6*	*9*	*2*

5. **How long did it take you to receive the requested information?**

Responses varied

6. **What was the nature of the information requested?**

Responses varied

[22] Responses to question numbers 3 and 4 exceed the 16 "yes" responses to question 1 because some agencies indicated they reported to both the ATF and the FBI.

7. How helpful was the information with your investigation?[23]

ESSENTIAL	*VERY HELPFUL*	*SOMEWHAT HELPFUL*	*NOT HELPFUL*
1	*9*	*2*	*0*

8. What suggestions do you have about improving the way you provide information to or get information from the FBI?

Responses varied

[23] The number of responses to this question is less than 16 because some agencies did not indicate how helpful the information was with their investigation, or the question was not applicable.

APPENDIX III

AGENCIES INTERVIEWED BY TELEPHONE

State and Local Agencies

1. Arizona Department of Public Safety
2. Atlanta Fire Department
3. Atlanta Police Department
4. Bexar County, Texas Sheriff's Department
5. California Department of Forestry & Fire Detection
6. Chicago Fire Department
7. Chicago Police Department
8. Cook County, Illinois Sheriff's Office
9. Dallas County Sheriff's Department
10. Dallas Fire Department
11. Dallas Police Department
12. Detroit Fire Department
13. Detroit Police Department
14. Fulton County, Georgia Sheriff's Department
15. Georgia Bureau of Investigations
16. Houston Fire Department
17. Houston Police Department
18. Illinois State Police
19. Los Angeles County Sheriff's Department
20. Los Angeles Fire Department
21. Los Angeles Police Department
22. Maricopa County, Arizona Sheriff's Office
23. Michigan Department of State Police
24. New York Police Department (Arson Squad)
25. New York Police Department (Bomb Squad)
26. Philadelphia Police Department
27. Phoenix Police Department
28. San Antonio Fire Department
29. San Antonio Police Department
30. San Diego County Sheriff's Department
31. San Diego Fire Department
32. San Diego Police Department
33. Wayne County, Michigan Sheriff's Department

ATF Field Divisions

34. Atlanta
35. Chicago

36. Dallas
37. Houston
38. Los Angeles
39. Philadelphia

FBI Field Divisions

40. Atlanta
41. Chicago
42. Dallas
43. Los Angeles
44. New York
45. Philadelphia
46. Phoenix
47. San Antonio

Department of Homeland Security

48. United States Fire Administration

APPENDIX IV

OUTLINE OF THE FEATURES OF THE NATIONAL REPOSITORY AND BDC DATABASES

Database Details	ATF National Repository		FBI Bomb Data Center
	AEXIS	**BATS**	**AIRS**
Accessibility	• Authorized National Repository staff • Access limited to one person within each ATF field division office • Read-only rights via a web-based querying feature to authorized state and local law enforcement agencies • A valid network username and password are required	• Required software application provided by the Repository • Internet connection under mandatory connection provisions • Qualified law enforcement agencies must meet certain requirements and comply with specific conditions • A valid network username and password are required	• Online via a secure network, accessible through a virtual private network • Different level of access to members of the BDC/SIG, which is obtainable when certain criteria are met • LEO members who meet certain requirements • A valid network username and password are required
Data Collection	• Electronically transferred from N-Force through an acceptance or cancel option made available to the end user. • Hardcopy via mail, fax, email, reports of investigations, photographs, and phone calls.	• Electronically from members that have access to BATS. • Hardcopy reports from an investigator's notes taken during an investigation or from reports from an agency's case management system.	• Electronically into AIRS by members of the LEO and BDC/SIG • Hardcopy via mail or fax, on required incident and activity report forms • Activity reports submissions are restricted to Special Agent Bombing Technicians and bomb squad members[24]

[24] These reports contain data on activities on training exercises that are specific to this segment of the law enforcement community.

