A POSSIBLE DESIGN AND
ESTIMATED COST ANALYSIS OF A COMPUTER
BASED INFORMATION SYSTEM FOR GUN CONTROL

CISR #52

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CISR #S2

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OUTLINE

Executive Summary
Acknowledgements
1. Introduction
2. Description of System Proposed
3. Computer Requirements
   3.1 Storage Needs
      3.1.1 Data on New Guns
      3.1.2 Data on Used Guns
      3.1.3 Data on Thefts
      3.1.4 Data on Licensees
      3.1.5 Data on Licensees that have Merged or Gone out of Business
      3.1.6 Data on Guns Associated with Licensees that have Merged or Gone out of Business
      3.1.7 Summary of Storage Needs
      3.1.8 Computer Storage Needed and Costs
   3.2 Computer Needs
      3.2.1 Transactions Per Year Associated with Queries
      3.2.2 Transactions Per Year Associated with New Gun Data Update
      3.2.3 Transactions Per Year Associated with Used Gun Data Update
      3.2.4 Transactions Per Year Associated with Licensee Data Update
      3.2.5 Transactions Per Year Associated with Theft Data Update
      3.2.6 Transactions Per Year Associated with Generation of Reports
      3.2.7 Summary of Transactions
      3.2.8 Computers Needed and Costs
   3.3 Telecommunication and Peripheral Needs
   3.4 Summary of Computer Requirements
4. Personnel Needs Per Year
   4.1 Personnel to Maintain New Gun Data
4.2 Personnel to Maintain Used Gun Data
4.3 Personnel to Enter Data on Thefts
4.4 Personnel to Enter Data on Licensees
4.5 Personnel to Reenter Incorrect Data
4.6 Personnel to Make Queries
4.7 Personnel to Produce Reports
4.8 Personnel for Software and Hardware Maintenance
4.9 Summary of Personnel Needed Per Year

5. Summary of Operational Requirements and Costs

6. Implementation Costs
   6.1 Design Costs
   6.2 Software Costs
   6.3 Costs of Data Initialization and Refinement
   6.4 Summary of Implementation Costs

7. Costs Summary

8. Costs of Other Systems
EXECUTIVE SUMMARY

This report is an outgrowth of a project conducted by students enrolled in a management information systems course at the Sloan School of Management at M.I.T. The report is a technical analysis of a computer system to meet the needs of the proposed ATF regulations. It is important to note that only costs for developing and operating a computer system are analyzed; benefits to be derived from such a system are not addressed and neither are non-computer related costs such as enforcement costs. The main objective in preparing this report was to develop a case study for technology based courses in information systems.

Two important parameters in such systems are database size and annual transaction volume. Calculations in this report indicate the data base size to be 25 billion characters of online data and the annual transaction volume to be 1.3 billion database accesses, most of which are for report generation.

Results of this report indicate that six years will be needed to design, implement, and debug a computer based information system to meet the needs of the proposed rules, and to initialize the database.

If purchased, the estimated hardware costs are approximately $4.1 million. Estimated software design and development costs are $6.5 million. Annual costs to operate this system are estimated to be $17 million. A large portion of the operating cost will be allocated to data entry. Estimated start up costs over the six year development period are $78 million, most of which are associated with costs for data initialization.

The above computer related costs do not include costs for back up facilities, or handling of data on NFA firearms, ammunition, firearm parts, and firearms imported by military personnel.

Also included in the report are cost data for other information systems of comparable size. The estimated costs for the proposed system appear to be comparable to the costs incurred in previously implemented systems.

For many parameters we have obtained several estimates from individuals and agencies referenced in the acknowledgements; the interested reader may wish to use other parameters in these calculations. We suggest that this report can be used as the basis for a comprehensive study of a computer system to augment firearms regulation; it cannot be used as a substitute.
ACKNOWLEDGEMENTS

The following individuals and organizations were contacted for information: Leonard Phillips of American Key Punch and Systems; Robin Tate and Glenn Whittington of American Airlines; Kathy Hirsch of American Management Systems; Bob Goldberg of BGS Systems; Mr. Barinow, Mrs. Erickson, Richard Johnson, Jim Hunt, Bill Kearns, Don Keith, Don Lofton, Bill McKay, Ms. Minks, Atley Peterson, Lester Stanford, and Nick Vonovich of the Bureau of Bureau of Alcohol, Tobacco, and Firearms; Louis Sigallia of the Bureau of Customs; Ms. Chris Bullen and Dr. John Rockart of the Center for Information Systems Research, Sloan School, MIT; Wayne Hilton and Jack Zodrow of Eastern Airlines; Bill Courtney and Tom Walzykowski of the FBI; Tom Hammett, Ken Schmitz, Don Walker and Palmer Williams of Hertz Rent-a-Car; Louis Gutentag of Harvard; John Hamerski, Dick MacKinnon, Tony Torti and Jack Weiss of IBM; John Mannion of the IRS; Steve Gold of Massachusetts Blue Cross; Professor Stuart Madnick of MIT; Students in the MIT Sloan School Class 15.565; James Featherstone, Neal Knox, Michael Lee and Tanya Metaksa of the National Rifle Association; Oscar Fernandez and Mike Mandelboum of Pan American Airlines; John Kahill of Sheraton International Hotels; Bruce Peterson and Mr. Moniago of Technology Management, Inc.; Roy Hoffman of United Airlines; John Jones and Mrs. Talley of the U.S. Army.

We would particularly like to thank several colleagues at MIT, including Dr. John Rockart, whose insights were most helpful. We also make special note of the most helpful and pleasant conversations with members of the Bureau of Alcohol, Tobacco, and Firearms.
This report analyzes the computational needs and estimated costs of a computer based information system to meet the storage and data manipulation capacity needed for a firearms tracing and reporting system as proposed in Federal Register Vol. 43, No. 55 - Tuesday, March 21, 1978. [See Appendix A].

The faculty working on this report have done so with the primary purpose of developing a case study to serve as an educational vehicle in Management Information System design courses. As such, the report will be used in course 15.565 at MIT and distributed to other universities. The students working on this report have done so to fulfill credit and course requirements for analyzing a computer based information system.

We have chosen this particular application because of its timeliness, its size (as it typifies many of the future information systems), and because of the opportunity it affords us in following its progress (and the decision-making process) from inception to implementation and through operations.

In the course of preparing this report we have sought information from various organizations including the FBI; U.S. Customs; Bureau of Alcohol, Tobacco and Firearms; congressional offices; National Rifle Association; IBM Corporation; U.S. Army; computer venders; computer timesharing companies; and others. These organizations have been most helpful and some also have expressed interest in the results of this report. As such, this report will be sent to personnel from those organizations who have requested it. We send the report to these organizations as purely
informational and not in support or opposition to their policies or proposals.

Several points must be noted concerning this report.

1. This report is a technical analysis of the required computer system, performed with limited resources in a short time - it is not an extensive study. We would welcome this report to be used as a starting point for such an extensive study but not as a substitute.

2. The report does not define objectives for the proposed system, does not evaluate the effectiveness of such a proposed system, and does not develop a cost benefit analysis; hence, does not recommend or oppose the proposed system.

3. Gun related information systems fall into two broad categories:
   a.) person registration and licensing - used to determine if a person can buy a gun and to keep track of that person.
   b.) gun registration and tracking - used to trace guns sold and distributed in the U.S.

The regulations in Appendix A propose a system of gun registration and tracking. There does exist an analysis of costs associated with a person registration and licensing system [e.g., "A Preliminary Costs Analysis of Firearms Control Program," Research Association Incorporated, Silver Springs, Maryland, December 20, 1968; Report to the Congress, "Hand Gun Control: Effectiveness and Costs," PAD-78-4, Comptroller General of the United States, February 6, 1978].

4. Only computer needs (data, software, hardware, personnel for maintaining data, personnel for operation of the computer, personnel for maintaining software and responding to queries) are reported on. Other needs and costs are not addressed. The procedures and costs not addressed include:
- costs of educating licensees in regulation requirements
- procedures and costs of submitting reports
- manufacturing procedures and costs of adding serial number identification to firearms
- procedures and costs for enforcement
- form printing costs
- administration costs

As a case study for a technology-based management information system course, the procedures and costs associated with reporting, manufacturing, enforcement, investigation, printing, and administration are beyond the scope of this report. However, for comprehensive evaluation of such a system, costs associated with these other areas should be investigated and added to those mentioned in this report. These additional problems and costs may be substantial.

5. This is a technical report and as such no views are implied nor should be attributed to MIT, Sloan School, Harvard University, Tufts University, or any of the institutions with which the students and faculty working on this report are affiliated.
2. Description of System Proposed

The Bureau of Alcohol, Tobacco, and Firearms (ATF) has proposed a new set of regulations to facilitate monitoring the movement of firearms. Briefly, these regulations would require that: (1) all new firearms bear a unique identification number, (2) each licensee report the theft, loss or recovery of a firearm, (3) each manufacturer or importer submit to ATF a quarterly report of firearms manufactured or imported, and (4) each licensee submit to ATF a quarterly report of all firearm dispositions.*

In conversations with ATF personnel it was stated that the implementation of these regulations would improve ATF's ability to gather information on the commerce of firearms. The reports submitted by all licensees would yield comprehensive data on the flow of firearms throughout the nation. It is the intent of ATF that analysis of these data could identify categories of sources of firearms used in crimes, pinpoint unusual traffic of firearms that might warrant investigation, and provide other statistical information.

It is the major intent of ATF that these data could be used in tracing for local law enforcement agencies, a gun reported used in a crime. Currently, all tracing is done manually, through a series of telephone calls. The manufacturer or importer, and then the distributors or wholesalers, and finally the dealer are each asked to retrieve information from their records about where a gun was shipped. The trace is complete when ATF can provide the requesting law enforcement agency with the name and address of the retail seller (or buyer) of the gun.**

---

* Federal Register; March 21, 1978, Part III, pp 11800-11810
** ATF Fact Sheet #FY-78-24, April 1, 1978.
In 1977, the ATF's center received 62,498 trace requests and successfully completed 34,597. For firearms purchased after 1968, the percent of successful traces is close to 90 percent. The present system is manual and ATF reports the tracing center is staffed by 23 people.* ATF personnel stated that data gathered from the licensees' reports and stored by ATF would expedite the tracing process.

No data on the individual gun owner would be stored in the proposed system.** Hence, the last step of the present method would remain the same, i.e., once the dealer is identified by the system then that dealer would be personally contacted for his records on the buyer of the gun. Also, under the proposed regulations, data on sales or exchanges of guns between non-licensed dealers, e.g., private citizens would not be kept. It is suspected that many of the guns used in crimes may have gone through several such changes in private ownership. Hence, several manual steps may be involved in completing a gun trace.

ATF personnel also expect that such a system would permit comparative analysis of data collected over several years to identify trends in the flow of firearms and their correlation with other factors, and thereby enable the Bureau to focus their resources on problem areas.

* ATF News Release #FY-78-26, April 1, 1978

** There seems to be a small contradiction in the regulations on this point: Section 178.131 states that data on final sales to non-licensees would not be reported, whereas Section 178.113 states that data on non-licensees acquiring imported guns will be reported. Also, existing regulations require a dealer that goes out of business to submit all his records (on sales of firearms to citizens) to ATF. For the purposes of this technical report we ignore this data series, as it would be small compared to other data series. However, there may be problems arising from privacy and security issues associated with such data.
3. Computer Requirements

In this section we analyze the data quantities, and query and reporting capabilities which determine storage and computer requirements.

Three basic data series would form the heart of the proposed system: data on guns; data on thefts; data on licensees, including manufacturers and distributors.

To compute the storage needs of such a system we suggest a design for the file organization. Our file organization was determined by the amount of data in each category and the way in which data is accessed. In general there is a trade-off between storage requirements and speed of access. For example, in organizing a file system, data may be duplicated or extra pointer* information may be added to permit faster access of data, but at a cost of increased storage requirements.

In the proposed system the storage requirements are such that most commercial data base management systems which utilize full inversion** or extensive indexing would require large storage capacities making them impractical. Since the data base is large and the structure of the data is fairly straightforward, it would seem appropriate that a specialized data base management system would be developed or built upon a simpler file access system such as a CODASYL type system.

In computing the storage requirements we have taken a simple design for a file structure with minimum linking and overhead items to obtain a hopeful lower bound on storage size.

To analyze the power of the computer needed we determine the load or the number of transactions per year that the system must process.

* A pointer is (logically) a connection between two data records (A and B) to facilitate fast access of record B after retrieving record A.

** See Date, C.J. "An Introduction to Database Systems. Addison-Wesley, 1975.
A transaction is defined as an access to a data record. Hence, any user initiated action normally generates several transactions. For the proposed system there are three categories of user initiated actions: queries, (e.g., trace request), data entry (e.g., update, validation), and reports (e.g., statistical report on categories of stolen guns used in crimes).

All numbers used in this report are based on current statistics but are projected out over six years.

We have chosen six years as the amount of time that will elapse before the system becomes operational for two reasons:

1. Most guns used in crimes are less than five years old.* For a system to be effective in tracing a gun used in a crime, six years of gun data should be available. Hence, before the present manual system is replaced by the new system, data would have to be accumulated and loaded into the system for six years.

2. The design phase for such a system may be two years, the software development phase may be three years, and the check out phase may be at least one year. Hence six years may elapse before the information system is running.

* ATF Newsletter, #FY-77-30, February 24, 1977.
3.1 Storage Requirements

To estimate the storage requirements, we itemize the data series that would be kept in the system and calculate the size of each series.

