NBS Special Publication 480-5

N

0

LEAA Police Equipment Survey of 1972, Volume V

Handguns and Handgun Ammunition



Law Enforcement Equipment Technology

microfiche

U.S. DEPARTMENT OF COMMERCE National Bureau of Standards



ACKNOWLEDGMENTS

We are grateful to the 445 police departments throughout the United States who contributed their time and knowledge to make this report possible. Special thanks go to the police departments whose officers and administrators helped the survey team during the developmental and testing phases of the work. In addition we thank Jacob J. Diamond, Chief of the Law Enforcement Standards Laboratory of the National Bureau of Standards (NBS), and Nicholas J. Calvano of the Measurement Engineering Division of NBS for expert advice concerning handguns and ammunition. The support and assistance of Lester D. Shubin, NILECJ, project monitor and consultant, is also gratefully acknowledged.

We thank the following members of the Technical Analysis Division who provided support: William L. O'Neal for his help in computerizing the sample selection and for helping to design and program the interactive recordkeeping system; Jenny L. Eldreth and P. Clare Peiser for helping maintain the computerized recordkeeping system; Sandra J. Mumford for supervising the coding/editing of the questionnaires; June R. Cornog for her advice, support, and help with initial interviews; Gail B. Hare for conducting pretest interviews; Diane R. Beall for typing the questionnaires; Suellen Halpin, Mary L. Friend, and Dwight F. Doxey for meking follow-up telephone calls; Lorraine S. Freeman for her administrative support; Karen Jackson, Cassandra Streeter, and Janice Davis for their help with questionnaire coding and recordkeeping; and Mary Hawkins and Jo Copeland for typing the report. Michael R. Vogt receives special thanks for his help in carrying out the computerized edit and tabulation of the data. We also gratefully acknowledge the help of Robert J. Cunitz in editing and reviewing the report. The development of this report was sponsored by the NLECJ Office of Research Programs, Geoffrey M. Alpan,. Director; Advanced Technology Division, Joseph T. Kochanski, Director.

NBS Special Publication 480-5

LEAA Police Equipment Survey of 1972, Volume V

Handguns and Handgun Ammunition

by

S. Bergman, E. Bunten, P. Klaus Institute for Applied Technology National Bureau of Standards Washington, D. C. 20234

NCJRS

JUL 27 1977

ACQUISITIONS

prepared by Law Enforcement Standards Laboratory Center for Consumer Product Technology National Bureau of Standards Washington, D.C. 20234

prepared for National Institute of Law Enforcement and Criminal Justice Law Enforcement Assistance Administration U.S. Department of Justice Washington, D. C. 20531



U.S. DEPARTMENT OF COMMERCE, Juanita M. Kreps, Secretary Dr. Sidney Harman, Under Secretary Jordan J. Baruch, Assistant Secretary for Science and Technology NATIONAL BUREAU OF STANDARDS, Ernest Ambler, Acting Director

Issued July 1977

Ø

Library of Co., gress Cataloging in Publication Data

Law Enforcement Standards Laboratory. LEAA police equipment survey of 1972.

(NBS special publication ; 480-1-480-7)

"CODEN: XNBSAV."

Ó

合

CONTENTS: v. 1. Ku, R., Bunten, E., Klaus, P. The need for standards, priorities for police equipment.—v. 2. Mumford, S. et al. Communications equipment and supplies.—v. 3. Klaus, P. and Bunten, E. Sirens and emergency warning lights. [etc.]

1. Police—Equipment and supplies—Collected works. I. National Institute of Law Enforcement and Criminal Justice. II. Title. III. Series: United States. National Bureau of Standards. Special publication; 480-1—480-7,

QC100.U57 no. 480-1-480-7 [HV7936.E7] 602'.1s [363.2'028] 74-28442

National Bureau of Standards Special Publication 480-5 Nat. Bur. Stand. (U.S.), Spec. Publ. 480-5, 83 pages CODEN:XNBSAV

U.S. GOVERNMENT PRINTING OFFICE WASHINGTON:

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (Order by SD Catalog No. C13.10:480-5). Stock No. 003-003-01747-7 Price \$2.20 (Add 25 percent additional for other than U.S. mailing).

્ર

èŋ,

CONTENTS

List of Ta	bles		IV
Foreword			VI
		\mathbf{V}	VII
			1
1.1.		Background	ī
1.2.	Sample	Design	$\hat{2}$
1.3.	Ouestic	onnaire Administration	4
1.4.		oment and Design of the Handguns DQ	5
1.5.	Charac	teristics of Subsample Groups	5
2. Oues	tion by C	Question Discussion	7
2.1.	Advice	to the Reader	7
2.2.	Discuss	승규는 그는 그들은 것은 것을 하는 것은 것을 하는 것을 하는 것을 하는 것을 수 있는 것을 가지 않는 것을 하는 것을 하는 것을 수 있는 것을 하는 것을 하는 것을 하는 것을 하는 것을 하는 것을	8
	2.2.1.	Characteristics of Respondents	8
	2.2.2.	그는 그는 그는 것 같아요. 그는 것 같아요. 이렇게 물건을 많이 많은 것 같아요. 그는 것 것 같아요. 그는 것 같아요. 그는 것 같아요. 것 같아요. 것 같아요. 것 같아요. 것 같아요. 것 같아요.	10
	2.2.3.	Characteristics of Handguns Used On Duty	12
		2.2.3.1. Caliber	13
		2.2.3.2. Revolvers/Automatics	14
		2.2.3.3. Model/Manufacturer	15
	n an trainig An traing the state	2.2.3.4. Barrel Length	15
	2.2.4.	Characteristics of Ammunition	17
		2.2.4.1. Characteristics of Ammunition Used	17
		2.2.4.2. Bullet Weight	17
		2.2.4.3. Ammunition Manufacturer	17
	2.2.5.	Off Duty Use of Handguns	19
	2.2.6.		2]
	2.2.7.	Problems Associated with Handgun Ammunition	23
Appendix	A. Hand	Iguns and Handgun Ammunition Questionnaire	an an Albana Arta an Albana Arta an Albana
Annendix		사람이 나는 것 같은 것 같아요. 이 가지 않는 것 같아요.	

言語

معاملين محمد المعلوم وي الح

بر المحمد (1977) - المحمد (1977) - المحمد (1977)

Ŷ.

LIST OF TABLES

 $\langle \vec{c} \rangle$

	승규는 것은 것은 것은 것을 가지 않는 것을 가지 않는 것을 가지 않는 것을 하는 것을 수 있다.	Page
Table 1.2-1.	Stratification categories	3
Table 1.2-2.	Number of police departments by region and type	3
Table 1.2-3.	Number of departments selected to receive the Detailed	
	Questionnaire: Handguns by region and department type	3
Table 1.3-1.	Number of departments returning acceptable Detailed	
	Questionnaires: Handguns and handgun ammunition	4
Table 1.5-1.	Activities handled by at least one-third of the	
1 40,00 2.00 2.0	departments by department type, and percent of total	
	departments having each activity	6
Table 1.5-2.	Descriptive data by department type (means)	6
Table 1.5-3.	Descriptive data by LEAA region (means)	7
Table i.	Rank of primary respondent for handguns questionnaire,	
Tuble I.	by department type	9
Table ii.	Number of years of law enforcement experience of	
Table II.	respondents to the handguns DQ, by department type	9
Table 1-1.	Percentages of departments having at least one officer	
1 abie 1-1.	그는 그는 그는 것 같은 것 같	
	using a handgun of the specified caliber; and percentages	
	of all officers in a particular department type using	11
Table 1-2.	handguns of these calibers on duty	τı
Table 1-2.	Numbers of officers in responding departments carrying	
	.38, .357, .45, 9mm, and other calibers of handguns on	
771 1 1 1 0	duty, by department type	11
Table 1-3.	Estimated numbers of officers carrying various calibers	
	of handguns in U.S. police departments on duty, by	
	department type	11
Table 2A/3A-1.	Percentages of departments with officers using more than	
	one caliber of handgun on duty, by department type	12
Table 2A/3A-2.	Percentages of handguns cited as most used or second	
	most used by caliber	13
Table 2A/3A-3.	Caliber of most used and second most used handgun,	
	by department type	13
Table 2A/3A-4.	Of those departments citing the .38 and the .357 as their	
0	most used handguns, the percentages listing .33, .357,	
	another caliber, or no second most used handgun	14
Table 2B/3B.	Percentages of most used handguns and second most used	
	handguns which were revolvers, by department type	14
Table 2C-1.	Percentages of responding departments using handguns of	
	specified manufacturers as their most used caliber	
	handgun, by department type	15
Table 2D/3D-1.	Percentages of most used and second most used handguns	
	with barrels of various lengths, by department type	16
Table 2D.	Percentages of most used caliber handguns of various	
	calibers with barrels of specified length (164,588	
	handguns, Question 2A)	16
Table 2D/3D-2.	Percentages of .38 and .357 caliber handguns with barrels	- - -
	of each specified length, when they were most used and	
	second most used handguns	17
Table 2E/3E-1.	Percentages of departments using each specified bullet	11
- anio "atil (11-11	type in their most used and second most used handgun	18

	형은 방법은 가지 않는 것은 것을 가지 않는 것을 하는 것을 수 있는 것을 하는 것을 했다.	Page
Table 2E/3E-2.	Of the departments using only one type of bullet for	
	their most used and second most used handguns,	
	percentages using specified bullet type	18
Table 2E/3E-3.	Percentages of departments using ammunition for their	
	most used and second most used handguns with specified	
	bullet weights	18
Table 2E/3E-4.	Percentages of departments using ammunition made by	
	each specified manufacturer with their most used and	
	second most used handgun	19
Table 2E/3E-5.	Of the departments using only one brand of ammunition	
	with their most used and second most used handgun,	70
	percentages using each specified brand of ammunition	19
Table 4.	Percentages of departments in each department type which	
	did not report officers' use of handguns off duty	20
Table 4/1.	Percentages of officers and percentages of departments	
	using specified calibers of handguns on duty and	
	off duty	21
Table 5-1.	Percentages of departments in each department type	
en en ser en en varen en ser Nacionale en en en en sere	listing at least one handgun problem	22
Table 5-2.	Of the 203 departments which listed at least one problem,	
	percentages citing specified problem	22
Table 6-1.	Percentages of departments in each department type	
	reporting at least one problem with handgun ammunition	24
Table 6-2.	Of the 117 departments citing at least one problem with	
	handgun ammunition, percentages citing each specified	
	problem	24

 \overline{Q}

FOREWORD

The Law Enforcement Standards Laboratory (LESL) of the National Bureau of Standards (NBS) furnishes technical support to the National Institute of Law Enforcement and Criminal Justice (NILECJ) program to strengthen law enforcement and criminal justice in the United States. LESL's function is to conduct research that will assist law enforcement and criminal justice agencies in the selection and procurement of quality equipment.

LESL is: (1) Subjecting existing equipment to laboratory testing and evaluation and (2) conducting research leading to the development of several series of documents, including national voluntary equipment standards, user guidelines, state-of-the-art surveys and other reports.

This document is a law enforcement equipment report developed by LESL under the sponsorship of NILECJ. Additional reports as well as other documents are being issued under the LESL program in the areas of protective equipment, communications equipment, security systems, weapons, emergency equipment, investigative aids, vehicles, and clothing.

Technical comments and suggestions concerning the subject matter of this report are invited from all interested parties. Comments should be addressed to the Law Enforcement Standards Laboratory, National Bureau of Standards, Washington, D.C. 20234.

> Jacob J. Diamond, *Chief* Law Enforcement Standards Laboratory

EXECUTIVE SUMMARY

I. SUMMARY OF BACKGROUND AND METHODOLOGY

A. Background

[°] Law Enforcement Standards Laboratory (LESL) was established in 1971 under the sponsorship of the NILECJ Advanced Technology Division (ATD).

° NILECJ asked the Behavioral Sciences Group of the National Bureau of Standards to develop and carry out a procedure to get information from the users of law enforcement equipment.

° "User" information would aid NILECJ in setting priorities for LESL programs and would provide some detailed information in support of the research to develop standards and guidelines.

° In addition, gathering information from the users would help to make police agencies aware of LESL and ATD.

° A nationwide mail sample survey was selected as the best procedure to collect user information.

° An Equipment Priorities Questionnaire (EPQ) and six Detailed Questionnaires (DQs) were developed and administered. A separate report was prepared for each of these seven questionnaires.

B. Design of Questionnaires

^d Questionnaires were developed in conjunction with NILECJ, LESL, and cooperating police departments. Questionnaires were pretested at various times with approximately 45 police departments.

° The EPQ was designed to provide information about priority needs for standards for various types of equipment.

° In addition, the EPQ asked for data about numbers of full- and part-time officers, activities performed in the department, budget, size of jurisdiction, etc.

° The six DQs (Alarms, Security and Surveillance Equipment; Communications Equipment and Supplies; Handguns and Handgun Ammunition; Sirens and Emergency Warning Lights; Body Armor and Confiscated Weapons; and Patrol Cars) were each developed separately.

° The DQs asked about kinds and quantities of equipment in use, problems with existing equipment, suggestions for improving equipment, needs for standards related to the equipment, etc. Although entitled Detailed Questionnaires, these questionnaires were designed to give an overview of the use of specific items of equipment.

C. Sample

° The population sampled was made up of all police departments listed in a computerized file compiled and maintained by the LEAA Statistical Service.

° Courts, correctional institutions, forensic labs, special police agencies, etc., were excluded.

° The sample was stratified by LEAA geographic region (10 regions) and by department type (7 department types: state police; county police and sheriffs; city departments with 1-9 officers; city departments with 10-49 officers; city departments with 50 or more officers, excluding the 50 largest cities; the 50 largest U.S. cities by population; and township departments). ° Overall, approximately 10 percent of the 12,836 departments in the population were selected as respondents (see table 1.2-2).

1

° The Equipment Priorities Questionnaire was sent to every sample department (1,386). Each Detailed Questionnaire was sent to all states, to all of the 50 largest cities, and to a randomly selected subsample of the main sample (about 530 departments received each DQ).

° Thus, states and the 50 largest cities were asked to fill in all 7 questionnaires. Each of the remaining 1,286 departments was asked to fill in the EPQ and 2 of the DQs.

° The sample for the Handguns DQ consisted of 528 departments (see table 1.2-3).

D. Questionnaire Administration

° Stringent control of administration was required.

° Introductory letters were sent to heads of departments asking cooperation.

° On June 1, 1972, questionnaire packages were mailed.

° In July 1972, follow-up by self-return post card was begun.

° In August 1972, follow-up by telephone was begun. Departments which had not returned questionnaires were called. Also, calls were made to clear up ambiguities in the returned questionnaires. About 1,300 calls were made. About 70 percent of the sample departments were called at least once.

° Each questionnaire was edited and coded by a specialized team to ensure consistency; it was then keypunched and tabulated.

° Completed questionnaires were accepted for tabulation through January 7, 1973.

E. Rates of Return

° Eighty-three percent of the 1,386 departments returned usable EPQs.

° Eighty-four percent of the 528 departments returned usable Handguns DQs.

° Between 81 and 85 percent of the other DQ subsamples returned usable questionnaires.

^e Highest rates of return (over 90%) were from states and the 50 largest cities.

[°] Lowest rates of return (less than 75%) were from counties and townships.

F. Characteristics of Departments Responding to the EPQ

[°] The activities most commonly carried out by the respondents were: serving traffic and criminal warrants (88%, traffic safety and traffic control (87%), and intradepartmental communications (87%).

° All of the responding 50 largest cities said they provided inhouse training and criminal investigations. This compared to 68 percent and 86 percent, respectively, of all responding departments.

° Only 13 percent of all respondents had crime laboratories. Seventy-three percent of the 50 largest cities and 55 percent of the states had crime laboratories.

° About three-fifths of the departments in all department types were providing emergency aid and rescue, ranging from 60 percent of the cities with 50 or more officers to 67 percent of the counties.

° Overall, the reported equipment budgets represented somewhat over 10 percent of the total budgets reported.

[°] Among department types, there was a wide range of total equipment expenditures, from a mean of about \$10,000 for cities with 1-9 officers to a mean of almost \$2.7 million for the 50 largest cities.

° One of the 50 largest cities reported an equipment budget of \$40 million.

° Overall, the 50 largest cities reported a mean of 2,491 full-time sworn officers. However, one of the 50 largest cities had 27 percent of all the full-time officers reported by that department type and another had about 12 percent.

G. Presentation of Data

[°] Data in this report are presented in two forms: text tables and full tables (app. B). Text tables do not always present a complete breakdown of the data.

° All tables (text and full) present the data in unweighted form (i.e., numbers and percentages of the responding departments from the sample for this questionnaire, not figures that have been weighted to expand the data to the total population of police departments in the U.S.).

[°] The sample selected for this questionnaire was not proportional to the total population of police departments. If decisions are to be made which require estimates of population figures, the appropriate extrapolation must be performed. (See app. B.)

II. SUMMARY OF RESULTS

A. On Duty Use of Handguns

° Ninety-four percent of the responding departments reported at least one officer using a ,38 caliber handgun on duty.

° Eighty-percent of the officers in those departments were using .38s.

° States (59%), townships (56%) and counties (55%) reported the lowest percentages of officers using .38s on duty, while the 50 largest cities (88%) and cities 50+ (81%) reported the highest percentages.

° Responding states (36%), townships (36%), and counties (40%) had the highest percentages of officers using .357 Magnum handguns on duty, while the 50 largest cities (9%) and cities 50+ (16%) had the lowest percentages.

° The .45 caliber and the 9mm were each being used by only 1 percent of the officers in the responding departments.

^o The 445 responding departments reported 179,891 officers carrying handguns.

^o Estimates of the total population of on duty handguns in the U.S. showed 70 percent of all officers using .38s and 25 percent using .357s.

B. Most Used and Second Most Used On Duty Handguns

° Departments were asked a series of questions about the handgun they had more of in their department than any other (most used handgun), and the same questions about the handgun caliber they had next most of in their department (second most used handgun).

° Forty-two percent of the responding departments reported using only one caliber of handgun.

° The answers about most used handguns represented about 91 percent of all the handguns reported.

° Ninety-nine percent of the handguns that were most used or second most used were either .38s or .357s (82% and 17% respectively).

° When the .38 caliber was listed as most used handgun, the .357 was the most likely caliber to be listed as second most used handgun, and vice versa.

° Only 8 of the 445 responding departments said that some caliber other than .38 or .357 was used by more of their officers on duty than any other.

° Almost all (99%) of the reported on duty handguns were revolvers.

[°] Ninety-seven percent of the responding departments were using only handguns produced by one or both of two manufacturers.

° Of all reported most used and second most used handguns, 80 percent had barrels 3-5 inches long.

° States reported a higher percentage of handguns with barrels longer than 5 inches (29%) than did any other department type.

ey Ra

C. Ammunition Used with Most Used and Second Most Used Handguns

[°] About half of the responding departments were using lead bullets in their most used handguns, 24 percent used hollowpoint and 15 percent used jacketed.

[°] About two-thirds of the departments were using only one bullet type for their most used handguns, and about half of these were using lead bullets exclusively. Thirteen percent were using hollowpoint exclusively.

° Seventy-three percent of the responding departments were using ammunition with bullet weights of 151-160 grains, and few departments were using ammunition with bullet weights higher than this.

° Fifty-nine percent of the responding departments were using only one brand of ammunition with their most used haudguns.

° Almost 3/4 of the departments that were using only one brand of ammunition were using ammunition made by one of two manufacturers (50% and 22%, respectively).

D. Off Duty Use of Handguns

° Only 78 percent of the responding departments answered the question concerning off duty use of handguns. This is not a good measure of the proportion of departments that use handguns off duty.

° Fifty-one percent of state departments did not answer the question on off duty use of handguns. Seventy-five percent or more of all other department types did give data about off duty handgun use.

° Of the 110,534 officers reported to be carrying off duty handguns, 86 percent were carrying .38s, 6 percent were carrying .357s, and 4 percent were carrying 9mm. This compares to 80 percent, 17 percent, and 1 percent respectively, of the 179,891 officers reported carrying on duty handguns.

° Of the 345 departments that reported off duty handgun use, 96 percent reported at least one officer using a .38 off duty; 29 percent reported .357 use; 30 percent reported 9mm use; 21 percent reported .45 use; 22 percent reported .32 use; and 23 percent reported .25 Automatic use. (Only two calibers of handguns were represented in more than 20% of the departments for on duty use.)

E. Problems With Handguns

3

° More than half of the responding departments had either had no problems with their handguns in the last 5 years (37%) or left this question blank (18%).

° Seventy-two percent of states and 72 percent of the 50 largest cities cited at least one handgun problem compared to 46 percent of all responding departments.

° The two most frequently mentioned problems were those associated with the cylinder and those associated with the hammer or firing pin.

F. Problems with Handgun Ammunition

° Only about one-fourth of the responding departments described a problem with handgun ammunition.

° A much higher percentage of the 50 largest cities (61%) listed a problem than any other department type.

° None of the 27 township departments and only 7 departments in cities with 1-9 officers listed an ammunition problem.

° Problems cited by one-fourth or more of the departments citing difficulties were: power/penetration too low (30%), knockdown power insufficient (27%), and primer (25%).

