

VOLUME TWO
PART 1 OF 2

TERN ISLAND STUDY



VOLUME TWO - INTERVIEW RECORD

JUNE, 1979

MANTA CORPORATION

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TERN ISLAND STUDY

Final Report

Volume Two - Interview Record

June, 1979

Prepared On Contract To the Dept. of Interior
Fish and Wildlife Service

MARINE RESEARCH · COMMERCIAL FISHING

THE MANTA · PIER 202, KEWALO BASIN, OR 272 SOUTH KALAHOE ST., KAILUA, HAWAII 96734 · 261 · 4959

APPENDIX
RECORD OF INTERVIEWS

Introduction

The scope of work for the Tern Island Study included a list of individuals, agencies and organizations to be contacted during the contract period. The contractor was also encouraged to contact additional people as necessary. The purpose of the interview phase of the study was to gather pertinent facts and opinions that would otherwise be unavailable through review of published or unpublished documents. It was virtually impossible within the contract period to actually interview more than a representative sample of the diverse group of people sharing a sincere interest in the future management of Tern Island. However, the list of those contacted reflects the broad spectrum of interested parties.

Procedure

Immediately after contract award, agencies and individuals on the mandatory interview list were sent a letter from the Fish and Wildlife Service that summarized the purpose of the contract and asked for assistance in the data gathering process. Shortly thereafter, representatives of MANTA Corporation set up interview dates by phone and followed the Fish and Wildlife Service letter with a more detailed overview of the management alternatives for Tern Island that were under consideration and an explanation of the interview process.

A format for interviews was established and followed so that each person or group of persons involved would be given the same opportunity to provide input on all the relevant topics. The process was flexible enough, however, that individuals with specific expertise could focus on particular 501220 During most interviews a secretary was present to record notes of the discussion and to allow one or more MANTA Corporation representatives to devote their full attention to the interview. Based on notes taken at the interview, a summary was prepared and returned to the individual(s) for review and clarification. Corrected interviews were retyped and are included in this Appendix. Pertinent data obtained during the interview process were also incorporated into the text of this report where relevant.

Problems and Observations

Successful completion of the interview process was hampered by a variety of unanticipated problems. Some individuals chose not to participate as requested from the belief that participation in the study might be construed as demonstrating their concurrence that the Fish and Wildlife Service has legal jurisdiction over the management of Tern Island. It also quickly became apparent that we would only be able to scratch the surface in our attempt to pursue a comprehensive interview program. The discussions made it clear that Tern Island management is an issue of national and even international significance, and the future evaluation of management alternatives must go much further beyond the confines of this State for pertinent facts and opinions. The interview process was also hampered by the lack of well-defined

management alternatives. The options for Tern Island developed as the study progressed, and regrettably not all those persons interviewed had the same opportunity to consider management options in depth.

A review of the appended interview summaries makes it clear that the attitudes and opinions of many individuals do not follow "party lines" as might be anticipated by one not familiar with the complexities of this issue. The summaries do not reflect a clear case of conservation vs. exploitation. Some of the strongest words of caution regarding the risks of commercial exploitation in the Northwest Islands came from those in the best position to participate in the exploitation. At the same time, there was glaring disagreement on some basic issues and interpretation of some "facts," even among coworkers within the same agency or between individuals and the established policies of the agencies for which they work. The volatile nature of the management controversy was perhaps best reflected in the extent to which draft interview summaries were modified before being returned to MANTA Corporation. Despite our sincere attempt to accurately reflect what was said during the interviews, some draft summaries were changed so radically that they bear little resemblance to the original document. This appendix contains only revised interview summaries, except in those cases where a corrected draft was never received by MANTA Corporation.

INTERVIEW RECORD

	<u>Interview date</u>	<u>Page No.</u>
1) Agard, Louis	29 March 1979	...5
2) Akaka, Hon. Daniel (rep. by Mr. Robert Ogawa)	18 April 1979	...8
3) Ariyoshi, Gov. George R.	declined	...10
4) Caperon, Dr. John	20 April 1979	...11
5) Carroll, Hon. John	28 March 1979	...14
6) Cooper, Mr. Alike	April 1979	...15
7) Craven, Dr. John	3 April 1979	...16
8) Davidson, Dr. Jack (et al)	29 March 1979	...19
9) Ego, Mr. Kenji (et al)	27 March 1979	...22
10) Fasi, Hon. Frank F.	2 April 1979	...28
11) Fiscus, Mr. Clifford (et al)	24 April 1979	...29
12) Freitas, Lt. Randy	26 March 1979 20 April 1979	...32 ...39
13) Gates, Mr. Doyle (et al)	26 March 1979	...42
14) Goto, Mr. Frank	5 April 1979	...46
15) Hara, Hon. Stanley	3 April 1979	...48
16) Harger, Mr. Graden	9 April 1979	...49
17) Heftel, Hon. Cecil	declined	...54
18) Inouye, Hon. Daniel (rep. by Adm. E. Alvey Wright)	18 April 1979	...55
19) Iversen, Dr. Robert	24 April 1979	...57
20) Kenyon, Dr. Karl	8 May 1979	...60
21) King, Hon. Jean S.	4 April 1979	...61
22) Kono, Mr. Hideto	11 April 1979	...62
23) Kridler, Mr. Eugene	4 April 1979	...65

24) Marr, Dr. John C.	9 May 197970
25) Miller, Mr. Frank (et al)	13 April 197971
26) Montgomery, Mr. Steven (et al)	18 April 1979	...75
27) Naftel, Mr. Gary	19 April 1979	...81
28) Naughton, Mr. John	26 April 1979	...83
29) Ohai, Mr. Leo	26 March 1979	...86
30) Ono, Mr. Susumu	2 April 1979	...88
31) Puffenberger, Mr. Jay	30 March 1979	...90
32) Pyle, Dr. Robert	13 April 1979	...93
33) Raney, Mr. David (et al)	7 April 1979	...101
34) Shinsato, Mr. William	28 March 1979	...106
35) Shomura, Dr. Richard	3 April 1979	...107
36) Skillman, Dr. Robert	20 April 1979	...109
37) Streeter, Mr. William	20 April 1979	...112
38) Taylor, Dr. Leighton	3 April 1979	...113
39) Toguchi, Hon. Charles	28 March 1979	...116
40) Tomich, Dr. P. Quentin	5 April 1979	...117
41) Wakatsuki, Hon. James	6 April 1979	...119
42) Walker, Mr. Ronald	27 March 1979	...120
43) Whittow, Dr. G. Causey	3 April 1979	...124
44) Wong, Hon. Richard S. H.	6 April 1979	...129
45) Yee, Hon. Wadsworth	28 March 1979	...131
46) Yim, Hon. T.C.	3 April 1979	...135
47) Ziegler, Dr. Alan	6 April 1979	...136

NAME: Louis "Buzzy" Agard
 AGENCY: Western Pacific Regional
 Fishery Management Council
 TITLE: Member of Council
 ADDRESS: 1164 Bishop, Suite 1608, Honolulu, Hawaii 96813
 PHONE: 523-1368

March 29, 1979
 1:30 p.m.

Description of person's experience/responsibility pertinent to Tern Island decision

Mr. Agard fished around Tern Island from October, 1946 to sometime in 1955 or 56. fishing in the area,
 During portions of that time he was/flying airplanes in to Tern Island to pick up
 He even wintered over there at times.
 the fish and return them to Honolulu. / After World War II, fish prices were good
 and there were lots of fish. Gradually more and more people started fishing
 those waters, the price went down, there were troubles with icing and the quality
 suffered. At times they would fly out as much as 7,500 lbs of fish, first in
 DC-3's, then C-46's. Didn't have much trouble with the runway.

Evaluation of alternatives

Research station operated by FWS

Sees this as a possible alternative.

Research station operated by other agency or jointly with FWS

Sees this as a possible alternative.

Commercial fisheries support station

Mr. Agard would like to see this alternative initiated. He feels however
 that there would need to be many changes made from the way it was handled in
 the 40's and 50's. Feels there need to be tight regulations and a strict
 permit system. He feels there is a real danger of fishing out various stocks.
 He cites the example that on his first trip he caught a load of threadfin, one
 of several loads that were caught just prior to his trip, but that for the following
 ten years he never saw another threadfin. He feels the Fish & Game would have
 to carry out studies to determine what species can be fished and how much.
 As for other impacts, he thinks the birds are healthy now and doesn't think the
 fishing would hurt them. Fishermen need the birds and will protect them. He

Page 2

thinks the turtles are OK. The seals look bad but he doesn't think fishing will hurt them, he thinks it is something else causing them trouble.

Mr. Agard feels the best resource in the area is the bait (akule). There would be a need to open the lagoon to allow fishing for bait. He doesn't feel this would hurt the seals and turtles. He has never seen a seal caught in a net, thinks it is possible but doubtful. He feels the fishermen themselves will control the taking of bait in order to ensure a continuous supply, and that, because it is not feasible to fish in the winter, this too will protect the resource. He feels it would be dangerous to leave boats there all year, the surf is so powerful, the only place to winter over might be the lagoon.

Mr. Agard sees the tuna ^{as} the most valuable off-shore species. He mentioned the big skipjack fishery off Lisianski, but is concerned that we are buying tuna from Japan and the Philippines when we have the resource available. There are 25 big Japanese boats fishing up there now. Guidelines need to be agreeable to all.