3.1.1 Data on New Guns

We present two estimates on the amount of storage required for the data collected from reports submitted by manufacturers and licensees on the transfer of guns. The first is based on a straightforward model where no sophisticated encoding schemes*** or searching schemes are used. This minimizes computer time used to retrieve the data but requires more storage space and results in more I/O accesses. The second estimate is based on a model that uses sophisticated encoding methods and assumes the use of a hash-coding for accessing ***. This approach reduces storage requirements and I/O accesses but requires more computer time for encoding and decoding data.

a. The straightforward model we use is:

\[
\text{storage for gun data} = (\text{number of guns sold in base year}) \times (\text{data per entry + linking information}) \times (\text{dispositions}) \times (\text{number of years information kept}) \times (\text{compounded increase in sales})
\]

\[
= (6,240,000) \times (109 + 48) \times (4) \times (6) \times (1.13)
\]

\[
= 26,569,000,000 \text{ bytes} \quad **
\]

- number of guns = 6,240,000 with 5,345,000 firearms manufactured in the U.S. in 1976 and 895,000 firearms imported into the U.S. in 1976*.

- data per entry = 109 bytes or characters. The proposed rules require the manufacturer to report the unique 14 digit identifying number on each device (which encodes the reporter's own ID number, and the model and caliber of the gun), and the date of manufacture or importation; the date of disposition and the receiver of each firearm; the mode of transportation and the name of the carrier (Federal Register, Appendix A). Officials at ATF estimated that 109 bytes would be used to store this information.


** a byte corresponds to one character of information

- linking information = 48 bytes. This would include pointers to other records and other system information. Assuming a minimum of pointers that would allow for fast access during a trace we propose that all records of the same guns through each disposition (from manufacturer to wholesaler to dealer) would be linked with forward and backward pointers. Therefore if a serial number is used as a key, then a trace would only require one search for manufacturer record followed by accesses, using pointers to each disposition record, until the last disposition was found. Assuming pointers take 4 bytes this would account for 8 bytes. Similarly, assuming gun records were linked five other ways, e.g., by manufacturer, by dealer, by location, by type of gun, by carrier, yields a total of six sets of pointers.

- dispositions - 4 times. The new regulations would require that every licensee report to ATF on the disposition of any firearm (Federal Register, loc. cit), e.g., manufacturer to wholesaler to distributors. Estimates by the FBI, ATF and others are that each firearm is transferred an average of four times before it is acquired by a nonlicensee (citizen). Thus, the 6,240,000 firearms distributed per year would each accumulate an average of four entries of information identifying successive dates of disposition, destinations, modes of transportation, and carriers. (This amounts to a total of 25 million dispositions that must be reported and recorded each year.)

- number of years information kept = 6. Studies have shown that most firearms used in a crime are not more than five years old. (ATF newsletter FY-77-30, February 24, 1977). Thus to insure a high percentage of successful tracings, all data mentioned above from the latest five to seven years would have to be kept readily accessible at any time. Of course, older data would probably be retained indefinitely on some secondary storage medium, to facilitate comparative analysis of years.

- Compounded increase in sales = 1.13. Assuming an annual increase in gun sales of 2%, and compounding over six years yields 113%.

  b. the model using sophisticated encoding schema, structuring and hashing is:

  storage for gun data = [(number of guns sold in base year) x (data per gun + linking) x (number of years information kept) + (number of guns sold in base year) x (data per disposition) x (dispositions) x (number of years information kept)] x (hash factor) x (compounded increase in sales)

  = [(6,240,000) x (52 + 48) x (6) + (6,240,000) x (50) x (4) x (6)] x (1.2) x (1.13)

  = 15,231,000,000 bytes
- number of guns = 6,240,000 as above.

- data per gun = 100 bytes. Encoding of the gun data could reduce the number of bytes stored per gun from 109 to 52. Linking information would require 48 bytes, as above. Total = 100 bytes per firearm. This model assumes a structure as follows:

- number of years information kept = 6, as above.

- data per disposition = 50. Encoding of the gun disposition data could reduce the total number of bytes to 50.

- dispositions = 4, as above.

- hash factor = 1.2. Assume the use of an efficient hashing algorithm that requires only 1.2 times the amount storage used for data.

- compounded increase in sales = 113%, as above.
It appears that while the volume of data stored in the proposed system would be large, none of this data would be highly volatile and the average number of accesses to any one record would be small. To minimize the storage requirements, at a slight increase in computer-time requirements, the second model (using data-encoding and hash-coding for accessing) is thus more appropriate. Hence, we will work with the second (lower) estimate in this report.

3.1.2 Data on Used Guns

Licensees would also be required to submit reports on the acquisition and disposition of used firearms.

\[
\text{storage for used gun data} = (\text{number of used guns sold per year}) \times (\text{data per acquisition or disposition}) \times (\text{number of acquisitions or dispositions}) \times (\text{years}) \times (\text{compounded increase in sales}) \times (\text{hash factor})
\]

\[
= (10,000,000) \times (50) \times (2) \times (6) \times (1.13) \times (1.2)
\]

\[
= 8,136,000,000 \text{ bytes}
\]

- number of used guns sold per year = 10,000,000. We assume that 10% of the estimated 200,000,000 guns currently held in the country are resold each year. We further assume that one half of these used guns are traded through commercial channels.

- data per acquisition or disposition = 50 bytes. Records on guns that bear a 14-digit identification number could be added to an existing chain of dispositions. Each such record would contain 50 bytes, assuming sophisticated encoding mechanism, as discussed in Section 3.1.1. Guns that were manufactured before the proposed regulations were implemented would not bear a 14-digit identification number. Thus, new manufacturer's-gun-date records would have to be created for these older used guns when they enter commercial channels. The gun data records would be similar to those described in Section 3.1.1, but the absence of an identification number on the gun may imply that the records' contents and structure may be different. Records on used guns that did not have a 100 byte manufacture record previously stored in the system (e.g., guns made prior to these regulations) may require additional storage requirements which are in excess of 50-byte disposition records.

- number of acquisitions or dispositions = 2. We assume there would be 1 acquisition plus 1 disposition per firearm to be reported.

- years = 6, as discussed in Section 3.1.1.
- compounded increase in sales, at 2% per year over a six year period is 113%

-hash-factor = 1.2, as stated in Section 3.1.1.

Note that these storage requirement calculations depend on the data record size. Irrespective of how efficiently the data can be compressed, these are approximately 347,000,000 records that must be stored for the data series presented in Sections 3.1.1 and 3.1.2.

3.1.3 Data on Thefts

The new regulations would require that every licensee report discovery of theft, loss, or recovery of any firearm (Federal Register, loc. cit.).

storage for theft data = [(number of thefts per year) + number of recoveries per year] x (data per gun + linking) x (years) x (compounded increase in thefts) x (hash factor)

= (50,000 + 25,000) x (50) x (6) x (1.2)

= 27,000,000 bytes

-number of thefts per year = 50,000. Estimates mentioned in conversations with ATF personnel are that 50,000 firearms are stolen from carriers and dealers each year; assume that half are recovered. We assume that the theft rate remains constant over the next six years. Each theft report would list the legal owner of the firearm, its identification number, the date of the theft, and the carrier, if the device was stolen while in transit.

-date per gun = 50 bytes (as calculated in Section 3.1.1 using sophisticated encoding).

-years = 6 (as discussed in Section 3.1.1)

-hash factor = 1.2 (as stated in Section 3.1.1).
3.1.4 Data on Licensees

Rather than storing all information (e.g., address, type) on each licensee with every gun record, which would greatly increase the amount of storage needed, we would propose that this information be kept as a separate file.

\[
\text{Storage for licensee data} = (\# \text{ of licensees}) \times (\text{information stored on each one} + \text{linking}) \times (\text{compounded increase in licensees}) \times (\text{hash factor})
\]

\[
= (172,000) \times (100 + 16) \times (1.34) \times (1.2)
\]

\[
= 32,082,816 \text{ bytes}
\]

- # of licensees = 172,000. In 1976, there were 165,000 licensees, according to statistics published in the Annual Report of the Bureau of ATF (ATF publication number p.1200.2). Mr. Lester Stanford, ATF Public Information Officer, has stated in a personal correspondence that this number has since risen to 172,000.

- information stored on each = 100 bytes for address, name, type.

- linking = 16 bytes for two sets of forward and backward pointers.

- compounded increase in licensees = 134%. Assuming an annual increase in licensees of 5% and compounding over six years yields 134%.

- hash factor = 1.2 (as stated in Section 3.1.1).

3.1.5 Data on Licensees that have Merged or Gone out of Business

The Bureau would receive reports on "dispositions" brought about by a license being reissued. Whenever a new license is issued to a firearms business (for example when a dealer sells out, or takes on a new partner) the firearms previously in the name of the old licensee must be transferred to the new licensee, and so reported. Estimates are that 10% of the 172,000 businesses change ownership each year, and an additional 12% of them go out of business. Information on the old licensee must be kept to provide a complete trace capability.
storage for changed licenses = (# of licensees) x (percent relicensed or gone out of business per year) x (information stored on each licensee + linking) x (years) x (compounded increase in licensees) x (hash factor)

= (172,000) x (.22) x (100 +16) x (6) x(1.34) x (1.2)

= 42,349,316 bytes

- # of licensees = 172,000 (as stated in Section 3.1.4).
- percent relicensed or gone out of business per year = 22%, as explained above.
- information on each licensee = 116 bytes (as explained in Section 3.1.4).
- years = 6 (as stated in Section 3.1.1)
- compounded increase in licensees = 134% (as calculated in Section 3.1.4).
- hash factor = 1.2 (as stated in Section 3.1.1).

Note for licensees that have gone out of business, existing regulations require the licensee to turn in to ATF all information on customers. If this customer information were to be entered into the system then additional storage would be needed; we have not included such storage in keeping with the philosophy that ultimate customer information would not be kept in the system.

3.1.6 Data on Guns Associated with Licensees that have Merged or Gone Out of Business

If a licensee is merged with another licensee then information on all guns associated with that licensee must be updated. In the file structure presented this update could be represented as follows:

```
manufacturer data on gun

Licensee A -> Licensee B -> Licensee C -> Licensee D -> .... Customer

(Before licensee B merges)
```

not kept in system
Hence when a merger occurs additional records must be kept. These are estimated as follows:

\[
\text{storage} = (\text{data per gun}) \times (\text{number of guns}) \times (\text{percent of guns affected}) \times (\text{years}) \times (\text{compounded increase in licensees})
\]

\[
= (50) \times (6,240,000 \times 1.13 + 10,000,000 \times 1.13) \times (0.10) \times (6) \times (1.34)
\]

\[
= 737,718,240 \text{ bytes.}
\]

- data per gun = 50, as calculated in Section 3.1.1 (using encoding)
- number of guns = 6,240,000 \times 1.13 (as calculated in Section 3.1.1) plus 10,000,000 \times 1.13 for used guns (as calculated in Section 3.1.2).
- percent of data affected = 10\%. Twenty-two percent of the licensees go out of business or merge each year. These are typically the smaller operations (the larger businesses being more stable) so these changing licenses would generate reports on additional dispositions of somewhat less than 22\% of the firearms entering the market each year. We estimate they account for 10\% of the commercial traffic.
- years = 6, as stated in Section 3.1.1.
- Compounded increase in licensees = 134\%, as calculated in Section 3.1.4.
3.1.7 Summary of Storage Needs

<table>
<thead>
<tr>
<th>Data Series</th>
<th>bytes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. data on new guns</td>
<td>15,231,000,000</td>
</tr>
<tr>
<td>2. data on used guns</td>
<td>8,136,000,000</td>
</tr>
<tr>
<td>3. data on thefts</td>
<td>27,000,000</td>
</tr>
<tr>
<td>4. data on licensees</td>
<td>32,082,816</td>
</tr>
<tr>
<td>5. data on licensees that have merged or gone</td>
<td>42,349,316</td>
</tr>
<tr>
<td>out of business</td>
<td></td>
</tr>
<tr>
<td>6. data on guns disposed of by licensees</td>
<td>737,718,240</td>
</tr>
<tr>
<td>that have merged or gone out of business</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>24,206,150,372</td>
</tr>
</tbody>
</table>

Several other factors may or will increase the storage required. Five such factors are:

1) Other data series, e.g., data on NFA firearms, ammunition, firearms imported by military personnel, and parts of firearms (frames or receivers); according to the proposed rules such data will also be kept. We have not included any storage for such data.

2) Searching techniques - We have assumed the data records are "hashed" using efficient techniques. Less efficient techniques may use more storage.

3) Additional linking information to facilitate faster accessing may be kept on each data item increasing storage required by 50%.

4) Additional data on used guns.

5) Additional bytes for possible larger size pointers.
3.1.8. Computer Storage Needed and Costs

Costs of secondary storage devices that would be appropriate for storing the estimated 24 billion bytes of information are presented below. The type and hence cost of the device depends somewhat on how rapid the response should be to trace request. One possibility is to have requests processed in a matter of minutes, much like in the NCIC system ("The NCIC & You", Dept. of Justice, FBI, January 1976). This would necessitate storing the data on disks, drums, or other direct-access storage devices. Another possibility is to have requests processed on an overnight basis. This may allow data to be stored on less expensive secondary storage. Trace requests from each day would then be handled in a batch-mode sequential processing of the data. A batch system would pose a problem for "priority requests" that require a relatively faster reply.

The size and intended uses of this data base makes many less expensive devices somewhat impractical. For example, storing this data on 2400 foot tapes at a density of 6250 bytes per inch and assuming 32,000 byte blocks with 0.6 inch interrecord gaps would require about 150 reels of tape.

