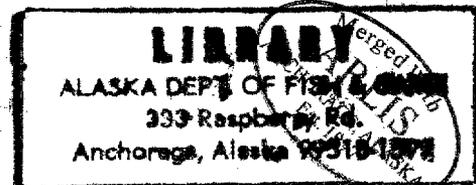


2912



SUSITNA HYDROELECTRIC PROJECT

TK
1425
.58
A23
no. 2912

AIR TAXI SURVEY REPORT

Report by

Harza-Ebasco Susitna Joint Venture

Prepared for

Alaska Power Authority

Final Report
June 1985

ARLIS
Alaska Resources
Library & Information Services
Anchorage, Alaska

July 8, 1985
1.8.2/4.5.2.5

Mr. James B. Dischinger
Project Manager
Alaska Power Authority
334 West 5th Avenue
Anchorage, Alaska 99501

CONFIDENTIAL: PRIVILEGED WORK
PRODUCT PREPARED IN ANTICIPATION
OF LITIGATION; RESTRICTED
DISTRIBUTION

Subject: Susitna Hydroelectric Project
Air Taxi Report

Dear Mr. Dischinger:

We have enclosed a draft final version of the subject report for your review and approval. If you have any questions, please contact Dr. James Thrall of our staff.

Very truly yours,


W.E. Larson
Project Director

dl

Enc: as noted

cc w/ Enc:

P. Bergmann, HE

w/o Enc:

J. Thrall, HE
D. Owens, HE

ARLIS

Alaska Resources
Library & Information Services
Anchorage, Alaska

TABLE OF CONTENTS

<u>Section/Title</u>	<u>Page</u>
1.0 INTRODUCTION	1
2.0 RESEARCH METHODS	2
2.1 SURVEY APPROACH	2
2.2 DEFINITION OF THE RESOURCE USE AREAS	2
2.3 DEVELOPMENT OF THE QUESTIONNAIRE	3
2.4 CONTACTS WITH AIR TAXI OPERATORS	4
2.5 ANALYSIS OF RESULTS AND REPORT PREPARATION	6
3.0 DESCRIPTION OF RESULTS	7
3.1 USE OF THE SECONDARY RESOURCE USE AREA	7
3.2 USE OF THE PRIMARY RESOURCE USE AREA	9
3.3 SUMMARY	17
REFERENCE	
APPENDIX A SAMPLE AIR TAXI OPERATOR SCREENING QUESTIONNAIRE AND MAP	
APPENDIX B SAMPLE DETAILED QUESTIONNAIRE	
APPENDIX C AIR TAXI SERVICES WITH BUSINESS IN THE PRIMARY OR SECONDARY RESOURCE USE AREAS	

3 3755 000 44148 5

LIST OF TABLES AND FIGURES

<u>Number</u>	<u>Title</u>	<u>Page</u>
Table 3-1	Bases of Operations for Air Taxis, Secondary Resource Use Area	8
Figure 3-1	Bases of Operations for Air Taxis, Primary Resource Use Area	10
Table 3-2	Purposes of Trips to the Primary Resource Use Area	12
Table 3-3	Each Air Taxi Service's Client Composition	13
Table 3-4	Origins of Air Taxi Clients	14
Table 3-5	Locations Visited by Air Taxis	16

1.0 INTRODUCTION

Air taxi operators comprise a special population/occupation group potentially affected by the proposed Susitna Hydroelectric Project. This study, aimed at gathering information about air taxi operations that rely on the area in the vicinity of the proposed dams and access routes, has three objectives. The first objective is to develop an inventory of air taxi operations that rely in some way on the natural resources of the study's resource use areas. The second objective is to determine the economic importance of trips to the resource use areas for each air taxi operation. This provides a baseline for the numbers and character of the operations that might be affected by the Susitna Project. The final objective is to obtain information from air taxi operators about the nature of their trips into the resource use areas to supplement and corroborate terrestrial, aquatic, and recreation data for the area. To accomplish these objectives, air taxi operators who had trip destinations in the resource use areas were contacted by mail and telephone over a seven-month period from October 1984 to April 1985. During this time, preliminary screening questionnaires were distributed and telephone interviews were conducted.

2.0 RESEARCH METHODS

2.1 SURVEY APPROACH

The objectives described above directed the study approach. To meet the objectives, all air taxi services were categorized by how much activity occurred in the resource use areas (defined in the following section as primary and secondary areas and shown in Appendix A). To accomplish this, a combination of mail and telephone screening surveys were administered to all licensed air taxi services in Alaska. On the basis of the screening information, air taxi services were divided into the following three categories:

1. Those not serving the resource use areas.
2. Those serving only the secondary resource use area or attributing less than 10 percent of their business to serving the primary resource use area.
3. Those attributing 10 percent or more of their business to serving the primary resource use area.