Mr. Agard feels that money is going to get tighter and we need to protect the resources we have. He thinks the only logistical approach to fishing these waters is with large ships. He thinks a skiff fishery would not be practical. He feels he didn't have enough information to comment on the economics of a mother ship system, but didn't think it was feasible. Thinks purse seining is possible. He also suggested the use of aggregation devices for fishing tuna.

Joint research/commercial fisheries support station

Mr. Agard feels the resources are sharable. That fisherman will go along with FWS to protect the animals. Sharing of the facility is possible and desirable in case of emergency. Fishing will be done by long range vessels that do not need land support facilities for successful operation.

Abandonment of facilities

Mr. Agard would hate to see the facility abandoned. Feels that with proper control it could be used effectively. He thinks it is important to keep it opened for safety's sake, that many rescues have taken place from Tern Island, and that it provides shelter from tsunami.

Overall response to Tern Island decision

Mr. Agard feels the July timing is critical. FWS needs to initiate a permit system immediately.

He would most like to see it utilized as a baiting station, but feels economics won't support aircraft into the island.

NAME: Robert Ogawa
TITLE: District Administrator
AGENCY: Office of Hon. Daniel Akaka
U. S. House of Representatives
ADDRESS: Room 5104
PJKK Federal Building
Honolulu, Hawaii 96850
PHONE: 546-8952

18 April 1979

Description of person's experience/responsibility pertinent to Tern Island decision.

Mr. Ogawa was working on this project, as well as others relating to the limited use of Midway for fisheries support and general development of the Leeward Chain fishery, while in Washington, D.C. As legislative aide assigned to the House Committee on Merchant Marine and Fisheries, he was assisting the Governor in his communications with the Secretary of the Interior regarding Tern Island.

Evaluation of alternatives

Representative Akaka has always supported the State's position.

Because he sits on the House Committee on Merchant Marine and Fisheries, which also deals with environmental matters, the Congressman is familiar with all sides of the issue. He does not believe that commercial activity and environmental protection need necessarily be mutually exclusive. Therefore, unless there be a callous disregard for environmental concerns, he would support the furtherance of Hawaii's economy through fishing expansion in the Leeward Chain.

Representative Akaka feels that the present jurisdictional dispute may have to be resolved in the courts. However, he would prefer to see the issue resolved through an agreement on reasonable administration of existing statutes, rules and regulations.

The U. S. Fish and Wildlife Service, the National Marine Fisheries Service and the State of Hawaii are now participating in a 5-year cooperative study to assess and appraise the fisheries and wildlife resources of the Northwestern Hawaiian Islands. The results of this study should provide the basis for development of a long-range plan to guide the judicious use, management and conservation of the natural resources of that region. Until the final assessment is made, the Congressman believes that it

would be premature to begin dismantling the Tern Island facilities, which may prove to be vital to the development of the Leeward fishery.

Congressman Akaka feels that a U. S. Fish and Wildlife Service research base at Tern Island is indeed desirable and appropriate, inasmuch as all the islands within this refuge system are designated as Federal Research Natural Areas. However, this need not preclude the studying, developing and utilizing the fisheries resource.

The administration of Tern Island should be a cooperative effort. Nonetheless, there still remains a potential for conflict between State and Federal agencies on such matters as permits and enforcement.

The Congressman would not recommend such other uses as diving charters, tour cruises and the like, as they would place an undue burden on control efforts.

The immediate problem is to resolve the jurisdictional dispute. Nothing should be done until that is accomplished.



EXECUTIVE CHAMBERS
HONOLULU

GEORGE R. ARIYOSHI
GOVERNOR

April 4, 1979

Dr. Edward W. Shallenberger
President
Manta Corporation
272 South Kalaheo Street
Kailua, Hawaii 96734

Dear Dr. Shallenberger:

Thank you for your letter of March 19, 1979, and its attachments regarding Manta Corporation's proposed study for the U.S. Fish and Wildlife Service on the management alternatives for Tern Island, French Frigate Shoals, upon its abandonment by the U.S. Coast Guard on July 1, 1979.

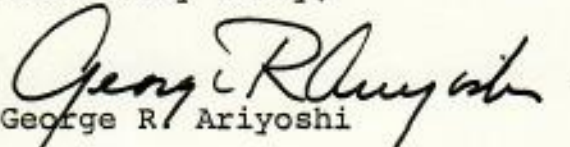
I concur that an evaluation process to fully consider all management options for the use of Tern Island and its existing facilities can only be accomplished by gathering input from persons knowledgeable on this matter. Such a procedure is deemed essential to totally realize the potential and actual compatible uses of Tern Island and its facilities.

In this respect, please be assured of the State's full cooperation in your endeavors for which I have designated Mr. Susumu Ono, Chairman of the Department of Land and Natural Resources as coordinator and principal contact. Mr. Ono is fully aware of my position on the matter and is prepared to speak in my behalf.

I appreciate your consideration of the concerns of this administration on this important matter.

With warm personal regards, I remain,

Yours very truly,


George R. Ariyoshi

cc: Hon. Susumu Ono

NAME: Dr. John Caperon
TITLE: Director
AGENCY: Hawaii Institute of Marine Biology
ADDRESS: P. O. Box 1346
Kaneohe, Hawaii 96744

20 April 1979

Description of person's experience/responsibility pertinent to Tern Island decision

Dr. Caperon is the Director of the Hawaii Institute of Marine Biology at Coconut Island. This is the University of Hawaii's marine laboratory.

Evaluation of alternatives

Research station operated by FWS

Dr. Caperon would not like to see a laboratory on Tern Island. There are lots of possibilities for labs on islands in the Pacific, there already is one on Eniwetok. It would be best to have another lab on an island such as Fanning where the fauna is richer. Most research that is needed can be done here at Kaneohe Bay, and could be done more relevantly here. In terms of personnel, time, logistics, etc. it would be better to do cruise studies in FFS and to keep lab work based here on Oahu. To maintain another lab on Tern Island would dilute the existing funds available for research.

Dr. Caperon feels his program does not need lab facilities on Tern. People like George Balasz can continue to do their research as they have been, packing in what they need. The availability of permanent shelter, water, and power would allow him to do more work, have more instrumentation.

Research station operated by other agency or jointly with FWS

See above comments.

Commercial fisheries support station

Dr. Caperon recommends that if a fishery can be established on a sound economic basis, accompanied by a program of education

and enforcement, and if the awareness is maintained that the area is a preserve, then it would be advisable.

These resources can be exploited in a reasonable, intelligent way. At this time no one knows exactly what the magnitude of the resource is. The weather in the area is forbidding, the area will be hard to fish. It is important to know as much as possible about the resource before investing money in a facility. At this time, it has not been proven enough to demand "cadillac" facilities for fishermen.

Dr. Caperon thinks the area will be exploited more by the Japanese fishing fleet than the U.S.

In the past the area has been effectively controlled because there were few or no fishermen in the area. Fishermen are as conservation minded as anyone, but if any people are in the preserve there will need to be measures for control.

These controls need to come mainly from a strong effort to educate fisherman so that they understand that conservation is in their best interests. However, there will always need to be some policing effort for the few who exploit with disregard for the welfare of the resource.

Joint research/commercial fisheries support station

Dr. Caperon doesn't want a station for the use of HIMB. He would rather use the facility when needed, paying for that use as needed. See above comments.

Other options

If fishing is allowed, than other uses cannot be negated. Diving charters, sport fishing and tours would lead to heavier use with more impact. Tourism actually provides less impact than many other activities. Tours of birders would be a good activity for

the area. They would have much less impact than fishing, and even less than the Coast Guard. Educational films, like those produced by National Geographic, would provide a good use of the area.

Abandonment of facilities

This would not be a satisfactory option. The existing facility should be used in some way and needs to be kept manned and occupied.

Overall response to Tern Island decision

Dr. Caperon feels that any agency or group can maintain the facility, and that the situation doesn't warrant the controversy it has generated. He questions the State's motives and commitment in wanting to manage Tern Island. However, he feels that the State is perhaps the appropriate agency to manage the facility, except for the fact that the State doesn't have the money to do a good job of the management. He feels the State is more interested in achieving the authority to manage than in actually having a commitment to manage the area.

Honorable John Carroll
Hawaii State Senate
State Capitol
Honolulu, Hawaii 96813

28 March 1979

The Manta Corporation representatives met with Senator Carroll on March 28. He expressed a wish to set up a meeting with knowledgeable people in the area. The Manta Corporation representatives gave him a list of such people. Senator Carroll did comment that, at this time, he felt that abandonment might be the best option.

On May 9 a Manta Corporation representative again talked to Senator Carroll. Senator Carroll said that at the present time his position was that Tern Island should be retained temporarily as a research site and that at this time there should be no commercial fishing. This position is based on a concern for the impact on the fishery resource, particularly lobster. He feels there should be no further fishing until a full study is made of the resource, perhaps three years from now.

Any facility maintained on Tern Island would provide a temptation to illegally fish the area.

ALIKA COOPER

Interview by telephone
April, 1979

Hilo, Hawaii

Description of person's experience/responsibility pertinent to Tern Is. decision

Mr. Cooper is a longtime commercial fisherman in the State of Hawaii. He has fished extensively at French Frigate Shoals. He is familiar with the area and with the fish to be found in adjacent waters. He has not been to Tern Island in recent years. Mr. Cooper is considered by many to be a defender of Hawaiian rights.