Thus it appears that the most practical storage device would be disks. In determining costs, we consider two types of disk drives: a model 3330, which features a removable disk pack, and a model 3350 which has a non-removable disk pack that allows for faster access speed and higher density. Advances in technology can be expected to reduce hardware costs over the next decade. Hence to estimate costs of storage equipment six years from now, we take current prices and discount them 20%. Prices are listed for IBM equipment, not because we recommend it but simply as an example.
The devices below are presented as a sample of possibilities that would allow short turn around time and prioritizing of requests. These are not meant to be an exhaustive list.

The IBM 3330-11 disk drive, with removable disk packs

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage capacity per device:</td>
<td>200 megabytes</td>
</tr>
<tr>
<td>Number of units required:</td>
<td>123</td>
</tr>
<tr>
<td>Unit price:</td>
<td>$67,860 (first two units with controllers for six more units)</td>
</tr>
<tr>
<td></td>
<td>$57,610 (each additional pair of units up to four)</td>
</tr>
<tr>
<td>Total price</td>
<td>$3,759,500</td>
</tr>
<tr>
<td>Estimated price in 6 years (20% decrease)</td>
<td>$3,007,600</td>
</tr>
</tbody>
</table>

The IBM model 3350 disk drive, with fixed disk packs

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage capacity per device:</td>
<td>317.5 megabytes</td>
</tr>
<tr>
<td>Number of units required:</td>
<td>77</td>
</tr>
<tr>
<td>Unit price:</td>
<td>$62,500 (first two units with controllers for six more units)</td>
</tr>
<tr>
<td></td>
<td>$49,500 (each additional pair of units)</td>
</tr>
<tr>
<td>Total price</td>
<td>$2,060,500</td>
</tr>
<tr>
<td>Estimated price in 6 years (20% decrease)</td>
<td>$1,648,400</td>
</tr>
</tbody>
</table>

For the remainder of this study we will assume that the IBM 3350 type drive with nonremovable disks will be used for storage.
3.2 Computer Needs

To estimate the size and type of computer needed, we quantify the computations and load on such a system in terms of the number of transactions processed per year. We define a transaction as an access to a data record. Thus a user initiated action normally generates several transactions. For the proposed system there are three categories of user initiated action: query, data inputting and reports.

3.2.1 Transactions Per Year Associated with Queries

A major type of query to the system will be in response to a trace request from a law enforcement agency. Tracing charts the transfer history of a firearm from the manufacturer or importer through wholesale dealer to a retailer or first retail purchaser. Trace requests would be received by telephone, mail, TWX, or computer terminal. A graph of the number of tracings per year handled by ATF appears below.
In 1976 the Bureau traced 51,466 firearms. (The rise in the number of tracings in 1976 is attributed, in part, to the implementation of Operation CUE). Currently, the Bureau performs over 5000 tracings per month. Implementation of the regulations would result in more information becoming readily available for tracing. Local law enforcement agencies are likely to take advantage of this, such that use of this tracing service would increase substantially.

\[ \text{transactions for queries} = (\text{number of trace requests}) \times (\text{transactions per query}) \]
\[ = (200,000) \times (8) \]
\[ = 1,600,000 \]
- number of trace requests = 200,000. Projecting the number requested this year to what it will be when the system would be operational, e.g., in six years, we estimate 200,000. This figure includes a continued compounding increase in requests for traces of 20% per year, as in the past. The availability of such a system and expected increase in crime are expected to sustain that growth rate.

- Transactions per query = 8. Must perform one access to each of the gun records corresponding to each disposition plus one access to each licensee record for each transfer. Additional transactions would be performed if information on the manufacturer or thefts was desired.

3.2.2 Transactions Per Year Associated with New Gun Data Update

Each time a gun report is filed, that data must be entered into the system, validated, and linked to corresponding records, and in the case of incorrect reports, the data must be reentered.

transactions for new gun update = [(number of data entries per year) x (transactions per entry) + (% incorrect) x (number of data entries per year) x (transactions per entry)] x (compounded increase in sales)

= [(6,240,000 x 5) x (3 + 3) + (.05) x (6,240,000 x 5) x (3 + 3)] x (1.13)

= 222,113,000

- number of data entries per year = (6,240,000 x 5) is equal to number of guns sold times the number of reports per gun (one from the manufacturer plus four on dispositions).

- transactions per entry = (3 + 3). Adding one entry to the chain (see Section 3.1.6) would require updating the forward or backward pointers of entries already in the chain; we estimate 3 such accesses (one access to add entry, two to update entries in chain). An estimated 3 transactions would be needed to validate the data, e.g., check manufacturer, etc., or link to other chains.

- % incorrect = 5%. This assumes a 5% entry or reporting error rate.

- compound increase = 113%, as in section 3.1.1.

3.2.3 Transactions for Update of Used Gun Data

Data from reports that are filed on used guns must also be entered into the system.
transactions for used gun update = [(number of data entries per year) x (transactions per entry) + (% incorrect) x (number of data entries per year) x (transactions per entry)] x (compounded increase in sales)

= [10,000,000 x 2) x (3+3) + (.05) x (10,000,000 x 2) x (3+3)] x (1.13)

= 142,380,000

3.2.4 Transactions Per Year Associated with Licensee Data Update

As dealers merge or go out of business two types of data records must be updated: the data on licensees and the data on guns as described in Sections 3.1.5 and 3.1.6.

transactions for licensee data update = (number of dealers merging or going out of business) x (transactions per update of licensee data) x (compounded increase in licensees) + (update information of gun to be reassigned to merged company)

= (.22 x 172,000) x (2) x (1.34) + (6,240,000 + 10,000,000) x (.10) x (5) x (1.13)

= 9,277,011

- number of dealers merging or going out of business = (.22 x 172,000) as calculated in Section 3.1.4.

- transaction per update of licensee data = 2 - one access to add element in chain, one access to update last element in chain

- compounded increase in licensees = 134%, as calculated in Section 3.1.4.

- update information on guns to be reassigned:

(number of new and used guns) x (weighted by % of market) x (transaction to update) x (compounded increase in gun sales)

= (6,240,000 + 10,000,000) x (.10) x (5) x (1.13)

= 9,175,600

- number of transactions to update = 5, including one to add new merger entry (Section 3.1.5) and four to update pointers.

- compounded increase in new and used gun sales = 113%, as calculated in Section 3.1.1.

Note no transactions have been added for entering data on customers of licensees that have gone out of business.
3.2.5 Transactions per Year Associated with Theft Data Update

\[
\text{transactions} = (\text{number of thefts} + \text{number of recoveries}) \times (\text{transactions per theft update})
\]

\[
= (50,000 + 25,000) \times (3)
\]

\[
= 225,000
\]

-\text{transactions per theft update} = 3 \text{ - one update access and two pointer-change accesses.}

3.2.6 Transaction Per Year Associated with Generation of Reports (e.g., generation of report to pinpoint unusual traffic of firearms)

A variety of analytical reports could be produced from the accumulated data each year. For some reports, the data could be structured (with pointers) for efficient accessing and subsequent report-generation. Such reports might include: a list of all guns stolen in a particular year, or a list of all guns manufactured by a certain company. For other reports, major portions of data stored in the system would have to be examined to generate the report. An example of such a report is a list of all sites where gun sales have increased by 50% over the past year.

The number of transactions needed to produce an analytical report would have a high variance, depending on the nature of the report. We estimate that an average report would involve examining one percent of the data base (.01). Therefore, the number of transactions needed to generate reports each year can be estimated as follows:

\[
\text{transactions for reports} = (\text{number of reports per year}) \times (\text{transactions per report})
\]

\[
= 200 \times (\text{number of data records accessed})
\]

\[
= 200 \times [(0.01) \times (\text{total records in system})]
\]

\[
= 200 \times [(0.01) \times (\text{gun data records} + \text{theft data records} + \text{licensee data records} + \text{records of data on guns affected by mergers}]]
\]
= 200 \times \left[ (0.01) \times [(6,240,000 \times 5 + 10,000,000 \times 2) \times (6) \times (1.13) \\
+ (75,000) \times (6) \times (1.42) \\
+ [(172,000) + (172,000) \times (0.22) \times (6)] \times (1.34) \\
+ (6,240,000) \times 10,000,000 \times (1.13) \times (6) \times (1.34)] \right] \\
= 200 \times [(0.01) \times 495,853,360)] \\
= 991,706,720

- gun data records includes those for new and used guns (as discussed in sections 3.1.1 and 3.1.2)
- theft data records includes those on theft and recovery of guns (as discussed in Section 3.1.3.)
- licensee data records includes those on active licensees and those on licensees that have merged or gone out of business (as discussed in Sections 3.1.4 and 3.1.5.)
- records of data on guns affected by mergers includes those discussed in Section 3.1.6.

3.2.7 Summary of Transactions

<table>
<thead>
<tr>
<th>TYPE OF USER</th>
<th>NUMBER</th>
<th>ON LINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>tracing queries</td>
<td>1,600,000</td>
<td>yes</td>
</tr>
<tr>
<td>new gun data update</td>
<td>222,113,000</td>
<td>not necessary</td>
</tr>
<tr>
<td>used gun data update</td>
<td>142,380,000</td>
<td>not necessary</td>
</tr>
<tr>
<td>licensee data</td>
<td>9,277,011</td>
<td>not necessary</td>
</tr>
<tr>
<td>theft data update</td>
<td>225,000</td>
<td>not necessary</td>
</tr>
<tr>
<td>generation of reports</td>
<td>991,706,720</td>
<td>not necessary</td>
</tr>
</tbody>
</table>

TOTAL TRANSACTION PER YEAR 1,367,301,731

Note that certain of these transactions may be batched since fast response time may not be needed.

Several other factors may increase the number of transactions to be processed. Two of these are:
1) Entering data from reports on NFA firearms, ammunition, firearms imported by military personnel, and firearm parts will require additional transactions. We have not included transactions to enter these data series.

2) Whenever the space allocated for a segment of data overflows, transactions will be required to redistribute the data into additional segments and create pointers to them. We have not included transactions to handle this process.

3.2.8 Computer Needs and Costs

With a total of 1,367,301,731 transactions per year and a data base of 24 billion bytes the proposed system is comparable in these respects to several existing information systems, e.g., an airline reservation system (excepting for some difference in the volatility of the data), Hertz Rent-a-Car system, and others.* The computer capacity to support such systems is equivalent to an IBM 370/168. We would therefore estimate that a 370/168 or equivalent would be suitable for this application. Present purchase price (including a main frame, and enough core memory to support an operating system), is $2,426,500. Assuming a 50% reduction in the purchase price in six years yields an estimated cost of $1,213,250. To allow for back up, two systems may be run in parallel and hence, total costs for computers would be $2,426,500.

* See Section 8.0.
3.3 Telecommunications and Peripherals Needed

It is expected that law enforcement agencies will submit their trace requests to district ATF offices, who will in turn feed the requests to the data center. An initial approximation of the required telecommunications equipment comes from assuming that this would involve a network similar to ATF's portion of the Treasury Enforcement Computer System (TECS). The Bureau has about 60 telecommunications terminals, located in regional and district offices, connected up to the TECS center in San Diego. An estimated 250 additional terminals or key-to-disk devices will be required at the central site for data entry and report generation.

For terminals, key-to-disk devices, multiplexors, concentrators, and front end processors, we estimate average purchase costs of $2,000 per device, totalling $500,000. We estimate an additional annual expense of $250,000 for the use of telecommunications network.

For report generation, specialized data needs, and system maintenance, the computer system would also need various peripheral devices including printers, plotters, tape drivers, etc. We estimate these costs at $1,000,000; hence, with a 20% reduction in six years we estimate these costs at $800,000.
3.4 Computer Requirements

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>AMOUNT REQUIRED</th>
<th>PURCHASE PRICE</th>
<th>RENTAL/YEAR**</th>
</tr>
</thead>
<tbody>
<tr>
<td>STORAGE</td>
<td>24,206,150,372</td>
<td>$1,684,400</td>
<td>$494,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANNUAL MAINTENANCE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTRACT</td>
<td></td>
<td></td>
<td>$75,400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPUTER</td>
<td>1,367,301,731</td>
<td>$1,213,250</td>
<td>$363,975</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANNUAL MAINTENANCE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTRACT</td>
<td></td>
<td></td>
<td>$66,000</td>
</tr>
<tr>
<td>PERIPHERAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEVICES</td>
<td>$800,000</td>
<td>$240,000</td>
<td></td>
</tr>
<tr>
<td>(line printers,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tape drives,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>plotter, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANNUAL MAINTENANCE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTRACT</td>
<td></td>
<td></td>
<td>$43,520</td>
</tr>
<tr>
<td>TELECOMMUNICATIONS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>$500,000</td>
<td>$150,000</td>
<td></td>
</tr>
<tr>
<td>Network</td>
<td></td>
<td></td>
<td>$250,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>$1,683,395</td>
<td></td>
</tr>
</tbody>
</table>

*Telecommunications lines customarily cannot be purchased

**Monthly rental costs taken to be 1/40th of purchase price
4. Personnel Per Year

Personnel will be required to maintain data (e.g., enter, validate, and update data), respond to queries, generate reports, and maintain software, and hardware.

4.1 Personnel to Maintain New Gun Data

Each quarter the bureau would receive reports from each of the 172,000 licensees on an average of 6,240,000 dispositions of new guns along with reports on the manufacturing or importation of 1,560,000 firearms. ("Annual Report of the Bureau of ATF," Fiscal '76, Dept. of the Treasury). It is estimated by ATF that licensees representing 20% of this commerce have data processing facilities that would allow them to submit their quarterly reports on electronic medium (magnetic tape, floppy disks, etc.)

