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OFF. OF ENVIRONMENTAL  
QUALITY CONTROL

Mr. Owen Miyamoto  
Airports Administrator  
Department of Transportation  
Honolulu International Airport  
Honolulu, Hawaii 96819

Dear Mr. Miyamoto:

Based upon the recommendation of the Office of Environmental Quality Control, I am pleased to accept the Final Supplemental Environmental Impact Statement for the Interim Helicopter Facility, Lihue Airport Complex, Lihue, Kauai, as satisfactory fulfillment of the requirements of Chapter 343, Hawaii Revised Statutes. This environmental impact statement will be a useful tool in the process of deciding whether the action described therein should be allowed to proceed. My acceptance of that statement is an affirmation of the adequacy of that statement under the applicable laws and does not constitute an endorsement of the proposed action.

When the decision is made regarding the proposed action itself, I expect the proposing agency to weigh carefully whether the societal benefits justify the environmental impacts which will likely occur. These impacts are adequately described in the statement, and, together with the comments made by reviewers, provide a useful analysis of the proposed action.

With kindest regards,

Sincerely,



JOHN WAIHEE

✓cc: Office of Environmental Quality Control

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FINAL  
Supplemental Environmental  
Impact Statement

FEBRUARY 1989

FOR

INTERIM HELICOPTER FACILITY  
LIHUE AIRPORT COMPLEX  
LIHUE, KAUAI, HAWAII

PREPARED FOR:  
AIRPORTS DIVISION  
DEPARTMENT OF TRANSPORTATION  
STATE OF HAWAII



Office of Environmental Quality Control  
235 S. Beretania #702  
Honolulu HI 96813  
586-4185

DATE DUE

Nov. 30, 2001 : \_\_\_\_\_

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AIRPORTS DIVISION  
DEPARTMENT OF TRANSPORTATION  
STATE OF HAWAII

This Environmental Document is Submitted  
Pursuant to Chapter 343, HRS

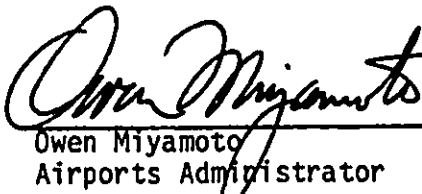
SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT  
INTERIM HELICOPTER FACILITY  
LIHUE AIRPORT COMPLEX  
LIHUE, KAUAI, HAWAII  
TMK: Fourth Division 3-5-1: Portion 8, 13

PROPOSING AGENCY:

Airports Division  
Department of Transportation  
Honolulu International Airport  
Honolulu, Hawaii 96819

ACCEPTING AGENCY:

Governor, State of Hawaii

 1/31/89  
Owen Miyamoto Date  
Airports Administrator

Prepared by:

Akinaka & Associates, Ltd.  
250 North Beretania St., Suite 300  
Honolulu, Hawaii 96817-4716

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- C. Comments to Notice of Determination/Environmental Assessment
- D. Comments and Responses to Draft Supplemental Environmental Impact Statement

SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

JANUARY 1989

- PROJECT:** Interim Helicopter Facility  
Lihue Airport Complex  
State Project No. AK1046-14
- PRIOR DOCUMENTS:**
1. "Environmental Impact Statement Lihue Airport Master Plan Study";  
Proposed by - Department of Transportation;  
Accepted by the Governor, State of Hawaii;  
April 26, 1977
  2. "Final Environmental Impact Statement for Recommended Development Projects";  
Lihue Airport, Kauai County;  
Prepared by - Federal Aviation Administration,  
Department of Transportation;  
Approved by the Regional Director;  
February 14, 1979
- LOCATION:** Lihue District, County of Kauai  
Island of Kauai, State of Hawaii
- PROPOSING AGENCY:** Airports Division  
Department of Transportation  
State of Hawaii
- ACCEPTING AUTHORITY:** Governor, State of Hawaii
- CONSULTANTS:**
1. Akinaka & Associates, Ltd.  
250 No. Beretania Street, Suite 300  
Honolulu, Hawaii 96817
  2. Y. Ebisu & Associates  
426 12th Avenue, Room 305  
Honolulu, Hawaii 96816



SECTION 1. SUMMARY

PROPOSED PROJECT:

Interim Helicopter Facility, Lihue Airport  
Complex

PROPOSING AGENCY:

Airports Division  
Department of Transportation  
State of Hawaii

PROJECT LOCATION:

TMK: Fourth Division 3-5-1:Portion 8, 13  
Lihue, Kauai, Hawaii

PROJECT IDENTIFICATION:

State Project No. AK1046-14

PROJECT DESCRIPTION:

The project will replace the existing helicopter operations area at Lihue Airport, Kauai, Hawaii. The interim helicopter facility will be constructed on existing unused airport property. This interim facility will allow continuation of the development of Lihue Airport and is intended for other uses upon completion of the inland helicopter facility.

The intent of the project is to replace the existing operational area in-kind. Twenty 62.5-foot square asphalt concrete helipads will be constructed for passenger boarding and parking. Two landing/takeoff pads will be used for arrivals and departures. A grassed taxi route will connect the helipads with the landing/takeoff pads. Three fueling pads will be constructed for fuel truck operations.

## SECTION 2. INTRODUCTION

### 2.1 GENERAL

The Lihue Airport Complex is located in Lihue, Kauai, Hawaii (EXHIBIT 2.1: PROJECT LOCATION & VICINITY MAP). Lihue is the seat of the County of Kauai which consists of the islands of Kauai and Niihau. Within the complex, it is proposed to construct an interim helicopter facility, (EXHIBIT 2.2: SITE MAP) which will be owned and administered by the State of Hawaii, Department of Transportation, Airports Division (DOTA). The Federal Aviation Administration (FAA) will control helicopter ingress/egress at the facility.

The proposed project will be constructed on Lihue Airport property as a relocation for the present helicopter operations area. It will be located on approximately 18 acres of State airport lands that are now mainly vacant.

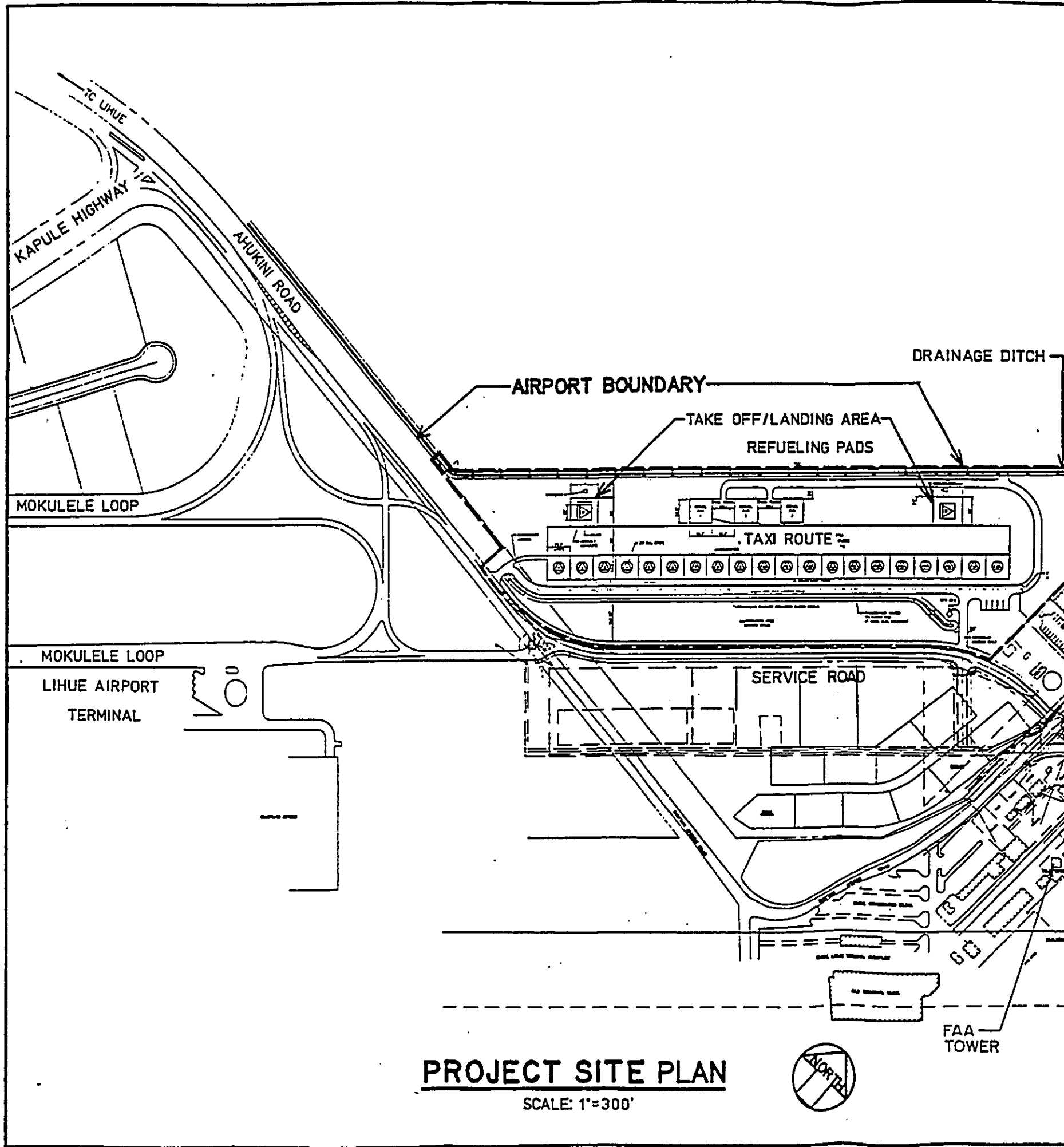
The facility will provide two landing pads (Final Approach/Takeoff Area) for arrival and departures. A grass surfaced taxi route will lead to twenty 62.5-foot square asphalt concrete passenger boarding pads. When completed, the proposed project will provide helicopter operators with facilities similar to the existing operational area.

This project is a phase of the airport development as established by the 1975 - 1995 Lihue Airport Master Plan Report and its various updates, most recent being the Lihue Airport Development Plan Update: April 1986 (REFERENCE 1). The report established the necessity of coordinated helicopter facilities and the development plan provided its general location.

An environmental impact statement (EIS) for the Lihue Airport Master Plan was prepared by the Airports Division, State Department of Transportation and accepted by the Governor, State of Hawaii in April 1977. Also, an EIS for the recommended projects at the Lihue Airport was prepared by the FAA and approved by the Regional Director in February 1977. These documents addressed the developments expected at Lihue Airport during 1975 - 1995. The helicopter facility is part of the Phase III improvements of the development program.

A supplemental statement is warranted as the scope of the action has been substantially increased. Unchanged material is incorporated by reference to the original EIS (hereinafter called the "accepted EIS" or "approved EIS"). The determination that a supplement EIS is required for the project was concurred by the Office of Environmental Quality Control (OEQC). Notice of the determination and the preparation of the supplemental EIS was published in the May 8, 1987 OEQC Bulletin.

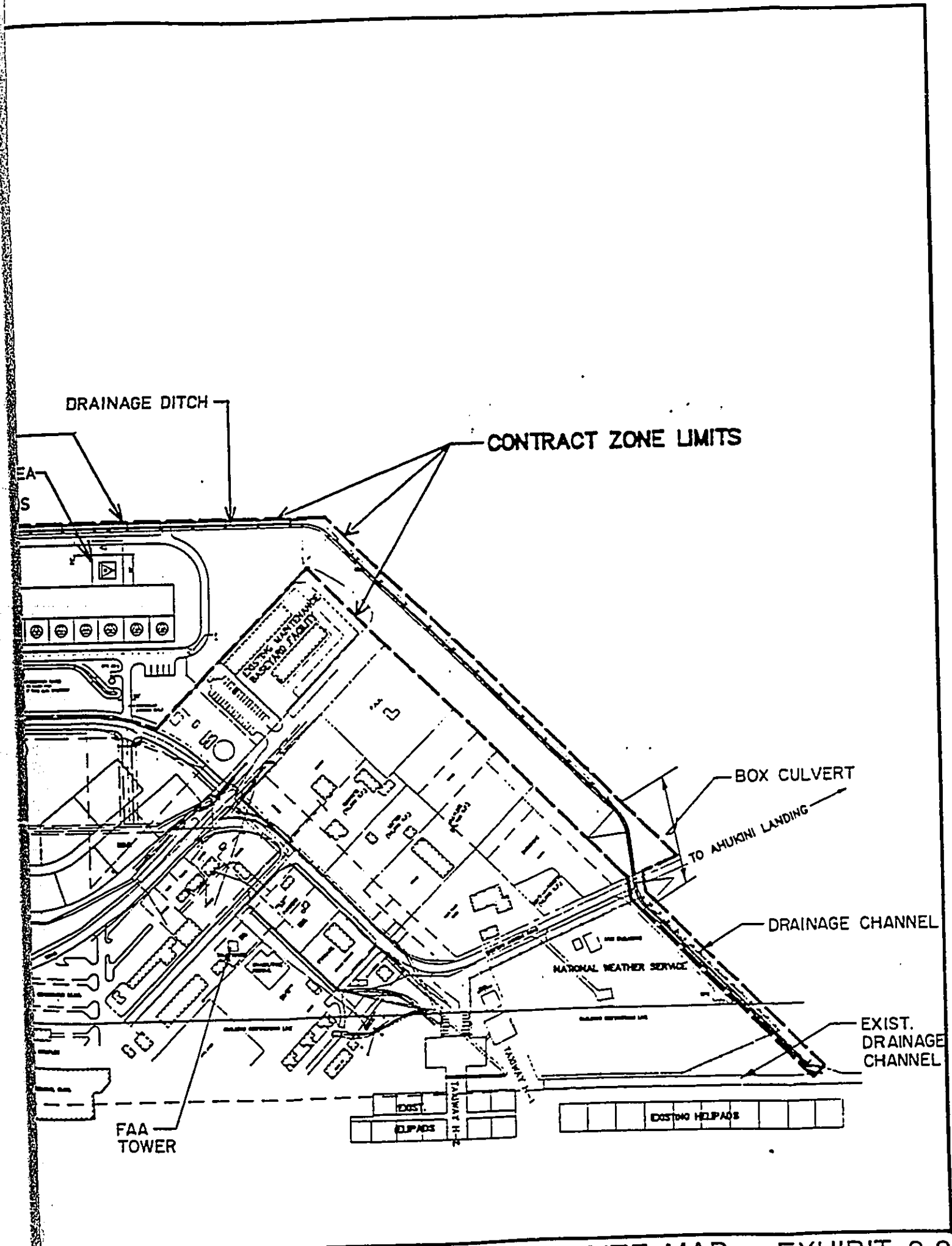




**PROJECT SITE PLAN**

SCALE: 1"=300'





SITE MAP EXHIBIT 2.2

## 2.2 DEFINITION AND REGULATIONS

The proposed interim helicopter facility is considered a public use heliport which is an identifiable area of land, water, or structure, including any building or facilities thereon, used or intended to be used for the landing and takeoff of helicopters. As a public use heliport, it is available for the takeoff or landing of helicopters without prior authorization being required to use the facility.

Regulations within the following chapters of the Hawaii Administrative Rules, "Title 19 - Department of Transportation, Subtitle 2 - Airports Division" control public airports in Hawaii:

1. Chapter 11 of Title 19, Administrative Rules, entitled "Airport Site Approval, Airport Liscensing, and Airport Liscense Renewal" implementing S261-12, Hawaii Revised Statutes.
2. Chapter 13 of Title 19, Administrative Rules, entitled "Aircraft Operations at Public Airports," implementing S261-12, Hawaii Revised Statutes.
3. Chapter 14 of Title 19, Administrative Rules, entitled "Controls for Public Areas at Public Airports," implementing S261-12, Hawaii Revised Statutes.
4. Chapter 15 of Title 19, Administrative Rules, entitled "Operation of Motor Vehicles at Public Airports," implementing S261-12, Hawaii Revised Statutes.

Administrative rules will be developed to implement the amended rules within Act 397 of the Fourteenth Legislature 1988, Sessions Laws of Hawaii (SLH). The amended rules require that the Director of the Department of Transportation adopt regulations for tour aircraft operations at state controlled airports by permit. Act 397 requires that the permit include:

1. Aircraft identification (type).
2. Schedule of operations.
3. Assessment of the impact to the airport & surrounding area.
4. Routes and altitudes of aerial tours.
5. Noise abatement procedures in vicinity of noise sensitive areas.

6. Penalties for failure to comply with permit conditions.
7. Annual renewal of permits.

Additionally, ACT 397 requires the Department of Transportation to adopt a helicopter master plan for each state airport. An advisory committee for each county shall advise the director in such matters within the master plan as:

1. Extent and timing of helicopter operations and facilities.
2. Maximum number of helicopters at the airport.
3. Extent of emergency services, maintenance, and operations at each airport.
4. Assessment of impact on the surrounding areas.

The Federal Government, through the FAA, exercises full control over the routes and altitudes of helicopters in operation. This field has been federally preempted and there is no room for state or local regulations. Parts 91 and 135 of Title 14 (Federal Aviation Regulations), Code of Federal Regulations are the primary rules for controlling helicopter operations. The local governments power over helicopter operations lies mainly in the area of land use controls as discussed in the following sections.

### 2.3 HISTORIC OVERVIEW

The need for a separate helicopter facility was identified in the 1975-1995 master plan. Separation of fixed wing and rotary aircraft is a desired operational feature at airports due to their relative flight speeds. The need for the helicopter facility was not a priority item during the 1970's due to the low volume of helicopter traffic at Lihue Airport. The low volume was due to the level of tourism, the relative unknown beauty of Kauai, and the existence of private heliports at Kauai Surf (Lihue), Poipu Beach (Poipu), and Coconut Plantation (Wailua).

Tourism on Kauai increased dramatically in the 1980's due to promotion of the islands beauty and tranquility. The "flight seeing" industry expanded at an even greater rate since the islands' natural beauty is most accessible by helicopter tours. In 1980 there were only three helicopter operators, in 1988 fifteen operators transported approximately 250,000 flightseers over the pristine beaches and canyons.

The large number of tour flights have caused a congestion in the existing helicopter operational area and developed into an

unhealthy mix of fixed wing and rotary aircraft. The congestion and unhealthy mix emphasized the need to implement the new helicopter facility phase of the Lihue Airport development plan.

A heliport including staging and building areas, passenger terminal, underground fueling, and vehicular parking lot was presented to the public during a hearing on June 16, 1988 (See APPENDIX B). Testimonies were greatly in favor of an inland facility away from the Lihue Airport and relief from noise and overflights in the area surrounding the airport. During the hearing, petitions from 267 citizens were received urging the State to close Lihue Airport to tour helicopter operations and permit the construction of the inland facility. The interim facility concept was adopted to allow continuation of the airport development and not hinder the private inland facility.

#### 2.4 PLANNING OVERVIEW

The interim helicopter facility is an integral item within the Lihue Airport development scheme. It will relocate the existing helicopter operations away from Taxiway 'A' allowing the taxiway to be realigned as proposed in the current development plan. This development plan is being updated based on a forecast of air traffic nearly doubling over the next 20 years. There were 2.27 million passengers in 1985 and the forecast is 4.4 million passengers in 2005.

In consideration of the flight congestion and the airport development schemes it is imperative that the helicopters be relocated from the present operations area. Plans to provide a heliport including ground support areas, underground fueling, and vehicular parkings were abandoned in favor of the interim facility upon communication/consultation with the Kauai public, helicopter operators and county government.

Helicopter operations are under examination by several organizations as follows:

1. Airports Division , State Department of Transportation is preparing the Hawaii State Helicopter System Plan (HSHSP) which includes examining the issues of helicopter noise impacts and developing recommendations for needed State policies and regulatory issues. The submittal of the draft HSHSP to the Legislature is expected in January 1989.
2. Airports Division , State Department of Transportation is preparing the 1988 update of the Lihue Airport Master Plan and the FAA Part 150 Noise Compatibility Study. The master plan update will include the proposed facility and long range potential expansion. The noise study will not separate helicopter generated effects from the overall airport noise system.



3. State Helicopter and Tour Aircraft Advisory Council will set-up rules which they feel most of the helicopter operators are committed to comply with. The council will monitor flights on a regular basis. An arbitration panel has been named for resolution of conflicts between the helicopter tour industry and the public.
4. Kauai County helicopter operators have developed flightseeing routes that have the minimum impacts upon the community yet provide scenic tours and safe operations. Several operators are seeking a private inland facility for a new base of operations.
5. Most Kauai helicopter operators have joined to develop a private heliport inland from Lihue. The inland site will be complete with all necessary conveniences as compared with the interim facility which will be a bare minimum heliport. A major landowner has offered several sites for consideration. Upon completion of the inland site, helicopter operations at Lihue Airport will be minimal. Flightseeing helicopter operations will be relocated to the inland facility.
6. Helicopter - Community Relations Planning Board has determined the impact of helicopter tours on the community, the environment and other potentially affected sectors. They have developed recommendations for solutions concerning the issues including the rights of both the tour industry and of the citizen as follows:
  - a. Designate areas to be avoided or provided special treatment by tour helicopters by categories.
    - 1) "Avoidance Areas" should be avoided at any altitude.
    - 2) "Special Areas" should be overflown at minimum altitudes.
    - 3) "Coastal Areas" should be flown at 1/4 to 1/2 miles offshore.
  - b. Establish inland heliport at suitable site.
    - 1) Build and operate under County, State and Federal regulations.
    - 2) Restrict number of pads and lease lots.
    - 3) Limit hours of operation, type of aircraft and noise generation.

- 4) Eliminate tour operations out of Lihue and Port Allen airports.
- c. Actions by Governor John Waihee, State of Hawaii
- 1) Petition the Federal Aviation Administration requesting a "Special Rule" for Hawaii to designate and enforce the Avoidance Areas.
  - 2) Include the Avoidance Areas in the administration rules of SB #2681 (helicopter master plan requirements of Act 397, 14th Legislature 1988).
  - 3) Authorize a study of Na Pali Coast as a recreation area and develop a long-range management plan.
- d. Appoint a formal helicopter community relation board for Kauai.
- 1) Comprised of members from the industry, community and relevant organizations appointed by the county.
  - 2) Develop plans and guidelines to improve relations of the helicopter industry and community.
- e. Conduct a study of the tour aircraft industry to develop recommendations for the County General Plan.
- 1) Address with existing sites and problems as well as future needs and proliferation.
  - 2) Develop plans limiting expansion of heliports and/or helistop on Kauai.

Requirements to initiate a helicopter master plan and an advisory committee are included in Act 397 of the Fourteenth Legislature 1988, SLH (approved by the Governor on June 17, 1988). A helicopter master plan must be developed and implemented for each state controlled airport. It is an extension of the airport development plans including identical items as:

1. Helicopter operations
2. Helicopter facilities development
3. Emergency services
4. Airport operations and maintenance

5. Assessment of impact to the surrounding areas.
6. Advisory committee consisting of technical and community representatives.

The extension of the development plans is to determine the maximum number of helicopters that can be supported at each state airport. Presently, this determination is the responsibility of the Director of Transportation and the Federal Aviation Administration. The master plan will be an appendix of the HSHSP and draft submittal to the Legislature is expected in January 1989.

## SECTION 3. DESCRIPTION OF PROPOSED PROJECT

### 3.1 PROJECT LOCATION

Lihue Airport is located on the southeastern coast of the Island of Kauai, Hawaii. Kauai is the northernmost of the major islands and the fourth largest island in the State of Hawaii. It is 33 miles long and 25 miles wide with a land area of 550 square miles. Kauai is commonly referred to as the Garden Island because of its lush vegetation and scenic mountains and valleys.

The airport is approximately 1 mile east of the town of Lihue which is the seat of the county government. Lihue is also the center of major economic activities for the county with a resident population of approximately 4,000 people.

### 3.2 DESCRIPTION OF PROPOSED ACTION

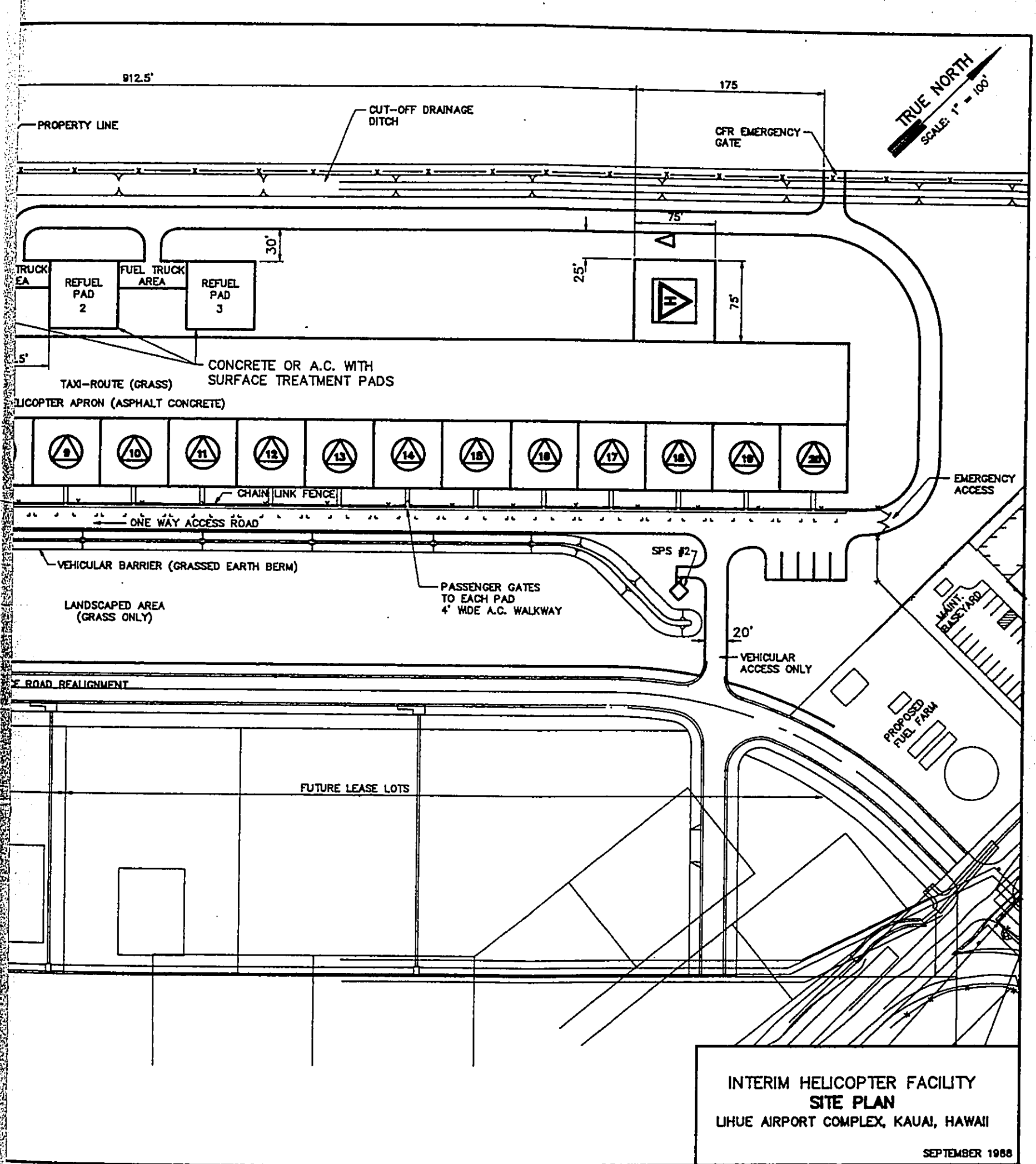
The facility, See EXHIBIT 3.1: HELICOPTER FACILITY PLAN will conform to the master plan for development of the airport complex. Plans for the facility has been revised many times to address concerns of the administering agencies and expected users. The basic design will be in accordance to the FAA's advisory circulars on Heliport Design and the final decision on safety aspects will be by the FAA's flight standards office.

Helicopters using the facility will arrive and depart from one of two landing pads. Alignment of the flight paths matches the existing conditions. Each landing pad will consist of a 75 foot square area centered upon a 40' X 40' asphalt concrete surface with helicopter landing markings. The aircraft will follow a taxi route to one of twenty 62.5-foot square passenger boarding pads. The landing pad perimeter and the taxi route will be grass surfaced with perimeter concrete markers. Lighting for night operations is not included in this project.

The passenger boarding pads will be constructed of asphalt concrete. Three pads located along the taxi route opposite the parking area will be designated for truck refueling. The twenty pads may be assigned through lease agreements. Rules and regulation must be developed prior to assignments. Four foot wide walkways will provide passenger access to the parking pads from the vehicular access road.

The common access road will service all the helicopter parking pads as shown on EXHIBIT 3.2: TYPICAL SITE SECTION. Traffic will be one-way on the 20 foot wide asphalt pavement. Parking will be provided along the common access road. Each parking pad will be

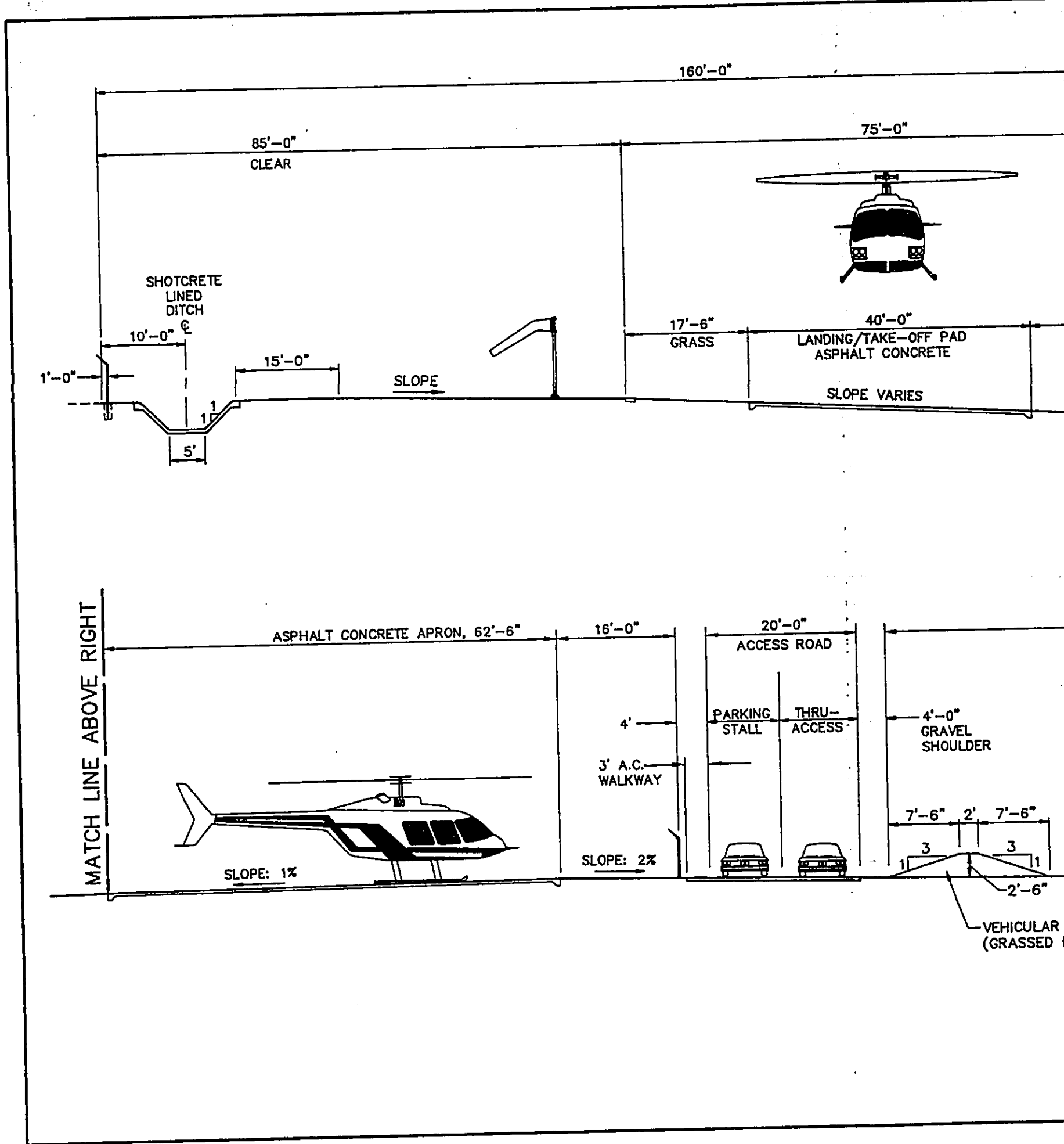




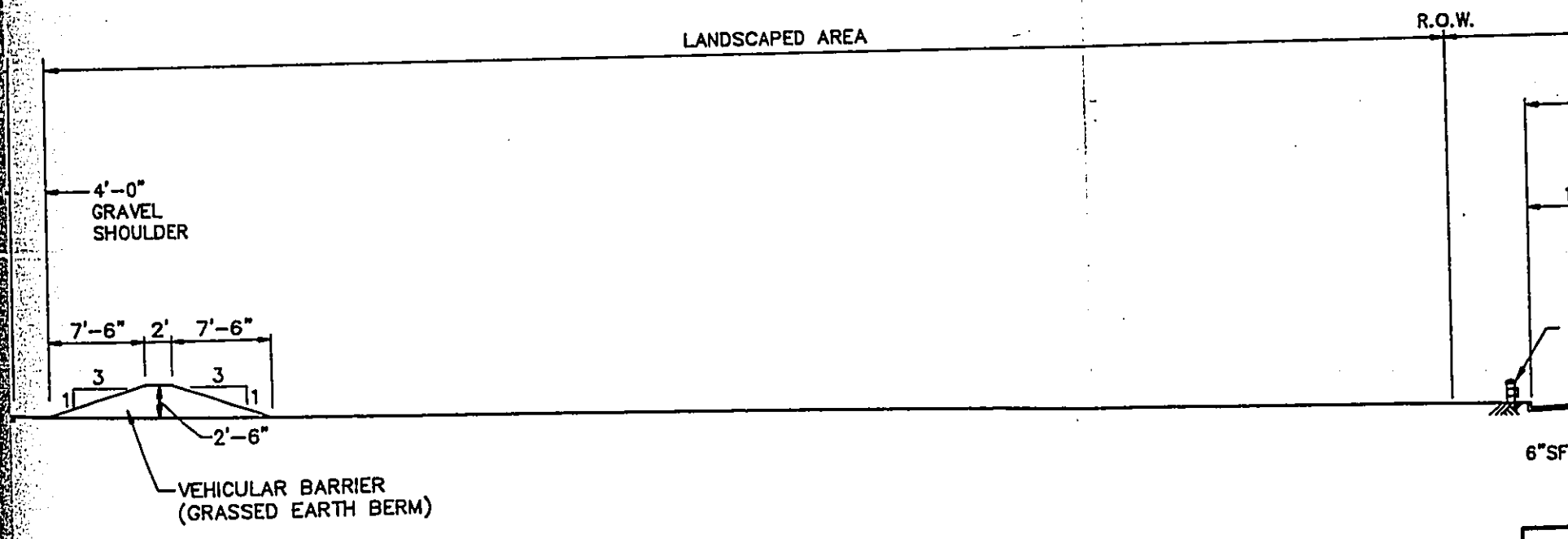
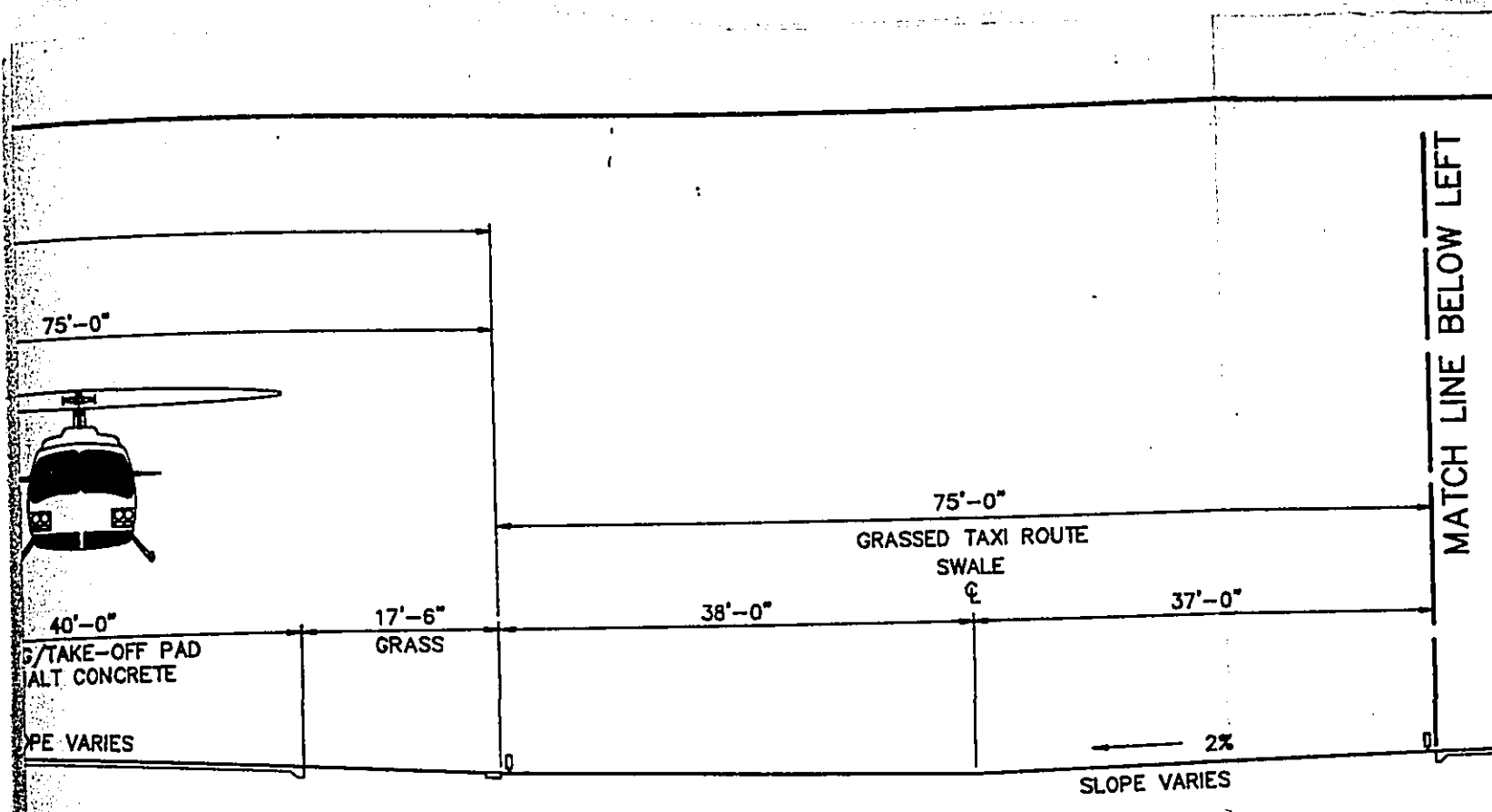
**INTERIM HELICOPTER FACILITY  
SITE PLAN**  
LIHUE AIRPORT COMPLEX, KAUAI, HAWAII