Only air taxi services in the third category received follow-up telephone surveys to obtain more detailed information.

2.2 DEFINITION OF THE RESOURCE USE AREAS

The middle Susitna Basin area (or primary resource use area) was the region most important to this study. This area (see map, Appendix A) was defined as the region east of Indian River to the mouth of the Tyone River along the Susitna River, north to the Denali Highway, and south to Stephan and

Clarence lakes. Air taxi use of a narrow corridor along another stretch of the Susitna River from Willow Creek to Indian Creek and a point location at the mouth of Kroto Creek were of additional interest. This interest arose because they are popular access points for various recreational activities downstream of the proposed damsites. The corridor and point locations comprised a secondary resource use area.

2.3 DEVELOPMENT OF THE QUESTIONNAIRE

2.3.1 SCREENING QUESTIONNAIRE

A screening questionnaire (see Appendix A) was developed to determine which air taxi services certified in Alaska take cargo or clients to destinations in (or flightseeing trips over) the resource use area. Through a combination of mail-out questionnaires and telephone interviews representatives of all air taxi services were asked to indicate total numbers of trips and clients, percentages of total business, and purposes of trips to the resource use areas. This information was used to identify the air taxi services which took 10 percent or more of their trips to the primary resource use area. Representatives of these services were then asked to respond to more detailed questions in a follow-up telephone interview.

2.3.2 FOLLOW-UP QUESTIONNAIRES

A more detailed questionnaire (see Appendix B) was prepared as a guide for the telephone interviews administered to air taxi representatives from those services attributing 10 percent or more of their business to the primary resource use area. The following topics were considered by representatives of the Susitna Project's socioeconomic subtask before specific questions were formulated:

1. Descriptions of numbers of aircraft and activities.

2. Numbers and characteristics of trips into the resource use areas.
3. Activities pursued in the resource use area by clients.

Questions were formulated to ensure that collected data would be appropriate for future analysis and would be consistent with the information gathered from other specialty populations/occupation groups. Questions focused on trips and clients rather than on knowledge of resource use since the percentage of trips into the resource use areas was generally a very small portion of each business.

A telephone interview approach was chosen for the follow-up questionnaire because of the small number of questions required to meet the objectives of the study, and because air taxi operations were located throughout the state making face-to-face interviews time consuming and costly. Furthermore, as a result of previous mail and/or telephone contacts, a representative of each air taxi service had been identified and notified of the potential need for additional information at a later time. Consequently, representatives were for the most part cooperative and prepared to participate in the follow-up telephone survey.

2.4 CONTACTS WITH AIR TAXI OPERATORS

The Alaska Transportation Commission (ATC) publishes a list of state-authorized air carriers which included 220 certified air taxi services in Alaska in 1984. Since air taxis are authorized to conduct their services from specific bases, but are not limited by where they can go (except by the size and design of their aircraft) it was impossible to narrow the field of 220 services to those who flew to the resource use areas from the information available from the ATC. In October 1984, screening questionnaires with self-addressed return envelopes were sent to all 220 air taxi services. A second mailing of the questionnaire and postcard reminders was sent to services which did not respond by the end of November 1984. In addition, telephone calls were made to air taxi services which did not

return the screening questionnaires so that their use of the primary and secondary resource use areas, as defined in the previous section, could be ascertained. Through this combination of mail and telephone contacts with the 220 certified services, it was determined that:

- 1) Sixteen air taxi services were out of business,
- 2) Sixteen did not respond to the two repeat mailings and could not be reached by telephone,
- 3) Four services were listed twice in the directory,
- 4) One hundred thirty-seven air taxis did not operate in the primary or secondary resource use areas, and
- 5) Forty-seven air taxis had some business in the primary or secondary resource use areas.

The 47 services (see Appendix C) with business in the primary or secondary resource use areas comprised the directory of air taxis for the study. Of the 47 services, only 20 conducted 10 percent or more of their business in the primary resource use area and therefore, only these were eligible for the follow-up telephone interview.

The detailed telephone interviews, which took approximately five minutes to complete, were conducted over a month-long period from March 15 to April 15, 1985. During that time, an attempt was made to contact a previously determined representative from each of the 20 air taxi services. The following is a summary of the telephone contacts:

- o One air taxi service was under contract to the Alaska Power Authority for 100 percent of its trips to the primary resource use area.
- o One air taxi service was under contract to the Alaska Department of Fish and Game (ADF&G) for 100 percent of its trips to the primary resource use area.
- o Eighteen air taxi services went to the primary resource area for a variety of purposes, but only 14 could be reached for the follow-up telephone interview. At least five attempts, at different times and days, were made to contact the remaining four air taxi services.