As the data series on new guns is large and represents a significant portion of the entry costs we will assume that ATF will be successful in requiring licensees to submit another 10% of the data in machine readable form, either via optical character recognition fonts or tape. Note we have not investigated the political or legal implications, or cost to the licensee of such a requirement but from a technical point of view, such a requirement results in 30% of the data being submitted in machine readable form hence reducing personnel required for data entry.

The remainder of the data (reports on dispositions and new guns) would arrive on paper forms and would require manual transcription into the data base.
Total personnel to Enter New Gun Data=

(personnel to enter gun data not in machine readable form) +
(personnel to open envelopes and preprocess) +
(personnel to enter machine readable data).

Personnel = personnel A + personnel B + personnel C

We calculate each of these components as follows:

personnel A = (amount of new gun data) x (time spent per entry)
= (number of new guns - portion reported in machine readable form)
  x (reports per gun) x (time spent per entry)
  x (compounded sales increase)
= (6,240,000 - (.3 x 6,240,000)) x (5) x (1 minute) x (1.13)
= 24,679,199 minutes
= 411,320 man hours
= 11,752 man weeks (assume a 35 hour week)
= 235 man years (assume a 50 week year)

- reports per gun = 5. For each gun there would be one manufacturer's
  report and four disposition reports.
- time spent per entry = 1 minute. We assume an average of 90 characters
  per entry (including characters for verification) and an average keystroke
  rate of 1 1/2 characters per second.*

(e.g. open envelopes and examine reports.)

personnel B = (number of forms) x (time spent per form) + (forms
  rejected) x (time per rejection)
= (688,000) x (4 minutes) + (10%** x 688,000) x (4 minutes)
= 3,027,200 minutes
= 50,453 hours
= 1442 weeks
= 29 man years

* According to the IRS public information officer, John Mannion, for data entry
  from individual tax returns the key stroke rate is about 1 per second. A study
  by BGS Systems, Inc. indicated rates of two strokes per second.

** Estimates provided by IRS are that 8% of the individual income tax returns
  contain errors causing them to be rejected.
- time spent per form = 4 minutes. This is the time spent to process paper work per form prior to data entry, and to filter out rejected forms.

- time per rejection = 4 minutes. This includes time to communicate to the sender the nature of the error, e.g., missing address, date of sale missing, etc. This communication may be by filling out a form and mailing it to the sender.

  personnel \( C = 10 \) people required to process the machine readable data (e.g., mount tapes, handle forms)

  Total personnel to enter new gun data = \( 235 + 29 + 10 \)

  = 274 man years.
4.2 Personnel to Maintain Used Gun Data

Each quarter the Bureau would also receive reports on an average 2,500,000 acquisitions and 2,500,000 dispositions of used guns. Since this activity occurs at the local dealer level, we estimate that 10% (as opposed to 30% for new guns) of these reports would be submitted on electronic medium. The remaining data would arrive on paper form and would require manual transcription into the data base.

\[
\text{personnel} = (\text{amount of used gun data}) \times (\text{time per entry}) \\
= (\text{number of used guns - portion reported in machine readable form}) \\
\times (\text{reports per gun}) \times (\text{time spent per entry}) \times (\text{compounded sales increase}) \\
= (10,000,000 - (0.1 \times 10,000,000)) \times 2 \times 1 \text{ minute} \times 1.13 \\
= 20,340,000 \text{ minutes} \\
= 339,000 \text{ hours} \\
= 9,686 \text{ weeks} \\
= 193 \text{ man years}
\]

- number of used guns = 10,000,000 (as discussed in Section 3.1.2) less 10% reported in machine readable form (as discussed below)
- reports per gun = 2. For each gun there would be one acquisition plus one disposition report.
- time per entry = 1 minute, as discussed in Section 4.1.1
- compounded sales increase = 113%, as computed in Section 3.1.1

We assume no additional people will be required to expedite processing of forms or handle machine readable data. This effort is included in manpower to process forms in Section 4.1.

4.3 Personnel to Enter Data on Thefts

\[
\text{personnel} = (\text{number of thefts + recoveries}) \times (\text{time spent per entry}) \\
= (50,000 + 25,000) \times 1.5 \text{ minutes} \\
= 112,500 \text{ minutes}
\]
= 1,875 hours
= 54 weeks
= 1 man year

4.4 Personnel to Enter Data on Licensees

\[ \text{personnel} = (\text{number of licensees which change}) \times (\text{time spent}) \times (\text{compounded increase in licensees}) \]

= (.22) \times (172,000) \times (2) \times (1.34)
= 101,410 minutes
= 1,690 hours
= 48 weeks
= 1 man year

4.5 Personnel to Reenter Incorrect Data

Assuming 5% of the data must be changed either because of incorrect report or entry of data:

\[ \text{personnel} = (\text{reentry \%}) \times (\text{manpower to enter data}) \]

= (.05) \times (235 + 193 + 1 + 1)
= 22 man years

- personnel to enter data = 430, the total manpower requirements computed in sections 4.1, 4.2, 4.3 and 4.4.

4.6 Personnel to Answer Queries, e.g., Trace Requests

These personnel would receive trace requests over a telephone or in the mail and enter them into the computer, via a terminal. The computer would return the history of dispositions of the gun, up to the final licensee. This information would then be reported (via mail or telephone) to the requesting law-enforcement agency.*

* We assume that contacting the dealer for the name of the gun buyer will remain the responsibility of the law-enforcement agency. Should ATF decide to perform this step of the trace, then their manpower requirements will increase.
personnel = (number of queries) x (time per query)

= (200,000) x (15)
= 3,000,000 minutes
= 50,000 hours
= 1429 weeks
= 29 man years
- number of queries = 200,000 (as calculated in Section 3.2.1).
- time per query = 15 minutes. This includes time to answer phone (or open mail request), key in query, and return call.

At present, ATF has 23 personnel handling traces (ATF News Release, April 1, 1978).

4.7 Personnel to Produce Reports

These personnel would produce the desired analytical reports. For some reports they would activate a standard report-generating program. For other nonroutine reports they would do the necessary analysis (e.g. statistical), write the appropriate computer programs and use the generated computer output to prepare a formal report.

The personnel effort in producing a report will vary widely depending on the type of report. We estimate that as much as six man months could be involved in producing a complex report where as little as one week would be involved in producing (executing a routine, checking, mailing, etc.) a simple report. We thus use as an average, 1.5 man months per report.

personnel = (number of reports) x (time spent per report)

= (200) x (1.5 months)
= 300 man months
= 25 man years
4.8 Personnel for Software and Hardware Maintenance

Based on this system's similarity to other information systems, we project about 30 to 60 people will be needed to support the normal functioning of the system. This includes manpower for operation of the central-site hardware, and manpower for maintenance of existing software.

4.9 Summary of Personnel Needed Per Year

<table>
<thead>
<tr>
<th>PERSONNEL</th>
<th>PERSONS/YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>enter new gun data</td>
<td>274</td>
</tr>
<tr>
<td>enter used gun data</td>
<td>193</td>
</tr>
<tr>
<td>enter data on thefts</td>
<td>1</td>
</tr>
<tr>
<td>enter data on licensee</td>
<td>1</td>
</tr>
<tr>
<td>reenter incorrect data</td>
<td>22</td>
</tr>
<tr>
<td>queries</td>
<td>29</td>
</tr>
<tr>
<td>reports</td>
<td>25</td>
</tr>
<tr>
<td>software and hardware</td>
<td>45</td>
</tr>
<tr>
<td>administrative at 1:10*</td>
<td>59</td>
</tr>
<tr>
<td>TOTAL</td>
<td>649</td>
</tr>
</tbody>
</table>

Several other factors may or will increase personnel required. These include:

1) If additional regulations requiring that data be submitted in machine readable form are not enacted, i.e., we have assumed 30% of the new gun data is reported in machine readable form. If this number should be 10% then an additional 140 personnel will be needed yearly.

2) Entry of data on NFA firearms, ammunition, firearms imported by military personnel, and parts (frames and receivers) will require additional personnel.

* We assume a simple ratio of 1:10 for administrative personnel and do not include administrators for administrators.
3) Administrative personnel have been assumed at a 1 to 10 ratio, that is, for every 10 workers, there exists one administrative personnel. This ratio may be low as it would include accountants, receptionists, telephone operators, supervisory personnel, etc.

4) We have assumed that personnel never get sick, are never tardy, and maintain maximum productivity seven hours per day, five days a week.

5) Updating the status of each licensee with regards to the annual renewal of his license will require additional personnel.
5. Summary of Operational Requirements and Costs

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>AMOUNT</th>
<th>PURCHASE COST</th>
<th>APPROXIMATE COST PER YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>STORAGE</td>
<td>24,206,150,372</td>
<td>$1,648,400</td>
<td></td>
</tr>
<tr>
<td>MAINTENANCE CONTRACT</td>
<td>1</td>
<td></td>
<td>$75,400</td>
</tr>
<tr>
<td>COMPUTER POWER</td>
<td>process transactions</td>
<td>$1,213,250</td>
<td></td>
</tr>
<tr>
<td>MAINTENANCE CONTRACT</td>
<td>(370/168)</td>
<td></td>
<td>$66,000</td>
</tr>
<tr>
<td>PERIPHERAL DEVICES</td>
<td></td>
<td>$800,000</td>
<td></td>
</tr>
<tr>
<td>MAINTENANCE CONTRACT</td>
<td>1</td>
<td></td>
<td>$43,520</td>
</tr>
<tr>
<td>TELECOMMUNICATIONS TERMINALS</td>
<td>60 remote trmns</td>
<td>$500,000</td>
<td></td>
</tr>
<tr>
<td>MAINTENANCE NETWORK</td>
<td>250 local trmns</td>
<td></td>
<td>$150,000</td>
</tr>
<tr>
<td>MAINTENANCE NETWORK</td>
<td>60 lines</td>
<td></td>
<td>$250,000</td>
</tr>
<tr>
<td>PERSONNEL FOR DATA ENTRY</td>
<td>491</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERSONNEL FOR QUERIES AND REPORTS</td>
<td>54</td>
<td></td>
<td>$16,422,500</td>
</tr>
<tr>
<td>PERSONNEL FOR SOFTWARE AND HARDWARE MAINTENANCE</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERSONNEL FOR ADMINISTRATION</td>
<td>59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL PERSONNEL</td>
<td>650</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$17,007,420</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Assumes decreases in costs of hardware as calculated in Section 3.2

2. Assume salary + benefits + overhead = $15,000, with 7% annual increase over next six years = $22,500 per man year, for data handling personnel and salary + benefits + overhead = $40,000 for technical and administrative personnel.
Note several factors could increase the costs of hardware. These include:

1. costs of back-up system.
2. additional linking information stored.
3. storing data on customers of licensees that have gone out of business.
4. sorting techniques.
5. assumed reductions in prices, due to technological advances, are not realized.
6 Implementation Costs

In this section we estimate costs of design, software implementation and initialization of the database, i.e., the costs incurred from the time that the decision is made to proceed to the time that the system is fully operational and replaces the current manual system.

6.1 Design Costs

The initial design costs for the proposed system include the items tabulated below.

<table>
<thead>
<tr>
<th>INITIAL DESIGN COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TASK</td>
</tr>
<tr>
<td>SPECIFICATION OF USER REQUIREMENTS</td>
</tr>
<tr>
<td>SPECIFICATION OF FUNCTIONAL REQUIREMENTS</td>
</tr>
<tr>
<td>DESIGN OF DATA BASE</td>
</tr>
<tr>
<td>SPECIFICATION OF HARDWARE AND SOFTWARE</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>
6.2 Software Costs

The costs of implementing software for the proposed system include the items tabulated below. These costs cover the initial effort to program, debug, and document the software. Additional costs of efforts to refine the system beyond its initial implementation are discussed in Section 6.3. The estimated costs for commercial personnel include benefits and overhead, and may be somewhat low for the level of personnel required (e.g., the average starting salary of a Sloan School management information systems graduate in 1977 was $24,000).
### SOFTWARE IMPLEMENTATION COSTS

<table>
<thead>
<tr>
<th>TASK</th>
<th>ESTIMATED MAN YEARS</th>
<th>COMMERCIAL BURDENED RATE FOR LEVEL OF PERSONNEL REQUIRED (SALARY, BENEFITS AND OVERHEAD)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase of Data Base Software and Report Generator</td>
<td>---</td>
<td>----</td>
<td>$150,000</td>
</tr>
<tr>
<td>Installation, Maintenance and Administration of Data Base Software</td>
<td>10</td>
<td>$60,000</td>
<td>$600,000</td>
</tr>
<tr>
<td>Extensions to Report Generator for Statistical Analysis</td>
<td>10</td>
<td>$60,000</td>
<td>$600,000</td>
</tr>
<tr>
<td>Development of Application Software</td>
<td>30</td>
<td>$60,000</td>
<td>$1,800,000</td>
</tr>
<tr>
<td>Installation and Maintenance of Communications Software</td>
<td>5</td>
<td>$60,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>Tuning and Adapting System Software</td>
<td>4</td>
<td>$60,000</td>
<td>$240,000</td>
</tr>
<tr>
<td>System Check-out and Acceptance Testing</td>
<td>30</td>
<td>$50,000</td>
<td>$1,500,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>$5,190,000</strong></td>
</tr>
</tbody>
</table>

Footnotes appear on next page.
1. Costs of hardware to support software development have not been included in these figures. It is assumed that hardware used to support the development staff will be incrementally acquired as a part of the operational system. Maintenance costs will be included in Section 6.3.
6.3 Costs of Data Initialization

Licensees would be required to submit reports beginning 90 days after the regulations are enacted. However, before the present manual system can be replaced, a total of six years of data must be gathered and stored in the computer system for it to be effective. The data cannot be loaded into the system until the software becomes operational. We assume that while the software is being implemented this data is gathered and prepared for loading into the final system, (e.g., for three years the data is placed on tapes, edited and validated). The three years of accumulated data can be loaded into the newly created system (not yet fully debugged). For the next three years data can be input into this system while debugging of the system also takes place. Hence in six years, simultaneously with the availability of the software, six years of data will be available.

