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A Preliminary Survey of State, County, and Local Law Enforcement Agencies Utilizing Airborne Vehicles

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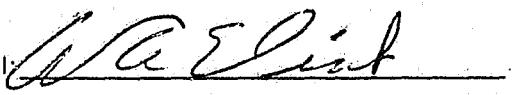
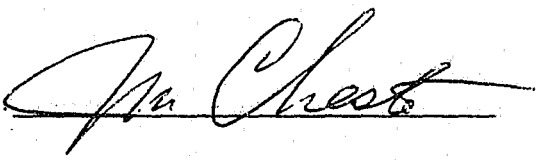
Department Approval: 

MITRE Project Approval: 

ABSTRACT

This is Volume I of a two volume report recapitulating the results of a two-month updating survey of state, county, and local law enforcement agencies in the 50 states that utilize airborne vehicles (helicopters, fixed-wing, and STOL aircraft). A detailed list is provided of the 209 agencies identified along with the aircraft inventory for each agency. Geographical distributions of the 209 agencies and 638 total law enforcement aircraft are given. Tentative findings about some aircraft usage characteristics and major missions flown by helicopters based on data from a sample of 129 surveyed agencies are also presented.

ACKNOWLEDGEMENTS

The survey team wishes to acknowledge the assistance provided by the following persons and organizations in the course of the updating survey:

Captain James R. Beall, Commanding Officer of the Los Agneles Police Department's Air Support Division, Los Angeles, California.

Lieutenants Claude Cooper and D. G. Lanning of the Los Angeles County Sheriff's Department, Aero Bureau.

Captain Robert Morgan, Lieutenant McClary, and Sergeant Kutzbach of the Santa Monica Police Department, Santa Monica, California.
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Mr. Ray Ingam, Commercial Marketing Representative, Bell Helicopter Company

In addition, we are indebted to all the personnel in the airborne law-enforcement agencies contacted during the survey for their cooperation.

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VOLUME I

I INTRODUCTION

A. Purpose of the Report

The purpose of this two-volume report is threefold: (1) to provide a complete list of all the 209 airborne law enforcement agencies in the 50 states (including their aircraft inventories) at the state, county, and local levels that were identified in a two-month-long survey; (2) to analyze certain of the data from 129 agencies (those surveyed via detailed questionnaires) for the purpose of drawing tentative conclusions about major missions and usage characteristics; and (3) to provide the complete set of data (including purchase costs, operating costs, and maintenance costs) on the 129 sample agencies for later, more-thorough analysis in a possible Phase II effort.

B. Background

At the request of the Administrator of the Law Enforcement Assistance Administration (LEAA), a two-month updating survey was undertaken with the objective of determining (1) which specific law enforcement agencies in the 50 states at state, county, and local levels utilize airborne vehicles; (2) what types, models, and quantities of aircraft are used; (3) the major law enforcement missions by type of aircraft; (4) the cost of purchasing, operating, and maintaining the various aircraft; and (5) other useful information about the efficacy of airborne vehicles in law enforcement.

It was recognized in the beginning, because of the very short time period and the relatively minor level of effort devoted to the investigation, that this first survey could only encompass limited analysis of the data that would be obtained. Most of the survey time and effort would be devoted to identifying as many existing airborne law enforcement agencies as possible. The time-consuming analysis would clearly have to await an effort specifically addressed to that task.

C. Survey Method

It was decided early in the preliminary survey period that the end result would, of practical necessity, comprise:

- As complete a list as possible of all state, county, and local law enforcement agencies that use aircraft. The list would at least include the aircraft inventory for each such identified agency.
- As much analysis as possible of the data obtained in detailed questionnaires submitted to agencies that were identified early in the survey.

The survey method consisted of (1) quickly obtaining lists of known airborne law enforcement agencies, (2) developing data questionnaires, (3) sending the questionnaires to all those agencies identified by the end of the third week of the survey period in order to allow enough time for responses to be received, and (4) continuing to utilize every conceivable source to identify more airborne law enforcement agencies. In the end, 209 agencies were identified -- nearly double the largest single list we were able to discover as being in existence when the survey began. One hundred thirty-one agencies were sent the survey

questionnaires (129 responded); 13 sources were queried (see list below); and over 500 follow-up phone calls made to locate and confirm additional agencies and to obtain survey questionnaire data. All 209 agencies were contacted and the aircraft inventory as of October 1975 obtained for each.* The 13 sources utilized and the major items obtained from the more productive are shown below.

PRODUCTIVE DATA SOURCES	MAJOR ITEMS OBTAINED
Aerospace Industries Association	List of L.E. agencies using helicopters
Airborne Law Enforcement Association	Membership list
Baltimore Police Department	List of L.E. agencies using helicopters
State Police Agencies	
Other State Government Agencies	
Bell Helicopter	Users of Bell aircraft
FAA Aircraft Register Summary by State and County	List of aircraft registered
Civil Defense List	Users of surplus/excess military aircraft
LEAA Grant Records	Printout of grants
Los Angeles Police Department	Partial list of airborne L.E. agencies
Rotor and Wing Magazine	
Portsmouth, Virginia Police Department	Users in Virginia
John Roberts, Ltd. (Helio Courier Distributor)	

D. Organization of Report Material

Section II of this volume provides a summary of the tentative findings that resulted from this first-phase survey. Section III presents six exhibits (and explanatory text) covering the identity, inventory, and geographical distribution of the 209 agencies. Section IV presents three exhibits (and text) containing data relating to the usage and major missions of airborne vehicles by various groups of agencies -- data taken from returned survey questionnaires. The data in Section III and IV support the tentative findings in Section II.

Volume II presents the raw data obtined in this survey from 129 of the 131 agencies queried via questionnaire.

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*Except for the Virginia State Police.

II SUMMARY OF TENTATIVE FINDINGS

A. Some Caveats Regarding the Findings

In the discussion of findings that follows, it is useful to keep the following in mind:

- There is a risk in applying "averages" (e.g., "average" cost per aircraft by type, "average" cost per flying hour, "average" mission) derived from the data thus far obtained. Our investigations confirmed what is already known: the combination of airborne law enforcement missions, budgets, and real-world problems for each agency is probably as distinctive as any one individual's fingerprints. As an example, while certain airborne missions are flown by many agencies, no two agencies yet queried have had identical mission profiles.

- From the caveat immediately above, generalizations about airborne law enforcement inventories or operations or costs based on the data in this preliminary report could be misleading. The raw data from the sample of 129 agencies require more careful study and interpretation. The cost data, in particular, need careful analysis and normalization in order to achieve comparability. Except for the data pertaining to geographical distribution and aircraft inventory, it is suggested that the reader interpret the analytical portion of this effort as a starting point, not a definitive statement.

B. Findings

Based on survey data, the following findings have emerged:

1. Distribution of Airborne Law Enforcement Agencies and Associated Aircraft

Of the total of 209 state, county, and local airborne law enforcement (LE) agencies identified, 58 are state agencies (representing 48 states), 80 are county agencies, and 71 are local agencies. The two states with no identified airborne LE agencies are New Hampshire and Connecticut.

The total of LE aircraft identified in the 50 states was 638 as of October 1975. Of this total, 277 (43.4 percent) are utilized at the state level, 157 (24.6 percent) are used at the county level, and 204 (32.0 percent) are employed by localities.

California, in Region IX, has more airborne LE agencies (28 agencies or 13.4 percent of all those identified) and airborne vehicles (93 accounting for 14.6 percent of all associated aircraft) than any other state. This one state's share of total airborne LE agencies and aircraft is larger than the totals for seven of the ten Federal Regions.

However, about half the airborne LE agencies and aircraft are located east of Region IX in Regions IV, V, and VI. The individual ratios for these regions are:

	Total Agencies In Region	Percent of All Agencies	Percent of all LE Aircraft
Region IV	48	23.0%	22.7%
Region V	31	14.8%	18.0%
Region VI	25	12.0%	10.2%
	104	49.8%	50.9%

The two smallest Regions in terms of airborne law enforcement are New England's Region I (2.4 percent of the agencies, 2.4 percent of LE aircraft) and Region X, in northwestern United States (3.4 percent of the agencies, 5.2 percent of the LE aircraft).

Forty-one states use aircraft in their state police organizations. The nine that do not are:

Connecticut
Hawaii
Idaho
Montana
Nevada
New Hampshire
Oklahoma
Wisconsin
Wyoming

Eleven states have two or more state-level law enforcement agencies. A list of those states, by Federal Regions and the roster of their state agencies (other than police) follows:

States with Two or More State-Level Airborne LE Agencies	Total Number of Agencies Including Police	Types of LE Agencies Other than Police
Region I		
Maine	2	Fish and game control.
Region III		
West Virginia	2	Department of natural resources.
Region IV		
Florida	4	Beverage control. Fish and game control. Department of natural resources.
North Carolina	3	Department of natural and economic resources. Wildlife resources control.
South Carolina	2	Wildlife control.

States with Two or More State-Level Airborne LE Agencies (Continued)	Total Number of Agencies Including Police	Types of LE Agencies Other than Police
Region V		
Illinois	3	State toll road control. Conservation control.
Michigan	3	Department of natural resources. Department of transportation.
Region VI		
Arkansas	2	Department of corrections.
Louisiana	2	Department of corrections
Region VIII		
North Dakota	2	Fish and game control.
Utah	2	Wildlife resources control.

The breakdown of county and local airborne LE agencies by size of population is given in the table below:

	Population Served					
	Below 100,000	100,000 to 200,000	200,000 to 500,000	500,000 to 1,000,000	Over 1,000,000	Total
Number of County Agencies	30	13	20	10	7	80
Percent of all LE Aircraft Used by Counties	24%	9%	25%	18%	24%	100%
Number of Local Agencies	16	21	15	12	7	71
Percent of all LE Aircraft Used by Localities	12%	23%	19%	25%	21%	100%

2. Distribution of Law Enforcement Aircraft by Type and Manufacturer

Of the 638 LE aircraft identified in this survey, 420 (65 percent) are helicopters, 188 (30 percent) are fixed wing, and 30 (5 percent) are short-takeoff-and-land (STOL) models. No other aircraft types were identified.

The breakdown of these aircraft by type and manufacturer follows.

Aircraft Type	Manufacturer	Quantity	Percent of Type
Helicopters	Aerospatiale	1	.2
	Bell	270	64.3
	Enstrom	6	1.4
	Fairchild Hiller	8	1.9
	Hiller	28	6.7
	Hughes	101	24.1
	Sikorsky	6	1.4
	Total	420	Total 100.0
Fixed-Wing	Beech	20	10.6
	Cessna	102	54.3
	Champion (formerly Aeronca)	2	1.1
	DeHaviland	10	5.3
	Grumman	3	1.6
	Maule	6	3.2
	Piper	41	21.8
	Rockwell	4	2.1
	Total	188	Total 100.0
STOL	Cessna	15	50.0
	DeHaviland	5	16.7
	Helio	2	6.7
	Maule	7	23.3
	Piper	1	3.3
	Total	30	Total 100.0

3. Some Law Enforcement Aircraft Usage Characteristics by Type of Aircraft

Analysis of data from the sample of 129 airborne LE agencies provides the basis for the following discussion of general usage characteristics of airborne LE vehicles.

a. Average Flying Hours Per Month

The table below gives (1) the discrete number and (2) the percentage of 129 sample LE agencies whose average flying hours per month fall in the interval shown for each type of aircraft.

Flying Hours Per Month	Helicopters		Fixed-Wing		STOL	
	Number of Agencies	Percent of Total	Number of Agencies	Percent of Total	Number of Agencies	Percent of Total
0-75	27	23.9	27	57.4	6	54.5
76-150	40	35.4	11	23.4	4	36.4
151-225	13	11.5	4	8.5	0	
226-300	20	17.7	2	4.3	1	9.1
301-500	8	7.1	0		0	
Over 500	5	4.4	3	6.4	0	
Totals*	113	100.0	47	100.0	11	100.0

*Totals are non-additive because some agencies use more than one type of aircraft.

However, referring to an earlier suggestion, judgement on such findings should await more thorough study.

b. Ratio of Day/Night Flying Hours by Type of Aircraft

The ratios of LE aircraft utilization for daylight and dark hours by type of aircraft for the 129 sample agencies are:

	Helicopters	Fixed-Wing	STOL
Daylight Hours	63%	86%	73%
Night (dark) Hours	37%	14%	27%

From these data, it is clear that the helicopter is the preferred nighttime airborne LE vehicle. Yet, even for helicopters, the average nighttime utilization rate seems to be only about half its average daytime use rate. For fixed-wing aircraft, nighttime use is about one-sixth the daylight rate; and for STOL aircraft, the nighttime usage is about one-third the daylight hours use rate.

By factors of between 2 and 6, airborne LE vehicles, taken as a group, seem to be daylight systems.

c. Aircraft Availability Ratios by Type

The table below gives the average availability ratio for each type of aircraft. (Availability ratio is defined as the percent of time the aircraft type is available for use when scheduled or when needed.)

