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Southwest Fisheries Center
Honolulu Laboratory
P. O. Box 3830
Honolulu, Hawaii 96812

THE 1976-78 STUDIES OF THE KAILUA-KONA, HAWAII, BILLFISH FISHERY PART II CHARTER BOAT OPERATORS COMPONENT

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INTRODUCTION

This report is the second of three presenting the major findings of a series of surveys undertaken in 1976-78 on the billfish fisheries in Kailua-Kona, Hawaii, and contains information on charter boats and their operators based in Kailua-Kona. The previous report presented information on commercial and recreational fishing, and the final report will cover charter boat patrons. The surveys were conducted by Research Associates, Inc. under contract to the Southwest Fisheries Center Honolulu Laboratory, National Marine Fisheries Service (NMFS), NOAA. This report is a condensed and edited version of the relevant portions of the contract reports submitted by Research Associates. It complements ongoing research on charter boat fishing in Hawaii being conducted by NMFS and the University of Hawaii, College of Tropical Agriculture. The original reports are available at the Honolulu Laboratory.

SURVEY RESULTS

Sampling

Because the number of charter boat operators was relatively small, an attempt was made to interview all operators in the entire fleet. Vessels operating in Kona at the time of the survey (December 1976) were identified through a compilation of membership lists from the two charter boat operators associations in Kailua-Kona. These associations were also able to provide the names of independent boats operating in the area.

At the time of the survey, 29 charter boats were operating at Honokohau (Kailua-Kona) and Keauhou (Kona) harbors. Twenty-five operators cooperated with the survey. The questionnaire is appended to this report.

A personal interview approach was selected to gather the most complete and accurate information from the charter boat operators as was done for the operators of commercial and recreational boats. This method offered the opportunity for interviewers to develop rapport with respondents and reassure them about the goals of the study and the confidentiality of the information gathered. Research Associates' supervisory personnel conducted all interviews with the charter boat operators.

Description of the Fleet

1. The average charter boat length was 38 ft; only two vessels were under 30 ft, and four over 45 ft. Average horsepower was 355.

2. The average vessel was priced at $63,000 and the estimated current (1976) value was $77,000.

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[1]National Marine Fisheries Service. 1982. The 1976-78 studies of the Kailua-Kona, Hawaii, billfish fishery, Part I, commercial/recreational component. Southwest Fish. Cent. Admin. Rep. H-82-3, 22 p. + Appendix. Southwest Fish. Cent., Natl. Mar. Fish. Serv., NOAA, Honolulu, HI 96812.

3. Five operators entered the business during late 1975 and in 1976. Four operators were in business over 10 years. The average was 5 years in the Kailua-Kona charter boat fishery.

4. Fifty-two percent (13 vessels) of the operators were both owners and skippers of their vessel; 32% (8 vessels) were skippers of vessels owned by others; and 16% (4 vessels) were owners who employed skippers.

5. Fifty-two percent were independent operators and 48% belonged to a charter boat association.

The following tables provide more information on the composition of the charter boat fleet.

Table 1.--Length of vessel.

Response	Percent
Less than 30 ft	8
30-34 ft	16
35-39 ft	36
40-44 ft	24
45 ft or longer	16
Average length:	38 ft
N = 25	
Question: What is the length of your boat?	

Table 2.--Horsepower.

Response	Percent
Less than 200 hp	16
200-300 hp	36
300-400 hp	8
400-500 hp	24
More than 500 hp	16
Average horsepower of boat:	355
BASE: Total charter boat operators	(25)
Question: What is the horsepower of your engine/s?	

Table 3.--Cost of vessel.

Cost of boat	Percent
Less than $25,000	8
$25,000-$39,999	20
$40,000-$59,999	32
$60,000-$79,999	20
$80,000-$99,999	4
$100,000-$199,999	12
$200,000 or more	4
Average cost of boat:	$63,080
BASE: Total charter boat operators	(25)

Question: What was the cost of the boat when it was purchased?

Table 4.--Estimated price of vessel.

Value of boat	Percent
$25,000-$39,999	16
$40,000-$59,999	28
$60,000-$79,999	16
$80,000-$99,999	8
$100,000-$199,999	24
$200,000 or more	8
Average value of boat:	$77,400
BASE: Total charter boat operators	(25)

Question: What would you say is the value of the boat today?

Table 5.--Duration of operation.