The data initialization costs are as follows:

\[
\text{initialization} = (\text{annual costs for data entry and administrative personnel})
\]
\[
\times \text{ (years)}
\]
\[
= ($11,047,500 + $1,960,000) \times 6
\]
\[
= $78,045,000
\]

- Personnel costs = $13,007,500, as presented in Section 4.9.
- Years = 6, as discussed above and in Section 3.

We estimate that maintenance on hardware needed to support the software development and database initialization will cost a total of $150,000 over the six years. This assumes work will begin with a minimal configuration and equipment will be incrementally added.
6.4 Summary of Implementation Costs

<table>
<thead>
<tr>
<th>ITEM</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>INITIAL DESIGN OF THE SYSTEM</td>
<td>$1,100,000</td>
</tr>
<tr>
<td>SOFTWARE IMPLEMENTATION</td>
<td>$5,190,000</td>
</tr>
<tr>
<td>DATA INITIALIZATION</td>
<td>$78,045,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$84,335,000</strong></td>
</tr>
</tbody>
</table>
7.0 Cost summary

Based on all of the assumptions stated in this report, investment, startup and operational costs are as follows:

Investment:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase of hardware</td>
<td>$4,161,650</td>
</tr>
<tr>
<td>Purchase of database software</td>
<td>150,000</td>
</tr>
<tr>
<td>System design</td>
<td>1,100,000</td>
</tr>
<tr>
<td>System development and checkout</td>
<td>5,190,000</td>
</tr>
<tr>
<td><strong>Total Investment</strong></td>
<td><strong>$10,601,650</strong></td>
</tr>
</tbody>
</table>

Startup:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initialization of database over six years (personnel cost)</td>
<td>$78,045,000</td>
</tr>
<tr>
<td>Maintenance of hardware during startup</td>
<td>150,000</td>
</tr>
<tr>
<td><strong>Total Startup</strong></td>
<td><strong>$78,195,000</strong></td>
</tr>
</tbody>
</table>

Operating cost:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>$16,422,500</td>
</tr>
<tr>
<td>Hardware maintenance and communications cost</td>
<td>584,920</td>
</tr>
<tr>
<td><strong>Total Operating Cost</strong></td>
<td><strong>$17,007,420</strong></td>
</tr>
</tbody>
</table>
8.0 Costs and Requirements Associated with Other Systems

The following chart presents data, where available, on several systems which have been implemented.
Footnotes for "Existing Systems" Chart


2. Costs for data initialization are assumed to be included in the software implementation costs.


4. Updating of information in the data base is generally not a separate activity. Rather, it is done by the system users in conjunction with making queries to the data base.

5. The U.S. Army personnel system is actually two separate systems: one for enlisted personnel and one for officers. Because they were implemented and operated by the same organization, we have combined the statistics for the two systems in this report.

6. This figure includes effort required to adapt the system 2000 Data Base package acquired from a commercial vendor; it does not include the vendor's effort required to develop the System 2000 package, estimated to be 100 man years.

7. This figure includes 120 man years of effort for the original implementation on a Univac 70/6, plus 63 man years to convert the system for use on two Univac 1182's (conversion currently underway).

8. This figure includes 21 operational personnel (including telecommunications personnel) seven programmers, five system analysts, two managers, and one special agent.

9. These figures cover $1,200,000 for development in 1963 and 1964, plus 50 man years for new developments over the last 5 years.

10. The three machines are used for on-line reservation processing, batched-job processing, and experimental development.

11. This figure includes primarily personnel for applications-program development.

12. Estimates are that the original implementation costs were $25,000,000 - $35,000,000. Exact figures were not available.
APPENDIX A
DEPARTMENT OF THE TREASURY
Bureau of Alcohol, Tobacco and Firearms

FIREARMS REGULATIONS
PROPOSED RULES

REPORTING FIREARMS MANUFACTURE AND DISPOSITION

1. Section 178.130 Quarterly report of firearms manufactured. This proposed new section would require the use of Form ATF F 5300.11, Quarterly Firearms Manufacturing Report, to be submitted quarterly by licensed manufacturers of firearms. The quarterly report would identify the number of firearms manufactured within a 3 month period. This report, known presently as Form 4483-A, is submitted currently under the general reporting requirement in §178.126.

2. Section 178.131 Quarterly report of firearms disposition by licensees, licensed manufacturers, and licensed dealers. This proposed new section would require licensees to submit to the Director a quarterly report of their sales or other dispositions of firearms. However, reports of sales or other dispositions, by licensed manufacturers, licensed dealers, and nonlicensed dealers would not identify a nonlicensed transferee by name and address.

These two reports submitted to the Bureau would provide a readily available source of firearms information to produce tracing of firearms use in crimes. This information would also enable the Bureau to put resources more effectively into problem areas. The data would also provide important information on firearms entering commercial channels for the Bureau and other law enforcement agencies, particularly any unusual flow of firearms which would warrant investigation. This information also would provide invaluable assistance in identifying dealers who may be illegally diverting firearms and selling them to nonlaw.

MISCELLANEOUS AMENDMENTS

Miscellaneous amendments, which would further conform the regulations to the proposed changes, are as follows:

1. The table of sections to Part 178 would be amended to reflect the redesignation of §178.126a to §178.129 and the addition of §§178.128, 178.129, 178.130, and 178.131.

2. Several sections provide dates the regulations would become effective.

3. Existing sections affected by the proposed changes are designed to achieve clarity and readability. Minor editorial changes would also be made.

PUBLIC PARTICIPATION

ATF requests comments from all interested persons. Of particular interest are comments from State and local law enforcement officials, as well as other public officials, on the effects these proposed regulations would have on their law enforcement efforts. In addition, comments from the firearms industries would be helpful.
industry on costs of the proposed unique serial number and reporting requirements are especially requested.

All comments received before the closing date will be carefully considered, and if the closing date and too late for consideration will be treated as possible suggestions for future ATP action.

Copies of the proposed changes and of written comments are available for public inspection during normal business hours at the following location:

Public Reading Room, Room 4408, Federal Building, 12th and Pennsylvania Avenue NW, Washington, D.C.

Copies of the proposed forms may be requested from:


Any interested person who desires an opportunity to comment orally at a public hearing on these proposed regulations should submit his or her request, in writing, to the Director within the 60-day comment period. The Director, however, reserves the right to determine, in the light of all circumstances, whether a public hearing should be held.

**Drafting Information**

Officials from the Bureau of Alcohol, Tobacco and Firearms and from the Treasury Department jointly participated in developing the proposals, both on matters of substance and style.

**Authority**

Accordingly, under the authority contained in 18 U.S.C. 926, as amended (82 Stat. 1228), the Director proposes to amend 27 CFR Parts 178 and 179 as follows:

**PART 178—COMMERCE IN FIREARMS AND AMMUNITION**

1. The table of sections in 27 CFR Part 178, Subpart H, is amended to read as follows:

Subpart H—Records and Reports

Sec.

178.128 Recording and reporting theft, loss, and recovery of firearms.
178.129 Recording multiple sales or other disposition of pistols and revolvers.
178.130 Quarterly report of firearms manufactured.
178.131 Quarterly report of firearms disposition by licensed importers, licensed manufacturers, and licensed dealers.

2. Section 178.92 is revised to read as follows:

§ 178.92 Identification of firearms.

(a) Unique serial numbers. (1) After—[180 days after the final regulation is published in the Federal Register], each licensed importer or licensed manufacturer of each firearm imported or manufactured shall affix a unique serial number on—

(i) Each firearm, and

(ii) Each firearm frame or receiver which is not a component part of a complete firearm at the time it is sold, shipped, or otherwise disposed of by a licensed importer or licensed manufacturer.

(2) The unique serial number shall be engraved, cast, stamped (impressed), or otherwise conspicuously placed or caused to be engraved, cast, stamped (impressed), or placed on the firearm or receiver of a completed firearm in a manner not susceptible of being readily obliterated, altered, or removed. The individual serial number shall be placed on the frame or receiver and other marks shall be placed on the frame, receiver or barrel of the firearm. Required identification marks are:

(i) An individual serial number, not duplicating any serial number placed by the manufacturer or importer on any other firearm;

(ii) The model, if a model designation has been made;

(iii) The caliber or gauge;

(iv) The name or (recognized abbreviation) of the manufacturer and also, when applicable, of the importer;

(v) In the case of a domestically manufactured firearm, the city and State (or recognized abbreviation of the State) where the licensed manufacturer maintains the place of business;

(vi) In the case of an imported firearm, the name and country in which manufactured and the city and State (or recognized abbreviation of the State) of the importer; and

(vii) Any other means of identification of the licensed manufacturer or licensed importer as authorized by the Director upon receipt of a letter application, in duplicate. The letter application shall show the identification is reasonable and will not hinder the effective administration of this part.

(c) Destructive devices. In the case of a destructive device, the Director may authorize other means of identifying that destructive device upon receipt of letter application, in duplicate, from the licensed importer, licensed dealer, or licensed manufacturer, showing that engraving, casting, or stamping (impressing) the destructive device would be dangerous or impracticable.

3. The center heading of Subpart H, preceding §178.121, is amended to read as follows:

Subpart H—Records and Reports

§ 178.126a [Redesignated as §178.129]

4. Section 178.126a is redesignated to §178.129.

5. Section 178.128a is added to read as follows:

§ 178.128a Importation of destructive devices.

(a) Each destructive device imported or manufactured shall legibly identify—

(i) Each firearm; and

(ii) Each firearm frame or receiver which is not a component part of a complete firearm at the time it is sold, shipped, or otherwise disposed of by a licensed importer of licensed manufacturer.

(b) Identification marks shall be engraved, cast, stamped (impressed), or otherwise conspicuously placed or caused to be engraved, cast, stamped (impressed), or placed on the firearm in a manner not susceptible of being readily obliterated, altered, or removed. The individual serial number shall be placed on the frame or receiver and other marks shall be placed on the frame, receiver or barrel of the firearm. Required identification marks are:

(i) An individual serial number, not duplicating any serial number placed by the manufacturer or importer on any other firearm;

(ii) The model, if a model designation has been made;

(iii) The caliber or gauge;

(iv) The name or (recognized abbreviation) of the manufacturer and also, when applicable, of the importer;

(v) In the case of a domestically manufactured firearm, the city and State (or recognized abbreviation of the State) where the licensed manufacturer maintains the place of business;

(vi) In the case of an imported firearm, the name and country in which manufactured and the city and State (or recognized abbreviation of the State) of the importer; and

(vii) Any other means of identification of the licensed manufacturer or licensed importer as authorized by the Director upon receipt of a letter application, in duplicate. The letter application shall show the identification is reasonable and will not hinder the effective administration of this part.

(c) Destructive devices. In the case of a destructive device, the Director may authorize other means of identifying that destructive device upon receipt of letter application, in duplicate, from the licensed importer, licensed dealer, or licensed manufacturer, showing that engraving, casting, or stamping (impressing) the destructive device would be dangerous or impracticable.

4. The center heading of Subpart H, preceding §178.121, is amended to read as follows:

Subpart H—Records and Reports

§ 178.126a [Redesignated as §178.129]

4. Section 178.126a is redesignated to §178.129.

5. Section 178.128a is added to read as follows:
§ 178.128 Recording and reporting theft, loss, and recovery of firearms.

(a) General. Each licensee shall record and report the theft, loss, and recovery of a firearm, including names or receivers, as required by this section.

(b) Theft or loss. Upon the discovery of a theft or loss of a firearm from a licensee's inventory, or upon notification that a firearm shipped by the licensee (or a consignee) was stolen or lost prior to delivery to the consignee or the person responsible for the management of the licensed business shall:

(1) Within 24 hours, record all available information on ATF F 3310.8A, in accordance with the instructions on the form, including the circumstances surrounding the theft or loss; and report the information by calling the telephone number indicated on the form.

(2) Within 7 days, complete, sign under the penalties imposed by 18 U.S.C. 924 and 1001 and mail the preaddressed original of the form, and retain the copy as part of the permanent firearms records, and

(3) Within 7 days, make the appropriate entry in the firearms acquisition and disposition record required to be maintained under this subpart.

(c) Recovery of previously stolen or lost firearms. If after reporting a firearm as stolen or lost the licensee recovers possession of the firearm, or discovers that the firearm was not actually stolen or lost, the licensee shall follow the procedures set forth in paragraph (b)(1) through (3) of this section.

(d) Effective date. This section becomes effective on MARCH 21, 1978.

7. Section 178.131 is added to read as follows:

§ 178.131 Quarterly report of firearms disposition by licensed importers, licensed manufacturers, and licensed dealers.

(a) Licensed importer. Each licensed importer shall prepare and submit to the Director a quarterly report showing any disposition of firearms during the reporting period. If there is no disposition of firearms during the reporting period, a report showing no transactions during the reporting period shall be submitted to the Director. The quarterly report shall be prepared and submitted as prescribed in paragraph (d) of this section.

(b) Licensed manufacturer. Each licensed manufacturer shall prepare and submit to the Director a quarterly report showing disposition of firearms during the reporting period. If there is no disposition of firearms during the reporting period, a report showing no transactions during the reporting period shall be submitted to the Director. The quarterly report shall be prepared and submitted as prescribed in paragraph (d) of this section.