SEPTEMBER 1988

EXHIBIT 3.1



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 SCALE: 1" = 1'-0" (REPORT)  
 DATE: 09/23/88



**TYPICAL SITE SECTION**  
NOT TO SCALE



FILE: 33P  
SCALE: 1" = 1'-0" (REPORT)  
DATE: 09/23/88

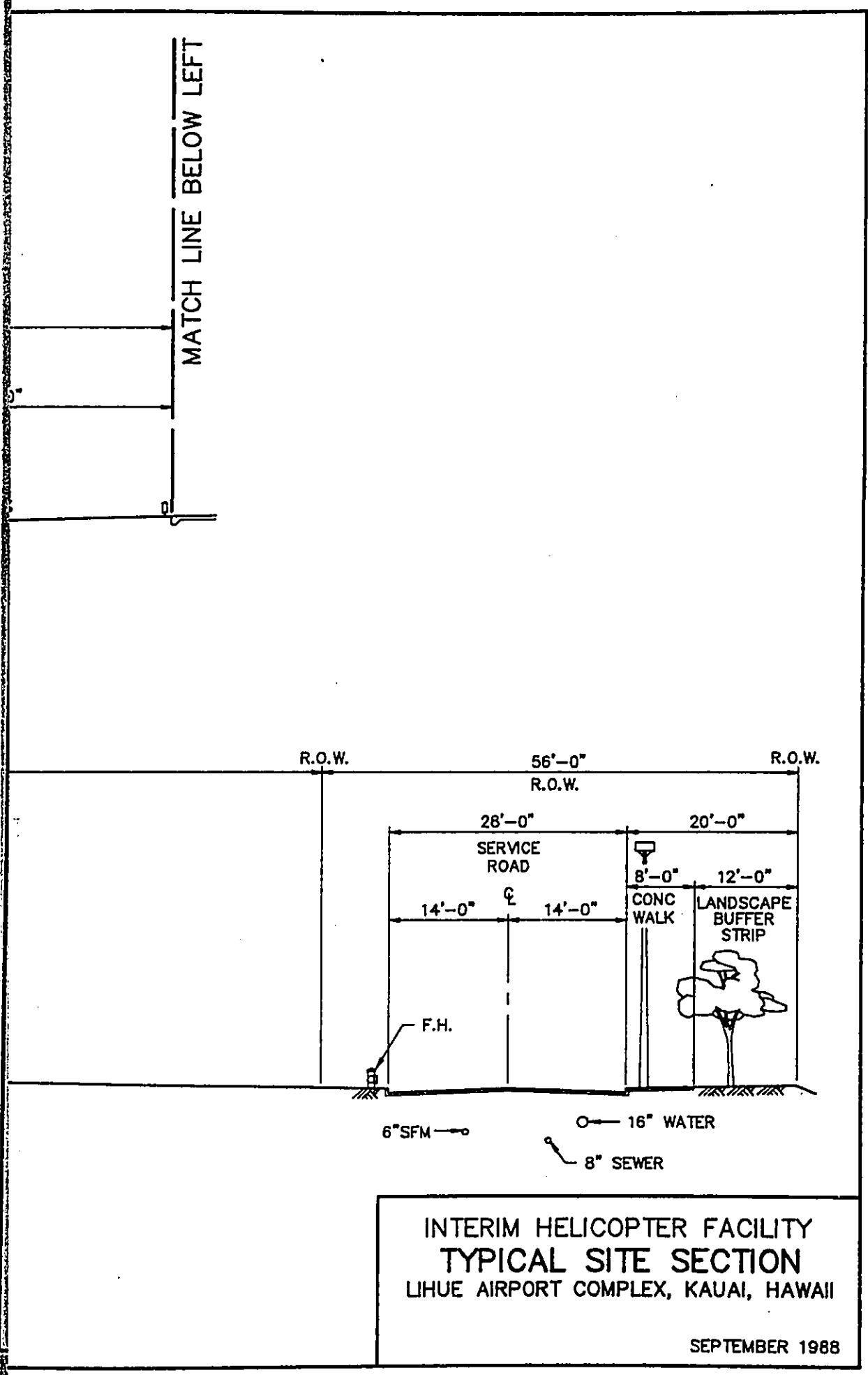


EXHIBIT 3.2

fronted by two vehicular parking spaces. A three-foot wide asphalt concrete walkway will be the pedestrian route along the access roadway.

Landscaping will be concentrated between the common access road and the present service road. Only ground cover or low shrubs will be considered for the landscaping scheme. Grassing of the taxi route and open space within the heliport constitutes the remaining landscaping expected within the project.

### 3.3 GOALS AND OBJECTIVES

Construction of the interim helicopter facility implements one component of the Lihue Airport Development Plan Update and completes a phase of the Lihue Airport Master Plan. Upon completion of the helicopter facility, the Lihue Airport will approach the goals established in the Master Plan Report.

The objectives of the new helicopter facility are:

1. Implement a component of the Lihue Airport Development Plan Update.
2. Increase the safety aspects of the airport by providing a facility that separates fixed wing from rotary aircraft.
3. Allow for the realignment of Taxiway 'A' by relocating the helicopter operations away from the taxiway obstacle-free zone.
4. Provide a minimum helicopter facility that conforms to the FAA advisory circular on heliport design. Eliminate the present traffic congestion at the existing helicopter operations area.
5. Consolidate the helicopter operations and provide a facility that can serve the existing operators, to the extent feasible.
6. Occupy a new operational area in the shortest time possible to reduce the period of congested conditions.

### 3.4 PHASING AND FUNDING

The interim helicopter facility is but one phase to complete the Lihue Airport Complex as envisioned by the master plan. The present Lihue Airport Master Plan Update includes a second phase for the helicopter facility. It is expected that the 1988 update of the master plan will not include separate helicopter facilities

at Lihue Airport since flightseeing operations will be relocated to the inland heliport.

This project will be financed by the State Department of Transportation. The State funding will be obtained from the Airport Revenue Bond Fund:

Sitework:	\$ 0.66 million
Helipads:	\$ 0.36 million
Drainage:	\$ 0.47 million
Roadway/Parking:	\$ 0.29 million
Landscaping:	\$ 0.32 million
Utilities:	\$ 0.02 million
Fencing:	\$ 0.13 million
Miscellaneous:	\$ 0.28 million
Sub Total:	\$ 2.53 million
Administration/Inspection:	\$ 0.18 million
Engineering/Surveying:	\$ 0.19 million
TOTAL:	<u>\$ 2.90 million</u>

## SECTION 4. EXISTING ENVIRONMENT

### 4.1 EXISTING FACILITIES

The existing helicopter operations are conducted on the north-easterly area of the airport. The area is shown on EXHIBIT 4.1: EXISTING OPERATIONAL AREA between Taxiway 'A' and Ahukini Road in vicinity of the FAA control tower and the Weather Bureau facility.

Based on the Airport Tenant Map and the Property Detail listings, (see PROPERTY DETAIL - LIHUE AIRPORT), there are 23 existing helipads for operator usage. Two of the pads are used exclusively for refueling by tanker trucks. Some of these pads (northern area) were constructed with private funds following development plans by the Airports Division. In addition to the helipads, three gates are available for passenger loading/unloading and takeoff/landing. Maintenance and administration facilities are scattered through the area as shown on EXHIBIT 4.1. Because of the proposed realignment of Taxiway 'A', the congested activities and the unhealthy mix of aircraft, the helicopter operations will be relocated 1900' westerly of the existing operational area.

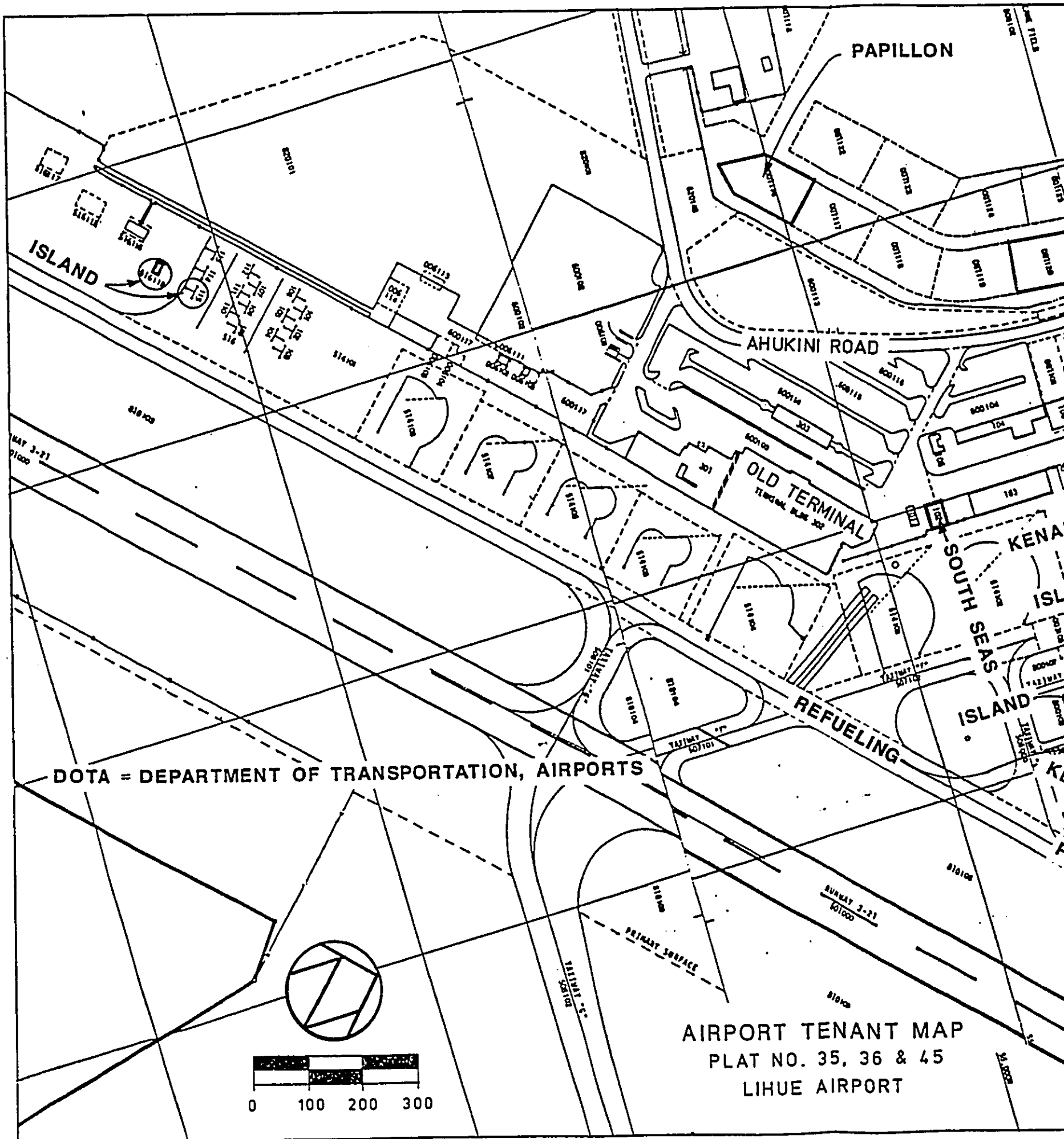
### 4.2 GEOLOGY

The geology of the area is described in the approved EIS. The Lihue Airport site is located on lava flows of the Koloa Volcanic series that erupted 2 million to 6 million years ago. The Koloa Volcanic Series consist of materials that are mostly dense to moderately dense. Lava flows are pahoehoe and aa, the latter being more abundant.

### 4.3 SOILS

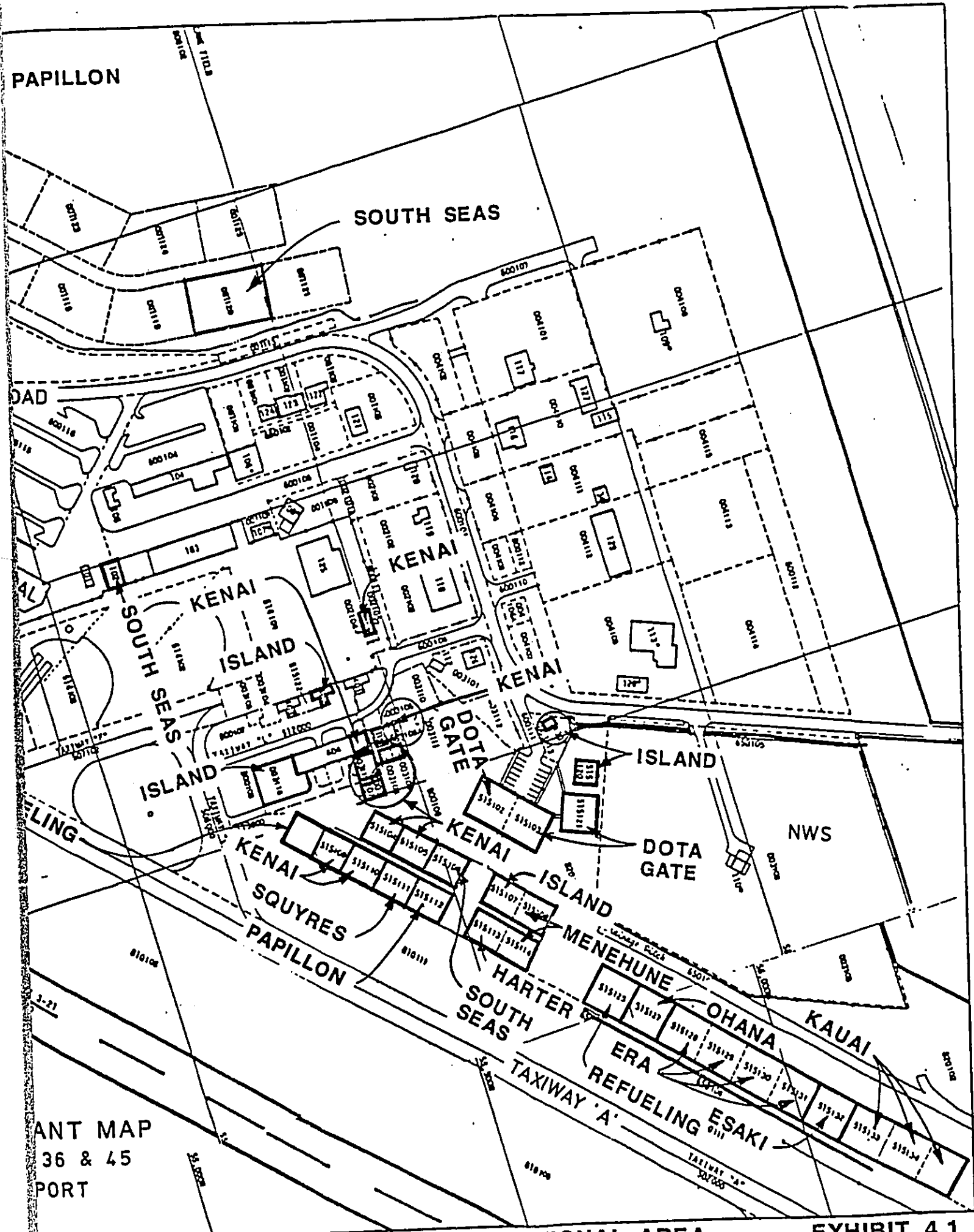
The soils at the project site is described in the approved EIS. The predominant soil covering the area is classified as Lihue silty clay. Test borings for the adjacent service road confirmed the existence of the silty clay. Laboratory test results conducted for the service road are:

1. CBR Values: 25 - 32%
2. Bearing Value: 4,000 lbs/in<sup>2</sup>
3. Allowable coefficient of friction: 0.4
4. Stable slope gradients: 2:1



DOTA = DEPARTMENT OF TRANSPORTATION, AIRPORTS

AIRPORT TENANT MAP  
PLAT NO. 35, 36 & 45  
LIHUE AIRPORT



PAPILLON

SOUTH SEAS

KENAI

KENAI

ISLAND

KENAI

ISLAND

NWS

DOTA GATE

KENAI

ISLAND

KENAI

SQUYRES

PAPILLON

MENEHUNE

KENAI

HARTER

SOUTH SEAS

OHANA

KAUAI

ERA

REFUELING

ESAKI

TAXIWAY 'A'

EXISTING OPERATIONAL AREA

EXHIBIT 4.1

PROPERTY DETAIL - LIHUE AIRPORT  
DEPARTMENT OF TRANSPORTATION, AIRPORTS  
REPORT NO. DCPPR51R, 9/30/88

I.D. NO	TENANT	AREA (SF)	START
001-116	Papillon Helicopters,Ltd	12,420	12/84
001-120	South Sea Helicopters	12,150	08/85
002-105	Kenai Air of Hawaii, Inc	602	04/83
003-106	Kenai Air of Hawaii, Inc	800	04/79
003-106A	Kenai Air of Hawaii, Inc	248	04/80
003-107	Kenai Air of Hawaii, Inc	1,048	03/85
003-108	Kenai Air of Hawaii, Inc	480	11/84
003-113	Island Helicopters Kauai	3,479	07/85
003-115	Kenai Air of Hawaii	5,316	10/83
003-116	Island Helicopters Kauai	484	03/86
003-117	Kauai Helicopters	200	02/85
003-120	South Sea Helicopters Inc	200	04/85
102-000	South Sea Helicopters, Inc	1,246	07/87
111-000	Kenai Air of Hawaii	660	04/79
130-000	Island Helicopters Kauai	0	N.A.
402-000	Island Helicopters Kauai	825	05/86
404-101	Kenai Air of Hawaii, Inc	169	10/82
404-103	Kenai Air of Hawaii, Inc	981	03/77
515-102	Dept. of Transp. - Airports	4,900	N.A.
515-103	Dept. of Transp. - Airports	2,254	N.A.
515-104	Kenai Air of Hawaii, Inc	3,025	06/84
515-105	Kenai Air of Hawaii, Inc	3,300	06/84
515-106	South Sea Helicopters, Inc	3,300	06/84
515-107	Island Helicopters Hawaii	3,300	N.A.
515-108	Menehune Helicopters Ltd	3,025	06/84
515-109	Kenai Air of Hawaii, Inc	3,025	06/84
515-110	Kenai Air of Hawaii, Ltd	3,300	06/84
515-111	Squyres, Will	3,300	11/83
515-112	Papillon Helicopters	3,300	06/84
515-113	Harter, Jack Helicopters	3,300	06/84
515-114	Menehune Helicopters Ltd	3,300	06/84
515-120	Island Helicopters Kauai	1,600	11/80
515-121	Dept. of Transp. - Airports	4,225	N.A.
515-127	Ohana Helicopters Inc	4,900	12/86
515-128	ERA Helicopters, Inc	4,900	12/86
515-129	ERA Helicopters, Inc	4,900	12/86
515-130	ERA Helicopters, Inc	4,900	10/87
515-131	ERA Helicopters, Inc	4,900	10/87
515-132	Esaki, Dennis	4,900	12/87
515-133	Kauai Helicopters	4,900	04/85
515-134	Kauai Helicopters	4,900	04/85
515-135	Kauai Helicopters	4,900	09/87
516-119	Island Helicopters Kauai	200	02/85

=====  
TOTAL AREA (SF) = 134,062

NOTE: These properties are under revocable permits.

#### 4.4 TOPOGRAPHY

The topography of the Lihue Airport area is described in the approved EIS. The project area has been completely graded for sugar cane cultivation. Topographic survey of the project area shows a general slope of approximately 3% from the southwest to the northeast across the project site.

#### 4.5 CLIMATE

The average annual temperatures recorded at the Lihue Plantation range between a high of 77.9°F and a low of 65.5°F. The average annual rainfall is 35 inches and the windspeed varies from 13 to 24 miles per hour from the northeasterly direction. The average relative humidity recorded at Lihue Airport is 67 percent in the middle of the afternoon and 83 percent in the early morning hours.

#### 4.6 HYDROLOGY

##### A. SURFACE WATER RUNOFF

The approved EIS describes the surface runoff system in the project's vicinity. Information from the "Storm Drainage Standards," Department of Public Works, County of Kauai, February 1972 indicate that the one hour rainfall for storms with recurrence intervals of ten and fifty years are 3.2 in/hr. and 4.0 in/hr. respectively.

Runoff quantity and quality depends upon land use as well as natural factors of soil type, soil moisture conditions and rainfall characteristics. Present conditions are varied with low quantity (low runoff coefficient), low quality (silt transportation) runoff from the canefields to high quantity (high runoff coefficient), undetermined quality from the improved lease lots.

Lihue Airport is located adjacent to Class A waters as designated by the State of Hawaii. The uses to be protected in this class of water are recreational, including swimming, bathing, and other water-contact sports and aesthetic enjoyment. Several settling ponds have been constructed by Lihue Plantation adjacent to the coast to settle out solid materials before drainage water is discharged into the ocean.

##### B. GROUNDWATER

Groundwater conditions were described in the approved EIS. In the lower elevations, development of the Koloa basal



groundwater is difficult due to the low permeability and resulting low productive yields. There is a seaward hydraulic gradient of the groundwater body as evidenced by monitoring wells.

Basal groundwater in the vicinity of Lihue Airport is of limited quantity and poor quality and cannot be used as a source of potable water for the airport or the surrounding area. The "General Plan for Domestic Water/Island of Kauai" has targeted water development to occur further inland at higher elevations on the eastern slopes of the Kilohana Crater.

The County of Kauai's Lihue Sewage Treatment Plant includes an injection well as an effluent disposal alternative. The E.I.S. for the plant expansion concluded that there would be no chance of affecting the existing groundwater supply nor any future high-elevation groundwater source. The treatment plant is within a mile of the airport terminal complex.

#### 4.7 BIOLOGY

The nature of flora and fauna in the project are described in the approved EIS. Most of the area in vicinity of Lihue Airport has been in intense sugar cultivation for many years. Native flora has been destroyed and replaced by introduced or non-native species. Use of herbicides in agricultural activities has also reduced the native varieties. There are no rare or endangered plant species within the project area.

Native birds and animals have retreated to the mountain forests upon removal of forests in the vicinity of the airport. Exotic birds, goats, horses and cattles have taken their place. Two endangered bird species (Hawaiian Stilt and Hawaiian Noddy) are found in the vicinity. These birds are observed at the mill settling pond located at the Ahukini Road/Kapule Highway intersection.

The proposed project is situated further away from the mill pond (L-20 reservoir) than the new terminal and Kapule Highway. Construction of these projects did not affect the birds. Recently, the pond was abandoned and no longer attracts waterfowl. The area proposed for the helicopter facility is mainly vacant and contains no suitable habitat for the endangered water fowl.

#### 4.8 ARCHAEOLOGY

Archaeological information of the project area is contained in the approved EIS. Known historic sites from the Wailua River to

Niimalu are described including their present status. One archaeological site (30-11-100, Ninini Heiau) has been identified in the Lihue Airport property. This site, in vicinity of Ninini Point Lighthouse, contained a heiau which has been completely destroyed. There is another heiau in the vicinity of the Airport (site: 30-11-1011), located near Ahukini Point. This site is also reported as being destroyed. There are no known archaeological or historical values remaining in the project location because of its long agricultural use.

#### 4.9 FLOOD HAZARD

A comprehensive engineering report for the airport complex was completed in September 1982 for "Rough Grading, Realignment of Cane Haul Roads and Irrigation System, Drainage Channel and Major Drains" (REFERENCE 10). The system proposed by the engineering report was initiated and incrementally completed in various airport projects. The major drain consisting of a concrete lined channel was constructed parallel to Taxiway 'A'.

The Flood Insurance Rate Map (FIRM) of March 4, 1987 includes the project site within zone 'X' (areas outside the 500-year flood plain). There are no natural streams or gulleys in the vicinity. Flood information is shown in FIRM Panel No. 150002 0202C (of 225).

#### 4.10 INFRASTRUCTURE

##### A. WATER SYSTEM

The study of the overall off-site and on-site water system serving Lihue Airport is included in the "Water System Study for the New Lihue Airport Complex" dated August 1982.

Water mains conforming to the standards of the County of Kauai Department of Water were approved for construction within the project Service (Ahukini) Road Realignment project to supply the new helicopter facility.

##### B. SEWER SYSTEM

Design concepts for collecting and conveying sewage flows from the Lihue Airport to the County's Lihue Sewage Treatment Plant are presented in REFERENCE 9 "Sewage System Study for the New Lihue Airport Complex" August 1982.

Improvements to the system have conformed to the study. Service for the new helicopter facility is included in the Service (Ahukini) Road Realignment project. Laterals as required were sized for forecasted flows and stubbed to the helicopter site.

C. SOLID WASTE

Solid wastes consisting of typical non-industrial business refuse are disposed at the County's Halehaka landfill in Lihue. Collection services are provided by private agencies contracted by the Department of Transportation.

D. TRANSPORTATION

Public mass transit does not service the Lihue Airport area. Vehicular traffic to the airport will be improved upon completion of the on-going construction of the Kapule Highway extension by-passing the town of Hanamaulu. Airport interior traffic will be served by a realigned Ahukini Road for which construction commenced in July 1988.

E. ELECTRICAL/TELEPHONE

Electrical power for residential and commercial use is provided by the Citizens Utilities Company, Kauai Electric Division throughout the proposed service area. High voltage distribution lines connect numerous substations including the Lihue Substation.

Telephone service for the proposed service area, as for the rest of the State, is provided by Hawaiian Telephone Company.

4.11 PUBLIC SERVICES

Fire and police protection provided by the County of Kauai support the airports' "Aircraft Rescue and Fire Fighting" (ARFF) group and security team. The Lihue Fire Station is approximately 1-1/2 miles from the airport. The Lihue Police Station is approximately the same distance away.

Health and emergency care are available at the Wilcox Memorial Hospital which is 2 miles northwesterly of the airport. Annual training simulating an aircraft emergency are practiced by the airport, fire, police, and hospital personnel.

4.12 SOCIO-ECONOMIC CHARACTERISTICS

A. POPULATION

Kauai County had an estimated total resident population of 46,300 as of July 1, 1986. Fewer than 200 of this total lived on Niihau. The projected population provided by State economists is 55,000; 63,900; 69,100 and 72,000 for the years 1990, 1995, 2000 and 2005, respectively.

According to the most recent available figures (1980), the largest towns on Kauai are Kapaa (with 4,467 residents) and Lihue (with 4,000). The median age of the population in Kauai County in 1984 was 31.3 years.

Data on the ethnic makeup of the population of Kauai show these percentages for 1985: Japanese, 20.0; Filipino, 22.8;

Caucasian, 21.1; Hawaiian and part-Hawaiian, 23.0; mixed (except part-Hawaiian), 11.0; other, 2.1. Kauai County has no ethnic majority.

#### B. EMPLOYMENT AND INCOME

The majority of residents within the project area are employed at Lihue which serves as the major commercial, business, and governmental center of Kauai. The per capita personal income for Kauai residents in 1984 was \$10,564. Generally, State and Local government positions accounted for 2,500 jobs in Kauai in 1984. The tourist industry provided 2,400 jobs for the same year while other service industries such as health care provided 2,050 jobs.

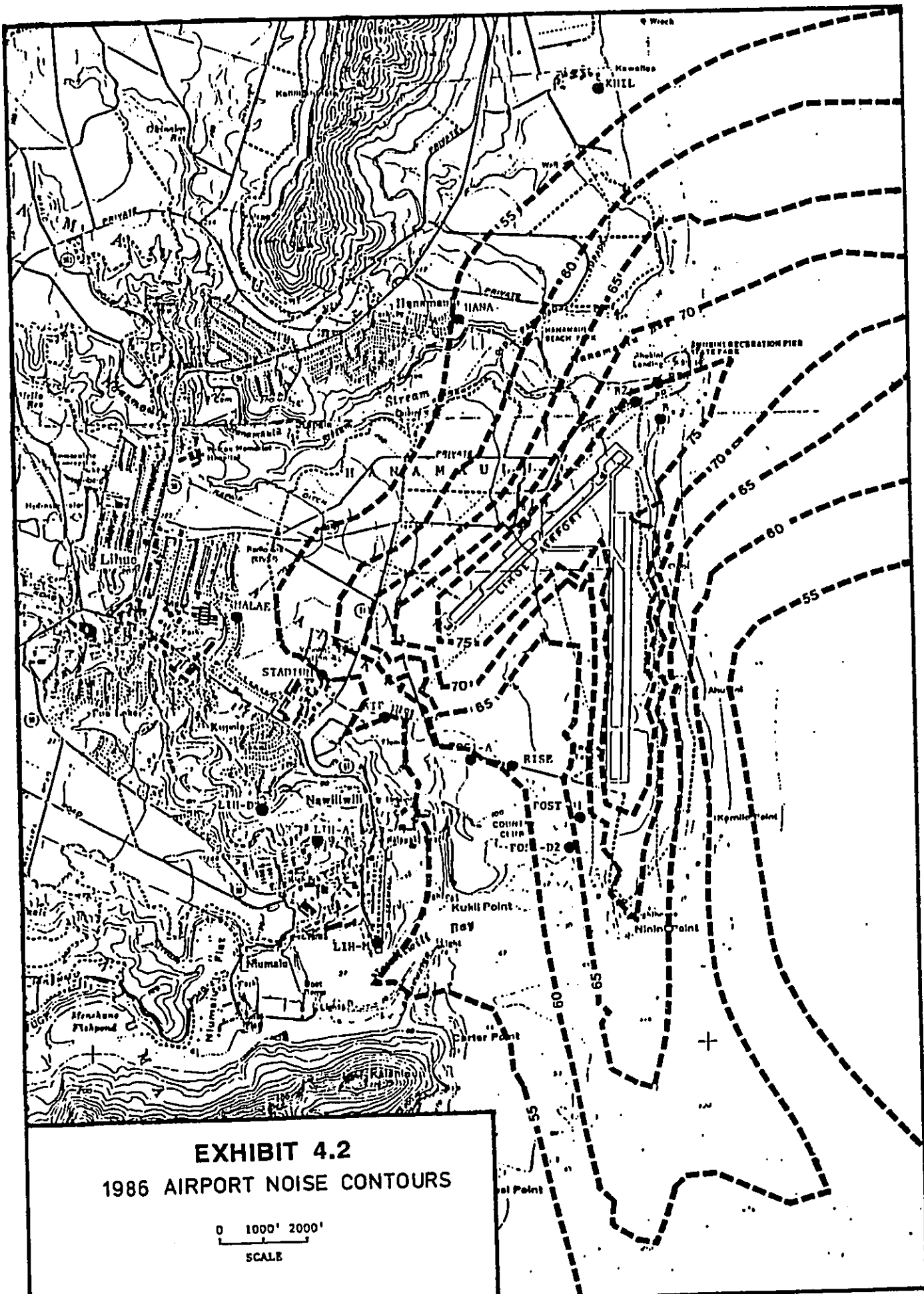
The annual average unemployment rate for Kauai County, in general, for 1985 was 5.2%.

#### 4.13 NOISE

Existing noise levels are discussed in detail within APPENDIX 'A': ACOUSTICAL STUDY OF POTENTIAL NOISE IMPACTS ASSOCIATED WITH THE PROPOSED NEW HELICOPTER FACILITY AT LIHUE AIRPORT. EXHIBIT 4.2: 1986 AIRPORT NOISE CONTOURS shows the existing ambient noise conditions in vicinity of Lihue Airport. Relatively few noise sensitive areas are enclosed by the 55 Ldn contour (the public health and welfare threshold).