Evaluation of alternatives

Mr. Cooper felt the only viable option was to use Tern Island as a base for a fishing station. He felt this might best be accomplished by turning the island over to those interested in fishing it, rather than to a government agency for establishment of a formal, government-sponsored fishing station.

Mr. Cooper felt that there was no threat to the wildlife from Hawaiian fishermen, because these fishermen had lived with the wildlife for untold generations and would do nothing to jeopardize them. He was much more concerned that management by state and federal agencies had led to the decline in numbers of endangered species.

Mr. Cooper felt strongly that the Fish and Wildlife Service has no jurisdiction over the island and should not be concerned with it. He felt that the island is owned by Hawaiians and Hawaiians alone, and therefore any other discussion is inappropriate.

Mr. Cooper invited the contractor to examine his documentation regarding the ownership of the island. This was not done.

NAME: Dr. John Craven
TITLE &
AGENCY: Dean, Marine Programs, University of Hawaii
State of Hawaii Marine Affairs Coordinator
ADDRESS: Holmes Hall #401
Honolulu, Hawaii 96822

3 April 1979

Description of person's experience/responsibility pertinent to Tern Island decision

Dr. Craven spoke at various times from his positions as Dean of Marine Programs for the University of Hawaii; as the State of Hawaii's Marine Affairs Coordinator; and as a private citizen. These positions are indicated in the following summary where clarification is needed.

Evaluation of alternatives

Research station operated by FWS

This is not an acceptable option.

Research station operated by other agency or jointly with FWS

A jointly operated research station would be a must. Such a station would fill the gap between here and Midway in studying the chain of islands. It would be hoped that the station could be truly cooperative, with participation by FWS, State Fish and Game, Sea Grant, and others. It would be necessary to keep this a very small operation. Hawaii cannot afford to start another large laboratory. There are already several marine laboratories in the State, and there are not funds available for a large facility.

This option would not have significant impact upon the refuge system.

Commercial fisheries support station

IF it proved economical to base at Tern, and IF bait resources exist in the area, then Tern Island should have a fisheries station to provide economic benefit to the State. But this will likely not prove to be economical for bottom fishing, lobster and such, as the resource is too transient to support an industry. There also is probably not enough tuna, other than albacore, to support a fishing program. It might prove profitable to produce bait in the area, in some mariculture program.

If a fishing station is established, the commercial sector must be willing to put up the money to support it.

Speaking as the Marine Affairs Coordinator, it will be important to have strict controls on the taking of any species other than albacore. Speaking as a private citizen, the 200 mile limit is not going to work because it is going to be too profitable to cheat.

If fishermen can be sociologically conditioned to accept the responsibility (and feeling of ownership) for protecting the resources, then control can be maintained.

Joint research/commercial fisheries support station

See above comments. The formation of a "Tern Island Authority" would be recommended, with participation by several agencies, as in the current tripartite study.

Other options

Tern Island could be a center for open sea mariculture, at first for research, and later for production, on such species as lobster, shrimp, etc. The State constitution now provides that areas of ocean can be set aside for private open sea mariculture. It might be appropriate to utilize the island for filming, and photography, but would not be appropriate to conduct tours of the area.

Overall response to Tern Island decision

The first point is whether or not Tern can be considered as an island. Are the changes man has made to this island reversible? Would the cost be too high? It is only a fiction to assume that Tern can be returned to its previous state, similar to the other islands in the preserve. And, in fact, is it necessary for each island in the chain to be maintained in its pristine state?

The best utilization of Tern Island, to the country, the state, and the people, would be to fill a need that cannot be filled in any other area. It appears that controlled commercial fishing might be that best utilization. It would be ideal to try fishing at Tern for 5-10 years on an experimental basis for perhaps 2 boats to determine yields and impacts.

There would probably be little difference in the impact on Tern Island from each of the various alternatives. Tern is already past being a wilderness preserve, and can not be returned to its natural state.

Dr. Craven discussed a report which was prepared to help establish the jurisdictional status of Tern Island. The report concluded that:

- a. Tern Island is federal property
- b. Tern Island was once in the jurisdictional domain of FWS
- c. That jurisdiction was completely handed over to the Coast Guard
- d. The Coast Guard thought that jurisdiction came from the Territory.

To make the turnover legal would have required a memo of agreement from the Department of the Interior. That memo can not be found. The Coast Guard has no obligation to return Tern Island to Interior. The most expeditious way to resolve the dispute would be for the Executive to issue an order, dealing with Tern Island alone.

Dr. Craven submits that most of the Leeward Islands belong to the federal government, Midway to the military, Kure to the State, and Tern Island to the Coast Guard to do with as they wish.

As Marine Affairs Coordinator, Dr. Craven would hate to see the disposition of Tern Island used as a test case for State's rights.

29 March 1979

Jack Davidson, PhD
Director, Sea Grant College Programs
University of Hawaii, Honolulu, Hawaii

Alfred Pratte
Coordinator, Marine Advisory Program
University of Hawaii, Honolulu, Hawaii

Richard Grigg, PhD
Manager, Sea Grant Northwestern Hawaiian Islands Fisheries Program
University of Hawaii, Honolulu, Hawaii

Steve Dollar
Sea Grant Northwestern Hawaiian Islands Fisheries Program
University of Hawaii, Honolulu, Hawaii

ADDRESS: Spalding 255, University of Hawaii, Honolulu, Hawaii 96822

PHONE: 948-7031

Evaluation of alternatives

Research station operated by FWS

Grigg felt that the best form of administration would be a Board of Directors with representation of all agencies involved.

Research station operated by other agency or jointly with FWS

This option was favored by this group. Grigg felt that the University of Hawaii, State Fish and Game, and Fish and Wildlife Service would all like to see a joint facility at Tern Island, and feels that they could work well together. He sees this as being a station where primarily near-shore work is done. He presented HIMB's laboratory at Eniwetok as a prime example of how this works and suggests it as a good model to follow.

Davidson voiced a concern that the agency that put up most of the money would want to maintain tight control. He also feels that the University would be unable to run the program effectively because of present levels of financing. He envisions only intermittent University use of the station, but feels it would have a great deal of positive impact in increasing Hawaii's status as a "Center for Marine Research." He also mentioned the positive impact of additional dollars to the State in terms of both added employment and the multiplier effect of money generated by out-of-state research conducted here.

Grigg has received several letters from mainland U.S., Panama and Australia expressing a desire to do research on coral reefs in the area. Funding is a main issue but could be partially the responsibility of the individual investigators. Research topics of importance include the Hawaiian monk seal, green turtle ecology and predator prey studies with emphasis on top carnivores, bottom fish population dynamics, lobster biology, to mention a few.

Davidson pointed out that even a strictly research program would still need to be under some control and would require periodic review, and that the "impact watchers" might have more impact than anything else.

Commercial fisheries support station

This group did not support this option, feeling that a joint research/commercial fisheries support station would be preferable.

Joint research/commercial fisheries support station

Davidson though this combination would work, but that management would be difficult. He wondered if anyone other than FWS would be willing to make a commitment to put in resources. He feels that those fishing in the area now are responsible people who won't harm the resource, but worries about opening it up to others who might ruin it for everyone.

Grigg feels fishing should be limited to off-shore waters. He thinks that the negative impacts of nearshore fishing would outweigh the benefits. While he cautions against excessive controls, particularly by too many committees, Grigg is not sure that research and commercial fishing would be compatible at FFS. He suggests the issuance of permits based on a cooperativeness between research and fishermen. He also suggests the establishment of a resident manager, to monitor shipments of fish for the purpose of record keeping and to make sure no inshore fish are taken.

Dollar expressed a wish that fishermen might, at times, alter their fishing in order to assist researchers.

Davidson pointed out the need for a large generating system for freezing fish and a need for dock facilities to eliminate the need for barging fuel to ships.

Abandonment of facilities

Grigg says abandonment should not be considered, as this is too valuable a facility. If it became necessary to abandon, he suggests leaving the facilities as is to provide a more diversified habitat for wildlife, as well as a way station for mariners in distress.

Other options

Other options mentioned included use by military, a tsunami warning station, tourism, photography cruises - groups of 30-50 could be accommodated by a joint research/commercial fishing station if it was conducted on a non-consumptive basis, with no going ashore, and a responsible guide.

Overall response to Tern Island decision

Some generalized comments included Grigg's suggestion to hold public hearing on the issue, since there is some local resentment towards the present administration of the area. Davidson felt the fishermen need to make a commitment to the program themselves, rather than having it all "given to them", and Dollar expressed a hope that whatever the decision, that the scale be kept small and simple.

NAME: Kenji Ego
TITLE: Director
AGENCY: Department of Land and Natural Resources
Division of Fish and Game
ADDRESS: 1151 Punchbowl Street
Honolulu, Hawaii
PHONE: 548-4000

27 March 1979

ALSO PRESENT: Henry Okamoto, Paul Kawamoto, Stan Swerdloff, Henry Sakuda

Description of person's experience/responsibility pertinent to Tern
Island decision

Mr. Ego and his staff have a working familiarity with the NWHI. They have a detailed knowledge of the interests and ecological factors involved. Their institutional jurisdiction involves both management and resource development concerns.