2.5 ANALYSIS OF RESULTS AND REPORT PREPARATION

The Description of Results includes the results for all 47 air taxi services which conducted trips to the resource use areas. However, the focus is on the detailed telephone interviews with representatives of the services (14 successfully interviewed) which took 10 percent or more of their trips to the primary resource use area. The analysis identifies qualitative similarities and differences among responses. In addition, ranges of responses are presented where there was extensive variation among responses and tallies are presented where similar responses could be grouped together. Unusual or isolated responses highlight the differences in the character of the air taxi businesses included in the study. Results provide baseline information about air taxi services that could potentially be affected by the Susitna Hydroelectric Project. Conclusions about the extent to which these air taxi services could be affected are not included here. Such information will be contained in a forthcoming report on special populations.

3.0 DESCRIPTION OF RESULTS

The following discussion presents survey results in two sections. The first section describes the number of air taxi services that take clients to the secondary resource use area. The second section focuses in more detail on air taxi services taking trips to the primary resource use area or the middle Susitna River Basin area. For air taxi services with 10 percent or more of their business in the primary resource use area, additional information about 1) numbers of aircraft and employees for these services, 2) numbers and types of clients and trips taken to the area, 3) percentages of total business volume of trips to the area, and 4) the purposes and destinations of the trips are also presented.

3.1 USE OF THE SECONDARY RESOURCE USE AREA

The following two questions were asked to determine the number of air taxi services that took trips to the secondary resource use area:

- 1) Do you take clients to the mouth of Kroto Creek (Deshka River)?, and
- 2) Do you take clients to that stretch of the Susitna River between Willow and Indian Creeks (including the mouths of tributaries between these two creeks)?

Responses showed that 37 air taxi services took clients to the mouth of Kroto Creek. In addition, 23 of the 37 air taxis took clients to the Susitna River between Willow and Indian Creeks.

The location of the base of operations of the 37 air taxis show the geographical relationships between air taxi services and the secondary resource use area. The bases authorized by the air taxi certification are listed in Table 3-1.

Table 3-1

BASES OF OPERATIONS FOR AIR TAXIS
SECONDARY RESOURCE USE AREA

BASE	NO. ^{a/}	BASE	NO. ^{a/}
Anchorage	18	Willow	1
Talkeetna	3	Yentna River	1
Cantwell	2	Alexander Creek	1
Wasilla	2	Montana Creek	1
Glenn Highway	2	Seldovia	1
Bethel	2	Fairbanks	1
Homer	2	Point Heiden	1
Kenai	1	Deadhorse	1
Birchwood	1	Palmer	1
St. Marys	1		1

Source: Alaska Transportation Commission. 1984.
Air Carrier Operating Authority.
Anchorage, Alaska.

Note: ^{a/} Total number of bases does not equal 37
because some air taxis have more than one base.

3.2 USE OF THE PRIMARY RESOURCE USE AREA

Twenty-five air taxi services specified that the trips they took to the middle Susitna River Basin (primary resource use area) between October 1, 1983 and October 1, 1984 amounted to less than 10 percent of their total business volume (see Category 2 as defined in the methodology). This business volume translates into 25 air taxis that took a total of approximately 350 trips and 684 people into the primary resource use area during the study period. This equalled an average of 14 trips for a total of 28 people for each air taxi in one year.

Twenty air taxi services attributed 10 percent or more of their business to trips taken to the middle Susitna River Basin.^{1/} These businesses are of greater concern with regard to potential effects of the Project than the businesses with less than 10 percent of their trips to this area. Not surprisingly, the location of the base of operations of the 20 services surrounded the middle Susitna River Basin (see Figure 3-1). The greatest number of services (7) had bases in Anchorage, while the remaining were fairly equally distributed among Talkeetna (3), Wasilla (2), Cantwell (2), Denali Highway (2), Glenn Highway (2), Kenai (1), Gulkana/Tolsone Lake (1), and Gakona/Meiers Lake (1).

On the screening questionnaire, the 20 air taxis indicated that the percentages of their business volume attributed to trips to the primary resource use area between October 1983 and October 1984 ranged from 10 to 100 percent with an average of 42 percent. The number of trips for the year totalled 1,554 for an average of 82 trips per air taxi. The number of

^{1/} In addition to these 20 services there were two others which each had 100 percent of their business in the middle Susitna River Basin. Data for these two services have not been included here because their business in the Susitna Basin area was Susitna Project- or state agency-related.