Aircraft Type	Availability Ratio (Expressed as a Percent)
Helicopters	92%
Fixed-Wing	94%
STOL	89%

The survey team tends to view these high ratios (especially that for helicopters) with some skepticism in the light of other studies of aircraft mean times between failure (MTBF), reliability, and availability. For example, one large urban police department using 14 helicopters gives an overall availability ratio of 80 percent for its rotary-wing vehicles. There is a possibility that many of the availability ratios in the 129 sample agencies were based more on hunches or guesstimates than on statistical records. This is another area that requires more investigation in order to develop conclusive findings. Such care is justified because average availability ratios constitute a prime operational cost-benefit area. Excessive down time always results in increased operating cost and reduced productivity.

d. Major Helicopter Missions for County and Local Law Enforcement Agencies

An analysis of helicopter missions* for county and local airborne law enforcement agencies was conducted in order to find out (1) which missions rated highest in priority for them and (2) the modal effectiveness rating of helicopters for each relevant mission. The county and local agencies were divided into five population intervals in order to detect mission profile differences that appear to be functions of population density. The intervals, along with reference numbers that will be used in this section, are:

Population Interval	Interval Reference Number
Below 100,000	1
100,000 to 200,000	2
200,000 to 500,000	3
500,000 to 1,000,000	4
Over 1,000,000	5

Twenty standard missions were listed in the survey questionnaire.** Space was provided for adding missions not on the list. The standard missions are:

Command Post
High Speed Chase
Provide Intercept Data to Ground
Patrol Activities
General Surveillance
Covert Surveillance
Search Activities
    Fugitives
    Vehicles
Nighttime Patrol
Security (Special Visitors, etc.)
Emergency Rescues
Traffic Control

*Although data are available for similar analyses on both fixed-wing and STOL aircraft from most of the 129 sample agencies, time constraints made possible the completion of only one such analysis. Actually, because (1) helicopters constitute 65 percent of all LE aircraft identified and (2) the 151 county and local agencies make up 72 percent of all agencies in the 50 states, the helicopter study is the most significant in terms of airborne law enforcement mission analysis. Of the 151 county and local level agencies identified, survey questionnaires were available from 86 of them (66 percent) lending some credibility to these preliminary findings.

**The 20 were a composite derived from lists in (1) Preliminary Police Patrol Aircraft Requirements Analysis, WP-10199, The MITRE Corporation, 28 February 1973, (2) The Utilization of Helicopters for Police Air Mobility, NILE&CJ, February 1971, and (3) Evaluation of Aerial Vehicles for Law Enforcement Application, The Aerospace Corporation, December 1973.

Standard Missions (continued)

Transport
- Emergency
- Priority Cargo
- Official Personnel
- Personnel in Custody

Narcotics Detection
Pollution Control
Riot Control
Fish/Game Law Control

Each responding agency was asked to indicate its high priority missions by using a scale of 1 to 5 where 1 indicates highest priority. More than one mission could be rated using the same number (i.e., two, three or more missions could receive a 1 priority, a 2 priority, and so on). Each agency was also asked to indicate the qualitative level of effectiveness of the aircraft type for each relevant mission. The ratings were high, medium, and low (designated by H, M, and L).

For counties in population intervals 1, 2, and 3, the ratio of respondent agencies (i.e., those that completed questionnaires) to the total number finally identified was so low as to render the results inconclusive. They are provided for the record in Section IV of this volume, but will not be recapitulated here.*

For county LE agencies in population intervals 4 and 5 (each with 100% representation via questionnares) the priority missions were:

Priority Missions	Population Interval Responding	Average Priority	Modal Effectiveness Rating for Helicopters
Provide intercept data to ground	4	2	H
Patrol activities	4,5	1	H
General surveillance	4	2	H
Covert surveillance	4	2	H
Search activities			
Fugitives	4	3	M
Vehicles	4,5	2 and 3	H
**Nighttime patrol	4,5	2	H
***Emergency Rescues	5	2	H
Traffic control	5	4	H
Transport			
Emergency	5	2	H

*See following page for footnote.

**This seems inconsistent with the tentative findings in Section II,B,3,b about the relative importance of day versus night operations.

***This was also a priority mission in county population intervals 1, 2, and 3.

For local LE agencies in population intervals 2, 3, 4, and 5 (the respondent sample in interval 1 was relatively small and is not reported here), the priority missions were:

Priority Missions	Population Intervals Responding	Average Priority	Modal Effectiveness Rating for Helicopters
High speed chase	2,3,4,5	2	H
Provide intercept data to ground	2,3,4,	1	H
Patrol activities	2,3,4,5	2	H
General surveillance	2,3,4,5	2	H
Covert surveillance	5	2	H
Search activities			
Fugitives	2,3,4,5	2	H
Vehicles	2,3,4,5	2 and 3	H
Nighttime patrol	2,3,4,5	1 and 2	H
Security (special visitors, etc.)	5	4	H
Traffic control	5	2	H

Although there appear to be some detailed differences between county and local law enforcement agencies with respect to priority missions (e.g., high speed chase and special visitor security missions appear only in the priority list for local agencies while emergency rescues and emergency transport appear only in the list of priority missions for counties), the priority list is essentially the same for both levels. Even the average priority ratings appear quite close.

In summary, for helicopter use by county and local LE agencies, the following eight missions rate highest in priority (with helicopters receiving a "high" effectiveness rating in all of them):

(Footnote to * on preceding page.) Apparently a number of low-population counties and localities in a wide range of states are entering the airborne law enforcement business through access to surplus and excess military aircraft (mostly helicopters). Surplus aircraft are purchased outright, usually at low initial cost. Excess aircraft are loaned or rented to LE agencies by civil defense organizations. Of the some 78 newly-formed LE agencies identified in this survey, 47 (60 percent) are located in counties in the three lowest population intervals (i.e., below 500,000). Thirty-five (45 percent) are located in the two lowest population intervals (i.e., below 200,000).

Composite List of Highest Priority Missions-County and Local Agencies	Average Priority		Modal Effectiveness	
	County	Local	County	Local
Provide intercept data to ground	2	1	H	H
Patrol activities	1	2	H	H
General surveillance	2	2	H	H
Covert surveillance	2	2	H	H
Search activities				
Fugitives	3	2	M	H
Vehicles	2 & 3	2 & 3	H	H
Nighttime patrol	2	1 & 2	H	H
Traffic control	4	2	H	H

C. Santa Monica, California: Case History of a High-Density City that Changed from Helicopters to STOL Aircraft

The preponderance of operational cost data* clearly indicates that investment, operating, and maintenance costs for helicopters, as a type of airborne law enforcement vehicle, are often significantly higher per pound of airborne payload than fixed-wing aircraft. Yet, as even this preliminary survey has shown:

- 65 percent of all airborne LE vehicles are helicopters
- Small-county and small locality airborne LE agencies are forming at a relatively high rate because of the ready availability of surplus and excess military helicopters.

*Some typical studies extant on the subject of cost include: Dade County Public Safety Department-STOL, a 1971 Dade County, Florida, report reprinted by LEAA in 1973; Short Takeoff-Landing Fixed Wing, Rotary Wing Cost Effectiveness Study, Final Report, prepared by the Los Angeles County Sheriff's Department and reprinted as LEAA report No. 71-DF-1119, apparently in 1971 (the report is not dated); Journal of Police Science and Administration, article entitled "Helicopter Patrol in Law Enforcement -- An Evaluation," by A. Bari Lateef, Vol. 2/No. 1/March 1974; Evaluation of Aerial Vehicles for Law Enforcement Application, op cit, December 1973.

In addition to the availability of used military helicopters, the survey team feels it may have detected a strong and pervasive conviction in the airborne law enforcement community that helicopters are the only valid vehicles for many airborne law enforcement environments and missions, especially in high density urban areas.* In fact, some cost-benefit studies** that compared various airborne LE vehicle types seem to support that confiction. Yet, because of sharp cost differences, it appears possible that important airborne law enforcement cost savings could accrue if fixed-wing aircraft could satisfactorily perform most of the prime airborne LE missions over heavily populated, urban areas. That such might be the case is suggested by the recent experience of the city of Santa Monica, California.

Santa Monica's population is about 90,000 persons. Its area is 8.3 square miles. The city is bounded on three sides by Los Angeles and the fourth side by the Pacific Ocean. Santa Monica Police Department operated two Hughes 300 Series helicopters from 1968 until 1972. The reason for two helicopters in such a relatively small area was that one aircraft was usually out of commission for maintenance: it literally required a fleet of two to keep one

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* Two examples of the helicopter's law enforcement "pro" published literature are: The Utilization of Helicopters for Police Air Mobility, NILE & CJ February 1971; and Helicopter Utilization in Municipal Law Enforcement, by James R. Beall and Robert E. Downing of the LAPD Helicopter Section, Charles C. Thomas publisher, 1972. In addition, the following cities and agencies have produced reports that detail helicopter operations: Los Angeles County Sheriff's Department (Project Sky Knight); District of Columbia; Lakewood, California; Kansas City, Missouri; Baltimore, Maryland; Prince George's County, Maryland; Maryland State Police; and Denver, Colorado. The prevailing view seems to be summarized by Beall and Downing on page 48 of Helicopter Utilization in Municipal Law Enforcement, "Fixed wing aircraft have a definite value to many law enforcement agencies but generally not in the field of regular patrol in support of ground units over densely populated areas."

** Particularly, the first, second, and fourth references in the second footnote preceding this one.

in the air.* A full-time mechanic was hired by the city to maintain the vehicles. Flight time per shift (two shifts per day) averaged between three and five hours. The cost for fuel and oil was $18.45 per flying hour. Maintenance costs approximated $21.00 per flying hour. There was a constant barrage of complaints from citizens who objected to the noise, especially late at night (for example, there were 1,204 calls in one 90-day period). Finally one of the vehicles was destroyed in a crash.

In 1972, the city changed to one Cessna 172 with STOL modifications. Santa Monica has operated the same aircraft since then at greatly reduced fuel cost per hour ($5.70). The aircraft is flown an average of seven hours for each of the two shifts each day, and employs the mechanic part time to perform routine maintenance. To date, after three years of operation, no citizen complaints have been received.

The Cessna STOL is used for continuous routine patrol. Following FAA flight rules, it must maintain a 1,000 foot altitude. Its motor is equipped with a special muffler for additional quieting. Prime missions (as for the helicopters) are (1) general surveillance, (2) school checks, (3) provision of intercept data to ground units for suspicious, drunk-driver, or accident incidents, (4) aerial surveillance of suspected criminal activities and direction to intercept of ground units (5) vehicle surveillance and chase, and (6) occasional cooperation with the LAPD Air Support Division and Los Angeles County Sheriff's Aero Bureau in fugitive vehicle surveillance and chase along the LA County freeway system.

One member of the survey team (a licensed pilot thoroughly familiar with Santa Monica because of long residence in the area) flew with the Cessna's two-man crew (pilot and observer) on part of one daylight shift. The team member was able to discern clearly all features of the Santa Monica cityscape from the cruise altitude of 1,200 feet and the surveillance altitude of 2,000 feet (at which altitude the aircraft's markings are indistinguishable and its engine nearly inaudible on the ground). Two randomly-selected target vehicles were "followed" easily while the aircraft flew between 50 and 60 miles per hour indicated airspeed about two city blocks away. If the driver had been a "bad guy" (as all suspects are called), he probably would not have noticed the presence of one more light plane in the sky several blocks away.

Two actual incidents were responded to and the aircraft arrived over each location within 45 seconds of the call. Then, because of the STOL modifications, a 60-degree bank at a slow 60 miles per hour (indicated) was maintained

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* The reader is referred to Section II,B,3,c for a discussion of helicopter availability ratios that seem to tell a different, more-favorable story. It is a question that should be resolved by careful, statistical-record research.

permitting the police department observer and the survey team member to watch details on the ground through hi-power binoculars. The ship was able virtually to "stand on one wing" and orbit slowly and steadily for an indefinite period.

There are, of course, two maneuvers the fixed-wing Cessna can not perform. One is low altitude orbit and flight (helicopters are not limited to the 1,000 foot minimum over populated areas) and the other is vertical descent to the ground for rescue. However, the reader will recall from the discussion of major missions, that emergency rescue is not a priority mission for LE helicopter units serving populous urban areas. The reason (and it is true of Santa Monica) is that, in most such areas, ground emergency services, vehicles, and facilities are close at hand.

The Santa Monica Police Department does not employ sworn personnel in its aircraft. The pilot/observer team are contractor personnel. The city pays only for the actual hours flown, while the contractor pays the crew for time during which adverse weather prevents normal operation. (Santa Monica's climate, as is well known, is amenable to flight on most days of the year, unlike many other areas of the country.)

Current airborne operational arrangements are satisfactory to the Santa Monica Police Department. It is reported that sworn personnel of the Department spend no more than an aggregate of one-half man year in connection with airborne operations. The mechanic's time averages 16 hours per week at $7.80 per hour. The assist to law enforcement from the highly-skilled pilot/observer teams is reported to be significant -- as great as with the helicopters at far less annual cost and with no negative public reaction.

In summary, while one case history is by no means conclusive, Santa Monica's experience does suggest that fixed-wing aircraft can be used in routine patrol missions and for missions in which ground units are coordinated. The airborne law enforcement cost reduction (and concommitant increase in productivity) could be great if the more costly helicopters could be replaced by fixed-wing aircraft in a significant number of applications. The question deserves thorough, unbiased study.

III. IDENTITY OF AND AIRCRAFT INVENTORY FOR 209 AIRBORNE LAW ENFORCEMENT AGENCIES

A. Contents of this Section

This Section contains detailed data relating to the identity, aircraft inventory, and geographical distribution of all 209 state, county, and local law enforcement agencies in the 50 states that utilize airborne vehicles.

B. Arrangement of Material

Six exhibits and explanatory text for each comprise the remainder of this section. All exhibits follow the explanatory text.