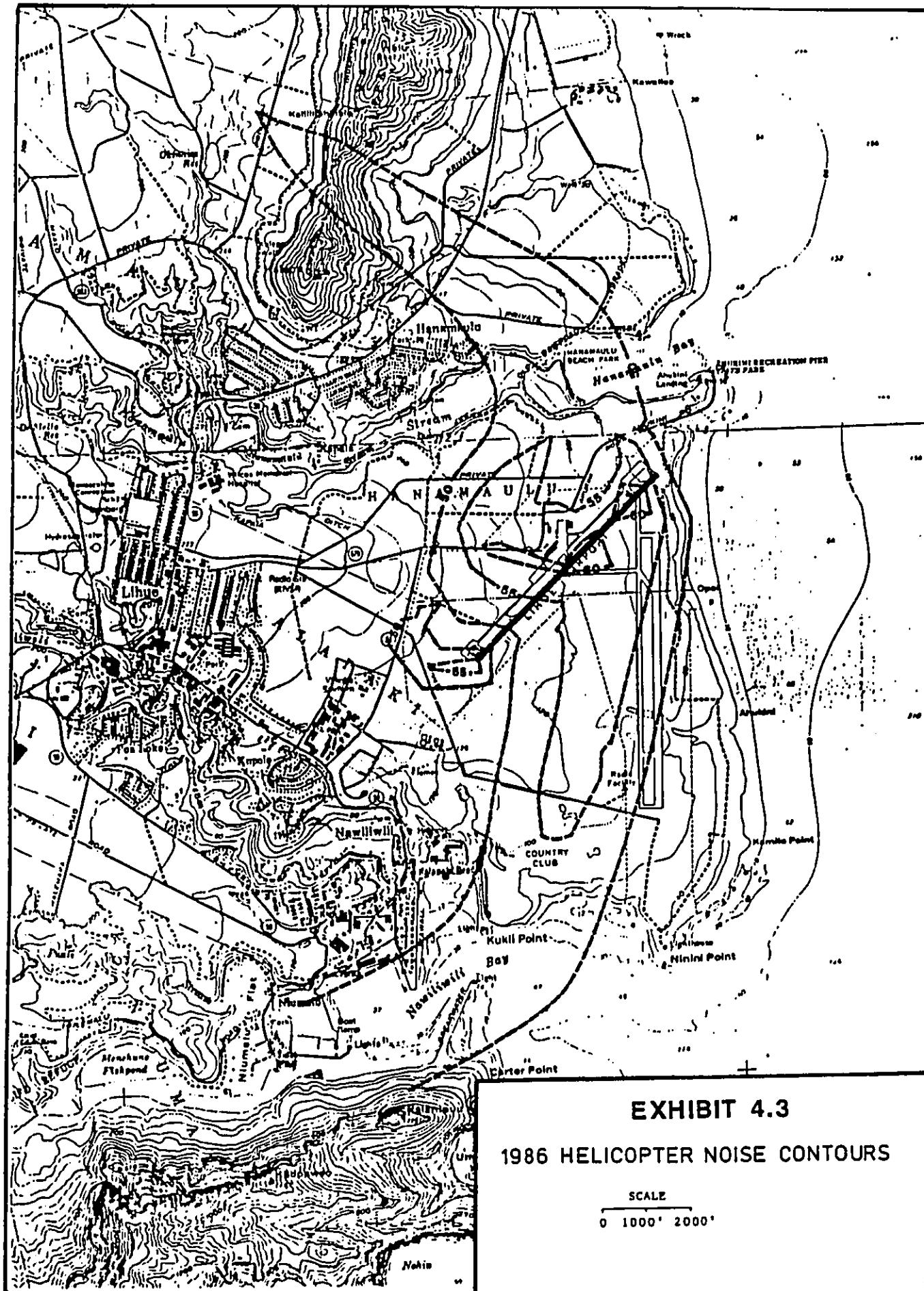
Noise levels from only helicopter operations are shown within EXHIBIT 4.3: 1986 HELICOPTER NOISE CONTOURS. The helicopter noise component is significantly lower than those associated with jet aircraft operations as indicated by comparing EXHIBITS 4.2 and 4.3. The helicopter component of the total aircraft noise levels is generally less than 55 Ldn. For this reason, risks to adverse health and welfare effects from existing noise are considered to be low.

Annoyance from helicopter noise occur at locations near the helicopter egress and ingress routes where helicopter flyby sound levels have been measured in levels range from 65 to 80 dB. Between jet aircraft flights, the background noise levels are not high enough to mask the flyby sound levels.



**EXHIBIT 4.2**  
**1986 AIRPORT NOISE CONTOURS**

0 1000' 2000'  
 SCALE



#### 4.14 HELICOPTER OPERATIONS

##### A. FLIGHTSEEING

Helicopter flightseeing tours are estimated to generate \$50 million in revenues to the State's economy and employ more than 400 people. The demand for flightseeing tours have increased helicopter activities on Kauai from a 3 company operation in 1980 to 15 companies in 1988. At Lihue Airport it is estimated that 250,000 tourists experienced the one-hour tour (approximate \$100/person) generating an income to \$22 million during 1987. TABLE 4.1 KAUAI HELICOPTER OPERATORS provides a list of helicopter companies operating on Kauai with the number of helicopters in operation.

A graph showing the helicopter tour expansion is presented as EXHIBIT 4.4: AIRCRAFT OPERATIONS. The figures represent total take-offs and landings for the period indicated. The figures represent total take-offs and landings for the period indicated. The graph includes the total operations at Lihue Airport indicating that the helicopter operations have increased in its percentage of operations throughout the past years.

National media coverage by "West 57th Street" discussed the flightseeing operation on Kauai. The program concentrated on alleged unsafe conditions at the operational area. These include:

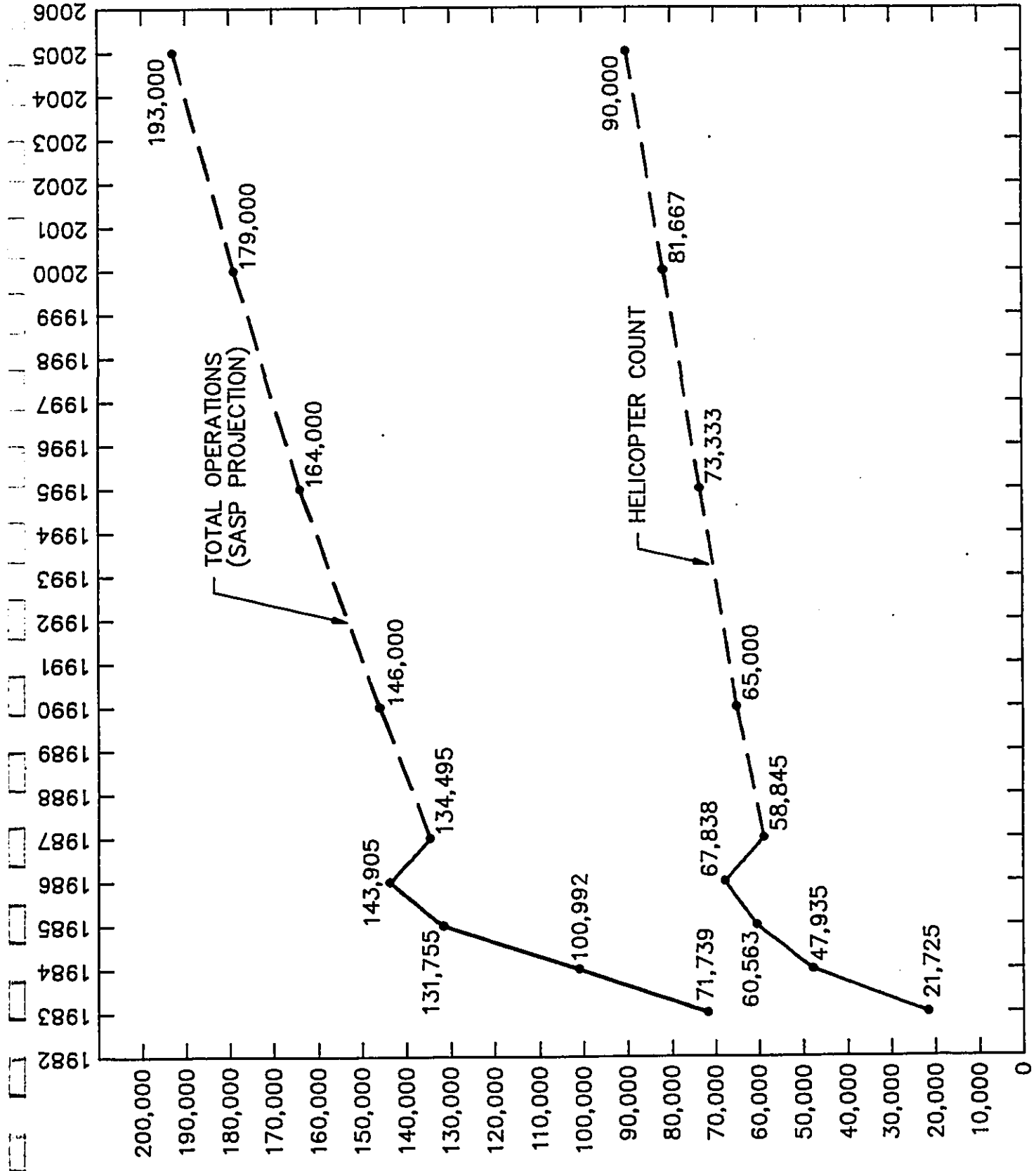
1. Uncontrolled passengers around the helicopters.
2. Pilots outside of operating helicopters.
3. Refueling in proximity of passengers.
4. Excessive number of helicopters in a confined area.

The program also contained opinions of Kauai helicopter operators and government administrators. Although the language differed, the consensus alluded to a congested operation at the existing helicopter area.

TABLE 4.1  
KAUAI HELICOPTER OPERATORS

<u>NAME</u>	<u>OWNER/OPERATOR</u>	<u>NO. OF HELICOPTERS</u>
Bali Hai Tours, Inc.	James Lee	1 (Port Allen)
Inter-Island Helicopters	Ken D'Attilo	2
Island Helicopters, Kauai	Curt Lofstedt	2
Kauai Helicopters	Rick Shaw	2
Menehune Helicopters Ltd.	Robert Templeton	2
Kenai Air of Hawaii, Inc.	Ron Williams	6
Niihau Helicopters	Tom Mishler	1 (Makaweli)
Ohana Helicopter	Bogart Kealoha	1
Papillon Helicopters, Ltd.	Mike Patton	6
South Sea Helicopters	Paul Asmus	2
Jack Harter Helicopters	Jack Harter	1
Will Squyres Helicopter Services	Will Squyres	1
ERA Helicopters	Ken Wilder	4
Bruce Needham Helicopters	Bruce Needham	2 (Port Allen)
Safari Helicopters	Preston Myers	1
	TOTAL	<hr/> 34





**AIRCRAFT OPERATIONS  
LIHUE AIRPORT, KAUAI, HAWAII**

**EXHIBIT 4.4  
AIRCRAFT OPERATIONS**

B. ORGANIZATIONS

The Hawaii Helicopter Operators Association was organized to promote aviation safety and noise abatement as they pertain to air routes, altitudes, or any other area of flight operations. The majority of Kauai helicopter operators belong to this organization.

The Kauai helicopter tour operators have joined together and developed a voluntary program to alleviate the noise emitted by helicopters during their island tours. The "Kauai County Voluntary Helicopter Noise Abatement Program" is supported by the majority of operators. The noise abatement operational rules identifies two noise sensitive areas in vicinity of Lihue Airport:

1. Westin Kauai Lagoons "... proceed over western edge of the lakes on the old Kauai Surf Golf course, remaining clear of the clubhouse ...."
2. City of Lihue "... avoid all flights over Lihue ..."

The Kauai helicopter tour operators organized in Aug. 1985 to support a "Helicopter Hotline" to monitor helicopter noise complaints. The program was patterned after the successful Maui hotline which has reduced noise problems and provided an outreach and contact program. Due to lack of financial support and cooperation, the Helicopter Helpline was disbanded in June 1987. In November 1987, the "Helicopter Helpline" was initiated for the same purposes with operators meeting monthly to discuss complaints and concerns.

A non-profit corporation (Lihue Inland Heliport, Ltd.) is under organization by the majority of the helicopter operators. This corporation will develop the private inland heliport. Officers have been elected and an assessment for stock will be made for funds to hire legal and other professional help. The slate of officers are:

Jack Harter (Jack Harter Helicopter): President  
Mike Patton (Papillon Helicopters): Vice President  
Rudy Park (ERA Helicopters): Secretary  
Bogart Kealoha (Ohana Helicopters): Treasurer

C. OTHER FLIGHTS

Kauai helicopter tour companies also provide services which require the unique operational characteristics of the

helicopter. The following tabulation of non-tour events occurred during March 1988

<u>EVENT</u>	<u>NO.</u>
Equipment Transport	13
Charter Landings	5
Photo Charters	4
Land Examination & Survey	3
Videotape Commercial Production	2
Powerline Inspection	1
Wild Animal Count	<u>1</u>
TOTAL	29

D. HELICOPTER INCIDENTS

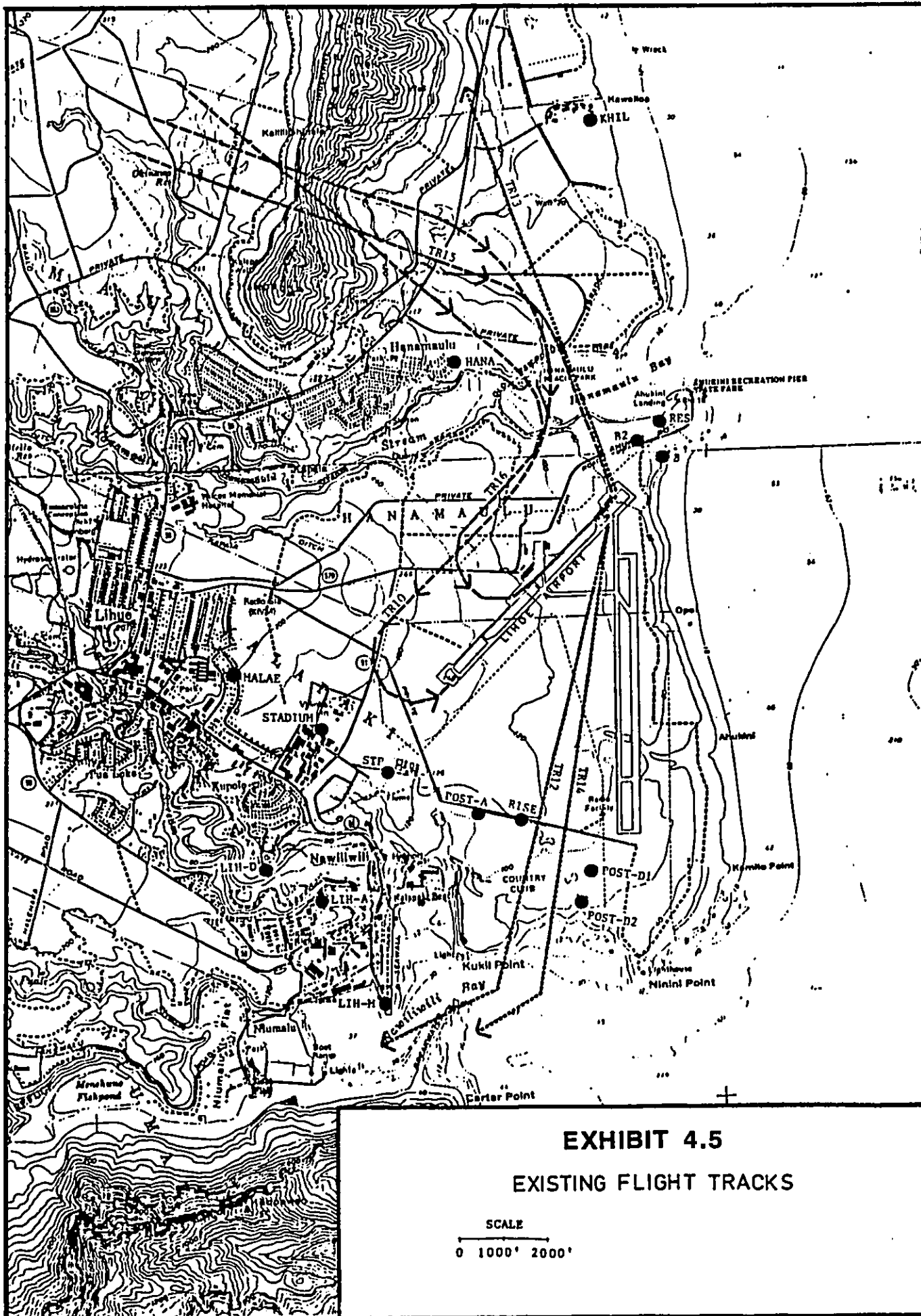
Statewide, from January 1985 through December 1987, there were 30 incidents involving helicopters. The FAA could not find common links between the accidents, such as mechanical problems or a lack of pilot training. Incidents on Kauai are listed below. No deaths were associated with the incidents.

- a - Bell 47G-3 in Waimea Canyon
- b - Bell 206B at Princeville Airport
- c - Bell 206L at Lihue Airport

In the safety area, the helicopter has two distinct advantages over conventional aircraft. A helicopter is able to auto rotate in the event of a power failure and can maneuver under control to a safe landing. Secondly, helicopters can hover allowing its engine to be checked in flight during near-maximum power application without committing to take off.

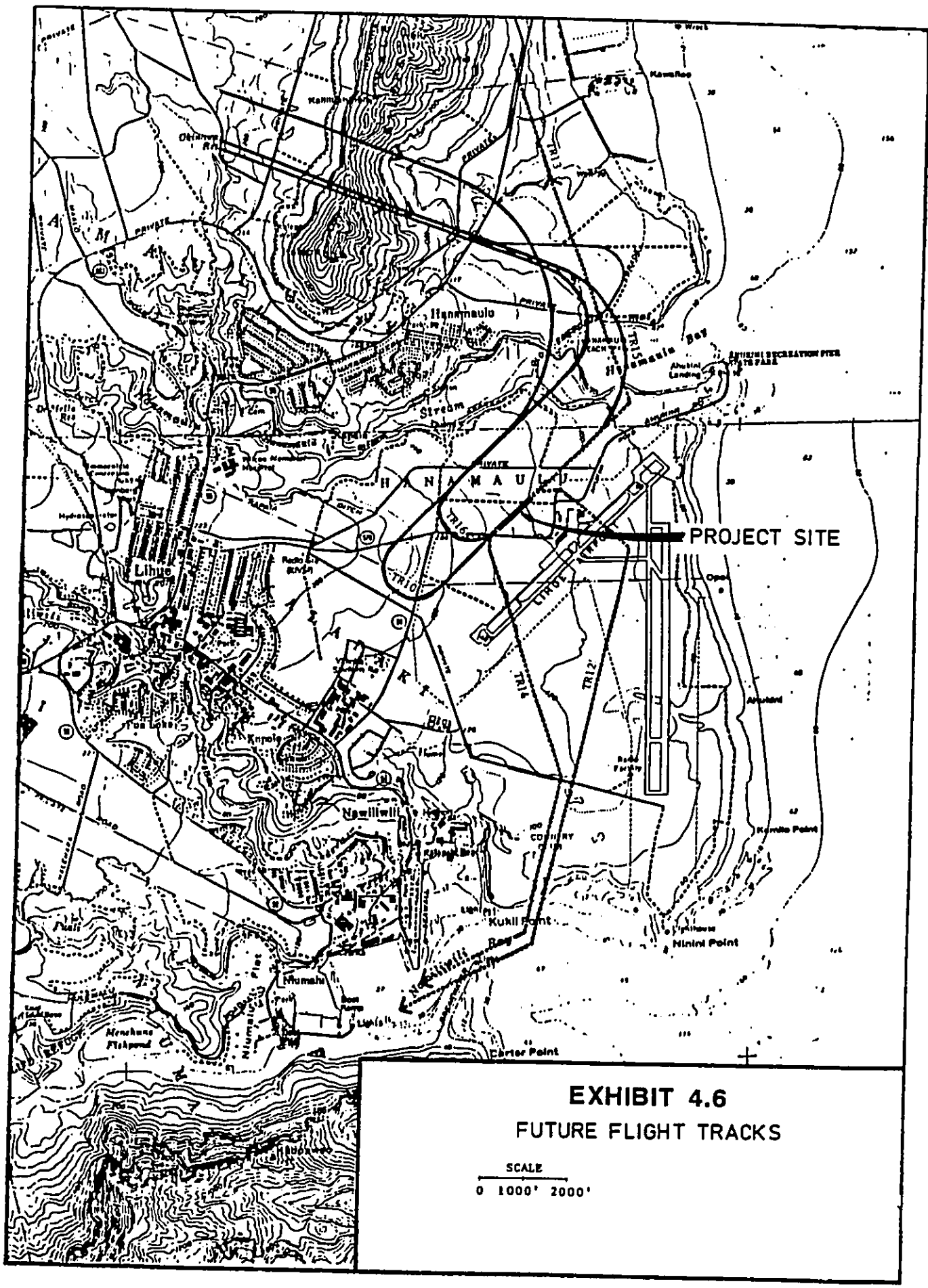
E. EXISTING FLIGHT TRACKS

Helicopters once arrived at Lihue Airport along a path over Lihue Town. Due to safety concerns and noise complaints, the arrival track slowly evolved through the Hanamaula saddle. Departures are southerly due to the operators desire for a clockwise island circuit to take advantage of the winds. The southerly departure eliminates conflicts with the Runway 17-35 but the congestion at Runway 3-21 approach occurs during periods of tour fixed-wing aircraft landings. This congestion continues as the route over Nawiliwili Harbor is selected to avoid flights over Lihue Town. EXHIBIT 4.5: EXISTING FLIGHT TRACKS draws the present departure and arrival flight tracks.



For comparison, EXHIBIT 4.6: FUTURE FLIGHT TRACKS is included to show tracks after completion of the project.

Inclement weather paths are stipulated by FAA letter of agreement (Special VFR). The southbound path is over the hardwood factory on the State highway. The northbound path is along Ahukini Highway then over Isenberg Tract. Operators will fly during inclement weather in Lihue knowing that the weather is clear over the Waimea Canyon or Napali coast.



**EXHIBIT 4.6**  
**FUTURE FLIGHT TRACKS**

SCALE  
 0 1000' 2000'

## SECTION 5. RELATIONSHIP TO LAND USE

### 5.1 COUNTY OF KAUAI

#### A. LIHUE DEVELOPMENT PLAN

The County's Lihue Development Plan was adopted in 1976. It provides physical, social, and economic measures which relate specifically to the Lihue community. The development plan is a tool to implement the goals and objectives of the County's General Plan which provides overall guidance to the future of Kauai.

The Kauai General Plan land use designations of the project area are a mix of urban, agriculture, open, resort, and public facilities. See EXHIBIT 5.1: COUNTY GENERAL PLAN. The General Plan shows that the public facility (airport) is surrounded by agriculture (sugar cane), open lands (Hanamaulu Bay and Shoreline) and touched by resort (Westin Kauai) and urban mixed use (Lihue Town).

The proposed use of the site conforms with the Development Plan and is in harmony with the General Plans' present agricultural designation of the surrounding lands.

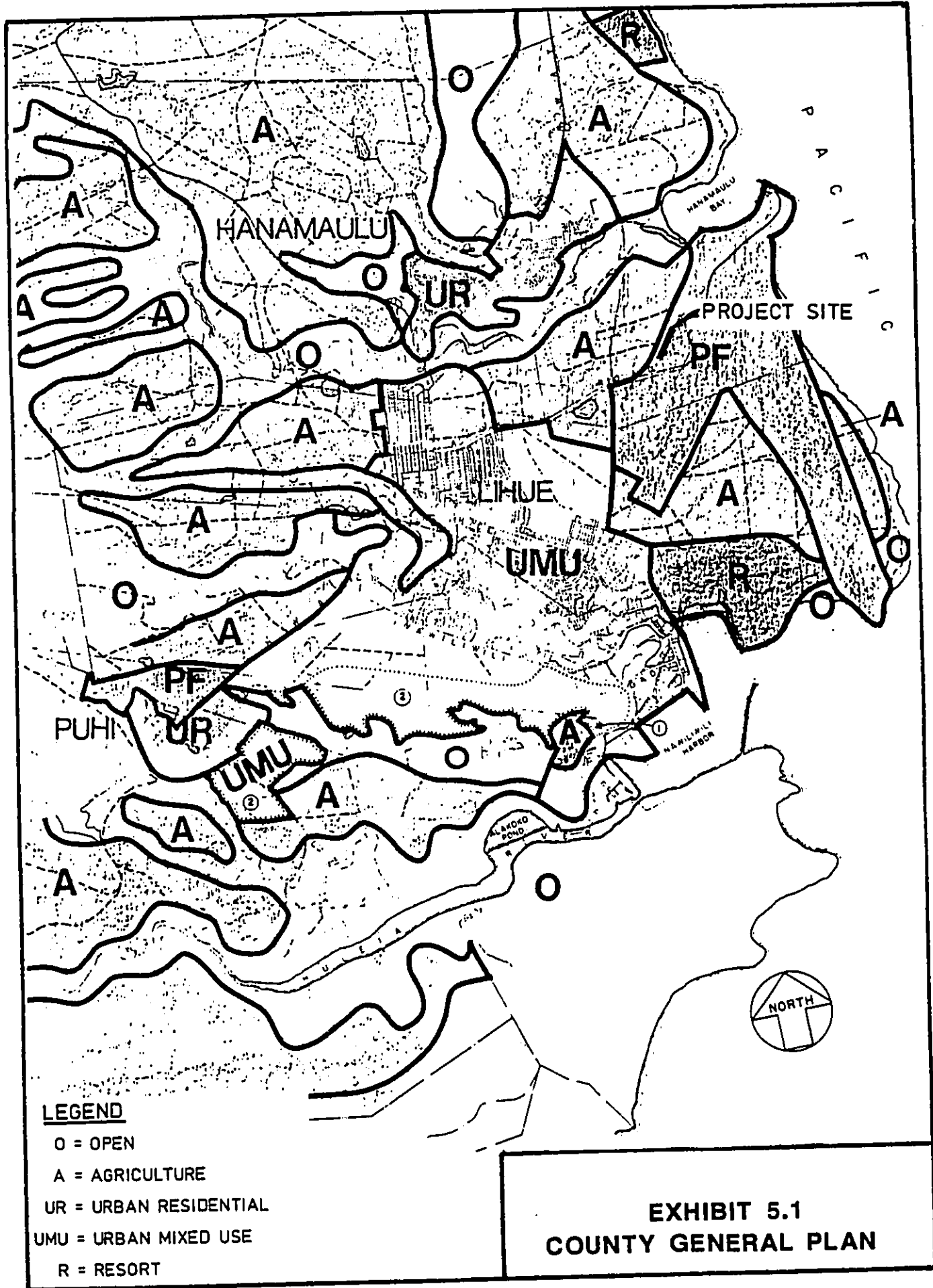
#### B. COUNTY ZONING

The Comprehensive Zoning Ordinance (CZO) for the County of Kauai establishes procedures for the division of the County into land use districts and regulations for the type, size, placement and control of structures within various zoning district classifications. An amended use permit was obtained when the airport boundaries were expanded by acquisition of additional property which was then zoned Agricultural.

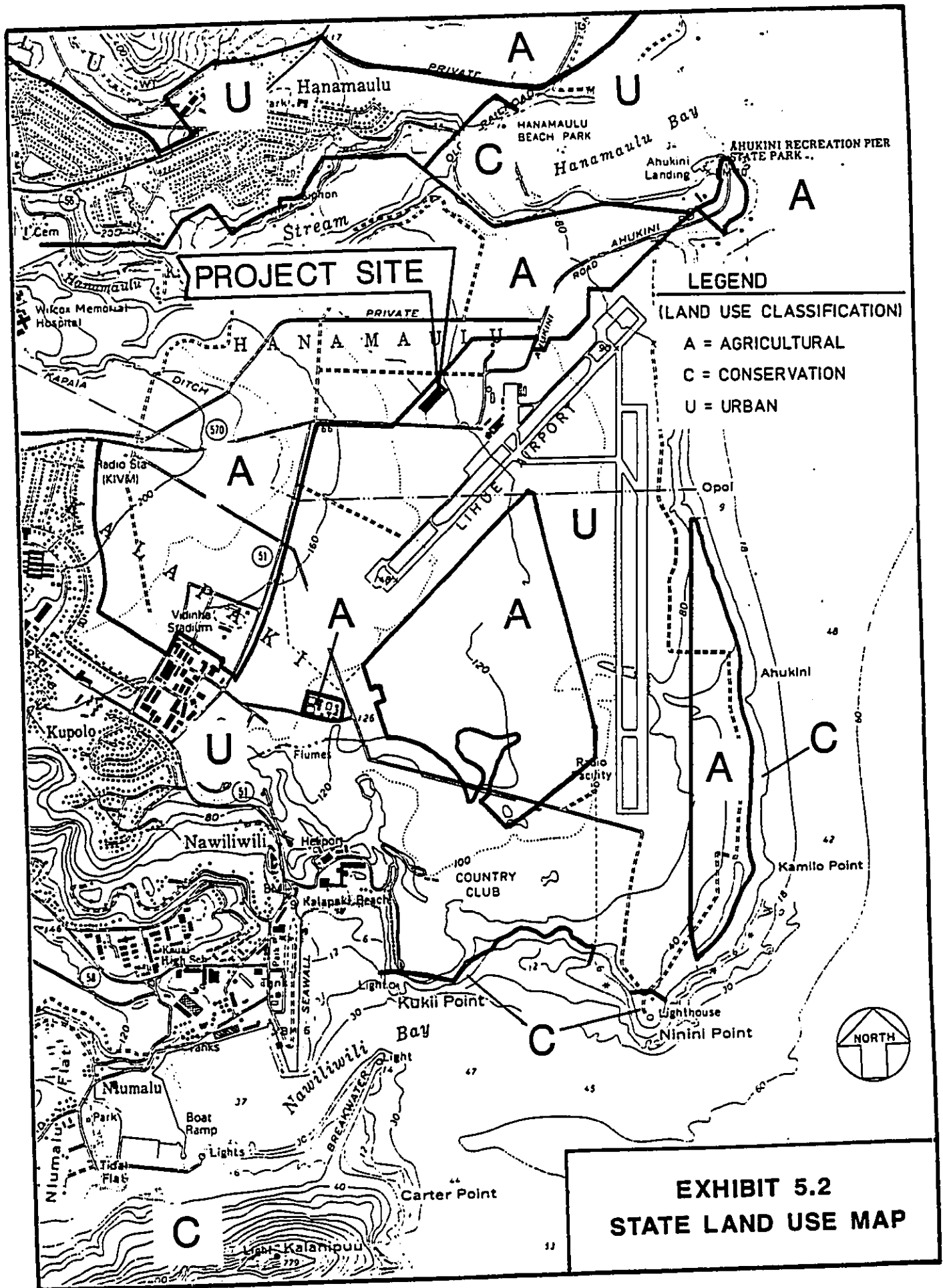
The new helicopter facility site is situated outside of the County's Special Management Area.

### 5.2 State LAND USE

The State Land Use Law regulates the classification and uses of State lands to accommodate growth and development. The law is the instrument that retains the natural resources of the area. All State lands are classified by the State Land Use Commission as either Urban, Rural, Agricultural, or Conservation. The Lihue Airport including the project site is designated as urban lands as shown on EXHIBIT 5.2: STATE LAND USE MAP.







5.3 EXISTING LAND USE

The present site is owned by the State and administered by Department of Transportation, Airports Division. The major portion of the site is vacant.

5.4 REGIONAL USE PROPOSALS

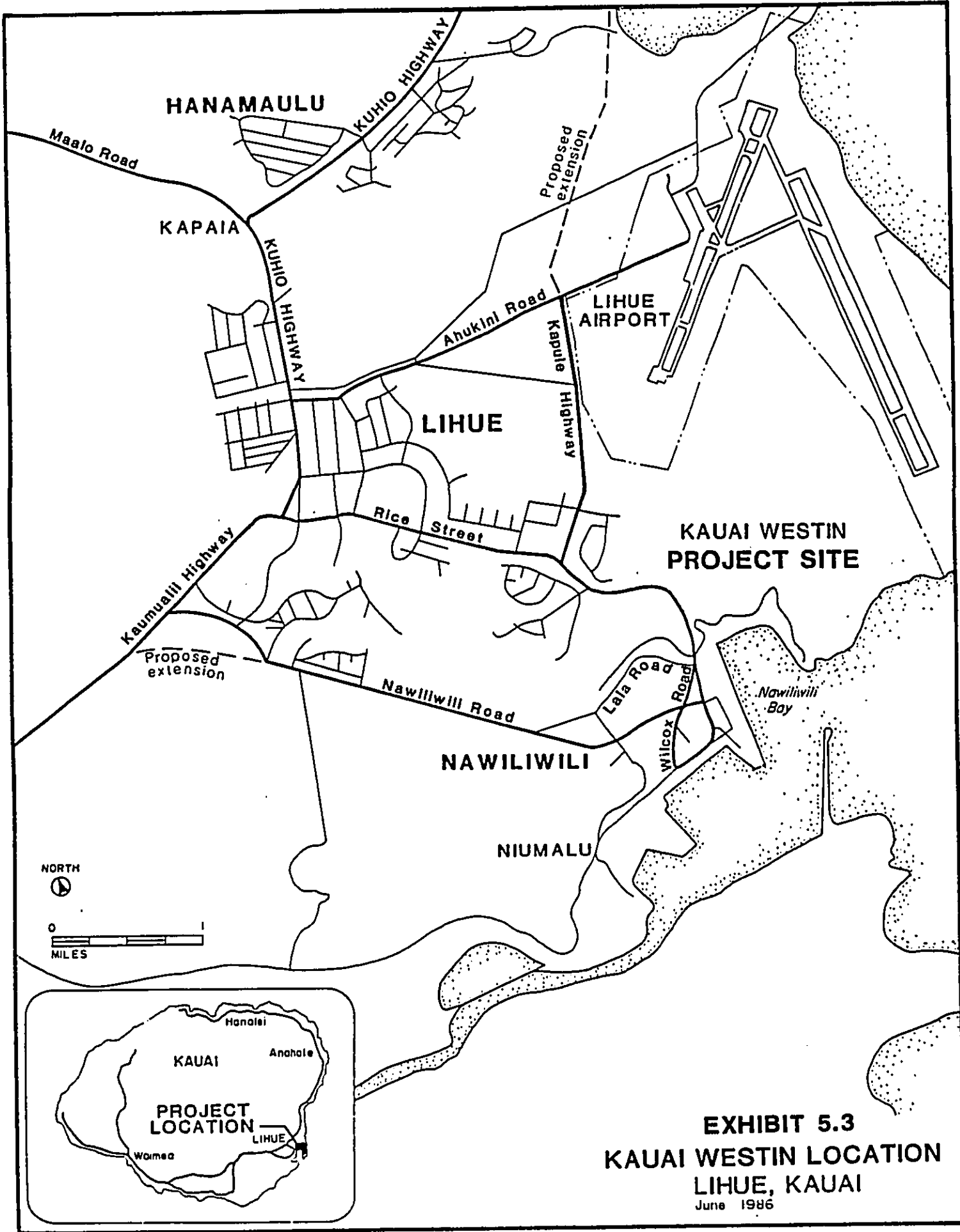
A. KAUAI WESTIN RESORT HOTEL

The Kauai Westin Resort Hotel is located southerly of the airport complex. A proposal to expand the resort to an integrated multiple - attraction visitor destination area is before various government agencies. EXHIBIT 5.3: KAUAI WESTIN LOCATION and EXHIBIT 5.4: KAUAI WESTIN PROPOSAL were obtained from the "Planning and Engineering Report for the Amended Proposed Rezoning at Ninini Point, Lihue, Kauai; Belt, Collins & Assoc., June 1986."