Database Details	ATF National Repository		FBI Bomb Data Center
	AEXIS	**BATS**	**AIRS**
User Interface[25]	• Patterned after Windows Explorer with file structured for data storage • Customized toolbars • Navigational buttons for moving from one section to another • Data validation per work sections • Wizard guide • Incident search options • Different field types for letters and special characters • Drop down/pop-up boxes for selecting data • Drag and drop functions for merging records • Duplicate record reconciliation screens • Computer generated incident number • Hot key commands entered from the keyboard • Record sorting options • Editing features • Theft/loss reporting • Tracing of explosives • Automated data loading via web interface from federal reporting agencies • Imaging • Web-based querying and reporting • Printable reports	• Web-based browser for productive user by the users • Maintenance screens to create and update records • Search options by incident, subject, or device • Import/export information to other users • Computer generated record number • Restriction/unrestricted options for data sharing • Geographic information system • Edit features • Printable reports	• Web-style controls for productive use by the end users • Different work modes and section identifiers • Navigational buttons for moving from one section to another • Validation indicators per work section • User's guide link for referencing • Search features • Required field denotations • Drop down boxes • Duplicate entry detection • Computer generated report numbers • Categorization of reports in "draft" or "final" status • Printable reports

[25] The purpose of this section of the analysis is to display the features available to an end user in interacting with the system to obtain arson and explosive intelligence information. The user interface for the AEXIS system should be viewed from the standpoint of the end user being the Repository staff interacting with the system to obtain arson and explosive intelligence information upon request to a given law enforcement agency.

Database Details	ATF National Repository		FBI Bomb Data Center
	AEXIS	BATS	AIRS
Data Field Categories[26]	• Incident information • Suspects • Investigation participation • Evidence components	• Incident • Investigator information • Incident details • Devices • Subjects/business information	• Nature of Incident • Nature of Activity • Reporting Agency Data • Incident data • Device data
Types of outputs	• Automated statistical summary reports • Standard reports per record numbers • Tracing reports • Reports from data extractions from AEXIS, NFIRS, and the UCR	• Incident reports per record entry • Audit reports for managerial review • Management reports for the assessment an agency's performance	• Multiple outputs in PDF, HTML, or Excel format for various scenarios by the end users or BDC staff
Sharing capabilities	• Authorized members of the Repository staff • ATF field divisions • Information provided upon request to the law enforcement community by mail, fax, or telephone by AEXIS staff • Authorized members of the law enforcement community with read-only rights provided by ATF staff	• Law enforcement agencies that have access to BATS under restricted or unrestricted options	• Authorized members of BDC/SIG and LEO • Information provided upon request to the law enforcement community by mail, fax, or telephone by BDC staff

Source: This analysis is based on information obtained from the FBI's Bomb Data Center and the ATF's National Repository.

[26] The available data fields within each of the respective categories are listed in detail in Appendix V.

APPENDIX V

SUMMARY OF THE DATA FIELDS FOR THE DATABASES OF THE ATF NATIONAL REPOSITORY AND FBI BOMB DATA CENTER

ATF's AEXIS

Incident Summary Reports

Incident Information

A. Investigation Title
B. Investigation Number
C. Date of Incident
D. Time of incident
E. AEXIS Identification
F. Jurisdiction
G. Incident Type/Subtype
H. Incident Address
I. Incident city
J. Target type
K. Structure type
L. Device location
M. Location description
N. Motive
O. Device delivery
P. Entry method
Q. Warning method
R. Dollar loss

Suspects

A. Name
B. Social security number
C. Date of birth
D. Arresting agency
E. Other identification numbers
F. Notes about suspect

Investigation Participation

A. Agency type
B. Department name
C. Agency's contact name
D. Agency's contact telephone number
E. Department case number

F. Department address
G. Department city
H. Department state
I. Department country
J. Department zip code

Evidence Components

Component Section

A. Sequence of evidence number
B. Evidence component type/subtype
C. Evidence common name
D. Evidence brand name
E. Evidence component use
F. Manufacturer
G. Country
H. Material

Quantity Section

A. Amount
B. Units
C. Model number
D. Identification lot number
E. Modified
F. Improvised
G. Fingerprints
H. Hair/Fibers
I. Length
J. Width
K. Diameter
L. Height
M. Percent
N. Leg wire length
O. Color

ATF's BATS

Incident Summary Reports

Incident

A. Start date/time
B. End date/time
C. Street address
D. City/State/Zip
E. County
F. Additional directions

Investigator information

A. Name
B. Phone
C. Email

Incident Details

A. BATS incident identification number
B. Agency identification number
C. Type of incident
D. Status of incident
E. Level of investigation
F. Incident target
G. Target status
H. Estimated damage
I. Secondary target
J. ATF involvement
K. Primary bias
L. Primary government association
M. Method of entry
N. Fire descriptors
O. Collateral crimes
P. Primary motivation
Q. Area of placement/device origin
R. Number injured
S. Number killed