C. Data

1. Exhibit 1 -- Identified Law Enforcement Agencies Utilizing Airborne Vehicles by Region, State, and Agency with Inventory Data

The contents of Exhibit 1 are described by the title. Each of the 209 agencies identified in the survey is listed (1) by Federal Region, (2) alphabetically by states within regions, and (3) by state, county, and then local agencies within states. In addition to the aircraft inventory for each agency, the number and percentage of aircraft are provided for each (1) Region, (2) State, (3) state agencies as a group within each state, (4) county agencies as a group within each state, and (5) local agencies as a group within each state.

2. Exhibit 2 -- Inventory of Airborne Vehicles Used by State, County, and Local Law Enforcement Agencies by Type, Manufacturer, and Model

Exhibit 2 gives the quantities and percentages of all 638 airborne LE aircraft in the 209 agencies by type (helicopter, fixed-wing, STOL), manufacturer, and model or series designation.

3. Exhibit 3 -- Distribution (1) of County Law Enforcement Agencies Utilizing Airborne Vehicles and (2) of County Law Enforcement Airborne Vehicles Themselves by County Population Interval

The exhibit's title describes its contents. The data are presented as histograms. (The county agencies in each population interval are listed in Exhibit 5.)

4. Exhibit 4 -- Distribution (1) of Local Law Enforcement Agencies Utilizing Airborne Vehicles and (2) of Local Law Enforcement Airborne Vehicles Themsleves by Local Population Interval

The exhibit's title describes its contents. The data are presented as histograms. (The local agencies in each population interval are listed in Exhibit 5.)

5. Exhibit 5 -- Counties and Localities Using Aircraft in Law Enforcement Activities by Population Interval

Exhibit 5 lists 151 county and local law enforcement agencies represented by the histograms in Exhibits 3 and 4.

6. Exhibit 6 -- Distribution of (1) State, County, and Local Law Enforcement Agencies that Utilize Airborne Vehicles and (2) Percentage of Total Law Enforcement Aircraft by State and Federal Region.

Exhibit 6 is a map of the United States showing the distribution referred to in the exhibit's title.

(Exhibits 1-6 follow)

NOTE: Section IV begins on page 69.

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE*	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
REGION I	.....	.....	.....	.....	15	2.4
MAINE	.....	.....	.....	.....	9	1.4
STATE AGENCIES	.....	.....	.....	.....	9	
1) DEPARTMENT OF FISHERIES AND GAME					7	
	STOL	DE HAVILLAND	DHC-2	1		
	STOL	CESSNA	185	4		
	H	BELL	TH-13T	2		
2) DEPARTMENT OF TRANSPORTATION AERONAUTICS BUREAU (MAINE STATE POLICE)					2	
	FW	CESSNA	172	1		
	STOL	PIPER	PA 18	1		
MASSACHUSETTS	.....	.....	.....	.....	1	0.2
STATE AGENCIES	.....	.....	.....	.....	1	
3) MASSACHUSETTS STATE POLICE	H	BELL	206	1	1	

* LEGEND: H - HELICOPTER FW - FIXED WING AIRCRAFT STOL - SHORT TAKEOFF AND LANDING AIRCRAFT

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA.

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
REGION I (Continued)						
RHODE ISLAND					4	0.6
STATE AGENCIES					4	
4) DEPARTMENT OF TRANSPORTATION DIVISION OF AERONAUTICS (RHODE ISLAND STATE POLICE)					4	
	H	BELL	47 D	1		
	H	BELL	47 K	1		
	FW	BEECH	BONANZA	1		
	FW	ROCKWELL	CMDR 560A	1		
VERMONT					1	0.2
STATE AGENCIES					1	
5) DIVISION OF AERONAUTICS (VERMONT STATE POLICE)	FW	CESSNA	182	1		
REGION II					30	4.7
NEW JERSEY					5	0.8
STATE AGENCIES					5	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
NEW JERSEY (Continued)						
6) NEW JERSEY STATE POLICE					5	
	H	FAIRCHILD - HILLER	FH 1100	1		
	H	BELL	206	4		
NEW YORK	.....	.....	.....	.....	25	3.9
STATE AGENCIES	.....	.....	.....	.....	5	
7) NEW YORK STATE POLICE					5	
	H	BELL	47G4	1		
	H	BELL	206	3		
	STOL	CESSNA	172	1		
COUNTY AGENCIES	.....	.....	.....	.....	12	
8) CHAUTAUQUA COUNTY SHERIFF	H	HILLER	OH-23-G	2	2	
9) NASSAU COUNTY POLICE					4	
	H	FAIRCHILD - HILLER	FH-1100	1		
	H	BELL	47G-3 B	2		
	STOL	DE HAVILLAND	DHC-2	1		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
NEW YORK (Continued)						
10) ONONDAGA COUNTY SHERIFF (SYRACUSE POLICE DEPT)	H	HILLER	OH-23-D	3	3	
11) ROCKLAND COUNTY SHERIFF	H	BELL	47G-3B	1	1	
12) SUFFOLK COUNTY POLICE	H	BELL	206	2	2	
LOCAL AGENCIES	.....	.....	.....	.....	8	
13) METROPOLITAN TRANSPORTATION AUTHORITY LONG ISLAND RAILROAD POLICE	H	BELL	47G-4	1	1	
14) NEW YORK CITY POLICE					7	
	H	BELL	206	4		
	H	BELL	47G-4	2		
	H	BELL	47J-2	1		
REGION III	.....	.....	.....	.....	43	6.7
DELAWARE	.....	.....	.....	.....	2	0.3
STATE AGENCIES	.....	.....	.....	.....	2	
15) DELAWARE STATE POLICE					2	
	H	BELL	206	1		
	FW	CESSNA	182	1		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
REGION III (Continued)						
DISTRICT OF COLUMBIA					3	0.5
16) METROPOLITAN WASHINGTON POLICE					3	
	H	BELL	47G-4A	1		
	H	BELL	47G-2	1		
	H	BELL	47G-3B	1		
MARYLAND					12	1.8
STATE AGENCIES					7	
17) MARYLAND STATE POLICE					7	
	H	BELL	206	4		
	H	SIKORSKY	HH-34J	2		
	FW	PIPER	PA-23	1		
LOCAL AGENCIES					5	
18) BALTIMORE CITY POLICE					5	
	H	FAIRCHILD - HILLER	FH-1100	1		
	H	HUGHES	300	4		
PENNSYLVANIA					10	1.6
STATE AGENCIES					6	
19) PENNSYLVANIA STATE POLICE	H	BELL	206	6	6	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
PENNSYLVANIA (Continued)						
LOCAL AGENCIES	.....	.....	.....	.....	4	
20) HORSHAM TOWNSHIP POLICE	H	BELL	47G-3B	3	3	
21) NEWTOWN TOWNSHIP POLICE	H	AEROSPATIALE	GAZELL	1	1	
VIRGINIA	.....	.....	.....	.....	9	1.4
STATE AGENCIES						
22) VIRGINIA STATE POLICE	DID	NOT PROVIDE DATA				
COUNTY AGENCIES	.....	.....	.....	.....	1	
23) HENRICO COUNTY POLICE	FW	CESSNA	172	1	1	
LOCAL AGENCIES	.....	.....	.....	.....	8	
24) DANVILLE POLICE	H	BELL	TH-13T	1	1	
25) NORFOLK POLICE	H	BELL	47G-3B	2	2	
26) PORTSMOUTH POLICE	H	BELL	47G-3B	1	1	
27) RICHMOND POLICE	H	HUGHES	269	2	2	
28) VIRGINIA BEACH	H	BELL	47G-3B	2	2	
WEST VIRGINIA	.....	.....	.....	.....	7	1.1

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
WEST VIRGINIA (Continued)						
STATE AGENCIES	.....	.....	.....	.....	7	
29) WEST VIRGINIA STATE POLICE					3	
	H	BELL	206	1		
	H	HILLER	UH/12E	2		
30) DEPARTMENT OF NATURAL RESOURCES					4	
	H	BELL	47G-3B	1		
	H	BELL	206	1		
	FW	PIPER	PA 18	1		
	FW	ROCKWELL	CMDR 560	1		
REGION IV	.....	.....	.....	.....	145	22.7
ALABAMA	.....	.....	.....	.....	14	2.2
STATE AGENCIES	.....	.....	.....	.....	7	
31) ALABAMA STATE TROOPERS					7	
	H	BELL	TH-13	3		
	FW	CESSNA	T-41	1		
	FW	CESSNA	182	1		
	FW	DE HAVILLAND	DHC-2	2		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
ALABAMA (Continued)						
COUNTY AGENCIES	.....	.....	.....	.....	4	
32) ESCAMBIA COUNTY SHERIFF	H	BELL	47G-3B	1	1	
33) JEFFERSON COUNTY SHERIFF					3	
	H	BELL	OH-13	2		
	FW	CESSNA	182	1		
LOCAL AGENCIES	.....	.....	.....	.....	3	
34) TUSCALOOSA POLICE					3	
	H	BELL	47G	2		
	H	BELL	47G-3B	1		
FLORIDA	.....	.....	.....	.....	53	8.3
STATE AGENCIES	.....	.....	.....	.....	15	
35) FLORIDA HIGHWAY PATROL					6	
	FW	CESSNA	182	2		
	FW	CESSNA	172	3		
	FW	CESSNA	150	1		
36) DIVISION OF BEVERAGES	FW	CESSNA	206	1	1	
37) FLORIDA GAME AND FRESH WATER FISH COMMISSION					6	
	H	BELL	47G-2	1		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
FLORIDA (Continued)						
FLORIDA GAME AND FRESH WATER FISH COMMISSION (Cont.)	FW	CESSNA	310	1		
	FW	CESSNA	150	1		
	FW	CESSNA	182	1		
	FW	PIPER	PA 18	1		
	FW	PIPER	PA 36	1		
38) DEPARTMENT OF NATURAL RESOURCES-DIVISION OF MARINE PATROL					2	
	FW	BEECH	BARON D55	1		
	FW	BEECH	BARON 58	1		
COUNTY AGENCIES	.....	.....	.....	.....	25	
39) BREVARD COUNTY SHERIFF	H	BELL	TH-13T	1	1	
40) BROWARD COUNTY SHERIFF	H	BELL	47G-5A	1	1	
41) COLLIER COUNTY SHERIFF	H	BELL	47G-3B	1	1	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
FLORIDA (Continued)						
42) DADE COUNTY PUBLIC SAFETY DEPARTMENT	H	BELL	47G-3B	3	4	
	STOL	HELIO COURIER	H 295	1		
43) HILLSBOROUGH COUNTY SHERIFF	H	HUGHES	500	1	1	
44) LEE COUNTY SHERIFF	H	HILLER	UH 12D	1	1	
45) LEON COUNTY SHERIFF	H	BELL	TH-13T	1	1	
46) MARION COUNTY SHERIFF	H	BELL	H-13T	1	1	
47) ORANGE COUNTY SHERIFF	H	SIKORSKY	S 55B	1	4	
	H	BELL	47G-2A	2		
	FW	PIPER	PA 24	1		
48) PALM BEACH COUNTY SHERIFF	H	BELL	206	1	1	
49) PASCO COUNTY SHERIFF	H	HILLER	12 E	1	2	
	FW	DE HAVILLAND	U6A	1		
50) PINELLAS COUNTY SHERIFF	H	BELL	47G-3B	2	5	
	H	BELL	47G-5A	1		
	H	BELL	47G	1		
	STOL	DE HAVILLAND	DHC-2	1		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
FLORIDA (Continued)						
51) POLK COUNTY SHERIFF	STOL	CESSNA	172	1	1	
52) ST. LUCIE COUNTY SHERIFF	H	HUGHES	TH 55	1	1	
LOCAL AGENCIES	.....	.....	.....	.....	13	
53) FORT LAUDERDALE POLICE	FW	CESSNA	172	2	2	
54) JACKSONVILLE SHERIFF	H	BELL	47G	6	6	
55) TAMPA POLICE					5	
	H	HUGHES	269	1		
	H	HUGHES	300	2		
	FW	PIPER	PA 22	1		
	FW	CESSNA	172	1		
GEORGIA	.....	.....	.....	.....	19	3.0
STATE AGENCIES	.....	.....	.....	.....	11	
56) GEORGIA STATE PATROL					11	
	H	BELL	47G-3B	10		
	FW	CESSNA	172	1		
COUNTY AGENCIES	.....	.....	.....	.....	3	
57) DE KALB COUNTY POLICE					3	
	H	HUGHES	300	2		
	STOL	MAULE	M5	1		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
GEORGIA (Continued)						
LOCAL AGENCIES	.....	.....	.....	.....	5	
58) ATLANTA POLICE	H	HUGHES	269	4	4	
59) COLUMBUS POLICE	H	HUGHES	269	1	1	
KENTUCKY	.....	.....	.....	.....	5	0.8
STATE AGENCIES	.....	.....	.....	.....	2	
60) KENTUCKY STATE POLICE					2	
	FW	CESSNA	182	1		
	FW	CESSNA	172	1		
COUNTY AGENCIES	.....	.....	.....	.....	3	
61) JEFFERSON COUNTY POLICE					3	
	H	HUGHES	300	2		
	H	HUGHES	269	1		
MISSISSIPPI	.....	.....	.....	.....	12	1.9
STATE AGENCIES	.....	.....	.....	.....	9	
62) MISSISSIPPI HIGHWAY PATROL					9	
	H	BELL	47G-2	1		
	H	BELL	47G-3B	4		
	H	BELL	206	1		