LEAA POLICE EQUIPMENT SURVEY OF 1972

5.7

Volume V: Handguns and Handgun Ammunition

S. Bergsman, E. Bunten, and P. Klaus

Institute for Applied Technology, National Bureau of Standards, Washington, D.C. 20234

The report outlines the methodology of and summarizes a portion of the data from the LEAA Police Equipment Survey of 1972. One of a series of 7 reports resulting from this nationwide mail survey of a stratified random sample of police departments, the present report summarizes the answers of 445 police departments concerning their officers' use of handguns and handgun ammunition: On-duty and off-duty use, types and calibers in use, and problems encountered. The data are presented by all responding departments and by seven department types.

Key words: Ammunition; handguns; police; police equipment; standards.

1. INTRODUCTION

1.1. Project Background

During the past several years, law enforcement agencies in the United States have become more aware of the importance of equipment in the performance of their duties. Much of their equipment had originally been designed for other uses and had to be modified. Other equipment items had to be used as given. No standards existed against which equipment performance could be measured nor were any standard test methods or procedures available. It has been difficult for agencies to compare the performance of equipment items. Recognizing this problem, the Law Enforcement Assistance Administration (LEAA) of the Department of Justice began a concentrated program in 1971, toward the improvement of law enforcement equipment.

As the first step in its program, LEAA in cooperation with the Department of Commerce established a Law Enforcement Standards Laboratory (LESL) at the National Bureau of Standards (NBS). The broad goal of LESL is to develop performance standards which can be promulgated by LEAA as voluntary aids for the selection of equipment by law enforcement agencies. Additionally, LESL is developing standard test methods and procedures, so that the relative performance of similar items may be evaluated by departments themselves.

In order to provide equipment user information for the program. the National Institute of Law Enforcement and Criminal Justice (NILECJ) of LEAA in 1971 asked the Behavioral Sciences Group of the Technical Analysis Division at NBS to gather information from the users of law enforcement equipment about their specialized equipment needs and problems. Although face-to-face interviews with a large sample of representatives from law enforcement agencies would have been desirable, time and manpower constraints led to the development of a nationwide mail sample survey having two general objectives: (1) To assist NILECJ in the establishment of priorities for LESL's standards development activities; and (2) to obtain detailed information about certain broad equipment categories in support of the research to develop standards and guidelines in these areas.

This report fulfills part of the second general objective. The associated survey questionnaire (see app. A) will be referred to as the Handguns and Handgun Ammunition Detailed Questionnaire (DQ). The remainder of the second objective is accomplished in the reports of the other five DQs: Alarms, Security and Surveillance Systems; Communications Equipment and Supplies; Sirens and Emergency Warning

1

8 h

Lights; Body Armor and Confiscated Weapons; and Patrol Cars. The first objective (above) is accomplished in the report on the Equipment Priorities Questionnaire (EPQ).¹

1.2. Sample Design

Although the objective of ATD is to serve all types of law enforcement agencies, this particular study was purposefully limited to police departments as the largest single group of law enforcement agencies with identifiable equipment needs. No attempt was made to survey correctional institutions, courts, forensic laboratories, or special police agencies such as park police, harbor patrols, or university police. The computerized directory of approximately 14,000 police agencies, compiled and maintained by LEAA's Statistics Division, provided the population from which the sample was drawn. Care was taken to exclude the double listings that existed for some agencies. (Details of the selection process are given in app. B of the Equipment Priorities Questionnaire.)

The final list of 12,842 departments was cross-stratified by LEAA geographic region and department type by the mutual agreement of NBS and NILECJ. The assignment of states to regions and the seven department types chosen for study are shown in table 1.2-1.

The breakdown of the population of police departments by cross-strata is exhibited in table 1.2-2. As can be seen from the table, there were no townships in regions 4, 6, 7, 8, 9, and 10. Almost 63 percent of the departments were city police, 43 percent having 1-9 full-time officers. County departments comprised about 24 percent of the population. By region, the smallest (region 10) contained only 3.4 percent of the police departments, while region 5, the largest, had 2.25 percent. The variation in the number of departments in a cell (region/department type combination) was even greater than that across the strata, i.e., the number of departments in each cell ranged from 0 to 1470.

The considerations discussed in the previous paragraph led to the sampling plan discussed briefly below. All of the state departments and the fifth largest city departments were included in the sample and were asked to complete all 6 DQs, i.e., they were sent the entire package of 7 questionnaires. For the remaining cells the variation in cell size presented a problem: If the same fraction of the entire population was to be selected from the members of each cell, a constant sampling fraction small enough to make the total sample manageable would yield too few sample units in small cells. To sole this problem, a fixed sample of 30 police departments/cell was chosen, wherever per fible, resulting in a different sampling fraction for each cell. A fixed sample size of 30 departments/cell was chosen to facilitate the equitable distribution of the 6 DQs. This plan resulted in sending the Handguns DQ to 528 departments.

The departments were selected randomly within each cell, from the total cell population, each department (other than the states and 50 largest cities) receiving 2 DQs. Thus, in cells having 30 sample units, the Handguns DQ was mailed to 10 departments; cells having fewer sample units were allocated proportionally fewer Handguns DQs. Table 1.2-3 presents the total sample for the Handguns DQ by region and department type.

Once the sample was selected, each sample unit was assigned a unique seven-digit identification number, coding region, type, and questionnaire assignment.

2

LEAA Police Equipment Survey of 1972, Vol. 1: The Need for Standards-Priorities for Police Equipment.

TABLE 1.2-1. Stratification categories

Department types	LEAA geographic regions
State police	1 = Conn., Maine, Mass., N.H., R.I., Vt,
County police and sheriffs	2 = N.J., N.Y.
City with 1-9 officers	3 = Del., Md., Pa., Va., W. Va., D.C.
City with 10-49 officers	4 = Ala., Fla., Ga., Ky., Miss., N.C., S.C., Tenn.
City with 50 or more officers	5 = Ill., Ind., Mich., Ohio, Wis., Minn,
The 50 largest U.S. cities ²	6 = Ark., La., N. Mex., Okla., Tex.
Township departments	7 = Iowa, Kans., Mo., Nebr.
이 같은 것 같은	8 = Colo., Mont., N. Dak., S. Dak., Utah, Wyo.
	9 = Ariz., Calif., Nev., Hawaii
	10 = Alaska, Idaho, Oreg., Wash.

Does not include the 50 largest cities. By population, U.S. 1970 census.

5

10 10 2

					LEAA	region					
Department type	1	2	3	4	5	6	7	8	9	10	Total
State	6	2	5	8	6	5	4	6	4	4	50 ¹
County	66	84	257	764	536	506	413	288	103	120	3,137
City (1-9 officers)	27	348	713	979	1,470	703	611	283	135	217	5,486
City (10-49 officers)	40	237	166	344	508	230	142	71	168	79	1,985
City (50+ officers)	60	64	36	83	119	46	23	19	87	17	554
50 largest cities	1	4	5	8	10	8	3	1	8	2	50
Township	629	349	362	•	234						1,574
Total	829	1,088	1,544	2,186	2,883	1,498	1,196	668	505	439	12,836

TABLE 1.2-2. Number of police departments by region and type

¹Questionnaires were actually sent to 56 state police departments since there were 6 state departments which listed 2 police agencies without reference to a common central agency. However, only one set of questionnaires was accepted from each of these six states as described in vol. 1, app. B, p. B-2.

	LEAA geographic region										
Department type	1	2	3	4	5	6	7	8	9	10	Total
State	6	2	5	8	6	5	4	6	4	4	50
County	10	10	10	10	10	10	10	10	10	10	100
City (1-9 officers)	9	10	10	10	10	10	10	10	10	10	99
City (10-49 officers)	10	10	10	10	10	10	10	10	10	10	100
City (50+ officers)	10	10	10	10	10	10	8	6	10	5	89
50 largest cities	1	4	5	8	10	8	3	1	8	Ż	50
Townships ²	10	10	10		10						40
Total	56	56	60	56	66	53	45	43	52	41 ~	528

TABLE 1.2-3. Number of departments selected to receive the Detailed Questionnaire: Handguns by region and department type

Questionnaires were actually sent to 56 state police departments since there were 6 state departments which listed 2 police agencies without geference to a common central agency. However, only one set of questionnaires was accepted from each of these six states. Township departments exist only in regions 1, 2, 3, and 5.

8

 Ω_c

1.3. Questionnaire Administration

From the beginning of the project, it was evident that stringent control would be required in administering the questionnaires to ensure a high rate of response. Computer-stored daily status records were input via a teletypewriter for each sample department. In general, the following procedure was used:

(1) Each department in the sample was mailed a letter, signed by the director of NILECJ, addressed to the head of the department. This letter introduced the survey and requested cooperation.

(2) About 1 week later, the questionnaire packages were mailed.

(3) Departments not returning the questionnaire within a month were identified by the computer and were sent a self-return post card requesting information as to the status of the questionnaires. Departments not receiving the questionnaire package were sent another; those not returning the post card were placed on a list for telephone follow-up.

(4) About a month and a half later, departments with which no contact had been made were called by telephone.

(5) Returned questionnaires were reviewed for completeness and either coded for keypunching or filed for telephone callback to supply missing data or to resolve ambiguities.

Considerable effort was expended to ensure a high rate of response, and this effort was rewarded with an 84 percent response for the Handguns DQ, and between 80 and 85 percent for each of the other questionnaires. In the course of the survey more than 70 percent of the sample departments were contacted at least once by telephone. More than 1,300 phone calls were made by the survey team.

The distribution of respondents (departments which returned usable Handguns DQs) is exhibited in table 1.3-1. The highest percentages of response were from the states and larger cities (89-94%), while counties and townships had the poorest response rates (under 75%).

	LEAA geographic region											
Department type	1	2	3	4	5	6	7	8	9	10	Total	Percent total sample
State ¹	6	2	5	8	6	5	3	6	3	3	47	94
County	5	7	6	8	8	5	8	9	10	7	73	73
City (1-9 officers)	7	10	7	9	9	7	9	8	9	9	84	85
City (10-49 officers)	9	8	7	9	10	8	9	10	10	9	89	89
City (50+ officers)	9	8	10	9	8	10	7	5	8	5	79	89
50 largest cities	1	3	4	7	8	8	3	1	8	2	45	90
Townships ²	7	9	7	•	4				-		27	68
Total	44	47	46	50	53	43	39	39	48	35	444	84
Percent total sample	79	84	77	89_	80	81	87	91	92	85	84	

TABLE 1.3-1. Number of departments returning acceptableDetailed Questionnaires: Handguns and handgun ammunition

Questionnaires were actually sent to 56 state police departments since there were 6 state departments which listed 2 police agencies without reference to a common central agency. However, only one set of questionnaires was accepted from each of these six states. Township departments exist only in regions 1, 2, 3, and 5.

69

1.4. Development and Design of the Handguns DQ

The survey plan and questionnaire design (of all seven questionnaires) evolved over a 12-month period. During this time, the survey team consulted at length with NILECJ equipment experts, LESL program managers, and equipment manufacturers. In addition, the officers and administrators of about 45 police departments served as consultants and/or as respondents for pretests of various versions of the questionnaires.

The Handguns DQ, in its final form, is reproduced in appendix A. This DQ asked respondents to identify the kinds of handguns being used by officers in the department both on duty and off duty; to fully describe the handgun used by more of their officers than any other and the handgun used by the next greatest number of officers; to provide data on the types of ammunition being used and to discuss problems with handguns and ammunition. The questionnaire was limited to general topics because: (1) It was not possible, considering the scope of the present survey, to explore in a detailed manner specific information about all types of weapons being used in the department; and (2) it was felt that the general data gathered in the present effort would provide important direction for research in the development of standards, the main objective of the survey.

1.5. Characteristics of Subsample Groups

The EPQ of the LEAA Police Equipment Survey requested data from each department about population served, physical size of jurisdiction served, type of jurisdiction, number of full- and part-time officers, approximate total, equipment, and personnel budgets during 1971, and activities handled by the department.

Table 1.5-1 presents a partial tabulation, by department type, of the responses to a checklist of 30 typical police activities by the respondents to the EPQ. (The EPQ respondents include, but are not limited to, the respondents to the Handguns DQ. See sec. 1.2.) The activities most frequently checked by all departments were: (1) serve traffic and criminal warrants (88%), (2) traffic safety and traffic control (87%), and (3) communications for own department (87%). The activity with the most consistent level across all department types was that of emergency aid and rescue, ranging from 60 percent (cities with 50+ officers) to 67 percent (counties).

Higher percentages of state and 50 largest city departments than of other departments were handling certain of the 30 activities. For example, all of the 50 largest city departments responding, and 98 percent of the responding state departments said that their departments provided police training for their own department. These compare to 68 percent for all responding departments. All of the responding 50 largest cities said that they handled criminal investigation in their own departments. This compares to 86 percent of all responding departments. Although only 13 percent of the departments overall had crime laboratories, 73 percent of the 50 largest cities and 55 percent of the states reported having them.

Counties appeared to be the only department type with significant responsibilities for custody and detention for more than 1 week. Seventy-eight percent of these departments had custody/detention up to 1 year, as compared with 22 percent of all responding departments.

Tables 1.5-2 and 1.5-3 present summaries of descriptive data by department type and LEAA region, respectively. As can be seen from the column for "annual equipment budget" (table 1.5-2), there was a wide range of expenditures among different department types, from a mean of about \$10,000 for responding cities (1-9) to almost \$2.7 million for the 50 largest cities. Overall, equipment budgets represented somewhat over 10 percent of the annual total budgets.

191

The mean number of part-time officers was based on those respondents having part-time officers in their departments. Of the 45 responding from the 50 largest cities, only 6 had part-time officers, including 1 city which had nearly 6,000. Thus, the mean

	<u> </u>		<u></u>	C:+	City	50	Town-	
Description of activity	State	County	City (1-9)	City (10-49) (in %)	(50+)	largest	ship	Total
Serve traffic and criminal warrants	70	89	84	89	94	87	93	88
Traffic safety and traffic control	92	56	94	96	96	98	94	87
Communications for own department	94	86	76	95	94	96	70	87
Criminal investigation	66	86	71	95	97	100	79	86
Police training for own department	98	55	48	77	87	100	42	68
Custody/detention-less than 1 day		79	51	73	72	80	43	65
Breath-alcohol test	89	46	47	72	83	91	49	64
Emergency aid and rescue	62	67	62	63	60	67	62	63
Public building protection	-	40	63	60	58	44	68	54
Service function	•		48	55	60	60	42	48
Animal control (dogcatcher)	•		58	63	42	•	37	44
Highway patrol	96	38	48	36	•	•	88	43
Maintenance of police buildings	51	36	34	41	48	47		40
Custody/detention-1 week or less		73		36	46	49		38
Communications for other agency	66	56		40	•			36
Serve civil process		88			-			32
Police training for other agency	77				42	84		24
Custody/detention-up to 1 year		78						22
Underwater recovery	34	42		a da serva		42		19
Bomb disposal	45					82		17
Polygraph	62				36	90	•	17
Vehicle inspection	55				00			17
Crime laboratory	55					73		13
Narcotics laboratory analysis	33 43					62		11
Harbor patrol	40					02		7
	-					50		
Lab analysis for blood alcohol	34					53		7
Other	•							6
Coroner	•							.5
Test for driver's license	34							3
Custody/detention-more than 1 year	-							3

 T_{ABLE} 1.5-1. Activities handled by at least one-third of the departments by department type, and percent of total departments having each activity

TABLE 1.5-2. Descriptive data by department type (means)

Department type	Area (mi²)	Population	Number of full-time officers	Number of part-time officers	Annual total budget	Annual equipment budget	Annual personnel budget
CO 1	107	051.040	0.403				
50 largest	187	851,342	2,491	1,115	\$43,268,865	\$2,669,920	\$34,712,818
State	62,580	3,936,410	889	18	16,377,358	2,304,339	12,020,572
County	1,518	130,254	60	25	1,089,919	58,539	859,984
City (50+)	31	83,334	132	26	1,733,340	173,099	1,407,177
City (10-49)	12	15,849	22	9	257,927	24,362	206,187
Township	28	13,228	14	8	175,654	20,854	141,675
City (1-9)	9	5,038	8	5	82,381	9,764	60,061

LEAA region	Area (mi²)	Population	Number of full-time officers	Number of part-time officers	Annual total budget	Annual equipment budget	Annual personnel budget
1	750	158,112	96	18	\$1,360,155	\$135,130	\$ 979,911
2	648	240,781	365	97	7,148,315	148,172	5,265,546
3	1,096	245,733	216	7	3,412,567	435,153	2,879,293
4	3,691	340,996	151	11	2,318,382	248,600	1,767,292
5	2,652	448,174	288	8	4,916,607	431,478	3,879,374
6	5,738	271,386	160	17	2,193,823	160,363	1,709,910
7	2,379	112,094	84	9	1,220,385	121,001	983,696
8	6,346	83,023	54	9	728,549	77,081	568,463
9	4,218	372,094	281	46	5,743,553	728,801	4,528,692
10	3,580	104,877	69	9	1,253,894	82,198	1,011,604

TABLE 1.5-3. Descriptive data by LEAA region (means)

value of 1,115 for this department type is somewhat misleading. It should be noted that the category part-time officers included officers described as auxiliary, special agent, traffic supervisor, posse, and cadet. All of these classifications were counted in the parttime category since it has different meanings for different departments.

Variations in these descriptive averages by LEAA region (table 1.5-3) were considerably smaller than variations by department type. Regions 1 and 8 had smaller budgets than the others, primarily because each contained only 1 of the 50 largest cities.

2. QUESTION BY QUESTION DISCUSSION

2.1. Advice to the Reader

In reading section 2, certain points should be kept in mind:

(1) This report is not an evaluation of any of the equipment described or discussed within it. It is a presentation of information and opinions of a stratified random sample of police departments given in response to a specific set of questions. It does not, in any way, reflect objective testing of any equipment by the National Bureau of Standards.

(2) The report reflects only what police departments were willing and able to say in response to a specific set of questions. In most cases, no attempt was made to verify the accuracy of the information given or the level of sophistication of the respondent.

(3) Each discussion begins with the presentation of the question that appeared in the questionnaire, and in most cases the choices supplied, if any, set off in bold face type. However, the reader is cautioned to become familiar with the questionnaire sent to sample departments (see app. A) and to evaluate the data in terms of the exact questions asked.

(4) The text tables that appear in section 2 are almost never the complete tables that were tabulated for that question. Data categories for text tables may have been collapsed from the full table, or certain categories of interest may have been singled out for fuller discussion. Appendix B contains the complete tables from which the text tables were extracted. Text tables have been numbered after the question number (e.g., the text tables for Question 6A would be numbered 6A-1, 6A-2, etc.). The tables in appendix B are also numbered after the question number, in the same manner. In some cases, tables that appear in appendix B will not have been discussed at all in the text.

(5) Data in the text of this report are usually presented by nearest whole percent of the group under consideration. In appendix B, the data are usually presented by number of respondents and percent. Because of statistical limitations imposed by the sample sizes used in this study, the reader is cautioned to be wary of assigning importance to percentage differences of less than 5 percent when percentages are based on the total number of respondents, and to percentage differences of less than 10 percent when percentages are based on one of the subsample groups (e.g., a particular department type or region). No statistical tests of significance are reported.

(6) Data were always tabulated by each of the choices supplied, if any, in the questionnaire. Any "other" choices written in by the respondents were also tabulated and/or recorded verbatim. In most cases, the numbers of respondents giving a specific "other" response do not reflect the numbers of respondents who would have marked that choice if it had been one of those provided. Therefore, in most cases, this report lists or gives examples of "other" responses, but does not present numbers or percents of departments giving that response. For those questions for which choices were not provided in the questionnaire, coding categories were developed after approximately one-fourth of the questionnaires had been returned.

(7) The following convention has been adopted in the report to designate the four city department types:

City with 1-9 officers=city (1-9)

City with 10-49 officers=city (10-49)

City with 50 or more officers=city $(50+)^2$

The 50 largest cities=50 largest³

In table headings this same convention has been used.

(8) Questions which asked departments to identify manufacturers of their equipment were asked in this manner only to make the question clearer; not to evaluate a manufacturer's product.

(9) In an attempt to make this report more readable, the main topics of the questionnaire have been reordered in the report; the discussion of the findings does not follow the order of the questions. To find the discussion of a particular question quickly, consult the Contents or the List of Tables.

(10) When the subsample groups are discussed (e.g., "counties said..." or "cities (1-9) said...") the reference is to the responding departments from one of the sample strata. It is particularly important to note that when the text or tables refer to "all departments" or "all responding departments," the reference is to all responding departments from the sample described in section 1.2. This sample was not proportional to the total population of police departments, and although it is possible to do so, the data in this report have not been weighted to allow direct extrapolation to the total population. (See app. B, p. B-1.)

2.2. Discussion

2.2.1. Characteristics of Respondents

a. Rank/Title of Respondent

All of the questionnaires in the LEAA Police Equipment Survey were mailed to the chief or highest official of the department with a request that the questionnaires be directed to the person or persons within the department who were felt to be best qualified to answer the questions.