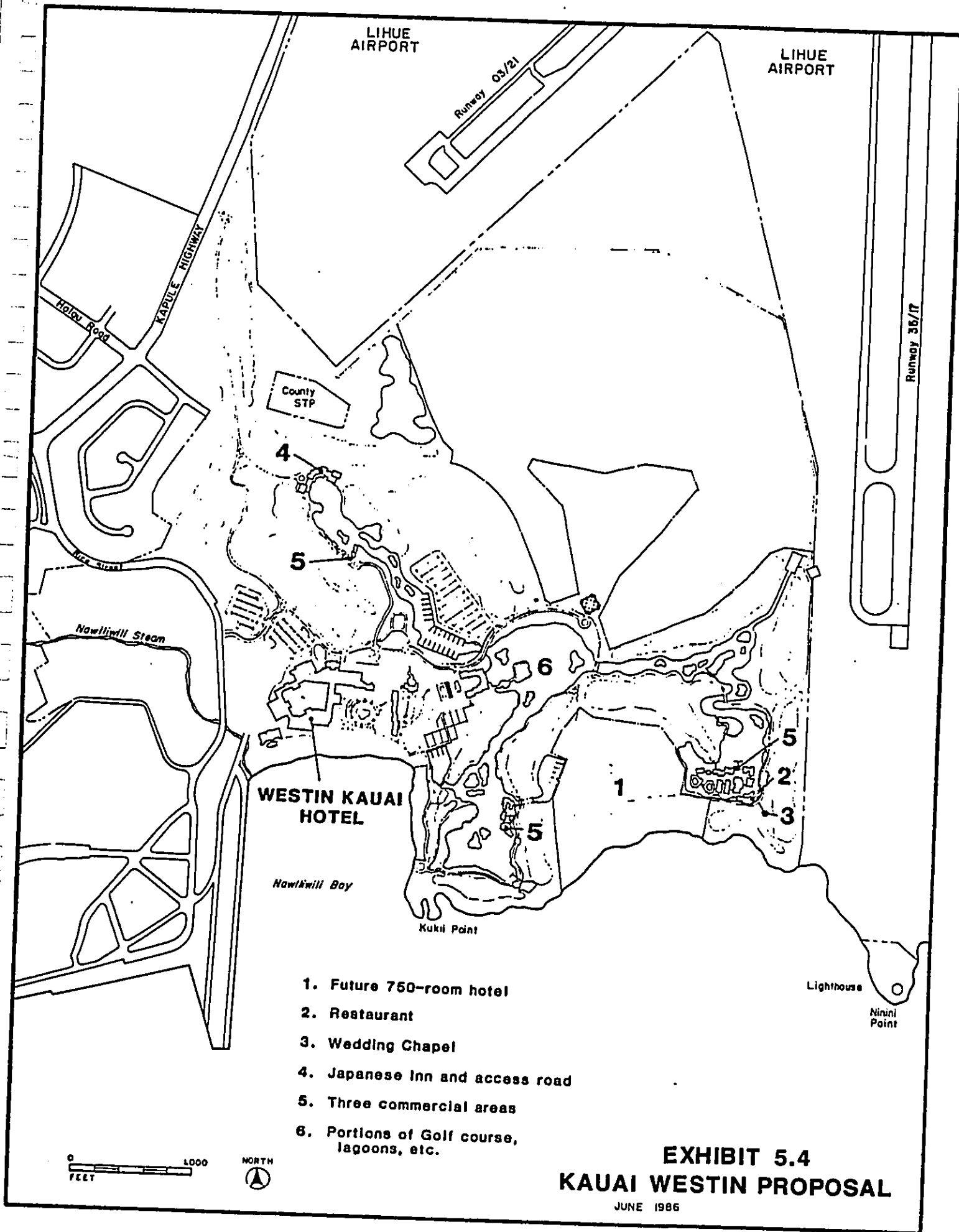
A noise study was conducted for this proposal by Darby and Associates in November 1985. The conclusion of the study is as follows: "The updated 1985 noise contours produced by Darby and Associates indicate that existing noise conditions will have only marginal impact upon the proposed project. Small portions of the eastern and northern part of the project lie within the Ldn 60 and greater contours. The affected areas are mostly areas proposed for golf course and horse stables. The project satisfies the State Land Use Condition that no resort units be located within the noise exposure forecast contour in excess of 25 NEF or roughly Ldn 60. No resort units are proposed in areas in excess of Ldn 60."

In response to comments from the State Department of Transportation, Airports Division, future noise forecasts were projected for the year 1995. As explained in Darby's report, the assumptions necessary for this projection are very difficult to establish. The report states that using conservative assumptions, the results still indicate that even in the 1995 projection, no resort units will be located in excess of the Ldn 60 contour. Portions of the project site in excess of Ldn 60 include portions of the golf course and grounds maintenance area, and perhaps portions of the easternmost commercial areas and restaurant.

In regards to noise complaints, the report states that "...the project will be primarily an action oriented resort and will



**EXHIBIT 5.3**  
**KAUAI WESTIN LOCATION**  
**LIHUE, KAUAI**  
 June 1986



LIHUE AIRPORT

LIHUE AIRPORT

Runway 03/21

Runway 36/17

KAPULE HIGHWAY

Halea Road

County STP

Nawiliwili Stream

WESTIN KAUAI HOTEL

Nawiliwili Bay

Kukii Point

Lighthouse

Ninini Point

- 1. Future 750-room hotel
- 2. Restaurant
- 3. Wedding Chapel
- 4. Japanese Inn and access road
- 5. Three commercial areas
- 6. Portions of Golf course, lagoons, etc.



**EXHIBIT 5.4  
KAUAI WESTIN PROPOSAL**

JUNE 1986

generate relatively high background noise levels with extensive water play features. Also, it is understood that the buildings will be air-conditioned and primarily of concrete construction. Thus, it is now not predictable that many individuals will complain about helicopter noise. Such noise may be masked by resort activities and the water features and helicopter overflights may even contribute to the atmosphere intended."

Helicopter noise has affected outdoor activities at the Westin Complex by interfering with athletic award presentations as described by the Mayor of Kauai during the public hearing (APPENDIX B). The same grievance was aired at a previous public informational meeting. Since the meeting was informational, the grievant was informed that the noise level was accepted by the rezoning applicant and made a condition of approval.

The Darby study of November 1985, as discussed above does not agree with noise measurements and projections developed for this study. As shown in EXHIBIT 6.1, this study projects that the Kauai Westin development is within the 60 Ldn noise contours and therefore the expressed complaints are to be expected.

B. AMFAC PROPERTY DEVELOPMENT CORP. (AMFAC)

AMFAC owns a major portion of the lands adjacent to the Lihue Airport and under the existing flight paths. AMFAC has requested a re-examination of the proposed facility site during the projects Public Hearing on June 16, 1988 (See APPENDIX B: SUMMARY OF PUBLIC HEARING). They are preparing a comprehensive master plan for all of their lands in the Lihue region to meet Kauai's mid and long range urban needs. Anticipating expansion of residential development in the Lihue and Hanamaulu areas, AMFAC is concerned about potentially adverse noise and safety impacts.

The accepted EIS includes discussions on compatible land uses. FAA Order 1050.1D, requires the FAA and State to take appropriate action, to the extent reasonable, to ensure that the use of land adjacent to, or in the immediate vicinity of Lihue Airport is restricted to activities and purposes compatible with normal airport operations, including the landing and takeoff of aircraft. Since land use control for lands in vicinity of the Lihue Airport rests with the County of Kauai, the State Department of Transportation, in December 1978, requested that the County retain the compatible land use zoning in the vicinity of the Lihue Airport to ensure the longevity of this important transportation facility.

C. HANAMAULU-WAILUA ELEMENTARY SCHOOL

The Department of Education (DOE) proposes to construct a new elementary school to service the Hanamaulu-Wailua region of east Kauai. A site selection report and EIS (See LIST OF REFERENCES) were developed to discuss potential impacts at five different sites. Impacts from aircraft noise included in the discussion. The former Hanamaulu Elementary School site was selected. The sites environmental characteristic for aircraft noise was considered "good" since the site is outside the 55 Ldn noise contour.

## SECTION 6. PROBABLE ENVIRONMENTAL IMPACTS

### 6.1 GENERAL

The proposed project will generate primary and secondary environmental impacts. Primary impacts are those resulting directly from construction activities and from the uses on the proposed project site. Secondary impacts are those which are anticipated beyond the project area such as population, land use, flightseeing routes, flight elevations and number of tour helicopters. Instead of addressing the off-site helicopter impacts on a piecemeal basis, the Department of Transportation has initiated a comprehensive study of the impacts with the goal of establishing a statewide policy on the management of helicopters. This statewide Helicopter Study, now in the initial stages, will address helicopter operations beyond the airport.

### 6.2 PRIMARY IMPACTS

#### A. SHORT TERM IMPACTS

Short-term impacts, beneficial and adverse, generally result from construction-related activities. Consequently, these impacts are of short duration and should not last longer than the duration of the construction.

1. Economic Impacts: Construction of the helicopter facility is expected to take about twelve months. Airport infrastructure servicing the facility including access road, water lines, and sewer system will be constructed within the Service (Ahukini) Road realignment project for which construction was initiated in the summer of 1988. The construction activity associated with the improvements will result in the generation of construction jobs and income during the period of construction. This construction activity in turn, will result in increased government revenues via gross excise, income, and other taxes generated by construction spending. The estimated construction cost for the proposed project is \$3.8 million.
2. Air Quality Impacts: During construction of the site work and utilities some dust may be generated. This problem, however, is not anticipated to be significant as the area has been continuously tilled for sugar cane cultivation. If dust is a significant problem, it will be mitigated by the use of appropriate water sprinkling methods, limiting the area being worked at any one time, and immediately seeding of the graded area.

Exhaust emissions from construction equipment are not expected to significantly affect the air quality of the area. The prevailing winds in the area should help to quickly disperse any exhaust gas concentration.

Burning of clearing and grubbing material will not be allowed during construction of the helicopter facility. These materials will be transported to and disposed of at landfills.

3. Water Quality Impacts: During construction, significant erosion and sedimentation problems are not expected to impact the water quality of the area. However, construction activity can contribute to an increased sediment load into the nearby bodies of water especially if a significant storm occurs. Scheduling of construction to implement the perimeter ditch as the initial item of work will mitigate erosion problems. Adverse water quality impacts can be minimized by conformance with State and County erosion control standards.
4. Traffic Impacts: During construction of improvements at the site, the construction work force will add to the traffic load during the morning and afternoon peak hours. Additional traffic will be generated throughout the working day as machinery and materials are transported to the site. The impacts of increased traffic due to construction activities will be minor because of the high capacity roads leading to the airport. Local traffic in the area are airport related and should not experience delays as the site construction will not significantly affect existing roads.
5. Noise Impacts: During site preparation, clearing, and construction activities, an increase of ambient noise is inevitable. Construction-related noise will be intermittent rather than continuous throughout the construction period and will cease upon completion of the project.

Impact to the adjacent areas will be insignificant as they are agricultural lands (sugar cane), the maintenance baseyard, and the proposed apron area (presently vacant).



6. Biological Impacts: There are no known rare or endangered species of flora or fauna at the project site. The site has been cultivated in sugar cane for many years.
7. Archaeological Impacts: There are no known archaeological sites within or near the project site.

The project area has been previously impacted by commercial agriculture activities and construction associated with existing rental car facilities. If historic remains such as artifacts, shell or charcoal deposits, burials, and stone platforms, pavings, or walls are found during construction, the contractor will be directed to stop work and the State Historic Sites Office will be contacted to assess the situation and make recommendations for mitigative actions, if needed.

B. LONG-TERM IMPACTS

Long-term impacts, beneficial and adverse, result from the implementation and operation of the helicopter facility. The impacts associated with these actions are identified and discussed in this section.

1. Economic Impacts: The new facility is intended to replace the existing operational area and not to generate additional traffic.

The facility, in itself, will not create meaningful long term employment opportunities as it is expected that present employees stationed off-airport will remain off-airport. There will be no savings of operational funds since activities will be unchanged.

There will be no long-term economic impact from the proposed facility as its function will be replaced by the inland facility.

2. Air Quality Impacts: The long-term environmental impacts on the ambient air quality are not anticipated to be significant. Odors and airborne particles from helicopter activities will be relocated close to the airport boundary. The adjacent canefields are compatible uses and should not be affected by the helicopter activities.

The helicopter facility will experience dust from the canefields during harvesting and planting periods. Also,

smoke from cane fires may be experienced during non-typical wind days. The prevailing tradewinds will carry dust and smoke away from the proposed facility.

Cane harvesting should be scheduled for no-burning during non-typical wind days as practiced wherever canefields abut residential areas.

Maintenance of the grassed taxi routes, turfed areas, and landscaping by use of EPA approved herbicides should not present a significant problem if applied according to prescribed methods. Burning will not be allowed as a method of maintenance.

Air quality impacts will be significantly reduced when the majority of the helicopter operations are transferred to the inland facility.

3. Water Quality Impacts

- a. Surface: No significant impact on the quality of off-shore waters is anticipated as a result of the proposed project. A potential source of degradation is storm water runoff to the ocean. Facilities for helicopter wash-downs will not be provided. If the operator wish to conduct maintenance at the parking pads, the operator will be responsible for the installation of the required oil/water separator and appurtenances.

The storm water runoff will be conveyed by the existing drainage system. Water borne particles will be minimized by ground cover.

- b. Ground Water: Degradation of the ground water system will not occur due to this project. Cesspools or injection wells are not part of this project. The limits of the Underground Injection Control (U.I.C.) is inland (at higher elevation) than the project site.

4. Biological Impacts: The project area is not considered to be a sensitive wildlife habitat area, nor does the site contain any endangered species of plants or animals. The project site and surrounding area has been cultivated for sugar cane for the past decade. Therefore, long-term adverse impacts are not anticipated from the proposed action.
5. Noise Impacts: Noise impacts associated with the new helicopter facility were investigated within APPENDIX A. The impact to the areas adjacent to Lihue Airport was based on helicopter flight forecasts for the year 2005.

Helicopter arrival and departure routes to Lihue Airport with the new facility in place are expected to remain the same as existing routes.

The findings indicate that there will be minimal risk of adverse health and welfare impacts from helicopter noise in the immediate vicinity of Lihue Airport after completion of the proposed helicopter facility at the year 2005 flight forecast. The reasons are that the arrival and departure routes remain unchanged and the year 2005 helicopter operations result in only a 1.5 Ldn increase in cumulative noise exposure from helicopter operations. It should be noted that the increase in helicopter operations may occur independent of the interim helicopter facility.

Annoyance reactions cannot be quantified as the complaint threshold for helicopter noise can be lower than the public health and welfare threshold. There will always be a risk of annoyance reactions from existing and future Lihue residents.

The noise contours from helicopters forecasted for 2005 will be affected by the relocation of most helicopter operations to the inland facility. The noise contours for the entire airport will not be significantly affected as jet noise is the primary agent.

6. Displacement: The helicopter tour agencies that are tenants of lease lots by revocable permits affected by the project will relocate to the new facility. No other tenants will be displaced.
7. Utilities/Infrastructure
  - a. Water Supply: The demand for potable water for the new facility was addressed in the Realigned Service (Ahukini) Road Project. A 16-inch water main was extended from the new terminal area to service the airport service area which includes the helicopter facility.
  - b. Sewage Disposal: There will be no impact due to increase sewage flows. Toilets and other wastewater flow generators will not be included in this project.
  - c. Drainage: The proposed project will include a perimeter drain to control off-site flood flows.

The perimeter drain will join the airports major drain system in vicinity of Taxiway 'A'.

Interior drainage will be handled by extension of the existing storm drain system. There should be no impacts concerning storm drainage to the interim facility or due to the interim facility.

- d. Electrical/Telephone: Electrical and telephone demands are anticipated to be minimal to non-existent. The previously mentioned Service (Ahukini) Road realignment project included sufficient power supply for the facility.
- e. Vehicular Traffic: There will be no increase of traffic due to the change in land transportation modes. The present system of transporting groups by vans from offices in Lihue will continue.

#### 8. Public Services

- a. Fire Service: The facility and activities will fit into the normal airport operations. The aircraft rescue and fire fighting (ARFF) team is stationed at the airport and trained as primary responders to aircraft incidents. The County's Lihue Fire Station is two miles away and serves as a support group.

There will be a minimal impact to the fire service requirements as the interim facilities are several hundred yards farther from the ARFF station. Response time will meet FAA certification requirements. A balancing of requirements will be experienced as older structures are replaced by modern buildings during taxiway and apron construction projects.

The interim facility project design includes remote gate controls for no-delay responses. The perimeter drain ditch and fence line will include features to allow the rescue team to leave the airport premises if an incident occurs on the adjacent lands.

- b. Security: The impact of the new project will be insignificant to public security services. Lihue Airport contracts with a private organization for maintenance of airport security and traffic control. The existing security system will be expanded as necessary for the new project needs. For incidents beyond the scope of the airport security system, the Kauai Police Department is within two miles of the airport.

- c. Health Services: The new project will not impact present health services. Activities at the new facility will conform to present operations such that any incident is within the emergency preparedness plan of the airport. Annual practices include a contrived aircraft incident which involves emergency health care at Wilcox Memorial Hospital located two miles north west of the airport.

### 6.3 SECONDARY IMPACTS

#### A. LAND USE

Land use relationships of the proposed facility with its surrounding lands are a critical item. During the development of the Lihue Airport Master Plan Study and the disclosures within its accepted EIS, land use compatibility was a major topic. Present usage of the surrounding lands are compatible with the proposed project as disclosed in the accepted EIS. It is expected that when land use of the surrounding areas are converted from agriculture and open designations, suggestions to alter the master planned facilities and activities will be experienced.

The State Department of Education (DOE) proposes a new elementary school to service the Hanamaulu - Wailua region of east Kauai. A site selection report and EIS were developed to discuss potential environmental impacts at five candidate school sites. Environmental characteristics included aircraft noise as well as the typical items. The former Hanamaulu Elementary School Site shown on EXHIBIT 6.1: PROPOSED DEVELOPMENTS had the highest evaluation and has been selected by the DOE. Since the site is outside the 55 Ldn Noise Contour, its environmental characteristic of aircraft noise was rated good.

#### B. HELICOPTER ACTIVITY:

Growth of helicopter activity is not promoted or restricted by this project. The interim helicopter facility will not be constructed because of a need to provide additional capacity to accomodate forecast increased demands. Rather, the facility will be constructed to reduce the congestion at the existing operational area, allow for the improvements of Taxiway 'A'. The goal to separate fixed wing and rotary aircraft in the air cannot be achieved due to maintenance of existing approach and departure paths.

Helicopter operational use have been requested for unused airfield areas at Lihue Airport...adjacent to the old terminal, the vacant general aviation apron, and the vacant



ground transportation facilities. These unused airfield areas show that the capacity for increased helicopter activities already exists. This discussion is intended to show that the project will be constructed for safety and operational control and not spatial requirements.

The helicopter facility will function as a service entity. It will not automatically attract increased helicopter activity. New activities will not be experienced unless the demand warrants it due to the costs involved. The demand will be a function of the tourist industry which depends on the following:

- 1) Attractiveness of Kauai as a visitor destination area
- 2) Visitor accommodations available on the island, and
- 3) Promotion of the attractiveness of Kauai and the available accommodations.

The interim helicopter facility will not contribute or detract from the growth of helicopter activity on Kauai. The secondary impacts of increased helicopter activity is associated with the growth of tourism which will be determined elsewhere.

C. POPULATION

There will be no on-site population impact due to this project as the facilities are replacements to house present activities. Off-site population impacts will be caused only by short-term employment generated through the construction phase. Since most of the construction employees will probably be from Kauai, there should be negligible impact on the population growth of Kauai County.

The facility will not contribute to the growth on Kauai. The secondary impacts associated with growth including the impact on water supply, land values, existing lifestyle and public utilities will be determined by other entities.

D. OFF-SITE IMPACTS

Helicopter impacts extend well beyond the air space under jurisdiction of the Lihue Airport control tower. These impacts concern visual and noise intrusions into the Kauai lifestyle. Results of the intrusions are complaints and proclamations to restrict flightseeing routes and control helicopter numbers.

The Kauai Helicopter industry has reacted to the complaints by developing a route through the island of least impact which is the basis of the "Kauai County Voluntary Helicopter Noise Abatement Program". Although most Kauai tour companies have accepted the routes by signature, complaints still persist due to individual pilots not conforming to the routes and non-tour flights which do not adhere to the agreement.

Complaints regarding helicopter operations are not unique to Kauai. The concerns of the activities by tour helicopters are similar for the rest of the state. The Department of Transportation has initiated a comprehensive study (State Helicopter System Planning Study) of the problem with the goal of establishing a statewide policy on the management of helicopters. The Kauai portion of the study has been initiated with a public information meeting in May and September 1988.

At the present time, except for safety considerations, there are no administrative or regulatory methods for limiting growth of tour helicopters at public use facilities. Controls for flight routes are based on safety but in every situation, the pilot has the ultimate decision on route and elevation for aircraft safety. The State Helicopter System Planning Study will evaluate the compatibility of helicopter operation and the desired lifestyles. Under Act 397, the state will prepare helicopter master plans, and formulate rules to regulate tour aircraft operations at public airports.



## SECTION 7. ADVERSE ENVIRONMENTAL IMPACTS WHICH CANNOT BE AVOIDED

### 7.1 INTRODUCTION

This section briefly discusses probable adverse environmental impacts which cannot be avoided, and mitigation measures that would reduce unavoidable adverse effects.

### 7.2 PRIMARY SHORT-TERM IMPACTS

Short-term impacts are those associated with construction activities such as grading, utility installation, and landscaping. The significance of short-term impacts for the project site is minimal as the site abuts the State maintenance baseyard, vacant airport land (future lease lots and apron) and canefields.

#### A. AIR QUALITY

Ambient air quality will temporarily decrease as a result of dust generated from clearing, grading, and other construction activities. The contractor will be required to minimize dust problems by conformance to State Department of Health regulations and County of Kauai rules and ordinances. Dust problems can be mitigated to a large extent by water sprinkling, limiting the area being worked at any one time, and immediate seeding of the graded area.

Exhaust emissions from construction equipment will also degrade the ambient air quality. Prevailing winds in the area should help to quickly dilute and disperse concentrations of exhaust emissions. The direction of the prevailing winds is away from the existing maintenance yard. Air quality of the area should therefore, not be significantly affected.

#### B. NOISE

The noise level will increase during the construction period. This effect will be of short duration, lasting only for the construction phase with the peak occurring during grading operations. The noise level can be reduced by the contractor by ensuring proper functioning of mufflers on all equipment, and conducting construction activities only during daylight hours, between 7:30 a.m. to 5:00 p.m.

#### C. WATER QUALITY

Construction of the interim helicopter facility should not adversely affect the water quality of the area. The impact of

construction activities can be mitigated by implementing erosion control measures such as interceptor ditches and sediment ponds. Grading in accordance to County erosion control standards and State water quality standards should minimize the adverse water quality impacts.

D. TRAFFIC

Local traffic may experience momentary delays when construction-related vehicles use existing roads to transport material and equipment. Additional traffic impacts will occur when the facility's roadway joins the existing service road. The problem will be mitigated by providing traffic controls and traffic safety precautions.

E. PUBLIC HEALTH AND SAFETY

Measures to assure public health and safety will be provided throughout all phases of construction. During non-work hours the construction work areas will be secured with safety signs and safety devices as required by State and County regulations.

7.3 PRIMARY LONG-TERM IMPACTS

Long-term impacts are the result of operating the helicopter facility. These impacts are critical as proper planning is required to minimize disruptions to the desired lifestyle and avoid burdens on the existing environment.

A. DISPLACEMENT

The loss of productive agricultural lands to develop the facility was discussed in the approved EIS, which addressed all cane lands affected by the airport, as follows:

"The loss of 570 acres of cane land represent's an adverse impact that would reduce the Island's cane lands by about 1%. If agriculture is diversified as planned, any loss of cane production jobs could be offset by new jobs elsewhere on the Island. The most direct impact will be felt by the Lihue Plantation Company, which could lose approximately 3% to 4% of its present land in cane production on Kauai."

This project will occupy about 20 acres of the 570 acres of cane land discussed above.

B. AIR QUALITY

Although the site is part of the airport complex and subject to the vehicular and aircraft emissions normally associated with airport operations and support activities, relocation of helicopter activities may transport the emissions to areas which did not experience the same level of pollutants.

The prevalent winds will direct the emissions away from inhabited structures. The approved EIS examined air quality impact due to 1995 forecasted helicopter activities. Emissions from helicopters would reach the terminal building only under wind conditions that would direct pollutants from other aircraft away from the terminal. Carbon monoxide concentrations at the terminal building due to 1995 helicopter activity is predicted at  $0.6 \text{ mg/m}^3$  which is well below the State standard of  $10 \text{ mg/m}^3$ . For receptor sites outside the airport, pollutant concentrations from helicopter operations will be insignificant.

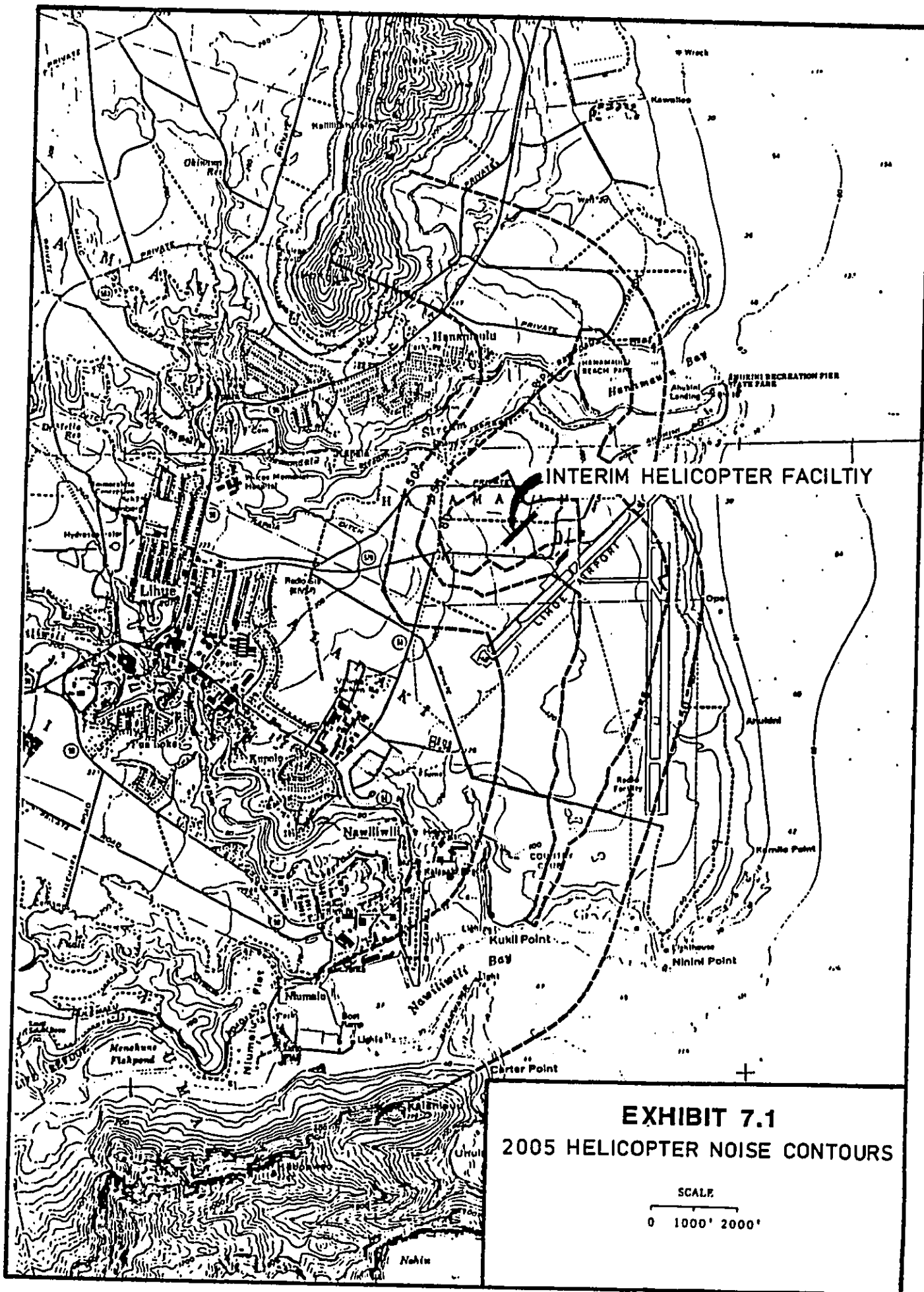
C. NOISE

As discussed in detail within APPENDIX A, the proposed facility will expand the 55 Ldn airport noise contours by approximately 1,250 feet toward Lihue. Increase in the airport noise contours are limited to lands currently in agriculture. The projected operations at the airport should result in helicopter noise levels no higher than 54 Ldn at existing residences and noise sensitive properties.

The predicted 55 Ldn contours associated with the proposed helicopter facility are not expected to enclose adjoining noise sensitive properties, as shown on EXHIBIT 7.1: 2005 HELICOPTER NOISE CONTOURS, noise impacts should be minimal with near zero risks of adverse health and welfare impacts.

Although health and welfare impacts are minimal, the complaint risks from helicopter operations will increase if operators are not cognizant of the sensitivity of the community. Primary mitigation measure is to avoid overflights of inhabited areas and if necessary, fly at higher altitudes. The Kauai helicopter industry has identified the noise sensitive areas of Kauai and have prescribed routes away from these areas.

Noise mitigation includes a voluntary "Fly Neighborly Program" developed by the Helicopter Association International. Methods within the program to reduce helicopter noise during landing and departure procedures are as follows:



**EXHIBIT 7.1**  
**2005 HELICOPTER NOISE CONTOURS**

SCALE  
 0 1000' 2000'

### "Noise-Abatement Approach and Landing

1. When commencing approach, follow one of these two procedures:
  - Establish a rate-of-descent of at least 500 fpm before reducing airspeed, then reduce airspeed while increasing rate-of-descent to at least 800 fpm, or
  - Hold rate-of-descent to less than 200 fpm while reducing airspeed to about 65 mph, then increase rate-of-descent to at least 800 fpm.
2. At a convenient airspeed between 60 and 90 mph, set up approach glide slope while maintaining the 800-fpm or more rate-of-descent.
3. Increase rate-of-descent if the main rotor tends to slap, or if you want a steeper glide slope.
4. Approaching the flare, reduce airspeed to below 70 mph before decreasing rate-of-descent.
5. Execute normal flare and landing, decreasing rate-of-descent and airspeed appropriately."

The basic difference between this approach technique and a normal one is that this one avoids the slap regime. Both procedures give approximately the same airspeed during the approach, with the quieter technique using a glide slope which is a few degrees steeper. Once the pilot has transitioned from cruise to the approach glide slope, he can tailor his airspeed and rate of descent to fit local conditions, avoid unsafe regimes, and still guarantee minimum noise.

### Departure

Takeoffs are reasonably quiet operations, the total ground area exposed to helicopter sound can be limited by using a high rate-of-climb and making a very smooth transition to forward flight. The departure route should traverse over areas which are the least sensitive to noise.

These procedures will mitigate noise impacts in the vicinity of the airport. The helicopter pilot must be aware of the environment in which he operates. The background noise level of Kauai County is low, particularly in the evenings, and citizens are conscious and resentful of noise intrusions. Therefore it would behoove helicopter operators to follow the noise abatement procedure."

Noise mitigation measures may be promoted and prescribed but the final action is the helicopters pilot responsibility. The pilot must determine the correct flight procedure dependent on wind conditions, air traffic, aircraft performance, and passenger load.

D. DURATION

The duration of the primary long-term impacts is dependent on the implementation schedule of the private inland helicopter facility. Upon completion of the inland facility and relocation of most of the helicopters, the long-term impacts will be nullified and it can be expected that the noise impacts will be reduced.

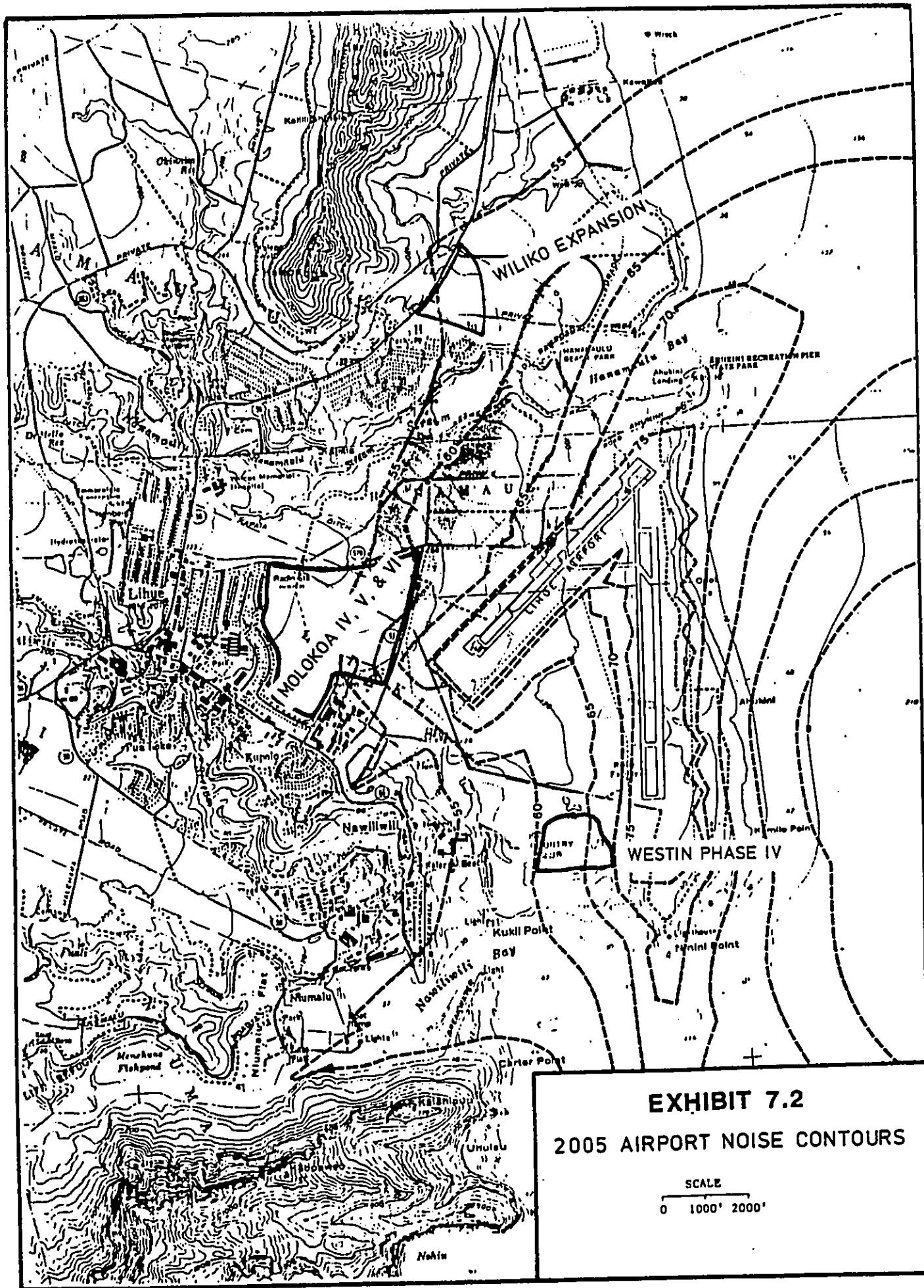
7.4 SECONDARY IMPACTS

A. LAND USE

Impacts from helicopter operations have been shown to be minimal if land uses remain constant. Land uses are affected by perceived needs and several sites within the Lihue area are targeted for higher uses. Residential subdivisions are planned in Hanamaulu (Wiliko Expansion) and Lihue (Molokoa Expansion). These sites are within the 55 Ldn contour and may be impacted by aircraft noise if implemented as planned. As shown on EXHIBIT 7.2: 2005 AIRPORT NOISE CONTOURS the sites are within the 55 Ldn contour with and without the affects of the new helicopter facility.