EXHIBIT I -- INDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
MISSISSIPPI (Continued)						
MISSISSIPPI HIGHWAY PATROL (Continued)	FW	CESSNA	L-19	1		
	FW	CESSNA	T-41	1		
	FW	PIPER	PA-23	1		
COUNTY AGENCIES	.....	.....	.....	.....	1	
63) HARRISON COUNTY SHERIFF	H	BELL	H-13H	1	1	
LOCAL AGENCIES	.....	.....	.....	.....	2	
64) JACKSON POLICE	H	BELL	47G-5A	1	1	
65) NATCHEZ POLICE	H	BELL	47G-3B	1	1	
NORTH CAROLINA	.....	.....	.....	.....	11	1.7
STATE AGENCIES	.....	.....	.....	.....	9	
66) NORTH CAROLINA HIGHWAY PATROL	H	BELL	206	2	2	
67) DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES DIVISION OF MARINE FISHERIES					2	
	FW	CESSNA	180	1		
	FW	PIPER	PA 18	1		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
NORTH CAROLINA (Continued)						
68) WILDLIFE RESOURCES COMMISSION					5	
	FW	PIPER	PA 18	4		
	FW	ROCKWELL	CDR 500	1		
COUNTY AGENCIES	.....	.....	.....	.....	1	
69) DARE COUNTY SHERIFF	H	BELL	47G-3B	1	1	
LOCAL AGENCIES	.....	.....	.....	.....	1	
70) CHARLOTTE POLICE	H	BELL	47G-5	1	1	
SOUTH CAROLINA	.....	.....	.....	.....	11	1.7
STATE AGENCIES	.....	.....	.....	.....	10	
71) AERONAUTICS COMMISSION (SOUTH CAROLINA HIGHWAY PATROL)					6	
	H	BELL	47G	2		
	H	BELL	206	1		
	FW	BEECH	BARON 55	1		
	FW	BEECH	KING AIR B100	1		
	FW	DE HAVILLAND	U6A	1		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICHES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
SOUTH CAROLINA (Continued)						
72) WILDLIFE DEPARTMENT					4	
	FW	CESSNA	180	2		
	FW	ROCKWELL	CDR. SHRIKE	1		
	FW	CHAMPION	CITABRIA	1		
COUNTY AGENCIES	.....	.....	.....	.....	1	
73) DARLINGTON COUNTY SHERIFF	H	BELL	TH-13T	1	1	
TENNESSEE	.....	.....	.....	.....	20	3.1
STATE AGENCIES	.....	.....	.....	.....	6	
74) TENNESSEE HIGHWAY PATROL					6	
	H	BELL	47G-2	2		
	H	BELL	47G-3B	4		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
TENNESSEE (Continued)						
LOCAL AGENCIES	.....	.....	.....	.....	14	
75) KNOXVILLE POLICE					2	
	H	BELL	TH-13T	1		
	H	BELL	H-13G	1		
76) LEWISBURG POLICE	H	BELL	TH-13T	1	1	
77) MEMPHIS POLICE					6	
	H	BELL	47	5		
	H	BELL	206A	1		
78) NASHVILLE POLICE					5	
	H	BELL	47G-3B	4		
	H	BELL	47G	1		
REGION V	.....	.....	.....	.....	115	18.0
ILLINOIS	.....	.....	.....	.....	11	1.7
STATE AGENCIES	.....	.....	.....	.....	9	
79) ILLINOIS STATE POLICE					4	
	FW	CESSNA	310	1		
	FW	CESSNA	182	3		
80) ILLINOIS STATE TOLL HIGHWAY AUTHORITY	H	BELL	206B	1	1	
81) ILLINOIS STATE CONSERVATION DEPARTMENT					4	
	H	ENSTROM	28A	1		
	FW	CESSNA	210	1		
	FW	CESSNA	206	1		
	FW	CESSNA	337	1		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHCILES BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
ILLINOIS (Continued)						
LOCAL AGENCIES					2	
82) CHICAGO POLICE	H	BELL	47G-4A	2	2	
INDIANA					21	3.3
STATE AGENCIES					9	
83) INDIANA STATE POLICE					9	
	H	BELL	206A	5		
	FW	BEECH	QUEEN AIR	1		
	FW	BEECH	BARON	1		
	FW	CESSNA	T-41	2		
COUNTY AGENCIES					7	
84) ALLEN COUNTY SHERIFF	H	BELL	TH-13	1	1	
85) DECATUR COUNTY SHERIFF	H	BELL	47G-3B	1	1	
86) HOWARD COUNTY SHERIFF	H	HILLER	OH-23G	2	2	
87) MARION COUNTY SHERIFF					2	
	H	BELL	206A	1		
	H	BELL	47G-5	1		
88) PORTER COUNTY SHERIFF	H	BELL	TH-13T	1	1	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
INDIANA (Continued)						
LOCAL AGENCIES	.....	.....	.....	.....	5	
89) GARY POLICE	H	HUGHES	269	2	2	
90) INDIANAPOLIS POLICE					3	
	H	HUGHES	269C	2		
	H	BELL	47G-3B	1		
MICHIGAN	.....	.....	.....	.....	49	7.6
STATE AGENCIES	.....	.....	.....	.....	22	
91) MICHIGAN STATE POLICE					8	
	H	BELL	206A	1		
	H	HILLER	UH-23D	4		
	FW	CESSNA	401	1		
	FW	CESSNA	185	1		
	FW	PIPER	PA-23	1		
92) DEPARTMENT OF NATURAL RESOURCES					10	
	H	BELL	47G	2		
	H	ENSTROM	F-28A	1		
	FW	BEECH	T-34	4		
	FW	CESSNA	337	1		
	FW	MAULE	M4	2		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
MICHIGAN (Continued)						
93) DEPARTMENT OF TRANSPORTATION - DIVISION OF AERONAUTICS					4	
	FW	CESSNA	182	2		
	FW	CESSNA	310	1		
	FW	BEECH	BONANZA V35	1		
COUNTY AGENCIES	.....	.....	.....	.....	10	
94) GENESSE COUNTY SHERIFF					4	
	H	BELL	47G-3B	3		
	FW	DE HAVILLAND	DHC-2	1		
95) MUSKEGON COUNTY SHERIFF	FW	CESSNA	172	1	1	
96) OAKLAND COUNTY SHERIFF					3	
	H	ENSTROM	F-28A	1		
	H	BELL	47G-2	2		
97) WAYNE COUNTY SHERIFF	H	HUGHES	300C	2	2	
LOCAL AGENCIES	.....	.....	.....	.....	17	
98) DETROIT POLICE					7	
	H	BELL	47G-5	2		
	H	BELL	47G-5A	4		
	FW	CESSNA	172	1		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
MICHIGAN (Continued)						
99) FLINT POLICE					4	
	H	BELL	47G-3B	3		
	FW	DE HAVILLAND	DHC-2	1		
100) LANSING POLICE	H	HUGHES	269	3	3	
101) WARREN POLICE					3	
	H	HILLER	OH-23-D	1		
	H	HILLER	OH-23-G	2		
MINNESOTA	.....	.....	.....	.....	7	1.1
STATE AGENCIES	.....	.....	.....	.....	7	
102) MINNESOTA STATE PATROL					7	
	H	BELL	47G-4A	1		
	H	BELL	47G-2A	3		
	FW	CESSNA	182	2		
	FW	CESSNA	180	1		
OHIO	.....	.....	.....	.....	26	4.1
STATE AGENCIES	.....	.....	.....	.....	12	
103) OHIO HIGHWAY PATROL					12	
	H	BELL	206A	2		
	FW	CESSNA	172	9		
	FW	BEECH	BONANZA P 35	1		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
OHIO (Continued)						
COUNTY AGENCIES	.....	.....	.....	.....	8	
104) ALLEN COUNTY SHERIFF	H	BELL	TH-13T	1	1	
105) LORAIN COUNTY SHERIFF					6	
	FW	DE HAVILLAND	BEAVER V6	1		
	FW	BEECH	TW. BNZA	1		
	FW	PIPER	PA-23	1		
	FW	CESSNA	310	1		
	FW	CESSNA	172	1		
	STOL	CESSNA	150	1		
106) WAYNE COUNTY SHERIFF	H	BELL	TH-13T	1	1	
LOCAL AGENCIES	.....	.....	.....	.....	6	
107) COLUMBUS POLICE	H	HUGHES	269C	4	4	
108) KETTERING POLICE	H	HUGHES	300-C	2	2	
WISCONSIN	.....	.....	.....	.....	1	0.2
COUNTY AGENCIES	.....	.....	.....	.....	1	
109) SAUK COUNTY SHERIFF	H	HILLER	OH-236	1	1	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
REGION VI	.....	.....	.....	.....	65	10.2
ARKANSAS	.....	.....	.....	.....	2	0.3
STATE AGENCIES	.....	.....	.....	.....	2	
110) ARKANSAS STATE POLICE	STOL	CESSNA	182	1	1	
111) ARKANSAS DEPARTMENT OF CORRECTIONS	FW	PIPER	CUB J3	1	1	
LOUISIANA	.....	.....	.....	.....	14	2.2
STATE AGENCIES	.....	.....	.....	.....	7	
112) LOUISIANA STATE POLICE					5	
	H	FAIRCHLD-HILLER	FH-1100	2		
	H	BELL	206 IIB	2		
	FW	CESSNA	206	1		
113) DEPARTMENT OF CORRECTIONS					2	
	FW	CESSNA	206	1		
	FW	BEECH	BARON	1		
COUNTY AGENCIES	.....	.....	.....	.....	7	
114) JEFFERSON PARISH SHERIFF	H	BELL	47G-38	2	2	
115) ST. CHARLES PARISH SHERIFF	H	BELL	TH-13M	1	1	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
LOUISIANA (Continued)						
116) ST. BERNARD PARISH SHERIFF	H	BELL	47G	1	1	
117) ST. MARY PARISH SHERIFF	FW	CESSNA	337	1	1	
118) ST. TAMMANY PARISH SHERIFF	H	BELL	H-13E	1	1	
119) TERREBONNE PARISH SHERIFF	H	BELL	TH-13T	1	1	
NEW MEXICO	.....	.....	.....	.....	5	0.8
STATE AGENCIES	.....	.....	.....	.....	3	
120) NEW MEXICO STATE POLICE					3	
	FW	CESSNA	172	1		
	STOL	CESSNA	337	1		
	STOL	CESSNA	206	1		
COUNTY AGENCIES	.....	.....	.....	.....	1	
121) BERNALILLO COUNTY SHERIFF	FW	PIPER	SENECA	1	1	
LOCAL AGENCIES	.....	.....	.....	.....	1	
122) ALBUQUERQUE POLICE	STOL	CESSNA	172	1	1	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
OKLAHOMA	.....	.....	.....	.....	1	0.2
LOCAL AGENCIES	.....	.....	.....	.....	1	
123) OKLAHOMA CITY POLICE	H	HUGHES	300C	1	1	
TEXAS	.....	.....	.....	.....	43	6.7
STATE AGENCIES	.....	.....	.....	.....	11	
124) TEXAS DEPARTMENT OF PUBLIC SAFETY					11	
	H	BELL	206A	3		
	H	BELL	206B	3		
	H	BELL	47G-4A	1		
	FW	CESSNA	402B	2		
	FW	CESSNA	401A	1		
	FW	BEECH	QUEEN AIR	1		
COUNTY AGENCIES	.....	.....	.....	.....	6	
125) BEXAR COUNTY SHERIFF	H	HUGHES	269C	1	1	
126) ECTOR COUNTY SHERIFF	H	BELL	TH-13T	1	1	
127) HARRIS COUNTY SHERIFF	H	HUGHES	269C	3	3	
128) MCLENNAN COUNTY SHERIFF	H	BELL	47G-3B	1	1	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
TEXAS (Continued)						
LOCAL AGENCIES	.....	.....	.....	.....	26	
129) DALLAS POLICE					9	
	H	BELL	47G-5	3		
	H	BELL	47G-5A	3		
	H	BELL	47G-3B	2		
	FW	DE HAVILLAND	U6A	1		
130) FORT WORTH POLICE	H	BELL	47G-4A	2	2	
131) HARLINGEN POLICE	H	BELL	47G-2	1	1	
132) HOUSTON POLICE	H	HUGHES	269C	11	11	
133) PASADENA POLICE	H	HUGHES	300C	1	1	
134) SAN ANTONIO POLICE	H	HUGHES	269C	2	2	
REGION VII	.....	.....	.....	.....	48	7.5
IOWA	.....	.....	.....	.....	10	1.6
STATE AGENCIES	.....	.....	.....	.....	6	
135) IOWA STATE PATROL					6	
	FW	CESSNA	182	2		
	FW	CESSNA	172	4		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
IOWA (Continued)						
LOCAL AGENCIES	.....	.....	.....	.....	4	
136) CEDAR RAPIDS POLICE	H	HILLER	12C	4	4	
KANSAS	.....	.....	.....	.....	10	1.6
STATE AGENCIES	.....	.....	.....	.....	2	
137) KANSAS HIGHWAY PATROL	FW	CESSNA	182	2	2	
COUNTY AGENCIES	.....	.....	.....	.....	2	
138) RUSH COUNTY SHERIFF	H	BELL	TH-13T	1	1	
139) STANTON COUNTY SHERIFF	H	BELL	TH-13T	1	1	
LOCAL AGENCIES	.....	.....	.....	.....	6	
140) KANSAS CITY POLICE	H	HUGHES	300C	2	2	
141) TOPEKA POLICE	H	HUGHES	300C	2	2	
142) WICHITA POLICE	H	HUGHES	269C	2	2	
MISSOURI	.....	.....	.....	.....	17	2.6
STATE AGENCIES	.....	.....	.....	.....	6	
143) STATE HIGHWAY PATROL					6	
	H	BELL	47G-2	1		
	FW	CESSNA	182	5		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
MISSOURI (Continued)						
COUNTY AGENCIES	.....	.....	.....	.....	4	
144) ST. CHARLES COUNTY SHERIFF	H	BELL	47G-3B	2	2	
145) ST. LOUIS COUNTY POLICE	H	BELL	47G-5	2	2	
LOCAL AGENCIES	.....	.....	.....	.....	7	
146) KANSAS CITY POLICE					6	
	H	HUGHES	300B	3		
	H	HUGHES	300C	3		
147) SIKESTON POLICE	H	BELL	TH-13T	1	1	
NEBRASKA	.....	.....	.....	.....	11	1.7
STATE AGENCIES	.....	.....	.....	.....	9	
148) NEBRASKA STATE PATROL					9	
	H	BELL	206B	1		
	FW	CESSNA	150	2		
	FW	CESSNA	172	2		
	FW	PIPER	PA 28-140	1		
	FW	PIPER	PA 28-180	1		
	FW	PIPER	PA 23	1		
	FW	PIPER	SENECA	1		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
NEBRASKA (Continued)						
COUNTY AGENCIES	.....	.....	.....	.....	1	
149) LANCASTER COUNTY SHERIFF	H	BELL	47G-3B	1	1	
LOCAL AGENCIES	.....	.....	.....	.....	1	
150) LINCOLN POLICE	H	BELL	47G-3B	1	1	
REGION VIII	.....	.....	.....	.....	30	4.7
COLORADO	.....	.....	.....	.....	11	1.7
STATE AGENCIES	.....	.....	.....	.....	5	
151) COLORADO STATE PATROL	FW	BEECH	BARON E55	1	5	
	FW	PIPER	PA 23	1		
	FW	CESSNA	182	2		
	FW	PIPER	PA 18	1		
COUNTY AGENCIES	.....	.....	.....	.....	3	
152) ADAMS COUNTY SHERIFF	H	BELL	47G-3B	1	1	
153) JEFFERSON COUNTY SHERIFF	H	BELL	47G-3B	1	1	
154) PUEBLO COUNTY SHERIFF (PUEBLO POLICE)	H	BELL	TH-13T	1	1	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
COLORADO (Continued						
LOCAL AGENCIES	.....	.....	.....	.....	3	
155) AURORA POLICE	H	BELL	47G-3B	1	1	
156) DENVER POLICE	H	BELL	47G-3B	2	2	
MONTANA	.....	.....	.....	.....	7	1.1
STATE AGENCIES	.....	.....	.....	.....	6	
157) MONTANA DEPARTMENT OF FISH AND GAME					6	
	H	BELL	47G-3B	1		
	H	BELL	OH-13S	1		
	FW	CESSNA	180	1		
	FW	PIPER	PA 18	3		
COUNTY AGENCIES	.....	.....	.....	.....	1	
158) FLATHEAD COUNTY SHERIFF	H	BELL	47G-3B	1	1	
NORTH DAKOTA	.....	.....	.....	.....	2	0.3
STATE AGENCIES	.....	.....	.....	.....	2	
159) STATE HIGHWAY PATROL	FW	CESSNA	182	1	1	
160) DEPARTMENT OF GAME AND FISH	FW	CESSNA	182	1	1	
SOUTH DAKOTA	.....	.....	.....	.....	3	0.5
STATE AGENCIES	.....	.....	.....	.....	1	
161) SOUTH DAKOTA HIGHWAY PATROL	FW	CESSNA	182	1	1	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE, AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
SOUTH DAKOTA (Continued)						
COUNTY AGENCIES	.....	.....	.....	.....	2	
162) MINNEHAHA COUNTY SHERIFF (SIOUX FALLS POLICE)					2	
	H	BELL	TH-13T	1		
	FW	CESSNA	172	1		
UTAH	.....	.....	.....	.....	6	0.9
STATE AGENCIES	.....	.....	.....	.....	5	
163) UTAH HIGHWAY PATROL					2	
	FW	PIPER	PA 30	1		
	FW	CESSNA	182	1		
164) DEPARTMENT OF WILDLIFE RESOURCES					3	
	FW	CESSNA	180	2		
	FW	PIPER	PA 18	1		
LOCAL AGENCIES	.....	.....	.....	.....	1	
165) SALT LAKE CITY POLICE	H	HILLER	OH-23D	1	1	
WYOMING	.....	.....	.....	.....	1	0.2
COUNTY AGENCIES	.....	.....	.....	.....	1	
166) NATRONA COUNTY SHERIFF	STOL	DE HAVILLAND	DHC-2	1	1	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
REGION IX	.....	.....	.....	.....	114	17.9
ARIZONA	.....	.....	.....	.....	15	2.4
STATE AGENCIES	.....	.....	.....	.....	5	
167) ARIZONA HIGHWAY PATROL					5	
	H	BELL	206B	2		
	FW	BEECH	BARON	1		
	FW	BEECH	QUEEN AIR	1		
	FW	CHAMPION	CITABRIA	1		
COUNTY AGENCIES	.....	.....	.....	.....	2	
168) PIMA COUNTY SHERIFF	STOL	CESSNA	182	1	1	
169) YUMA COUNTY SHERIFF	FW	CESSNA	172	1	1	
LOCAL AGENCIES	.....	.....	.....	.....	8	
170) PHOENIX POLICE					4	
	H	HUGHES	300C	3		
	FW	CESSNA	172	1		
171) TUCSON POLICE					4	
	H	HUGHES	269C	2		
	H	HUGHES	269A	2		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
CALIFORNIA	.....	.....	.....	.....	93	14.6
STATE AGENCIES	.....	.....	.....	.....	6	
172)CALIFORNIA HIGHWAY PATROL	H	FAIRCHILD - HILLER	FH-1100	3	6	
	STOL	MAULE	210C	3		
COUNTY AGENCIES	.....	.....	.....	.....	43	
173)CALAVERAS COUNTY SHERIFF	H	BELL	TH-13T	1	1	
174)IMPERIAL COUNTY SHERIFF	H	BELL	TH-13T	3	4	
	FW	CESSNA	172	1		
175)INYO COUNTY SHERIFF	STOL	MAULE	M5	1	1	
176)KERN COUNTY SHERIFF	H	HUGHES	500	1	1	
177)LOS ANGELES COUNTY SHERIFF	H	HUGHES	269B	4	16	
	H	HUGHES	269C	1		
	H	BELL	47G-3B	5		
	H	SIKORSKY	H 34	3		
	FW	CESSNA	182	1		
	FW	MAULE		1		
	STOL	HELIO COURIER		1		
178) RIVERSIDE SHERIFF	STOL	CESSNA	U206	1	1	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA.