(c) Licensed dealer. Each licensed dealer shall prepare and submit to the Director a quarterly report showing disposition of firearms during the reporting period. If there is no disposition of firearms during the reporting period, a report showing no transactions during the reporting period shall be submitted to the Director. The quarterly report shall be prepared and submitted as prescribed in paragraph (d) of this section.

(d) Preparation and submission of report. Each licensee shall prepare a report on ATF F 0000.00 in duplicate and as instructed on the form, showing data on the description and disposition of the firearm and information about the mode of transportation to another licensee, including date transported, and name and address of the consignee. Dispositions to nonlicensees shall include the date of disposition and firearm description, but the report shall not contain the name and address of the nonlicensee. The report shall be signed by a person responsible for the management of the licensed business. The licensee shall prepare and submit the report, as instructed on the form, no later than 30 calendar days after the end of the 3-month reporting period. The report shall be signed under the penalties imposed by 18 U.S.C. 924 and 1001 by a person responsible for the management of the licensed business. A copy of the report shall be retained on the licensee's premises and shall be made available for inspection for 2 years following the date of preparation.

(e) Alternate reports. Notwithstanding paragraph (a), (b), or (c) of this section, the Director may authorize alternate reports submitted by a licensed manufacturer or licensed dealer showing only the total number of firearms disposed of during the reporting period, including the dates of disposition and the names of the purchasers. The Director may authorize alternate reports showing only the total number of firearms disposed of during the reporting period, including the dates of disposition and the names of the purchasers, in accordance with paragraph (a) of this section.

(f) Effective date. This section becomes effective on MARCH 21, 1978.

8. Section 179.102 is revised to read as follows:

§ 179.102 Identification of firearms.

(a) Unique serial numbers. (1) After ________________________ (180 days after the final regulation is published in the Federal Register), each licensed importer or licensed manufacturer of each firearm imported or manufactured shall affix a unique serial number on—

(i) Each firearm; and

(ii) Each firearm frame or receiver which is a component part of a firearm.
complete firearm at the time it is sold, shipped, or otherwise disposed of by a licensed importer or licensed manufacturer.

(2) The unique serial number shall be engraved, cast, stamped (impressed), or otherwise conspicuously placed or engraved, cast, stamped (impressed), or placed on the frame or receiver of a completed firearm in a manner not susceptible of being readily obliterated, altered, or removed. However, the unique serial number shall be inconspicuously placed on the frame or receiver by licensed manufacturers or importers of frames or receivers which are to be sent to another licensed manufacturer. Additionally, a licensed manufacturer or importer of frames or receivers to be sent to another licensed manufacturer may omit the sixth and seventh characters of the unique serial number if a model and caliber or gauge is unknown.

(3) The unique serial number format on the frame or receiver of the firearm shall consist of 14 characters as follows:

(a) The first three characters shall be assigned by the Director and shall be uppercase alphabetical characters, or combined uppercase alphabetical and numerical characters, identifying the importer or manufacturer.
(b) The fourth and fifth characters shall be the last two digits in a production or importation year.
(c) The sixth and seventh characters shall be assigned by the Director and shall be uppercase alphabetical characters, or combined uppercase alphabetical and numerical characters, identifying the firearm model and caliber or gauge.
(d) The eighth through fourteenth characters shall be serializations of the model that is produced or imported during a production or importation year.

The unique serial number may consist of not more than two lines, and the marking shall be readily legible and not smaller than 8-point Gothic without serifs. When the unique serial number appears on two lines, however, the first line shall consist of seven characters and the following seven characters shall appear not less than 1/8 millimeter from the first line.

(b) Identification marks before — [181 days] after the final regulation is published in the Federal Register.

(1) Each licensed importer or licensed manufacturer of each firearm imported or manufactured shall legibly identify —

(a) Each firearm; and

(b) Each firearm frame or receiver which is not a component part of a complete firearm at the time it is sold, shipped, or otherwise disposed of by a licensed importer or licensed manufacturer.

(2) Identification marks shall be engraved, cast, stamped (impressed), or otherwise conspicuously placed or caused to be engraved, cast, stamped (impressed), or placed on the firearm in a manner not susceptible of being readily obliterated, altered, or removed. The individual serial number shall be placed on the frame or receiver, and other marks shall be placed on the frame, receiver, or barrel of the firearm. Required identification marks are:

(i) An individual serial number, not duplicating any serial number placed by the manufacturer or importer on any other firearm;
(ii) The model, if a model designation has been made;
(iii) The caliber or gauge;
(iv) The name (or recognized abbreviation) of the manufacturer and also, when applicable, of the importer;
(v) In the case of a domestically-manufactured firearm, the city and State (or recognized abbreviation of the State) where the licensed manufacturer maintains the place of business;
(vi) In the case of an imported firearm, the name and country in which manufactured and the city and State (or recognized abbreviation of the State) of the importer; and
(vii) Any other means of identification of the licensed manufacturer or licensed importer as authorized by the Director upon receipt of a letter application, in duplicate. The letter application shall show the identification is reasonable and will not hinder the effective administration of this part.

(c) Destructive devices. In the case of a destructive device, the Director may authorize other means of identification that destructive device upon receipt of letter application, in duplicate, from the licensed importer, licensed dealer, or licensed manufacturer, showing that engraving, casting, or stamping (impressing) the destructive device would be dangerous or impracticable.


Rex D. Davis, Director.


Richard J. Davis, Assistant Secretary of the Treasury.

(FR Doc. 78-7303 Filed 3-18-78; 2:10 pm)

[4810-31] [27 CFR Parts 47, 178, and 179] (Notice No. 325)

FIREARMS REGULATIONS

AGENCY: Bureau of Alcohol, Tobacco and Firearms (ATF).

ACTION: Notice of proposed rulemaking.

SUMMARY: This notice proposes that (1) importers and certain military members of the Armed Forces submit a Federal firearms license report by telephone information on firearms receipt and disposition when requested by ATF. This proposal would also allow dealers to return firearms for repair or replacement to their manufacturer or importer without having to obtain a copy of the manufacturer or importer's license, and that copies of licenses, when required, would be retained as part of the licensees' permanent records, enabling ATF officers to verify compliance with this proposed amendment. Additionally, miscellaneous, clarifying and editorial changes are proposed. The proposal would improve ATF's administration and enforcement of federal firearms laws.

DATE: Comments must be submitted on or before May 22, 1978.

ADDRESS: Send comments, in duplicate, to: Director, Bureau of Alcohol, Tobacco and Firearms, Washington, D.C. 20226, Attention: Regulations and Procedures Division.

FOR FURTHER INFORMATION CONTACT:

J. A. Hunt or A. N. Stickney, Research and Regulations Branch, 202-566-7626.

SUPPLEMENTARY INFORMATION:

PROPOSED CHANGES

The sections under 27 CFR Parts 47, 178, and 179 with proposed changes are as follows:

IMPORTATION

Sections 47.42, 47.45, 178.112, 178.113, 178.114, 179.111, 179.112, 179.113, and 179.142 on the use of Forms 6—Part I, 5—Part II, and 6A for importations, would be amended.

The proposed importation regulations would require that a one-time importation of a stated amount of firearms, implements of war, and ammunition be made under a single authorization. Forms 6 and 6A would become one multi-use form: Proposed ATF F 7570.3. The proposed form would serve as (1) an application to import, (2) a permit, (3) a certification of release from customs custody, and (4) a verification of importation by all Federal firearms licensees. This proposed form would replace the current Federal firearms licensees, military members of the U.S. Armed Forces, and U.S. Customs Ser-
PROPOSED RULES

Section 178.94. At the present time, licenses selling or otherwise disposing of firearms or ammunition to other licensees are required to be attested by ATF, licensed Firearms importers, or persons licensed as importers. In lieu of a letter request, the Director may require use of a Form ATF F 7560.8, Application to Transport Interstate or to Temporarily Export Certain National Firearms Act (NFA) Firearms. While current regulations specify the information that a letter request should contain, regulations for international or temporary export are not. The Director may require information that is otherwise omitted from the letter. The form is designed to be used by both the applicant and ATF by providing uniformity and ease in preparing and processing all pertinent information. This form would also ensure that a person communicating by these National Firearms Act (NFA) firearms is in compliance with 18 U.S.C. 922(e) by meeting the written notice requirements to a contractor or common carrier in delivering a firearm for transportation in interstate or foreign commerce. Finally, an approved application must be forward to the Director before the firearm can be exported or transferred. A letter of authorization to move a firearm, required for transportation in interstate or foreign commerce, would also be made available for use.

In revising §178.94, it is further proposed that the following changes, in addition to some editorial changes, be made:

(1) Change the title to the section to read, "Transportation of Certain National Firearms Act (NFA) Firearms."

(2) Change the use of an approved application for compliance with §178.31 to "in the possession of the carrier during the transportation of the national firearm and would provide the carrier into proof of authorization for the movement of a national firearm, in compliance with 18 U.S.C. 922(d)."

Additionally, a person transporting an NFA firearm would be required to purchase an ATFP F 7560.8 that the interstate transportation or temporary export was completed and would forward the certified ATFP F 7560.8 to the Director.

In revising §178.94, it is further proposed that the following changes, in addition to some editorial changes, be made:

(1) Change the title to the section to read, "Transportation of Certain National Firearms Act (NFA) Firearms."

(2) Change the use of an approved application for compliance with §178.31 to "in the possession of the carrier during the transportation of the national firearm and would provide the carrier into proof of authorization for the movement of a national firearm, in compliance with 18 U.S.C. 922(d)."

Mississippi Amendments

Miscellaneous amendments, which would further conform the regulations to the proposed changes, are as follows:

1. Pub. L. 94-329, the Arms Export Control Act of 1976, repealed section 414 of the Mutual Security Act of 1954 although all determinations, authorizations, regulations, orders, contracts, agreements, and actions issued, undertaken, or entered into under section 414 of the Mutual Security Act of 1954 continue in force and effect until modified, revoked, or superseded by appropriate action. This law primarily controls the International Traffic in Arms into and from the United States. As a result, §§47.1, 47.2, 47.22, 47.44, 47.54, 178.2, 178.114, and the center heading preceding §§178.112, 178.116, and 178.193 would be amended to replace any reference to the "Mutual Security Act of 1954" with the "Arms Export Control Act of 1976." Section 47.57 would be amended to refer to the Arms Export Control Act of 1976. Since the Arms Export Control Act of 1976 increases the fine for violations to $100,000. §§47.61 and 47.62 would be amended to reflect the statutory change.

2. The table of sections to Part 47 would be amended to reflect a center-heading change preceding §47.41, a title change to §47.63, and to supply an updated citation of authority. The table of sections to Part 178 would be amended to reflect a title change to §§178.28 and 178.114, as well as the center-heading change preceding §178.121; and to supply and updated citation of authority. The table of sec-

FEDERAL REGISTER, VOL. 43, NO. 55—TUESDAY, MARCH 21, 1978
tions to Part 179 would be amended to reflect a title change to §179.112, as well as the center-heading change following §179.121; and a title change to §179.193 which would read, "Arms Export Control Act" instead of "Mutual Security Act". At the end of the table of sections to Part 179, the citation of authority would be updated.

3. Add and revise some meanings of terms in §§47.11, 178.11, and 178.11, as part of a program to standardize certain terms throughout Title 27 of the Code of Federal Regulations.

4. All new and revised forms would conform to the Bureau's subject classification coding system (for example, ATF F 5300.11 and ATF F 7570.3 in lieu of ATF Form 4483-A and ATF Forms 8 or 6A, respectively). All references to the proposed forms, appearing in parentheses, are being used as explanatory items.

5. The provisions in §178.112 pertaining to an "Importation List" would be eliminated since there is no need for its compilation.

6. The majority of the sections affected by the proposed changes would be revised to achieve clarity and readability. Minor editorial changes would also be made.

**PUBLIC PARTICIPATION**

ATF requests comments from all interested persons. All comments received before the closing date will be carefully considered. Comments received after the closing date and too late for consideration will be treated as possible suggestions for future ATF action.

Copies of the proposed changes and of written comments are available for public inspection during normal business hours at the following location:

Public Reading Room, Room 4408, Federal Building, 12th and Pennsylvania Ave. NW, Washington, D.C.

Copies of the proposed forms may be requested from:


Any interested person who desires an opportunity to comment orally at a public hearing on these proposed regulations should submit his or her request in writing to the Director within the 60-day comment period. The Director, however, reserves the right to determine, in the light of all circumstances, whether a public hearing should be held.

**DRAFTING INFORMATION**

Officials from the Bureau of Alcohol, Tobacco and Firearms and from the Treasury Department jointly participated in developing the proposals, both on matters of substance and style.

**PROPOSED RULES**

**PART 47—IMPORTATION OF ARMS, AMMUNITION AND IMPLEMENTS OF WAR**

1. The table of sections to 27 CFR Part 47 Subpart E is amended to read as follows:

- **Subpart E—Importations Other Than Those Subject to Controls Under 27 CFR Parts 178 and 179**

2. Subpart F is amended to read as follows:

3. Authority. Accordingly, under the authority contained in 18 U.S.C. 926, as amended (82 Stat. 1226) and in 22 U.S.C. 2778 (90 Stat. 744), the Director proposes to amend 27 CFR Parts 47, 178, and 179 as follows:

§47.11 Meaning of terms.

- ATF officer. An officer or employee of the Bureau of Alcohol, Tobacco and Firearms (ATF) authorized to perform any function relating to the administration or enforcement of this part.

- Chemical agent. Customs officer. Any officer of the U.S. Customs Service or any commissioned, warrant, or petty officer of the Coast Guard, or any agent or other person authorized by law or designated by the Secretary of the Treasury to perform any duties of an officer of the U.S. Customs Service.