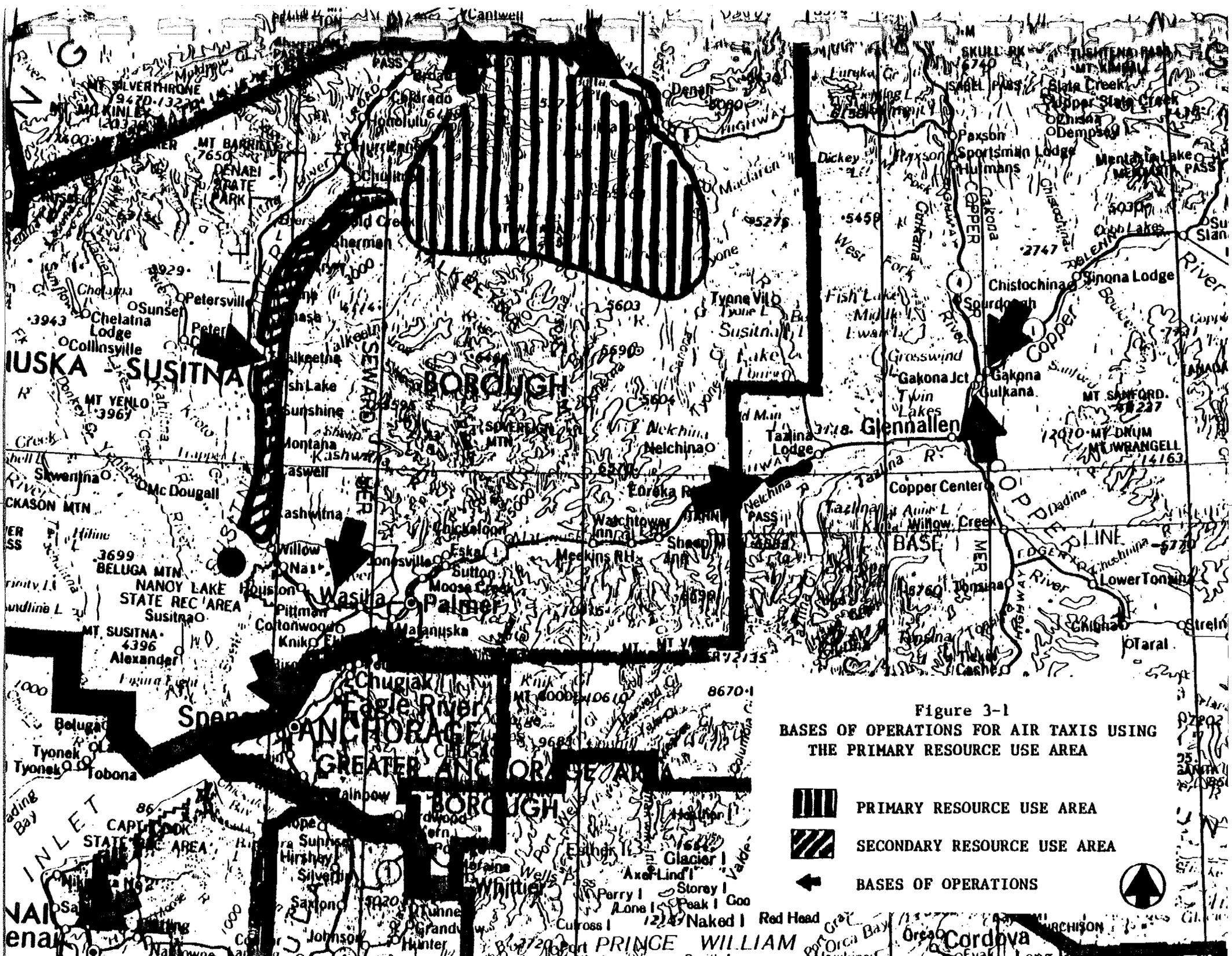


Figure 3-1
 BASES OF OPERATIONS FOR AIR TAXIS USING
 THE PRIMARY RESOURCE USE AREA

-  PRIMARY RESOURCE USE AREA
-  SECONDARY RESOURCE USE AREA
-  BASES OF OPERATIONS



clients totalled 1,852 people for an average of 97 people taken to the primary resource use area in one year.

Additional findings from the follow-up telephone interviews with 14 of the 20 services enhanced the profiles of air taxis conducting business in the primary resource use area. The following descriptions are based on the follow-up interview findings.

The smallest service had one aircraft, one part-time pilot and one part-time employee. The largest service has 25 to 30 aircraft with 26 full-time pilots and employees and 16 part-time pilots and employees. Similarly, another service had 20 part-time (some seasonal) pilots and employees. The majority had 4 to 6 aircraft with 1 to 10 full- or part-time pilots and/or employees.

The number of trips that the 14 services made during the one-year study period totalled 883 for an average of 63 trips per air taxi business. The purposes of these trips were for the most part to transport hunters, fishermen, cargo, and flightseers. However, as shown in Table 3-2, six services transported people for other purposes including prospecting and trapping.

The number of clients transported to the primary resource area totalled 1,732 people during the study period for an average of 124 people per business. Table 3-3 presents the composition of each service's clients according to the activities they pursued. As shown, hunters made up the greatest percentage of clients (at least 50 percent) at eight services. Fishermen made up the majority of clients at five services. Visitors to a remote lodge, government agency personnel conducting studies, trappers, and prospectors comprised the clients noted in the "other" category.