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
CALIFORNIA (Continued)						
COUNTY AGENCIES (Cont.)						
179) SAN BERNARDINO COUNTY SHERIFF					6	
	H	HUGHES	500C	2		
	H	BELL	476G-B2	2		
	H	BELL	476G-B	1		
	FW	CESSNA	205	1		
180) SAN DIEGO COUNTY SHERIFF					7	
	H	BELL	47G-5	2		
	H	BELL	47G-3B	4		
	FW	PIPER	PA 18A	1		
181) SAN MATEO COUNTY SHERIFF					2	
	H	HUGHES	269	1		
	H	HUGHES	300C	1		
182) SANTA CRUZ COUNTY SHERIFF	FW	CESSNA	150	1	1	
183) SONOMA COUNTY SHERIFF	H	BELL	47	1	1	
184) VENTURA COUNTY SHERIFF					2	
	H	BELL	47G-3B	1		
	H	BELL	TH-13T	1		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
CALIFORNIA (Continued)						
LOCAL AGENCIES	.....	.....	.....	.....	44	
185) ANAHEIM POLICE	H	HUGHES	269C	1	1	
186) COSTA MESA POLICE	H	HUGHES	269C	2	2	
187) GLENDALE POLICE	H	BELL	47G-5A	1	1	
188) HUNTINGTON BEACH POLICE					6	
	H	HUGHES	269B	1		
	H	BELL	47G-3B	4		
	STOL	MAULE	M4	1		
189) LAKEWOOD COMMUNITY SAFETY DEPARTMENT					3	
	H	HUGHES	300B	2		
	H	HUGHES	300C	1		
190) LONG BEACH POLICE					2	
	H	BELL	47G-5A	1		
	H	BELL	47G-2A	1		
191) LOS ANGELES POLICE					15	
	H	BELL	47G-4A	1		
	H	BELL	47G-5	4		
	H	BELL	206B	9		
	STOL	CESSNA	210	1		

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
CALIFORNIA (Continued)						
LOCAL AGENCIES						
192) SOUTHERN CALIFORNIA AIR POLLUTION CONTROL - LOS ANGELES DISTRICT	H	BELL	47G-3B	1	1	
193) NEWPORT BEACH POLICE	H	HUGHES	300-C	2	2	
194) OAKLAND POLICE	H	HUGHES	300-C	2	2	
195) PASADENA POLICE	H	ENSTROM	F-28A	3	3	
196) POMONA POLICE	H	BELL	47G-5	1	2	
	H	BELL	47G-3B	1		
197) RICHMOND POLICE	FW	CESSNA	172	1	1	
198) RIVERSIDE POLICE	H	BELL	47G-5	2	2	
199) SANTA MONICA POLICE	STOL	CESSNA	172	1	1	
HAWAII	.....	.....	.....	.....	4	0.6
COUNTY AGENCIES	.....	.....	.....	.....	2	
200) MAUI COUNTY POLICE	H	HILLER	OH3-23G	2	2	
LOCAL AGENCIES	.....	.....	.....	.....	2	
201) HONOLULU POLICE	H	HUGHES	300-C	2	2	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
NEVADA					2	0.3
LOCAL AGENCIES					2	
202) LAS VEGAS POLICE	H	HUGHES	300-C	2	2	
REGION X					33	5.2
ALASKA					19	3.0
STATE AGENCIES					19	
203) ALASKA STATE TROOPERS					19	
	H	HILLER	12E	1		
	FW	GRUMMAN	GOOSE G21A	3		
	FW	DE HAVILLAND	DHC-2	2		
	FW	CESSNA	180	1		
	FW	CESSNA	150	1		
	FW	PIPER	PA-18	11		
IDAHO					1	0.2
COUNTY AGENCIES					1	
204) ADA COUNTY SHERIFF	STOL	DE HAVILLAND	U6A	1	1	

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

REGION, STATE, AGENCY NAME	AIRCRAFT TYPE	MANUFACTURER	MODEL	NUMBER BY MODEL	TOTAL NUMBER OF AIRCRAFT	PERCENT OF NATIONAL TOTAL AIRCRAFT USED IN LAW ENFORCEMENT BY REGION AND STATE
OREGON	.....	.....	.....	.....	4	0.6
STATE AGENCIES	.....	.....	.....	.....	4	
205) OREGON STATE POLICE					4	
	FW	PIPER	PA-18	1		
	FW	MAULE	M 5	3		
WASHINGTON	.....	.....	.....	.....	9	1.4
STATE AGENCIES	.....	.....	.....	.....	3	
206) WASHINGTON STATE PATROL					3	
	FW	CESSNA	182	1		
	FW	PIPER	PA 23	1		
	FW	BEECH	KING AIR	1		
COUNTY AGENCIES	.....	.....	.....	.....	4	
207) CHELAN COUNTY SHERIFF	H	BELL	47G-3B	1	1	
208) SNOHOMISH COUNTY SHERIFF	H	BELL	47G-3B	3	3	
LOCAL AGENCIES	.....	.....	.....	.....	2	
209) SEATTLE POLICE	H	HUGHES	269C	2	2	
TOTAL NUMBER OF AIRCRAFT USED BY LAW ENFORCEMENT AGENCIES					638	100.0 100.0

EXHIBIT I -- IDENTIFIED LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES LISTED BY REGION, STATE AND AGENCY WITH INVENTORY DATA. (Continued)

AIRCRAFT TYPE	MANUFACTURER AND MODEL	TOTAL NUMBER CURRENTLY IN USE	PERCENT OF TOTAL LAW ENFORCEMENT AIRCRAFT
HELICOPTER		420	(65%)
	BELL 47 SERIES	172	27%
	BELL 206 SERIES	63	10%
	BELL TH-13 SERIES	28	4%
	BELL H AND OH SERIES	7	1%
	HILLER OH SERIES	14	2%
	HILLER UH SERIES	14	2%
	SIKORSKY H H 34 J	2	*
	SIKORSKY H 34	3	*
	SIKORSKY 55 B	1	*
	AEROSPATIALE GAZELLE	1	*
	ENSTROM F 28 A	6	*
	FAIRCHILD - HILLER FH-1100	8	1%
	HUGHES 300 SERIES	41	6%
	HUGHES 269 SERIES	54	8%
	HUGHES 500 SERIES	4	*
	HUGHES TH 55	2	*
FIXED WING		188	(30%)
	CESSNA 150	6	*
	CESSNA 172	35	5%
	CESSNA 180	8	1%
	CESSNA 182	30	4%
	CESSNA 185	1	*
	CESSNA 205	1	*

* LESS THAN 1%

EXHIBIT 2 -- INVENTORY OF AIRBORNE VEHICLES USED BY STATE, COUNTY AND LOCAL LAW ENFORCEMENT AGENCIES BY TYPE, MANUFACTURER AND MODEL