Devices

A. Device name
B. Device type
C. Device placement
D. Country of origin
E. Device description
F. Device components
G. Device containers
H. Ignitions
I. Fillers
J. Military ordinance

Subjects/Business Information

A. Relationship(s)
B. Name
C. Other name(s) used
D. Business name
E. Primary phone
F. Secondary phone
G. Email
H. Social security number
I. Date of birth
J. Age
K. Ethnicity
L. Race
M. Sex
N. Hair color
O. Eye color
P. Height
Q. Weight
R. Street address
S. City/State/Zip
T. County
U. Country
V. Disposition

FBI's AIRS

Incident Report

Nature of Incident

A. Bombing
B. Attempted bombing
C. Recovery of incendiary explosive device
D. Accidental explosion
E. Hoax device
F. Theft of Explosives
G. Recovery of Explosives
H. Lost/Missing Explosives

Reporting Agency Data

A. Agency name
B. Agency city
C. Agency street
D. Agency state
E. Agency telephone number
F. Agency fax number
G. Bomb squad identification number
H. NCIC number
I. Responding agency number
J. Investigating agency number
K. Agency zip code

Incident Data

A. Incident start date and time
B. Incident end date and time
C. Incident street address
D. Incident city
E. Incident county
F. Incident state
G. Incident zip code
H. Target
I. Apparent involvement
J. Threat type
K. Method of delivery

Device Data

A. Quantity
B. Category
C. Device type
D. Subtype
E. External container

Activity Report

Nature of Activity

A. Bomb squad training
B. Operational standby/special effects
C. Protective detail
D. Bomb threat call
E. Suspicious package call
F. Disposal of Explosives/Pyrotechnics
G. Assisting another agency

Reporting Agency Data

A. Agency name
B. Agency street
C. Agency city
D. Agency state
E. Agency zip code
F. Agency telephone number
G. Agency fax number
H. Reporting officer
I. Responding agency number
J. Investigating agency number
K. Related file number

Incident Data

A. Number of days
B. Incident start date and time
C. Incident end date and time
D. Number of personnel
E. Activity report detail
F. Incident county

ATTORNEY GENERAL'S AUGUST 11, 2004, MEMORANDUM REGARDING THE COORDINATION OF EXPLOSIVES INVESTIGATIONS AND RELATED MATTERS

Office of the Attorney General
Washington, D.C. 20530

August 11, 2004

MEMORANDUM FOR THE DEPUTY ATTORNEY GENERAL
DIRECTOR, FEDERAL BUREAU OF INVESTIGATION
DIRECTOR, BUREAU OF ALCOHOL, TOBACCO, FIREARMS AND EXPLOSIVES
ADMINISTRATOR, DRUG ENFORCEMENT ADMINISTRATION

FROM: THE ATTORNEY GENERAL

SUBJECT: Coordination of Explosives Investigations and Related Matters

To ensure effective coordination of explosives investigations by law enforcement components of the Department of Justice (the Department), I hereby direct as follows:

Jurisdiction

1. The Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) shall control the investigation of all explosives incidents, except as follows:

   a. In cases where a Joint Terrorism Task Force (JTTF) determines that the explosives incident is related to terrorism, then the JTTF shall control the investigation; and
   b. In cases where the Federal Bureau of Investigation (FBI) traditionally has exercised jurisdiction (including but not limited to bank robberies, civil rights violations, and organized crime), then the FBI shall control the investigation.

2. The Deputy Attorney General shall resolve all issues relating to jurisdiction over explosives investigations.

Information Sharing

3. The Department's Chief Information Officer (CIO) shall consolidate all of the Department's arson and explosives incident databases including, but not limited to, the FBI's Automated Incident Reporting System and ATF's Bomb and Arson Tracking System, into a single database.

4. All consolidated arson and explosives incident databases shall be maintained by ATF and shall be accessible to all Department law enforcement components. No Department component may maintain any database that contains arson or explosives incident information that would otherwise be maintained in the consolidated database.

5. Within 90 days, the CIO shall examine and report to the Deputy Attorney General on the feasibility of consolidating all of the Department's remaining arson and explosives databases.

6. The Deputy Attorney General shall resolve all issues relating to the consolidation of arson and explosives databases.

TEDAC

7. The CIO shall coordinate the development of a database for the Terrorist Explosives Device Analytical Center (TEDAC).

8. A senior FBI representative shall serve as Director of TEDAC; a senior ATF representative shall serve as a Deputy Director of TEDAC.