The handguns questionnaire was usually filled in by the chief/unit head in townships and smaller city departments, and by an armorer or ballistician in the states

²Excluding the 50 largest U.S. cities,

³By population, 1970 U.S. Census.

and 50 largest cities. In cities (50+), the primary respondents were not concentrated into any single category. (See table i.)

Questionnaires from counties were most often filled in by the sheriff (49%) or deputy sheriff (16%).

b. Number of Years of Law Enforcement Experience of Respondent

In general, the questionnaire was filled in by experienced officers. Although about two-thirds of the respondents had more than 10 years of law enforcement experience, there were variations among department types: More than 85 percent of respondents in the 50 largest cities and states had more than 10 years of experience, while half or less of the respondents in townships, cities (1-9), and counties had this much experience. (See table ii.)

			Department type (in %))	
Rank/title	City (1-9)	City (10-49)	City 50 (50+) largest	State	Township
Chief	74	45	13 4	0	67
Gun specialist	1	6	22 54	34	0
Lieutenant	4	13	15 13	11	0
Sergeant	7	11	99	13	15

TABLE I.	Rank of	primary	respondent J	for I	handguns questionnaire,
		by	department	type	

NOTE: Excluding counties.

TABLE ii. Number of years of law enforcement experience of respondents to the handguns DQ, by department type

	Number of years of experience						
Department type	More than 5 years	More than 10 years	More than 20 years	More than 25 years			
State	97	86	39	26			
City (50+)	93	74	39	19			
50 largest	92	88	40	20			
City (10-49)	90	71	24	11			
Township	86	53	23	19			
City (1-9)	83	52	15	9			
County	73	43	13	5			
All departments	88	66	26	14			

2.2.2. On Duty Use of Handguns

1. How many of the officers in your department use, on duty, handguns of each of the following calibers? (Either as their primary or their "back-up" weapon.)

Number of Officers

Calibers .32 Automatic .38 Special 9mm Luger .357 Magnum .45 Automatic Other (specify)

Both the percentages of departments in each department type reporting use of each caliber of handgun on duty, and the percentages of all officers in each department type using each caliber of handgun on duty were determined. Comparisons of these measures showed some striking contrasts. For example, while 95 percent of the responding county departments said that some of their officers were using .38 Special handguns, only 55 percent of all responding county officers were using .38s. Similarly, while 15 percent of the 50 largest cities reported using .45 caliber handguns, only 2 percent of the officers in that department type were reported to be using .45s. (See table 1-1.)

Almost all responding departments (94%) had some officers using the .38 Special handgun on duty, and 80 percent of the officers in the responding departments were using .38s on duty. Although slightly more than half of the responding departments (56%) reported having some officers using the .357 Magnum, this gun was used by only 17 percent of their officers.

State police, townships, and counties reported relatively fewer officers using the .38 Special handgun (55-50% of officers) and relatively more officers using the .357 (36-40% of officers) than did city department types.

The .45 and the 9mm were each being used by only 1 percent of officers in the responding departments, and by no more than 4 percent of the officers in any department type.

In answer to Question 1, the 445 responding departments reported a total of 179,891 officers carrying handguns on duty. Four-fifths of those officers were carrying .38 Special handguns, 17 percent were carrying .357s, 1 percent were carrying .45s, 1 percent were carrying 9mm handguns, and less than 1 percent were carrying handguns of any other caliber. (See table 1-2.)

It is probable that the relative proportions of .38s and .357s reported in Question 1 (80% and 17%, respectively) were partially attributable to the sample design: All states and all of the 50 largest cities were included in the sample, but only portions of the other 5 department types were sampled.

Using these reported numbers, divided by the numbers of respondents, department type averages, per caliber, were computed. These averages were multiplied by the number of departments in each department type in the population⁴ to produce the estimates of the total number of handguns of each caliber in use shown in table 1-3.

According to the estimates in table 1-3, .38 caliber handguns represented about 70 percent of the total on duty handguns while .357s represented about 25 percent of the total. This moderate shift in the relative proportions of .38s and .357s was mainly a result of the extrapolation of data from county departments. County departments reported 55 percent of their officers carrying .38s and 40 percent carrying .357s, and counties make up almost one-fourth of the U.S. police department population.

See table 1.2.2.

TABLE 1-1. Percentages¹ of departments having at least one officer using a handgun of the specified caliber; and percentages of all officers in a particular department type using handguns of these calibers on duty

				Cali	ber			
	.38 Spe	cial	.357 M	ignum	.45	entre de la	9mr	n
Department type	Officers	Depts.			Officers	Depts.	Officers	Depts.
50 largest	88	100	9	41	2	15	1	13
City (50+)	81	97	16	52	1	14	2	22
City (1-9)	70	93	23	51	2	8	3	5
City (10-49)	68	94	26	57	2	12	2	15
State	59	87	36	66	*	6	4	15
Township	56	85	36	74	1	7	4	26
County	55	95	40	59	1	11	3	10
All Departments	80	94	17	56	1	10	1	14

Percentages add to more than 100 percent,

*Less than 1 percent.

TABLE	1-2. N	lumbe	rs of	officers	in	respor	iding de	par	tments
carrying	.38,	.357,	.45,	9mm, c	ınd	other	calibers	oſ	handguns
		on	duty,	by dep	arti	nent ty	pe		

		Caliber					
Department type	.38	.357	.45	9mm	Other		
50 largest	106,540	11,111	2,365	250	513		
State	25,451	15,288	84	1,785	183		
City (50+)	8,409	1,620	125	171	112		
County	1,639	1,194	30	82	15		
City (10-49)	1,293	498	42	40	23		
City (1-9)	534	176	26	17	. 9		
Township	149	97	2	11	7		
All departments	144,015	29,984	2,674	2,356	862		
Percent of total	80	17	- 1	1	<1		

TABLE 1-3. Estimated numbers of officers carrying various calibers of handguns in U.S. police departments on duty, by department type

	Caliber						
Department type	.38	.357	.45	9mm	Other		
50 largest	115,804	12,077	2,571	272	558		
State	27,075	16,264	89	1,899	195		
City (50+)	58,969	11,360	877	1,199	785		
County	70,432	51,309	1,289	3,514	645		
City (10-49)	28,838	11,107	937	892	513		
City (1-9)	34,875	11,494	1,698	1,110	588		
Township	8,686	5,655	117	641	408		
All departments	334,679	119,266	7,578	9,537	3,692		
Percent of total	71	25	1	2	1		

Estimated total number in U.S.=484,752

÷

2.2.3. Characteristics of Handguns Used On Duty

Respondents were asked a series of questions about the handgun that was used on duty by more of their officers than any other (most used handgun, Questions 2-2E), and then these same questions were asked about the handgun used on duty by the second greatest number of officers (second most used handgun, Questions 3-3E). The questions were asked in this way so that the data could always be referenced to a particular caliber of handgun.

Fifty-eight percent of the responding departments were using more than one caliber of handgun on duty. The 50 largest city departments had the smallest percentage of departments (48%) using more than one caliber of handgun on duty and townships had the highest percentage (70%). (See table 2A/3A-1.)

2. and 3. Select from the list in Question 1 the handgun that is "used, on duty, by more of your officers than any other." /"second most often used by your officers." Completely Fill In the Questions Below for that Handgun.⁵

2A. & 3A. Caliber Type.

2B. & 3B. How many are revolvers?

How many are automatics?

2C. & 3C. List below each different model of this "most used"/"second most used" handgun now used in your department. (Identify Each Different Model by Both Manufacturer and Model Name or Model Number)

2D. & **3D.** Barrel Lengths:

How many have barrels of less than 3 inches?

How many have barrels of 3-5 inches?

How many have barrels of more than 5 inches?

2E. & 3E. Ammunition:

In the table below, list each type of ammunition that your officers use with this "most used"/"second most used" handgun. (Fill in the Table Below for *Each* Type of Ammunition Used)

Bullet Type

Bullet Weight (in grains) Manufacturer

> TABLE 2A/3A-1. Percentages of departments with officers using more than one caliber of handgun on duty, by department type

Department type	Percent of responding departments
Township	70
State	64
City (50+)	62
County	60
City (10-49)	58
City (1.9)	51
50 largest	48
All departments	58

"See app. A, pp. A-3 to A-5, for actual question presentation.

12

2A. & 3A. Caliber Type

(For most used and second most used handgun)

Ninety-nine percent of the handguns⁶ reported in Questions 2 and 3 were either ,38 Special (82%) or .357 Magnum (17%). Only 8 of the 445 departments (2%) said that a caliber other than .38 or .357 was used by more of their officers than any other; 4 cited the 9mm as most used and 4 cited the .45 caliber as most used. (See table 2A/3A-2.)

Given these findings, it is not surprising that when the .38 Special was listed as most used handgun, the .357 Magnum was most likely to be listed as the second most used handgun, and vice versa. States reported the highest percentage of departments in which the .357 was used by more officers than any other caliber; 45 percent of states said the .357 was most used. The 50 largest cities reported the highest percentage of departments (89%) in which the .38 was used by more officers than any other caliber. (See table 2A/3A-3.)

^oThe total numbers of handguns reported in Questions 2 and 3 were slightly greater than the numbers of officers carrying handguns reported in Question 1 (180,256 and 179,891, respectively). In addition, there were a few "third," "fourth," etc., "most used handguns" that should not have been reported in Questions 2 and 3. Both of these errors combined, however, represented less than 1 percent of all the handguns in the responding departments.

Caliber		handgun in Questi	cent of is reported ons 2 and 3 180,256]	
.38 Special .387 Magnum 9mm .45 .22			82 17 1 1 *	
.32 .44 Magnum .25			*	

TABLE 2A/3A-2. Percentages of handguns cited as most used or second most used, by caliber

*Less than 1 percent.

TABLE 2A/3A-3. Caliber of most used and second most used handgun, by department type

		ed handgun artment partments)	Second most used handgun in department (in % of departments)		
Department type	.38 Special [n=445]	.357 Magnum [n=445]	,38 Special [n=259]	.357 Magnum [n=259]	
50 largest	89	n	23	64	
City (50+)	80	19	29	51	
City (1-9)	76	20	33	53	
County	74	25	32	57	
City (10-49)	71	27	38	50	
Township	67	33	21	47	
State	53	45	53	33	
All departments	74	24	34	51	

¹Most used handgun percentages were based on all respondents. Second most used handgun percentages were based on the 259 respondents listing a second handgun.

Half of the reporting 328 departments in which there were more .38s in use on duty than any other caliber were using the .38 exclusively for on duty service (reported no second most used handgun). Only 17 percent of the departments in which the .357 was reported as the most used on duty gun were using the .357 exclusively. (See table 2A/3A-4.)

The remainder of the discussion of Questions 2-2E and 3-3E will focus on the data for most used handgun (Questions 2-2E), since these data represent over 90 percent of the handguns reported. Only in cases in which differences appear will the data for second most used handgun (Questions 3-3E) be discussed, even though data for second most used handguns will be presented in the text tables. Full tables for all questions appear in appendix B.

		citing the .38 and the
.357 and their	most used handguns,	the percentages listing
.38, .357, anot	her caliber, or no seco	ond most used handgun

Most used		cent listi d most us	Using most used handgun	
	.38	.357	Other	exclusively
.38 [n=328]	••	40	10	50
.38 [n=328] .357 [n=109]	77	••	7	17

2.2.3.2. Revolvers/Automatics

2B. and 3B. How many are revolvers? How many are automatics? (For most used and second most used handgun)

Since the vast majority of reported handguns were either .38 caliber or .357 caliber, it follows that almost all (99%) of the reported handguns were revolvers (only 11 .38 caliber automatics were reported, and no .357 caliber automatics were reported). Within every department type, 95 percent or more of the most used handguns were revolvers. For those most used handguns which were automatics, only 9mm, .45, and .38 were cited. For second most used, .32, .22, and .25 automatics were also cited. (See table 2B/3B.)

Department type	Most us Total number reported	ed handguns Percent of revolvers	Second most used hand Total number Percen reported revolve		
*50 largest	111,928	100	7,398	100	
State	38,618	96	6,087	98	
City (50+)	9,346	99	1,168	94	
County	2,338	100	523	99	
City (10-49)	1,532	98	307	93	
City (1-9)	563	95	142	92	
Township	213	100	43	77	
All departments	164,588	99	15,668	98	

TABLE 2B/3B. Percentages of most used handguns and second most used handguns which were revolvers, by department type

2.2.3.3. Model/Manufacturer

2C. and 3C. List below each different model of this "most used"/"second most used" handgun now used in your department. (Identify Each Different Model by Both Manufacturer and Model Name or Model Number)

Manufacturer Model/model number

Almost all of the most used handguns reported by the responding departments were produced by Colt and Smith & Wesson. Although it was not possible to determine what percentages of handguns in use were made by various manufacturers, the data show that 97 percent of the departments listed one or both of these manufacturers, and did not list any other manufacturer for their most used handgun. At least 92 percent of the departments in every department type were using those two manufacturers exclusively for their most used handguns. (See table 2C-1.)

A great number of different models were represented among departments' most used handguns. About two-fifths of all responding departments and 67 percent of the 50 largest cities had some of one model made by Smith & Wesson represented among their most used guns. The four models with the highest percentages of departmental representation were all made by this manufacturer. The .357 model with greatest representation was also made by them.

TABLE 2C-1. Percentages of responding departments using handguns of s	specified
manufacturers as their most used caliber handgun, by department t	ype

				Depart	ment type			
Manufacturer	All departments	50 largest	State	City (50+)	City (10-49)	City (1-9)	County	Township
Smith & Wesson	91	100	96	95	88	88	85	85
Colt	50	57	45	61	49	39	47	56
Other	3	0	2	1	8	1	5	4

2.2.3.4. Barrel Length

2D. and 3D. Barrel Lengths:

How many have barrels of less than 3 inches?

- How many have barrels of 3-5 inches?
- How many have barrels of more than 5 inches?
- (For most used and second most used handgun)

Overall, 80 percent of the 180,256 handguns reported in Questions 2D and 3D (data for most used and second most used combined) had barrels of 7.6-12.7 cm (3-5 in), 10 percent were less than 7.6 cm (3 in), and 10 percent more than 12.7 cm (5 in). Within the seven department types, about the same proportion of handguns had 7.6-12.7 cm (3-5 in) barrels, with one exception: A smaller proportion of the handguns reported by state departments (61%) had barrels 7.6-12.7 cm (3-5 in) long, and states reported a much higher percentage (29%) of handguns with barrels more than 12.7 cm (5 in) long. (See table 2D/3D-1.)

	E	Barrel length					
Department type	7.6-12.7 cm (3-5 in)	Less than 7.6 cm (3 in)	More than 12.7 cm (5 in)				
50 largest [n=119,326]	87	9	4				
City (1-9) [n=755]	86	9	5				
City (10-49) [n=1839]	82	10	8				
Township [n=256]	78	16	5				
City $(50+)$ [n=10,514]	77	17	5				
County [n=2816]	77	17	5				
State [n=44,705]	61	10	29				
All departments [n=180,256]	80	10	10				

TABLE 2D/3D-1. Percentages of most used and second most used handguns with barrels of various lengths, by department type

TABLE 2D. Percentages of most used caliber handguns of various calibers with barrels of specified length (164,588 handguns, Question 2A)

• Reported barrel length	.38 [n=144,104]	.357 [n=18,652]	9mm [n=1,788]	.45 [n=44]
Less than 7.6 cm (3 in)	10	2	0	0
7.6-12.7 cm (3-5 in)	80	89	100	91
More than 12,7 cm (5 in)	10	9	0	9

Data from Question 2D (most used handgun, n=164,598, 91% of total) showed differences in barrel lengths among the various calibers of handguns. The proportions of .38 caliber handguns of each length closely parallel the proportions of all handguns taken together. In contrast, 100 percent of the 9mm handguns reported had 7.6-12.7 cm (3-5 in) barrels, 91 percent of the .45s had barrels of this length, and 89 percent of the .357s had barrels of this length. (See table 2D.)

Two calibers of handguns with greatest representation (.38 and .357) were examined in greater detail. Table 2A/3A-4 showed that, in general, one of these two calibers would be used by more officers in a department than any other caliber, and that the other would be used by the next greatest number of officers. Of the .38s that were listed as most used handguns, 80 percent had barrels of 7.6-12.7 cm (3-5 in). Of the .38s that were listed as second most used handguns, more than half (53%) had barrels of less than 7.6 cm (3 in). Roughly these same proportions were found in all department types except states (most used .38s) and cities with 1-9 officers (second most used .38s). For exact numbers, see appendix B.

Of the .357 handguns cited as most used, 89 percent had barrels of medium length. Approximately this same percentage was found in six of the seven department types for the .357s that were listed as second most used handguns. However, the overall percentages for second most used .357s were greatly affected by state departments: 64 percent of the .357 second most used handguns in states had barrels of more than 12.7 cm. (See table 2D/3D-2.) T_{ABLE} 2D/3D-2. Percentages of .38 and .357 caliber handguns with barrels of each specified length, when they were most used and second most used handguns

	.3	liber .35	.357	
Reported barrel length	Most used [n=144,104]	Second most [n=3,943]	Most used [n=18,652]	Second most [n=11,381]
Less than 7.6 cm (3 in)	10	53	2	2
7.6-12.7 cm (3-5 in)	80	45	89	73
More than 12.7 cm (5 in)	10	2	9	26

2.2.4. Characteristics of Ammunition Used

2E. and 3E. Ammunition: In the table below, list each type of ammunition that your officers use with this "most used"/"second most used" handgun. (Fill in the Table Below for Each Type of Ammunition Used)

Bullet type Bullet weight Manufacturer (in grains)

(For most used and second most used handgun)

2.2.4.1. Bullet Type

Almost half (49%) of the responding departments were using lead bullets in their most used handguns. About one-fourth were using hollowpoint, and 15 percent were using jacketed ammunition. (See table 2E/3E-1.)

About two-thirds of the respondents reported using bullets of only one type in their most used handgun. About half of these departments said they used lead bullets exclusively. Thirteen percent reported using hollowpoint exclusively. (See table 2E/3E-2.)

2.2.4.2. Bullet Weight

About three-fourths of the responding departments reported using ammunition with bullet weights of 9.8-10.4 g (151-160 grains), and very few departments were using ammunition with bullet weights greater than this. About 17 percent were using ammunition with bullet weights of 6.5-7.1 g (101-110 grains), and 12 percent with weights of 9.1-9.7 g (141-150 grains). (See table 2E/3E-3.)

2.2.4.3. Ammunition Manufacturer

About half of the 445 responding departments (53%) were using at least some Remington-Peters ammunition with their most used handgun. About a third (34%) were using Winchester-Western ammunition, and 17 percent were using Super Vel ammunition. (See table 2E/3E-4.)

More than half (n=263, 59%) of the responding departments reported using only one brand of ammunition with their most used handguns. Fifty percent of these departments said they were using Remington-Peters exclusively. About one-fourth (22%) reported using Winchester-Western exclusively. Less than 10 percent were using any other brand exclusively.

Bullet type	Most used handgun [n=445]	Second most used [n=259]
Lead	49	43
Hollowpoint	24	27
Jacketed	15	. 15
Soft point	10	11
Wadcutter	6	3
Semiwadcutter	3	2
Metal piercing	2	*
Unusable information	16	14
No answer	1	2

TABLE 2E/3E-1. Percentages¹ of departments using each specified bullet type in their most used and second most used handgun

Percentages add to more than 100 percent since multiple answers were allowed. *Less than 1 percent.

TAE	BLE 2E	C/3E-2.	' Of	the d	lepartm	ents i	ising	only	one	type	of bu	llet
for	their	most	used	and	second	most	used	hand	lgun	s, per	rcenta	ges
				using	specif	ied bi	ullet t	ype				

Bullet type	Most used handgun [n=292]	Second most used [n=138]		
Lead	49	41		
Hollowpoint	13	18		
Soft point	6			
Jacketed	4	4		
Ball	4	2		
Lubaloy	3	4		
Wadcutter	2	1		
Semiwadcutter	1	1		
Metal piercing	1	4		
Frangible	0	1 = 1		
Other	1	4		
Unusable information	14	12		

¹This table was compiled by special tabulation and does not appear in app. B.

 T_{ABLE} 2E/3E-3. Percentages¹ of departments using ammunition for their most used and second most used handguns with specified bullet weights

Reported bu Grains	illet weight Grams	Most used handgun [n=445]	Second most used [n=259]
151-160	9.8-10.4	73	57
101-110	6.5-7.1	17	17
141-150	9.1.9.7	12	10
121-130	7.8-8.4	7	9
191-200	12.4-13.0	6	5

¹Percentages add io more than 100 percent since multiple answers were allowed. NOTE: Percentages of departments in all other categories were 5 percent or less.

TABLE 2E/3E-4. Percentages' of departments using ammunition = made by each specified manufacturer with their most used and second most used handgun

Manufacturer	Most used handgun [n=445]	Second most used [n=259]
P	r ŋ	
Remington-Peters	53	49
Winchester-Western	34	31
Super Vel	17	20
Smith & Wesson	11	7

¹Percentages add to more than 100 percent since multiple answers were allowed. NOTE: Percentages of departments using each other brand were 5 percent or less.