Air taxi operator responses to the question of what percentage of their clients come from Alaska, the Lower 48 or from abroad by activity are presented in Table 3-4. As shown, 8 of the 14 air taxis had 100 percent of

Table 3-2
PURPOSES OF TRIPS TO THE PRIMARY RESOURCE USE AREA

Activity	AIR TAXI SERVICES													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Hunting	x	x	x	x	x	x	x	x	x	x	x	x	o	x
Fishing	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Cargo														
Transport	x	x	x	o	x	o	x	o	x	x	x	o	x	x
Flightseeing	x	x	o	x	x	o	o	o	x	x	x	o	x	x
Prospecting	o	o	o	o	x	o	o	o	o	o	o	o	o	o
Trapping	o	o	o	o	x	o	o	o	o	o	o	o	o	o
Studies/ Survey	o	o	o	o	o	o	o	x	o	o	x	x	o	x
Transport to Lodge	o	o	o	o	o	o	o	o	x	o	o	o	o	o

Source: Harza-Ebasco, 1985. Compiled from Air Taxi Operation Survey Data.

Note: x = yes
o = no

Table 3-3
EACH AIR TAXI SERVICE'S CLIENT COMPOSITION
(Percent)

CLIENTS	AIR TAXI SERVICES													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Hunters	50	30	50	75	75		73	70	13	38	22	75	-	90
	100 ^{a/}													
Fishermen	45	69	50	23	20		27	20	67	50	70	10	-	2
Sightseers	5	1	0	3		0	0	0	10	13	4	0	-	2
	5 ^{b/}													
Other	0	0	0	0		0	0	10	10	0	4	15	-	6
Total	100	100	100	101	100	100	100	100	100	101	100	100	-	100

Source: Harza-Ebasco. 1985. Compiled from Air Taxi Operation Survey Data.

Note: Percentages may not equal 100 due to rounding.
- equals missing data.

^{a/} Percentage reflects a combination of hunters and fishermen.
^{b/} Percentage reflects a combination of sightseers and others.

Table 3-4
 ORIGINS OF AIR TAXI CLIENTS
 (Percent)

Air Taxi Service	<u>Hunting</u>			<u>Fishing</u>			<u>Sightseeing</u>			<u>Cargo</u>			<u>Other</u>		
	AK	Lower 48	Abroad	AK	Lower 48	Abroad	AK	Lower 48	Abroad	AK	Lower 48	Abroad	AK	Lower 48	Abroad
1	50	50	0	50	50	0	100	0	0	100	0	0	0	0	0
2	0	100	0	0	100	0	0	100	0	100	0	0	0	0	0
3	100	0	0	100	0	0	0	0	0	100	0	0	0	0	0
4	100	0	0	100	0	0	0	100	0	0	0	0	0	0	0
5	100	0	0	100	0	0	100	0	0	100	0	0	100	0	0
6	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0
7	0	100	0	0	100	0	0	0	0	100	0	0	0	0	0
8	100	0	0	100	0	0	0	0	0	0	0	0	100	0	0
9	100	0	0	0	0	100	0	100	0	100	0	0	0	100	0
10	50	50	0	100	0	0	0	100	0	100	0	0	0	0	0
11	100	0	0	100	0	0	100	0	0	100	0	0	100	0	0
12	100	0	0	100	0	0	0	0	0	0	0	0	100	0	0
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	100	0	0	50	50	0	50	50	0	100	0	0	100	0	0

Source: Harza-Ebasco, 1985. Compiled from Air Taxi Operator Survey Data.

Note: - equals missing data.

their fishermen and hunters come from Alaska, 2 services had equal numbers of hunters and fishermen come from Alaska and the Lower 48, 3 services had 100 percent of their hunters from the Lower 48, and 2 services had 100 percent of their fishermen from the Lower 48. One service indicated that 100 percent of its fishermen came from foreign countries. Of the air taxi services that carried sightseers, three had 100 percent of their sightseeing business from Alaskans and four had 100 percent of this same business from people from the Lower 48. One business had equal numbers from Alaska and the Lower 48.

Not surprisingly, all nine air taxi services which hauled cargo indicated that their cargo transport clients were from Alaska. At the time, five of the six air taxis which had other purposes for transporting people stated that 100 percent of their clients were Alaskans. The remaining one air taxi had 100 percent of such clients from the Lower 48.

Looking at this information from another perspective, it can be noted that 5 of the 13 air taxi services which responded to the question of clients' origins conducted all of their business solely with Alaskans. Two air taxis conducted all of their business (except cargo transport) with people from the Lower 48. The remaining six services had a mix of Alaskan and other clients.