Evaluation of alternatives

Research station operated by FWS

This is not an acceptable alternative. The outlook would be far too narrow. Other agencies must be involved, otherwise the research activities may be lsanted.

Research station operated by other agency or jointly with FWS

There would be three ways to have a joint station: 1) each with their own separate responsibility and separate areas; 2) jointly administered; and 3) a single administration with an advisory board. The second would be far preferable because it would have real power (an advisory board is really powerless), and because a joint administration is better economicall than 1) above.

Retention of the airstrip in operating condition is critical for emergency and personnel transfer purposes.

Impact of a joint research station would be minimal since researchers are cautious people. However, there would be some impact on the birds from occasional airplane flights. Strict controls are needed, not for enforcement purposes, but primarily for operational controls.

Commercial fisheries support station

See discussion below.

Joint research/commercial fisheries support station

A clear preference of the Fish and Game Division is for a joint research and commercial fishing station, since they feel the synergistic effects of such an operation would be beneficial to all parties involved. The first aspect of such an operation would be to provide minimal shelter for the commercial fishermen, plus the provision of a support station with a capacity for transferring fish and supplies to and from the island for the research parties and fishing operation. Thus a supply station would allow commercial fishing vessels to extend their stay in the NWHI, thereby enhancing their ability for profitable utilization of the vast fishery resources of this region. One good way to establish a fishery support station would be a barge operation, requiring no new bulkheads or piers. This would consist of one or two light barges tied up to existing bulkheads, to which fishing vessels would be able to tie up. Refrigeration could be provided onboard a barge, along with a small blast freezing unit on shore. Maintaining a runway and keeping it open would be important for emergency cases and in order to bring in new crews and supplies.

It should be recognized that the concern for some birdlife, particularly the terns, There is a total of 7 million terns in the NWHI, so the terns on Tern Island itself do not appear to be particularly crucial to the overall tern population. Considering the danger to aircraft operations which are presented by these birds, it is perhaps not essential to provide maximum habitat and allow the tern population to escalate to the maximum extent on Tern Island. It should even be considered in the long term that terns could be kept away from Tern Island entirely in order to remove the real threat to aircraft operations that is presented by these birds. Since there is only limited habitat potential for turtles on Tern Island, keeping the runway operative would not cause significant harm to the turtle population or habitat.

One crucial aspect of commercial fishery support would be the availability of fresh food, fuel and water. The generators on the island should also be kept operational as a part of the shoreside facilities.

The occurrence of several types of adverse impacts should be considered. First, there could be fuel spillage. Control would be required to prevent this type of accident. Another type of adverse impact could occur by the dropping of anchors inside the lagoon, damaging the substrate and coral. This type of damage could be avoided quite simply by anchoring in the dredged channel only or by the use of mooring buoys. Also, boats will have to change oil frequently, and pump out waste materials. However, pumping of wastes can be controlled and would be conducted in the open ocean according to accepted practice. Accidents can never be completely prevented, and of course vessels in the area during emergency storm conditions would always have the right

to seek shelter on Tern Island or other islands in the region. Careful regulation and established rules and controls should minimize adverse impacts to reef and land areas.

A possible economic impact could result in the price of fish being driven down substantially by the resulting larger landings and opening up new markets (frozen fish as opposed to the traditional fresh fish). This impact would be positive, resulting in increased overall profit to the fishermen and lower prices to the consumer. For example, the fishermen could stay out for three or four months at a time, if replacement crews and supplies could be flown or shipped in to a Tern Island support station. Another means of increasing the catch in the area could be through the placement of fish aggregation devices by the NMFS or by the State.

Certainly a variety of new controls and regulations, as well as enforcement personnel and processes, would be required to institute this type of operation even on an introductory basis. Probably over the next year or two, the State administration would be willing to request funding and support for a new type of effort. Also, the necessary function could be contracted out. In any event, some type of enforcement presence should be physically maintained in the area.

The State is somewhat concerned about these types of problems, and about the narrow range of interest which seem to be considered by the current federal enforcement and management function in the refuge. The State Fish and Game Division feels that the FWS could consider subcontracting the management and regulatory function in the refuge, at least on a partial basis, to the State. Federal statutes provide for,

and in fact mandate, "cooperation agreements" to provide for state administration of management and regulatory functions, with federal review and supervision of the program. The State has considered some that some type of quotas and seasonal controls which would apply to all vessels fishing in the area may become necessary, and that a regional fisheries management function may be desirable to provide for the controlled harvest of the fishing resources in the area, such as under the possible aegis of the Regional Fisheries Management Council.

Abandonment of facilities

The Fish and Game Division is totally against the abandonment option. It feels that "mothballing" or removal of certain structures at the Tern Island facility should under no circumstances be considered as the action to be taken in July when the Coast Guard moves out. At a bare minimum, a caretaker function should be maintained in order to keep facilities in operating order until a final decision about research and commercial experiment is made. As it stands, fishermen are now using the lights on Tern Island for navigational reference.

Overall response to Tern Island decision

The Fish and Game Division stresses the benefits of a combined research and commercial fishing function, under which commercial fishing vessels could provide support to research functions.

Substantial controls and regulations, as well as ongoing monitoring, could be provided, and in fact the controlled introduction of a research and commercial fishing function could provide useful information for management purposes, as well as increasing a potential use of the resources of this region by commercial fishermen.

The entire State administration has a strong interest in seeing a more balanced management and resource development of this area as indicated by communications within the last year between Governor Ariyoshi and the Secretary of the Interior, and various State legislative proposals. A substantial new budget and presence of enforcement and other personnel on Tern Island may be required in order to make a research and commercial fishing support facility workable.

Honorable Frank F. Fasi
Mayor, City and County of Honolulu
Honolulu Hale
Honolulu, Hawaii 96813

2 April 1979
1030

The City and County is interested in commercial use of the area for fishing if it can be done without harmful impact.

It appears that all interested parties should be able to use the area. The Federal government will make the determination regarding jurisdiction.

FWS should be the agency to control the area, with the State and the City and County supporting their efforts.

Fishermen would accept FWS as the lead agency.

FWS should quickly establish regulations. Suggest Spark Matsunaga be contacted, told that City and County would agree to FWS' plan.

Clifford H. Fiscus
Robert L. DeLong
NOAA, NMFS
National Marine Mammal Laboratory, NMAFC
7600 Sand Point Way, N.E., Bldg. 32
Seattle, Washington 98115

Edited version of phone
conversation with Edward
Shallenberger on 24 April
1979

Research station operated by FWS

The Marine Mammal Commission has advised the National Marine Fisheries Service that the population at French Frigate Shoals should be left undisturbed as much as possible. Consequently, the National Marine Mammal Laboratory, NMFS, plans no monk seal research at French Frigate Shoals which would cause disturbance to seals unless the research could only be accomplished at French Frigate Shoals.

It would be logistically convenient to conduct monk seal research at French Frigate Shoals but would be risky. French Frigate has the only major monk seal population that appears in a healthy state, having grown substantially in the past 20 years and having the largest number of pups born each year.

If the Tern Island facility were used as a research station, the activities of researchers would undoubtedly extend over the waters and islands of the atoll and impinge upon monk seals. The islands in this atoll are small and on some it is impossible to land without disturbing monk seals. Any disposition of Tern Island which increases the presence of man on the rookery islands will jeopardize this unique, productive monk seal population. For anyone who questions if human disturbance adversely affects monk seal populations, a careful reading of Karl Kenyon's report of the decline at Kure and Midway Atolls (1972, J. Mammal. 53:687ff.) is suggested.

Research station operated by other agency or jointly with FWS

There is apprehension about increasing research in this area. The time of year that research is conducted is critical in terms of deleterious impact upon monk seals, sea turtles, and sea birds.

FWS has the responsibility of administering activities in the refuge and should be the lead agency in administering any cooperative research station. Research conducted in the area should be carefully controlled. There should be a master research plan with a review committee composed of conservation and research experts. The master research plan would describe management information needs and contain guidelines for deciding research which could appropriately be conducted at French Frigate Shoals without impacting monk seals and sea turtles.

Commercial fisheries support station

Pelagic fishing away from the refuge is clearly compatible with the refuge as we know it today. DeLong and Fiscus see a definite problem with a fishing station at Tern Island. Even a limited station will provide an incentive to increased use of the refuge waters in the future. A skiff fishery within the refuge would be disastrous, impacting the monk seal in a variety of ways. Increased vessel traffic resulting from a support station will increase the probability of mishaps and release of oil products into the inner-reef waters. The approach to Tern Island is perilous.

Abandonment of facilities

This would be the most ideal situation. It would suit the criteria of what is needed for the monk seals. However, leaving empty or locked

buildings would provide an attraction and encourage unauthorized visitation. If buildings remain, a caretaker would be required.

Other options

DeLong and Fiscus are adamant that tourists not be allowed to visit islands at French Frigate Shoals. They would prefer to see a good monk seal exhibit elsewhere on Oahu (or other main island), such as at Sea Life Park or Waikiki Aquarium.