EXHIBIT 7.2 also identifies a future resort hotel within the Kauai Westin Complex. This site is shown within the 60 Ldn noise contour. Low level helicopter flights may be unavoidable. The "Planning and Engineering Report for the Amended Proposed Rezoning at Ninini Point, Lihue, Kauai" includes investigations of effects of the helicopter overflights. As a minimum, disclosure of the relatively high risks of complaints regarding helicopter operations should be provided to the future users and occupants of the planned development.

The proposed helicopter facility will have minimal impact to these proposed developments. The threshold of health and welfare noise levels (55 Ldn) will affect the site with or without the helicopter facility. Current land uses along the helicopter arrival and departure routes are clear of noise sensitive activities and compatible with helicopter operations. Proper land use controls could be a mitigating measure and should be exercised to maintain the current noise compatibility of land uses along these routes and prevent



**EXHIBIT 7.2**  
**2005 AIRPORT NOISE CONTOURS**

SCALE  
0 1000' 2000'

encroachment of noise sensitive uses into airport noise contours.

Additional noise mitigation measures are not considered necessary prior to completion of the proposed helicopter facility because the 55 Ldn contours associated with helicopter operations are not expected to encompass existing noise sensitive properties, and are equal to or less than existing background ambient noise levels.

**B. OFF-SITE IMPACTS**

The forecasted growth in tour helicopter operations may require mitigation measures to minimize their impact along the tour routes. Kauai helicopter operators have voluntarily developed a route of least impact by avoiding noise sensitive areas as a step to mitigate complaint risks. Other mitigating measures such as limiting the number of tour helicopters, revised tour routes, and noise abatement programs are being addressed in the State Helicopter System Plan now being formulated.

The State Helicopter System plan is scheduled for completion in February 1989. Formulation of the plan includes inventory of facilities, demand forecasts, facility needs, advisory committees, public meetings, and public review. The objectives of the plan are:

1. Identify the problems and assess the impacts of helicopter operations.
2. Plan for the future accomodation of helicopter's within the State Airport System.
3. Seek to improve the compatibility of helicopter operations within the community.

Off-site impacts can be mitigated by promotion of the Helicopter Helpline. Community complaints can be received, monitored, and handled. The Helpline can also identify offending operators and formulate voluntary solutions before the problem expands. Voluntary mitigation actions would be preferable to governmental regulations and enforcement.

**C. DURATION**

Secondary impacts from helicopter operations in the Lihue vicinity will be largely eliminated upon the commencement of operations at the inland helicopter facility. Noise and visual impacts will be reduced to a pre-1980 level when only three companies operated from Lihue Airport.



## SECTION 8. ALTERNATIVES TO THE PROPOSED ACTION

### 8.1 INTRODUCTION

This section briefly explores and evaluates known alternatives to the proposed action.

### 8.2 NO ACTION ALTERNATIVE

The no action alternative would be the least desirable as the existing operational area has been identified as extremely congested. Reports on helicopter operations at the existing site and remarks within national media coverage commented on unsafe conditions. The FAA reports that the Lihue situation continues to be a concern and that inspectors are keeping watch over efforts to improve operations.

Additionally, the no action alternative will continue the undesirable mix of helicopters and fixed wing aircraft. The helicopters account for 50 percent of the air traffic at Lihue Airport. This high proportion and the relative difference in airspeeds makes for an unhealthy mix.

Finally, the no action alternative will also prevent the State from attaining the goals of the airport master plan. If the helicopter area remains in its present location, Taxiway A cannot be realigned for proper airport operations.

### 8.3 ALTERNATIVE SITES

#### A. ALTERNATIVES FOR LOCATION SELECTION

The following is a statement from the accepted EIS.

"Many alternatives were considered during the Lihue Airport Master Planning Study before the recommended Master Plan was developed. Among the alternatives analyzed were the possible use of other modes of transportation; other existing airports; alternative airport locations; the existing Airport without improvement ("do-nothing" alternative); and the Airport with alternative airfield and terminal area locations and configurations that might alleviate present and potential adverse environmental impacts on the Airport environs."

Alternative airport locations were Port Allen, Kilauea Bay - Moloaa Bay, Barking Sands, and Poipu. These locations were rejected in favor of the present location. The use of Port Allen for concentrated helicopter operations is an alternative which has received negative reactions during public meetings convened by State legislative committees.

B. ALTERNATIVES FOR SITE SELECTION:

The LIHUE AIRPORT DEVELOPMENT PLAN UPDATE OF APRIL 1986 considered several alternatives for the helicopter facility site to execute the master plan.

These alternatives as shown on EXHIBIT 8.1: SITE SELECTION ALTERNATIVES are:

1. New Area West of Ahukini Road:

Selection of the New Area West of Ahukini Road allows for helicopter approach and departure routes that avoid the standard flow of aircraft traffic. Helicopter activities then are essentially independent of fixed wing operations on Runway 3-21. Sight lines from the control tower would be good. Space for parking up to 200 automobiles is available. Also, a hydrant fueling system can be efficiently provided to minimize the need for hover taxiing.

2. Present Helicopter Area:

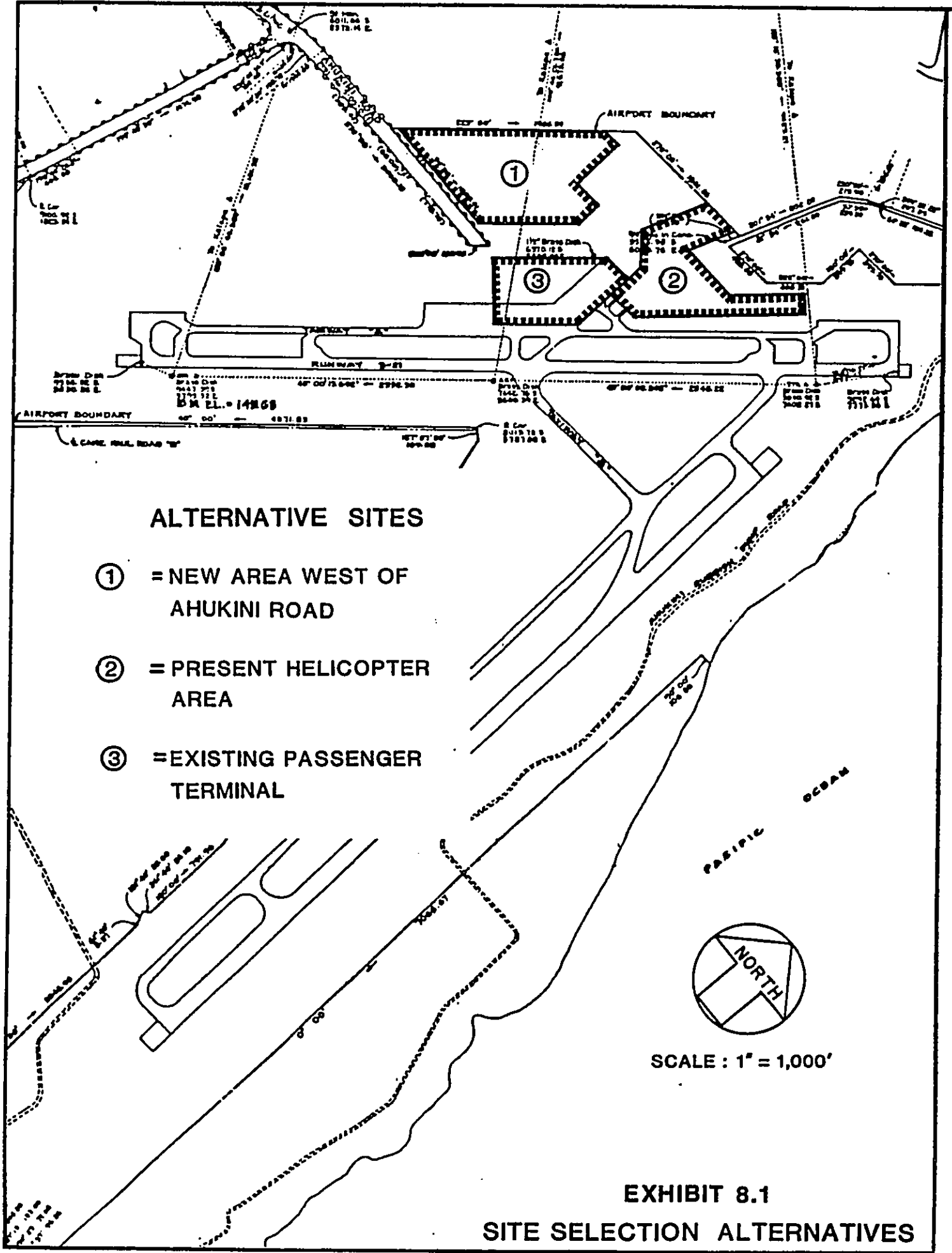
The present Helicopter Area alternative was not recommended for the long range site. Using this alternative would require additional land acquisition and interaction with fixed-wing aircraft operations on Runway 3-21 would continue. Relocating the helicopter landing and take-off strip to eliminate the interaction results with poor sight lines from the control tower.

3. Old Passenger Terminal:

The existing Passenger Terminal alternative was eliminated since it could not fit into the long range objectives. More importantly, use of the existing passenger terminal would increase the interactions with fixed-wing operations on Runway 3-21. The terminal is within the building restriction line and required clear zone from the runway.

C. INLAND FACILITY

This concept is proposed by private individuals and has been presented at the informational meeting for the airport master plan and has had written media coverage on Kauai. Proponents of this concept have developed schematics and have approached government agencies for support. The approach used by the proponents is for permitted use as funding and regulation will



be private. At this time, the request for permitted use has not included any formal application. Media coverage indicates support from the land owners, Grove Farm (Halfway Bridge Site) and AMFAC (Wailua Site), where the inland facility is proposed. Discussions with representatives of the owners confirm that they are willing to work toward a long term solution but nothing definite has been resolved.

The inland facility will be a "quasi-public airport" in that the airport will be privately owned and used by paying passengers carried in privately owned aircraft operated for hire. Several layout configurations are under investigation. Staging and building areas will be dependent on land availability as the project sites are open and unrestricted. Air space control has not been resolved but initial discussions with FAA indicate that they will not staff a control tower at the inland facility. The Westin Resort, Nawiliwili Harbor, and Hanamaulu areas will experience reduced noise impacts due to helicopter operations.

The Department of Transportation, Airports Division has declared their support for the inland facility concept in terms of traffic reduction at Lihue Airport. Their immediate concerns are to relieve the present congestion, claims of unsafe operations and allow for taxiway construction as soon as possible. The initiation of the inland facility may be prolonged due to funding, governmental regulations as discussed in Section 2.2, and environmental concerns.

Land use controls for this facility lies mainly with the County of Kauai. The proposed facility would be subject to the procedural requirements of a Use Permit, Special Permit and Class IV Zoning Permit before the Kauai Planning Commission. A General Plan and/or Zoning Amendment does not apply in this instance. The petition must be transmitted to the State Land Use Commission for final review and action pursuant to their rules and regulations. (If the project site is greater than 15 acres, the procedural requirements of the State's Land Use Commission's Rules of Practice and Procedure and District Regulations are applicable). It can be expected that the inland facility will have difficulties in acquiring all permits if the Lihue Airport continues to accommodate tour helicopters without restrictions. During the planning phases of the inland facility, several issues relating to island-wide helicopter activities must be addressed. These issues include:

1. Has Kauai reached the saturation point in terms of helicopter flightseeing activities?

2. Can helicopters be limited to their use of Lihue Airport after the inland facility is constructed?
3. How will safety and flight paths be regulated?

During the June 16, 1988 public hearing (See APPENDIX B: SUMMARY OF PUBLIC HEARING), nine testimonies were received of which the majority, including a strong advocacy from the County, supported the inland facility. Also, petitions from citizens (See APPENDIX B) were received urging the State to close Lihue Airport to all scenic tour operations and to permit the immediate construction of a private sector facility away from all noise sensitive areas.

#### D. SEGREGATED SITES

Helicopter facilities supporting single helicopter operators were the typical situation prior to aggregation at the Lihue Airport. Previous heliports have been located at Kauai Surf, Poipu Beach, and Coconut Plantation. Proposals for new heliports at Omao and Koloa did not receive sufficient support to commence construction and operations.

Other helicopter operational or landing sites exist at Princeville, Wilcox Hospital, Port Allen, and Makaweli. Princeville and Port Allen also support fixed winged aircraft. The Wilcox Hospital helipad is normally used only for medical emergency situations. The Makaweli site (private ownership) was recently initiated to support west-side tours and access to the island of Niihau.

Proliferation of segregated sites is not advocated by the Kauai public or county planners. Objections to noise and possible safety hazards have impeded construction of new segregated helipads sites.

#### 8.4 ALTERNATE FLIGHT PATHS

Alternative helicopter flight paths arriving and departing the new facility at the Lihue Airport have been promoted by the FAA and State officials. The FAA criteria for flight paths include:

- a. Minimum aircraft mixing (by type).
- b. No noise complaints
- c. Pilot acceptance, as pilots have final word on safety.

Alternative routing, their conflicts, and controls were discussed with the Kauai helicopter operators. The routes will be test flown

by the FAA for final acceptance. The alternative routings and discussions are:

- a. Ingress/egress through Hanamaulu (Kalepa Ridge) Saddle: All helicopter traffic would fly through a "channel" about 2,000' wide and less than 1,000' altitude. The route skirts the existing Hanamaulu subdivision. The route will bring helicopter closer to the ground producing greater noise annoyance.
- b. Status Quo Route with Radar Support: The addition of radar facilities would not help in eliminating the conflicts associated with the helicopter plus fixed wing mix at the airport. The reason is that the conflicts are occurring close-in near Runway 03/21, where the radar display would not be effective.
- c. Status Quo w/Additional Tower Manpower: Increased controls by providing additional manpower is not feasible as two separate controllers should not manage the same air space. Helicopter crossing at runway 3/21 is very critical but directing general aviation (60 flights/day) to runway 17/35 during peak traffic is not recommended, due to crosswinds.
- d. Status Quo: If the current entry/departure routes are maintained during operation of the interim helicopter facility, the most desirable runway crossing point would be in the general vicinity of the existing helicopter facilities. Maintaining the current entry/departure routes, while not the most desirable situation, is possible.
- e. Transfer all Fixed Wing arrivals to Runway 35: It may be possible to reduce the RWY 03/21 crossing delays during departures by transferring all fixed wing arrivals to RWY 35, and by having the helicopters cross the runway centerline to the south. Primary difficulties to light aircraft would occur from high crosswind components on RWY 35.
- f. On-site Adjustments: It is possible that two runway crossing points could be used. When aircraft are on approach to RWY 03, the existing crossing point could be used, with helicopters held back if a RWY 03 departure is also in progress. When aircraft are not on approach to RWY 03, the area to the south of the runway could be used as the crossing point. The primary problem with these procedures is that it may require too much coordination and may be too complex.
- g. Counter-clockwise Tour Routes: Operators claim that the Kauai scenery is made for clockwise routes. The operators consider

flying along the Napili Cliffs in a counter-clockwise direction difficult. The preferential route is to fly clockwise into the wind along the cliffs. A southern arrival route would make the tour 5 minutes longer adding considerable cost to operations. Pilots would rather have conflicting traffic head-on (see to avoid) and not have aircraft overtaking helicopters during the descending pattern.

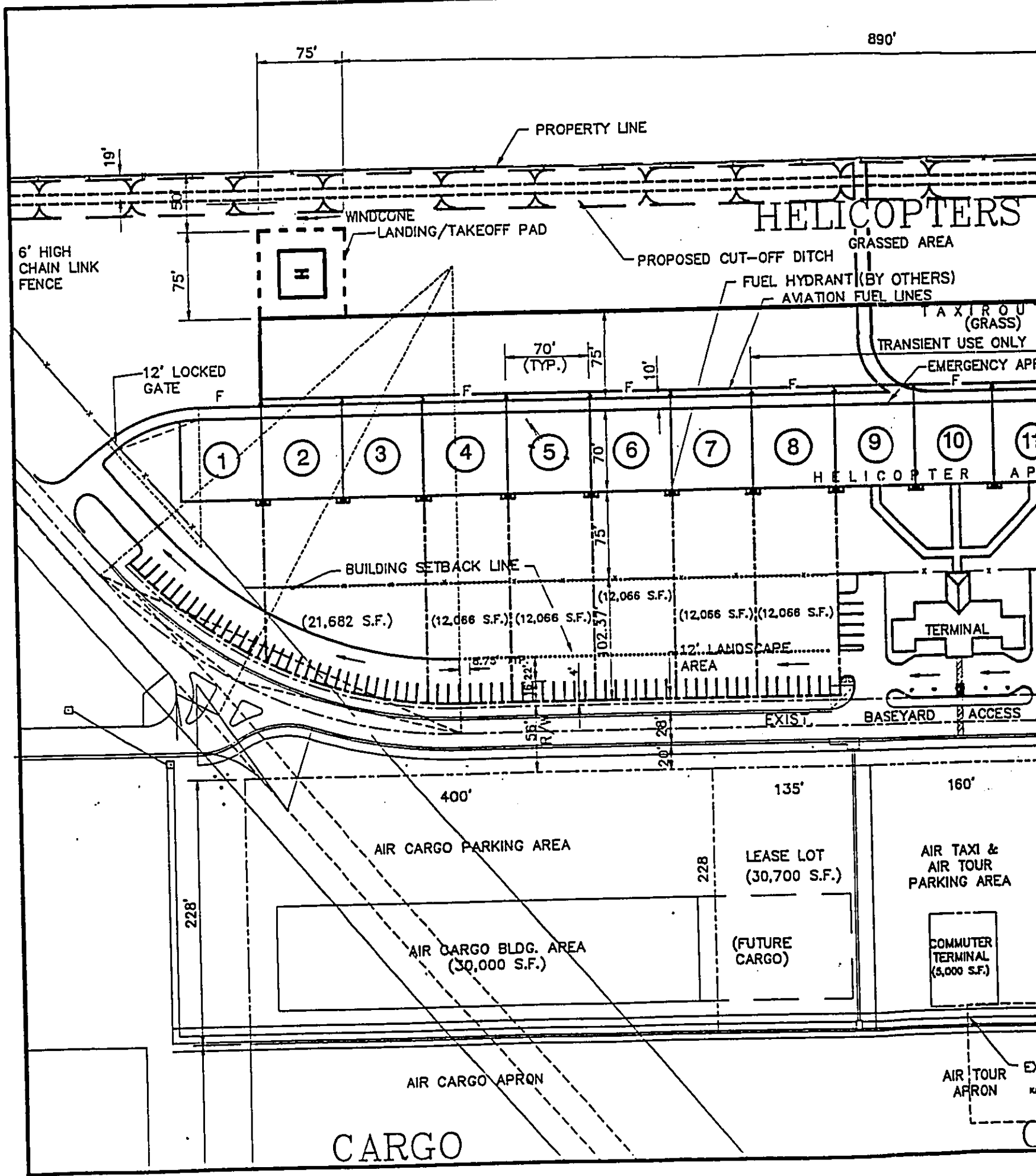
The status quo routes were considered to be the most feasible routes following meetings with State DOT, FAA and the helicopter operators. The routes will be maintained to continue the current southerly flow of helicopter departures toward Nawiliwili Harbor and arrivals from the Hanamaulu (Kalepa Ridge) saddle. Maintenance of the status quo routes means that the goal of in-flight separation of fixed wing and rotary aircraft will not be attained.

#### 8.5 ALTERNATIVE SITE IMPROVEMENTS

The proposed plans for the helicopter facility have been revised many times to address concerns of the administering agencies and expected users. FIGURE 8.2: ALTERNATIVE SITE IMPROVEMENTS shows how the site could be developed to provide the total needs for the helicopter operators. Improvements include underground fueling, flight staging areas, building areas for maintenance and administration functions, spacious vehicular parking lot, and a helicopter terminal. This alternative was abandoned when the inland facility received the support of the majority of the operators, the land owner of the proposed inland site, and the County of Kauai. Pursuing this alternative would have meant securing solutions for fuel dispensing and controls, tower line-of-sight requirements, and lease lot rules and regulations.

It is expected that the inland facility will be constructed and reduce the need for the helicopter facility at the Lihue Airport. Should construction of the inland facility be immediate, the size of the interim helicopter facility can be scaled-down to handle the reduced traffic. Should the inland facility be constructed after the Lihue facility, the pads can be used for other purposes, such as ground transportation operations or airport support/fixed based operations.

A further scaled-down facility will be adequate if lease documents for the inland site include a clause stating that leasing of land at the inland site precludes use of Lihue Airport. Lihue Airport would then be limited to transient operations only and not for loading/unloading of passengers.



890'

75'

PROPERTY LINE

19'

WINDCONE LANDING/TAKEOFF PAD

HELICOPTERS

6' HIGH CHAIN LINK FENCE

PROPOSED CUT-OFF DITCH

GRASSED AREA

FUEL HYDRANT (BY OTHERS)  
AVIATION FUEL LINES

H

TAXI ROU (GRASS)

TRANSIENT USE ONLY

EMERGENCY APR

12' LOCKED GATE

70' (TYP.)

1

2

3

4

5

6

7

8

9

10

11

HELICOPTER AP

BUILDING SETBACK LINE

(21,682 S.F.)

(12,066 S.F.)

(12,066 S.F.)

(12,066 S.F.)

(12,066 S.F.)

(12,066 S.F.)

12' LANDSCAPE AREA

TERMINAL

EXIST. BASEYARD ACCESS

400'

135'

160'

AIR CARGO PARKING AREA

LEASE LOT (30,700 S.F.)

AIR TAXI & AIR TOUR PARKING AREA

228'

AIR CARGO BLDG. AREA (30,000 S.F.)

(FUTURE CARGO)

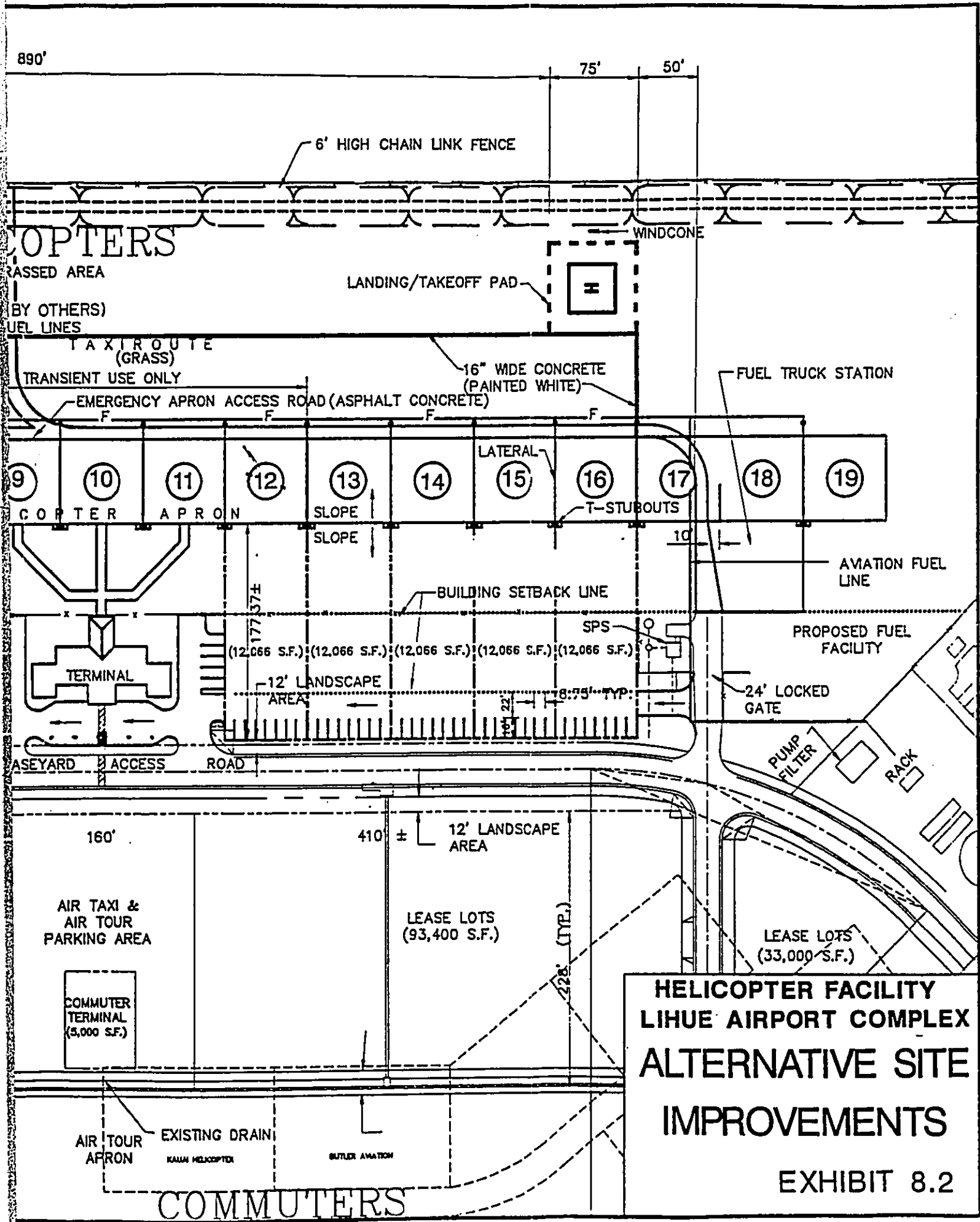
COMMUTER TERMINAL (5,000 S.F.)

AIR CARGO APRON

AIR TOUR APRON

CARGO





SECTION 9. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The construction and operation of the proposed project would involve the irretrievable commitment of certain natural and fiscal resources. Major resource commitments include land, construction materials, manpower and energy. The impacts of using these resources should, however, be weighed against the safety benefits and the consequences resulting from taking no action.

The commitment of construction materials, manpower, and energy are mostly unrenowable and irretrievable. Benefits to the State's tourism industry will be insignificant as the interim facility is an equivalent to the existing helicopter operational area. The operation of the project will not include the consumption of potable water and electricity.

SECTION 10. RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES AND MAINTENANCE/  
ENHANCEMENT OF LONG-TERM PRODUCTIVITY

A. SHORT-TERM USES

The development of the interim helicopter facility will include local short-term uses of man's environment during the construction phase of the project. Minor disruptions and nuisances in the vicinity of the project site should be expected. Temporary economic benefits will result from construction expenditure and employment opportunities.

The development of the helicopter facility will relieve the congestion experienced at the existing operational area and separate on-ground fixed wing aircraft from helicopter operations. The operations will be efficient considering dedicated fueling pads.

B. LONG-TERM PRODUCTIVITY

The interim helicopter facility will meet the existing operational space needs for flightseeing tours. Increase in long-term productivity and its economic benefits are not items promoted by the interim facility. The intent of the facility is to replace the existing operational area and not to expand tour activities.

The long-term productivity of this facility can occur at other locations on the island. It is possible that all tours will be generated from the new inland facility. The interim helicopter facility can be easily modified for use as a ground transportation support entity.

SECTION 11. LIST NECESSARY APPROVALS

The project site is designated as "Urban" (EXHIBIT 5.2) by the State Land Use Commission. Boundary amendment from agriculture was included in LUC Interp ZM-400-H and ZM-400-H-I concerning the Lihue Airport Complex.

The County of Kauai General Plan designation of the project site is "Public Facilities" as shown in EXHIBIT 5.1. Use of the site for a helicopter facility is consistent to the designation. The basis of the planned use is for an airport complex.

Prior to proceeding with the development at the helicopter facility, the Department of Transportation will request approval and permits from the following agencies:

1. Federal Aviation Administration (Environmental, Article 14 of the Federal Regulations, Airport Layout Plan)
2. Governor, State of Hawaii (Environmental)
3. State Department of Health (Dust Control)
4. Kauai County Planning (Construction plans)
5. Kauai County Public Works (Sewage, Grading)
6. Kauai County Department of Water (Water Connection)
7. Kauai County Fire Department (Fire Protection)
8. Hawaiian Electric Company (Electrical)
9. Hawaiian Telephone Company (Telephone)

SECTION 12. LIST OF AGENCIES, ORGANIZATIONS, AND INDIVIDUALS CONSULTED  
IN THE PREPARATION OF THE EA AND SEIS

A. NOTICE OF DETERMINATION/ENVIRONMENTAL ASSESSMENT

1. The following list of agencies and organizations were contacted on an initial attempt to identify interests in regards to the proposed actions. The intent was to make those who may be affected aware of the proposed project. Responses received regarding the EA determined which of the potential impacts are the major issues.

a. Federal Agencies

- 1) Federal Aviation Administration
- 2) Soil Conservation Services
- 3) Fish and Wildlife Service
- 4) Army Engineer District, Honolulu
- 5) Headquarters 15th Air Base Wing (PACAF)

b. State Agencies

- 1) Department of Planning & Economic Development
- 2) Department of Land & Natural Resources
- 3) Office of Environmental Quality Control
- 4) Department of Health
- 5) Department of Agriculture
- 6) Water Resources Research Center, UHM

c. County Agencies

- 1) Planning Department
- 2) Fire Department
- 3) Department of Public Works
- 4) Department of Water
- 5) Office of Economic Development

d. Organizations & Individuals

- 1) American Lung Association of Hawaii
- 2) Hawaii Visitors Bureau
- 3) Kauai Chamber of Commerce
- 4) Sierra Club, Life of the Land
- 5) Lihue Plantation Company
- 6) Hawaiian Airlines
- 7) Aloha Airlines
- 8) Hemmeter Aviation
- 9) League of Women Voters
- 10) Kauai Citizen Helicopter Advisory Board
- 11 - 24) Helicopter Operators at Lihue Airport
- 25) Helicopter - Community Relations Planning Board
- 26) William Sollner

2. The following agencies, organizations provided comments in reviewing the EA. A total of 14 comments were received and are reproduced in APPENDIX C: COMMENTS TO NOTICE OF DETERMINATION/ENVIRONMENTAL ASSESSMENT. Comments were not responded to directly but addressed in the Draft Supplemental Environmental Impact Statement.

a. Federal Agencies

- 1) U.S. Army Engineer District, Honolulu
- 2) Fish and Wildlife Service

b. State Agencies

- 1) Environmental Center, U of H Manoa
- 2) Department of Health
- 3) Department of Agriculture

4) Department of Land & Natural Resources

c. County Agencies

1) Department of Public Works

2) Department of Water

3) Fire Department

4) Planning Department

d. Organizations & Individuals

1) Kauai Citizens Helicopter Advisory Board

2) AMFAC Properties

3) Jack Harter Helicopters

4) Sierra Club, Kauai Group

B. SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

1. The following agencies, organizations and individuals were provided copies of the Draft Supplemental Environmental Impact Statement.

a) FEDERAL AGENCIES

1) Department of the Army  
U. S. Army Engineer District, Honolulu  
Building 230  
Fort Shafter, Hawaii 96858

2) Soil Conservation Service  
U. S. Department of Agriculture  
P. O. Box 50004  
Honolulu, Hawaii 96850

3) Fish and Wildlife Service  
U. S. Department of the Interior  
P. O. Box 50167  
Honolulu, Hawaii 96850

4) Commander, Naval Facility  
Command Pacific Division  
U.S. Department of the Navy  
Pearl Harbor, Hawaii 96860

- 5) Federal Aviation Administration  
Honolulu Airports District Office  
P.O. Box 50244  
Honolulu, Hawaii 96850
- 6) District Planning Office  
U. S. Department of Transportation  
United States Coast Guard  
Commander, Fourteenth Coast Guard District  
300 Ala Moana Boulevard  
Honolulu, Hawaii 96850
- 7) U.S. Army Support Command Hawaii  
Attention: Environmental Management Office  
Fort Shafter, Hawaii 96858-5000

b. STATE AGENCIES

- 1) Department of Agriculture  
State of Hawaii  
1428 South King Street  
Honolulu, Hawaii 96814
- 2) Department of Defense  
Office of the Adjutant General  
State of Hawaii  
3949 Diamond Head Road  
Honolulu, Hawaii 96816-4495
- 3) Department of Health  
State of Hawaii  
1250 Punchbowl Street  
Honolulu, Hawaii 96813
- 4) Department of Land & Natural Resources  
State of Hawaii  
1151 Punchbowl Street  
Honolulu, Hawaii 96813
- 5) Department of Planning & Economic Development  
State of Hawaii  
250 South King Street  
Honolulu, Hawaii 96813
- 6) Department of Social Services and Housing  
State of Hawaii  
1390 Miller Street, #209  
Honolulu, Hawaii 96813
- 7) Office of Environmental Quality Control  
State of Hawaii  
465 South King Street, #115  
Honolulu, Hawaii 96813



- 8) Environmental Center  
University of Hawaii  
Crawford 317  
2250 Campus Road  
Honolulu, Hawaii 96822
- 9) Water Resources Research Center  
University of Hawaii  
Holmes Hall 283  
2540 Dole Street  
Honolulu, Hawaii 96822

c. COUNTY AGENCIES

- 1) Kauai County  
Planning Department  
4280 Rice Street  
Lihue, Hawaii 96766
- 2) County of Kauai  
Department of Public Works  
3021 Umi Street  
Lihue, Kauai, Hawaii 96766
- 3) County of Kauai  
Department of Water Supply  
4938 Pua Loke Street  
Lihue, Kauai, Hawaii 96766
- 4) Kauai Community College  
Puhi  
Lihue, Kauai, Hawaii 96766

d. UTILITY COMPANIES

- 1) Kauai Electric Division  
Citizens Utilities Company  
P.O. Box 278  
Eleele, Kauai, Hawaii 96705
- 2) Hawaiian Telephone Company  
P.O. Box 2200  
Honolulu, Hawaii 96841

e. ORGANIZATIONS

- 1) The Sierra Club, Hawaii Chapter  
P. O. Box 111070  
Honolulu, Hawaii 96828

- 2) Life of the Land  
250 South Hotel Street, Suite 211  
Honolulu, Hawaii 96813
- 3) American Lung Association  
245 North Kukui Street  
Honolulu, Hawaii 96817
- 4) Hawaii Helicopters Operators Association  
228 Lagoon Drive, Suite 207  
Honolulu, Hawaii 96819
- 5) Kauai Citizens Helicopter Advisory Board  
P.O. Box 1071  
Lawai, Kauai, Hawaii 96765
- 6) State Helicopter & Tour Aircraft Advisory Board

f. GOVERNMENT OFFICIALS

- 1) Honorable Lehua Fernandes Salling  
Senator  
State Capitol, Room 218  
Honolulu, Hawaii
- 2) Honorable Ezra Kanoho  
Representative  
State Capitol, Room 315  
Honolulu, Hawaii
- 3) Honorable Bertha Kawakami  
Representative  
State Capitol, Room 318  
Honolulu, Hawaii
- 4) Honorable Tony Kunimura  
Mayor  
Kauai County  
4396 Rice Street  
Lihue, Kauai, Hawaii 96766
- 5) Honorable Ronald Kouchi  
Chairman  
Kauai County Council  
4396 Rice Street  
Lihue, Kauai, Hawaii 96766

g. INDIVIDUALS

- 1) Kauai Helicopter Operators (Separate copies)
  - a) Bali Hai Tours
  - b) Inter-Island Helicopters
  - c) Island Helicopters, Kauai
  - d) Kauai Helicopters
  - e) Menehune Helicopters, Ltd.
  - f) Kenai Air of Hawaii, Inc.
  - g) Niihau Helicopters
  - h) Ohana Helicopters
  - i) Papillon Helicopters, Ltd.
  - j) South Sea Helicopters
  - k) Jack Harter Helicopters
  - l) Will Squyres Helicopter Service
  - m) ERA Helicopters
  - n) Safari Helicopters
- 2) AMFAC Properties  
P.O. Box 3140  
Honolulu, Hawaii 96802
- 3) William Sollner  
Garden Isles Newspaper  
P.O. Box 231  
Lihue, Kauai, Hawaii 96766
- 4) Gary Blaich  
P.O. Box 404  
Kilauea, Kauai, Hawaii 96754

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Area of Expertise for Project: Project Management, Civil Engineering

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Area of Expertise for Project: Civil Engineering

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Professional Registration: Electrical Engineering - Hawaii

Area of Expertise for Project: Acoustical Engineering

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Hawaii, April 1986.
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Administration, July 14, 1986.
7. "A Positive Approach to Helicopter and Community Compatibility"  
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8. "Site Selection Report and Final Environmental Impact Statement," for  
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9. "Sewage System Study for the New Lihue Airport Complex" by Fukunaga &  
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10. "Rough Grading, Realignment of Cane Haul Roads and Irrigation System,  
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**APPENDIX A**

ACOUSTIC STUDY OF  
POTENTIAL NOISE IMPACTS ASSOCIATED WITH  
THE INTERIM HELICOPTER FACILITY AT  
LIHUE AIRPORT  
LIHUE, KAUAI

PREPARED FOR  
AKINAKA & ASSOCIATES, LTD.