Finally, air taxi operators related where they usually took clients to hunt, fish, sightsee or pursue other activities and where they transported cargo. Although air taxis generally take clients wherever they want to go, respondents were able to identify specific locations that they frequented depending on client activities. Table 3-5 presents this information showing that lake regions were popular for both hunting and fishing with particular lakes like Deadman, Clarence, Stephan, High, and Fog named repeatedly. Area lakes were also popular for cargo drop-offs while Mt. McKinley, the Devil Canyon rapids, and glaciers were favorite areas for sightseeing.

Table 3-5
 LOCATIONS VISITED BY AIR TAXIS

Activity	Locations
Hunting	<p>Lakes: Deadman, Big Lake, Clarence, Stephan, High, Fog, Seven-mile, Tsusena, Watana, and other unnamed lakes.</p> <p>Drainages: Indian River, Susitna River in middle basin to mouth of Tyone River, from Talkeetna down the Susitna River to Cook Inlet, Tyone River.</p> <p>Areas: Talkeetna to the Alaska Range, Knik Glacier, Skwentna, west of Stephan Lake, South of Devil Canyon and Watana, Clarence & Deadman Lakes, below Prairie Creek, the entire middle basin area.</p>
Fishing	<p>Lakes: Deadman, Big Lake, Clarence, Stephan, High, Fog, Tsusena, Watana, Neil, Trapper and the higher lakes of the Talkeetna Mountains.</p> <p>Drainages: Lake Creek, Deshka River, Susitna River from Talkeetna to Cook Inlet, Yentna River, Alexander Creek, Prairie Creek</p> <p>Areas: Skwentna, the middle Susitna River Basin area.</p>
Cargo	<p>General area of the Project, all lakes including Murder and higher lakes, Susitna River from Talkeetna to Cook Inlet.</p>
Sightseeing	<p>Mt. McKinley, the damsite, the general area of the Project, Knik Glacier, Denali Glacier, over Talkeetna, Wilderness Lake, Curry Ridge, Devil Canyon.</p>
Other	<p>Stephen Lake, areas in ADF&G Game Management Unit 13, along the Susitna River for studies.</p>

Source: Harza-Ebasco. 1985. Compiled from Air Taxi Operator Survey Data.

Note: No attempt is made to show number of times each lake, drainage, or area was noted as a response.

3.3 SUMMARY

Screening questionnaire results showed that of the 220 certified air taxi services in Alaska in 1984, 47 air taxis conducted business in the primary and/or secondary resource use areas. Furthermore, the questionnaire revealed the number of services which went to the primary or secondary areas and how many conducted 10 percent or more of their business in the primary area. In the secondary resource use area, where the object was simply to determine the number of air taxis visiting that area, 37 of the 47 took clients to the mouth of Kroto Creek. Twenty-three of the 37 services also went to the Susitna River between Willow and Indian Creeks.

In the primary use area or middle Susitna River Basin the object was to determine the number of services taking clients or cargo to the area as well as to determine the percentage of the services' business attributed to trips to the area. The focus of the study was on the 20 air taxis which took 10 percent or more of their business to the primary resource use area. Therefore, additional information about numbers of trips and clients, and purposes of trips was collected from those businesses which could be reached by telephone (14 of the 20) for a second more detailed telephone interview. Findings from the detailed follow-up telephone interviews showed that from October 1983 to October 1984, 14 air taxis took 883 trips to the area primarily for purposes of hunting, fishing, sightseeing and cargo transport. These trips were taken by a total of 1,732 clients (an average of 124 clients per business) for the study period. Eight services' clients were predominantly hunters. Five services' clients were mostly fishermen and one service had a more even mix of clients.

With regard to origins of client (Alaska, Lower 48, Foreign countries), the majority of the services (8) reported that 100 percent of their hunters and fishermen were Alaskans, while all services reporting cargo transport business (9) conducted 100 percent of this business with Alaskans. By contrast, of the eight services conducting sightseeing trips, four had 100

percent of such business with clients from the lower 48, and of the six services with 'other' business, one also had 100 percent of such business with Lower 48 clients.

When asked to identify where the air taxis took clients for particular activities, operators reported that lake regions were popular for hunting, fishing, and cargo delivery while Mt. McKinley, the damsites (including Devil Canyon rapids), and glaciers were most popular for sightseeing.

REFERENCE

Alaska Transportation Commission. 1984. Air Carrier Operating Authority.
Anchorage, Alaska.

425383
850625

APPENDIX A
SAMPLE AIR TAXI OPERATOR SCREENING QUESTIONNAIRE AND MAP

Dear Air Taxi Operator:

The Alaska Power Authority is continuing to update information for the Susitna Hydroelectric Project. One group of Alaskans that have been identified as potentially important users of the Susitna Basin area are air taxi operators and their clients. As an air taxi operator, you can provide us with valuable information about you and your clients' use of the project area.