Response	Percent
1 year or less	20
2 years	24
3 years	16
4-6 years	20
7-10 years	4
More than 10 years	16
Average years in operation:	5
BASE: Total charter boat operators	(25)

Question: For how many years has your boat been in operation in Kona as a charter vessel?

Table 6.--Ownership/operation.

Response	Percent
Owner and skipper	52
Skipper only	32
Owner only	16

BASE: Total charter boat operators (25)

Question: Are you the owner of the boat, the skipper of the boat, or both?

Table 7.--Association membership.

Response	Percent
Independent operator	52
Association member	48

BASE: Total charter boat operators (25)

Question: Are you a member of a charter operators' association, or are you an independent operator?

Personal Characteristics

1. All of the charter boat owners and operators were male. Their average age was 41 years.

2. Over half said they were dependent upon the charter operation for their sole source of income. The remainder received 47% of their income from the charter boat business. Vessel earnings are presented in the following section.

3. The average annual earnings of boat skippers (excluding owners) was $8,750 which includes wages, tips, share of fish, etc.

4. Three quarters of the charter boats employed two persons full time.

The following tables provide more information on the charter boat operators.

Table 8.--Age of owners.

Response	Percent
18-24	8
25-34	40
35-44	12
45-54	20
55-64	12
65 or over	8
Average age:	41

BASE: Total charter boat operators (25)

Question: Which of the following categories includes your age?

Table 9.--Source of income.

Response	Percent
Yes	56
No	44

BASE: Total charter boat operators (25)

Question: Are you dependent upon this charter operation as your sole source of income?

Table 10.--Alternative sources of income.

Percent of personal income from charter operation	Percent
None	18
1-25	18
26-50	18
51-75	18
76-99	27
Average percentage of income derived from charter operation	47

BASE: Charter boat operators not dependent on charter operation as sole source of income (11)

Question: What percent of your total personal income is derived from this charter operation?

Table 11.--Average earnings.

Response	Percent
Up to $5,000	25
$5,001-$10,000	38
$10,001-$15,000	25
$15,001-$20,000	13
Average earnings	$8,750
BASE: Skippers only (no owners included)	(8)

Question: As skipper of this boat, what were your personal gross earnings for the past year? Please include wages, tips, share-of-fish, and mount commissions.

Table 12.--Employment.

Response	Full time percent	Part time percent
None	0	56
1	16	28
2	76	12
3	8	4
BASE: Total charter boat operators	(25)	(25)

Question: How many persons, including yourself if applicable, are full-time/part-time employees of this charter operation?

Business Earnings

The survey asked detailed questions (including voluntary review of logbooks and business records) concerning the operation of the charter boats, the number of full- and half-day trips, number of passengers per trip, number of pleasure (or "holoholo") trips, fees charged, earnings from fees, tips, and other revenues.

1. The average number of full-day charter trips taken during 1976 was 97, with 4 operators making fewer than 50 trips, and 13 making over 100 trips. The average number of half-day trip was 72.

2. Most operators carry an average of four passengers per trip.

3. The average fee was $239 for a full-day charter and $149 for a half-day charter.

4. Average annual gross income from charter boat operations was $26,752 with an additional $2,400 received from sale of fish. (Operators also distributed the catch to the crew for their own use or sale.) Including other sources of charter-related revenue (e.g., mounting fees), the average vessel grossed $30,140 in 1976.

5. Average annual expenditures were $31,476 which indicates that most vessels lost money on their charter boat operations. However, the impact of variable vessel financing rates (reflecting in particular the cost of new vessels) suggests that losses were overstated.

The following tables provide more information on vessel earnings and costs.

Table 13.--Number of full-day charter trips.

Response	Percent
Less than 50	16
50-75	20
76-100	8
101-125	32
126-150	20
Do not know/no answer	4
Average number of full-day trips	97
BASE: Total charter boat operators	(25)

Question: First, how many full-day charter trips did this boat take out during the past year?

Table 14.--Number of half-day charter trips.

Response	Percent
None	4
20 or less	16
21-50	16
51-75	16
76-100	24
101-150	12
More than 150	8
Do not know/no answer	4
Average number of half-day trips	72
BASE: Total charter boat operators	(25)

Question: And how many half-day trips did this boat take?

Table 15.--Number of nonbusiness trips.

Response	Percent
5 or less	20
6-10	12
11-20	16
21-30	20
31-50	12
51-100	16
More than 100	4
Average number of pleasure trips:	33
BASE: Total charter boat operators	(25)

Question: How many trips did you make on this boat to fish for your own pleasure or to catch fish to sell. These would be trips when you did not carry any paying customers.