AIRCRAFT TYPE	MANUFACTURER AND MODEL	TOTAL NUMBER CURRENTLY IN USE	PERCENT OF TOTAL LAW ENFORCEMENT AIRCRAFT
FIXED WING (Continued)			
	CESSNA 206	4	*
	CESSNA 210	1	*
	CESSNA 310	4	*
	CESSNA 337	3	*
	CESSNA 401	2	*
	CESSNA 402.	2	*
	CESSNA L19	1	*
	CESSNA T41	4	*
	ROCKWELL COMMANDER 500	1	*
	ROCKWELL COMMANDER 560	2	*
	ROCKWELL COMMANDER SHRIKE	1	*
	CHAMPION CITABRIA	2	*
	BEECH BARON SERIES	7	1%
	BEECH BONANZA SERIES	3	*
	BEECH TWIN BONANZA SERIES	1	*
	BEECH T34	4	*
	BEECH QUEEN AIR SERIES	3	*
	BEECH KING AIR SERIES	2	*
	PIPER PA18	25	4%
	PIPER PA22	1	*
	PIPER PA23	7	1%
	PIPER PA24	1	*

* LESS THAN 1%

EXHIBIT 2 -- INVENTORY OF AIRBORNE VEHICLES USED BY STATE COUNTY AND LOCAL LAW ENFORCEMENT AGENCIES BY TYPE, MANUFACTURER AND MODEL (Continued)

AIRCRAFT TYPE	MANUFACTURER AND MODEL	TOTAL NUMBER CURRENTLY IN USE	PERCENT OF TOTAL LAW ENFORCEMENT AIRCRAFT
FIXED WING (Continued)			
	PIPER PA28	2	*
	PIPER PA30	1	*
	PIPER PA36	1	*
	PIPER CUB J-3	1	*
	PIPER SENECA	2	*
	GRUMMAN GOOSE	3	*
	MAULE	1	*
	MAULE M4	2	*
	MAULE M5	3	*
	DE HAVILLAND BEAVER	7	1%
	DE HAVILLAND U6A	3	*
STOL		30	(5%)
	CESSNA 150	1	
	CESSNA 172	4	*
	CESSNA 182	2	*
	CESSNA 185	4	*
	CESSNA 206	1	*
	CESSNA U206	1	*
	CESSNA 210	1	*
	CESSNA 337	1	*
	DE HAVILLAND BEAVER	4	*
	DE HAVILLAND U6A	1	*

* LESS THAN 1%

EXHIBIT 2 -- INVENTORY OF AIRBORNE VEHICLES USED BY STATE AND LOCAL LAW ENFORCEMENT AGENCIES BY TYPE, MANUFACTURER AND MODEL (Continued)

AIRCRAFT TYPE	MANUFACTURER AND MODEL	TOTAL NUMBER CURRENTLY IN USE	PERCENT OF TOTAL LAW ENFORCEMENT AIRCRAFT
STOL (Continued)			
	HELIO COURIER H295	2	*
	PIPER PA18	1	*
	MAULE	1	*
	MAULE M4	1	*
	MAULE M5	2	*
	MAULE 210C	3	*
		638	100%

* LESS THAN 1%

EXHIBIT 2 -- INVENTORY OF AIRBORNE VEHICLES USED BY STATE COUNTY AND LOCAL LAW ENFORCEMENT AGENCIES BY TYPE, MANUFACTURER AND MODEL (Continued)

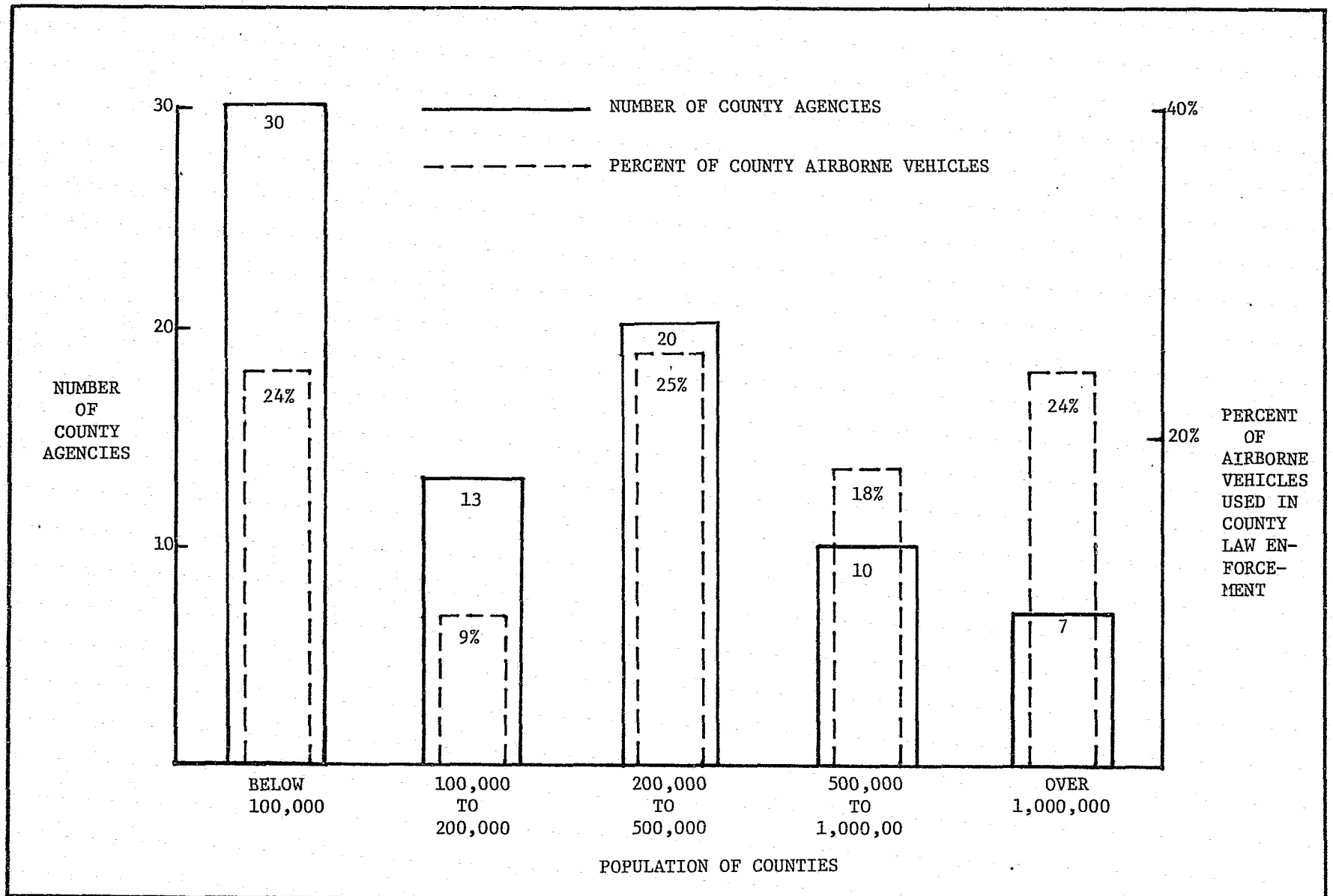


EXHIBIT 3 -- DISTRIBUTION (1) OF COUNTY LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES AND (2) OF COUNTY LAW ENFORCEMENT AIRBORNE VEHICLES THEMSELVES BY COUNTY POPULATION INTERVAL

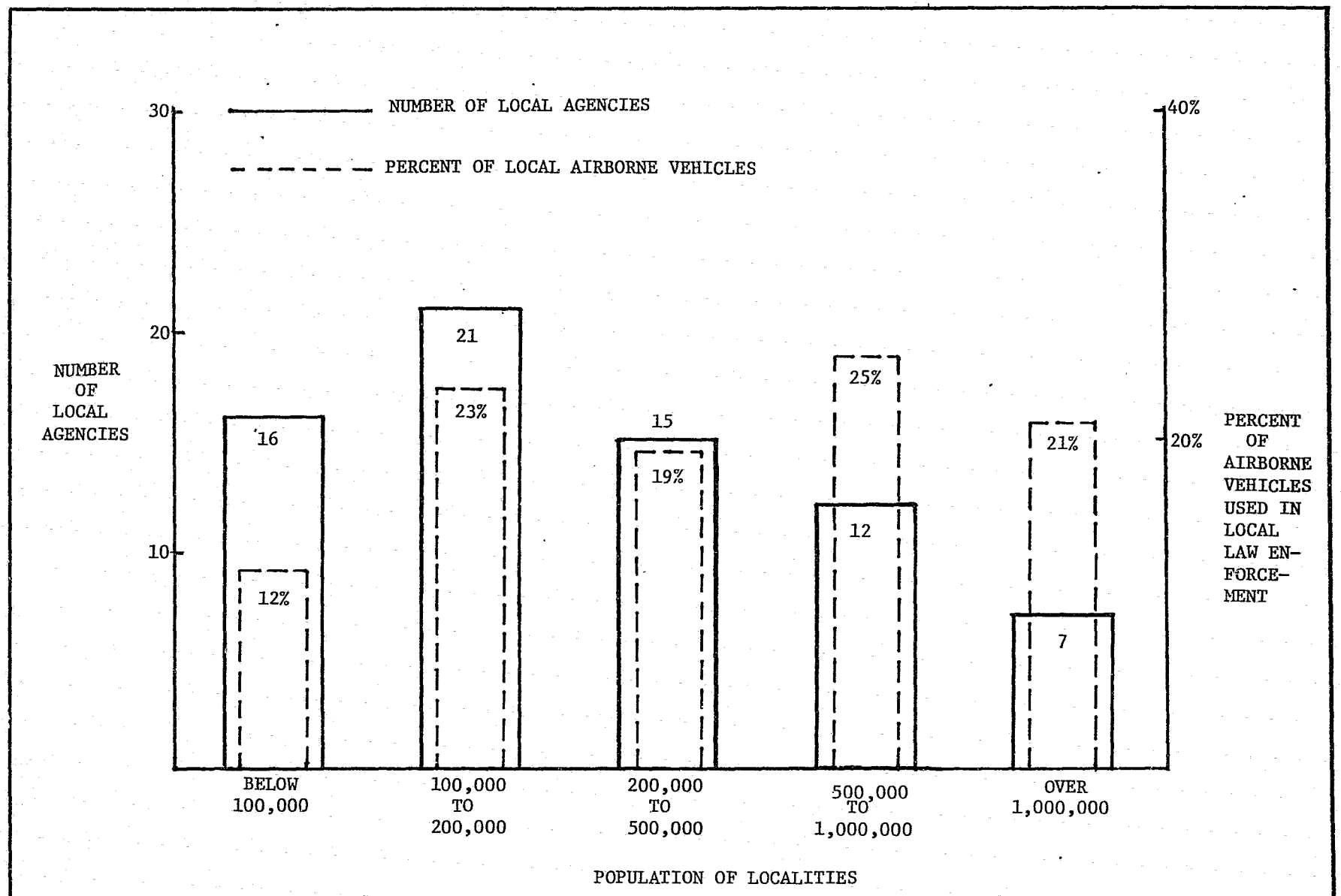


EXHIBIT 4 -- DISTRIBUTION (1) OF LOCAL LAW ENFORCEMENT AGENCIES UTILIZING AIRBORNE VEHICLES AND (2) OF LOCAL LAW ENFORCEMENT AIRBORNE VEHICLES THEMSELVES BY LOCAL POPULATION INTERVAL

EXHIBIT 5 -- COUNTIES AND LOCALITIES USING AIRCRAFT IN LAW ENFORCEMENT ACTIVITIES BY POPULATION INTERVAL

POPULATION INTERVAL = BELOW 100,000

COUNTIES

ALABAMA		
1. ESCAMBIA COUNTY SHERIFF		
ARIZONA		
2. YUMA COUNTY SHERIFF		
CALIFORNIA		
3. CALAVERAS COUNTY SHERIFF		
4. IMPERIAL COUNTY SHERIFF	———	X
5. INYO COUNTY SHERIFF		
FLORIDA		
6. COLLIER COUNTY SHERIFF		
7. MARION COUNTY SHERIFF		
8. PASCO COUNTY SHERIFF'S DEPARTMENT		
9. ST. LUCIE COUNTY SHERIFF'S OFFICE	———	X
HAWAII		
10. MAUI COUNTY POLICE DEPARTMENT		
INDIANA		
11. DECATUR COUNTY SHERIFF		
12. HOWARD COUNTY SHERIFF	———	X
13. PORTER COUNTY SHERIFF		
KANSAS		
14. RUSH COUNTY SHERIFF		
15. STANTON COUNTY SHERIFF		
LOUISIANA		
16. ST. BERNARD PARISH SHERIFF DEPARTMENT		
17. ST. CHARLES PARISH SHERIFF		
18. ST. MARY PARISH SHERIFF		
19. ST. TAMMARY PARISH SERIFF'S DEPARTMENT		
20. TERREBONNE SHERIFF DEPARTMENT		
MISSOURI		
21. ST. CHARLES COUNTY SHERIFF'S DEPARTMENT	———	X
MONTANA		
22. FLATHEAD COUNTY SHERIFF		
NORTH CAROLINA		
23. DARE COUNTY SHERIFF		
OHIO		
24. WAYNE COUNTY SHERIFF		
SOUTH CAROLINA		
25. DARLINGTON COUNTY SHERIFF		

NOTE: X'S INDICATE AGENCIES WHOSE DATA ARE INCLUDED IN EXHIBITS 8 AND 9.