DeLong compares the sensitivity of monk seals to human disturbance to that of the elephant seals at Guadalupe Island, Mexico. Elephant seals are less sensitive to man and yet even the elephant seal is abandoning traditional rookery beaches at Guadalupe due to human activity. There are some areas where tourists can observe seals in the wild. San Miguel Island, in the California Channel Islands, is administered by the National Park Service and there, tourists can observe seals from a high ridge, at a distance with glasses or spotting scopes without the seals being aware of their presence. Unfortunately, there is no possibility of such aesthetic utilization of monk seals at Tern Island or other islands in the Northwestern Hawaiian Islands.

Overall response to Tern Island decision

Monk seals are an example of wilderness wildlife which are harmful to or harmed by economic uses of the habitat they occupy. Man cannot utilize that habitat without impacting monk seals.

Fiscus and DeLong encourage whatever action would bring the least human activity to the islands. They are concerned about increased vessel activity which would mean greater impact.

NAME: LT RANDY FREITAS
AGENCY: U. S. Coast Guard, Aids to Navigation Branch,
14th District
TITLE: LT., Assistant Branch Chief
ADDRESS: PJKK Federal Building
Room 9139
Honolulu, Hawaii

PHONE: 546-7130, 521-1354

Description of person's experience/responsibility pertinent to Tern Island decision

LT FREITAS is the Assistant Branch Chief with substantial responsibility in the Branch responsible as program manager for the Coast Guard LORAN station on the island, about to be discontinued.

Evaluation of alternatives

Research station operated by FWS

Several kinds of minimal facilities would be needed in order to operate a land-based research station at Tern Island, in the opinion of LT FREITAS. Some sort of communications capability, presumably by radio, would have to be installed and maintained. In order to maintain operational capability, this would indicate a permanent placement of a person qualified in this area on the island. Also a first aid capability on the island would be necessary, as well as maintenance of the airstrip in order to allow aircraft to enter and retrieve injured or sick personnel or commercial fishermen from the area. The first aid capability might require the presence of first aid trained personnel on the island, and certainly would require that the full length of the airstrip be maintained in order for larger aircraft to enter and leave the island. Logistics requirements would include need for an operations and maintenance capability, which probably would re-

quire two operations and maintenance personnel. The responsibilities of such persons would include maintenance of water and sewage systems, rolling and packing the runway, removing bird eggs from the runway, repairing damage from storms and wave action, maintaining seawalls, sandy beach areas which might tend to erode, maintaining mechanical equipment, rolling stock, small boats, and the like. Given these logistical requirements, in order to maintain a minimum operational capability at Tern Island, a cook and kitchen facilities would be necessary for personnel operating the station. This could perhaps be arranged through commercial sub-contracting. LT FREITAS stressed that the airstrip in particular requires constant maintenance in its full length, in order to maintain emergency landing capability, even though such emergency landings might occur infrequently. If the airstrip is not so maintained, response capability in an emergency situation would be limited to sending the nearest ship, normally a two day or 50 hour voyage. In cases of extremely hazardous weather, neither ship or air access to Tern Island would be possible, until hazardous weather conditions cease - for example, during winter typhoons.

If the existing facilities are inoperational and intended for any substantial period of time (longer than two or three months) significant problems could occur in the operational capability of the equipment, which will be left on the island, and in terms of damage to existing sewer and water collection systems, as well as perhaps to the buildings themselves, and certainly to the runway and seawalls. Thus, a serious loss of operational capability would be an impact that would result from a period of abandonment of the facilities, as discussed fully below. LT FREITAS had no comment concerning the possible types of impact of the

operation of a research station on the island, other than the obvious physical impacts which would be similar to the impacts of the current Coast Guard operations on the island. These include limited impact upon nesting birds who seem to nest on the runway, some impact upon wildlife from required maintenance operation on the runway, such as rolling, compacting, and repair of seawalls. Also, the presence of human personnel in a four-wheel drive truck can cause disturbance to the wildlife on the island. LT FREITAS definitely felt that the station could not be maintained by a one-man jack-of-all-trades or resident "czar" who would provide a minimal emergency back-up and maintenance presence on the island.

Research station operated by other agency or jointly with FWS

(See above comments)

Commercial fisheries support station

For any kind of substantial commercial fishing support operation to be established at Tern Island, transportation to and from vessels using the facility would be required, due to the fairly shallow draft of the channel - 12'8". Something like a small boat harbor or anchorage for visiting vessels would be required. Also, the same type of logistical support as noted in the previous research station discussion would be essential. This could be limited somewhat if a "mother ship" were to provide commercial fisheries support, as well as communications capability, emergency medical assistance, and the like. Nevertheless, airstrip maintenance would be required, and the same basic types of logistical support would be essential on a mother ship, in addition to the basic maintenance of the seawalls and the airstrip. Transportation

of the commercial fishing take by barge or air or other means would have to be arranged as well. Winter storm conditions could make it extremely difficult to maintain a mother ship at anchor in the French Frigate Shoals or Tern Island area. If a quite substantial commercial fishing support operation were established, the logistical support for the operation of the station could be contracted out to a commercial operation such as Global Associates, which subcontracts for such operations at Eniwetok. The Coast Guard will be pulling up its channel and harbor buoys, and some kind of arrangement would have to be made for privately maintained buoys to be installed in the channel and harbor if used by commercial fishing and other vessels. The Coast Guard is willing to drop such buoys at the time they remove their own buoys during the month of July, 1979, if required by another Federal agency. Prior arrangements would have to be made by the responsible party. Re-supply vessels and/or storage capabilities on Tern Island should also be a part of a commercial support facility. The impacts of a commercial fishing support station in terms of logistical operations, would be similar, although perhaps somewhat larger in scope or degree, to the types of impacts associated with a research station, as discussed above - i.e., the impacts of ongoing maintenance activity, the impacts of operational and recreational activities of personnel stationed at the island and other persons present on the island or in the vicinity, and the like. Additional impacts could be entailed by the presence of several vessels in the harbor area.

Joint research/commercial fisheries support station

(See above discussion)

Abandonment of facilities

The express view of the Coast Guard is that it is emphatically not obligated to remove any structures or equipment from Tern Island, because its contract to the Department of the Interior provides that such arrangements are to be made by mutual agreement. However, ongoing negotiations with FWS have indicated that all rolling stock will probably be left on the island, buildings will be left in a habitable condition, although they will be closed to prevent entry of birds and damage by weather. The existing recreational facilities, the five storage tanks for diesel fuel, and the airstrip and seawalls, will be left intact. Certain inessential small buildings will be demolished, garbage and debris will be cleared away in a matter designed to avoid interference with wildlife on the island.

One immediate impact of the abandonment of the facilities will be very quick take-over of the runway and other areas of human use on the island by birds for nesting purposes. This will, within a few weeks or months, prevent landings on the airstrip until the birds can be removed from the strip. Also, it is anticipated that the condition of the coral on the runway, and the end of the runway adjacent to seawalls, will deteriorate relatively rapidly, since frequent maintenance is required to keep the runway packed and serviceable and to prevent erosion of certain parts of the runway. Any lengthy abandonment of the facilities will certainly generate problems with the operational equipment, such as the generators, the sewage system, and the water system. The water system, for example, if not maintained immediately and constantly from the time of Coast Guard withdrawal would have to be flushed and rechlorinated as well as cleaned out. The seawall would probably suffer deterioration

in a relatively rapid fashion, and the existing sandy areas without the seawalls would continue to erode. Some positive impact on the wildlife population would occur, primarily due to increased nesting area, and the cessation of human interference.

The generators will be left by the Coast Guard and the majority of diesel fuel tanks will be left empty.

The abandonment of the facilities will not have an impact on existing navigation and commercial fishing in the area outside of the Federal Reserve for the French Frigate Shoals. This is due to continued operational capability of a LORAN navigation system in the area, provided that all vessels switch away from the LORAN-A system to other navigational systems.

Other options

One possible option would be maintenance of an emergency evacuation facility only. This would probably still require several support personnel. Certainly, ground personnel would be useful in directing aircraft as to the best conditions in terms of weather and wildlife present on the runway for landing. Birds on the airstrip will always present a hazard for aircraft landing, and particularly for aircraft takeoff. During aircraft takeoff, the birds at the far end of the runway are disturbed precisely as the plane takes off into the rising flights of birds. Apparently smaller aircraft fare better in sliding through the birds than the large transports and military aircraft used by the Coast Guard.

There was no discussion of additional options for Tern Island.

Overall response to Tern Island decision

Rolling stock, a variety of equipment, and certain kinds of recreational

activities, as described more comprehensively in the attached Coast Guard E.I.S. for the cessation of operation. It should be noted that the Coast Guard also maintains a radio beacon at Tern Island, which will also be shut down upon cessation. A basic Coast Guard response to possible alternative future uses of Tern Island is that this is no longer a Coast Guard responsibility. LT FREITAS feels that perhaps those involved in the decision may have underestimated the logistical needs for any type of on-going operational capability at Tern Island.

NAME: Randall W. Freitas, Lt.
AGENCY: U.S. Coast Guard
ADDRESS: PJKK Federal Building
Honolulu, Hawaii 96850

20 April 1979

Lt. Freitas was interviewed for a second time in order to obtain answers to a list of questions which had arisen through the conducting of interviews with others on the mandatory contact list. Those questions are attached.

Answers follow, by number per the attached list.