Laboratories

9. There shall be established a Laboratories Review Board (Lab Board). The Deputy Attorney General (or his designee) shall chair the Lab Board; representatives of ATF, the Drug Enforcement Administration, and the FBI shall serve as members of the Lab Board.

10. The Lab Board shall examine the Department's available resources and workloads and make recommendations to the Deputy Attorney General. Such recommendations shall include an analysis of laboratory demands imposed by TEDAC.

11. The Deputy Attorney General (or his designee) shall, as appropriate, direct the allocation and use of the Department's laboratory resources.

Training

12. All budget, curricula, teaching and scheduling functions relating to post-blast explosives training within the Department shall be consolidated under ATF.

13. All agents, officers, technicians, and other personnel who engage in or are related to post-blast explosives training shall remain with their respective agencies and continue to provide training as they did prior to consolidation.

14. The Deputy Attorney General shall resolve all issues relating to the consolidation of post-blast explosives training.

15. All explosives training provided by Department components shall be made available, when appropriate, to all federal law enforcement agencies.

16. There shall be established an Explosives Training Review Board (Explosives Board). The Deputy Attorney General (or his designee) shall chair the Explosives Board; representatives of ATF and the FBI shall serve as members of the Explosives Board.

17. Within 90 days, the Explosives Board shall examine and report to the Deputy Attorney General on the feasibility of consolidating the Department's remaining explosives training programs and facilities.

Special Events

18. The recommendations of the Explosives Review Group (ERG) regarding Special Events, as set forth in the Memorandum for the Deputy Attorney General of May 3, 2004, Attachment 2, shall be adopted and implemented.

19. No later than December 1, 2004, the ERG Chair shall report to the Deputy Attorney General in writing on the implementation of the ERG's recommendations regarding Special Events.

Canines

20. As soon as practicable, all Department components that use explosives detection canines shall use only canines certified by ATF.

APPENDIX VII

BUREAU OF ALCOHOL, TOBACCO, FIREARMS AND EXPLOSIVES' RESPONSE TO THE DRAFT AUDIT REPORT

U.S. Department of Justice

Bureau of Alcohol, Tobacco,
Firearms and Explosives

Office of the Director

Washington, DC 20226

SEP 27 2004

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MEMORANDUM TO: Assistant Inspector General for Audit

FROM: Director

SUBJECT: Response to the Office of Inspector General's (OIG) Draft Audit Report-The Bureau of Alcohol, Tobacco, Firearms and Explosives' and Federal Bureau of Investigation's Arson and Explosives Intelligence Databases

The Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) appreciates the opportunity to respond to the recommendation from the OIG's above-cited draft report. Our response to your recommendation is as follows:

Recommendation #2: Ensure that "Bomb Arson Tracking System" (BATS)" users adhere to the Memorandum of Understanding (MOU) and require that data used to populate the BATS database involve only arson and the suspected misuse of explosives.

Response: ATF has established an MOU with all BATS users that requires adherence to set standards. Additionally, ATF has provided all users with a behavior guide which sets standards on how to populate the database with arson incidents and suspected misuse of explosives. Furthermore, ATF will periodically take a statistically significant random sampling of the data contained within BATS and check for adherence to the requirements set out in the MOU.

If you have any questions regarding this response, please contact Ms. Carol Campbell, Audit Liaison, Office of Professional Responsibility and Security Operations, on (202) 927-8276.

Carl J. Truscott

APPENDIX VIII

FEDERAL BUREAU OF INVESTIGATIONS' RESPONSE TO THE DRAFT AUDIT REPORT

U.S. Department of Justice

Federal Bureau of Investigation

Washington, D. C. 20535-0001

September 23, 2004

Mr. Guy K. Zimmerman
Assistant Inspector General
for Audit
U.S. Department of Justice
Office of the Inspector General
Audit Division
1425 New York Avenue, N.W.
Suite 5001
Washington, D.C. 20005

Dear Mr. Zimmerman,

In response to your memorandum to Director Robert Mueller dated September 1, 2004, the Federal Bureau of Investigation (FBI) agrees with the conclusion of the Office of Inspector General (OIG) in it's conclusion on page 34, that both the FBI and the Bureau of Alcohol, Tobacco, Firearms and Explosives (BATFE) compile and disseminate data relative to explosive incidents. This duplication of effort has resulted in confusion and a lack of consistency. We disagree, however, with the OIG's recommendation in the first paragraph on page 37, that the databases of the FBI and BATFE should be consolidated under the BATFE. Furthermore, the FBI would like to clarify statements of the OIG's draft report.