BY  
Y. EBISU & ASSOCIATES

MAY, 1988

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## I. PURPOSE AND SUMMARY

The purpose of this study was to determine if the proposed new helicopter facility at Lihue Airport and the forecasted landings and takeoffs from the new facility would generate adverse noise impacts on surrounding noise sensitive properties. The proposed improvements involve a consolidation and relocation of existing helicopter parking positions and refueling facilities. The new facility will be located northwest (mauka) of Runway 03-21 at Lihue Airport. Helicopter ingress and egress routes in the areas surrounding Lihue Airport with the new facility in place are expected to remain the same as existing routes.

This study does not evaluate the possible increase in secondary noise impacts associated with forecasted increases in tour helicopter operations which would originate from the proposed facility at Lihue Airport. Because there is currently no regulatory method of limiting helicopter operations at a public use facility such as Lihue Airport, the CY 2005 forecasts for helicopter operations at Lihue Airport were used to evaluate the future noise impacts with or without completion of the proposed facility. The secondary noise impact implications of the forecasted growth in tour helicopter operations on Kauai were discussed in respect to projected increases in noise levels along the tour routes. However, a causal relationship between the construction of the new helicopter facility and the forecasted growth in tour helicopter operations on Kauai was not assumed.

The findings from the sound measurements which were performed and the helicopter noise contours which were developed indicate that there will be minimal risk of adverse health and welfare impacts from helicopter noise in the immediate environs of Lihue Airport following completion of the proposed helicopter facility at the forecasted annual level of 90,000 operations per year. The reasons for this is that the helicopter ingress and egress routes to and from the new facility will remain essentially the same as existing routes, and the forecasted growth in helicopter opera-

tions are predicted to result in only a 1.5 Ldn increase in cumulative noise exposure from helicopters.

However, because the complaint threshold for helicopter noise can be lower than the most conservative 55 Ldn public health and welfare threshold, there will always be a risk of annoyance reactions from existing and future Lihue residents. This is particularly true for those noise sensitive receptors who are located directly under or near the helicopter flight tracks to and from the proposed facility, or along the tour routes. Recommendations for minimizing risks of adverse annoyance reactions from existing and future residents are provided.

## II. NOISE DESCRIPTORS AND THEIR RELATIONSHIP TO LAND USE COMPATIBILITY\*

A general consensus has developed for using the Day-Night Sound Level (Ldn) in describing environmental noise in general, and for relating the acceptability of the noise environment for various land uses. The Day-Night Sound Level represents the 24-Hour average sound level for a typical day, with nighttime noise levels (10:00 P.M. to 7:00 A.M.) increased by 10 decibels prior to computation of the 24-Hour average. Annual aircraft operations are divided by 365 days to obtain the 24-Hour average used in Ldn computations.

The Ldn descriptor employs a process of averaging instantaneous A-Weighted sound levels as read on a standard Sound Level Meter, which are normally referred to as meter readings in dBA. The maximum A-Weighted sound level occurring during an aircraft flyby event (or single event) is referred to as the Lmax value. The mathematical product (or integral) of the instantaneous sound level times the duration of the event is known as the Sound Exposure Level, or Lse, and is analogous to the energy of the time varying sound levels associated with an aircraft flyby event. Current noise standards and criteria which associate land use compatibility or adverse health and welfare effects with various levels of environmental noise are normally described in terms of Ldn rather than the single event (Lmax or Lse) noise descriptors. The reasons for this are based on the relatively good correlation between the cumulative Ldn descriptor and annoyance reactions of the exposed population. However, at very low levels of environmental noise (55 Ldn or less), other attitudinal variables and biases (besides noise) of the exposed population tend to influence annoyance reactions, and the correlation between annoyance reactions and Ldn levels deteriorates.

\*A brief description of the acoustic terminology and symbols used are provided in APPENDIX B.

TABLE 1, extracted from REFERENCE 1, categorizes the various Ldn levels of outdoor noise exposure with severity classifications. TABLE 2, also extracted from REFERENCE 1, presents the general effects of noise on people in residential use situations. FIGURE 1, extracted from REFERENCE 2, presents suggested land use compatibility guidelines for residential and nonresidential land uses. A general consensus among federal agencies has developed whereby residential housing development is considered acceptable in areas where exterior noise does not exceed 65 Ldn. This value of 65 Ldn is used as a federal regulatory threshold for determining the necessity for special noise abatement measures when federal funding assistance is applied for.

Federal agencies (HUD and EPA) recognize 55 Ldn as a desirable goal for exterior noise in residential areas for protecting the public health and welfare with an adequate margin of safety (REFERENCES 3 and 4). Although 55 Ldn is significantly quieter than 65 Ldn, the lower level has not been adopted for regulatory purposes by federal agencies due to economic and technical feasibility considerations.

In Hawaii, where open living conditions prevail throughout the year, and where natural ventilation is a prevalent characteristic of residential housing, the more conservative level of 55 Ldn should be used to evaluate potential noise impacts. This is particularly true whenever relatively quiet areas are under evaluation. Also, at an exterior noise level of 55 Ldn, the noise attenuation characteristics of typical naturally ventilated dwellings produce acceptable noise levels within the dwelling (approximately 45 Ldn). Naturally ventilated residential units outside the 55 Ldn contour were considered to be "Unconditionally Acceptable" in respect to adverse health and welfare effects.

For commercial, industrial, and other non-noise sensitive land uses, exterior noise levels as high as 75 Ldn are generally considered acceptable. Exceptions to this occur when naturally ventilated office and other commercial establishments are exposed to exterior levels which exceed 65 Ldn.

TABLE 1  
EXTERIOR NOISE EXPOSURE CLASSIFICATION  
(RESIDENTIAL LAND USE)

Noise Exposure Class	Day-Night Sound Level	Equivalent Sound Level	Federal Standard <sup>(1)</sup>
Minimal Exposure	Not Exceeding 55 Ldn	Not Exceeding 55 Leq	Unconditionally Acceptable
Moderate Exposure	Above 55 Ldn But Not Above 65 Ldn	Above 55 Leq But Not Above 65 Leq	Acceptable <sup>(2)</sup>
Significant Exposure	Above 65 Ldn But Not Above 75 Ldn	Above 65 Leq But Not Above 75 Leq	Normally Unacceptable
Severe Exposure	Above 75 Ldn	Above 75 Leq	Unacceptable

Note: (1) Federal Housing Administration, Veterans Administration, Department of Defense, and Department of Transportation.

(2) FHWA uses the Leq instead of the Ldn descriptor. For planning purposes, both are equivalent if: (a) heavy trucks do not exceed 10 percent of total traffic flow in vehicles per 24 hours, and (b) traffic between 10:00 PM and 7:00 AM does not exceed 15 percent of average daily traffic flow in vehicles per 24 hours.

Source: Reference 1.

TABLE 2

EFFECTS OF NOISE ON PEOPLE  
(Residential Land Uses Only)

Effects <sup>1</sup> Day-Night Average Sound Level in Decibels	Hearing Loss	Speech Interference		Annoyance <sup>2</sup> % of Population Highly Annoyed <sup>3</sup>	Average Community Reaction <sup>4</sup>	General Community Attitude Towards Area
		Indoor % Sentence Intelligibility	Outdoor Distance in Meters for 95% Sentence Intelligibility			
75 and above	May Begin to Occur	98%	0.5	37%	Very Severe	Noise is likely to be the most important of all adverse aspects of the community environment.
70	Will Not Likely Occur	99%	0.9	25%	Severe	Noise is one of the most important adverse aspects of the community environment.
65	Will Not Occur	100%	1.5	15%	Significant	Noise is one of the important adverse aspects of the community environment.
60	Will Not Occur	100%	2.0	9%	Moderate	Noise may be considered an adverse aspect of the community environment.
55 and below	Will Not Occur	100%	3.5	4%	10 Slight	Noise considered no more important than various other environmental factors.

1. "Speech Interference" data are drawn from the following tables in EPA's "Levels Document": Table J, Fig. D-1, Fig. D-2, Fig. D-3. All other data from National Academy of Science 1977 report "Guidelines for Preparing Environmental Impact Statements on Noise, Report of Working Group 69 on Evaluation of Environmental Impact of Noise."

2. Depends on attitudes and other factors.

3. The percentages of people reporting annoyance to lesser extents are higher in each case. An unknown small percentage of people will report being "highly annoyed" even in the quietest surroundings. One reason is the difficulty all people have in integrating annoyance over a very long time.

4. Attitudes or other non-acoustic factors can modify this. Noise at low levels can still be an important problem, particularly when it intrudes into a quiet environment.

NOTE: Research implicates noise as a factor producing stress-related health effects such as heart disease, high-blood pressure and stroke, ulcers and other digestive disorders. The relationships between noise and these effects, however, have not as yet been quantified.

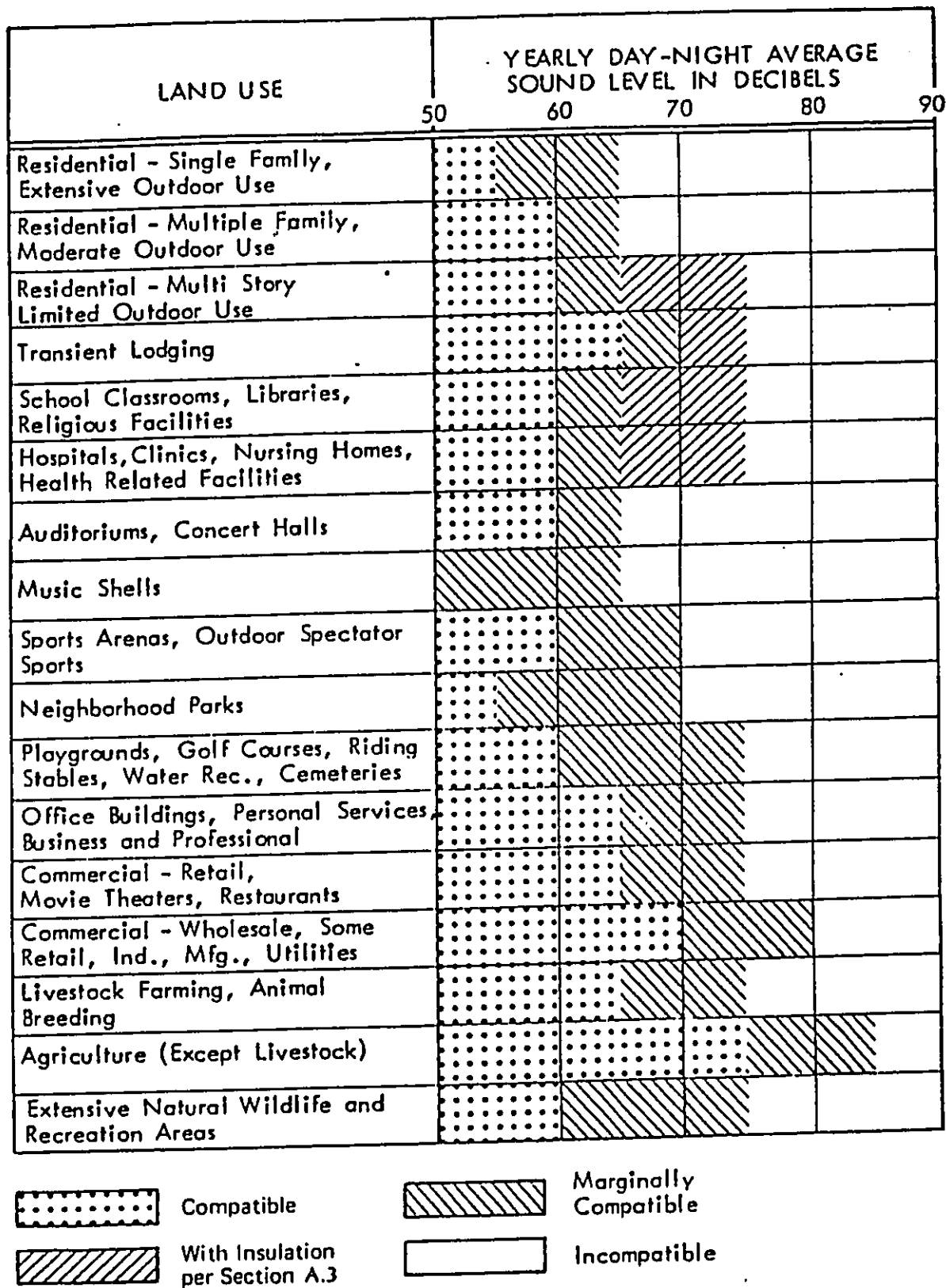


FIG. 1. Land use compatibility with yearly day-night average sound level at a site for buildings as commonly constructed. [For information only; not a part of American National Standard for Sound Level Descriptors for Determination of Compatible Land Use S3.23-1980.]



It is of interest to note from FIGURE 1 that noise levels below 60 Ldn are considered "Compatible" for lands with "Extensive Natural Wildlife and Recreation Areas." However, for designated wilderness areas, where preservation of the natural quiet and experience of the wilderness area is a desired goal, cumulative helicopter noise exposure levels must be as low as 30 to 40 Ldn (or below background ambient noise levels) in order to achieve that goal.

### III. GENERAL STUDY METHODOLOGY

The noise analysis procedures delineated in REFERENCE 5 were used in this study. The recently released FAA Heliport Noise Model (FAA HNM), Version 1.1, was not available in time for use in this study. Ldn noise contours for CY 1986, 1991, and 2005 were developed with the FAA Integrated Noise Model (FAA INM). A user generated data base of helicopter noise curves and flight profiles were included in the FAA INM to reflect the noise monitoring data and operating conditions at Lihue Airport. The FAA INM is normally used to develop fixed wing aircraft noise contours, because it does not have provisions for stationary (e.g. hover) operations, and was used to develop the Ldn contours for the Lihue Airport Part 150 Noise Study (REFERENCE 6). The results from the FAA INM should produce reasonably accurate results near the helicopter egress and ingress routes at Lihue Airport. At locations in the immediate vicinity of the proposed facility, the HNM results should be more accurate than the INM results due to the inclusion of hover operations by the HNM.

The Day-Night Sound Level (Ldn) noise descriptor was used to describe the existing and projected aircraft noise surrounding the proposed helicopter facility at Lihue Airport. Existing (or Base Year) helicopter noise contours were developed for annually averaged conditions which occurred during CY 1986 for comparison with total (fixed wing plus helicopter) noise contours developed for the current FAR Part 150 Noise Compatibility Study for Lihue Airport (REFERENCE 6). Forecasts of future helicopter operations at Lihue Airport were obtained from REFERENCE 7. Using these forecasts, helicopter noise contours were then developed for the CY 1991 and CY 2005 time periods for conditions with and without the new facility in place.

Operational assumptions and aircraft flight tracks developed during the FAR Part 150 effort were also used in this study of the new helicopter facility. FIGURE 2 depicts the location of the existing runways at Lihue Airport, as well as the helicopter



flight tracks to and from the airport. TABLE 3 presents a summary of the daily operational assumptions used to generate the Ldn contours for the Base Year (CY 1986) conditions at Lihue Airport.

The proposed helicopter facility location and assumed helicopter flight tracks following completion of the facility are depicted in FIGURE 3. TABLES 4 and 5 present summaries of the daily operational assumptions used to generate the helicopter Ldn contours for CY 1991 and CY 2005, respectively. A very small (4 percent) increase in helicopter operations is projected to occur from CY 1986 to CY 1991, and a larger increase (40 percent) is projected to occur from CY 1986 to CY 2005. It was assumed that the future mix of helicopter traffic would not change significantly from the Base Year mix of predominantly Bell 206 helicopters, and that the future mix would be acoustically similar to the current mix of helicopters operating at Lihue Airport.

Helicopter noise level assumptions, in Lse (Sound Exposure Level), were developed for takeoff, level flight, and approach flight conditions from published noise characteristics for the Bell 206 and Aerospatiale 350D (REFERENCES 8 and 9), plus measured helicopter sound level data obtained in 1984 and 1987 at Lihue Airport. The results of these helicopter noise measurements are shown in TABLE 6, with the locations of the measurement sites shown in FIGURE 2. Comparisons of measured helicopter Sound Exposure Level vs. FAA INM predictions are included in TABLE 6 to indicate the relative consistency between the model outputs and the noise measurement results. These efforts were necessary and were previously performed during the Lihue Airport Part 150 study since the FAA INM does not contain a built-in helicopter noise data base.

Existing Ldn contours for 60, 55, and 50 Ldn were generated using the Federal Aviation Administration Integrated Noise Model (FAA INM). Although FAA (REFERENCE 5) does not require the development of noise contours below the 65 Ldn level, the development of the lower level contours were considered necessary to depict the changes of the possible helicopter noise impact

TABLE 3

BASE YEAR (CY 1986) HELICOPTER OPERATIONS  
LIHUE AIRPORT

A/C	TOTAL DAILY LANDINGS	RWY 03 (TR10)	RWY 03 (TR16)	RWY 21 (TR15)
BELL 206	86.66	7.59	68.32	10.75
HUGH 300	0.00	0.00	0.00	0.00
HUGH 500	0.00	0.00	0.00	0.00
ASTAR	1.62	0.14	1.28	0.20
Sub-total (Day):	88.28	7.73	69.60	10.95
Sub-total (Night):	0.00	0.00	0.00	0.00

A/C	TOTAL DAILY DEPART'S	RWY 03 (TR12)	RWY 03 (TR13)	RWY 21 (TR14)
BELL 206	86.66	77.99	1.73	6.93
HUGH 300	0.00	0.00	0.00	0.00
HUGH 500	0.00	0.00	0.00	0.00
ASTAR	1.62	1.46	0.03	0.13
Sub-total (Day):	85.63	76.81	1.77	7.06
Sub-total (Night):	2.65	2.65	0.00	0.00



**FIGURE 3**  
 FUTURE HELICOPTER FLIGHT TRACKS  
 WITH NEW HELICOPTER FACILITY

SCALE  
 0 1000' 2000'

TABLE 4  
 FORECASTED CY 1991 HELICOPTER OPERATIONS  
 LIHUE AIRPORT

A/C	TOTAL DAILY LANDINGS	RWY 03H (TR10)	RWY 03H (TR16)	RWY 21H (TR15)
BELL 206	90.09	7.89	71.03	11.17
HUGH 300	0.00	0.00	0.00	0.00
HUGH 500	0.00	0.00	0.00	0.00
ASTAR	1.68	0.15	1.33	0.21
Sub-total (Day):	91.77	8.04	72.36	11.38
Sub-total (Nite):	0.00	0.00	0.00	0.00

A/C	TOTAL DAILY DEPART'S	RWY 03 (TR12)	RWY 03H (TR13)	RWY 21H (TR14)
BELL 206	90.09	81.08	1.80	7.21
HUGH 300	0.00	0.00	0.00	0.00
HUGH 500	0.00	0.00	0.00	0.00
ASTAR	1.68	1.52	0.03	0.13
Sub-total (Day):	89.03	79.85	1.84	7.34
Sub-total (Nite):	2.75	2.75	0.00	0.00

TABLE 5  
 FORECASTED CY 2005 HELICOPTER OPERATIONS  
 LIHUE AIRPORT

A/C	TOTAL DAILY LANDINGS	RWY 03H (TR10)	RWY 03H (TR16)	RWY 21H (TR15)
BELL 206	121.02	10.60	95.41	15.01
HUGH 300	0.00	0.00	0.00	0.00
HUGH 500	0.01	0.00	0.00	0.00
ASTAR	2.26	0.20	1.78	0.28
Sub-total (Day):	123.29	10.80	97.20	15.29
Sub-total (Nite):	0.00	0.00	0.00	0.00

A/C	TOTAL DAILY DEPART'S	RWY 03 (TR12)	RWY 03H (TR13)	RWY 21H (TR14)
BELL 206	121.02	108.92	2.42	9.68
HUGH 300	0.00	0.00	0.00	0.00
HUGH 500	0.01	0.00	0.00	0.00
ASTAR	2.26	2.04	0.05	0.18
Sub-total (Day):	119.59	107.26	2.47	9.86
Sub-total (Nite):	3.70	3.70	0.00	0.00



TABLE 6  
COMPARISON OF LIH DATA AND INM VER 3 Lee VALUES

ROTOR WING AIRCRAFT (TRACK)	NOISE MEASUREMENT LOCATIONS AT LIH														
	B	B2	SIP	STADIUM	EBL	BAVA	RES	MALAE	LIH-H	LIH-A	LIH-D	POST-A	POST-III	POST-DE	RISE
B-206L (TR 10)	* 73.1	75.7	72.4	73.1 73.2	70.0 70.2	78.0 77.6	73.8	67.0	56.0	60.2	59.8	65.8	58.5	57.3	63.4
B-206L (TR 12)	* 68.8	67.3	72.8 71.7	64.9 65.7	51.5	60.2	64.8	59.4	77.0 75.4	69.1 69.2	68.0 64.4	80.2	75.4 79.5	75.6 79.4	85.4 85.2
B-206L (TR 13)	* 79.8	83.2	54.8	54.6	75.2	75.4	79.0	54.2	48.8	49.9	49.2	56.0	55.1	54.2	56.9
B-206L (TR 14)	* 68.9	67.8	65.2 69.9	63.9	50.7	60.2	64.9	58.2	72.1	66.3	62.3	76.7 77.4	82.7	82.7	82.1
B-206L (TR 15)	* 82.0	81.9	53.8	54.4	66.9	77.4	76.9	55.5	47.9	49.7	50.1	53.8	52.6	51.8	54.2
B-206L (TR 16)	* 71.2	73.9	62.0	61.6	65.6	78.0 81.1	71.9	61.0	52.4	54.9	54.7	61.3	57.0	55.6	60.9

NOTE:  
\* LIH NOISE MEASUREMENT DATA IN dB  
\*\* INM VERSION 3 CALIBRATION RESULTS IN dB

zones with the addition of the new facility. Additionally, REFERENCE 10 recommends that more conservative noise criteria be used in evaluating the noise compatibility of new heliports.

Noise exposure contours were developed for the CY 1991 and CY 2005 periods to depict the projected helicopter noise levels with and without the proposed facility in place. The helicopter ingress and egress routes were maintained to continue the current southerly flow of helicopter departures toward Nawiliwili Harbor and with arrivals from the saddle (or Kalepa Ridge). The helicopter egress and ingress routes to the proposed facility, were considered to be the only feasible routes following meetings with State DOT, FAA, and the helicopter operators.

The future noise contours were compared to existing conditions to evaluate the potential noise impacts associated with the forecasted growth in helicopter operations at Lihue Airport, as well as those associated with the new helicopter facility. Using the Ldn noise contour results and the results of the single event sound level measurements, evaluations were made of potential noise impacts in the health and welfare category, and of potential annoyance responses from nearby residences. Based on the above evaluations, recommendations for mitigation measures which would minimize risks of health and welfare impacts, as well as risks of annoyance responses from nearby residences were provided.

#### IV. EXISTING AMBIENT NOISE LEVELS

The existing background ambient noise levels in the vicinity of the proposed new helicopter facility are controlled by fixed wing and rotary wing aircraft operations at Lihue Airport. The dominant contributors to ambient noise levels in the area are the interisland jet aircraft which depart on Lihue Airport's RWY 03 during trade wind (north flow) conditions. The Base Year (CY 1986) noise contours, which were developed during the Part 150 study at Lihue Airport, are shown in FIGURE 4. The contours are representative of the existing ambient noise conditions in the environs of Lihue Airport, with relatively few noise sensitive areas enclosed by the 55 Ldn contour. A residence near Ahukini Landing, residences at Hanamaulu Bay, residences at the eastern edge of Hanamaulu town, and the Westin Kauai Resort are enclosed by the Base Year 55 Ldn contour. The Ahukini Landing area is in the "Significant Exposure, Normally Unacceptable" category of noise exposure, while the Hanamaulu and Westin Kauai areas are in the "Moderate Exposure, Acceptable" category.

At locations near the helicopter egress and ingress routes, helicopter flyby sound levels range from 65 to 80 dB (Lmax), with measured and predicted sound exposure levels (Lse) as indicated in TABLE 6. Between aircraft flights, background noise levels are in the order of 45 dB (Leq or average), and are not high enough to mask the aircraft sound levels during flyby events. The present background ambient noise environment in the vicinity of the proposed helicopter facility is characterized by relatively quiet background noise levels, with periodic aircraft noise events audible above the background noise.

The Base Year (CY 1986), 60, 55, and 50 Ldn contours, which represent the noise from only helicopter operations at Lihue Airport, were generated using the FAA Integrated Noise Model (FAA INM) and are depicted in FIGURE 5. The helicopter noise component of the total Base Year noise contours (FIGURE 4) is significantly lower than those associated with the jet aircraft operations at

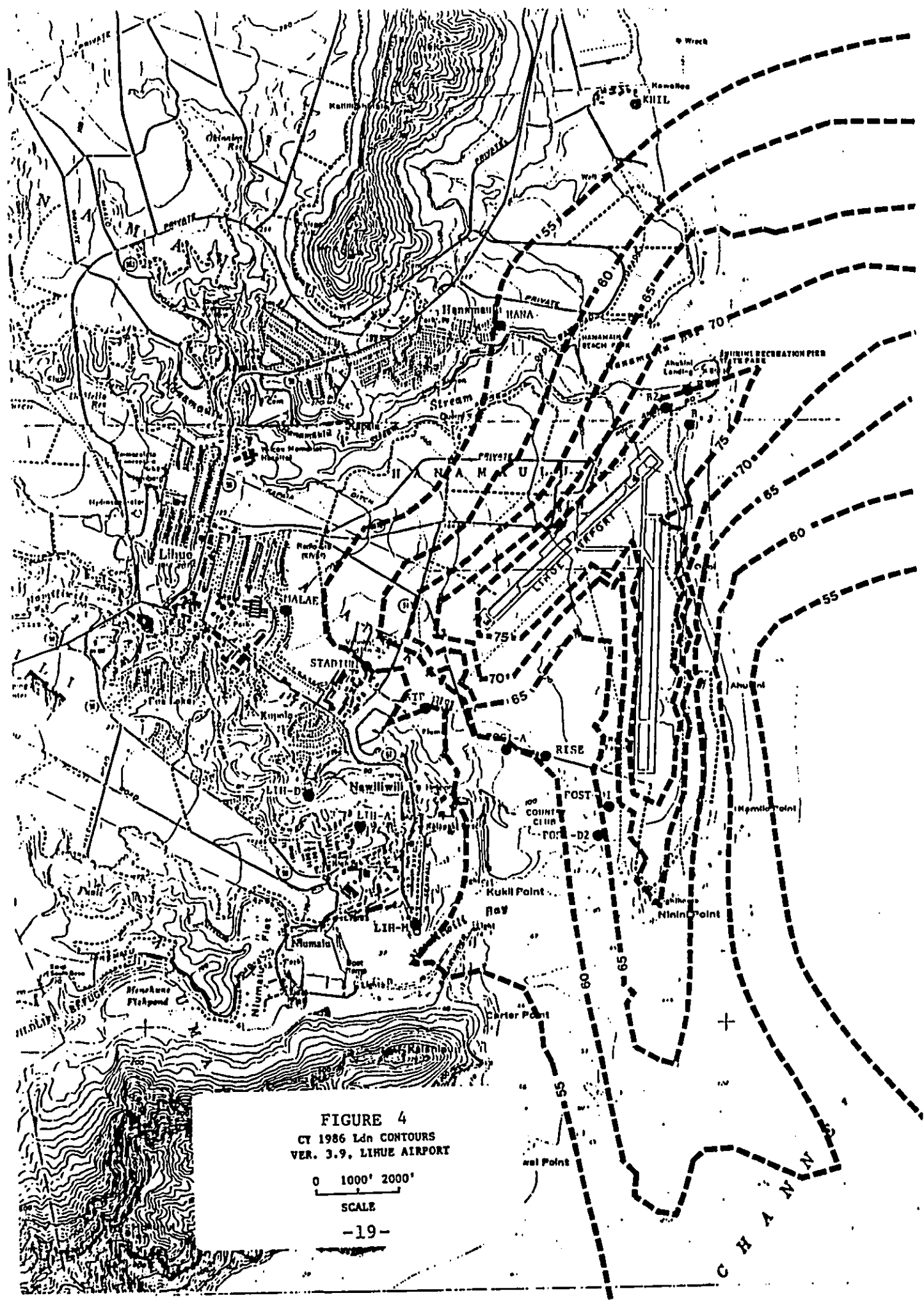
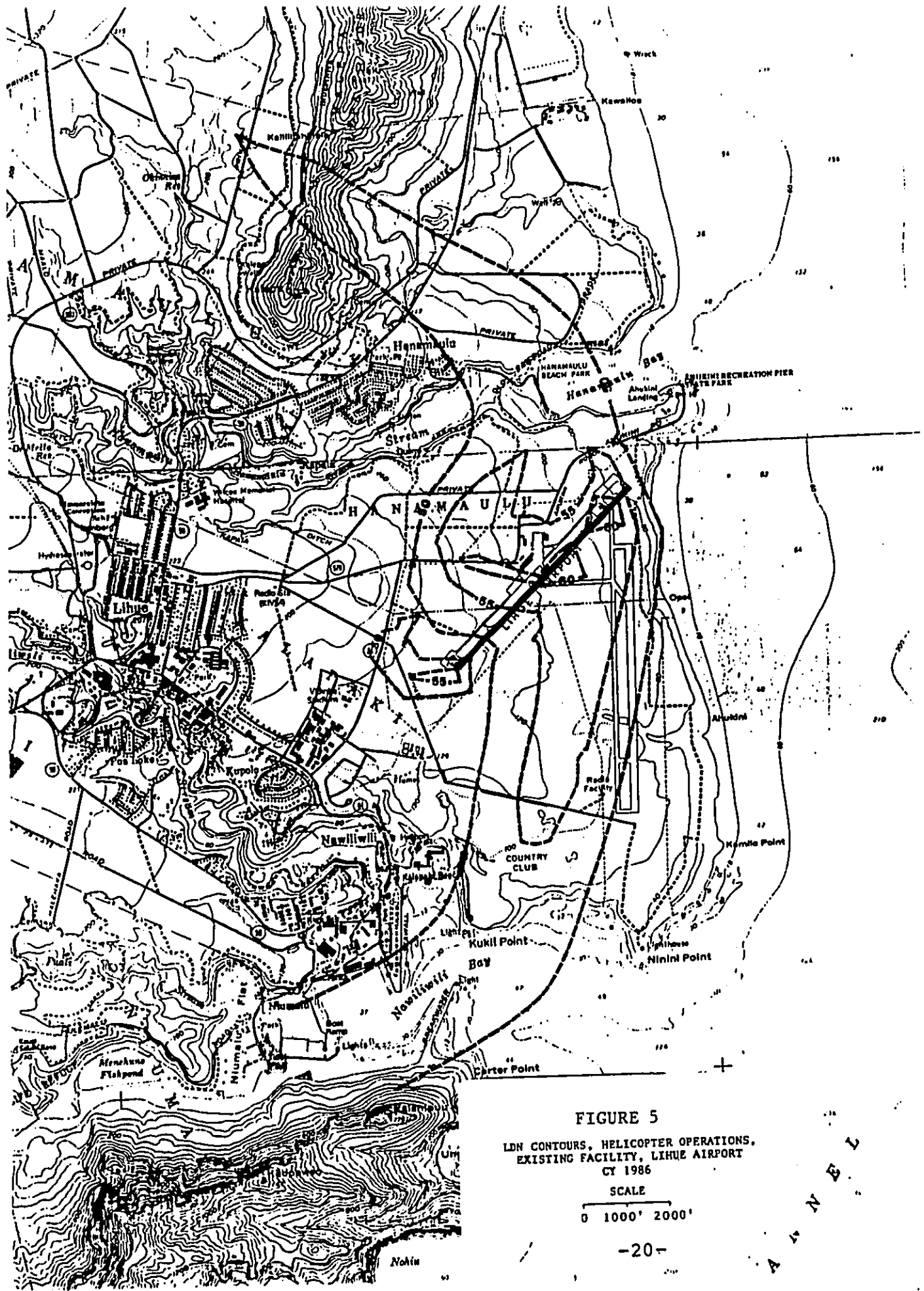


FIGURE 4  
 CY 1986 Ldn CONTOURS  
 VER. 3.9, LIHUE AIRPORT

0 1000' 2000'  
 SCALE



**FIGURE 5**  
 LDN CONTOURS, HELICOPTER OPERATIONS,  
 EXISTING FACILITY, LIHUE AIRPORT  
 CY 1986

SCALE  
 0 1000' 2000'

Lihue Airport. The existing helicopter component of total aircraft noise levels in the surrounding communities are in the "Minimal Exposure, Unconditionally Acceptable" category, with levels generally less than 55 Ldn. For this reason, risks of adverse health and welfare effects from existing helicopter noise are considered to be low.