1. Lt. Freitas did not have the budget information. This would require a special request, in writing, to the Commander, 14th Coast Guard District, at the above address.
2. There have been no medical evacuations in the past three years. For information prior to that time it would be necessary to refer to the station logs which are stored in the National Archives in Washington, D.C.
3. During the past year there has been \$26,000 damage to aircraft from bird strikes. The Coast Guard will not fly C130's into Tern Island again, maybe not even in the event of a life and death emergency.
4. Before the Coast Guard began using the buoy tender there were 2 flights per month, since that time there has been one ship visit and one flight per month. After July 1 the Coast Guard will go by once a year.
5. Fill and drag before each flight, minimum.
6. The barge and the tractor will be removed. The retaining wall around tank #5 has had some problems, is not stable, so this tank has not been used recently.

7. Not a matter of Coast Guard interest.
8. The Coast Guard has one medical corpsman for 20 people.
9. There would probably be a need for 4-6 people to maintain the facility as it is. They would need limited mechanical ability, as well as skills for general upkeep of the buildings.
10. Sharks and coral provide the major safety hazards. There is a need for a back-up boat because of these hazards.
11. None.
12. None. Not a matter of Coast Guard interest.
13. Fuel has been ferried from the ship by barge. There have been no fuel spills during Coast Guard operation.
14. 20 is the high number, availability of water is the limiting factor.
15. Waste oil is burnt. Lt. Freitas did not know how other wastes are disposed.
16. Does not have this information.
17. Not at present for existing use.
18. The only accidents have occurred working with boats against the pier.
19. None. Not a matter of Coast Guard concern.
20. Isolation.

QUESTIONS FOR COAST GUARD

1. Expenses for operation station for 20 people - breakdown by category
2. History of medical evacuations - Coast Guard and others
3. History of aircraft problems - i.e. bird strikes
4. Frequency of flights by year
5. Method and extent of runway maintenance
6. Maintenance of other facilities: costs, methods, frequency, problems - i.e. buildings, sewage, water, generator, dock, seawall
7. Expected life of equipment/facilities
8. Minimum medical facilities needed
9. Skills needed for operation/maintenance
10. Safety hazards - i.e. swimming, etc.
11. Intensity of activity off island
12. Adequacy of facilities - recommended improvements
13. Fuel storage - problems? - method of transfer
14. How many can facility support. What are limiting factors.
15. What is done with waste oil, solid waste, sewage, gray water
16. Water supply and demand
 - how much supplied, how seasonal
 - potential for greater yield
 - how is it used?
 - how to increase water supply or lower demand
17. Is there ever any need for channel or turning basin dredging?
If yes, where was material disposed?
18. Accident history with ships/boats.
Capability to respond.
19. Recreational needs
20. Primary complaints from extended stay by residents

NAME(S): Doyle Gates, Robert Iversen, Scott Anderson 26 March 79
AGENCY: National Marine Fisheries Service 1000
ADDRESS:

Description of person's experience/responsibility pertinent to Tern Island decision:

Hawaii administrator responsible for area. All individuals have been to Tern on many occasions.

Evaluation of Alternatives:

Research station operated by FWS

Research station important. It should be a real research station, not just a ploy to lock up the area.

If administered by FWS, an advisory board should be appointed. Should consist of people from State as well as other Federal agencies, also industry and scientific community.

Facilities: minimal housing, freshwater storage, freezing, etc. Dock for small research vessel; e.g. 75-85 feet. A field station as opposed to a formal lab. Might start out only as a base of operations for research by people like Brian and Patty Johnson, and George Balazs.

Transportation by air and surface vessel: could operate as a base of operations for research, not just on Tern but for a large portion of the Leewards.

Impact will be of a similar nature as the LORAN station. The difference will be a matter of degree -- probably less than LORAN. Scientists would be more aware of needs and fragility. Scott said, however, that there would likely be more vessel impact and more chance for pollution. Doyle said that a research station might encourage more use of the area by others. Bob fears pseudo researchers, hangers on, movie makers, etc., similar to the Humpback problems. FWS would probably be more restrictive than jointly run group: less impact than if shared.

Page 2

Research station operated by other agency or jointly with FWS

This is a better idea. Groups should not be arbitrarily cut out. The impact would probably be greater than if it were only operated by the FWS.

Commercial fisheries support station

If a mother ship were used shore support would be needed; e.g. machine shop, back up, logistical support, communications, etc. If there were no mother ship then there would be more major requirements for the shore station.

Scott questioned how many people would really use a shore facility. Doyle recommended that FWS approach this like the Navy is doing on Midway, as an experimental fishing station. Should have firm controls and be able to close it off at any time.

The possibility of a skiff fisheries and/or the use of 50-65 ft. boats as small mother ships for skiffs was discussed. This depends on what the facilities are - ice, fuel, housing, etc.

All recommended strongly that whatever is done be done with care and prudence, slowly and carefully. Stringent controls with strong enforcement are necessary to prevent both oil pollution and animal harassment. A strong permit system should be utilized.

Observers aboard fishing boats can be helpful in placating critics and are sometimes helpful in reducing impact.

A fear was expressed that if control of the island should be in the hands of the State that the State likely would not put sufficient restrictions and controls on the situation.

Page 3

Joint research/commercial fisheries support station

This could be the ideal and could be beneficial to both fisheries and research.

Like the other possibilities, impact is a matter of degree, not type -- the more use the greater impact.

Abandonment of facilities

The station should not be abandoned, but should be maintained from 1 July on. The air strip is important. Caution should be exercised in deciding what buildings should be removed. Mothballing should be done with care.

Other options

Emergency air strip is very important and must be kept operational.

Other uses should not be blanketly ruled out -- each should be considered on its own merit. The FWS should maintain an open mind.

Overall response to Tern Island decision

French Frigate Shoals is a unique and special area and must always be treated as such. Fisheries development, however, must not be ruled out, but controlled in such a way that it is compatible with refuge management.

At this time, Gates, Iversen & Andersen are speaking as individuals.

This is not an agency position.

Additional comments - April 17, 1979

1. Statement of special purpose. Whatever option is selected by FWS, that agency should go on record with a "statement of special purpose" concerning Tern Island. That is, Tern Island and the French Frigate Shoals, because of their unique characteristics, are deserving of particular concern, no matter what the final recommendation is for future use (Iversen).
2. Caretaker on duty 1 July 1979. Whatever final use is made of Tern Island, there must be a caretaker on duty on 1 July 1979 to protect and maintain the facility until the final plan can be implemented (Anderson).
3. Enforcement. A small pier or equivalent type of anchoring/mooring facility should be provided for the support of a small vessel (e.g. 60 ft.) to be used for enforcement purposes not only in the French Frigate Shoals area, but in other areas of the chain. Fishery management plans being developed by the Western Pacific Council and the general trend towards fishery development (with or without Tern Island) will require an active enforcement presence on the water along the Northwestern Hawaiian Islands (Iversen).

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NAME: Frank Goto
AGENCY: United Fishery Agency, Ltd.
ADDRESS: 17 Ahiu Street
Honolulu, Hawaii 96813

5 April 1979

Description of person's experience/responsibility pertinent to Tern Island decision

As president of Hawaii's largest fish auction, Mr. Goto has extensive knowledge of commercial fishing in the state.

Evaluation of alternatives

Research station operated by FWS

Research station operated by other agency or jointly with FWS

Mr. Goto did not speak to these options.

Commercial fisheries support station

A support station would be needed to enable shorter range boats to fish down the chain.

With the market expanding as it has been, fresh fish from FFS could be profitable. The fresh fish market has grown 6-7 fold in the past 10 years. An example of the potential market possibilities is reflected in the way ahi prices took a great jump when additional markets (i.e. exporting) were found.

One of the problems is that there isn't enough retail distributions. There aren't enough retail outlets for fresh fish and there isn't an adequate distribution system to handle additional distribution. Nevertheless the prices and volume of fresh fish will continue to climb. The local population wants fresh fish -- not frozen! Locals will pay as much as 3-4 times the current price for fresh fish.

Requirements for a fishing station would be fuel, maybe barges, a reefer system, and medivac. All of these (except the medivac) could be handled by barges. There is no need for anything fancy there, nor for anything permanent. Tern Island will always be needed as a port of refuge.

The potential prices of fish would probably warrant the cost of airshipment.

The area would most likely be fished most by West Coast fishermen, who are part of the albacore fleet, in their off-season. Mr. Goto does not think this will be a

summer fisher, and doubts that "old-timers" will fish up there at all.

The market can probably easily absorb all that 4-5 boats can produce. It is possible that some flag line boats would go up during the summer. But it is unlikely than there would be a big surge of any kind of boats going up. The larger boats will probably continue to bring their fish in to Honolulu.

It would be nice to have ice at Tern Island. The planes could take the ice up on their way to pick up fish, while they are empty.

There is probably a big enough resource to make a skiff fishery practical if the facilities are there for other fishing. This type of fisherman would be harder to control.

Commercial interests would likely be willing to pay for the facilities.

Certain species would do well being flash frozen, but it would be too difficult, and too expensive to put a flash freezing plant on Tern Island.

There would be a great market for lobsters in the restaurant/hotel industries. The problem with that species now is the lack of a continuity of supply.

A facility at Tern wouldn't be of benefit to the albacore fleet.

Fishing at FFS is only good for the species which bring a good price.