Page 1 of the "Executive Summary", footnote #1 states "The FBI does not normally receive and record arson-only incidents." In fact , the Uniform Crime Reporting Act of 1988, 28 U.S.C. 534, and 28 C.F.R. 0.85 (f) clarifies that the FBI shall compile criminal statistics (including arson statistics) from federal, state and local agencies and shall operate a central clearinghouse for police statistics under the Uniform Crime Reporting Program. As discussed on August 19, 2004, the FBI 's Uniform Crime Report Program routinely shares arson statistics with the BATFE. The Bomb Data Center (BDC), however, collects only bombing incidents and activity reports and does not collect arson statistics.

The last sentence of the first paragraph on page 7, titled Automated Incident Reporting System (AIRS), states "On August 19, 2004, FBI officials said the FBI recently implemented COBRA, a wireless system that enables law enforcement agencies to enter data remotely." In fact, the COBRA system was implemented in 1998 as part of an FBI program to equip state and local bomb squads to recognize and detect materials involving weapons of mass destruction. At that time, the COBRA system contained a hard-wire modem to connect the user via telephone, to the FBI's Bomb Data Center as part of the National WMD Response Plan. The bombing incident and activity reporting feature of the system was added for the convenience of state and local bomb squads. In January, 2004, the FBI initiated a series of multi-million dollar contracts to upgrade state and local COBRA systems These contracts include replacing the telephone modem with cellular, or wireless modem for remote internet connectivity; to provide wireless service free of charge to state and local bomb squads; and to conduct on-site training to

ensure state and local bomb technicians can operate the system. In fact, the FBI was recently nominated for an award for the COBRA system by the technology community for innovative use of technology to improve National security and protect Americans against terrorist attacks.

Also on page 7, the last sentence of the next paragraph of the report states "...as reporting agencies acquire access to LEO they will eventually be authorized to enter data directly into AIRS." The FBI provided all of the more than 440 accredited bomb squads in the U.S. a COBRA system with which they have had the ability to enter data directly into AIRS since 1999. Many departments chose not to utilize the direct-entry capability. As stated above, the system was upgraded to a wireless system in 2004. Also, as the OIG noted on page 18, "Data is collected for the FBI's AIRS system electronically or in hardcopy format via mail (and e-mail) or fax. Authorized members of the BDC/SIG may enter bombing incidents and bomb squad activities directly into the system." This appears to conflict with the OIG's statement at the bottom of page 18 which states "In our judgement, a system in which data can be entered directly by the reporting agency, **such as BATS system**, (emphasis added) has the advantage of furnishing real-time data." Since AIRS is a direct entry system available to every bomb squad, and in as much as BATS is a pilot project, under development, and only available to two departments (page 4 of the report), it would appear, other factors notwithstanding, that it would be prudent to continue utilizing the FBI's AIRS database.

The draft audit states on page 34, that "... as the FBI migrates from data entry by BDC and LSU staff to data entry by reporting agency, the error rate should decrease." It should be reiterated that AIRS is a direct agency data entry system and that agencies may choose not to utilize that feature. They may fax, mail or e-mail reports to BDC in addition to the direct data entry feature.

Finally, the footnote on page 36 of the draft report states: "On August 19, 2004, FBI officials indicated they did not want to include subject and suspect data, or data related to juveniles." What the FBI officials were attempting to convey is the AIRS database conforms to DOJ policies with regards to the Freedom of Information and Privacy ACT (FOI/PA) and provisions for maintaining information identifying juveniles. Also, the FBI does not feel the internet is an appropriately secure means of inter-agency transmission of criminal investigative information, particularly information that identifies subjects, suspects, victims, witnesses and juveniles. Information transmitted via the internet could be subject to theft and public disclosure, thus jeopardizing criminal investigations, Grand Jury proceedings, individual and business reputations and, of utmost importance, the safety of victims and witnesses. The FBI's AIRS database, therefore collects only statistical data and does not collect or disseminate criminal investigative information.

If you have any additional questions regarding data related to explosives incidents, please do not hesitate to request our assistance. I thank you for your efforts to address this matter.