## V. FUTURE HELICOPTER NOISE LEVELS

FIGURES 6 thru 9 present the forecasted helicopter noise contours for Lihue Airport under the "No Build" and "Build" Alternatives for CY 1991 and 2005. TABLE 7 summarizes the helicopter operation forecasts used, and their relationship to historical operations data from FAA and State DOT sources. The noise contours shown for 60, 55, and 50 Ldn represent the helicopter noise exposure resulting from an average day of flight operations, and are applicable for the CY 1991 and 2005 periods. As indicated in FIGURES 7 and 9, residential or other urban areas are not expected to be exposed to helicopter noise above 55 Ldn, and as such, the proposed helicopter facility should not alter the existing land use compatibility conditions in the airport environs, and should not pose significant risks of adverse health and welfare effects. EPA's most stringent recommendation of 55 Ldn for residential land uses will be met even if helicopter operations increase from the present level to 90,000 operations per year as forecasted for CY 2005.

The forecasted helicopter noise contours shown in FIGURES 6 thru 9 were developed under the assumption that helicopter ingress and egress routes will not change from existing routes. These existing and future routes are depicted in FIGURES 2 and 3. Because of the operational desirability of separating the fixed wing operations from rotary wing operations at Lihue Airport, the possibility of locating both the ingress and egress routes to the north was evaluated. The noise contours associated with the proposed location of the ingress and egress routes over Kalepa Ridge were also developed. FIGURE 10 depicts the forecasted CY 2005 noise contours for the condition with both ingress and egress routes located north of the airport. Helicopter noise levels north of the airport would increase by 5 to 10 Ldn units due to the doubling of helicopter flights over the area, and due to the lower helicopter altitudes required to maintain separation between arriving and departing helicopters. Existing residences along the



FIGURE 6  
 LDN CONTOURS, HELICOPTER OPERATIONS,  
 EXISTING FACILITY, LIHUE AIRPORT  
 CY 1991

SCALE  
 0 1000' 2000'





FIGURE 7  
 LDN CONTOURS, HELICOPTER OPERATIONS,  
 WITH NEW FACILITY, LIHUE AIRPORT,  
 CY 1991

SCALE  
 0 1000' 2000'

A N N E L

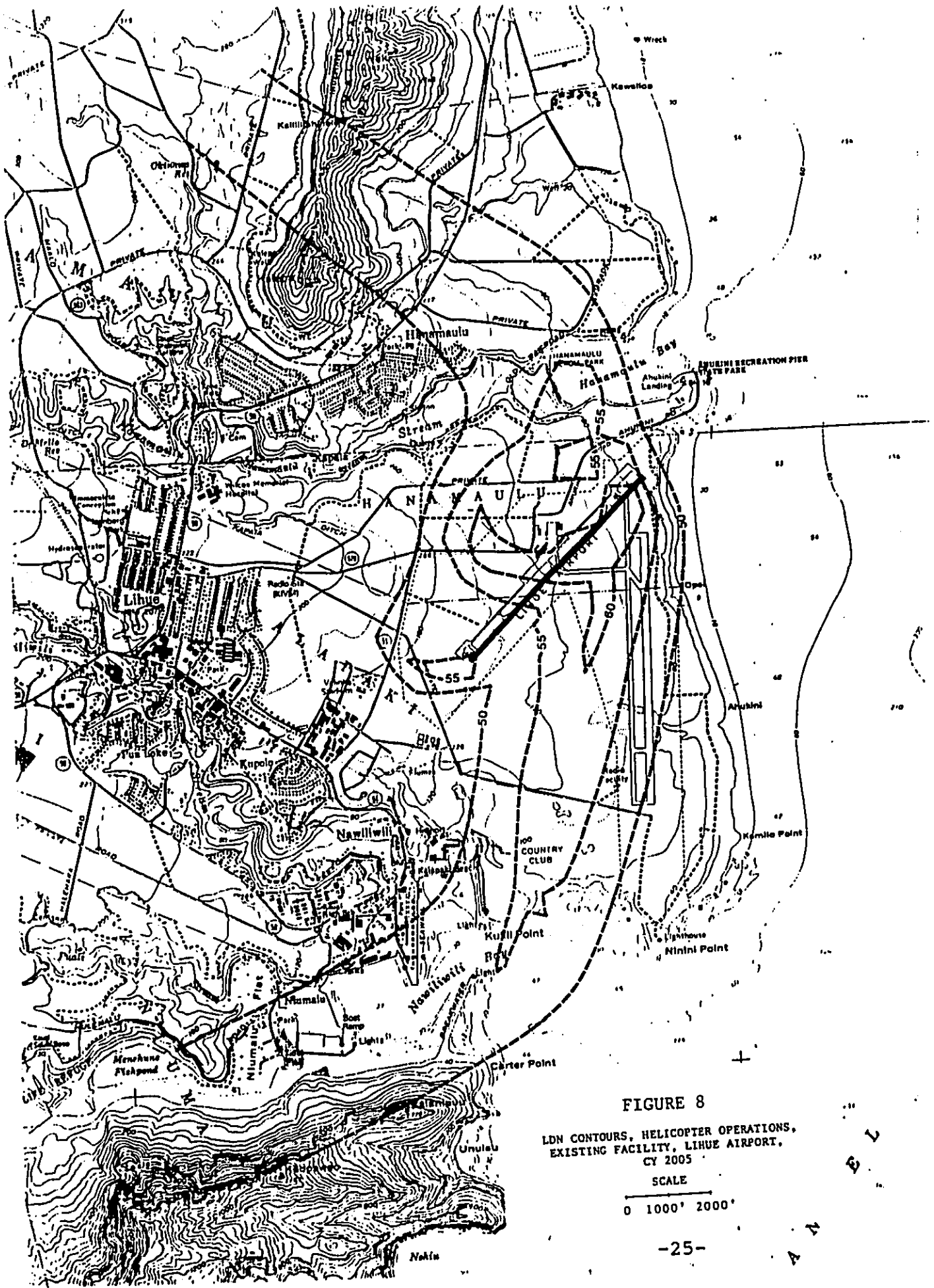


FIGURE 8  
 LDN CONTOURS, HELICOPTER OPERATIONS,  
 EXISTING FACILITY, LIHUE AIRPORT,  
 CY 2005

SCALE  
 0 1000' 2000'

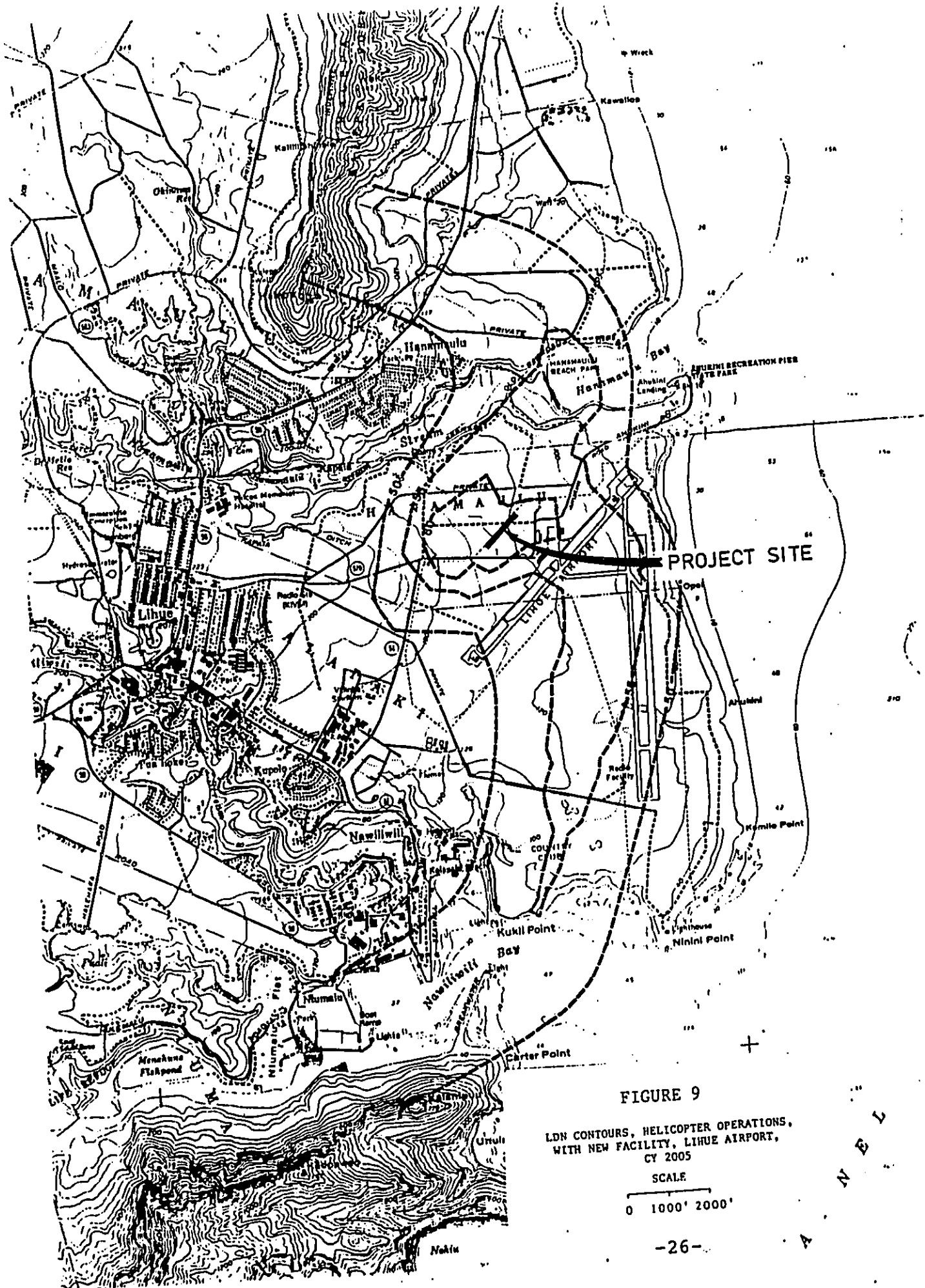


FIGURE 9  
 LDN CONTOURS, HELICOPTER OPERATIONS,  
 WITH NEW FACILITY, LIHUE AIRPORT,  
 CY 2005

SCALE  
 0 1000' 2000'

TABLE 7  
 COMPARISON OF ANNUAL STATE AND FAA OPERATIONAL DATA WITH  
 HELICOPTER OPERATIONS FORECASTS

YEAR	STATE LANDINGS	STATE OPERATIONS	FAA OPERATIONS	SASP FORECAST	PART 150
1980	2,310	4,620			
	3,001	6,002			
	3,001	6,002			
	4,043	8,086			
	10,615	21,230			
1985	17,306	34,612	47,935		
	24,772	49,544	60,563		
	24,467	48,934	67,838		64,444
1987			58,845		
1990				65,000	67,000
1995				73,333	
2000				81,667	
2005				90,000	90,000

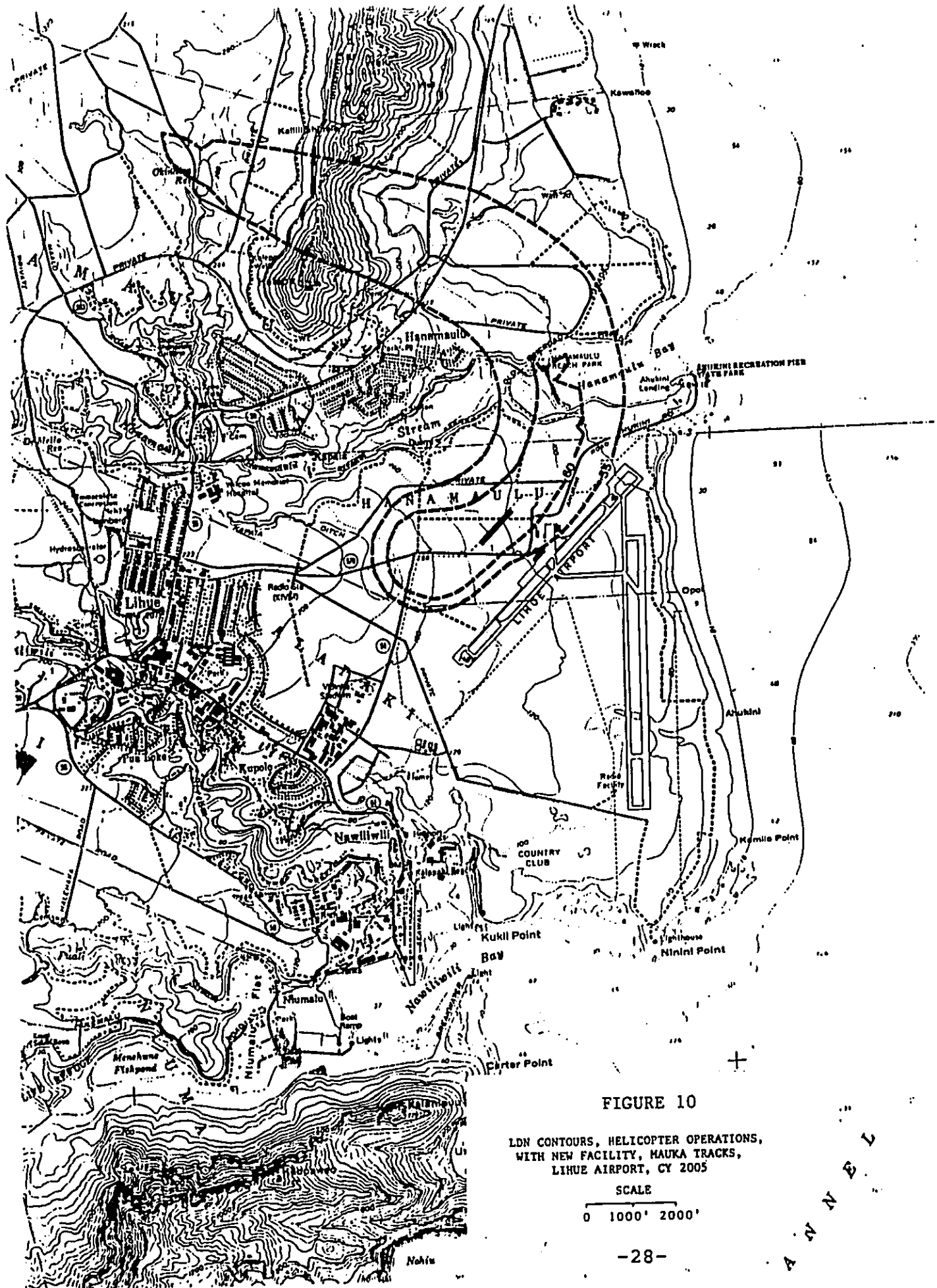


FIGURE 10

LDN CONTOURS, HELICOPTER OPERATIONS,  
WITH NEW FACILITY, MAUKA TRACKS,  
LIHUE AIRPORT, CY 2005

SCALE  
0 1000' 2000'

access road to Hanamaulu Beach Park would be exposed to helicopter noise levels between 55 and 60 Ldn if both ingress and egress routes are located north of the airport. For noise impact and other operational reasons, the alternative of locating both routes north of the airport was not adopted.

Because the Ldn noise descriptor represents a highly averaged measure of time-varying sound levels, the maximum A-weighted sound level (Lmax) during an aircraft flyby event will generally be greater than the Ldn contour values shown. Because the existing helicopter egress and ingress routes are not expected to be changed following completion of the new facility, helicopter flyby sound levels are expected to remain the same as existing levels and range from 65 to 80 dB (Lmax), with sound exposure levels (Lse) as shown in TABLE 6.

## VI. POSSIBLE NOISE IMPACTS FROM THE NEW HELICOPTER FACILITY

Based upon the most stringent criteria and guidelines developed for the assessment of aircraft noise impacts on residential lands, the proposed helicopter facility at Lihue Airport should generate minimal risks of adverse health and welfare impacts on surrounding noise sensitive communities. Because the predicted 55 Ldn contours associated with the proposed helicopter facility are not expected to enclose adjoining noise sensitive properties, noise impacts should be minimal with near zero risks of adverse health and welfare impacts. The projected operations at the airport for the CY 1991 and 2005 periods should result in helicopter noise levels no higher than 54 Ldn at existing residences and noise sensitive properties in the airport environs. This compares favorably with the "Minimal Exposure, Unconditionally Acceptable" level of 55 Ldn; currently the most stringent noise impact criteria and long range goal of federal agencies. For these reasons, helicopter noise impacts associated with the completion of the proposed helicopter facility are expected to be minimal.

The proposed facility will expand the 55 Ldn airport noise contours by approximately 1,000 FT toward Lihue proper, but will not increase the amount of incompatible land uses presently in the airport environs. The anticipated changes in the future CY 2005 noise contours for the entire Lihue Airport and attributable to the proposed helicopter facility are shown in FIGURE 11. Because increases in the airport noise contours are limited to lands which are currently in agriculture, noise impacts associated with the new facility construction are expected to be minimal.

Future residential subdivisions and a resort hotel are planned within the Lihue Airport noise contours, and may be impacted by aircraft noise if they are implemented where planned. The general locations of these planned noise sensitive developments are indicated in FIGURE 11. Aircraft arrivals and departures to/from the proposed helicopter facility will probably be

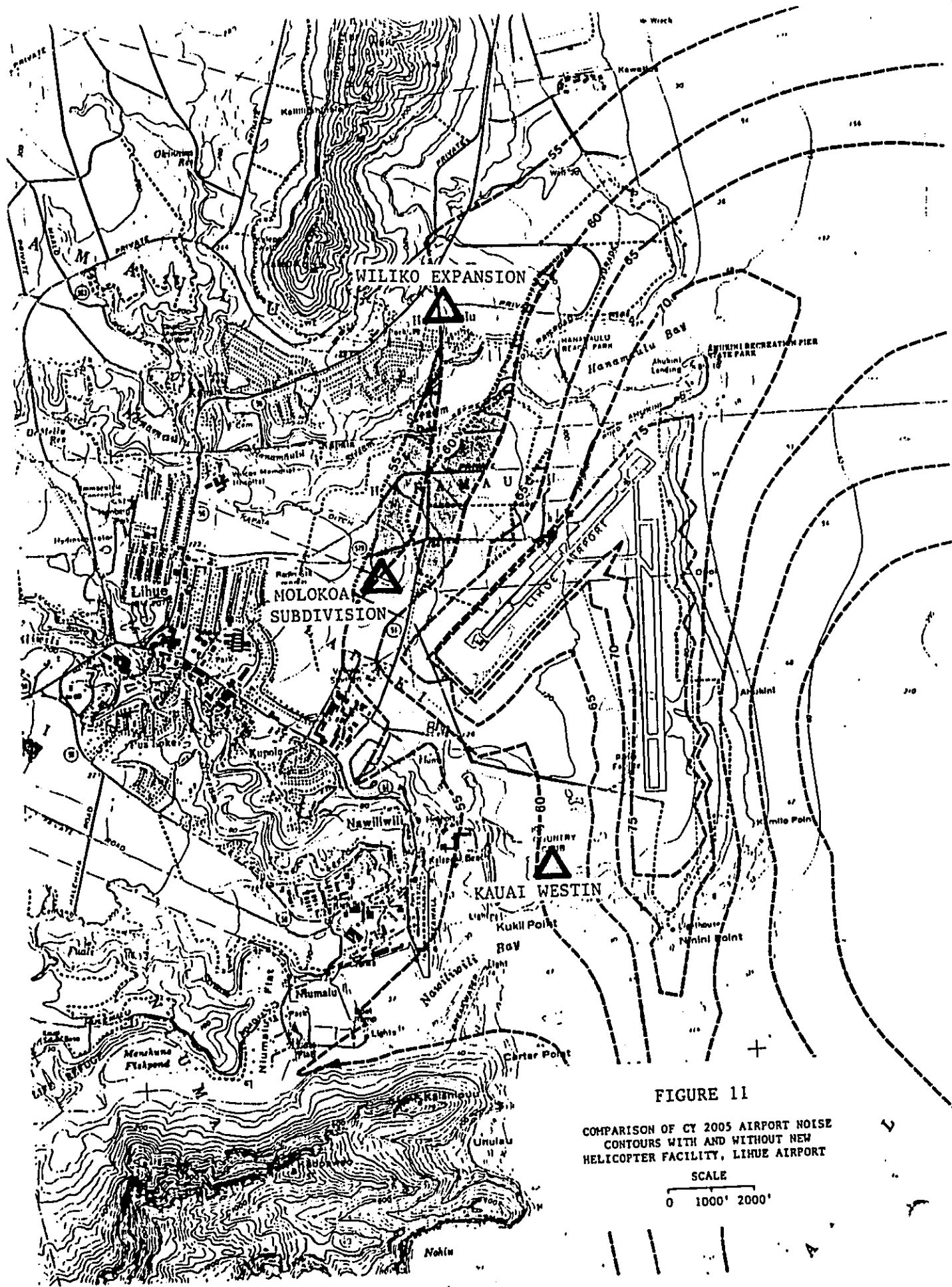


FIGURE 11  
 COMPARISON OF CY 2005 AIRPORT NOISE  
 CONTOURS WITH AND WITHOUT NEW  
 HELICOPTER FACILITY, LIHUE AIRPORT

SCALE  
 0 1000' 2000'



audible at these locations, and may annoy noise sensitive individuals. Low level helicopter overflights of the planned Molokoa Subdivision and Kauai Westin Resort expansion may be unavoidable, and these factors should be considered prior to implementation of these developments. As a minimum, complete disclosure of the relatively high risks of complaints regarding helicopter operations should be provided to the future occupants of these planned developments.

The past history of community complaints and annoyance responses regarding helicopter noise suggest that the "no reaction" response threshold for helicopter noise can be less than 55 Ldn. Based on information reported in REFERENCE 4, the average "no reaction" response threshold to aircraft noise is approximately 5 Ldn units less than the Ldn associated with other background ambient noise, as long as the exposed population do not have attitudinal biases regarding the source of the noise. Variations in this "no reaction" response threshold are possible due to attitudinal biases (favorable and unfavorable) of the exposed population. For background ambient noise levels of 45 to 55 Ldn, which are believed to be characteristic of the project environs, the "no reaction" response threshold is estimated to be between 40 and 50 Ldn. Stated in a different way--If the annually averaged Ldn from the noise of helicopters operating at the proposed facility exceeds 40 to 50 Ldn when the non-helicopter ambient noise components are in the range of 45 to 50 Ldn, the noise from the helicopter operations may cause annoyance reactions from the exposed community. These observations are particularly applicable to the proposed Molokoa Subdivision and the proposed expansion of the Kauai Westin Resort.

If helicopter operations at Lihue Airport increase to the levels forecasted for CY 2005, a 40 percent increase in total tour flights can be expected from Base Year conditions, unless additional helicopter facilities are constructed at other locations on Kauai. A 40 percent increase in helicopter operations at Lihue Airport will produce a moderate 1.5 Ldn increase in

noise average levels along the helicopter tour routes, assuming other operational conditions and helicopter sound levels remain the same. It is not known if the construction of the proposed helicopter facility will stimulate further growth in tour helicopter operations on Kauai, and possibly cause additional secondary noise impacts in areas removed from Lihue Airport. It is also not known if future growth in helicopter tour operations on Kauai can be influenced by placing limits on facility improvements at Lihue Airport. At the present time, there are no administrative or regulatory methods for limiting growth of tour helicopter operations at public use facilities, but the issues related to the future compatibility of helicopter operations on Kauai and across the state are being evaluated by by the State DOT within the context of a State Helicopter System Planning Study.

## VII. RECOMMENDED NOISE MITIGATION MEASURES

The noise mitigation measures recommended for implementation following completion of the proposed helicopter facility are those operational procedures which minimize complaint risks from surrounding noise sensitive properties and which are possible within the operating constraints at Lihue Airport. One of the primary mitigation measures for reducing risks of complaints from noise sensitive properties is to avoid overflights of these properties, particularly at low altitudes. This mitigation measure is being implemented at Lihue Airport since two helicopter ingress and egress routes are available and are currently clear of noise sensitive properties. These routes will probably be maintained as helicopter ingress and egress routes into the indefinite future, since there are no other acceptable operational or noise abatement alternatives. For these reasons, proper land use controls and/or disclosures of the presence and necessity of these helicopter ingress and egress routes should be exercised in order to maintain the current noise compatibility of land uses along these routes.

Because the 55 Ldn contours associated with helicopter operations are not expected to encompass existing noise sensitive properties, and are equal to or less than existing background (non-helicopter) ambient noise levels, additional noise mitigation measures are not considered necessary prior to completion of the proposed helicopter facility.

Mitigation measures required to compensate for the forecasted growth in tour helicopter operations along the tour routes, to limit the growth of tour helicopter operations, or to improve the noise compatibility of these operations along the tour routes are being addressed in the current State Helicopter System Plan. In addition, helicopter operators on Kauai have agreed to abide by a voluntary noise abatement program which is structured to avoid noise sensitive areas along the tour routes whenever possible (REFERENCE 11).

The centralization of helicopter operations within the Lihue Airport complex with the proposed facility may improve the possible means of documenting and/or regulating tour helicopter operations on Kauai. It is possible that a centralized information network may be required to document the lift-off and touch-down times of tour helicopters, to estimate the general positions of tour helicopters along their routes, to receive complaints from the community on the existing Helicopter Helpline, to receive weather observations from tour helicopters, to receive radio position reports from tour helicopters, and to document information from pilots upon their return. If a recommendation for such a centralized information network results from the State Helicopter System Plan, the proposed helicopter facility at Lihue Airport should make it easier to implement, because it is consistent with the intent of centralizing the existing scattered facilities at Lihue Airport.

## A. REFERENCES

1. "Guidelines for Considering Noise in Land Use Planning and Control;" Federal Interagency Committee on Urban Noise; June, 1980.
2. American National Standard, "Sound Level Descriptors for Determination of Compatible Land Use," ANSI S3.23-1980; Acoustical Society of America.
3. "Environmental Criteria and Standards, Noise Abatement and Control, 24 CFR, Part 51, Subpart B;" U.S. Department of Housing and Urban Development; July 12, 1979.
4. "Information of Levels of Environmental Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety;" U.S. Environmental Protection Agency; EPA 550/9-74-004; March 1974.
5. "FAA Order No. 1050.1D -- Policies and Procedures for Considering Environmental Impacts;" Federal Aviation Administration; December 21, 1983.
6. "Acoustic Study and Development of Base Year Noise Contours for Lihue Airport;" Y. Ebisu & Associates; July, 1987.
7. "Hawaii State Airport System Plan Aviation Demand Forecasts;" Airports Division, Hawaii State Department of Transportation; June, 1986.
8. "Helicopter Noise Exposure Curves for Use in Environmental Impact Assessment;" FAA AD/A-123 467; Federal Aviation Administration; November 1982.
9. "Noise Measurement Flight Test: Data/Analysis Aerospace AS 350D ASTAR Helicopter;" FAA AD/A148-496; Federal Aviation Administration; September, 1984.
10. "Noise Assessment Guidelines for New Heliports;" FAA AC 150/5020-2; Federal Aviation Administration; December 9, 1983.
11. "Kauai County Voluntary Helicopter Noise Abatement Program;" January, 1988.



TEXT

APPENDIX B  
EXCERPTS FROM EPA'S ACOUSTIC TERMINOLOGY GUIDE

Descriptor Symbol Usage

The recommended symbols for the commonly used acoustic descriptors based on A-weighting are contained in Table I. As most acoustic criteria and standards used by EPA are derived from the A-weighted sound level, almost all descriptor symbol usage guidance is contained in Table I.

Since acoustic nomenclature includes weighting networks other than "A" and measurements other than pressure, an expansion of Table I was developed (Table II). The group adopted the ANSI descriptor-symbol scheme which is structured into three stages. The first stage indicates that the descriptor is a level (i.e., based upon the logarithm of a ratio), the second stage indicates the type of quantity (power, pressure, or sound exposure), and the third stage indicates the weighting network (A, B, C, D, E.....). If no weighting network is specified, "A" weighting is understood. Exceptions are the A-weighted sound level and the A-weighted peak sound level which require that the "A" be specified. For convenience in those situations in which an A-weighted descriptor is being compared to that of another weighting, the alternative column in Table II permits the inclusion of the "A". For example, a report on blast noise might wish to contrast the  $L_{Cdn}$  with the  $L_{Adn}$ .

Although not included in the tables, it is also recommended that " $L_{PN}$ " and " $L_{EPN}$ " be used as symbols for perceived noise levels and effective perceived noise level, respectively.

It is recommended that in their initial use within a report, such terms be written in full, rather than abbreviated. An example of preferred usage is as follows:

The A-weighted sound level ( $L_A$ ) was measured before and after the installation of acoustical treatment. The measured  $L_A$  values were 85 and 75 dB respectively.

Descriptor Nomenclature

With regard to energy averaging over time, the term "average" should be discouraged in favor of the

term "equivalent". Hence,  $L_{eq}$  is designated the "equivalent sound level". For  $L_d$ ,  $L_n$ , and  $L_{dn}$ , "equivalent" need not be stated since the concept of day, night, or day-night averaging is by definition understood. Therefore, the designations are "day sound level", "night sound level", and "day-night sound level", respectively.

The peak sound level is the logarithmic ratio of peak sound pressure to a reference pressure and not the maximum root mean square pressure. While the latter is the maximum sound pressure level, it is often incorrectly labelled peak. In that sound level meters have "peak" settings, this distinction is most important.

"Background ambient" should be used in lieu of "background", "ambient", "residual", or "indigenous" to describe the level characteristic of the general background noise due to the contribution of many unidentifiable noise sources near and far.

With regard to units, it is recommended that the unit decibel (abbreviated dB) be used without modification. Hence, dBA, PNdB, and EPNdB are not to be used.

Examples of this preferred usage are: the Perceived Noise Level ( $L_{PN}$  was found to be 75 dB.  $L_{PN} = 75$  dB.) This decision was based upon the recommendation of the National Bureau of Standards, and the policies of ANSI and the Acoustical Society of America, all of which disallow any modification of bel except for prefixes indicating its multiples or submultiples (e.g., deci).

Noise Impact

In discussing noise impact, it is recommended that "Level Weighted Population" (LWP) replace "Equivalent Noise Impact" (ENI). The term "Relative Change of Impact" (RCI) shall be used for comparing the relative differences in LWP between two alternatives.

Further, when appropriate, "Noise Impact Index" (NI) and "Population Weighted Loss of Hearing" (PHL) shall be used consistent with CHABA Working Group 69 Report Guidelines for Preparing Environmental Impact Statements (1977).

TABLE I: A-Weighted Recommended Descriptor List

Term	Symbol
1. A-Weighted Sound Level	$L_A$
2. A-Weighted Sound Power Level	$L_{WA}$
3. Maximum A-Weighted Sound Level	$L_{max}$
4. Peak A-Weighted Sound Level	$L_{Apk}$
5. Level Exceeded x% of the time	$L_x$
6. Equivalent Sound Level	$L_{eq}$
7. Equivalent Sound Level over Time (T) (1)	$L_{eq}(T)$
8. Day Sound Level	$L_d$
9. Night Sound Level	$L_n$
10. Day-Night Sound Level	$L_{dn}$
11. Yearly Day-Night Sound Level	$L_{dn}(y)$
12. Sound Exposure Level	$L_{SE}$

(1) Unless otherwise specified, time is in hours (e.g. the hourly equivalent level is  $L_{eq}(1)$ ). Time may be specified in non-quantitative terms (e.g., could be specified a  $L_{eq}(WASH)$  to mean the washing cycle noise for a washing machine.)

## APPENDIX B (CONTINUED)

TABLE II: Recommended Descriptor List

TERM	A-WEIGHTING	ALTERNATIVE (1) A-WEIGHTING	OTHER WEIGHTING (2)	UNWEIGHTED
1. Sound (Pressure) (3) Level	$L_A$	$L_{pA}$	$L_B, L_{pB}$	$L_p$
2. Sound Power Level	$L_{WA}$		$L_{WB}$	$L_W$
3. Max. Sound Level	$L_{max}$	$L_{Amax}$	$L_{Bmax}$	$L_{pmax}$
4. Peak Sound (Pressure) Level	$L_{Apk}$		$L_{Bpk}$	$L_{pk}$
5. Level Exceeded x% of the time	$L_x$	$L_{Ax}$	$L_{Bx}$	$L_{px}$
6. Equivalent Sound Level	$L_{eq}$	$L_{Aeq}$	$L_{Beq}$	$L_{peq}$
7. Equivalent Sound Level Over Time(T) (4)	$L_{eq(T)}$	$L_{Aeq(T)}$	$L_{Beq(T)}$	$L_{peq(T)}$
8. Day Sound Level	$L_d$	$L_{Ad}$	$L_{Bd}$	$L_{pd}$
9. Night Sound Level	$L_n$	$L_{An}$	$L_{Bn}$	$L_{pn}$
10. Day-Night Sound Level	$L_{dn}$	$L_{Adn}$	$L_{Bdn}$	$L_{pdn}$
11. Yearly Day-Night Sound Level	$L_{dn(y)}$	$L_{Adn(Y)}$	$L_{Bdn(Y)}$	$L_{pdn(Y)}$
12. Sound Exposure Level	$L_S$	$L_{SA}$	$L_{SB}$	$L_{Sp}$
13. Energy Average value over (non-time domain) set of observations	$L_{eq(e)}$	$L_{Aeq(e)}$	$L_{Beq(e)}$	$L_{peq(e)}$
14. Level exceeded x% of the total set of (non-time domain) observations	$L_x(e)$	$L_{Ax(e)}$	$L_{Bx(e)}$	$L_{px(e)}$
15. Average $L_x$ value	$L_x$	$L_{Ax}$	$L_{Bx}$	$L_{px}$

(1) "Alternative" symbols may be used to assure clarity or consistency.

(2) Only B-weighting shown. Applies also to C,D,E,..... weighting.

(3) The term "pressure" is used only for the unweighted level.

(4) Unless otherwise specified, time is in hours (e.g., the hourly equivalent level is  $L_{eq(1)}$ ). Time may be specified in non-quantitative terms (e.g., could be specified as  $L_{eq(WASH)}$  to mean the washing cycle noise for a washing machine).

## APPENDIX B

### SUMMARY OF PUBLIC HEARING

The public hearing concerning the New Helicopter Facility environmental document was held at Wilcox Elementary School, Lihue, Kauai on June 16, 1988. The Notice of Determination/Environmental Assessment (EA) was placed for public review for a period of 30 days prior to the Public Hearing. The availability of the EA was noted in the Legal Notice of Public Hearing advertised May 16 & 20, 1988 and June 3, 8, & 10, 1988.

This appendix consists of:

1. The verbaton transcript of the Public Hearing
2. Written testimonies received through June 30, 1988
3. Public Hearing Attendance List
4. Listing of responders of Media Noise Statement

<u>SPEAKER</u>	<u>ITEM</u>
1. Tony Kunimura, Mayor County of Kauai	Strongly supports inland helicopter facility
2. Glenn Kimura, Principal Helber Haster & Kimura Planners	AMFAC desires examination of alternative sites
3. Stanford Achi, Spokesperson Niamalu - Nawiliwili Tenants Association	Heliport at Lihue Airport should be abolished
4. Paul Asmus, President South Seas Helicopters	Questions various statements with the Environmental Assessment
5. Mark Phillips, Individual	Sierra Club supports inland facility
6. Steve Glass, Individual	Supports moving facility inland. Establish limits on flights per day.
7. Eddie Sarita, Individual	Construct facility away from Lihue Airport



8. Jack Harter, Individual

State and local Helicopter Advisory Council supports inland facility. Submitted media noise statements.