Table 16.--Number of customers per trip.

Response	Percent
2 customers	4
2.5	8
3	8
3.5	8
4	64
More than 4	8
Overall average number of customers:	4
BASE: Total charter boat operators	(25)

Question: What is your average, or usual, number of customers per trip?

Table 17.--Full-day charter fees.

Response	Percent
Less than $225	12
$225	20
$234	28
$250	20
$260 or more	20
Average charge for full-day charter	$239
BASE: Total charter boat operators	(25)

Question: What is your usual charge for a full-day charter?

Table 18.--Half-day charter fees.

Response	Percent
$100	8
$130	12
$137.50	12
$140	20
$150	20
$175 or more	16
No answer/no half-day charter offered	12
Average charge for half-day charter	$149
BASE: Total charter boat operators	(25)

Question: What is your usual charge for a half-day charter?

Table 19.--Gross charter income in 1976.

Response	Percent
Less than $5,000	4
$5,000-$14,000	12
$15,000-$19,000	8
$20,000-$24,999	8
$25,000-$29,999	32
$30,000-$34,999	16
$35,000-$39,999	4
$40,000 or more	16
Average gross annual income	$26,752
BASE: Total charter boat operators	(25)

Question: During the past 12 months, what was the gross income of this charter operation, excluding commissions paid to booking agents?

Table 20.--Income from sale of fish.

Response	Percent
$0/all to crew	32
Less than $1,000	12
$1,000-$1,999	4
$2,000-$2,499	16
$2,500-$2,999	8
$3,000-$3,999	12
$5,000 or more	16
Average earnings from sale of fish	$2,402
BASE: Total charter boat operators	(25)

Question: What were the charter operation's earnings from the sale of fish?

Table 21.--Average combined income.

	Charter business earnings (mean)
Income from charter trips	$26,752
Income from sale of fish	2,402
Income from mount commissions	986
Total	$30,140

Table 22.--Average annual expenditures.

Item	Operating costs
Salaries and wages	$8,518
Repairs (includes engine/hull/electronic equipment/fishing tackle)	4,983
Commissions to booking agencies, etc.	4,053
Boat fuel and oil	3,361
Fishing tackle (includes rods and reels/lures/hooks and leaders/line/skirts and leadheads)	2,801
Insurance (includes marine hull and liability/health insurance for crew/other job-related insurance)	2,345
Boat payments	1,595
Advertising costs	1,002
Food and beverages	643
Ice	465
Club or association fees	152
Mooring fees	86
Tournament fees	61
Live bait	42
Other charter operation-related expenses	1,369
Total	$31,476
BASE: Total charter boat operators	(25)

Table 23.--Boat payments.

Response	Percent
Nothing/no payments/ boat paid for	76
Less than $5,000	8
$5,001-$10,000	8
$10,001 or more	8
Average mortgage payment	$1,595
BASE: Total charter boat operators	(25)

Question: What was paid on the boat mortgate for the past year, including both principal and interest?

Table 24.--Repairs.

Response	Percent
Less than $1,000	8
$1,000-$1,499	12
$1,400-$1,999	12
$2,000-$2,999	20
$3,000-$3,999	12
$4,000-$4,999	4
$5,000-$9,999	12
$10,000-$14,999	12
$15,000 or more	8
Average repair expenditure:	$4,983
BASE: Total charter boat operators	(25)

Question: How much was spent on repairs? (Includes engine/hull/electronic equipment/fishing tackle)

Table 25.--Salaries and wages.

Response	Percent
$0/none	4
Less than $2,500	8
$2,500-$4,999	35
$5,000-$9,999	20
$10,000-$14,999	24
$15,000 or more	16
Average expenditure for salaries	$8,518
BASE: Total charter boat operators	(25)

Question: How much did the charter operation pay in salaries and wages to crew members?

Table 26.--Insurance.

Response	Percent
$0/nothing	4
Less than $1,500	12
$1,500-$1,999	32
$2,000-$2,499	20
$3,000 or more	20
Average insurance expenditure	$2,345
BASE: Total charter boat operators	(25)

Question: How much did the charter operation pay for insurance including marine hull liability insurance, health insurance for crew members, and any other job-related insurance that you carry?

Fish Catch and Disposition

The following table lists the average charter boat catch by species, number, pounds, and revenue.