Sincerely yours,

Dwight E. Adams

Dwight E. Adams
Director
FBI Laboratory

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APPENDIX IX

OFFICE OF THE INSPECTOR GENERAL, AUDIT DIVISION, ANALYSIS AND SUMMARY OF ACTIONS NECESSARY TO CLOSE THE REPORT

In its September 27, 2004, response to the draft report, the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) indicated that it has established a Memorandum of Understanding (MOU) with all Bombing and Arson Tracking System (BATS) users that requires adherence to set standards. Additionally, the ATF has provided all users with a guide containing standards on how to populate the database with arson incidents and suspected misuse of explosives. Furthermore, the ATF said it will periodically review a statistical sample of the data contained within BATS to check for adherence to the requirements prescribed in the MOU.

In its September 23, 2004, response to the draft report, the Federal Bureau of Investigation (FBI) agreed with our conclusion that duplication of effort between the FBI and the ATF in compiling and disseminating data on explosives incidents results in confusion and inconsistency. However, despite the Attorney General's memo of August 11, 2004, which directed the Department to consolidate the arson and explosive incidents databases under the ATF, the FBI disagreed with recommendation 1, stating, "We disagree, however, with the OIG's recommendation in the first paragraph on page 37, that the databases of the FBI and BATFE should be consolidated under the BATFE." Additionally, the FBI commented on other issues in the report. These issues are addressed below:

Executive Summary. Our draft report stated that the FBI does not normally receive and record arson-only incidents. The FBI commented that the Uniform Crime Reporting Act of 1988, 28 U.S.C. 534, and 28 C.F.R. 0.85 (f) clarifies that the FBI is directed to compile criminal statistics (including arson statistics) from federal, state, and local agencies and operate a central clearinghouse for police statistics under the Uniform Crime Reporting Program. Additionally, the FBI commented that the FBI's Uniform Crime Report Program routinely shares arson statistics with the ATF. On the basis of the FBI's comments, we revised the Executive Summary to show that the Bomb Data Center (BDC), rather than the FBI as a whole, normally does not receive and record arson-only incidents.

Automated Incident Reporting System (AIRS). The FBI stated in its response that the COBRA system was implemented in 1998. In addition, the FBI said it had provided all of the more than 440 accredited bomb squads in the United States with a COBRA system with which they have had the ability to enter data directly into AIRS since 1999. We added the FBI's comments to the report.

The FBI also stated in its response that since AIRS is a direct entry system available to every bomb squad and the ATF's BATS is a pilot project available to only two departments, the Department should continue to use AIRS. However, the FBI's response also indicated that direct entry into AIRS is optional. In fact, we found that thousands of entries in AIRS were made by BDC and contract staff who transcribed data from hard copies submitted by contributing agencies. In addition, an October 1, 2004, FBI memorandum indicated that no data in the COBRA system was in the AIRS database yet, but that data would be converted and downloaded into AIRS over the next 60 days.

Finally, the FBI commented on our statement that, "On August 19, 2004, FBI officials indicated they did not want to include subject and suspect data, or data related to juveniles," in a consolidated database. The FBI does not feel the Internet is an appropriately secure means of interagency transmission of criminal investigative information, particularly information that identifies subjects, suspects, victims, witnesses, and juveniles. We agree and clarified footnote 18 accordingly.

The status of each recommendation, and the actions needed to close the report, are summarized below. Recommendation 1 was directed to the Department. Recommendation 2 was directed to ATF, and recommendations 3 and 4 were directed to the FBI.

1. **Resolved.** This recommendation can be closed when we receive documentation from the Department showing that the Repository and BDC databases have been consolidated under ATF management in accordance with the Attorney General's August 11, 2004, directive. Implementation milestones should be established and progress should be reported to the Office of the Inspector General every 90 days.

2. **Resolved.** The ATF indicated it has established an MOU with all BATS users and that it will periodically review a statistical sample of the data contained in BATS to check for adherence to the

requirements of the MOU. This recommendation can be closed when we receive a copy of the MOU and documentation showing that the ATF has reviewed a statistical sample of the data within BATS.

3. **Unresolved.** This recommendation was not addressed by the FBI in its September 23, 2004, response and is therefore unresolved. This recommendation can be resolved and closed when we receive documentation showing that the FBI has developed and implemented policies, procedures, and performance standards to ensure timely and accurate data entry into AIRS.

4. **Resolved.** This recommendation can be closed when we receive documentation showing that data from the COBRA server has been transferred to AIRS and that the FBI has taken steps to maximize the use of direct entry of data by participating agencies.