As a first step, the following questions will help us determine if you use the Susitna Project Area. We would appreciate your taking the time to answer the questions and return this form in the enclosed stamped self-addressed envelope. If you are a frequent user of the Susitna Basin, you may be asked for more information later this year. If you never use the area, please answer NO to QUESTIONS 1, 2, & 3 and simply return this form by mail.

Thank you for your help. Should you be interested in additional information about the Susitna Project please contact Marnie Isaacs, Public Information Officer at the Alaska Power Authority, 334 W. 5th Avenue, 2nd Floor, Anchorage, Alaska 99501.

- - - - -

QUESTIONS: ALL RESPONSES WILL BE CONSIDERED CONFIDENTIAL.

1. Do you take clients to the mouth of Kroto Creek (the Dushka River)?
_____ YES
_____ NO

2. Do you take clients to that stretch of the Susitna River between Willow and Indian creeks (including the mouths of tributaries between these 2 creeks)?
_____ YES
_____ NO

3. Do you take clients or cargo to destinations in (or flight-seeing trips over) the Susitna Basin Area as defined here and outlined on the attached map?

Susitna Basin Area - East of the Indian River to the mouth of the Tyone River along the Susitna River, north to the Denali highway and south to the Stephan and Clarence lake regions.
_____ YES
_____ NO

Please stop here and return this form in the enclosed stamped self-addressed envelope unless you answered YES to QUESTION 3. If so, please continue.

The next 3 questions pertain specifically to your destinations in the Susitna Basin Area shown on the attached map. You are asked to make estimates about your volume of business (including flightseeing trips) to that area between October 1, 1983 and October 1, 1984.

4. What is the total number of trips into the area during that period? _____ trips

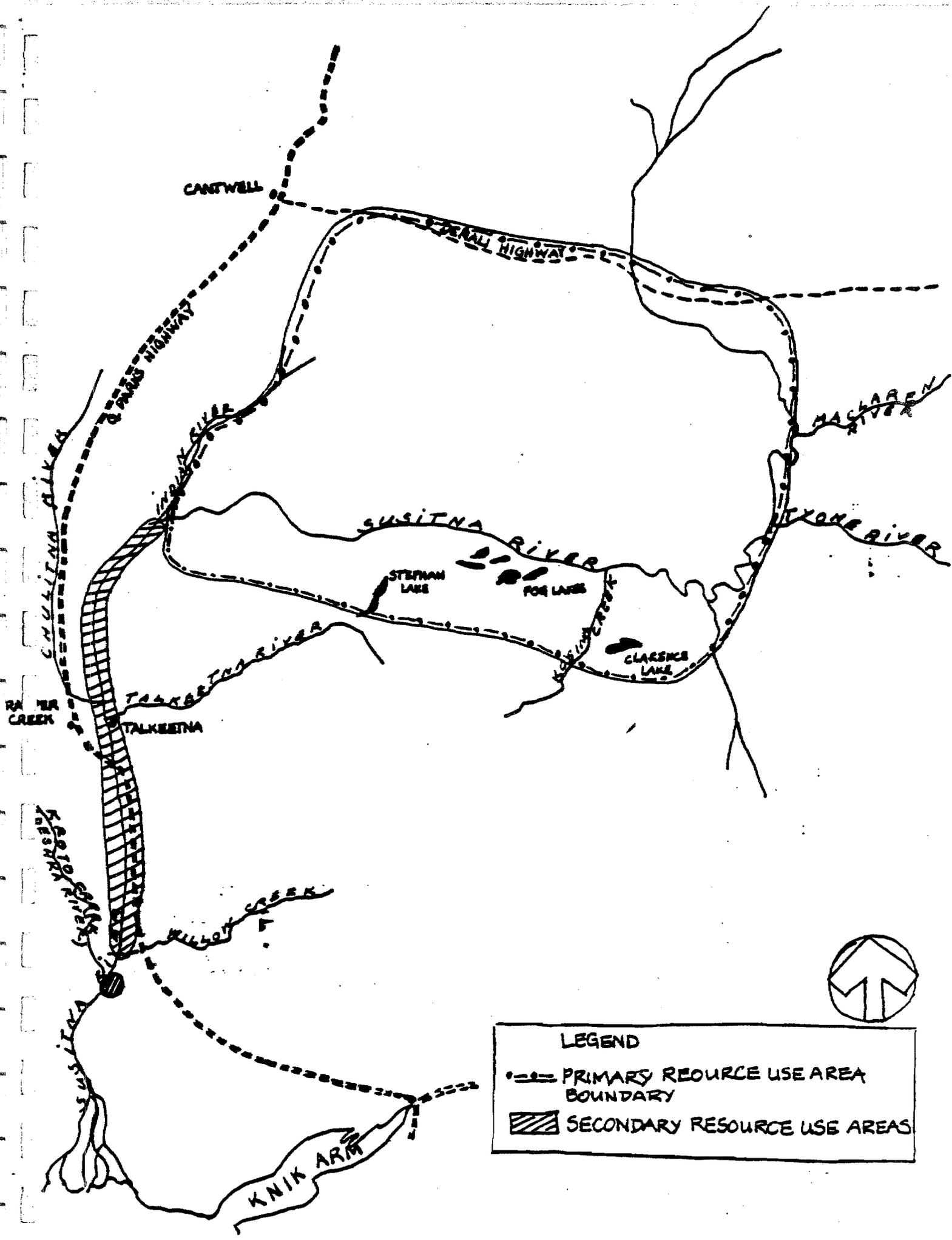
5. What is the total number of clients taken into the area during that period? _____ persons