EXHIBIT 5 -- COUNTIES AND LOCALITIES USING AIRCRAFT IN LAW ENFORCEMENT ACTIVITIES BY POPULATION INTERVAL (CONTINUED)

SOUTH DAKOTA	
26. MINNEHAHA COUNTY SHERIFF	
TEXAS	
27. ECTOR COUNTY SHERIFF	
WASHINGTON	
28. CHELAN COUNTY SHERIFF	
WISCONSIN	
29. SAUK COUNTY SHERIFF'S DEPARTMENT	X
WYOMING	
30. NATRONA COUNTY SHERIFF	
LOCALITIES	
ALABAMA	
1. TUSCALOOSA POLICE DEPARTMENT	X
CALIFORNIA	
2. COST MESA POLICE DEPARTMENT	X
3. NEWPORT BEACH POLICE DEPARTMENT	X
4. POMONA POLICE DEPARTMENT	X
5. RICHMOND POLICE DEPARTMENT	
6. SANTA MONICA POLICE DEPARTMENT	
MISSISSIPPI	
7. NATCHEZ POLICE DEPARTMENT	
MISSOURI	
8. SIKESTON POLICE DEPARTMENT	
OHIO	
9. KETTERING POLICE DEPARTMENT	
PENNSYLVANIA	
10. HORSHAM TOWNSHIP POLICE	
11. NEWTOWN TOWNSHIP POLICE	X
TENNESSEE	
12. LEWISBURG POLICE DEPARTMENT	
TEXAS	
13. HARLINGER POLICE DEPARTMENT	
14. PASADENA POLICE DEPARTMENT	X
VIRGINIA	
15. DANVILLE POLICE DEPARTMENT	
COLORADO	
16. AURORA	

NOTE: X'S INDICATE AGENCIES WHOSE DATA ARE INCLUDED IN EXHIBITS 8 AND 9.

EXHIBIT 5 -- COUNTIES AND LOCALITIES USING AIRCRAFT IN LAW ENFORCEMENT ACTIVITIES BY POPULATION INTERVAL (CONTINUED)

POPULATION INTERVAL = 100,000 TO 200,000

COUNTIES

CALIFORNIA

1. SANTA CRUZ COUNTY SHERIFF DEPARTMENT

COLORADO

2. ADAMS COUNTY SHERIFF
3. PUEBLO COUNTY SHERIFF

FLORIDA

4. LEE COUNTY SHERIFF
5. LEON COUNTY SHERIFF

IDAHO

6. ADA COUNTY SHERIFF

MICHIGAN

7. MUSKEGAN COUNTY SHERIFF'S DEPARTMENT

MISSISSIPPI

8. HARRISON COUNTY SHERIFF

NEBRASKA

9. LANCASTER COUNTY SHERIFF'S DEPARTMENT ——— X

NEW YORK

10. CHAUTAUQUA COUNTY SHERIFF'S DEPARTMENT ——— X

OHIO

11. ALLEN COUNTY SHERIFF

TEXAS

12. MC LENNAN COUNTY SHERIFF'S DEPARTMENT ——— X

VIRGINIA

13. HENRICO COUNTY POLICE DEPARTMENT

LOCALITIES

CALIFORNIA

1. ANAHEIM POLICE DEPARTMENT ——— X
2. GLENDALE POLICE DEPARTMENT ——— X
3. HUNTINGTON BEACH POLICE DEPARTMENT ——— X
4. PASADENA POLICE DEPARTMENT ——— X
5. RIVERSIDE POLICE DEPARTMENT ——— X

FLORIDA

6. FT. LAUDERDALE POLICE DEPARTMENT

GEORGIA

7. COLUMBUS POLICE DEPARTMENT ——— X

NOTE: X'S INDICATE AGENCIES WHOSE DATA ARE INCLUDED IN EXHIBITS 8 AND 9.

EXHIBIT 5 -- COUNTIES AND LOCALITIES USING AIRCRAFT IN LAW ENFORCEMENT ACTIVITIES BY POPULATION INTERVAL (CONTINUED)

INDIANA	
8. GARY POLICE DEPARTMENT	X
IOWA	
9. CEDAR RAPIDS POLICE DEPARTMENT	X
KANSAS	
10. KANSAS CITY POLICE DEPARTMENT	X
11. TOPEKA POLICE HELICOPTER UNIT	X
MICHIGAN	
12. FLINT POLICE DEPARTMENT	X
13. LANSING POLICE DEPARTMENT	X
14. WARREN POLICE DEPARTMENT	X
MISSISSIPPI	
15. JACKSON POLICE DEPARTMENT	X
NEBRASKA	
16. LINCOLN POLICE DEPARTMENT	X
NEVADA	
17. LAS VEGAS POLICE DEPARTMENT	X
TENNESSEE	
18. KNOXVILLE POLICE DEPARTMENT	
UTAH	
19. SALT LAKE CITY POLICE DEPARTMENT	X
VIRGINIA	
20. PORTSMOUTH POLICE DEPARTMENT	X
21. VIRGINIA BEACH POLICE DEPARTMENT	

POPULATION INTERVAL = 200,000 TO 500,000

COUNTY	
ARIZONA	
1. PIMA COUNTY SHERIFF'S DEPARTMENT	
CALIFORNIA	
2. COUNTY OF KERN SHERIFF'S DEPARTMENT	X
3. RIVERSIDE COUNTY SHERIFF'S DEPARTMENT	
4. SONOMA COUNTY SHERIFF	X
5. VENTURA COUNTY SHERIFF	X
COLORADO	
6. JEFFERSON COUNTY SHERIFF	
FLORIDA	
7. BREVARD COUNTY SHERIFF	
8. HILLSBOROUGH COUNTY SHERIFF	
9. ORANGE COUNTY SHERIFF DEPARTMENT	X

NOTE: X'S INDICATE AGENCIES WHOSE DATA ARE INCLUDED IN EXHIBITS 8 AND 9.

EXHIBIT 5 -- COUNTIES AND LOCALITIES USING AIRCRAFT IN LAW ENFORCEMENT ACTIVITIES BY POPULATION INTERVAL (CONTINUED)

FLORIDA (CONTINUED)	
10. PALM BEACH COUNTY SHERIFF'S DEPARTMENT	X
11. POLK COUNTY SHERIFF	
GEORGIA	
12. DE KALB COUNTY POLICE DEPARTMENT	X
INDIANA	
13. ALLEN COUNTY SHERIFF	
LOUISIANA	
14. JEFFERSON PARISH SHERIFF DEPARTMENT	
MICHIGAN	
15. GENESSE COUNTY SHERIFF	X
NEW MEXICO	
16. BERNALILLO COUNTY SHERIFF	
NEW YORK	
17. ONONDAGA COUNTY SHERIFF'S DEPARTMENT	X
18. ROCKLAND COUNTY SHERIFF	
OHIO	
19. LORAIN COUNTY SHERIFF'S DEPARTMENT	
WASHINGTON	
20. SNOHOMISH COUNTY SHERIFF	
LOCALITIES	
ARIZONA	
1. TUCSON POLICE DEPARTMENT	X
CALIFORNIA	
2. LAKEWOOD COMMUNITY SAFETY DEPARTMENT	X
3. LONG BEACH POLICE DEPARTMENT	X
4. OAKLAND POLICE DEPARTMENT	X
FLORIDA	
5. TAMPA POLICE DEPARTMENT	X
GEORGIA	
6. ATLANTA POLICE DEPARTMENT	X
HAWAII	
7. HONOLULU POLICE DEPARTMENT	X
KANSAS	
8. WICHITA POLICE DEPARTMENT	X
NEW MEXICO	
9. ALBUQUERQUE POLICE DEPARTMENT	

NOTE: X'S INDICATE AGENCIES WHOSE DATA ARE INCLUDED IN EXHIBITS 8 AND 9.

EXHIBIT 5 -- COUNTIES AND LOCALITIES USING AIRCRAFT IN LAW ENFORCEMENT ACTIVITIES BY POPULATION INTERVAL (CONTINUED)

NORTH CAROLINA	
10. CHARLOTTE POLICE DEPARTMENT	X
OKLAHOMA	
11. OKLAHOMA CITY POLICE DEPARTMENT	X
TENNESSEE	
12. NASHVILLE POLICE DEPARTMENT	
TEXAS	
13. FT. WORTH POLICE DEPARTMENT	
VIRGINIA	
14. NORFOLK POLICE DEPARTMENT	
15. RICHMOND POLICE HELICOPTER PATROL	X

POPULATION INTERVAL = 500,000 TO 1,000,000

COUNTY	
ALABAMA	
1. JEFFERSON COUNTY SHERIFF'S DEPARTMENT	X
CALIFORNIA	
2. SAN BERNANDINO COUNTY SHERIFF	X
3. SAN MATEO SHERIFF'S OFFICE	X
FLORIDA	
4. BROWARD COUNTY SHERIFF	X
5. PINELLAS COUNTY SHERIFF	X
INDIANA	
6. MARION COUNTY SHERIFF'S DEPARTMENT	X
KENTUCKY	
7. JEFFERSON COUNTY POLICE	X
MICHIGAN	
8. OAKLAND COUNTY SHERIFF'S DEPARTMENT	X
MISSOURI	
9. ST. LOUIS COUNTY POLICE DEPARTMENT	X
TEXAS	
10. BEXAR COUNTY SHERIFF	X
LOCALITIES	
ARIZONA	
1. PHOENIX POLICE DEPARTMENT	X
COLORADO	
2. DENVER POLICE DEPARTMENT	X

NOTE: X'S INDICATE AGENCIES WHOSE DATA ARE INCLUDED IN EXHIBITS 8 AND 9.

EXHIBIT 5 -- COUNTIES AND LOCALITIES USING AIRCRAFT IN LAW ENFORCEMENT ACTIVITIES BY POPULATION INTERVAL (CONTINUED)

DISTRICT OF COLUMBIA	
3. METROPOLITAN WASHINGTON POLICE DEPARTMENT	X
FLORIDA	
4. JACKSONVILLE SHERIFF'S DEPARTMENT	X
INDIANA	
5. INDIANAPOLIS POLICE DEPARTMENT	X
MARYLAND	
6. BALTIMORE CITY POLICE DEPARTMENT	X
MISSOURI	
7. KANSAS CITY POLICE DEPARTMENT	X
OHIO	
8. COLUMBUS POLICE DEPARTMENT	X
TENNESSEE	
9. MEMPHIS POLICE DEPARTMENT	X
TEXAS	
10. DALLAS POLICE DEPARTMENT	X
11. SAN ANTONIO POLICE DEPARTMENT	X
WASHINGTON	
12. SEATTLE POLICE DEPARTMENT	X

NOTE: X'S INDICATE AGENCIES WHOSE DATA ARE INCLUDED IN EXHIBITS 8 AND 9.

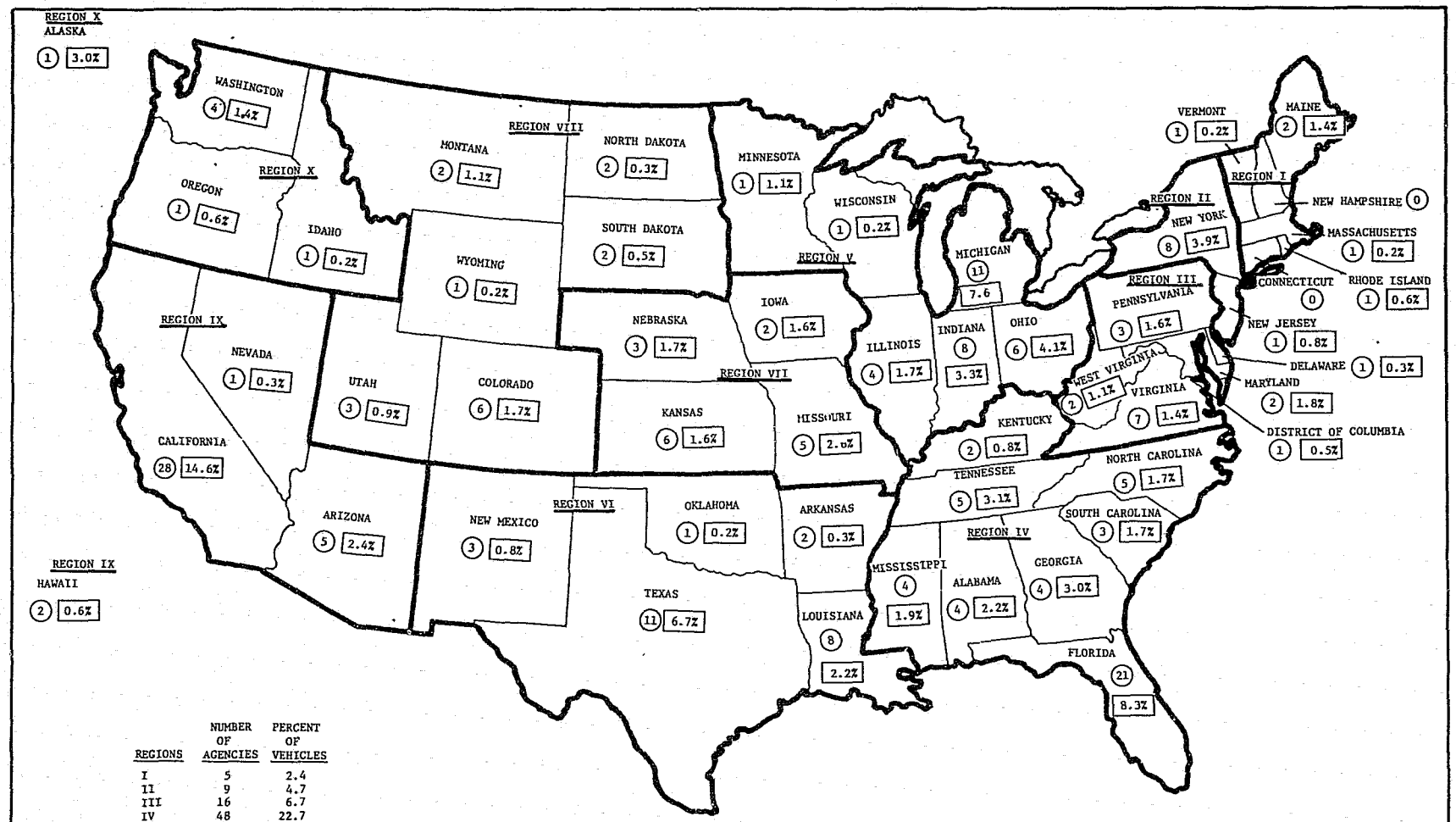
POPULATION INTERVAL = OVER 1,000,000

COUNTY	
CALIFORNIA	
1. LOS ANGELES COUNTY SHERIFF'S DEPARTMENT	X
2. SAN DIEGO SHERIFF'S AERO SQUADRON	X
FLORIDA	
3. DADE COUNTY PUBLIC SAFETY DEPARTMENT	X
MICHIGAN	
4. WAYNE COUNTY SHERIFF'S DEPARTMENT	X
NEW YORK	
5. NASSAU COUNTY POLICE	X
6. SUFFOLK COUNTY POLICE DEPARTMENT	X
TEXAS	
7. HARRIS COUNTY SHERIFF	X
LOCALITIES	
CALIFORNIA	
1. LOS ANGELES POLICE DEPARTMENT	X
2. LOS ANGELES AIR POLLUTION CONTROL DISTRICT	X