Species	Number	Pounds caught	Revenue
Blue marlin	28	7,230	$ 875
Ahi (yellowfin and bigeye tunas)	33	3,238	1,865
Ono (wahoo)	43	1,113	823
Aku (skipjack tuna)	397	915	18
Mahimahi	31	650	503
Striped marlin	4	572	84
Black marlin	2	544	71
Shortbill spearfish	5	163	51
Sailfish	--	5	--

APPENDIX

CHARTER OPERATOR QUESTIONNAIRE

RESEARCH ASSOCIATES

DECEMBER 1976

NAME OF BOAT _____

NAME OF OWNER OR SKIPPER _____

PIER _____

PHONE _____

INTERVIEWER _____

DATE OF INTERVIEW _____

LENGTH OF INTERVIEW _____

RA #03400

Hello, I'm _____ from Research Associates. We're workin as consultants to the National Marine Fisheries Service to develop information about t value of commercial and recreational fishing to the people of the Kona Coast. Your frank and open answers will help provide the basis for a fisheries management plan wh will benefit the local fishing industry here. All of your answers will be strictly confidential, of course.

I'd like to begin by asking some questions about your boat.....

Q.1 First, what is the length of your boat? _____ ft.

Q.2 And what is the horsepower of your engine/s? _____ hp.

Q.3 For how many years has your boat been in operation in Kona as a charter vessel?

_____ yrs.

Q.4 What was the cost of the boat when it was purchased?

$ _____

Q.5 What would you say is the value of the boat today?

$ _____

Q.6 Are you the owner of the boat, the skipper of the boat, or both?

1 (___) owner
2 (___) skipper
3 (___) both

Q.7 How many persons, including yourself if applicable, are full-time employees of th charter operation?

_____

Q.8 And how many persons are part-time employees of this charter operation?

_____

Q.9 Do you keep a boat log or other kinds of records about the following items:

	Records	No Records
Number of charter trips	1 (___)	2 (___)
Number of persons aboard	1 (___)	2 (___)
Hours at sea	1 (___)	2 (___)
Engine time	1 (___)	2 (___)
Fish caught	1 (___)	2 (___)
Boat expenditures	1 (___)	2 (___)
Boat revenues	1 (___)	2 (___)

Q.10 Are you a member of a charter operators' association, or are you an independent operator?

1 (___) association member

2 (___) independent

The questions I have for you now deal with revenues, customers, expenditures, and fish catches for the past twelve months...that would be from December 1975 to the present date. Please answer from your records, if possible. If you have no available records, we will need your best estimate.....(RECORD ESTIMATES WITH AN "E"; RESPONSES FROM RECORDS WITH AN "R")

Q.11 First, how many full-day charter trips did this boat take out during the past year?

_____

Q.12 And how many half-day trips did this boat take?

_____

Q.13 What is your average, or usual, number of customers per trip?

_____

Q.14 How many fishing trips did you make on this boat to fish for your own pleasure or to catch fish to sell? These would be trips when you <u>did</u> <u>not</u> carry any paying customers.

_____

Now, we need to have some information about your fish catches for the past year. For this study, we are interested in the larger, open-ocean fish such as ono, ahi, aku, mahi-mahi, and different marlin species.....

Q.15	a. Did you catch any (name) during the past twelve months?	b. How many did you catch?	c. Total lbs. caught	d. How many lbs. did you keep for yourself or give away?	e. How many lbs. did you sell?	f. What were total earn from the s of (name
Ono	Caught ( ) Not Caught ( )					
Ahi	Caught ( ) Not Caught ( )					
Aku	Caught ( ) Not Caught ( )					
Mahi-mahi	Caught ( ) Not Caught ( )					
Blue marlin	Caught ( ) Not Caught ( )					
Black marlin	Caught ( ) Not Caught ( )					
Striped marlin	Caught ( ) Not Caught ( )					
Shortbill spearfish	Caught ( ) Not Caught ( )					
Sailfish	Caught ( ) Not Caught ( )					

(GO THROUGH QUESTIONS a, b, c, d, e, and f FOR EACH FISH LISTED)

[illegible] business operating expenses for the past twelve months.