T_{ABLE} 2E/3E-5. Of the departments using only one brand of ammunition with their most used and second most used handgun, percentages using each specified brand of ammunition

Manufacturer M	lost used handgun [n=263]	Second most used [n=109]
Remington-Peters	50	42
Winchester-Western	22	26
Smith & Wesson	9	4
Super Vel	9	14

NOTE: Percentages of departments using each other brand were less than 10 percent.

Of the 109 departments (42% of the 259 reporting a second handgun) reporting use of only one manufacturer's ammunition for their second most used handgun, 42 percent reported using Remington-Peters, 26 percent Winchester-Western, and 14 percent Super Vel. (See table 2E/3E-5.)

2.2.5. Off Duty Use of Handguns

4. How about off duty: About how many of the officers in your department use handguns of each of the following calibers when they are off duty?

Officers

Caliber .22 LR .25 Automatic .32 Automatic .38 Special 9 mm Luger .357 Magnum .45 Automatic Other (specify) Other (specify)

Only 78 percent of the 445 departments which provided data about their officers' use of handguns on duty (Question 1) answered this question. Their answers accounted for 62 percent of the 179,091 officers carrying handguns on duty reported in Question 1.

* Some of the 100 departments which did not report off duty use of handguns made such comments as: "off duty officers use weapons of their choice," and "no off duty officers." Therefore, these data cannot be taken as a measure of proportion of officers that carry weapons off duty. The data can be used, however, to indicate the proportions of various calibers of handguns used off duty as compared with those used on duty.

About one-fourth of the departments not reporting off duty weapons were state departments: 51 percent of the states gave no answer. About 75 percent or more of the departments in all other department types did answer Question 4. (See table 4.)

The 345 departments which reported off duty handgun use were using .38 caliber handguns in about the same proportion as was reported for on duty use in Question 1: 94 percent of all responding departments had at least one officer using the .38 on duty, and 96 percent of the 345 departments describing off duty handguns had at least one .38 in use off duty. In addition, about the same proportions of officers were using the .38 on duty and off duty: 80 percent and 86 percent, respectively.

There was one major difference between on duty and off duty handgun use: Only four different calibers of handguns were reported to be in use on duty by 10 percent or more of the responding departments; but eight different calibers were reported to be in use off duty by 10 percent or more of the departments that reported off duty use. As with on duty use, however, the percentages of officers using each of these different calibers were small; the majority of officers used the .38 on duty and off duty. (See .ble 4/1.)

TABLE 4.	Perce	ntages	of d	epar	tments	in each	
departmen	it type	which	did	not	report	officers	,
	use c	of hand	guns	off	duty		

Department type	Percent of departments "none"/"no answer"				
State	51				
City (1-9)	26				
50 largest	22				
Township	22				
City (50+)	18				
City (10-49)	15				
County	15				
All departments	22				

Caliber	Percent of departments On duty Off duty [n=445] [n=345]		Percent of officers On duty Off duty [n=179,891] [n=110,534]	
.38 Special	94	96	80	86
.357 Magnum	56	• 29	17	6
9 mm Luger	14	30	1	4
.45 Automatic	10	21	1	2
.32 Automatic	3	22	*	1
.25 Automatic	3	23	*	1
.22	3	15	*	1
.44	2	1	*	*
.380	2	10	*	*
.41	2	*	*	*
.32 Revolver	1	1	*	*
.45 Revolver	Ô	1	0	*
Other		*	*	*

TABLE 4/1. Percentages of officers and percentages of departments¹ using specified calibers of handguns on duty and off duty

Percentages of departments add to more than 100 percent since there could be more than one caliber of handgun in each department. *Less than 1 percent.

2.2.6. Problems with Handguns

5. When you think of all the handguns that have been used by any of your officers in the last 5 years; which of these guns have had, or have caused problems of one kind or another?

Be sure to think of handguns that were once used but are not now used, as well as handguns that are now used. In the spaces provided below tell us about the handgun and the "problem."

Case number 1 Caliber Revolver or Automatic Manufacturer Model Barrel Length What was the problem? Case number 2 (etc.) Case number 3 (etc.)

More than half (55%) of the responding departments either said they had had no problems with their handguns in the last 5 years or left the question blank. There were striking differences among the seven department types, however. Almost three-fourths of the states and 50 largest cities cited one or more problems, but only about one-fourth of the counties and cities (1-9) described problems. (See table 5-1.)

Among the 203 departments that described at least one problem, those problems associated with the cylinder were mentioned most frequently (35%). The hammer/firing pin was reported to have been involved in the handgun problems of about one-fifth of the departments mentioning problems. (See table 5-2.)

Department type	Percent of department types citing one or more problems		
State	72		
50 largest	. 72		
City (50+)	53		
City (10-49)	47		
Township	41		
County	29		
City (1-9)	24		
All departments	45		

T_{ABLE} 5-1. Percentages of departments in each department type listing at least one handgun problem

T_{ABLE} 5-2. Of the 203 departments which listed at least one problem, percentages¹ citing specified problem

	and the second	
Problem		Percent of departments [n=203]
0 r. l		35
Cylinder		55 21
Hammer/firing pin		
Misfires		15
Trigger		11
Age, wear and tear		11
Abuse by personnel		10
Accidental discharge		10
Main springs		9
Problems on double or	single action	9
Ammunition problems		8 ·
Problems with finish (b	luing)	8
Jamming		8
Shaving lead		8
Timing problems		8
Problems with reliabilit	v/defective	
manufacturing		7
Head space problems		6
Barrel problems		5
Ejector rod problems		4
Feeding problems		4
		4 24
Other		24

Percentages add to more than 100 percent since departments could describe more than one problem.

Each of the problem descriptions, categorized by manufacturer, was recorded verbatim along with the caliber, manufacturer/model, barrel length, and type of handgun. No cross tabulations were made with these identifying factors, however, because the various calibers, manufacturers, etc., were disproportionately represented among the departments. Cross tabulations with these identifiers would have reflected this departmental representation rather than problems associated with a particular model, caliber, barrel length, etc. Examples of Cylinder Problems Mentioned Were:

Shaved lead, cylinder had excess play.

Cylinder would not rotate when hammer was cocked.

Weapon bought new and used approximately 3 months.

After carrying this gun in a holster for several years, the rotating mechanism wears so much that the bullets do not line up with the barrel, causing a spray of lead to fly out of the side of the chamber.

Examples of Hammer/Firing Pin Problems Mentioned Were:

Crystallized hammers, weak main spring, crystallized firing pin.

Firing pin spring too weak.

Hammer springs of marginal strength and would not fire primers at all times.

2.2.7. Problems Associated with Handgun Ammunition

6. How about handgun ammunition: Have your officers found any problems with any handgun ammunition that they have used in the last 5 years?

Again, be sure to think of handgun ammunition that was once used but is not now used, as well as ammunition that is now used. In the spaces below tell us about the ammunition and the "problem."

Case number 1 Caliber Cartridge Bullet Type Bullet Weight Manufacturer What was the problem: Case number 2 (etc.) Case number 3 (etc.)

A smaller percentage of the responding departments reported problems with handgun ammunition (26%) than reported problems with handguns (45%). A much higher percentage of the 50 largest cities (61%) reported ammunition problems than any other department type. None of the 27 township departments and only 7 of the 84 city (1-9) departments listed an ammunition problem. (See table 6-1.)

Among the 117 departments that described an ammunition problem, 3 problems were cited by more than one-fourth of the departments: power/penetration too low (30%); knockdown power insufficient (27%); and primer (25%). A wide variety of other problems was also mentioned. (See table 6-2.)

A cross tabulation was performed for those departments which said they used reloaded ammunition for either their most used or their second most used handgun (Questions 2E and 3E). Of these 52 departments, 56 percent cited ammunition problems as compared to 26 percent of all the responding departments. (It is likely that more departments were using reloaded ammunition than reported that fact in either Question 2E or 3E.) TABLE 6-1. Percentages of departments in each department type reporting at least one problem with handgun ammunition

Department type	Percent of department type	
50 largest	61	
State	45	
City (50+)	43	
County	18	
City (10-49)	16	
City (1-9)	8	
Township	0	
All departments	26	

TABLE 6-2. Of the 117 departments citing at least one problem with handgun ammunition, percentages¹ citing each specified problem

and the second	
Problem	Percent of departments [n=117]
Power/penetration too low	30
Knockdown power insufficient	27
Primer	25
Case, cartridge	21
Wrong amount of powder	17
Gun failure	15
Penetration too great	9
Accuracy poor	5
Leading, fouling	5
Ricochet	5
Smoking excessive	3
Variability of energy rates	3
Powder/miscellaneous problems	3
Other	14

¹Percentages add to more than 100 percent since multiple answers were allowed.

As with handgun problems, each ammunition problem was recorded verbatim along with the identifiers listed in Question 6. Again, the disproportionate representation of certain calibers, cartridge types, manufacturers, etc., precluded cross tabulation of these identifiers.

Examples of Power/Penetration Too Low Were:

Lack of penetration.

Would not penetrate windshields; as a result an officer was almost run over by a felon.

Lack of penetration on autos and ricocheting.

Examples of Knockdown Power Insufficient Were:

Poor stopping power.

Bullet would go through person but would not stop or immediately disable them.

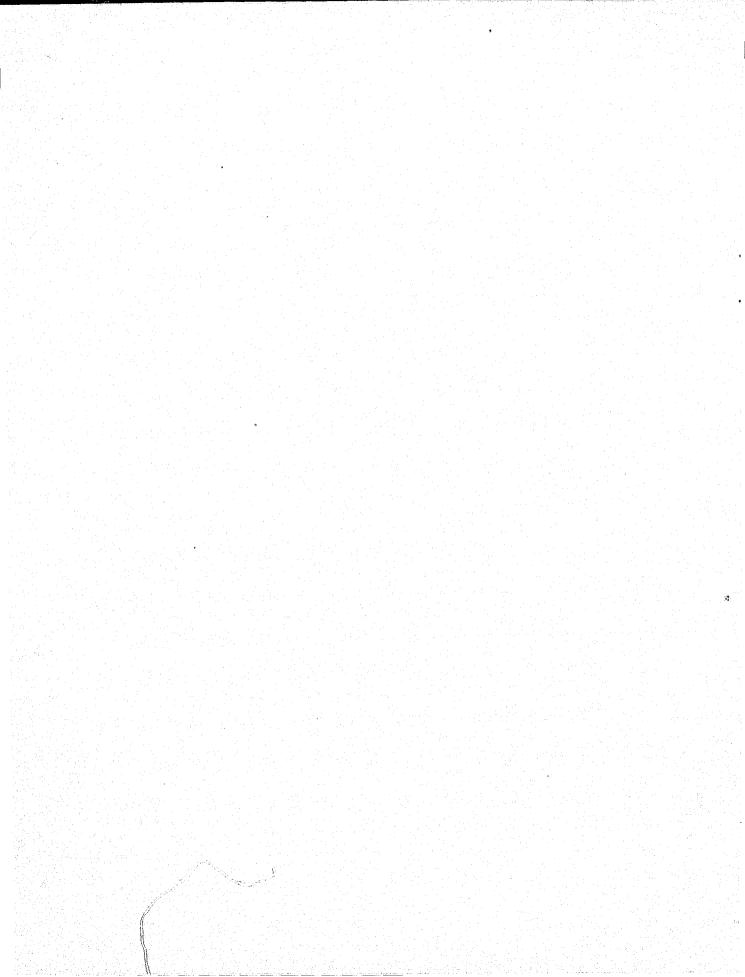
The street officers frequently complain that this bullet fails to have adequate "knock-down" power desirable in a face to face shootout. Penetration is great, but cavitation is poor on this type bullet.

Examples of Primer Problems Were:

Dead primer, unknown cause of defect.

Arrived from the manufacturer with blown primers.

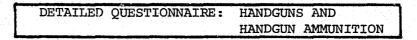
Bad primers.



APPENDIX A

NBS-886 May 1972 OMB 41-F72030 Approval Expires June 30, 1973

U.S. Department of Commerce National Bureau of Standards



POLICE EQUIPMENT SURVEY

Sponsored By:

National Institute of Law Enforcement and Criminal Justice Law Enforcement Assistance Administration U.S. Department of Justice

Directed and Conducted By:

Behavioral Sciences Group National Bureau of Standards Washington, D.C. 20234 Phone: 301-921-3558

NOTE: This questionnaire is included in this document as a supplement to the discussion in the text. It has no other intended use.

INTRODUCTION: Police officers in several departments have told us informally about their problems in selecting and using handguns. They have told of the danger to their officers from poor handguns and handgun ammunition. In order to make it easier for law enforcement departments to select and buy handguns and handgun ammunition to meet their particular needs, the Law Enforcement Standards Laboratory will be writing voluntary performance standards for these items of equipment.

PURPOSE OF THIS QUESTIONNAIRE: The purpose of this "detailed" questionnaire is to get answers from YOU, the user, about the handguns and handgun ammunition you are now using, and the problems you find in using them. Your answers will be used to determine what kinds of testing need to be done, and what sorts of problems must be solved. We must find out what YOUR needs are.

GENERAL INSTRUCTIONS:

- 1. Fill in the questionnaire completely. Even if you do not have all the information you need "at your fingertips," please make your best effort to supply every answer AS ACCURATELY AS POSSIBLE.
- 2. Answer all questions for YOUR OWN DEPARTMENT. Do not attempt to supply information that might exist in some other department.
- 3. The results of this questionnaire will be compiled by computer. It is very important that you follow directions and answer every question legibly and in the boxes and spaces provided.
- 4. No individual department will be identified in the report of this survey; the results will be published in tabulated form.
- 5. Additional instructions for filling in your answers appear after some questions. Follow the directions given.
- 6. Please PRINT all answers and comments CLEARLY.
- 7. When this questionnaire has been completely filled in; place it, with the other questionnaires sent to your department, in the stamped, addressed envelope supplied. Return all of them to: Technology Building, Room AllO National Bureau of Standards Washington, D.C. 20234
- 8. If you have any questions, write to the above address or call collect: E. Bunten, or P. Klaus Phone: 301-921-3558
- 9. Remember that it is only by getting YOUR answers to these questions that it will be possible to begin solving the problems that police have with handguns and handgun ammunition.

PART I: ON DUTY USE OF HANDGUNS AND HANDGUN AMMUNITION.

1. How many of the officers in your department use, <u>on duty</u>, handguns of each of the following calibers? (Either as their primary or their "back-up" weapon.)

NUMBER OF OFFICERS CALIBER

- (10-14)*** .32 Automatic
- (15-19) .38 Special
- (20-24) 9 mm Luger
- (25-29) .357 Magnum
- (30-34) .45 Automatic
- (35-39) Other (Specify)

Other (Specify)

2. Select from the list in Question 1 the handgun that is used, on duty, by more of your officers than any other. COMPLETELY FILL IN THE QUESTIONS BELOW FOR THAT HANDGUN.

MOST USED HANDGUN

(40-42)	2A.	Caliber	Type.				
(43-47)	2B.	How many	are	revolvers?			
(48-52)		How many	are	automatics?)		

2C. List below each different model of this "most used" handgun now used in your department. (IDENTIFY EACH DIFFERENT MODEL BY BOTH MANUFACTURER AND MODEL NAME OR MODEL NUMBER)

		MANUFACTURER MODEL/MODEL NUMBER	
(53-56)	a.		
(57-60)	b.		
(61-64)	с.		
(65-68)	đ.		
(69-72)	ě.		
(73-76)	f.		
(77-80)	g.		
(10-13)	***	Numbers in parentheses are for computer use only.	

2D. Barrel Lengths:

(14-18) How many have barrels of less than 3 inches?

(19-23) How many have barrels of 3-5 inches?

(24-28) How many have barrels of more than 5 inches?

2E. <u>Ammunition</u>: In the table below, list each type of ammunition that your officers use with this "most used" handgun. (FILL IN THE TABLE BELOW FOR EACH TYPE OF AMMUNITION USED)

	BULLET TYPE	BULLET WEIGHT (IN GRAINS)	MANUFACTURER
(29–35)			
(36-42)			
(43-49)			
(50-56)			
(57-63)			
(64-70)		No. of the state o	
(71-77)			
(78-14)			

3. Go back to the list in Question 1 and pick out the handgun that is <u>second</u> most often used by your officers. COMPLETELY FILL IN THE QUESTIONS BELOW FOR THAT HANDGUN.

SECOND MOST USED HANDGUN:

- (15-17) 3A. Caliber Type:
- (18-22) 3B. How many are revolvers?
- (23-27) How many are automatics?
 - 3C. List below each different model of this "second most used" handgun now used in your department. (IDENTIFY EACH DIFFERENT MODEL BY BOTH MANUFACTURER AND MODEL NAME OR MODEL NUMBER)

	MANUFACTURER MODEL/MODEL NUMBER
(28-31)	\mathbf{a}_{\bullet} , and the second s
(32-35)	b.
(36-39)	C -
(40-43)	d.
(44-47)	e.
(48-51)	
3D	Barrel Lengths:
(52-56)	How many have barrels of less than 3 inches?
(57-61)	How many have barrels of 3-5 inches?
(62-66)	How many have barrels of more than 5 inches?
3 E	Ammunition: In the table below, list each type of ammunition that your officers use with this "second most used" handgun. (FILL IN THE TABLE BELOW FOR EACH TYPE OF AMMUNITION USED)
	BULLET TYPE BULLET WEIGHT MANUFACTURER (IN GRAINS)
(67–73)	
(74-80)	
(10-16) (17-23)	

PART II: OFF DUTY USE OF HANDGUNS.

4. How about <u>off duty</u>: about how many of the officers in your department use handguns of each of the following calibers when they are off duty?

	NUMBER OF OFFICERS	CALIBER
(24–28)		.22 LR
(29-33)		.25 Automatic
(34-38)		.32 Automatic
(39-43)		.38 Special
(44-48)		9 mm Luger
(49-53)	· · · · · · · · · · · · · · · · · · ·	.357 Magnum
(54–58)		.45 Automatic
(59–63)		Other (Specify)

Other (Specify)

PART III: PROBLEMS OF HANDGUNS

5. When you think of all the handguns that have been used by any of your officers in the last 5 years; which of these guns have had, or have caused problems of one kind or another?

Be sure to think of handguns that were once used but are not now used, as well as handguns that are now used. IN THE SPACES PROVIDED EELOW TELL US ABOUT THE HANDGUN AND THE "PROBLEM".

(64)

CASE NUMBER 1

(65-67)	Caliber			
(68)	Revolver or A	utomatic		
(69-70)	Manufacturer	•		
a a a a a a				

(71-72) Model _____

(73) Barrel Length

(74-75) What was the problem?

CASE NUMBER

(76-78)	Caliber
(79)	Revolver or Automatic
(10-11)	Manufacturer
(12-13)	Model
	Barrel Length
(15-16)	What was the problem?

CAS	E NUMBER 3
(17-19)	Caliber
(20)	Revolver or Automatic
(21-22)	Manufacturer
(23-24)	Model
(25)	Barrel Length
26-27)	What was the problem?

A--8

6. How about <u>handgun ammunition</u>: Have your officers found any problems with any handgun ammunition that they have used in the last 5 years?

Again, be sure to think of handgun ammunition that was once used but is not now used, as well as ammunition that is now used. IN THE SPACES BELOW TELL US ABOUT THE AMMUNITION AND THE "PROBLEM".

(28)

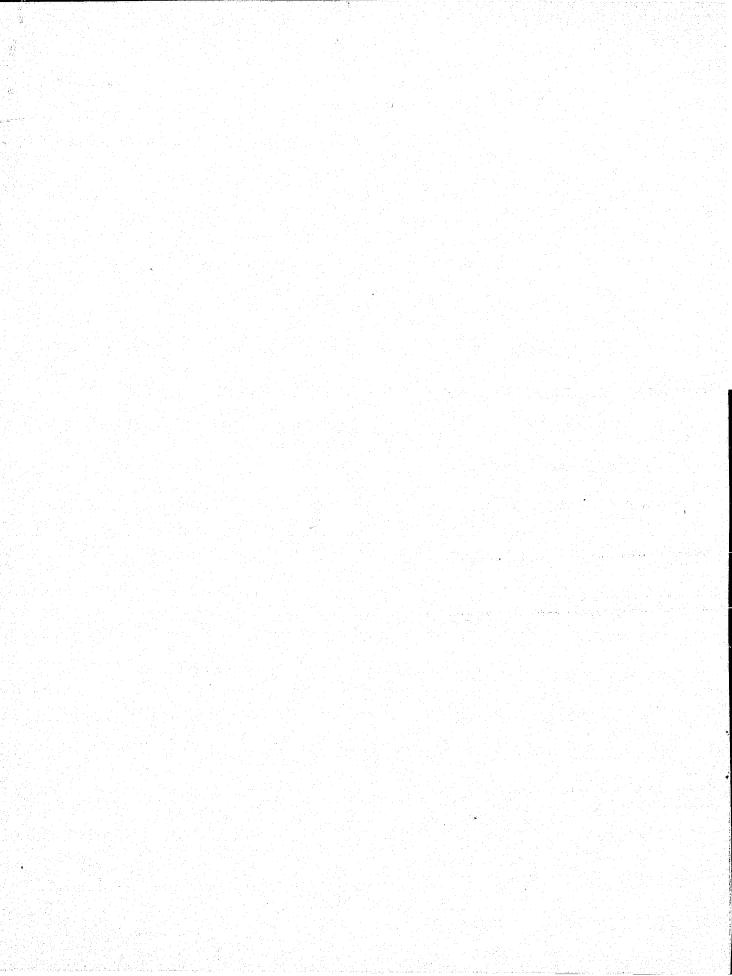
CAS	E NUMBER]
(29-31)	Caliber
	Cartridge
	Bullet Type
	Bullet Weight
	Manufacturer
(41-42)	What was the problem?