EXHIBIT 5 --COUNTIES AND LOCALITIES USING AIRCRAFT IN LAW ENFORCEMENT ACTIVITIES BY POPULATION INTERVAL (CONCLUDED)

ILLINOIS	
3. CHICAGO POLICE DEPARTMENT	X
MICHIGAN	
4. DETROIT POLICE DEPARTMENT	X
NEW YORK	
5. LONG ISLAND RAILROAD POLICE	
6. NEW YORK CITY POLICE DEPARTMENT	X
TEXAS	
7. HOUSTON POLICE DEPARTMENT	X

NOTE: X'S INDICATE AGENCIES WHOSE DATA ARE INCLUDED IN EXHIBITS 8 AND 9.



REGIONS	NUMBER OF AGENCIES	PERCENT OF VEHICLES
I	5	2.4
II	9	4.7
III	16	6.7
IV	48	22.7
V	31	18.0
VI	25	10.2
VII	16	7.5
VIII	16	4.7
IX	36	17.9
X	7	5.2
	209	100.0%

EXHIBIT 6 -- DISTRIBUTION OF (1) STATE, COUNTY, AND LOCAL LAW ENFORCEMENT AGENCIES THAT UTILIZE AIRBORNE VEHICLES AND (2) PERCENTAGE OF TOTAL LAW ENFORCEMENT AIRCRAFT BY STATE AND FEDERAL REGION

IV. SOME TENTATIVE FINDINGS ABOUT LAW ENFORCEMENT AIRCRAFT USAGE AND PRIORITY MISSIONS

A. Contents of This Section

This Section contains tentative findings based on data obtained in survey questionnaires from a sample of 129 airborne law enforcement agencies. These findings relate (1) to average flying hours per month by type of aircraft and (2) to identification of major missions for helicopters in use by county and local law enforcement agencies.

B. Arrangement of Material

Three exhibits and explanatory text for each comprise the remainder of this section. All the exhibits follow the explanatory text.

C. Data

1. Exhibit 7 -- Distribution of Flying Hours for Sample Agencies by Type of Aircraft

The exhibit's title is descriptive of its contents.

2. Exhibit 8 -- Major Missions, Average Mission Priority, and Model Helicopter Effectiveness Rating by Mission for County Agencies by Population Interval

The most extensive analysis conducted by the survey team on data obtained in the 129 survey questionnaires dealt with helicopter mission priorities for (1) county and (2) local law of enforcement agencies that use those aircraft. (The specific agencies whose data were used in the analysis are indicated by X's in the right margin of Exhibit 5.)

Methodologically, each agency queried by questionnaire was asked to rate its highest priority missions out of a standard list of 20 (with space provided for addition of other missions). High priority missions were to be rated on a scale of 1 to 5 where 1 was the highest priority mission. Respondents were permitted to assign any of the scale numbers to any number of missions (i.e., there could be several "1" missions, several "2" missions, and so on). Respondents were also asked to rate the effectiveness of each type of aircraft for each relevent mission on the basis of H, M, and L for high, medium, and low. Where no effectiveness rating was given, according to the questionnaire's instructions, an assumption would be made that the mission was not relevant for the aircraft type.

In preparing the data for presentation in Exhibit 8 (and Exhibit 9 also), the priority numbers of all responding agencies in each population interval for a given helicopter mission were averaged. Summary helicopter effectiveness ratings were obtained by taking the modal rating (i.e., the rating appearing the most times) for a relevant group of respondents or a given mission. Where two ratings (say, H and M) were indicated by an equal number of respondents, the modal rating was given as (in the example) H/M. Where all three ratings were indicated by an equal number of responding agencies (as sometimes happened), the M designation was shown as the "modal" rating.

"Priority Missions" were those that nominally 75 percent or more of the responding agencies in any one population interval rated with one of the scalar numbers.

In Exhibit 8 (and Exhibit 9, also) the first twenty missions through "Fish/Game Law Control" are the standard missions listed in the survey questionnaires. The missions that follow were those added by respondents. The five columns give the results of responses in the five population intervals. The limits of each population interval are shown at the top of each column. The next figure shows the total of agencies in the population interval (identified in Exhibit 5). The figure in the third box is the number of agencies on whose data the ratings are actually based. The X's show priority missions. The encircled X's show mission that all or nearly all agencies in the group rated with scalar numbers. The derivations of "average priority" ratings and "modal rating" were described above.

The raw data on which these summaries are based will be found in the individual survey questionnaires in Volume II.

3. Exhibit 9 -- Major Missions, Average Mission Priority, and Modal Helicopter Effectiveness Rating, by Mission for Local Agencies Population Interval.

The methodological explanation for Exhibit 8 given above applies also to Exhibit 9.

EXHIBIT 7 -- DISTRIBUTION OF FLYING HOURS FOR SAMPLE AGENCIES BY TYPE OF AIRCRAFT

NUMBERS IN THE TABLE BELOW ARE NUMBERS OF SAMPLE AGENCIES WHOSE AVERAGE FLYING HOURS PER MONTH FALL IN THE INTERVAL SHOWN.

TYPE OF AIRCRAFT	AVERAGE FLYING HOURS PER MONTH					
	0 - 75	76 - 150	151 - 225	226 - 300	301 - 500	OVER 500
HELICOPTERS	27	40	13	20	8	5
FIXED WING	27	11	4	2	0	3
STOL	6	4	0	1	0	0

NOTE: NUMBERS ARE NOT ADDITIVE BECAUSE SOME AGENCIES UTILIZE SEVERAL TYPES OF AIRCRAFT

POPULATION OF COUNTIES →	BELOW 100,000			100,000 TO 200,000			200,000 TO 500,000			500,000 TO 1,000,000			OVER 1,000,000		
NUMBER OF AGENCIES IN THE POPULATION INTERVAL →	30			13			20			10			7		
NUMBER OF AGENCIES REPRESENTED HERE →	5			3			8			10			7		
MISSION	PRIORITY MISSIONS	AVERAGE PRIORITY	MODAL RATING	PRIORITY MISSIONS	AVERAGE PRIORITY	MODAL RATING	PRIORITY MISSIONS	AVERAGE PRIORITY	MODAL RATING	PRIORITY MISSIONS	AVERAGE PRIORITY	MODAL RATING	PRIORITY MISSIONS	AVERAGE PRIORITY	MODAL RATING
COMMAND POST			H			H	X	4	H			H			H
HIGH SPEED CHASE			L			M	X	3	M			H			H
PROVIDE INTERCEPT DATA TO GROUND	X	3	H	(X)	3	H	(X)	3	H	X	2	H			H
PATROL ACTIVITIES	(X)	2	M/H			H	(X)	1	H	X	1	H	(X)	1	H
GENERAL SURVEILLANCE	X	2	H	(X)	2	H	(X)	2	M	(X)	2	H			H
COVERT SURVEILLANCE						L			L			M	X	2	H
SEARCH ACTIVITIES															
FUGITIVES	X	1	H	(X)	2	H	(X)	2	H	(X)	3	M			H
VEHICLES	(X)	1	H			H	X	3	H	X	3	H	X	2	H
NIGHTTIME PATROL	X	4	H			H	(X)	2	H	X	2	H	(X)	2	H
SECURITY (SPECIAL VISITORS, ETC.)			M			M			H			H			H
EMERGENCY RESCUES	X	2	H	(X)	1	H	(X)	2	H			H	X	1	H
TRAFFIC CONTROL			M			H			M/L			M/H	X	4	H
TRANSPORT															
EMERGENCY			M/H	(X)	3	H			H			H	(X)	2	H
PRIORITY CARGO			H	(X)	4	H			M			H			H
OFFICIAL PERSONNEL			M			M			M			H			H
PERSONNEL IN CUSTODY						L			L			L			L
NARCOTICS DETECTION	(X)	2	M	(X)	2	H	x	4	M			M/L			H
POLLUTION CONTROL						M			M			H			M/H
RIOT CONTROL			H			H	X	2	H			H			H
FISH/GAME LAW CONTROL			M	(X)	3	H			L			M			L
TRAFFIC SURVEY			M												
PHOTO PLATFORM			H						H			H			H
FIRE FIGHTING									H						
TRAINING									H						
SEARCH FOR LOST PERSONS												M			

EXHIBIT 8 -- MAJOR MISSIONS, AVERAGE MISSION PRIORITY, AND MODAL HELICOPTER EFFECTIVENESS RATING BY MISSION FOR COUNTY AGENCIES BY POPULATION INTERVAL

POPULATION OF LOCALITIES →	BELOW 100,000			100,000 TO 200,000			200,000 TO 500,000			500,000 TO 1,000,000			OVER 1,000,000		
NUMBER OF AGENCIES IN THE POPULATION INTERVAL →	16			21			15			12			7		
NUMBER OF AGENCIES REPRESENTED HERE →	6			18			11			12			6		
MISSION	PRIORITY MISSIONS	AVERAGE PRIORITY	MODAL RATING	PRIORITY MISSIONS	AVERAGE PRIORITY	MODAL RATING	PRIORITY MISSIONS	AVERAGE PRIORITY	MODAL RATING	PRIORITY MISSIONS	AVERAGE PRIORITY	MODAL RATING	PRIORITY MISSIONS	AVERAGE PRIORITY	MODAL RATING
COMMAND POST			M			H			H			H			H
HIGH SPEED CHASE			M	Ⓧ	2	H	X	2	H	X	2	H	X	1	H
PROVIDE INTERCEPT DATA TO GROUND	Ⓧ	2	H	Ⓧ	1	H	X	1	H	X	2	H			H
PATROL ACTIVITIES	Ⓧ	2	H	X	2	H	Ⓧ	2	H	Ⓧ	1	H	Ⓧ	2	H
GENERAL SURVEILLANCE	X	3	H	X	2	H	Ⓧ	3	H	Ⓧ	2	H	Ⓧ	2	M/H
COVERT SURVEILLANCE	X	4	M			H			H			H	X	2	H
SEARCH ACTIVITIES															
FUGITIVES			H	Ⓧ	2	H	X	2	H	X	2	H	X	3	H
VEHICLES	X	2	H	X	3	H	X	2	M	X	2	H	X	3	H
NIGHTTIME PATROL	X	1	H	X	1	H	X	2	M	X	1	H	X	2	H
SECURITY (SPECIAL VISITORS, ETC.)			H			M/H			H			M	X	4	H
EMERGENCY RESCUES			H			H			L			M			M
TRAFFIC CONTROL			H			H			H			H	Ⓧ	2	H
TRANSPORT															
EMERGENCY			H			H			L			M			M
PRIORITY CARGO			H			H			H			L			M
OFFICIAL PERSONNEL			H			H			M/L			M			H
PERSONNEL IN CUSTODY			L			L			M/L						L
NARCOTICS DETECTION			M			L			L			M/L			M
POLLUTION CONTROL						L			L			M			H
RIOT CONTROL			H			H			H			H			H
FISH/GAME LAW CONTROL						H			L						
PUBLIC RELATIONS			H			H			H						
ASSISTANCE TO OTHER AGENCIES			H						L						
FIRE PATROL/ASSISTANCE			H			H									
SEARCH FOR LOST PERSONS						H									
PHOTO PLATFORM						H			H			H			
FELONIES IN PROGRESS									H						
SCHOOL CHECKS												M			
DISTANT VIOLATIONS												M			
EMERGENCY COMMUNICATION RELAY															M

EXHIBIT 9-- MAJOR MISSIONS, AVERAGE MISSION PRIORITY, AND MODAL HELICOPTER EFFECTIVENESS RATINGS BY MISSION FOR LOCAL AGENCIES BY POPULATION INTERVAL