- **Machine gun. Permit.** The term "permit" means the same as "license" for the purposes of 22 U.S.C. 2778.

- Regional Director. Wherever used in this part shall mean a regional regulatory administrator as defined in this section.

  - Regional regulatory administrator. The principal ATF regional official responsible for administering regulations in this part.

- Section 47.22 is revised to read as follows:

§47.22 Forgings, castings, and machine bodies.

To be included in a partially completed state, such as forgings, castings, extrusions, and machined bodies of any of the articles enumerated on the Import List which have reached a stage in manufacture where they are clearly identifiable as arms, ammunition, and implements of war are considered to be articles for the purpose of section 38 of the Arms Export Control Act of 1976.

§47.34 [Amended]

- Section 47.34 is amended in paragraph (a) by deleting the phrase "26 CFR * * *" wherever it appears and by replacing it with "27 CFR * * *

- The center heading of Subpart E is amended by deleting the phrase "26 CFR * * *" wherever it appears and by replacing it with "27 CFR * * *"

§47.41 [Amended]

- Section 47.41 is amended in paragraphs (a), (c), and (d) by deleting the phrase "26 CFR * * *" wherever it appears and by replacing it with "27 CFR * * **

FEDERAL REGISTER, VOL. 43, NO. 55—TUESDAY, MARCH 21, 1978
Section 47.42 is revised to read as follows:

47.42 Application for permit.

Persons required to obtain a permit provided in §47.41 shall file with the Director of ATF F 7570.3 (Form 6—T 1), as instructed on the form and under the penalties imposed by U.S.C. 2778(c) and 18 U.S.C. 1001. The approved ATF F 7570.3 will be returned to the applicant and shall serve the import permit.

Section 47.43(c) is amended to read as follows:

47.43 Terms of permit.

(a) * * *

(b) * * *

(c) No amendments or alterations of previous entries may be made on the permit, except by the Director. No photostatic or other copy of a permit may be used to effect release in custody, unless certified by the Director.

Section 47.44(a) is amended to read as follows:

47.44 Permit denial, revocation or suspension.

(a) Import permits under this part may be denied, revoked, suspended, or revoked without prior notice whenever the Director finds the proposed importation to be inconsistent with the purpose or in violation of section 38 of the Arms Export Control Act of 1976 or the regulations in this part.

2. Section 47.45 is revised to read as follows:

47.45 Importation.

(a) An importer who imported articles into the United States, subject to the import procedures of this subpart, may get the released articles released from customs custody upon completion of Form 6—T 3 (Form 6A) as instructed on the form and upon furnishing the copies of the form to the customs officer releasing the articles.

The customs officer, after certifying the facts of the importation on Form 6—T 3 (Form 6A), shall forward a copy of Form 6—T 3 to the Director and return the other to the importer.

(b) Within 15 days of the date of the officer’s release from customs custody, the importer of the articles released shall forward to the Director a copy of Form 6—T 3 (Form 6A) on which shall be reported any error of discrepancy appearing on the form certified by the U.S. Customs Service.

13. Section 47.54 is revised to read as follows:

47.54 Administrative procedures inapplicable.

The functions conferred under section 38 of the Arms Export Control Act of 1976 are excluded from the operation of 5 U.S.C. Chapter 5, with respect to rulemaking and adjudications (5 U.S.C. 553, 554).

§47.56 [Amended]

14. Section 47.56 is amended in paragraph (a) by deleting the phrase “26 CFR * * *” where it appears and by replacing it with “27 CFR * * *”.

15. Section 47.57(a) is amended in the first sentence by deleting the phrase “26 CFR * * *” where it appears and by replacing it with “27 CFR * * *”. Furthermore, the last sentence in paragraph (a) is amended to read as follows:

§47.57 U.S. military firearms or ammunition.

(a) * * * This prohibition applies to military firearms and ammunition furnished on a grant basis to, or for which payment in full was not made by, a foreign government under the Lend-Lease Act of 1941, as amended; the Greek-Turkish Aid Act of 1947, as amended; the China Aid Act of 1948, as amended; the Mutual Defense Assistance Act of 1949, as amended; the Mutual Security Act of 1954, as amended; the Foreign Assistance Act of 1961, as amended; the Arms Export Control Act of 1967; or any other foreign assistance program of the United States.

§47.61 [Amended]

16. Section 47.61 is amended by deleting “$25,000” where it appears and by replacing it with the maximum fine for violations of “$100,000”.

§47.62 [Amended]

17. Section 47.62 is amended by deleting “$25,000” where it appears and by replacing it with the maximum fine for violations of “$100,000”.

18. Section 47.63 is revised to read as follows:

§47.63 Importing merchandise contrary to law; forfeiture.

Any person who fraudulently or knowingly:

(a) Imports or brings into the United States contrary to law any merchandise on the Import List; or

(b) Receives, conceals, buys, sells, or in any manner facilitates the transportation of merchandise that has been imported contrary to law—shall be fined not more than $10,000 or imprisoned not more than 5 years or both; and the imported merchandise, or the value of the merchandise, shall be forfeited to the United States.

(18 U.S.C. 545.)

PART 178—COMMERCE IN FIREARMS AND AMMUNITION

1. The table of sections to 27 CFR Part 178 is amended to read as follows:

§178.25 Transportation of certain National Firearms Act (NFA) firearms.

Subpart C—Administrative and Miscellaneous Provisions

Sec. 178.26 Transportation of certain National Firearms Act (NFA) firearms.

Subpart G—Importation

178.114 Importation by military members of the U.S. Armed Forces.


2. Section 178.2 is revised to read as follows:

§178.2 Relation to other provisions of law.

The provisions in this part deal with commerce in firearms or ammunition and are in addition to, and are not in lieu of, any other provision of law or regulations. For traffic in machine guns, destructive devices, and certain other firearms, see §172.28 and 27 CFR Part 179. For statutes on the registration and licensing of persons engaged in the business of manufacturing, importing, or exporting firearms, ammunition, or implements of war, see section 38 of the Arms Export Control Act of 1976 (22 U.S.C. 2778) and regulations at 27 CFR Part 47. For statutes on nonmailable firearms, see 18 U.S.C. 1715 and implementing regulations.


3. Section 178.11 is amended by deleting the term “Regional Commissioneer” where it appears; and is further amended to read as follows:

§178.11 Meaning of terms.

Assistant Regional Commissioner. Wherever used in this section shall mean a regional regulatory administrator as defined in this section.

ATF officer. An officer or employee of the Bureau of Alcohol, Tobacco and Firearms (ATF) authorized to perform
any function relating to the administration or enforcement of this part.

Commissioner. Wherever used in this part shall mean the Director as defined in this section.

Customs officer. Any officer of the U.S. Customs Service or any commissioned, warrant, or petty officer of the Coast Guard, or any agent or other person authorized by law or designated by the Secretary of the Treasury to perform any duties of an officer of the U.S. Customs Service.

Director. The Director, Bureau of Alcohol, Tobacco and Firearms, the Department of the Treasury, Washington, D.C. 20228.

National Firearms Act firearms or NFA firearms. Any firearm as defined in 27 CFR Part 179, Subpart B (26 U.S.C. 5845(a) through (g)).

Regional regulatory administrator. The principal ATF regional official responsible for administering regulations in this part.

Surplus military firearm. Any firearm that was acquired by a regular or irregular military force of a nation for the use of its soldiers, including any firearm originally manufactured for commercial use but which subsequently was acquired by the military force.

United States. The States, the District of Columbia, the Commonwealth of Puerto Rico, and the possessions of the United States (not including the Canal Zone), unless otherwise expressly defined.

4. Section 178.28 is revised to read as follows:

§ 178.28 Transportation of certain National Firearms Act firearms.

(a) A person desiring to transport in interstate or foreign commerce, or to temporarily export, destructive devices, machine guns, short-barreled shotguns, or short-barreled rifles shall apply on ATF F 7560.8, executed under the penalties of perjury and as instructed on the form, and shall receive approval from the Director before the proposed movement is made.

(b) The Director may approve a properly executed ATF F 7560.8 to transport in interstate or foreign commerce certain NFA firearms if the Director determines that the transportation is reasonably necessary, consistent with public safety, and in conformance with State and local law. Upon approval or disapproval, the processed ATF F 7560.8 will be returned to the applicant.

(c) A copy of ATF F 7560.8 shall be furnished to the common or contract carrier performing the approved transportation in interstate or foreign commerce. The common or contract carrier shall retain the furnished copy of ATF F 7560.8 while transporting or shipping the designated firearm in order to meet the provisions of 18 U.S.C. 922(f) and 27 CFR 178.31(e).

(d) Authorization for the transportation of the firearm is limited to the specified dates and locations on ATF F 7560.8. If the firearm for any reason is not in transit during the authorized return period, the authorization is automatically revoked. Any further movement of the firearm would require another application.

(e) Within 7 days of completing an interstate transport or temporary export of a NFA firearm approved for movement, the person who received authorization shall certify on ATF F 7560.8 that the movement was completed on a given date and shall mail the certificated copy of the form to the Director.

(f) If an approved ATF F 7560.8 expires before the firearm is transported in interstate or foreign commerce, or if the approved ATF F 7560.8 is unused or revoked before the expiration date, the person who received authorization on the approved ATF F 7560.8 shall mail it immediately to the Director.

(g) Authorization granted by this section does not extend to import relief from any other statutory or regulatory provision relating to firearms.

(h) A licensed manufacturer, licensed importer, licensed dealer who is a special (occupational) taxpayer qualified under 26 U.S.C. 5801 need not obtain authorization from the Director to transport in interstate or foreign commerce firearms as specified by the special tax payment. A licensed collector qualified under 26 U.S.C. 5801 need not obtain authorization if the firearm to be transported is a curio or relic.

5. Section 178.31 is revised to read as follows:

§ 178.31 Transporting or shipping firearms approval and ammunition via common or contract carrier.

(a) Any person transporting or shipping by common or contract carrier any package containing a firearm or ammunition in interstate or foreign commerce to any person shall give written notice to the carrier unless the firearm or ammunition is to be sent to a licensed importer, licensed manufacturer, licensed dealer or licensed collector.

(b) Any passenger who owns or legally possesses a firearm or ammunition being transported abroad any common carrier for movement with the passenger in interstate or foreign commerce may deliver the firearm or ammunition into the custody of the pilot, captain, conductor or operator of the common or contract carrier for the duration of that trip without violating any provisions of this part.

(c) No common or contract carrier shall transport or deliver in interstate or foreign commerce any firearm or ammunition with knowledge or reasonable cause to believe that the shipment, transportation, or receipt of any firearm or ammunition would be in violation of this part. This paragraph, however, is not applicable to the transportation of firearms or ammunition in bonded shipment under U.S. Customs Service laws and regulations.

§ 178.44 [Amended]

6. Section 178.44 is amended by changing the following sentence where it appears in paragraphs (a) and (b):

"The application must be executed under the signatures of the principal ATF regional agent and the penalties imposed by 18 U.S.C. 924."

to read as follows: "The application must be signed under the penalties imposed by 18 U.S.C. 924 and 1001."

7. Section 178.94 is revised to read as follows:

§ 178.94 Sales or deliveries between licensees.

(a) General. A licensed importer, licensed manufacturer, or licensed dealer (transferor) selling or otherwise disposing of firearms or ammunition, a licensed collector (transferor) selling or otherwise disposing of curios or reliefs, to another licensee (transferee) shall verify the identity and licensed status of the transferee prior to making the transaction. Verification shall be established by the transferee furnishing to the transferor a certified copy of the transferee's license and by any other means as the transferor finds necessary. The certified copy of the license required by this section shall be maintained in the transferee's records as a part of the permanent records required by Subpart H of this part. A transferor who has the certified information required by this section may sell or dispose of firearms or ammunition to a transferee for not more than 45 days following the expiration date of the transferee's license.

(b) Exemptions from license copies. (1) A transferee who has furnished a certified copy of his license to a transferor need not furnish another certified copy of his license to a transferor during the term of the transferee's current license.
2) Licensees of multilicensed business organizations need not furnish certified copies of their licenses to their licensees operated by that organization.

3) Multilicensed business organizations need not furnish certified copies of their licenses to a transferee if they furnish, in lieu of a certified copy of such license, a certified list containing the name, address, license number, the expiration date of the license, each licensed location operated by that organization. A transferee may sell or otherwise dispose of firearms and ammunition as provided by this section to any licensee appearing on the list without requiring a certified copy of a license.

4) A licensed manufacturer or licensed importer need not furnish a certified copy of its license to another licensee if a firearm is being returned for the purpose of repair or replacement with a firearm of the same kind and type, and the licensed manufacturer or licensed importer's name appears on a list compiled by the Bureau and published annually.

8. Section 178.112 is revised to read as follows:

78.112 Importation by a licensed importer.

(a) General. A licensed importer (as defined in §178.11) may import or bring into the United States firearms or ammunition only (1) if the Director authorizes the importation of the firearm or ammunition, and (2) if the licensed importer complies with the requirements of this section.

(b) Execution of permit application. To import or bring a firearm or ammunition into the United States, a licensed importer shall file with the Director an application for a permit to import or bring firearms or ammunition. The application shall be submitted on ATF Form 7570.3, Part 1, (Form 6—Part 1), as instructed on the form and signed by the importer. The application shall be submitted to the Director on or before the date the firearm or ammunition is brought into the United States. A licensed importer shall also furnish information establishing that the firearm or ammunition is:

(1) Being imported or brought in for scientific or research purposes;
(2) For use in connection with U.S. military competition or training under 10 U.S.C. Chapter 401;
(3) An unserviceable firearm, other than a machine gun, imported or brought in as a curio or museum piece, including how the firearm was made unserviceable and why it is a curio or museum piece;
(4) Generally recognized as particularly suitable or readily adaptable to sporting purposes, excluding surplus military firearms, and not covered by the definition of a firearm in 26 U.S.C. §5845(a).