6. What percentage of your total business are trips into the area during that period? _____ %

7. What are the major purposes of the trips you take into the Susitna Basin? (Please check all categories that apply.)

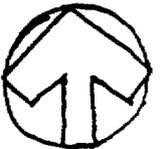
_____ Hunting	_____ Cargo Transport	Other _____
_____ Fishing	_____ Flightseeing	(Please specify)

Finally, please indicate a telephone number where you can be contacted after October 15, 1984. _____



LEGEND

-  PRIMARY RESOURCE USE AREA BOUNDARY
-  SECONDARY RESOURCE USE AREAS



APPENDIX B
SAMPLE DETAILED QUESTIONNAIRE

TELEPHONE SURVEY OF
AIR TAXI OPERATORS

2nd survey

BUSINESS NAME: _____
 BUSINESS LOCATION: _____
 CONTACT PERSON: _____
 PHONE #: _____
 BASE OF OPERATION: _____

1) HOW MANY PLANES/HELICOPTERS DOES THIS BUSINESS HAVE? _____

2) INCLUDING YOURSELF, HOW MANY DOES THIS BUSINESS HAVE?
 PILOTS: full-time _____ part-time _____
 OTHER EMPLOYEES: full-time _____ part-time _____

3) WHERE IN THE MIDDLE SUSITNA BASIN AREA DO YOU USUALLY TAKE:

WHERE

- HUNTERS _____
- FISHERMAN _____
- CARGO _____
- SIGHTSEERS _____
- OTHER _____

→ MIDDLE SUSITNA BASIN AREA: East of the Indian River to the mouth of the Tyone River along the Susitna River, north to the Denali Highway and south to the Stephan and Clarence Lake regions.

4) IN THE PRELIMINARY QUESTIONNAIRE YOU STATED THAT THE TOTAL NUMBER OF CLIENTS THAT YOU TOOK INTO THE STUDY AREA LAST YEAR WAS _____ OF THESE _____ PEOPLE; APPROXIMATELY HOW MANY WERE:

- HUNTERS _____
- FISHERMAN _____
- SIGHTSEERS _____
- OTHER _____

5) WHERE ARE THE MAJORITY OF YOUR CLIENTS FROM?

<input type="checkbox"/>				
<u>HUNTING</u>	<u>FISHING</u>	<u>SIGHTSEEING</u>	<u>CARGO</u>	<u>OTHER</u>
___ AK				
___ 48	___ 48	___ 48	___ 48	___ 48
___ FOREIGN				

APPENDIX C

AIR TAXI SERVICES WITH BUSINESS IN THE PRIMARY AND/OR
SECONDARY RESOURCE USE AREAS

Airlift Alaska/Flying Alaska/Silvertip Air Service
Alaska Air Charter
Alaska Air Guides
Alaska Bush Carrier
Alaska North Flying Service
Alaska Travel Air
Big Red's Flying Service
Birchwood Air Service
Bran Air
Bush Pilots Air Service
Chugiak Aviation
Cook Inlet Aviation
Deering's Guide Service
Ellis Air Taxi
Fishing Unlimited
Golden North Air Service
Gracious House Flying Service
High Adventure Air Charter
Homer Air
Hudson Air Service
Hudson Air Taxi
K-2 Aviation
Kenai Air Alaska
Ketchum's Air Service
Knik Air, Inc.
Lake Creek Lodge
Lee's Guide Service
Mat-Su Bush Flying
McMahan's Guide and Flying Service
Ray Atkins - Registered Guide
Regal Air
Rust's Flying Service
Sea Airmotive
Sportsman Flying Service and/or Gulkana Air Service
Super Eagle Airlines
Susitna Air Service
Susitna Flying Service
Talkeetna Air Taxi
Trail Ridge Air
Trans-Alaska Helicopters
Troy Air, Inc.
Tundra Copters
Wieder Kehr, Inc.
Wilbur's Flight Operations
Willow Air Service
Woods Air Service
Zap Airways