CASE	NUMBER 2
(43-45) (Caliber
(46-47) (Cartridge
(48-49) _E	Bullet Type
(50-52) E	Bullet Weight
(53-54) M	Manufacturer
	What was the problem?
1997 - 1997 1997 - 1997 - 1997 1997 - 1997 - 1997 - 1997	

	NUMBER 3
(57–59) (Caliber
(60-61) (Cartridge
(62-63) _I	Bullet Type
(64-66) I	Bullet Weight
(67-68) N	Manufacturer
(69-70)	What was the problem?
	A-10
	이는 것은 같은 것은

IDENTIFYING INFORMATION: (All identifying information will be kept confidential)

	Department:			
	: person who ans			
	Title:		Rank:	
	No. of years	experience in	a law enforcement:	
	Telephone Nur	nber:		
Others v	who helped: 1.			
	Title:		Name Rank:	
	No. of years	experience in	a law enforcement:	
	Telephone Nu	mber:		
	2.			
	Title:		Name Rank:	
	No. of years	experience in	n law enforcement:	
	Telephone Nu	mber:		



APPENDIX B Data Tables

B.1. Advice to the Reader

(a) The data presented in the following tables resulted from the responses of a stratified random sample (see sec. 1.2) of police departments in response to a specific set of questions (see app. A). These data do not, in any way, reflect objective testing of any of the equipment by the National Bureau of Standards. The reader is cautioned to become familiar with the questionnaire and to evaluate the data in terms of the exact questions asked.

(b) Tables have been numbered after the question number (e.g., the tables for Question 6A would be numbered 6A-1, 6A-2, etc.). The data are usually presented by number of respondents and nearest whole percentage. Because of the statistical limitations imposed by the sample sizes used in this study, the reader is cautioned to be wary of assigning importance to percentage differences of less than 5 percent when percentages are based on all respondents, and to percentage differences of less than 10 percent when percentages are based on one of the subsample groups (e.g., a particular department type or region). No statistical tests of significance are reported.

(c) These tables are based on the responding departments from the specific sample selected for this questionnaire. This sample was not proportional to the total population of police departments, and although it is possible to do so, the data in these tables have not been weighted to allow direct extrapolation to the total population.

(d) In order to extrapolate to the total population from the respondent data presented in this report, use the following procedure: For each department type, multiply the percentage of respondents of a particular department type giving the answer of interest (see B.2 Data Tables, app. B) by the total number of departments of that department type in the population (see table 1.2-2, sec. 1.2); add those seven subtotals; and divide the total by the total number of police departments in the population (table 1.2-2). The quotient of this division will be an estimate of the percentage of all U.S. police departments that would choose the answer of interest.

B.2. Data Tables

RANK OF PERSON WHO FILLED IN QUESTIONNAIRE

				DEPARTMEN	IT TYPE		
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 Officers)	CITY (50 OR MORE Officers)	FIFTY LARGEST CITIES
	NO. %	NO. *	NO. X	NO. %	NO. %	NO. %	NO. 5
CHIEF CAPTAIN COMMISSIONER COLONEL ACTING CHIEF ASSISTANT CHIEF MAJOR LIEUTENANT CORPORAL DEPUTY SHERIFF INSFECTOR SHERIFF SERGEANT PATROLMAN OTHER TITLE UNDERSHERIFF SPECIALIST	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	2 4 1 2 0 0 0 0 0 0 2 4 6 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

 84 100

47,100

TOWNSHIP

NO..

0 0

Ó

õ

0.

27 101

79 100

*

 \mathcal{A}

B-2

Table 1-2

TOTAL

YEARS OF EXPERIENCE OF PERSON WHO FILLED IN QUESTIONNAIRE

445 .99

				DEPARTMENT	ТҮРЕ		
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY FIFTY (50 OR MORE LARGEST OFFICERS) CITIES	TOWNSHIP
	NO • %	NO. %	NO. %	NO• %	NO. %	NO. % NO. %	NO+ %
2 OR LESS 3-5 YEARS 6-10 YEARS 11-15 YEARS 16-20 YEARS 21-25 YEARS 26-30 YEARS 31 OR MORE NO ANSWER	11 2 37 8 96 22 87 20 88 20 55 12 37 8 25 6 9 2	0 0 0 0 5 11 4 9 18 38 6 13 7 15 5 11 2 4	4 5 12 16 22 30 14 19 8 11 6 8 3 4 1 1 3 4	6 7 8 10 26 31 19 23 12 14 5 6 4 5 3 4 1 1	0 0 7 8 17 19 22 25 20 22 12 13 4 4 6 7 1 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccc} 0 & 0 \\ 4 & 15 \\ 9 & 33 \\ 4 & 15 \\ 4 & 15 \\ 1 & 4 \\ 4 & 15 \\ 1 & 4 \\ 4 & 15 \\ 1 & 4 \\ 0 & 0 \end{array}$
TOTAL	445 100	47 101	73 98	84 101	89 99	79 100 46 101	27 101

Table i-1

Table 1-1

1. HOW MANY OF THE OFFICERS IN YOUR DEPARTMENT USE: ON DUTY: HANDGUNS OF EACH OF THE FOLLOWING CALIBERS?(EITHER AS THEIR PRIMARY OR THEIR BACKUP WEAPON.) -- Numbers represent numbers of officers carrying handgun of specified caliber.

041 T-CO								UL.	spec	arried carr	her .						
CALIBER								DEPAR	RTME	NT TYPE							
	ALL DEPARTM TYPE	ENT	STAT	ε	COUNT	Ύ	. (CITY (1-9 OFFICE	२ ५)	CITY (10-4 OFFICE	9	CITY (50 OR OFFICE	MORE	FIFT Large Citi	ST	TOWNS	HIP
	NO.	*	NO.	*	NO.	*		NO.	%	NO.	%	NO.	*	NO.	*	NO•	*
•32 AUTOMATIC •38 SPECIAL 9 MM •357 MAGNUM •45 AUTOMATIC •22 •25 •32 REVOLVER •380 •41 •44 OTHER	159 144015 2356 29984 2674 139 67 32 103 135 224 4	0 80 1 17 17 0 0 0 0 0 0 0	3 25451 1785 15288 84 105 24 0 40 5 5	0 59 4 36 0 0 0 0 0 0 0	2 1639 82 1194 30 3 1 1 1 1 4 3	0 55 3 40 1 0 0 0 0 0 0 0		0 534 17 176 26 4 3 0 1 1 0 0	0 70 23 3 1 0 0 0 0 0 0 0	6 1293 40 498 42 8 3 0 4 1 1 1 9	0 68 26 2 0 0 0 0 0 0 0 0 0 0 0 0 0	9 8409 171 1620 125 2 19 5 28 1 48 0	2 16 1 0 0 0 0 0 0	136 106540 250 11111 2365 15 26 29 126 166 0	0 88 0 9 2 0 0 0 0 0 0 0 0 0 0	3 149 13 97 2 1 1 2 2 1 1 2 2 1 1 2 2 1 2 1 2 1 2	L 4
TOTAL	179891	99	42791	99	2960	99		762	99	1896	98	10437	100	120779	99	26	6 99

B-3 Table 1-2

1. HOW MANY OF THE OFFICERS IN YOUR DEPARTMENT USE, ON DUTY, HANDGUNS OF EACH OF THE FOLLOWING CALIBERS?(EITHER AS THEIR PRIMARY OR THEIR BACKUP WEAPON.)-- Numbers represent numbers of <u>departments</u> with at least one officer carrying handgun of specified caliber.

CALIBER

OFPARTMENT TYPE

				DEC AN INCH				
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 Officers)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
	NO. %	NO• %	NO. %	NO. %	NO. %	NO. %	NO. %	NO. K
.32 AUTOMATIC .38 SPECIAL 9 MM .357 MAGNUM .45 AUTOMATIC .22 .25 .32 REVOLVER .380 .41 .44 OTHER	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	1 2 41 87 7 15 31 66 3 6 4 9 3 6 0 0 1 2 1 2 1 2 1 2	2 3 69 95 7 10 43 59 8 11 1 1 1 1 1 1 0 0 1 1 2 3 1 1	0 0 78 93 7 8 43 51 4 5 1 1 1 1 0 0 1 1 1 1 1 1 0 0 0 0 0 0	2 2 84 94 13 25 51 57 11 12 3 3 2 2 0 0 2 2 1 1 1 1 1 1 0 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
TOTAL	850 190	94 199	135 186	136 161	170 189	154 207	93 202	57 211

	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE Officers)	FIFTY LARGEST CITIES	TOWNSHIP
•32 AUTOMATIC								n da binnya sin Pengharan di Bij
MEAN	11.36	3.00	1.00	•00	3.00	2.25	45.33	1.50
MINIMUM	1	3	1	0	1	£ • 20		1.00
MAXIMUM	120	3	ī	õ	5	4	6 120	2
•38 SPECIAL		n e stêre diên.					150	6
MEAN	344.53	620.76	23.75	6.85	15.39	109.21	2316.09	6+48
MINIMUM	1	24	1	i i i i i i i i i i i i i i i i i i i	1	5	128	1
MAXIMUM	32000	3875	394	84	48	592	32000	21
9 MM								
MEAN	36.81	255.00	11.71	2.43	3.08	10.06	41.67	1.57
MINIMUM	1	3	1	1	1	1	4 4	ī
MAXIMUM	1700	1700	73	6	18	64	101	5
•357 MAGNUM								
MEAN MINIMUM	120.42	493.16	27.77	4+09	* 9 . 76	38.57	584.79	4 • 85
MAXIMUM	1	5	1	1	1	2	30	1
•45 AUTOMATIC	3000	2500	353	37	30	155	3000	26
MEAN	58.13	AA AA						
MINIMUM	20.10	28.00	3.75	6.50	3.82	11.36	337.86	1+00
MAXIMUM	2000	50	1	1	1	우리 아들 귀에 가장 가장 문	2	1
OTHER	2000	50	9	20	18	36	2000	9 - 19 1 - 19 - 19
MEAN	11.92	16.36	1 06	0.05	1 00			
MINIMUM	• • • • • • • • • • • • • • • • • • •	10130	1.86	2.25	1.89	7.92	31.42	1.33
MAXIMUM	99	48		1	6	1 45	6	1
						40	99	. 2

DEPARTMENT TYPE

1

CALIBER

1

AVERAGE NUMBER OF OFFICERS USING, ON DUTY, HANDGUNS OF SPECIFIED CALIBERS AS PRIMARY OR BACKUP WEAPON.

Table 1-3

Table 2-1

2. SELECT FROM THE LIST IN QUESTION 1 THE HANDGUN THAT IS USED. ON DUTY, BY MORE OF YOUR OFFICERS THAN ANY OTHER.

MOST USED HANDGUN: 2.A. CALIBER TYPE

CALIBER

			DEPARTMEN	Т ТҮРЕ			
	ALL DEPARTMENT TYPES	STATE COUN	NTY CITY (1-9 Officers)	CITY (10-49 Officers)	CITY (50 OR MORE Officers)	FIFTY LARGEST CITIES	TOWNSHIP
	NO• %	NO• % NO	• % NO• %	NO. %	NO• %	NO. %	NO• %
•38 9 mm •357 magnum •45	328 74 4 1 109 24 4 1	25 53 54 1 2 1 21 45 14 0 0	0011	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	63 80 1 1 15 19 0 0	41 89 0 0 5 11 0 0	18 67 0 0 9 33 0 0
TOTAL	445 100	47 100 7	3 100 84 99	89 100	79 100	46 100	27 100

Table 2-2

B-5

2. AVERAGE NUMBER OF OFFICERS USING AS THEIR PRIMARY ON-DUTY WEAPON HANDGUNS OF SPECIFIED CALIBERS.

CALIBER

				DEPARTMEN	T TYPE			
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
.38 SPECIAL								
MEAN	427.02	936.44	26.81	7.66	18.29	127.40	2570.76	7•44
MINIMUM MAXIMUM	32000	93 3875	1	1	5 48	22	255 32000	21
9 MM	32000	30/5	394	84	40	592	32000	C1
MEAN	447.00	1700.00	•00	6.00	18.00	64.00	•00	•00
MINIMUM	6	1700	n	6	18	64	0	0
MAXIMUM	1700	1700	õ	6	18	64	Õ	õ
.357 MAGNUM								
MEAN	170.44	541.33	48.22	5.35	14.33	62.60	978.60	8+33
MINIMUM	$1^{(1)}$, $1^{(2)}$, $1^{(2)}$, $1^{(2)}$, $1^{(2)}$	106	2	1	5	6	213	1
MAXIMUM	1950	1950	353	18	30	150	1927	26
.45 AUTOMATIC								
MEAN	11.00	•00	3.00	11.50	18.00	•00	•00	•00
MINIMUM	3	0	3	3	18	0	0	0
MAXIMUM	20	0	3	20	18	0	0 /	0
OTHER								
MEAN	•00	•00	•00	•00	•00	•00	•00	•00
MINIMUM MAXIMUM	0	0	U	0 0	0 0	U	0	0
MATHON	U	U	U	U	v	U	U	U

Table 2 B-1

	ANY(MOST USE				BER OF GUNS)					
GUN TYPE						DEPARTMENT	ТҮРЕ			
		DEI	ALL PARTMENT TYPES	STATE	COUNTY	CITY (1-9 OfficeRs)	CITY (10-49 OFFICERS)	CITY (50 OR MORE Officers)	FIFTY LARGEST CITIES	TOWNSHIP
			NO. %	NO• %	NO. %	NO• %	NO. %	NO. %	NO, %	NO• %
REVOLVERS AUTOMATIC	5		2748 99 1840 1	36918 96 1700 4	2327 100 11 0	584 95 29 5	1496 98 36 2	9282 99 64 1	111928 100 0 0	213 100 0 0
TOTAL		16	+588 100	38618 100	2338 100	613 100	1532 100	9346 100	111928 100	213 100

Table 2 B-2

2.B. HOW MANY (MOST USED HANDGUNS) ARE REVOLVERS? (NUMBER OF DEPARIMENTS) HOW MANY (MOST USED HANDGUNS) ARE AUTOMATICS?

GUN TYPE

		DEPARTMENT	TYPE		
DEr	ALL STATE PARTMENT TYPES	COUNTY CITY (1-9 OFFICERS)	CITY (10-49 Officers)	(50 OR MORE L	FIFTY TOWNSHIP Argest Cities
	NO. % NO. %	NO. % NO. %	NO. %	NO• % !	NO. % NO. %
REVOLVERS AUTOMATICS	438 98 46 98 10 2 1 2	73 100 81 96 3 4 3 4	87 98 2 2	78 99 1 1	46 100 27 100 0 0 0 0
TOTAL	448 100 47 100	76 104 84 100	89 100	79 100	46 100 27 100

Table 2 B-3

2.8. CALIBER BREAKDOWN OF ALL MOST USED GUNS - REVOLVERS (NUMBER OF GUNS)

CALIBER			DEPARTMENT	TYPE		
	ALL DEPARTMENT TYPES	STATE COUNT	TY CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY FIFT (50 OR MORE LARGE OFFICERS) CITI	ST
	NO• %	NO. % NO.	% NO• %	NO. %	NO. % NO.	% NO• %
•38 •357 MAGNUM •45	144093 89 18652 11 3 0	25475 69 1456 11443 31 868 0 0 3	63 493 84 37 91 16 0 0 0	1154 77 342 23 0 0	8343 90 107035 939 10 4893 0 0 0	96 137 64 4 76 36 0 0 0
TOTAL	162748 100	36918 100 2327	100 584 100	1496 100	9282 100 111928	100 213 100

Table 2 B-4

2.B. CALIBER BREAKDOWN OF ALL MOST USED GUNS - REVOLVERS (NUMBER OF DEPARIMENTS)

CALIBER

			DEPARTMENT	Т ТҮРЕ			literation and the second
	ALL DEPARTMENT TYPES	STATE COUNTY	(CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE Officers)	FIFTY T LARGEST CITIES	OWNSHIP
	NO. %	NO. % NO.	% NO• %	NO. %	NO. %	NO. %	NO• %
•38 •357 MAGNUM •45	328 75 109 25 1 0		74 64 79 25 17 21 1 0 0	63 72 24 28 0 0	63 81 15 19 0 0	41 89 5 11 0 0	18 67 9 33 0 0
TOTAL	438 100	46 100 73 1	81 100	87 100	78 100	45 100	27 100

Table 2 B-5

2.8. CALIBER BREAKDOWN OF ALL MOST USED GUNS - AUTOMATICS (NUMBER OF GUNS)

CALIBE	R																							
											DEP	RTME	INT	TYPE										
			DE	ALL PARTM TYPE	ENT	STA	TE	COUN	TΥ	0	CIT) (1-9 FFICE	€	ی کار اکاری با	CITY (10-4 OFFICE	9 .	(50	OR N ICEF		LA	FIFTY RGES CITIE		T	OWNSH	IP
				NO.	%	NO.	%	N0.	%		NO.	%		NO.	Ж	1	10.	*	N	10.	%		NO.	x
•38 9 MM •45				11 1788 41	1 97 2	0 1700 0	100	11 0 0	100 0 0		0 6 23	0 21 79		0 18 18	0 50 50		0 64 1 0	0 100 0		0 0 0	0 0		0 0 0	0 0 0
TOTAL				1840	100	1700	100	11	100		29	100		36	100		64 1	.00		0	0		0	0

2.B. CALIBER BREAKDOWN OF ALL MOST USED GUNS - AUTOMATICS (NUMBER OF DEPARIMENTS)

CALIBER

DEPARTMENT TYPE ALL STATE COUNTY CITY CITY CITY FIFTY TOWNSHIP (1-9 (10-49 (50 OR MORE LARGEST TYPES OFFICERS) OFFICERS) OFFICERS) CITIES NO. - % NO. * NO. * NO. NO. * - % NÓ. * NO. * NO. % •38 3. 30 0 0 3 100 0 0 0 0 0 0 0 0 0 0 9. MM 4 3 40 1 100 0 0 12 33 1 50 1 100 0 0 0 0 •45 30 ō 0 0 67 50 õ 0 0 0 0 0 TOTAL 10 100 1 100 3 100 3 100 2 100 1 100 Ó 0 0 0

Table 2 C-1

2.C. LIST BELOW EACH DIFFERENT MODEL OF THIS MOST USED HANDGUN NOW USED IN YOUR (NUMBER OF DEPARTMENTS) DEPARTMENT.

MANUFACTURER

TOWNSHIP CITY CITY FIFTY ALL STATE COUNTY CITY (1-9 OFFICERS) (10-49 (50 OR MORE LARGEST DEPARTMENT CITIES TYPES OFFICERS) OFFICERS) B-9 NO+ - % NÓ. NO. NO. % NO. . % NO. - % NO. % NO. % * % 46 100 Ŭ. Ó 7 Ö. D Ð. Ũ Ò Û OTHER 39 145 130 145 124 157 73 159 TOTAL 640 144 66 141 100 137 108 128

DEPARTMENT TYPE

Table 2 D-1

2.D. BARREL LENGTHS: (FOR YOUR MOST USED HANDGUN) HOW MANY HAVE BARRELS OF THE (NUMBER OF GUNS) FOLLOWING LENGTHS?

BARREL LENGTH

								DEPA	RTMEN	T TYPE								
	ALL DEPARTMI TYPE		STAT	ε	COUN	TΫ	OF	CITY (1-9 FICE	RS)	CITY (10-4 OFFICE	9	CIT (50 OR OFFIC	MORE	FIFT LARGE CITI	ST	т	OWNSH	IIP
	NO.	*	NO.	%	NO.	%		NO.	%	NO.	%	NO e	%	NO.	*		NO.	%
LESS THAN 3 INCHES 3-5 INCHES MORE THAN 5 INCHES NO ANSWER	15067 133364 16062 95	9 81 10 0	3242 24941 10435 0	8 65 27 0	337 1887 114 0			53 529 31 0	9 86 5 0	114 1308 110 0	7 85 7 0	1563 7239 449 95	17 77 5 1	9732 97285 4911 0	4		26 175 12 0	12 82 6 0
TOTAL	164588	100	38618	100	2338	100		613	100	1532	99	9346	100	111928	100		213	100

Table 2 D-2

2.D. BARREL LENGTHS: (FOR YOUR MOST USED HANDGUN) HOW MANY HAVE BARRELS OF THE (NUMBER OF DEPARIMENTS) FOLLOWING LENGTHS?