Approval of a properly executed ATF Form 7570.3 (Form 6—Part 1) by the Director shall serve as the permit for a single importation of the firearm or ammunition during the period of validity (usually 6 months) specified on the form. If the entire shipment cannot be completed as one importation, another application on ATF Form 7570.3 (Form 6—Part 1) shall be submitted to the Director for a permit to cover the unshipped balance. The new application may include firearms or ammunition in addition to the unshipped balance. If the Director disapproves ATF Form 7570.3 (Form 6—Part 1), he shall notify the licensed importer on the form of the basis for disapproval.

(c) Release from customs custody. A firearm or ammunition imported or brought into the United States by a licensed importer may be released from customs custody to the licensed importer upon presenting to a Customs officer an approved ATF Form 7570.3 (Form 6—Part 1) from the Director for the importation of the firearm or ammunition to be released. In obtaining release from customs custody of an authorized firearm or ammunition, the licensed importer shall complete ATF Form 7570.3, Part 4 (Form 6A), for each firearm or ammunition to be released. The Customs officer shall certify Part III of ATF Form 7570.3 (Form 6A), forward a copy to the Director, and return the other copies to the licensed importer.

(d) Verification of importation. Within 15 days of the date of release from customs custody, the licensed importer shall:

(1) Record on ATF Form 7570.3 the identification numbers required by §178.92;
(2) Prepare Part IV of ATF Form 7570.3 (Form 6A) as instructed on the form and sign the under the penalties imposed by 18 U.S.C. 924 and 1001.

(3) Forward to the Director a copy of ATF Form 7570.3 (Form 6A) on which shall be reported an entry for each firearm or firearm on Part I of ATF Form 7570.3 (Form 6A) certifying the Customs officer; and

(4) Post all required information regarding the importation in the records required to be maintained by the licensed importer under Subpart H of this part.

9. Section 178.113 is revised to read as follows:

§178.113 Importation by other licensees.

(a) General. No person other than a licensed importer (as defined in §178.11) shall engage in the business of importing firearms or ammunition. The Director, however, may permit a licensee, other than a licensed importer, to import or bring into the United States a firearm or ammunition under certain conditions, as required by paragraphs (b) through (h) of this section.

(b) Execution of permit application. To import or bring a firearm or ammunition into the United States, a licensee, other than a licensed importer, shall file with the Director an application for a permit on ATF Form 7570.3 (Form 6—Part 1), as instructed on the form and signed under the penalties imposed by 18 U.S.C. 924 and 1001. The licensee shall also furnish information establishing that the firearm or ammunition is:

(1) Being imported for the personal use of the licensee or on behalf of a nonlicensee (when the firearm is being imported for a nonlicensee, the name and address of the nonlicensee shall be stated);

(2) Being imported or brought in for scientific or research purposes;

(3) For use in connection with U.S. Armed Forces competition or training under 10 U.S.C. Chapter 401;

(4) An unserviceable firearm, other than a machine gun, imported or brought in as a curio or museum piece;

(5) Generally recognized as particularly suitable or readily adaptable to sporting purposes, excluding surplus military firearms, and not covered by the definition of a firearm in 26 U.S.C. §5845(a).

Approval of a properly executed ATF Form 7570.3 (Form 6—Part 1) by the Director shall serve as the permit for a single importation of the firearm or ammunition during the period of validity (usually 6 months) specified on the form. If the entire shipment cannot be completed as one importation, another application on ATF Form 7570.3 (Form 6—Part 1) shall be submitted to the Director for a permit to cover the unshipped balance. The new application may include firearms or ammunition in addition to the unshipped balance. If the Director disapproves ATF Form 7570.3 (Form 6—Part 1), he shall notify the licensee on the form of the basis for disapproval.

(c) Release from customs custody. In obtaining release from customs custody, the licenses shall complete ATF Form 7570.3 (Form 6—Part 1), as instructed on the form, and shall notify the copies to the Customs officer releasing the firearm or ammunition. The Customs officer shall certify Part III of ATF Form 7570.3 (Form 6A), forward a copy to the Director, and return the other copies to the licensee.

(d) Verification of importation. In obtaining release from customs custody, the licensee shall complete ATF Form 7570.3 (Form 6A), as instructed on the form, and shall notify the copies to the Customs officer releasing the firearm or ammunition. The Customs officer shall certify Part III of ATF Form 7570.3 (Form 6B), forward a copy to the Director, and return the other copies to the licensee.

(e) Upload of information. The licensed importer shall file with the Director on ATF Form 7570.3 (Form 6—Part 1), as instructed on the form, and signed under the penalties imposed by 18 U.S.C. 924 and 1001, a description of the firearm or ammunition and the date the firearm or ammunition was imported.

(f) Upload of information. The licensed importer shall file with the Director on ATF Form 7570.3 (Form 6—Part 1), as instructed on the form, and signed under the penalties imposed by 18 U.S.C. 924 and 1001, a description of the firearm or ammunition and the date the firearm or ammunition was imported.

(g) Upload of information. The licensed importer shall file with the Director on ATF Form 7570.3 (Form 6—Part 1), as instructed on the form, and signed under the penalties imposed by 18 U.S.C. 924 and 1001, a description of the firearm or ammunition and the date the firearm or ammunition was imported.

(h) Upload of information. The licensed importer shall file with the Director on ATF Form 7570.3 (Form 6—Part 1), as instructed on the form, and signed under the penalties imposed by 18 U.S.C. 924 and 1001, a description of the firearm or ammunition and the date the firearm or ammunition was imported.

FEDERAL REGISTER, VOL. 43, NO. 55—TUESDAY, MARCH 21, 1978
PROPOSED RULES

§ 178.114 Importation by military members of the U.S. Armed Forces.

(a) General. A military member of the U.S. Armed Forces may import or bring into the United States a firearm or ammunition upon receiving authorization from the Director. The military member filing an application shall meet the following conditions:
(1) The military member is on active duty outside the United States or has been on active duty outside the United States within the 60-day period immediately preceding the intended importation;
(2) The firearm or ammunition is being imported or brought to the place of residence of the military member; and
(3) The military member intends to use the firearm or ammunition for personal use.

(b) Execution of application. A military member shall file with the Director an application on ATF Form 7570.3, Part I (Form 6—Part II), following the instructions on the form and signed under the penalties imposed by 18 U.S.C. 924 and 1001, for authorization to import or to bring a firearm or ammunition into the United States. The following information shall also be furnished:
(1) Certification that the transportation, receipt, or possession of the firearm or ammunition to be imported would not violate any Federal law, State statute, or published ordinance at the place of his or her residence; and
(2) Statements that—
(i) The firearm or ammunition being imported is for personal use; and
(ii) If a firearm, is not a surplus military firearm and does not fall within the definition of a firearm under 26 U.S.C. 5845(a) and why it is generally recognized as particularly suitable for or readily adaptable to sporting purposes.
(3) A copy of the license, permit, certificate of registration, or firearm identification card, as applicable and as required by his or her State, to import into the United States a pistol or revolver for sporting purposes.

The Director may issue an authorization to import or bring into the United States a firearm or ammunition, which is generally recognized as particularly suitable for or readily adaptable to sporting purposes and is intended for personal use of the military member. If the Director approves ATF Form 7570.3 (Form 6—Part II), the approved form will be forwarded to the military member and shall serve as authorization for a single importation of the firearm or ammunition, which is valid for a period of 6 months as specified on the approved form. If the Director disapproves the application, he shall notify the military member of the basis for disapproval on ATF Form 7570.3, Part II (Form 6—Part II).

(c) Release from customs custody. Upon receipt of an approved form to import the firearm or ammunition, the military member shall release the firearm or ammunition from customs custody upon furnishing the approved ATF Form 7570.3 (Form 6—Part II) to the Customs officer releasing the firearm or ammunition. The Customs officer shall certify and forward a copy of ATF Form 7570.3 (Form 6A) to the Director and return the other copy to the military member. However, when a military member is on active duty outside the United States, the military member may appoint, in writing, an agent to obtain the release of the firearm or ammunition from customs custody for the military member. The agent shall furnish sufficient personal identification, the written authorization to act on behalf of the military member, and the approved ATF Form 7570.3 to the Customs officer.

(d) War souvenirs. Firearms determined by the Department of Defense to be war souvenirs may be imported into the United States by military members of the U.S. Armed Forces under the regulations and procedures as issued by the Department of Defense.

§ 178.124 [Amended]

11. Paragraph (g) of § 178.124 is amended by changing the phrase, “executed under the penalties of perjury,” where it appears in paragraph (g) to read “signed under the penalties imposed by 18 U.S.C. 924 and 1001.”

12. Section 178.126 is revised to read as follows:

§ 178.126 Furnishing transaction information.

Each licensee shall submit, when required by letter issued by the regional regulatory authority, a report of firearms transactions, for the period and the time specified in the letter. The report shall involve all record information required by this subpart, or a portion of that record information as specified by the regional regulatory administrator’s letter. When an ATF officer indicates a need for information concerning receipts and disposition of firearms, the licensee shall report by telephone the information as requested by the ATF officer.

13. Section 178.171 is revised to read as follows:

§ 178.171 Exportation.

Licensed manufacturers, licensed importers, and licensed dealers shall export firearms and ammunition according to the applicable provisions of section 38 of the Arms Export Control Act of 1976 (22 Stat. 744; 22 U.S.C. 2778). In addition, the licensee shall maintain showing:

(a) The manufacture of firearms and ammunition as required by this part,
(b) The acquisition of the firearms and ammunition as required by this part,
(c) The name and address of the foreign consignee of the firearms and ammunition,
(d) The date the firearms and ammunition were exported.

PART 179—MACHINE GUNS, DESTRUCTIVE DEVICES, AND CERTAIN OTHER FIREARMS

1. The table of sections to 27 CFR Part 179 is amended to read as follows:

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>179.111</td>
<td>Application procedure for registration of imported firearms</td>
</tr>
<tr>
<td>179.112</td>
<td>Application procedure for registration of imported firearms</td>
</tr>
<tr>
<td>179.113</td>
<td>Arm's Export Control Act</td>
</tr>
<tr>
<td>179.114</td>
<td>Subpart O—Other Laws Applicable</td>
</tr>
<tr>
<td>179.115</td>
<td>Assistant Regional Commissioner</td>
</tr>
<tr>
<td>179.116</td>
<td>Customs officer</td>
</tr>
</tbody>
</table>

2. Section 179.11 is amended to read as follows:

§ 179.11 Meaning of terms.

Assistant Regional Commissioner. Whenever used in this part shall mean a regional regulatory administrator as defined in his section.

Commissioner. Wherever used in this part shall mean the Director as defined in this section.

Customs officer. Any officer of the U.S. Customs Service or any commissioned, warrant, or petty officer of the Coast Guard, or any agent or other person authorized by law or designated by the Secretary of the Treasury to perform any duties of an officer of the U.S. Customs Service.

Director. The Director, Bureau of Alcohol, Tobacco and Firearms.
PROPOSED RULES

§179.112 Application procedure for registration of imported firearms.

(a) Application. Each importer shall prepare Form 2 (Firearms), in duplicate, as an accurate notice of firearms imported by him or her. The notice shall be executed under the penalties of perjury and shall set forth the following:

(1) The name and address of the importer;
(2) The special (occupational) tax stamp and the Federal firearms license identification numbers;
(3) The date of release from customs custody;
(4) The type, model, length of barrel, overall length, caliber, and gauge or size;
(5) Serial number;
(6) Other marks of identification of the firearm imported;
(7) The place where the imported firearm will be kept.

The importer shall file the original notice with the Director no later than fifteen (15) days from the date of arrival of the firearm in the United States. The copy of the notice shall be kept with the records required by Subpart I of this part at the premises covered by the importer's special (occupational) tax stamp.

(b) Registration. The timely receipt of this notice by the Director and a copy of ATF Form 7570.3 (Firearms) shall effect the registration of the firearm to the importer.

(c) Transfers. The requirements of this section, relating to the transfer of a firearm, are also applicable to the transfer of the imported firearms.

§179.122 Requirements.

(a) Imports. Persons engaged in the business of importing firearms are required by the Arms Export Control Act of 1976 (22 U.S.C. 2778) to register with the Director. (See 27 CFR Part 47.)

(b) Exports. Persons engaged in the business of exporting firearms under Part 47 or larger are subject to the requirements of a license issued by the Secretary of State. Applications for a license, prior to exporting firearms, shall be made to the Office of Munitions Control, Department of State, Washington, D.C. 20520.

§179.142 Stolen, lost, or destroyed documents.

When any Forms 1, 2, 3, 4, 5, 10 (Firearms), ATF Form 7560.8, and ATF Form 7570.3 (Firearms) which shows possession of a firearm, is stolen, lost, or destroyed, the person losing possession of the document shall immediately report to the Director the circumstances of the theft, loss, or destruction in detail. The report shall also include all known facts which identify the document. The Director will make an investigation, as appropriate, upon receipt of the report and may issue a duplicate document if circumstances warrant.

§179.193 Arms Export Control Act.

See section 38 of the Arms Export Control Act of 1976 (22 U.S.C. 2778), and the regulations in 27 CFR Part 47, for provisions relating to the registration of persons engaged in the business of manufacturing, importing, or exporting arms, ammunition, or implements of war.


Rex D. Davis,
Director.


Richard J. Davis,
Assistant Secretary of the Treasury.

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