In regards to controls, the best plan would be to set up a self-policing system. Fishermen would, however, accept observers on their boats if necessary. The fishermen would probably not accept a system where they paid the expense of the observers.

Joint research/commercial fisheries support station

If there are mutual benefits, then fishing and research could work together. There should be NMFS/FWS control, along with the State - but the State doesn't have enough money or personnel to take over the management totally.

Overall response to Tern Island decision

The emphasis should be to open FFS to some sort of fishing. Certain safeguards must be put into the permit system to preserve and enhance the fragile ecosystem. Other areas have shown that proper management, and well planned joint usage enhances refuge areas.

Honorable Stanley Hara
Chairman, Senate Committee on Ecology,
Environment and Recreation
Hawaii State Senate
State Capitol
Honolulu, Hawaii 96813

3 April 1979

An appointment was scheduled to interview Senator Hara at 0900 on 28 March.

The Senator was not present for the interview at that time. After several attempts to set up another appointment, on 3 April Senator Hara's secretary told a Manta Corporation representative that the Senator did not wish to comment on the study.

Gradén Harger
Chief, Operations, Pacific Region Hdqtrs.
Herb Hirata
Chief, Observations
National Weather Service
P. O. Box 50027
Honolulu, Hawaii 96850
546-5680

9 April, 1979
0830

The purpose of the study and the management alternatives under consideration were explained to Mr. Harger and Mr. Hirata. National Weather Service (NWS) requirements at French Frigate Shoals were discussed.

Tern Island is a Second Order Weather Station. As an observation platform, it plays an important role because of its position northwest of the main islands. It is "upstream" with respect to the typical direction that significant weather approaches the main islands. The NWS no longer operates at-sea weather stations, so the data generated from remote islands takes on greater importance. The only other station to the northwest is Midway, which reduced their operations to 14 hours daily (0600L to 2000L). However, the twice daily vertical soundings and the primary surface observations are still taken.

Currently, the following data are recorded at Tern Island by the Coast Guard: cloud cover, visibility, temperature, dew point, pressure, wind velocity and direction. Historical records go back to at least 1951. There is presently no automated equipment to record weather data on the island. No vertical profile data are recorded. Data are recorded by the Coast Guard four times daily, or more frequently at special request from the NWS. The data are recorded at no charge to the NWS by agreement with the Coast Guard. The NWS noted that their present investment involves approximately \$2,000 for initial instrumentation plus an estimated \$200 annually in recurring expenses.

Page 2 - National Weather Service

Investment in semi-annual and emergency visits is approximately \$1,000 per year.

The NWS has not conducted other research activities at Tern Island in the past and does not anticipate different future needs. Mr. Harger did note that the NWS did once consider the feasibility of establishing a facility at Tern Island that could obtain vertical profile data, but added that cost considerations were probably responsible for the earlier decision not to pursue this alternative. Although these data would be desirable in the future, cost would again probably be prohibitive. The NWS does not predict that data needs from Tern Island will change in the future unless the capability at Midway changes significantly. Vertical profile data is now being gathered at Midway. Mr. Hirata noted that the Navy is now considering contracting out the weather data gathering activity.

Mr. Harger explained that there are two ways to gather the pertinent data: human or automated. Automated systems that would provide visual data (i.e., cloud cover and visibility) would probably be too complex to consider for Tern Island after the Coast Guard leaves, as they would require frequent technical maintenance. If a management alternative for Tern Island was chosen that did not have people on the island all the time, the NWS would like to establish a simple automated system, without visual data capability. The NWS would prefer to obtain visual data also, but it is not critical to the forecast operation. The weather system that would probably be established at Tern would be the RAMOS system. It is a new design, and the NWS is presently unsure of the frequency of maintenance that

Page 3 - National Weather Service

would be required in a remote station. Mr. Harger estimated that some maintenance would be required every 3-4 months. He also noted that it would be possible to train a caretaker with adequate background in electronics to actually maintain the station. However, in the event that one or more persons were to be on the island all the time anyway, it would be simpler to continue the non-automated monitoring of weather. Mr. Harger noted that the RAMOS system could be powered by a separate solar power unit, or alternatively, it could share power with other facilities.

It was noted that if National Marine Fisheries Service was involved in operation of a permanent research station, the fact that NOAA was a sister agency might make it easier to develop an agreement for data gathering. The NWS would consider nominal payment for continued weather observations, although they are not paying the Coast Guard at this time. The actual process involves only about 15 minutes time, four times during each 24 hour period. If an automated system was established, the NWS would probably share in costs to get an experienced electronics technician to the island to maintain the station periodically. Mr. Hirata did note, however, that irregular maintenance would require that a technician stay on the island longer than the usual 3-4 hour turn-around time on a day trip by charter plane to the island.

The RAMOS station would involve a structure about 4' x 4' at the base, and approximately 20' in height. Most of the recording sensors would be on top of the structure. Mr. Harger noted that two such stations are now working in Hawaii; at Kilauea Point, Kauai, and

Page 4 - National Weather Service

at South Point, Hawaii. Both the stations in the main islands are interrogated for data by telephone line. However, the Tern Island station would require capability for satellite communication to retrieve data.

Mr. Harger noted that there did not appear to be any conflicts between the NWS objectives and any of the other alternatives, with the exception of total abandonment of the island. If the island was abandoned it would involve deterioration of the runway and greater difficulty in access by boat, so maintenance of an automated weather recording facility would be very difficult. Of course, the NWS would prefer an alternative that would involve having people on the island at all times so that an agreement could be worked out for human weather observations.

In summary, the current function of the data gathering capability at Tern Island is to ground truth satellite photos and to verify infrequent observations from ships near the area. The data are "invaluable for the analysis of the strength and movement of storms and for subsequent forecasts for the densely populated islands to the southeast." The data are useful to support all scientific research, future construction programs on the island, ships plying the area, as well as general climate study and daily operational weather analysis and forecasting. It was noted that future improvements in satellite weather data may eventually make such remote stations unnecessary, but it is now impossible to predict when this capability would exist. The data gathered in the remote northwest stations at Tern and Midway are particularly important during bad weather months (roughly September through April).

Page 5 - National Weather Service

It was suggested that we contact Mr. Paul Haraguchi (836-1831) at the airport forecast office regarding historical data for Tern Island. Dr. Ramage, at the Hawaii Institute of Geophysics, was suggested as an important contact to determine if other research objectives for Tern Island may be affected by changes in management of the facility.

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EDUCATION AND LABOR
SUBCOMMITTEES:
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AND VOCATIONAL EDUCATION
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POST OFFICE AND CIVIL SERVICE
SUBCOMMITTEES:
COMPENSATION AND EMPLOYEE
BENEFITS
CIVIL SERVICE

CECIL "CEC" HEFTEL
1ST DISTRICT, HAWAII

Congress of the United States
House of Representatives
Washington, D.C. 20515

April 10, 1979

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DISTRICT OFFICE:
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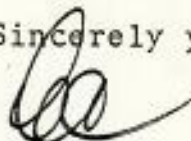
Dr. Edward W. Shallenberger
President, Manta Corporation
272 S. Kalaheo Street
Kailua, Hawaii 96734

Dear Dr. Shallenberger:

Thank you for your invitation to participate in the study of management alternatives for Tern Island, French Frigate Shoals. I regret that I will be unable to be with you for your interview series, but I do look forward to receiving the results of your study.

Thank you again, and best wishes. With warm personal regards and aloha,

Sincerely yours,



CEC HEFTEL
Member of Congress

NAME: E. Alvey Wright
TITLE: Special Assistant to Senator
Daniel Inouye
ADDRESS: PJKK Federal Building
Honolulu, Hawaii 96850

18 April 1979

Mr. Wright serves as Special Assistant to U.S. Senator Daniel Inouye. He is familiar with the Northwest Hawaiian Islands and with the administration of the refuge from his tenure as Head of the State of Hawaii Department of Transportation.

Mr. Wright asked that it be mentioned that he cannot speak for the Senator but is speaking for himself only. Any reference to these remarks should repeat this condition.

Evaluation of alternatives

Research station operated by FWS

Tern Island is just a runway now, and FWS doesn't manage runways.

Research station operated by other agency or jointly with FWS

The State is bound by enough environmental legislature that it could adequately manage the area. The State will not allow any actions that are environmentally unsound. Anything done on Tern Island would be done in accordance with the refuge status. If the State assumes management of Tern Island, it would cooperate with FWS and NMFS in enforcement.

Commercial fisheries support station
unrestricted

Does not advocate/fishing.

Abandonment of facilities

Abandoning the facilities would be a waste. It would be better to sensitively manage them.

Overall response to Tern Island decision

Mr. Wright feels that this study/ ^{may be} a waste of federal funds. There should be no reason to examine management alternatives until the jurisdictional matter is resolved.

He does advocate State management control of Tern Island, as a component of the Northwestern Hawaiian Islands. He does not think the seals and turtles should sway the decision on who should manage the entire leeward chain. There is no need for there to be a "51st State" which requires separate management. Federal law mandates management on the lowest governmental level; i.e. the State of Hawaii.