BARREL LENGTH

									DE	PARTM	ENT	TYPE										
		DE	ALL PARTM TYPE	ENT	STA	TE	COUN	ТҮ	CI (1 OFFI	-9		CIT (10-4	tð 👘		CIT 0 OR FFIC	MORE	FIFT LARGE CITI	EST	Ť	OWNSI	IIP	
			NO.	%	N0.	%	NO.	*	NO			NO.	%	Ŭ	N0.	-N-37 %	NO.	*		NO •	*	
LESS THAN 3 3-5 INCHES More Than 5 No Answer			212 412 87 1	48 93 20 0	16 41 8 0	87 17	44 60 17 0	82 23	2 8 1	95		29 85 18 0	33 96 20 0		58 76 20 1	73 96 25 1	32 46 9 0	70 100 20 0		12 24 3 0	89 11	
TOTAL			712	161	65	138	121	165	11	3 134		132	149		155	195	87	190		39	144	

Table	2A	2D-1
-------	----	------

COMPARISON BETWEEN MOST USED HANDGUN CALIBER AND BARREL LENGTH (NUMBER OF GUNS)

BARREL LENGTH	то	TAL	•3	8	9 MM	.357		.45	5
	NO •	%	1 NO.	%	NO. %	NO •	%	NO.	%
LESS THAN 3 INCHES 3-5 INCHES	15067 133364	9 81	14651 114904	10 80	0 0 1788 100	416 16632 8	2	0 40	0 91
MORE THAN 5 INCHES NO ANSWER	16062 95	10 0	14454 95	10 0	0 0	1604 0	9	4 0	9

Table 2A 2D-2

COMPARISON BETWEEN MOST USED HANDGUN CALIBER AND BARREL LENGTH (NUMBER OF DEPARIMENTS)

в				Е			

BARREL LENGTH			
	TOTAL	38 9 MM	•357 •45
	No. % No.	% NO. %	NO• % NO• %
LESS THAN 3 INCHES 3-5 INCHES	212 30 191 412 58 299		21 13 0 0 106 68 3 60
MORE THAN 5 INCHES	$\begin{array}{cccc} 87 & 12 & 55 \\ 1 & 0 & 1 \end{array}$	10 0 0	30 19 2 40
NO ARSWER		0 0 0	0 0 0 0

Table 2 D-3

BARREL LENGTHS WHEN MOST USED HANDGUN IS A .38 CALIBER (NUMBER OF GUNS)

BARREL LENGTH

				DEPARTMENT	F TYPE			
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
	NO. %	NO. %	NO. %	NO • %	NO. %	NO. %	NO. %	NO• %
LESS THAN 3 INCHES 3-5 INCHES More Than 5 Inches No Answer	14651 10 114904 80 14454 10 95 0	3231 13 12599 49 9645 38 0 0	296 20 1075 73 96 7 0 0	48 10 418 85 27 5 0 0	111 10 976 85 67 6 0 0	1534 18 6320 76 394 5 95 1	9408 9 93412 87 4215 4 0 0	23 17 104 76 10 7 0 0
ΤΟΥΑL	144104 100	25475 100	1467 100	493 100	1154 101	8343 100	107035 100	137 100

Table 2 D-4

BARREL LENGTHS WHEN MOST USED HANDGUN IS A .38 CALIBER

(NUMBER OF DEPARTMENTS)

BARREL LENGTH

				DEPARTMENT	Г ТҮРЕ			
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
	NO. %	NO. %	NO. %	NO . %	NO. %	1 NO. %	NO. %	NO• %
LESS THAN 3 INCHES 3-5 INCHES MORE THAN 5 INCHES NO ANSWER TOTAL	191 58 299 91 55 17 1 0 546 166	15 60 20 80 6 24 0 0 41 164	40 74 41 76 8 15 0 0 89 165	16 25 62 97 -10 16 0 0 88 138	28 44 60 95 9 14 0 0 97 153	53 84 60 95 13 21 1 2 127 202	29 71 41 100 7 17 0 0 77 188	10 56 15 83 2 11 0 0 27 150

Table 2 D-5

BARREL LENGTHS WHEN MOST USED HANDGUN IS A .357 CALIBER (NUMBER OF GUNS)

BARREL LENGTH		ng sa sang Tang		DEPARTMENT	Г ТҮРЕ		
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)			FTY TOWNSHIP GEST TIES
	NO. %	NO. %	NO. %	NO• %	NO. %	NO. % NO.	• % NO• %
LESS THAN 3 INCHES 3-5 INCHES MORE THAN 5 INCHES	416 2 16632 89 1604 9	11 0 10642 93 790 7	41 5 810 93 17 2	5 5 85 93 1 1	3 1 296 87 43 13	29 3 324 855 91 3873 55 6 696	3 79 71 93
TOTAL	18652 100	11443 100	868 100	91 99	342 101	939 100 4893	3 100 76 100

Table 2 D-6

BARREL LENGTHS WHEN MOST USED HANDGUN IS A .357 CALIBER (MMBER OF DEPARTMENTS)

BARREL LENGTH

DEPARTMENT TYPE

			AL DEPART TYP	MENT	STA	TE	COUN	ΓY	CIT (1- OFFIC	9	CIT (10-4 FIC	49	CIT) OR FICE	MORE	FIF LARGI CIT	ST	TOWNSI	HIP
			NO.	%	NÖ.	*	N0.	%	NO.	%	NO.	%	N0.	*	N0.	%	NO.	*
3	ESS THAN 3 5-5 INCHES MORE THAN 5		21 106 30		1 20 2	5 95 10	4 18 8	100	5 16 1	29 94 6	1 23 9	4 96 37	15	33 100 47		60 100 40	9	22 100 11
٦	TOTAL		157	144	23	110	30	166	22	129	33	137	27	180	10	200	12	133

2.E. AMMUNITION: LIST EACH TYPE OF AMMUNITION THAT YOUR OFFICERS USE WITH THIS (NUMBER OF DEPARTMENTS) MOST USED HANDGUN.

				ÞΕ			
ALL DEPARTMENT TYPES	STATE	COUNTY	(1-9) (1		CITY D OR MORE FFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
NO. 8	NO. %	NO. %	NO. % N	10. %	NO. %	NO. %	NO• %
LEAD 217 49 JACKETED 66 15 HOLLOWPOINT 105 24 WAD CUTTER 28 6 SEMI WADCUTTER 14 3 SOFT POINT 45 10 METAL PIERCING 8 2 UNUSABLE INFO 73 16 'UNXNOWN 1 0 NO ANSWER 5 1	22 47 8 17 6 13 1 2 9 19 2 4 3 6 0 0	33 45 6 8 14 19 4 5 3 4 8 11 0 0 17 23 1 1 2 3	44 52 13 15 11 13 3 4 0 0 4 5 1 1 16 19 0 0 2 2	32 36 20 22 25 28 5 6 1 1 9 10 3 3 16 18 0 0 1 1	42 53 10 13 29 37 4 5 3 4 8 10 2 3 12 15 0 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
NO ANSWER 5 1 TOTAL 562 126	00 59 125	2 3 88 119	22 94 111 1	1 1 112 125	0 0 110 140	0 0 68 148	0 0 31, 114

LIST EACH BULLET WEIGHT, IN GRAINS, THAT YOUR OFFICERS USE WITH THIS MOST USED (NUMBER OF DEPARIMENTS) HANDGUN.

BULLET WEIGHT (IN GRAINS)

				DEPARIME				
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
	NO. %	NO. %	NO. %	NO+ %	NO. %	NO. %	NO. %	NO• %
LESS THAN 91 91-100 101-110 111-120 121-130 131-140 141-150 151-160 161-170 171-180 181-190 191-200 GREATER THAN 210 NO ANSWER/DONT KNOW	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0 1 2 7 15 0 0 3 6 0 0 8 17 37 79 0 0 1 2 0 0 1 2 0 0 1 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccc} 0 & 0 \\ 0 & 0 \\ 22 & 28 \\ 0 & 0 \\ 8 & 10 \\ 1 & 1 \\ 8 & 10 \\ 59 & 75 \\ 0 & 0 \\ 1 & 1 \\ 0 & 0 \\ 7 & 9 \\ 0 & 0 \\ 2 & 3 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
TOTAL	558 124	59 125	89 121	95 112	109 122	108 137	0 0 68 149	0 0 30 111

DEPARTMENT TYPE

Table 2 E-3

LIST EACH MANUFACTURER OF AMMUNITION THAT YOUR OFFICERS USE WITH THIS MOST USED (NUMBER OF DEPARTMENTS) HANDGUN.

	MANUFACTURER							DEPAR	TMENT	TYPE								
			ALL ARTMENT TYPES	STATE		COUNTY		CITY (1-9 OFFICER	S)	CITY (10-4 OFFICE		CITY (50 OR OFFICE	MORE	FIFT LARGE CITI	ST	TOWNS	HIP	
		· · · · · · ·	NO. %	N0.	*	NO.	%	NO.	%	NO.	%	NO.	%	NO.	*	NO	%	
B-15	2 5 8 10 11 12 13 16 18 19 ANY, ALL MULTIPLE MANUFACTURERS UNKNOWN OTHER NO ANSWER		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5 0 29 3 1 7 2 19 1 3 0 0 1 0 0 0	11 0 62 6 2 15 4 40 2 6 0 2 0 0 0 0 0	10 1 10 2	3 1 48 14 14 29 5 3 1 0 4 0 3	7 1 9 0	4 54 8 1 11 0 30 1 0 0 0 1 4	2 3 40 7 3 17 1 3 3 2 3 1 2 1 0 3	23 45 83 19 1 37 23 1 21 03	2 3 43 11 0 23 4 28 4 28 4 2 1 1 1 0 .1 0	3 4 54 14 0 29 5 35 5 3 1 1 0 1 0	4 1 28 7 4 8 1 17 1 0 0 2 0 4 1	9 2 61 15 9 17 2 37 2 0 0 4 0 9 2		2 7 2 7 2 7 3 0 9 33 1 4 0 0 0 0 0 0 1 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	n ()
	TOTAL		614 136	71	150	94 1	129	96	115	118	130	123	155	78	169	3	4 126	•

Table 3-1

3. GO BACK TO QUESTION 1 AND PICK OUT THE HANDGUN THAT IS SECOND MOST OFTEN USED NUMBER OF DEPARIMENTS BY YOUR OFFICERS.

SECOND MOST USED HANDGUN: 3.A. CALIBER TYPE

CALIBER

	VALUE										DEPA	RTME	INT	TYPE										
تا 				AI DEPAR TYI			STAT	E	COUNT	ſŸ	CITY (1-9 OFFICE) *		CITY (10-4 OFFICE	19	(50 0	TY DR MO ICERS		L	FIFT ARGE	ST	. т	OWNSH	IP
۲			an tha an Airtí	a Alfreda A	NO.	*	NO .	8	NO.	%	NO.	%		NO.	%	N)• •	%	e I	NO.	%		N0 •	%
	•32 •38 9 MM •357	MAGNUM			7 87 17 132	3 34 7 51	0 16 1 10	0 53 3 33	2 14 1 25	5 32 2 57	0 14 4 23	0 33 9 53		0 20 3 26	0 38 6 50		4	4 9 8		2 5 0 14	9 23 0 64		1 4 4 9	5 21 21 47
	•45 •22 •25 •380 •44				5 5 4 1	2 2 0	0 1 1 1	0 3 3 3 0	2 0 0 0	5 0 0 0	0 1 1 0	0 2 0 0		1 1 0 0	2 2 2 0 0		2 0 1 0	4 0 2 0 2		0 1 0 0	0 5 0 0		0 1 0 0	0 5 0 0
	TOTAL	el estatu - Statut			259	101	30	98		101	43	99		52	100		49 10	10		22	101		19	99

CALIBER				DEPARTMEN	TTYPE			
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE Officers)	FIFTY LARGEST CITIES	TOWNSHIP
.32 AUTOMATIC MEAN Minimum Maximum	5•14 1 20	•00 0 0	1.00 1 1	•00 0 0	.00 0 0	3.00 1 5	13.00 6 20	2•00 2 2
•38 SPECIAL MEAN MINIMUM MAXIMUM	45.31 1 400	127.50 24 296	13.36 1 98	3.14 1 10	6.90 1 20	27.36 5 51	227.80 128 400	2+75 1 6
9 MM MEAN MINIMUM MAXIMUM	4 • 76 1 30	30.00 30 30	2.00 2 2	2•25 2 3	3.00 2 4	5.75 1 15	00. 0 0	2+00 1 5
•357 MAGNUM MEAN MINIMUM MAXIMUM	86.21 1 3000	392.00 5 2500	13.04 1 119	3•52 1 37	5.81 1 20	26.60 3 155	444.14 30 3000	2+11 1 5
•45 AUTOMATIC MEAN MINIMUM MAXIMUM	9.40 2 35	•00 0 0	3.00 2 4	•00 0 0	4.00 4 4	18.50 2 35	•00 0 0	+ DD 0 0
OTHER MEAN MINIMUM MAXIMUM	16.36 1 48	32•33 9 48	•00 0 0	3•50 3 4	4.00 2 6	26.00 7 45	15.00 15 15	1 • 00 1 1

3. AVERAGE NUMBER OF OFFICERS ASSOCIATED WITH SECOND MOST USED ON DUTY HANDGUNS. FOR SPECIFIED CALIBERS

Table 3-2

Table 3 B-1

3.8.	HOW	MANY(SECOND	MOST	USED	HANDGUNS)	ARE	REVOLVERS?	
	HOW	MANY (SECOND	MOST	USED	HANDGUNS)	ARE	AUTOMATICS?	

(NUMBER OF GUNS)

GUN TYPE				DEPARTMENT	TYPE			
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
	NO• %	NO. %	NO. %	NO. %	NO. %	NO. %	NO. %	NO • %
REVOLVERS AUTOMATICS	15410 98 5 258 2	5960 98 127 2	517 99 6 1	130 92 12 8	286 93 21 7	1101 94 57 6	7383 100 15 0	33 77 10 23
TOTAL	15668 100	5087 100	523 100	142 100	307 100	1168 100	7398 100	43 100

Table 3 B-2

3.8.	HOW	MANY (SECOND	MOST USED	HANDGUNS)	ARE REVOLVERS?	(NUMBER OF DEPARTMENTS)
	HOW	MANY (SECOND	MOST USED	HANDGUNS)	ARE AUTOMATICS?	(nonblac of Dia Activity)

GUN TYPE

			DEPARTMENT TYPE		
	ALL DEPARTMENT TYPES	STATE COUNTY	CITY CITY (1-9 (10-49 OFFICERS) OFFICERS)	CITY FIFTY (50 OR MORE LARGEST OFFICERS) CITIES	TOWNSHIP
	NO• %	NO. % NO. %	NO. % NO. %	NO. % NO. %	NO• %
REVOLVERS AUTOMATICS	229 88 31 12	26 87 42 95 · 4 13 3 7	38 89 46 86 5 12 6 12	42 86 21 95 7 14 1 5	14 74 5 26
TOTAL	260 100	30 100 45 102	43 100 52 100	49 100 22 100	19 100

Table 3 B-3

3.8. CALIBER BREAKDOWN OF ALL SECOND MOST USED GUNS " REVOLVERS (NUMBER OF GUNS)

CALIBER

CALIBER				DEPARTMEN	Т ТҮРЕ			
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
	NO. %	NO. %	NO. %	NO. %	NO. %	NO. %	NO. %	NO• %
•32 •38 •357 MAGNUM •45 •22 •44	34 0 3943 26 11381 74 2 0 5 0 45 0	0 0 2040 34 3920 66 0 0 0 0 0 0	2 0 187 36 326 63 2 0 0 0 0 0	0 0 45 35 81 62 0 0 4 3 0 0	0 0 136 48 150 52 0 0 0 0 0 0	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	26 0 1139 15 6218 84 0 0 0 0 0 0	0 0 13 39 19 58 0 0 1 3 0 0
TOTAL	15410 100	5960 100	517 99	130 100	286 100	1101 101	7383 99	33 100

Table 3 B-4

3.8. CALIBER BREAKDOWN OF ALL SECOND MOST USED GUNS - REVOLVERS (NUMBER OF DEPARTMENTS)

CALIBER

DEPARTMENT TYPE

	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
	NO. %	NO. %	NO. %	NO. %	NO. %	NO. %	NO. %	NO• %
•32 •38 •357 MAGNUM •45 •22 •44	6 3 87 38 132 58 1 0 2 1 1 0	0 0 16 62 10 38 0 0 0 0 0 0	2 5 14 33 25 60 1 2 0 0 0 0	0 0 14 37 23 61 0 0 1 3 0 0	0 0 20 43 26 57 0 0 0 0 0 0	2 5 14 33 25 60 0 0 0 0 1 2	2 10 5 24 14 67 0 0 0 0 0 0 0 0	0 0 4 29 9 64 0 0 1 7 0 0
TOTAL	229 100	26 100	42 100	38 101	46 100	42 100	21 101	14 100

≥∭rs ÷

 \mathcal{O}

Table 3 B-5

3.8. CALIBER BREAKDOWN OF ALL SECOND MOST USED GUNS - AUTOMATICS (NUMBER OF GUNS)

CALIBER

											DEP	RTME	NT T	YPE									
			DE	ALL PARTA TYPE	ENT	STA	ΓΕ	COL	JNT	Y	CITY (1-9 DFFICE)	C	CITY (10-4 FFICE	9	CITY 50 OR DFFICE	MORE	FIFT LARGE CITI	ST	٢	rownsh	IIP	
				NO.	%	NO.	8	NC		%	N0+	%		NO.	¥	ND.	%	NO.	%		NO.	%	
•32				2	1	0			0	0	0	0		0	0	D	Ũ	0	0		2		
9 MM •45				81 45	31	30	24		2	33	9	75 0		9	43 19	23 37	34 55	0	0.		8 D	80 0	
•22 •25		•		69 21	27 8	48 9	38		0 0	0	03	0 25		6	29 10	 07	0 10	15	100 0		0	0	
•380				40	16	40	31		0	Ō	Ō	0		ō	Ō	Ö		Ō	Ö		0	Ō	
TOTAL				258	100	127	100		6	100	12	100		21	101	67	99	15	100		10	100	

Table 3 B-6

3.B. CALIBER BREAKDOWN OF ALL SECOND MOST USED GUNS - AUTOMATICS (NUMBER OF DEPARTMENTS)

CALIBER

DEPARTMENT TYPE ALL STATE COUNTY CITY CITY CITY FIFTY TOWNSHIP (10-49 DEPARTMENT (1-9 (50 OR MORE LARGEST TYPES OFFICERS). OFFICERS) OFFICERS) CITIES NO. % NO. NO. N0. NC. * % NO. % NO. % NO.+ % % % • 32 . 1 3 20 0 0 0 . 0 Ú 0 0 0 0 0 0 0 14 9 MM 17 .55 25 33 3 4 57 80 1 1 4 80 50 0 0 5 16 ž 67 Ó .45 1 0 0 0 17 2 29 0 0 0 0 3 10 •22 1 25 0 0 Ð 0 1 17 0 0 1 100 0 Ŋ •25 4 13 1 25 0 0 17 14 0 0 1 20 1 1 0 0 .380 1 3 25 0 0 0 0 0 0 0 0 0 0 0 0 TOTAL 31 100 3 100 1 100 4 100 5 100 6 101 7 100 5 100

Table 3 C

3.C. LIST BELOW EACH DIFFERENT MODEL OF THIS SECOND MOST USED HANDGUN NOW USED (NUMBER OF DEPARIMENTS) IN YOUR DEPARTMENT.

MANUFACTURER

	ALL ARTME TYPES		STA.	TE	COUN	TΥ	. c	CITY (1-9 OFFICE		CITY (10-4 FFICE	9	CITY 0 OR FFICE	MORE	FIFT LARGE CITI	ST	1	TOWNSH	IP
	NO.	%	NO.	%	NO.	%		NO.	%	NO.	*	NO.	ж	NO.	%		NO.	*
1 2 2		47 78	13 23		21 34			16 29	37 67	24 43	46 83	25 40	51 82	16	73 100		6 11	32 58
ματογραφικό το του του του του του του του του του	6	2	0	Ó	1	2		<u></u>	Ő	1	2	2	4	0	0		2	11
8 13	1	0	1	3	0	0		0	0	0	0	0	0	0	0		0	Ő
14	1	0	0	0	1	2		0	0	0	0	0	0	0	0		0	0
OTHER UNKNOWN	3	2	0	0	1	2		Ŭ	0	1	2	1	2	· · 0·	0		Õ	11 D
TOTAL	346 1	33	38	126	62	140		47	109	70	135	69	141	38	173		22	117

DEPARTMENT TYPE

B-21

Table 3 D-1

3.D. BARREL LENGTHS: FOR YOUR SECOND MOST USED HANDGUN, HOW MANY HAVE BARRELS OF (NUMBER OF GUNS) THE FOLLOWING LENGTHS?