Q.16	Item	Annual Costs
a. What was paid on the boat mortgage for the past year, including both principal and interest?	Boat Payments	
b. What were the mooring fees for the past year?	Mooring Fees	
c. How much was spent on fuel and oil for the boat?	Boat Fuel and Oil	
d. How much was spent on engine repairs? repairs on the hull? repairs on any electronic equipment? fishing tackle repairs?	Engine Repairs	
	Hull Repairs	
	Electronic Equipment Repairs	
	Fishing Tackle Repairs	
e. How much was spent for fishing tackle, including rods and reels, lures, hooks and leaders, line, and skirts and leadheads?	Fishing Tackle	
f. How much was spent for live bait?	Live Bait	
g. How much was spent for ice?	Ice	
h. How much did the charter operation pay in salaries and wages to crew members? in share-of-fish? in share-of-mount commissions?	Salaries and Wages	
	Share-of-Fish	
	Share-of-Mount Commissions	
i. How much did the charter operation pay in commissions to booking agencies, travel agents, and others?	Commissions to Booking Agencies, etc.	
j. How much did the charter operation pay for insurance, including marine hull and liability insurance, health insurance for crew members, and any other job-related insurance that you carry?	Insurance	
k. How much was paid for advertising and promotion?	Advertising Costs	
l. How much was spent for food and beverages for yourself, your crew, and/or your passengers?	Food and Beverages	
m. How much was spent for club or association fees?	Club or Association Fees	
n. How much was spent for tournament fees?	Tournament Fees	
o. Can you think of any other charter operation-related expenses that were incurred during the past year that we haven't mentioned? If so, what are they and how much did you spend?	Other _____ _____ _____	

Q.17 Do you personally do any of your own repairs and maintenance on the boat or fishing equipment?

1 (___) Yes
2 (___) No (SKIP TO Q.18)

Q.17a About how many hours would you say you have spent working on boat-related repai and maintenance in the past twelve months?

_____ hours

Q.18 Does the business have a vehicle to transport customers from their hotel to the pier and back and/or a vehicle to haul fish?

1 (___) no vehicle (SKIP TO Q.19)
2 (___) vehicle to transport customers
3 (___) vehicle to haul fish
4 (___) both

Q.18a How much was spent on fuel and oil for this/these vehicle/s?

$ _____

Q.18b How much was spent for maintenance and repair of this/these vehicle/s?

$ _____

Q.18c And how much was spent for insurance for this/these vehicle/s?

$ _____

Q.18d Over the past twelve months, how much was spent on loan payments for this/these vehicle/s?

$ _____

Fine.....the next area of questioning deals with the earnings of the charter operation over the past twelve months. Again, please check your records, if possible. Otherwise we will need your best estimate.

Q.19 First, what is your usual charge for a full-day charter? $ _____

Q.20 And what is your usual charge for a half-day charter? $ _____

Q.21 During the past twelve months, what was the gross income of this charter operation excluding commissions paid to booking agents?

$ _____

Q.22 What were the charter operation's earnings from the sale of fish?

$ _____

Q.23 What were the charter operation's earnings from mount commissions?

$ _____

Q.24 About how much did the crew earn in tips during the past twelve months?

Q.25 Are you dependent upon this charter operation as your sole source of income?

1 (___) Yes (GO TO Q.26)
2 (___) No

Q.25a. What percent of your total personal income is derived from this charter operation?

_____%

Q.26 How many others on your crew, if any, are dependent upon this charter operation as their sole source of income?

_____

(SKIP Q.27 IF INTERVIEWING OWNER)

Q.27 (FOR SKIPPERS ONLY) As skipper of this boat, what were your personal gross earnings for the past year? Please include wages, tips, share-of-fish, and mount commissions. (SHOW CARD AND RECORD LETTER NEXT TO APPROPRIATE CATEGORY)

_____

Q.28 Which of the following categories includes your age?

1 (___) 18 - 24 years
2 (___) 25 - 34 years
3 (___) 35 - 44 years
4 (___) 45 - 54 years
5 (___) 55 - 64 years
6 (___) 65 years and over
7 (___) Refused

Thank you very much for your help. I'd like to mention again that the information you have given us will be held in strictest confidence and will not be identified with you personally or with your name.

Mahalo!

Sex of Respondent (RECORD, DO NOT ASK)

1 (___) Male
2 (___) Female

research associates

Suite 909
1441 Kapiolani Blvd.
Honolulu, Hawaii 96814
Phone 947-3794

STUDY OF BIO-ECONOMICS AND OPTIMAL MANAGEMENT CRITERIA FOR UTILIZATION OF PACIFIC BILLFISH

MODULE I

PREPARED FOR:

NATIONAL MARINE FISHERIES SERVICE
HONOLULU LABORATORY

BY:

RESEARCH ASSOCIATES

JULY 1977