45-626 Halekou Place
Kaneohe, Hawaii 96744

April 24, 1979

Dr. Edward W. Shallenberger
Manta Corporation
272 South Kalaheo St.
Kailua, Hawaii 96734

Dear Ed:

The following remarks of mine concerning the future use of Tern Island are in addition to my comments made during your interview on March 26, 1979. They are a refinement of the preliminary written comments I gave to you on that date. Please discard my previous draft.

I should emphasize the comments below are my personal opinions and do not reflect the official opinion of the National Marine Fisheries Service.

In general, I believe that Tern Island, French Frigate Shoals, should be left as it is (except for removal of loran tower) for the near future with a caretaker to insure the physical security of the existing plant and to effect preventative maintenance.

For the near future, there should be no development of Tern Island as a fishery base. This statement is made for the following reasons:

1. The tripartite survey of the resources of the NWHI will not be completed until about 1981. One of the rationales for the tripartite survey was that baseline data on the extent of the resources of the NWHI is required prior to any final decisions on the extent and direction of fishery development in the area of the NWHI. It would be premature to commit substantial funds to shoreside fishery development facilities until adequate information is on hand. On the other hand, the future use of Tern Island cannot be put off until every T is crossed and every I is dotted. I suggest an interim period with a moratorium on development to last from July 1979 until July 1980. The interim can be used for assembling available baseline data and for detailed planning efforts which cover various options as to the future use of Tern Island.

2. It is generally conceded that the NWHI, while not untouched by human activities, are in the main mostly an unspoiled area containing numerous resources which are sensitive to man's activities. These include the Hawaiian monk seal, green sea turtle, both on the endangered list, many species of endangered birds, and huge rookeries of sea birds which are needed for the successful prosecution of fisheries throughout the central Pacific.

It would be premature to do anything at this time which might negatively affect these resources before additional baseline data on ecological interactions is in hand, at least in the broad measure. In planning for the development of areas which are sensitive and also controversial, it is prudent to proceed slowly, so that negative interactions can be prevented, rather than having to try to eradicate the results of negative interactions after the fact.

3. It is probable there are reasonable, compatible uses of the NWHI for the development and prosecution of commercial fishing activities as well as the protection of the marine environment, land as well as the sea. If an EIS shows the two concepts (development and environmental protection) to be compatible, it would be most wasteful to have, for example, razed the facilities on Tern Island, only to have to spend additional public monies to rebuild the facilities.

Because of the controversial nature of the use of Tern Island, future planning efforts should include a working group which has as its primary function the preparation of an environmental impact statement (not EIA) covering future uses of Tern Island. Such a working group should reflect the broad concerns of the community at large and should include in its membership advocates of both development and environmental protection, legal specialists, and Federal and State resource surveyors, as well as the general public in its make up. Planning for the creation of such a group should proceed immediately. I may be able to provide some suggestions as to how such a group might be created, based on planning NMFS has previously done in case a Federal environmental impact statement was needed to cover the development of a superport in the Palau Islands. I realize this approach is different than the normal procedure where one agency has the lead, but under the circumstances this approach should be considered.

The use of the Tern Island airstrip and the use of Tern Island for law enforcement purposes deserve further comment.

Law enforcement. Tern Island should have a minimum of support facilities for the stationing of a law enforcement vessel (e.g., 60 to 65 ft. long) which will soon be needed to enforce State and Federal regulations in the Northwestern Hawaiian Islands. At present the USCG overflies the NWHI about every 14 days and even if a patrol plane should spot a violator, there would probably be a 2 or 3-day lag time for a USCG surface vessel to arrive on scene. The presence of an enforcement officer and vessel, which could be used to patrol the entire chain, at Tern Island, would serve as a powerful deterrent to any incursions which might be attempted by transiting vessels, or fishermen operating in the vicinity. It could also serve a useful purpose for emergency aid to seamen in distress. The planning by Federal and State agencies for such a vessel should address the costs, manning levels, infrastructure support needs, probable sources of funding, and include a plan to obtain the needed funding and manning for the operation of the vessel. Shoreside facilities should include dormitory, galley,

and office space for the vessel's crew, plus an office for any Federal or State law enforcement officers who would be operating in concert with the vessel. In my opinion, a law enforcement presence is a very high priority.

Airstrip. The airstrip should be kept in good enough condition to be used as an emergency facility for medical evacuation of fishermen, or even seamen on transiting merchant ships, in the case of need. It could also be utilized to fly in parts (major, not minor) needed by fishing vessels which suffer mechanical emergencies.

Sincerely yours,



Robert T. B. Iversen

Karl W. Kenyon
U. S. Fish & Wildlife Service
11990 Lakeside Place NE
Seattle, Washington 98125

8 May 1979

Description of person's experience/responsibility pertinent to Tern Island decision

Mr. Kenyon has worked on research on the Hawaiian monk seal at Tern Island for 25 years. He has as much experience and expertise as anyone has ever had with the monk seal. He has made many, many trips to Tern Island and French Frigate Shoals.

Overall response to Tern Island decision

Mr. Kenyon personally favors abandonment of the Tern Island facility, but feels that continued FWS protection is necessary. Because of possible negative impacts from illegal human activity in the area it would not be feasible to walk away and lock up the facility.

Whether there is fishing activity in the area, research conducted in the area, or other activities, there needs to be strict control. However, Mr. Kenyon would prefer to see all of FFS turned back to a refuge. He would prefer to see Midway used as a base for any tourism, research or fishing being done - with the exception of such research that can not be done anywhere else.

Monk seals are particularly sensitive to frequent human activity, and mothers with pups are very, very sensitive. Except while they have pups, monk seals can tolerate a certain amount of low-level harassment, but daily visits, for example, would be too much. Monk seals and humans do not get along well. Midway Island provides an example: when people came, the monk seals left. When East^{er} Island was kept closed the monk seals used it; when it was opened to people, the seals left. On Kure Island, when the Coast Guard came the monk seals left the desirable areas and moved to the sandbar, to avoid human activity.

Mr. Kenyon is not against fishing per se, but feels that any fishing in the area would be a wedge, opening up for more intense activity. Another problem is "glass ball-itis", the desire to collect balls. This can be a problem with researchers as much as with others.

NAME: Honorable Jean S. King
TITLE: Lt. Governor
AGENCY: State of Hawaii
ADDRESS: State Capitol
Honolulu, Hawaii 96813

4 April 1979

Lt. Governor King states that she favors the opportunity to see expanded commercial fishing activity, but recognizes the need for adequate controls.

NAME: Hideto Kono 11 April 1979
TITLE: Director
AGENCY: State of Hawaii Department of Planning
and Economic Development
ADDRESS: P. O. Box 2359
Honolulu, Hawaii 96813

(Also present was Mr. Wayne Weatherford of the DPED staff)
Description of person's experience/responsibility pertinent to
Tern Island decision

Mr. Kono has been Director of the Department of Planning and Economic Development of the State of Hawaii for several years, and as such is extremely aware of the economic needs of the State and people of Hawaii. He is familiar with the area and with both the research and fishing communities of the State.

Mr. Kono, with Governor Ariyoshi, has been carrying on dialogue and correspondence with the Secretary of the Interior regarding the disposition of Tern Island.

Evaluation of alternatives

Research station operated by FWS

Not in favor of this option.

Research station operated by other agency or jointly with FWS

To the extent that the federal and state governments feel it important to study the species which live in the area, there should be research done. DLNR would be the appropriate agency to lead such studies. The ongoing tripartite study should give answers to what the research needs are.

There should just be a small research laboratory. There is no need for a large station. The area is too fragile to support more than a small group of researchers. Larger research projects can be done based on Oahu.

Commercial fisheries support station

Tern Island could serve as a base for bottom fishing, pole and line fishing, as well as trolling. It needs to be determined

whether there are resources there to contribute to Hawaii's benefit from the sea. It should be possible to pursue this activity in cooperation with the federal government.

Tern Island could be of more use to Hawaii boats than is Midway. The facilities should be kept to a minimum because of the economics. It should be structured so that fishing pays for itself.

Bait: that problem actually is one for future consideration, but it is possible that bait can be grown to meet the needs of the industry. It might better be grown in the main islands because of the logistics of support and economics. However, bait might possibly be stored there, grown on Molokai and shipped up on empty boats going up to fish.

Joint research/commercial fisheries support station

The FWS tends to have a more narrow point of view than the state, which may cause problems in a joint program. The state has as much concern for impact on the environment as does the federal government, so the state will not allow any actions which will be damaging. Controls are necessary, but should be jointly administered and not overly stringent.

The federal government and the DLNR should establish the controls together at the time of establishment of jurisdiction.

Abandonment of facilities

Mr. Kono and the Governor talked to the Secretary of the Interior in Washington and asked that the island not be cleared or abandoned until the jurisdictional dispute is settled, and have received a letter from the Secretary assuring that this will not occur.

Other options

Not in favor of tours or diving expeditions.

Overall response to Tern Island decision

In order to broaden Hawaii's economic base, now based largely on tourism and defense, the expansion of the commercial fishing industry has become important. This becomes a major consideration with the establishment of the 200 mile limit. The opportunities in the Leewards need to be maximized. The state would advocate mixed use of the Leeward Islands when possible.

The situation has reached a point where the environmentalists and the economic development people need to have dialogue. Tern Island should be able to accomodate both interests. Both need to respond to the others needs and responsibilities in order to achieve a good balance. DPED will do all it can to assist in this development.