BARREL LENGTH

BARREL LENGTH				DEPARTMEN	T TYPE			
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
	NO. %	NO. %	NO. %	NO. %	NO. %	NO. %	NO. %	NO• %
LESS THAN 3 INCHES 3-5 INCHES MORE THAN 5 INCHES NO ANSWER	2372 15 10258 65 3009 19 29 0	1150 19 2421 40 2516 41 0 0	156 30 326 62 41 8 0 0	17 12 118 83 4 3 3 2	69 22 197 64 31 10 10 3	235 20 863 74 54 5 16 1	729 10 6308 85 361 5 0 0	16 37 25 58 2 5 0 0
TOTAL	15668 99	6087 100	523 100	142 100	307 99	1168 100	7398 100	43 100

Table 3 D-2

3.D. BARREL LENGTHS: FOR YOUR SECOND MOST USED HANDGUN, HOW MANY HAVE BARRELS OF (NUMBER OF DEPARIMENTS) THE FOLLOWING LENGTHS?

BARREL LENGTH

DEPARTMENT TYPE

		1. 1. 1. 1. (1. 1. 1. 1. 1.	ALI DEPART TYP	YENT	STAT	E	COUNT	r Y .		CITY (1-9 DFFICE		CITY (10-4 FICE	9	CIT (50 OR OFFIC	MORE	FIFT LARGE CITI	sT	т	OWNSH	IP
			NO.	%	NO.	%	NO.	*	•	NO.	%	N0.	%	NO.	*	NO.	%		NO.	ж
LESS THAN 3 INC 3-5 INCHES MORE THAN 5 INC NO ANSWER			86 200 51 4	77	18 16 2 0	60 53 7 0	16 34 11 0	36 77 25 0		8 33 3 2	19 77 7 5	12 41 12 1	23 79 23 2	16 43 12 1	88	10 19 9 0	45 86 41 0		6 14 2 0	32 74 11 0
TOTAL	•		341	132	36	120	61	138		46	108	66	127	72	147	38	172		22	117

Table 3 D-3

BARREL LENGTHS WHEN SECOND MOST USED HANDGUN IS A .38 CALIBER (NUMBER OF GUNS)

BARREL LENGTH							DEPA	RTMEN	т түре							
	ALL DEPARTM TYPE	IENT	STAT	Έ	COUNT	Y Y	CITY (1-9 OFFICE	н н С	CITY (10-49 OFFICER		CIT (50 OR OFFICE	MORE	FIFT LARGE CITI	ST	TOWNSHI	P
	NO.	%	NO.	*	N0.	%	NO.	%	N0.	%	N0.	%	NO.	%	NO.	%
LESS THAN 3 INCHES 3-5 INCHES MORE THAN 5 INCHES NO ANSWER	2097 1759 77 10	53 45 2 0	1046 994 0 0	51 49 0 0	120 66 1 0	64 35 1 0	13 32 0 0	29 71 0 0	48	45 35 12 7	191 156 36 0	50 41 9 0	654 462 23 0	41 2	12 1 0 0	92 8 0 0
TOTAL	3943	100	2040	100	187	100	45	100	136	99	383	100	1139	100	13 1	00



Table 3 D-4

BARREL LENGTHS WHEN SECOND MOST USED HANDGUN IS A .38 CALIBER (NUMBER OF DEPARIMENTS)

BARREL LENGTH

DEPARTMENT TYPE

ALL DEPARTMENT TYPES	STATE COUNTY	CITY CITY (1-9 (10-49 OFFICERS) OFFICERS)	CITY (50 OR MORE) OFFICERS)	FIFTY TOWNSHIP LARGEST CITIES
NO• %	NO. % NO. %	NO. % NO. %	NO. %	NO. % NO. %
LESS THAN 3 INCHES 55 63 3-5 INCHES 56 64 MORE THAN 5 INCHES 13 15 NO ANSWER 1 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	10 71 11 79 4 29 0 0	5 100 3 75 3 60 1 25 2 40 0 0 0 0 0 0
TOTAL 125 143	19 119 22 157	17 122 28 140	25 179	10 200 4 100

CONTINUED

10F2

Table 3 D-5 BARREL LENGTHS WHEN SECOND MOST USED HANDGUN IS A .357 CALIBER (NUMBER OF GUNS)

BARREL LENGTH

						<i>ie</i> -		DEPA	RTMEN	TTYPE				fi a an			
	DEPAR	LL TMENT PES	STA	TE	c	COUNT	Y	CITY (1-9 OFFICE		CITY (10-4 OFFICE	9	CIT (50 OR OFFIC	MORE	FIFT LARGE CITI	ST	TOWNSH	+IP
	NO	• %	NO.	%		N0 •	%	NO.	%	NO.	%	NO.	%	NO.	%	N0+	ж
LESS THAN 3 INCHES 3-5 INCHES MORE THAN 5 INCHES NO ANSWER	17 826 292 1	2 73 9 26	47 1357 2516 0	-		36 253 37 0	11 78 11 0	1 73 4 3	1 90 5 4	0 136 14 0	0 91 9 0	36 597 18 16	5 90 3 2	50 5830 338 0	1 94 5 0	1 16 2 0	11
TOTAL	1138	1 101	3920	100		326	100	81	100	150	100	667	100	6218	100	19	100

Table 3 D-6

BARREL LENGTHS WHEN SECOND MOST USED HANDGUN IS A .357 CALIBER (NUMBER OF DEPARTMENTS)

BARREL LENGTH

DEPARTMENT TYPE

	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
	NQ• %	NO. %	NO. %	NO. %	NO. %	NO• %	NO. %	NO• %
LESS THAN 3 INCHES 3-5 INCHES MORE THAN 5 INCHES NO ANSWER	20 15 116 88 36 27 3 2	5 50 6 60 2 20 0 0	6 24 20 80 8 32 0 0	1 4 17 74 3 13 2 9	0 0 26 100 6 23 0 0	4 16 24 96 8 32 1 4	3 21 14 100 7 50 0 0	1 11 9 100 2 22 0 0
TOTAL	175 132	13 130	34 136	23 100	32 123	37 148	24 171	12 133

Table 3 E-1

3.E. AMMUNITION: LIST EACH TYPE OF AMMUNITION THAT YOUR OFFICERS USE WITH THIS SECOND MOST USED HANDGUN (NUMBER OF DEPARTMENTS)

BULLET TYPE

ALL DEPARTMENT TYPES STATE COUNTY CITY (1-9 oFFICERS) CITY (10-49 oFFICERS) CITY (50 OR MORE OFFICERS) FIFTY LARGEST CITIES TOWNSHIP NO. % NO. %						DEPARTMEN	NT TYPE			
LEAD 112 43 14 47 17 39 18 42 18 35 21 43 16 73 8 42 JACKETED 39 15 5 17 4 9 4 9 12 23 10 20 2 9 2 11 WAD CUTTER 69 27 6 20 9 20 12 28 19 37 15 31 6 27 2 11 WAD CUTTER 8 3 2 7 2 5 0 0 2 4 1 2 1 5 0		DEPARTME	INT	TE CO	UNTY	(1-9	(10-49	(50 OR MORE	LARGEST	TOWNSHIP
JACKETED 39 15 5 17 4 9 4 9 12 23 10 20 2 9 2 11 HOLLOWPOINT 69 27 6 20 9 20 12 28 19 37 15 31 6 27 2 11 WAD CUTTER 8 3 2 7 2 5 0 0 2 4 1 2 1 5 0		NO.	% NO,	% N	10. %	NO. %	NO. %	NO• %	NO. %	NO• %
TOTAL 309 118 38 127 51 117 45 104 66 129 62 126 28 128 19 101	JACKETED HOLLOWPOINT WAD CUTTER SOFT POINT METAL PIERCING FRANGIBLE UNUSABLE INFO ANY, ALL UNKNOWN NO ANSWER	39 69 8 28 1 1 36 1 2	15 5 27 6 3 2 1 1 0 0 0 0 14 4 0 0 1 1	17 20 7 3 17 0 0 13 0 3	4 9 9 20 2 5 8 18 0 0 0 0 7 16 0 0 0 0	4 9 12 28 0 0 2 5 0 0 0 0 7 16 1 2 0 0	12 23 19 37 2 4 1 2 5 10 1 2 0 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	29 627 15 00	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	TOTAL	309 1	.18 38	127	51 117	45 104	66 129	62 126	28 128	19 101

B-25

Table 3 E-2

LIST EACH BULLET WEIGHT, IN GRAINS, THAT YOUR OFFICERS USE WITH THIS SECOND MOST USED HANDGUN (NUMBER OF DEPARTMENTS)

BULLET WEIGHT (IN GRAINS)

• • • • • • • • • • •							DEP		T TYPE								
	AL DEPART TYP	MENT	STAT	Ë ser s	COUNT	Y	CIT (1- OFFIC)	CITY (10-49 OFFICERS		CITY 50 OR OFFICE	MORE	FIF Large CIT	EST	TOW	NSHIP	
	NO.	%	NO.	×	N0.	%	NO.	%	NO.	%	NO.	*	NO.	ж	N	5 • %	
LESS THAN 91 91-100 101-110 121-120 121-130 131-140 141-150 151-160 151-160 181-190 191-200 GREATER THAN 210 NO ANSWER/DONT KNOW	8 7 43 23 25 148 1 2 12 12 19	2 9 1 57 0 1 5 2	1 6 1 2 1 5 20 0 0 0 0 0 0 0 2	3 20 3 7 3 17 67 0 0 0 0 7	0 4 1 5 25 0 0 2 1 5	0 9 2 11 2 11 57 0 0 5 2 11	2 0 4 0 1 24 0 5 1 5	5 0 9 0 2 56 0 12 2. 12	1 4 0 8	6 25 25 2 8 0 5 2 2 2 2 2 2 2 2 4 0 6	2 2 10 5 0 4 27 0 0 3 2 3	4 20 2 10 0 8 55 0 0 6 4 6	0 2 4 0 4 1 0 15 0 0 0 0 1	9 18 0 18 5 0		0 0 1 5 2 11 0 0 2 11 0 0 2 11 10 53 0 0 1 5 0 0 1 5 0 0 1 5	
TOTAL	300	117	39	130	49	110	43	100	64 12	24	59	119	27	123		19 101	

Table 3 E-3

LIST EACH MANUFACTURER OF AMMUNITION THAT YOUR OFFICERS USE WITH THIS SECOND (NUMBER OF DEPARIMENTS) MOST USED HANDGUN

MANUFACTURER

	HANOF ALLONEN				DEPARTME	NT TYPE			
		ALL DEPARTMEN TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	(10-49 (50	OR MORE LA	FIFTY TO ARGEST CITIES	OWNSHIP
		NO.	K NO.	% NO. %	NO. %	NO. %	NO. % N	NO. %	NO• %
)	2 3 5 8 10 11 12 13 16 18 19 ANY + ALL MULTIPLE MANUFACTURERS UNKNOWN OTHER NO ANSWER	6 1 5 126 4 18 6 51 2 3 80 3 80 3 8 6 2 4 5 3 6	7 0 2 1 0 6 1 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	TOTAL	330 12	7 44 1	46 53 120	46 106	66 129	68 138	34 157	19 100

TABLE 2A, 3A COMPARISON BETWEEN MOST USED HANDGUN AND SECOND MOST USED HANDGUN BY CALIBER. (NUMBER OF DEPARTMENTS)

CALIBER												DEP	ARTMEN	ТТҮ	PE										
WHEN MOST	SECOND MOST		DE	ALL PARTN TYPE	1ENT		STA	ΓE -	COUNT	Υ	Ċ	CIT (1- OFFIC	0	· (CITY 10-4 FICE	9	(50	CIT OR FICE	MORE	:	FIF LARGE CIT	EST	FOWNSH	IIP	
USED IN:	USED IS:			NO.	%		NO.	%	N0.	8		N0.	%		N0.	%		NO •	%		NO.	%	NO •	%	
38	32 AUTO. NONE 9 MM 357 MAG. 45 AUTO. OTHER			7 163 13 132 2 11	2 50 40 1 3	•	0 11 10 0 3	0 44 40 0 12	2 25 1 25 1 0	4 46 2 46 2 0		0 37 23 23 0 2	0 58 3 36 0 3		0 32 3 26 0 2	0 51 5 41 0 3		2 29 4 25 1 2	3 46 40 2 3		2 24 0 14 0 1	5 59 0 34 0 2	1 5 2 9 0 1	6 28 11 50 0 6	
TOTAL				328	100		25	100	54	100		64	100		63	100		63	100		41	100	18	101	
9 MM	38 NONE			13	25 75		0 1	0 100	0 0	0		0 1	0 100		0 1	0 100		1			0	0	0 0		
TOTAL				4	100		1	100	0	· 0		1	100		1	100		1	100		0	Ö	0	D	
357 MAG.	38 9 mm None 45 Auto.	-		84 4 18 3	77 4 17 3		16 0 5 0	76 0 24 0	13 0 4 1	72 0 22 6		13 2 2 0	76 12 12 0		20 0 3 1	83 0 12 4		13 0 1 1	87 0 7 7		5 0 0 0	100 0 0 0	4 2 3 0	44 22 33 0	
TOTAL				109	101		21	100	18	100		17	100		24	99		15	101		5	100	9	99	
45 AUTO.	38 NONE			2	50 50,		0 0	0 0	1	100 0		1	50 50		0 1	0 100		0	0 0		0 0	0	0 0	0 0	
TOTAL				4	100		Û	0	1	100		2	100		1	100		0	0		0	0	0	Q	

CALIBER

Table 4-1

4. HOW ABOUT OFF DUTY: ABOUT HOW MANY OF THE OFFICERS IN YOUR DEPARTMENT USE (NUMBER OF OFFICERS) HANDGUNS OF EACH OF THE FOLOWING CALIBERS WHEN THEY ARE OFF DUTY?

	CALIBER																		
										DEPA	RTMEN	NT TYPE							
				AL DEPART TYP	MENT	ST/	ATE	COUNT	Y .	CITY (1-9 OFFICE) .	CITY (10-4 OFFICE	9	CITY (50 OR OFFICE	MORE	FIFT LARGE CITI	ST	TOWNSI	HIP
				NO.	%	NO	. %	N0.	%	NO.	%	NO.	%	N0 e	%	NO.	%	NO •	*
	 22 LR 25 AUTOMATIC 32 AUTOMATIC 38 SPECIAL 9 MM LUGER 357 MAGNUM 45 AUTOMATIC 32 REVOLVER 380 41 44 			870 1041 739 94942 4435 6188 1682 17 414 6 34	1 86 4 6 2 0 0 0 0	275 133 75 12492 1854 1956 35 (((() 30	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	91 65 2017 218 109 92 0 55 0 3	3 2 7 4 8 4 3 0 2 0 0	8 11 15 297 13 20 4 1 3 0 0	2 3 4 80 3 5 1 0 1 0	37 30 36 938 70 59 50 1 33 0 0	323 756540300	68 167 176 5615 232 277 148 7 156 1 1	1 2 3 4 2 0 2 0 0	387 614 361 73456 2040 3763 1351 8 124 5 0	0 1 0 89 2 5 2 0 0 0 0	4 21 10 127 8 4 2 0 3 0 0 0 0	2 12 6 71 4 2 1 0 2 0 0
	•45 REVOLVER OTHER			165 1	0	(25 0	1 0	Ű 1	0 0	0 0	0	50 0	1 0	90 0	0 0	0	0
5	TOTAL			110534	101	16890	100	2741	99	373	99	1254	101	6898	99	82199	99	179	100
2	mahia 4.0																		

Table 4-2

4. HOW ABOUT OFF DUTY: ABOUT HOW MANY OF THE OFFICERS IN YOUR DEPARTMENT USE (NUMBER OF DEPARTMENTS) HANDGUNS OF EACH OF THE FOLOWING CALIBERS WHEN THEY ARE OFF DUTY?

CALIBER

								DEP	RTME	NT TYPE									
		ALL DEPARTA TYPE	MENT	ST	ATE	COUI	NTY	CITY (1-9 OFFICE	•	CIT (10- OFFIC	49	CIT (50 OR OFFIC	MORE	FIF LARG CIT	EST	Ŧ	OWNSH	IIP	
		NO.	%	NO	. %	NO	• %	NO.	×	NO.	%	N0.	%	NO.	%		NO+	%	
22 LR 25 AUTOMA 32 AUTOMA 38 SPECIA 9 MM LUGER 357 MAGNU 45 AUTOMA 32 REVOLV 380 41 44 45 REVOLV OTHER NONE/NO AN	TIC L TIC ER	53 81 76 332 103 101 74 5 35 2 35 2 3 3 1 100	18 17 75 23 23 17 1 8 0 1 1 0	11	0 21 9 19 3 6 0 0 1 2 0 0 1 2 0 0 0 0 0 0	1 6 1	9 12 0 82 1 15 6 22 3 18 0 0 3 4 0 0 1 1 1 1 0 0	5 8 10 57 7 9 4 1 3 0 0 0 1 22	6 10 12 68 8 11 5 1 4 0 0 0 1 26	13 15 20 75 23 18 17 1 10 0 0 0 0 0 13	17 22 84 26 20 19 1 11 0 0 0 0	9 21 17 64 32 29 20 20 10 1 1 1 1 1 1	27 22 81 41 37 25 3 13 13 1 1 1 0	12 13 14 36 17 17 15 1 6 1 1 0 1 1 0 10	26 28 30 78 37 37 37 37 37 32 13 2 0 22		3 10 5 21 3 3 2 0 2 0 0 0 0 0 0 0 6	11 37 19 78 11 11 7 0 7 0 0 0 22	
TOTAL		969	218	7(5 161	14	2 194	127	152	205	230	221	281	143	310		55	203	

Table 2A/4-1

÷.

COMPARISON BETWEEN MOST USED HANDGUN AND OFF-DUTY HANDGUNS, BY CALIBER. (NUMBER OF OFFICERS)

CALI	BER
------	-----

	CALIBER					DEPARTMENT TYPE			
						DEPARTMENT TIPE			
	WHEN		ALL DEPARTMENT TYPES	STATE	COUNTY	CITY CITY (1-9 (10-49 OFFICERS) OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY TOWNS LARGEST CITIES	HIP
	ON DUTY IS:	OFF DUTY IS:	NO • %	NO. %	NO. %	NO. % NO. %	NO. %	NO• % NO•	%
	38	22 LR 25 AUTO 32 AUTO 38 9 MM 357 MAG 45 AUTO OTHER	9934 4 10546 5 10770 5 109375 48 27605 12 31120 14 21623 9 7821 3	$\begin{array}{cccc} 2190 & 10 \\ 1403 & 6 \\ 341 & 2 \\ 11503 & 51 \\ 2041 & 9 \\ 2941 & 13 \\ 0 & 0 \\ 2190 & 10 \end{array}$	711 11 745 12 648 10 1365 22 623 10 774 12 798 13 615 10	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1693 10 1501 9 5940 37 2381 15 1755 11 770 5	5851 \ 3 30 6384 4 101 7979 4 40 89259 49 125 22295 12 21 25410 14 16 19890 11 4 3602 2 29	28 11 34 6 4
	TOTAL		228794 100	22609 101	6279 100	529 100 2081 101	16260 101	180670 99 366	100
5	9 MM	38 9 MM 357 MAG 45 AUTO OTHER	64 3 1788 87 64 3 64 3 64 3 64 3	00 1700 100 00 00 00 00	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 6 100 18 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	64 20 64 20 64 20	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0
	TOTAL		2044 99	1700 100	0 0	6 100 18 100	320 100	0 0 0	0
	357 MAG	22 LR 25 AUTO 32 AUTO 38 9 MM 357 MAG 45 AUTO OTHER	399384054835297122952469921496831975541523325	869 5 600 3 0 0 5965 35 3303 19 4259 25 2286 13 0 0	353 9 527 14 532 14 800 21 396 10 487 13 397 10 353 9	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	201 7 206 7 840 28 452 15 560 18 460 15	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	12 10 41 22 2 14
	TOTAL		50432 100	17282 100	3845 100	215 100 1187 100	3029 100	24761 102 113	101
	45 AUTO	22 LR 25 AUTO 32 AUTO 38 357 MAG 45 AUTO OTHER	18 13 3 2 21 15 41 30 18 13 18 13 18 13	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0 0 0 0 0 0 0 0 0	0 0	0 0 0 0
	TOTAL		137 99	0 0	0 0	29 99 108 102	0 0	0 0 0	0

Table 2A/4-2

COMPARISON BETWEEN MOST USED HANDGUN AND OFF-DUTY HANDGUNS. BY CALIBER.

(NUMBER OF DEPARTMENTS)

CALIBER

					DEPARTMENT	TYPE			
WHEN		ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
ON DUTY IS:	OFF DUTY IS:	ND. %	ND. %	NO. %	NO. %	NO. %	NO. %	NO. %	NO • %
38	22 LR 25 AUTO 32 AUTO 38 9 MM 357 MAG 357 MAG 45 AUTO 0THER NONE OR BLANK	$\begin{array}{cccc} 40 & 6 \\ 60 & 9 \\ 51 & 8 \\ 245 & 36 \\ 66 & 10 \\ 61 & 9 \\ 44 & 6 \\ 33 & 5 \\ 78 & 12 \end{array}$	2 5 3 8 1 3 9 24 4 11 2 5 0 0 2 5 15 39	6 6 7 7 6 6 46 44 8 8 12 11 9 9 4 4 7 7	3 3 5 6 7 8 42 48 4 5 3 3 1 1 3 3 19 22	9 7 9 7 8 6 51 41 12 10 11 9 9 7 3 2 12 10	8 5 18 11 14 8 50 30 23 14 18 11 13 8 11 7 13 8	9 8 10 9 11 9 32 27 14 12 13 11 11 9 8 7 9 8	3 8 8 21 4 10 15 38 1 3 2 5 1 3 2 5 3 8
TOTAL		678 101	38 100	105 102	87 99	124 99	168 102	117 100	39 101
9 MM	38 9 MM 357 MAG 45 AUTO OTHER	1 12 4 50 1 12 1 12 1 12 1 12	0 0 1 100 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 100 0 0 0 0 0 0	0 0 1 100 0 0 0 0 0 0 0 0	1 20 1 20 1 20 1 20 1 20 1 20	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0
TOTAL		8 98	1 100	0 0	1 100	1 100	5 100	0 0	0 0
357 MAG	22 LR 25 AUTO 32 AUTO 38 9 MM 357 MAG 45 AUTO 0THER NONE OR BLANK	12 4 20 7 23 8 83 31 33 12 38 14 28 10 14 5 21 8	2 5 1 3 0 0 10 27 5 14 7 19 3 8 0 0 9 24	1 3 3 8 14 39 3 8 4 11 4 11 1 3 3 8	2 6 2 6 13 37 2 6 6 17 3 9 2 6 3 9	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	3 12 3 12 4 15 3 12 4 15 4 15 4 15 1 4 1 4	$\begin{array}{cccc} 0 & 0 \\ 2 & 12 \\ 1 & 6 \\ 6 & 37 \\ 2 & 12 \\ 1 & 6 \\ 1 & 6 \\ 1 & 6 \\ 0 & 0 \\ 3 & 19 \end{array}$
TOTAL		272 99	37 100	36 99	33 102	74 99	48 99	26 101	16 98
45 AUTO	22 LR 25 AUTO 32 AUTO 38 357 MAG 45 AUTO OTHER NONE OR BLANK	1 9 1 9 2 18 3 27 1 9 1 9 1 9 1 9 1 9	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 100	0 0 1 25 1 25 2 50 0 0 0 0 0 0 0 0	1 17 0 0 1 17 1 17 1 17 1 17 1 17 1 17 0 0	0 U 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 U 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
TOTAL		11 99	0 0	1 100	4 100	6 102	0 0	0 0	0 0

Table 5-1

5. WHEN YOU THINK OF ALL THE HANDGUNS THAT HAVE BEEN USED BY YOUR OFFICERS IN THE LAST 5 YEARS; WHICH OF THESE GUNS HAVE HAD, OR HAVE CAUSED PROBLEMS?

RESPONSE

		DEPARTMENT TYPE											
	ALL DEPARTMENT TYPES	STATE COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP						
	NO. %	NO. % NO.	% NO• %	NO. %	NO • %	NO. %	NO• %						
CITED PROBLEM No Problem No Answer	203 46 163 37 79 18	8 17 33 4	29 20 24 45 49 58 26 15 18	42 47 26 29 21 24	42 53 25 32 12 15	33 72 9 20 4 9	11 41 13 48 3 11						
TOTAL	445 101	47 100 73 10	00 84 100	89 100	79 100	46 101	27 100						

(NUMBERS OF DEPARTMENTS)

Table 5-2

5. WHEN YOU THINK OF ALL THE HANDGUNS THAT HAVE BEEN USED BY YOUR OFFICERS IN THE LAST 5 YEARS! WHICH OF THESE GUNS HAVE HAD, OR HAVE CAUSED PROBLEMS?

PROBLEM

PROBLEM							DEPA	RTME	NT TY	PΕ										
	ALI DEPARTM TYPE	IENT	STAT	Ē	COUNT	Y	CITY (1-9 FICE	k.		CITY 10-4 FICE	9	CI (50 0 OFFI		E I	FIFT LARGE CITI	ST	то	WNSHI	IP	
	NO.	%	NO.	*	NO.	%	NO.	%		NO.	*	NO	• %		NO.	*	1	NO.	*	
EJECTOR ROD PROBS. ABUSE BY PERSONNEL ACCIDENTAL DISCHARGE ACCURACY POOR AGE; WEAR & TEAR PROBS. CAUSED BY AMMO. BARREL PROBS. CYLINDER PROBS. DEFECTIVE MFG; RELIABILITY DOUBLE/SINGLE ACTION PROB. EXTRACTOR ROD PROBS. FINISH (BLUING) PROBS. GRIP PROBS. HEAD SPACE PROBS. HAMMER/FIRING PIN PROBS. JAMMING LEAD SHAVING MISFIRES SAFETY PROBS. SIGHT PROBS. SIGHT PROBS. STOPPING POWER INSUFFICIENT TRIGGER PROBS. OTHER MAIN SPRING PROBS. TIMING OFF SEAR PROBS. MULTIPLE PROBS.	$\begin{array}{c} 10\\ 20\\ 20\\ 20\\ 12\\ 11\\ 11\\ 15\\ 18\\ 6\\ 9\\ 17\\ 2\\ 15\\ 42\\ 16\\ 16\\ 16\\ 16\\ 16\\ 16\\ 16\\ 16\\ 16\\ 16$	5 10 10 2 11 8 5 35 7 9 3 4 8 1 7 21 8 8 15 2 5 4 11 16 9 8 4	2 1 1 0 5 1 2 2 2 2 2 2 2 2 2 5 1 13 4 1 5 3 1 4 1 5 5 6 6 0 7	6 3 0 14 3 6 6 6 6 6 6 15 3 9 12 3 15 9 3 12 3 14 14 14 14 14 14 14 14 14 14	2 3 0 1 2 1 8 1 1 2 0 0 1 7 3 2 6 0 1 0 5 2 0 0 1 1	$ \begin{array}{c} 10\\ 14\\ 14\\ 0\\ 5\\ 38\\ 5\\ 10\\ 0\\ 5\\ 33\\ 14\\ 10\\ 29\\ 0\\ 5\\ 0\\ 24\\ 10\\ 0\\ 5\\ 0\\ 24\\ 10\\ 0\\ 5\\ 0\\ 24\\ 10\\ 0\\ 5\\ 0\\ 24\\ 10\\ 0\\ 5\\ 0\\ 24\\ 10\\ 0\\ 5\\ 0\\ 24\\ 10\\ 0\\ 5\\ 0\\ 5\\ 0\\ 24\\ 10\\ 0\\ 5\\ 0\\ 5\\ 0\\ 0\\ 5\\ 0\\ 0\\ 5\\ 0\\ 0\\ 5\\ 0\\ 0\\ 5\\ 0\\ 0\\ 0\\ 5\\ 0\\ 0\\ 0\\ 5\\ 0\\ 0\\ 0\\ 5\\ 0\\ 0\\ 0\\ 0\\ 0\\ 5\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\$	0 0 0 1 7 1 0 0 1 2 0 0 4 1 3 2 0 1 0 2 2 0 2 3 1	0 0 0 5 0 5 5 0 5 5 0 0 5 5 0 0 5 5 0 0 5 5 0 0 5 5 0 0 5 5 5 0 0 5 5 5 0 0 5 5 5 0 5 5 5 0 5 5 5 0 5 5 5 0 5 5 5 0 5 5 5 5 0 5 5 5 0 5 5 5 0 5 5 5 5 0 5 5 5 5 5 0 5 5 5 5 0 5 5 5 5 5 0 5 5 5 5 5 0 5 5 5 5 0 5 5 5 5 5 5 0 5 5 5 5 5 0 5 5 5 5 5 5 0 5		0 2 6 1 5 3 0 17 1 2 0 11 0 0 7 3 5 5 2 0 2 3 6 1 0 3 1	0 5 14 2 7 0 40 2 5 0 2 2 0 0 16 7 12 5 7 14 2 0 7	1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		5 10 4 0 3 0 10 4 1 2 0 9 0 1 8 2 0 5 0 1 3 3 9 5 6 1 8 8	15 30 12 0 9 0 30 12 3 6 0 37 0 3 24 6 0 15 0 9 9 27 15 18 3 276		1 0 1 4 1 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 9 9 18 9 9 36 9 9 0 18 0 0 0 0 18 9 0 0 0 18 9 0 0 0 18 9 18 9 9 0 9 18 9 9 0 9 18 9 9 0 9 0 9 0 9 0 0 18 0 9 0 0 0 0 0 0 0 0 0 0 0 0 0	
TOTAL	507	236	103	288	54	256	34	165		77	178	11	9 264		101	270		19	7/T	

(NUMBER OF DEPARTMENTS)

Table 6-1

RESPONSE

6. HOW ABOUT HANDGUN AMMUNITION: HAVE YOUR OFFICERS FOUND ANY PROBLEMS WITH ANY HANDGUN AMMUNITION THAT THEY HAVE USED IN THE LAST 5 YEARS?

(NUMBER OF DEPARTMENTS)

				DEPARTMEN	TTYPE			
	ALL DEPARTMENT TYPES	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 Officers)	CITY (50 OR MORE Officers)	FIFTY LARGEST CITIES	TOWNSHIP
	NO• %	NO. %	NO. %	NO. %	NO. %	NO• %	NO. %	NO+ %
CITED PROBLEM NO PROBLEM NO ANSWER	117 26 215 48 113 25	21 45 20 43 6 13	13 18 38 52 22 30	7 8 58 69 19 23	14 16 45 51 30 34	34 43 27 34 18 23	28 61 12 26 6 13	0 0 15 56 12 44
TOTAL	445 99	47 101	73 100	84 100	89 101	79 100	46 100	27 100

Table 6-2

6. HOW ABOUT HANDGUN AMMUNITION: HAVE YOUR OFFICERS FOUND ANY PROBLEMS WITH ANY HANDGUN AMMUNITION THAT THEY HAVE USED IN THE LAST 5 YEARS?

(NUMBER OF DEPARTMENTS)

PROBLEM

θ 33

FRUDLEM							DEP	RTME	NT TYPE									
	ALL DEPARTMEN TYPES	T	STATE		COUNT	Y	CIT (1-4 OFFIC	9	CITY (10-4 OFFICE	9	CITY (50 OR OFFICE	MORE	FIFT LARGE CITI	ST	т	OWNSH	IP	
	NO.	%	NO. 5	к	NO.	*	NO.	%	NO.	*	N0.	%	NO.	%		N0 •	%	
POWDER, MISC PROBS. ACCURACY POOR CASE CARTRIDGE PROBS. GUN FAILURE LEADING, FOULING MISFIRES PRIMER PROBS. POWER, PENETRATION LOW POWDER, WRONG AMT RELOAD PROBLEMS RICOCHET SMOKING EXCESSIVE VARIABILITY OF ENERGY RATES PENETRATION TOO GREAT OTHER KNOCKDOWN POWER LOW MULTIPLE PROBS.	6 30 29 35 21 8 8 3 4 11 14 52 5	3 5 21 15 5 26 25 30 18 7 7 3 3 10 12 27	0 1 2 1 5 2 1 1 5 2 4 1 2 1 3 1 1 5 2 1 3 1 5 2 5 2 0	4554994055044	1 0 2 3 6 6 0 3 2 0 1 3 0 1 0 1 0	8 15 15 23 46 23 15 8 3 0 8 0 0 0 0	0 0 1 0 2 0 5 5 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 14 0 29 0 71 14 14 14 14 0 0 0 0 43 0	0 3 3 0 3 1 1 4 2 1 1 1 2 1 3 0	0 21 21 7 7 29 14 7 7 14 7 21 0	2 1 8 5 0 9 11 5 5 1 0 0 0 3 3 6 1	6 3 24 15 0 26 32 15 15 3 0 0 0 9 9 9 18 3	1 3 6 2 5 7 7 18 5 0 4 0 2 3 14 4 4	4 11 21 7 18 25 64 18 0 14 0 7 11 50				
TOTAL	263 2	17	44 21	2	30	230	14	199	26	183	60	178	71	253		G	0	

Table 6-3

COMPARISON BETWEEN CALIBER OF AMMUNITION AND PROBLEMS OF AMMUNITION CITED

(NUMBER OF DEPARTMENTS)

PROBLEMS																						
PROBLEMS	тот	AL	• 3	8	.3	57	.9	MM			5	•	22	.2		.4		ANY			ANSW	ER
	NO.	%	NO.	%	NO •	%	NO	•	%	NO.	%	NO.	. %	NO.	%	NO.	%	NO .	8	N	%	
POWDER MISC PROBS.	3	1	3	2	0	0		0	0	U,	0	Ċ) 0	0	0	0	0	0	0	ſ) 0	
ACCURACY POOR	é	2	3	2	1	3		0	0	0	0	C C) ()	0	0	1	50	1	9	() U	
CASE CARTRIDGE PROBS.	24	10	14	- 8	. 3	9		1 2		2	33	. 1	100	0	0	· 1·	50	2	18		, ,	
GUN FAILURE	17	7	. 13	7	2	6		1 2	5	1	17) U	· 0		U	U		U		, 0	
LEADING, FOULING	6	70	6	3	0	0		0	0	0	0	. () U	0	U		Ű		27	· .	100	
MISFIRES	30	12	20	11	6			0	0	0	0	. (J U	U.				2	27 18	. î	1 100 1 0	
PRIMER PROBS.	47	11	18	10	. 6	18		0	0	0	0				100	0	0	0				
POWER. PENETRATION LOW	37	14	34	18	0	. 0.		0	Q .	. u			J U		0		0	2			5 0	
POWDER . WRONG AMT	20	87	14	8	3	9		0	õ	- 1	17		<u>j</u> <u>v</u>	U.	Ű		a.	1	. 1 0.		n a	
RELOAD PROBLEMS	8	2	. 4	2	3	9		0	0		U U				0	0	ň		9		- 0	
RICOCHET	P. 7	4	6	. 3	U	U		0	U .		. U			0	0	. n.	ň	0	n		n Ö	
SMOKING EXCESSIVE	2	2		4	0	e e		0	U N	. 0			, a	0	ň	· . õ	ň	័ព័	ñ	i	ñ Ö	
VARIABILITY OF ENERGY RATES	10	1						0	0	·	0. 0		5 .0	0	ñ	ň	ň	. n	n n		n. Ö	
PENETRATION TOO GREAT	12	. 5	. 9			3		2 . 5	0	2	33		, ŭ		ň	ñ	ň	ő	ň	: 	n Ö	
OTHER	30	12	27	15				2 0	5	5	33		n ü	ň	ő	. õ	ă	Ő	ō	1	0 0	
KNOCKDOWN POWER LOW Multiple probs.	5	. 2	27	*2	. 0	9		ň	ñ	0	ů.	ì	ñ Ö	n n	ŏ	ŏ	ŏ	ŏ	ŏ		0 0	1
MULLIFUL FRUDS+	, p	4	5	5	U	U		V -	0					, v			· · ·		-			

Table 6-4

.

COMPARISON OF AMMUNITION PROBLEMS AND AMMUNITION MANUFACTURERS CITED (NUMBER OF DEPARTMENTS)

ODORI ENC																				
PROBLEMS		AL		1	2	2	3	i	4		5	·	. (5	7		8		9	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	* %	NO.	*
POWDER, MISC PROBS.	3	1	0	0	Ó	.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ACCURACY POOR	6	2	0	0	0	0	0	0	0	0	1	9	0	0	0	0	1	6	0	0
CASE CARTRIDGE PROBS.	24	10	0	0	0	0	. O	0	. 0	0	1	9	0	0	6	24	2	12	0	0
GUN FAILURE	. 17	7	0	0	0	0	0	0	0	0	1	9	0	0	1	4	0	0	0	0
LEADING, FOULING	6	2	1	100	0	0	0	0	1	33	0	0	0	0	1	4	. 1	6	0	0
MISFIRES	30	12	0	0	0	0	0	0	0	0	3	27	0	0	0	٥	3	19	0	0
PRIMER PROBS.	27	11	0	0	0	0	0	0	1	33	3	27	· 0	0	1	4	0	0	0	- 0 C
POWER: PENETRATION LOW	.34	14	0	0	1	33	0	0	· 0	a	0	0	2	40	4	16	2	12	0	0
POWDER WRONG AMT	20	8	0	0	0	0	0	0	0	0	2	18	0	0	1	4	1	6	0	Q
RELOAD PROBLEMS	8	3	0	. 0	0	0	0	.0	0	0	. 0	0	0	0	. 0	0	0	0	0	0
RICOCHET	6	2	0	0	0	0	0	0	0	0	0	0	0	0	1	- 4	2	12	0	• Q
SMOKING EXCESSIVE	3	1	0	0	- 1	33	0	0	1	33	0	. 0	0	0	1	4	0	0	0	0
VARIABILITY OF ENERGY RATE	5 4	- 2	0	0	0	D	0	0	0	0	D	0	0	0	0	0	0	0	0	0
PENETRATION TOO GREAT	10	4	0	0	0	0	0	0	· · O	0	. 0	0	. 1	20	3	12	1	6	Q	0
OTHER	12	5	0	0	0	. 0	0	0	0	0	0	, Q	0	0	1	-4	1	6	0	0
KNOCKDOWN POWER LOW	30	12	0	0	1	33	D	0	. 0	0	0	0	2	40	4	16	2	12	0	0
MULTIPLE PROBS.	5	2	0	0	0	0	0	0	O	Ó	0	.0	0	0	1	. 4	0	0	0	0

Table 6-5

COMPARISON OF AMMUNITION PROBLEMS AND AMMUNITION MANUFACTURERS CITED (CONT.)

PROBLEMS

PRUDLEMS																							
the state of the s		10)		- 11		12	2		13	1	4	.1	5	16	5	17	· .	18	1.1	19		
		NO.	%	· · · •	10.	96	NO.	*	NÖ	. %			NO.		NO •		NO.	36	NO.	.%	NO.	×	
				•		~		· · · ·		• /0		~				~	1100	74					
POWDER, MISC PROBS.		0	0		0	0	. 0	0		0 0	0	0	0	0	1	12	0	0	1	5	0	0	
ACCURACY POOR		0	0		0	0	4	6		n n	0	0	0	0	0	0	0	0.	0	0	0	0	
CASE CARTRIDGE PROBS.		ň	้ก		ñ	ñ	10	16		กัก	់ ក	ñ	n	0	้ก	ñ	ñ	n	n	ñ	3	12	
GUN FAILURE		ň	័ត		ň	ň	12	19		n n		ň	ĭ	ĥ	· ŏ	ň	· õ	ň	2	10	ň	ิ กิ	
LEADING, FOULING		ň	ň		ŏ.	ň	10	0		0 0 0 0		Ä	· 7	, č	Ň	Ň		20		Ĩň	ň	ň	
MISFIRES			50			100	ų,			0 0	· ·	15			, v	ő	-	20	- <u>4</u>	20		20	
		-			÷.	100		11											•		2		
PRIMER PROBS.			50		U U	0	4	. 0		1 100	4	15	Ť		1	12	, i i	20	- 4	20	. 0	24	
POWER, PENETRATION LOW		0	. 0		· 0	0	4	6		0.0	3	23	6	33	2	25	1	20	1	5	. 0	U	
POWDER WRONG AMT		0	0		0	0	9	15		0 0	0	8	0	0	0	0	0	0	1.	5	-5	20	
RELOAD PROBLEMS		0	0		0	0	0	0		00	0	0	Ö	0	0	. 0	0	0	. 4	20	4	16	
RICOCHET		0	0		0	0	0	0		0 0	1	8	2	11	· · Ò	0	0	0	0.	0	0	0 D	
SMOKING EXCESSIVE		- 0	0		0	Ó	0	0		0 0	Q	0	. 0	0	0	0	0	0	Ó	0	0	0	
VARIABILITY OF ENERGY RATE	S	0	0		Ō	Ö	- ų	6		ō ō	0	Ō	0	0	. 0	Ō	Ø	0	0	0	0	0	
PENETRATION TOO GREAT		ō	Ō		ົ້	. 0	2	- 3		n n	1	A		11	· . ñ	ň	n i	Ō	Ō	ñ	0	0	
OTHER		់ តំ	ñ		ň	้กั	- ī	~ 5		ňň		Ä		.	2	25	ĩ	20	ັ້ວ	10	ň	- <u>4</u> -	
KNOCKDOWN POWER LOW		õ			õ	ň	- 2	2		Å i Å				22	5	25	ñ	-0	~ ^	- n		n	
MULTIPLE PROBS.		<u>.</u>			Š.	Š	5	0		0 0		23		6		20	X	័ត				-iii	
MARITLE LUNDO		U	U		U	U	. U.	Ų		Ų, Ū	. u	. 0	1	D .	U.	, U	U		- -	2	· . I .		

ANNOUNCEMENT OF NEW PUBLICATIONS ON NATIONAL CRIME AND RELATED SUBJECTS

Superintendent of Documents, Government Printing Office, Washington, D.C. 20402

Dear Sir:

Please add my name to the announcement list of new publications to be issued on the above subjects (including this NBS series):

Sitj				
City	State	e	_ Zip Code	
Address		'		
Company			<u></u>	
Name				

(Notification key N-351)

U. S. GOVERNMENT PRINTING OFFICE ; 1977 O - 229-968