9. Bev Harter, testimony of Margie Parker, Executive Director, Poipu Beach Resort Association

In favor of inland facility to replace airport operations.

WRITTEN TESTIMONIES RECEIVED THROUGH JUNE 30, 1988

1. Glenn Kimura, Principal Helber Hastert & Kimura Planners

Testimony of Public Hearing

2. Lois & Harold Birbaum Individual

All aircraft be based at Lihue & Princeville to enforce regulations.

3. Margie Parker, Executive Director, Poipu Beach Resort Association

Testimony of Public Hearing

4. Gary Blaich, Individual

Drop expanded heliport, relocate to mauka site

5. Jack Smith and Six other Individual

Close Lihue Airport to helicopters, construct private facility

**ORIGINAL**

IN THE MATTER OF:

THE PUBLIC HEARING RELATIVE TO  
THE NEW HELICOPTER FACILITY AT  
LIHUE AIRPORT, KAUAI

**TRANSCRIPT OF PROCEEDINGS**

Held by the Department of Transportation, Airports Division,  
State of Hawaii, at Wilcox Elementary School, 4319 Hardy  
Street, Lihue, Kauai, Hawaii, on Wednesday, June 16, 1988,  
commencing at 7:10 p.m.

MODERATOR : ERIC HONMA, Chair  
Commissioner on Transportation  
State of Hawaii

REPORTED BY:

KATHLEEN L. SAKAMOTO  
Certified Shorthand Reporter #180  
Notary Public  
State of Hawaii

**RECEIVED**

JUN 27 1988

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1 Thursday, June 16, 1988

7:10 p.m.

2 --oo0oo--

3 MR. HONMA: Good evening, ladies and gentlemen.  
4 It is now 7:10 p.m., and I hereby declare the public hearing  
5 concerning the Lihue Airport New Helicopter Facility SEIS is  
6 now convened here at Wilcox Elementary School on June 17,  
7 1988 in accordance with the Notice of Public hearing  
8 advertised in the Honolulu Advertiser on May 16, 1988 and  
9 June 8, 1988; also in the Garden Isle on May 20, 1988 and  
10 June 3 and 10, 1988; and the Honolulu Star-Bulletin on June  
11 12, 1988.

12 My name is Eric Honma. I am a Commissioner on  
13 Transportation, appointed by the Governor under Section  
14 Chapter 26-19 H.R.S. and confirmed by the State Senate. I  
15 am commissioned by the Director of Transportation to chair  
16 this public hearing on his behalf.

17 The following guests are here tonight. (Pause)

18 The purpose of this hearing is to comply with  
19 Section 91-3 of the Hawaii Revised Statutes by affording all  
20 interested persons an opportunity to submit data, views or  
21 arguments, orally or in writing, with respect to the Lihue  
22 Airport New Helicopter Facility SEIS.

23 When your name is called, please come forward  
24 before the microphone, state your name, organization, if  
25 any, and interest. Unless you are called to order by me or

1 until your time is up, you may speak freely with respect to  
2 the subject matter.

3 We ask that you limit your testimony to five  
4 minutes so that others may have an equal opportunity to be  
5 heard. Those who represent large groups or want more time  
6 will be given an opportunity to speak further for a  
7 reasonable length of time after everyone else has been given  
8 a chance to speak for the allotted five minutes.

9 In order that the testimonies be kept relevant and  
10 material to the issues, we ask that you address yourself to  
11 the subject of this hearing.

12 Written submissions will be received at anytime  
13 prior to June 30th, 1988 to the Engineering Branch, Airports  
14 Division, Honolulu International Airport, Honolulu, Hawaii  
15 96819.

16 In order that each and every interested person may  
17 be given a fair opportunity to be heard at this public  
18 hearing, we request that you observe the following  
19 procedures:

20 If you wish to speak and have not done so already,  
21 please enter your name on the sign-up sheet, together with  
22 your address, the organization you represent, if any, and  
23 await your turn. Those sign-up sheets are located on the  
24 far end of the benches. There are four of them that are  
25 evenly placed.

1           The general agenda for tonight will be as follows:  
2       First, Mr. Owen Miyamoto, Airports Administrator of the  
3       Department of Transportation, will introduce the consultants  
4       preparing the SEIS for the Airports Division. The  
5       consultant will make a short presentation, followed by a  
6       15-minute recess. When we resume, we will then receive your  
7       testimonies.

8           We are here tonight to solicit factual testimonies  
9       from you on the SEIS. This hearing is not intended to be a  
10      popular referendum. The proceedings of this hearing will be  
11      recorded. It is important that you speak into the  
12      microphone and clearly state your testimonies. Testimonies  
13      should be factual, brief, unemotional, and free of any  
14      political references.

15           We will now get into the details of the new  
16      helicopter facility SEIS for Lihue Airport. Mr. Miyamoto.

17           MR. MIYAMOTO: Thank you, Mr. Chairman. The  
18      Department of Transportation has selected consultants to  
19      assist them in the preparation of the supplemental  
20      environmental impact statement for the new helicopter  
21      facility at Lihue Airport.

22           The prime consultant on this project for the SEIS  
23      is Akinaka & Associates, who are represented here tonight by  
24      Mr. Henry Morita, Mr. Ron Yama and Mr. Salvador Quitariano.  
25      In addition, for the noise study, we have selected Y. Ebisu

1 & Associates, who is represented by Yoichi Ebisu. In  
2 addition to the consultants, from the staff of the  
3 Department of Transportation, we have Mr. Walter Nishigata  
4 and Mr. Steve Wong, both of whom are involved in the design  
5 work and the project management for the Lihue Airport  
6 improvements.

7 The official observers are from the Federal  
8 Aviation Administration, Mr. David Welhouse; from Wilson  
9 Okamoto & Associates, Rodney Funakoshi, Earl Matsukawa; and  
10 from MLA Associates, Mr. Chris Mills.

11 At this time I'd like to turn the microphone over  
12 to our consultant, Mr. Henry Morita, who will make the  
13 presentation for Akinaka & Associates.

14 MR. MORITA: Thank you, Owen. This portion of  
15 tonight's public hearing is to define the project and to  
16 provide some background of the situation. There are several  
17 documents that studied the entire Lihue Airport operations  
18 and provided guidelines to initiate this project.

19 The 1975 to 1995 airport master plan report and  
20 its various updates acknowledged the necessity of  
21 coordinated helicopter facilities. Basically, the need is  
22 due to the volume of helicopter traffic which has caused an  
23 unsatisfactory mix of fixed-wing and rotary aircraft and the  
24 congestion at the existing helicopter loading apron area.  
25 The most recent update, the Lihue Airport development plan

1 update of April 1986, includes a schematic of the project.

2 (Pause)

3 You will not be able to see what is shown on the  
4 slide, but the exact same thing is posted on the board in  
5 front of you, and during the intermission you will have a  
6 chance to look at it in detail.

7 In June 1987, the notice of determination/  
8 environmental assessment for the new helicopter facility was  
9 filed with the State's Office of Environmental Quality  
10 Control. The Department of Transportation, Airports  
11 Division, distributed the notice to 36 agencies, which  
12 included the helicopter organizations on Kauai. The  
13 assessment discussed possible environmental impacts due to  
14 initiation of the project. The assessment concluded with a  
15 notice that a supplemental environmental impact statement  
16 should be developed to further address the project's impact  
17 on air quality, specifically in terms of noise levels.

18 Since the filing of the notice of determination,  
19 interviews with representatives of the helicopter  
20 organizations, the Federal Aviation Administration, county  
21 agencies and interested private groups, have resulted in  
22 several modifications to the original proposal. These  
23 modifications concerned the staging area, the building area  
24 and the fueling facilities. The proposal maintains the  
25 intent of the master plan and will be discussed later.



1           This project was planned and will be developed  
2 under the direction of the State's Department of  
3 Transportation, Airports Division. Since funding of the  
4 project will include participation by the Federal Aviation  
5 Administration, planning and development of this project  
6 must also conform to their regulations. This meeting is not  
7 a requirement of Chapter 343, Hawaii Revised Statutes, but  
8 is conducted to obtain further public input. The public  
9 hearing format was adopted to meet federal environmental  
10 regulations.

11           The consultant firm of Akinaka & Associates, Ltd.  
12 was employed to develop the construction plans and the  
13 environmental documents based on the facility plan of the  
14 Lihue Airport development plan update. The construction  
15 plans will adhere to Federal Aviation Administration  
16 advisory circulars. To accurately address the noise  
17 impacts, Y. Ebisu & Associates was commissioned to study and  
18 report on the conditions.

19           The environmental documents developed for this  
20 project concentrates on the impacts to the Lihue Airport  
21 vicinity. Secondary impacts which cover the entire island  
22 are addressed by the statewide helicopter study.

23           The master plan and the Lihue area development --  
24 the master plan and the Lihue Airport development plan  
25 update of April 1986 includes realigning taxiway A and

1 constructing an apron area for various airport operations.  
2 The realigned taxiway requires relocation of the existing  
3 helipads to meet clearance standards.

4 Also, recent increased helicopter operations have  
5 resulted in congested traffic conditions. The traffic  
6 conditions are demonstrated by the increase of helicopter  
7 tour companies, 14 now on Kauai, and the increase in  
8 flights.

9 Finally, the present mix of helicopters and fixed-  
10 wing aircraft is undesirable. The helicopters account for  
11 50 percent of the air traffic at Lihue Airport, which is a  
12 high percentage.

13 The existing helicopter operations are conducted  
14 on the northeasterly areas of the airport. The area is  
15 between taxiway A and Ahukini Road in the vicinity of the  
16 FAA control tower and the Weather Bureau facility.

17 Presently, most passenger boarding, as well as  
18 arrival and departure operations, are performed at three  
19 landing pads. Based on the airport tenant map and the  
20 property detail listings, there are 22 existing helipads for  
21 operator usage. Two of the pads are exclusively used for  
22 refueling by tanker trucks. Some of these pads were  
23 constructed by private funding, but follow development plans  
24 of the Airports Division.

25 Passenger management consists of off-airport

1 offices serving as gathering points and bussing by vans to  
2 the landing pads. Several firms maintain passenger offices  
3 at the airport within walking distance to the landing pads.

4 Aircraft maintenance consists of first and second  
5 echelon tasks at the helipads. Extended maintenance  
6 operations are completed at Rotor-Wings, a fixed-base  
7 operator, or at individual maintenance buildings.  
8 Individual maintenance buildings are the exception rather  
9 than the norm at Lihue Airport.

10 Safety instructions start with a passenger  
11 briefing at the office. Additional safety precautions are  
12 provided by an escort to the aircraft for loading and  
13 unloading. Chain-link fencing separates the helicopter  
14 operations from vehicles and personnel for safety and  
15 security. An asphalt concrete parking area is dedicated to  
16 helicopter passenger vans and private vehicles.

17 Operations in the existing area have resulted in  
18 media coverage of possible hazardous situations. The  
19 airport consideration -- the airport condition was discussed  
20 in detail within the July 1987 issue of the Hawaii Business  
21 News. Nationwide coverage was provided by the television  
22 program, West 57th Street. It emphasized the congested  
23 condition at the existing pads and possible traffic  
24 conflicts.

25 The objectives of the proposed project are as

1 follows: 1) Provide a facility that separates fixed wing  
2 from helicopter operations; 2) provide a consolidated  
3 helicopter facility that can serve the existing operators'  
4 needs to the extent feasible; 3) provide a facility at the  
5 Lihue Airport complex that conforms to FAA standards; 4)  
6 provide a facility with a lease lot concept integrated with  
7 a new helicopter terminal building; 5) provide such a  
8 facility that can allow construction to begin by late 1988.

9           The new helicopter facility is proposed to be  
10 located mauka of the airport control tower, conforming to  
11 the 1986 development plan update. It will be located on  
12 approximately 18 acres of State airport lands that are now  
13 leased to Lihue Plantation on a month-to-month permit.  
14 Locating the facility at the airport will integrate its  
15 operations into existing air traffic controls, safety  
16 systems and emergency procedures.

17           The plans for the proposed facility has been  
18 revised many times to address concerns of the administering  
19 agencies and expected users. The layout has been revised to  
20 reduce helicopter movements to a minimum and provide for the  
21 most efficient and safe fueling proceedings. Basic design  
22 will be in accordance to the FAA's advisory circular on  
23 heliport design. Final decision on safety aspects will be  
24 by the FAA's flight standards office.

25           The facility will provide two landing pads, final

1 approach/takeoff area, FATO, for arrival and departures.  
2 The traffic at the landing pads and the adjoining taxi route  
3 will be controlled by the airport tower. Each landing pad  
4 will consist of a 75-foot-square area centered upon a 40' by  
5 40' concrete surface with helicopter landing markings. The  
6 pad perimeter and taxi routes will be grass surfaced with  
7 perimeter concrete markers.

8 Nineteen 70 foot square concrete passenger  
9 boarding pads will be constructed with three of the pads  
10 designated for transient support and truck refueling. The  
11 remaining 16 pads will be used by preferential assignment  
12 and transient use. The number of transient use pads will be  
13 dependent upon operator needs. For this project, transients  
14 are operators that are not based at Lihue Airport. Twelve  
15 of the 16 pads will each be adjoined by a staging area of  
16 5,250 square feet and a building area of 4,830 square feet.  
17 Each pad will be serviced by an underground fuel  
18 distribution system.

19 The staging and building areas will be leased to  
20 the helicopter tour operators. The staging area is expected  
21 to support minor maintenance and repairs. Overnight parking  
22 of the aircraft can be designated for this area. Surfacing  
23 of the area will be the lessee's responsibility.

24 The building area will allow for passenger and  
25 administration management. There will be building height

1 restrictions to assure line of sight from the control tower  
2 to the taxiways. Major repairs can be accomplished in this  
3 area if proper facilities are constructed. Building  
4 restrictions will be included in the lease agreements to  
5 control building type, color, height and other visual items.  
6 Improvements within the building area will also be the  
7 lessee's responsibility.

8 A terminal area with transient pads is planned for  
9 the center section. The terminal will be constructed by the  
10 State and available for use by any operator. The terminal  
11 building interior layout includes eight individual stalls,  
12 similar to those now used by the car rental companies, and a  
13 lobby area for passengers.

14 Vehicular access and parking will be provided by a  
15 common access driveway and off-street parking areas. Stalls  
16 will be designated for individual operators. This common  
17 access driveway and parking area will be constructed by the  
18 State for uniformity. A landscaping strip, which will be  
19 maintained by the State, will separate the parking area from  
20 the service road.

21 The helicopter flight paths departing and arriving  
22 at Lihue Airport were discussed between the State, FAA, and  
23 the operators. A path arriving and departing by way of  
24 Hanamaulu Saddle was proposed by the FAA, but will not be  
25 adopted due to noise and congestion. Other flight paths

1 were considered and the conclusion is to maintain the  
2 existing flight path.

3 Noise concerns associated with the traffic path  
4 will be discussed by Yoichi Ebisu immediately following this  
5 presentation. The discussion will be limited to the Lihue  
6 Airport vicinity as another project addresses concerns for  
7 the entire island.

8 The Department of Transportation is very aware of  
9 the concerns over the increasing activity by sightseeing  
10 helicopters on Kauai as well as the rest of the State.  
11 Instead of attacking the problem on a piecemeal basis, the  
12 Department has initiated a comprehensive study of the  
13 problem with the goal of establishing a statewide policy on  
14 the management of helicopters.

15 This statewide helicopter study, now in the  
16 initial stages, will address helicopter operations beyond  
17 the airport area. The initial public meeting was held on  
18 May 4, 1988 here at Wilcox Elementary School. Comments on  
19 noise and traffic were expressed by those in attendance.

20 It is appropriate that the topic of an inland  
21 helicopter facility be included in this presentation. This  
22 concept was proposed by private individuals at the previous  
23 informational meeting for the airport master plan.  
24 Proponents of this concept have developed schematics and  
25 have approached the governmental agencies for initiation.

1 Use of lands outside the Lihue Airport for helicopter  
2 operations is not new -- is not a new consideration.

3 Previous heliports have been located at Milolii  
4 Beach, Kalalau Beach, Kauai Surf and Poipu Beach. Existing  
5 helipads are located at Princeville, Coconut Plantation,  
6 Wilcox Hospital, Port Allen and Makaweli. Proposed  
7 locations included Omao, Wailua and Koloa Town. The inland  
8 sites will require State and County land use permits and  
9 environmental impact assessments.

10 The Department of Transportation, Airports  
11 Division, has previously declared that they support the  
12 inland facility concept in terms of traffic reduction at  
13 Lihue Airport. Their immediate concern is to relieve the  
14 present congestion and eliminate claims of unsafe  
15 operations. Construction at the present airport will  
16 eliminate many permit requirements and new environmental  
17 impact studies. These requirements and studies will prolong  
18 the congestion at the airport.

19 Several helicopter operators have promoted the  
20 feasibility of an inland facility. It is possible that the  
21 inland facility will be constructed and reduce the need for  
22 the helicopter facility at the Lihue Airport. Should  
23 construction of the inland facility be immediate, the size  
24 of the new helicopter facility can be scaled down to handle  
25 the reduced traffic. Should the inland facility be



1 constructed after the Lihue facility, the pads can be used  
2 for other purposes, such as ground transportation operations  
3 or airport support/fixed base operations. The terminal can  
4 be maintained for itinerant helicopter use.

5 The project has been delayed for many months to  
6 address operators' concerns and agency review. The new  
7 facility is intended to replace the existing operational  
8 area and not to generate additional traffic.

9 Maintaining the status quo conditions at the Lihue  
10 Airport will: a) retard the orderly improvements to Lihue  
11 Airport; b) continue the congested operations; and c) not  
12 alleviate the safety or hazardous concerns.

13 This proposed project is the best plan utilizing  
14 available State lands at the Lihue Airport.

15 I'd like to turn the speaker over now to -- rush  
16 it over now to Yoichi Ebisu who will discuss the noise  
17 concerns.

18 MR. EBISU: Thank you, Hank. Okay, I'm going to  
19 discuss the results of the noise impact evaluation on the  
20 new proposed helicopter facility at Lihue Airport.

21 The methodology we used was basically to use the  
22 Ldn noise descriptive system, to use the State airport  
23 system plan forecast for both 1991 and the year 2005 in  
24 developing the noise contours. We generated Ldn contours  
25 with and without the proposed facility for 1991 and 2005

1 basically to see what the differential effects of the new  
2 facility were on the noise contour and basically apply the  
3 very conservative 55 Ldn Public Health and Welfare criteria  
4 in terms of noise impact.

5           The Ldn system basically takes into account the  
6 loudness of the helicopter fly-by events, the duration of  
7 the noise events, the number of events that occur during an  
8 average day of the year, and applies the nighttime penalty  
9 if there are any flights before 7 in the morning or after 10  
10 at night.

11           On the top of this, this is a land use  
12 compatibility matrix versus Ldn exposure area. The red area  
13 is generally the very intense noise levels where we  
14 generally considered incompatible. The green areas are  
15 basically what we call unconditionally compatible. And the  
16 amber areas are the gray, the shades of gray, the margin of  
17 compatible areas.

18           On the top is the more sensitive, residential land  
19 uses and you'll see the transition between green and amber  
20 occurring at about 55 Ldn, which is the EPA level for  
21 protecting public health and welfare. And the transition  
22 from amber to red occurs at about 65 Ldn, which almost  
23 everyone agrees is the -- the level of concern in terms of  
24 noise impact. Sixty-five Ldn is generally used as a  
25 regulatory level by the Federal government, and particularly

1 HUD, FHA, FAA and the Department of Defense.

2 For this study, we're using a level of 55 Ldn then  
3 for determining noise impact. So we're trying to be  
4 conservative on this study because of the concerns about  
5 helicopter noise.

6 This is a noise contour for Lihue Airport. Total  
7 noise levels are primarily controlled by fixed-wing jet  
8 aircraft -- your interisland aircraft, Hawaiian and Aloha  
9 aircraft. The yellow zone corresponds to the amber regions  
10 of 55 to 65 Ldn, and outside of the yellow region is  
11 basically what we call compatible. And as you can see on  
12 this chart, there aren't too many incompatible areas at  
13 Lihue Airport right now as a result of all aircraft  
14 operations in Lihue. These contours apply for 1986, but  
15 they haven't changed significantly in the last two years.

16 There are some areas of incompatibility in the red  
17 near Ahukini landing. There's a rental home there and that  
18 home is exposed to very high noise levels. But generally  
19 there's a lot of buffer space around Lihue Airport at this  
20 time.

21 Looking at the existing conditions at Lihue  
22 Airport, we used the following helicopter flight tracks in  
23 developing the helicopter noise contours. As you can see,  
24 we have green lines that are the primary arrival route from  
25 the Saddle Kalepa Ridge area north of Hanamaulu, and you

1 make a right turn on the down -- left turn. It's  
2 essentially onto runway 3, and then the helicopters depart  
3 in a clockwise manner. They go out toward the Kauai Westin  
4 and make a right turn up the river and they try to maintain  
5 this circular route, which is an established tour pattern  
6 for helicopters, not only at Lihue Airport, but around the  
7 island.

8           The helicopter noise levels at Lihue Airport, 1986  
9 levels, basically are shown in this slide. The yellow area  
10 is basically still the region above 55 Ldn, so it still  
11 corresponds to the amber zone. We've added the green zone  
12 to indicate a region 5 Ldn levels below the most  
13 conservative 55 Ldn. In other words, we've constructed the  
14 contours in this study down to 50 Ldn just so we could see  
15 what the differential changes between the with-facility and  
16 without-facility conditions are.

17           So as you can see in this chart, the '86  
18 helicopter noise component at Lihue is generally very small  
19 when compared to the jet -- if I can get it here -- the jet  
20 aircraft noise levels. That's because jet aircraft is  
21 essentially louder than helicopters. So helicopters  
22 generally don't generate the red type of noise levels.

23           In developing the out year noise contours, we  
24 relied on the SASP forecast. And this slide basically shows  
25 that from 1986, which is our base year, the flights are

1 predicted to go up to 92 per day in 1991 and then go to 40  
2 percent to 123 flights per day. These are one flight is one  
3 departure or one arrival. So in terms of operations, you  
4 just double the numbers. These are just helicopter flights.

5 The graphics for this is shown in this slide. The  
6 blue -- the turquoise blue is basically the -- the  
7 historical data from the State Department of  
8 Transportation's landing reports from the helicopter  
9 companies from about 1971 up to 1986. You can see it's sort  
10 of peaking out at '85. The yellow graph represents the FAA  
11 past counts which they started to collect after helicopters  
12 started becoming a significant part of the total operations  
13 in Lihue. And also you can see, you know, peaking at about  
14 this time, '86.

15 The green curve is the SASP forecast extended from  
16 1990 out to the year 2005. And the red thing bridging the  
17 gap there, it's basically the helicopter operational numbers  
18 that were used in the part 150 study for the Lihue Airport,  
19 and which we're also using, starting from 1986 to 1991. And  
20 we used the 2005 point at the upper right-hand corner for  
21 the out year forecast.

22 The future flight tracks with the new facility is  
23 shown on the next slide. And as you can see, the clockwise  
24 ingress and egress routes are maintained, but that the down  
25 wind lake or the down wind flight track, the green arrow

1 track, is displaced approximately 1800 feet toward Lihue  
2 town to accommodate the location of the new or the proposed  
3 facility closer to the town.

4 So just from geometry, you can see that we wouldn't  
5 expect the noise levels to change in the egress point at the  
6 Saddle where the green arrows start, and we wouldn't expect  
7 it to change too much at the end of the red tracks where the  
8 Westin Kauai is. But we expect some changes in the existing  
9 agricultural lands now where the new facility is proposed to  
10 be located.

11 The 1991 noise contours, assuming just the  
12 forecasted growth in helicopter operations at Lihue Airport,  
13 but with the existing facility in place -- in other words,  
14 no new facility is shown in this graphic.

15 And then this is the contours with the new  
16 facility in place, and you can see a slight change in the  
17 contours, the yellow area towards Lihue town, and a slight  
18 increase in the yellow area, but generally no significant  
19 change in the populated areas of Hanamaulu and Lihue and  
20 Nawiliwili.

21 For the year 2005, this is the contour without the  
22 new facility and this is the contour with the new facility.  
23 You can see that there is some increase in the yellow area,  
24 primarily due to the projected 40 percent increase in  
25 helicopter operations at the airport. But again, generally

1 Hanamaulu, Nawiliwili generally are clear of the 55 Ldn  
2 contour.

3 This graphic basically shows the differential  
4 change in the total predicted noise levels of Lihue Airport  
5 in the year 2005 if the new facility is implemented. I  
6 don't know if you can see it, but mauka runway 3 -- there's  
7 a shaded gray area and that shaded gray area represents the  
8 differential displacement or increase in the noise contours  
9 in the mauka direction as a result of the helicopter  
10 facility, okay? So this graphic basically has the same  
11 forecast for helicopter operations, but it shows the result  
12 of relocating the facility from runway 3 to a point 1800  
13 feet inland.

14 And again you see that, you know, from what we  
15 could have concluded from geometry, that there isn't a  
16 significant change in the developed areas. What is of  
17 concern is that the -- there are some proposals for  
18 development north of Hanamaulu and north of the stadium area  
19 and the encroachment near the tracks, those developments for  
20 the Westin Kauai expansion. So we may be causing some  
21 increase in, you know, future complaint risks as a result of  
22 some of these encroachments to the noise contours.

23 And what we're recommending is at least the new  
24 landowners have the noise exposures disclosed to them prior  
25 to land purchase.

1           The study's conclusions are that there are minimal  
2 risks of adverse health and welfare effects related to the  
3 proposed facility. The facility should be compatible with  
4 existing land use in the Lihue Airport environment. We  
5 expect complaint risks to continue because of the nature of  
6 helicopter noise and people's attitudes toward that noise  
7 source, and that complaint risk may increase in the future  
8 if development occurs around the facility.

9           So that's all I have. Thank you.

10           MR. HONMA: Prior to our recess, we have a request  
11 -- due to a time constraint on his schedule -- from the  
12 Mayor to provide testimony prior to our recess. Inasmuch as  
13 the purpose of this public hearing is to solicit as well as  
14 receive all testimony regarding the SEIS, we will afford the  
15 Mayor an opportunity to provide his testimony, immediately  
16 after which we shall recess as originally stated so that all  
17 may have an opportunity to view the proposed plans and sign  
18 up to present further testimony.

19           MAYOR KUNIMURA: For the record, my name is Tony  
20 Kunimura, Mayor of the County of Kauai. My first intention  
21 was not to come here tonight because I felt that, you know,  
22 industry and government can work it out. I just received  
23 this afternoon a beautiful document, that if the Founding  
24 Fathers were alive, you know, that started the 13 colonies  
25 and the United States of America, they would be most proud



1 that it was not government and it was not political coercion  
2 that did it, but a group of helicopter operators got  
3 together and put together an agreement on noise abatement.

4 And I'm very proud that on Kauai the people are  
5 like, you know -- all are like that. We're willing to work  
6 it out. But hell hath no greater fury than if anybody tried  
7 to shove anything down Kauai people's throat. I want that  
8 understanding because even King Kamehameha couldn't conquer  
9 this island, and I don't think any latter-day King  
10 Kamehameha is going to do it.

11 I decided to appear here today, this evening,  
12 because I was told at the meeting by one of the individuals  
13 that my name had been bounced around about this inland  
14 heliport and the one that the D.O.T. is planning to put up,  
15 and somebody from FAA said the Mayor is not taking a  
16 position. Well, I want that person to understand that I do  
17 not like newspaper headlines, okay?

18 I do too often get in the headlines and I'm very shy  
19 about it and I don't say anything about what I'm doing. But  
20 I support, for the record, once and for all, the inland  
21 heliport.

22 As a matter of fact, Mr. Jack Harter -- you know, as  
23 a matter of fact, if I saw Jack Harter here tonight, I  
24 wouldn't know who the hell he is, you know. Where's Jack  
25 Harter? (Gentleman in the audience responds by standing.)

1 Okay, I didn't mean to say "hell," okay, but when you put  
2 out that newspaper commitment and I guess that survey form,  
3 my secretary brought the newspaper to me and it was still  
4 warm off the press. And I signed it and with a footnote,  
5 and I said you have my full support.

6 Because, you know, what the heck's the matter with  
7 this whole government? We have too much government.  
8 Everybody in government is trying to tell business what the  
9 heck to do. It's about time we go back and start listening  
10 to the people and let the people do what they think they  
11 ought to do as long as it's legal. And if they cannot, then  
12 let's go ahead and support them and help them. This is my  
13 philosophy of government.

14 I don't know why I'm a Democrat, but I'm that kind  
15 of a Democrat. All right? Government should not do  
16 everything. But government should do only those things that  
17 people cannot do for themselves. And I can, you know -- I  
18 hope I heard you folks -- you know, I hope my hearing is  
19 wrong, you know. Is it true that if -- if the helicopter  
20 operators should be able to put together this inland  
21 heliport, that you folks are going to close down here? Is  
22 that the understanding?

23 MR. MIYAMOTO: No.

24 MAYOR KUNIMURA: You're going to have one  
25 competing with the other?

1 MR. MIYAMOTO: Not competing.

2 MAYOR KUNIMURA: What is it then?

3 MR. MIYAMOTO: I could explain it.

4 MAYOR KUNIMURA: It doesn't make sense. One is  
5 going to be government; the other is going to be private.  
6 Government is always cheaper because it's always subsidized.  
7 How do you expect the private entrepreneur to risk all his  
8 capital going up there to put in an improvement when they  
9 don't have assurance that other people cannot -- you know,  
10 are going to go up and support him, this one heliport on  
11 Kauai?

12 And secondly, some of these studies really amazes  
13 me when I hear the overtone that some of the studies made,  
14 you know, about Lihue Airport Heliport -- that they're not  
15 interested or they didn't even take a look at what the  
16 County Planning Department is looking at. By that  
17 Hanamaulu By-pass is going to be created something like 70  
18 to 78 acres of house lots in Hanamaulu, and which should be  
19 so -- closer to work, less distance on the highway, good  
20 planning. You're going to be flying over these homes pretty  
21 soon. Then again the helicopter operators are going to be  
22 condemned.

23 Yesterday I was at Westin for that quarterback  
24 challenge, and we had an awards ceremony for the students  
25 who wrote about "Just Say No to Drugs." Half the time, we

1 couldn't hear what the heck they were saying because the  
2 helicopters were flying over Westin. Pretty soon there's  
3 going to be complaints against the helicopters again.

4 If these people want to, you know -- and I was  
5 told tonight that you people are going ahead with this plan  
6 because you don't know for sure if these helicopter  
7 operators can, you know, pull this. I wouldn't for the life  
8 of me go ahead and commit myself when the government is  
9 planning, you know, something like this, you know, down at  
10 Lihue Airport because you're going to lose all --  
11 everybody's going to lose their tail.

12 If you put a stop and give the promise to these  
13 helicopter operators and give me time, I will support, you  
14 know, a tax-free revenue bond, okay, for the welfare of  
15 Kauai's mental health so that we can have the heliport  
16 inland.

17 Can you imagine -- have you seen the island from  
18 Hanalei over the pass to this heliport and up again and down  
19 Knudsen Gap to Poipu and then to Kokee, flying over minimal  
20 populated areas, instead of trying to come in and sneak into  
21 Lihue Airport? Some day we're going to be having a big  
22 catastrophe at Lihue Airport, and what's going to happen? I  
23 hope I'm not around, you know.

24 And if we're going to -- if you're going to put up  
25 this heliport, temporary heliport with all the monies you

1 are going to be expending, I would say give it to these  
2 private guys. Maybe they can use it in a better fashion.  
3 And I hope you folks think it over.

4 The other day I called the Department of  
5 Transportation, and I don't think -- Mr. Hirata, you know,  
6 if he really knew what this was, yeah, he would support it.  
7 And we're going to be sitting with Mr. Hirata because he's a  
8 very sensible man; sensitive, too, okay?

9 And I hope you folks can be sensitive and sensible  
10 because let's not have, you know, people have more  
11 ammunition to say government is inefficient, you know,  
12 incapable of being sensitive. I think it's about time we  
13 show the people that Hawaii's government are -- you know,  
14 people in government are sensitive to the needs of the  
15 people and that they listen.

16 So thank you very much. I have to go to another  
17 function and I thank you for allowing me to put myself on  
18 record that I am 100 percent -- Jack Harter, you can count  
19 on it, okay? Okay, thank you.

20 MR. HONMA: Now we have a 15-minute recess, after  
21 which we'll be ready to receive your testimony. If you  
22 haven't done so already and you would like to testify,  
23 please sign up because I will be calling you off the sign-up  
24 sheet.

25 This meeting is in recess until 8:10 p.m.

1 (Recess taken from 8:00 a.m. to 8:15 p.m.)

2 MR. HONMA: Will the meeting please come to order.  
3 When you are called, please use the microphone up in the  
4 front to deliver your testimony. Please speak into the  
5 microphone, stating your name, your organization you  
6 represent, if any, and provide your testimony.

7 Mr. Glen Kimura.

8 MR. KIMURA: Good evening. My name is Glenn  
9 Kimura, principal with Helber Hastert & Kimura Planners.  
10 Our firm has been obtained by Amfac Property Development  
11 Corporation as the planning consultant for its lands in the  
12 Lihue area, and my comments tonight are made on behalf of  
13 Amfac.

14 As planners we recognize that the Lihue/Hanamaulu  
15 area is Kauai's civic and residential center today and  
16 should logically continue to be the center of urbanization  
17 in the future.

18 Amfac owns a major portion of the lands impacted  
19 by the proposed helicopter facility expansion and its  
20 proposed flight paths. In addition to owning the land  
21 adjacent to the airport, Amfac also has land zoned for  
22 residential development in Molokua and Hanamaulu, which were  
23 designed to meet the needs of the local housing community.

24 Amfac has been working with the State Housing and  
25 Finance Development Corporation on plans for affordable

1 housing in Hanamaulu, and is currently preparing a  
2 comprehensive master plan for all of its lands in the Lihue  
3 region to meet Kauai's mid- and long-range urban needs.

4           Given anticipated expansion of residential  
5 development in the Lihue and Hanamaulu areas, especially in  
6 light of Kauai's housing shortage, we are concerned about  
7 the potentially adverse noise and safety impact. It appears  
8 that a supplemental EIS evaluating the impact of the  
9 proposed helicopter facility site is premature since it has  
10 not been determined that the Lihue Airport is the preferred  
11 site. Rather, we urge the Department of Transportation to  
12 examine alternative sites before expending the effort to  
13 finalize the EIS. We feel that the time is right for a  
14 study of alternative sites.

15           As I mentioned earlier, Amfac is undergoing a  
16 major planning effort that will identify areas for  
17 residential and other compatible land uses, resort areas  
18 that matured, so that today we are better able to assess the  
19 needs of the primary helicopter-using population.

20           Finally, as we all know, this issue has  
21 dramatically captured the public's attention and we can  
22 expect active participation by the community. We believe  
23 this combination of factors will enhance the process of  
24 finding a solution which provides efficient helicopter  
25 service, while safeguarding Kauai's options for prudent

1 urban expansion.

2 Amfac has recently met with the State D.O.T.  
3 Airport Division, their planners, and the helicopter  
4 operators to search for more viable alternative sites, such  
5 as the inland site away from existing and potential  
6 population centers.

7 And, for the record, Amfac is willing to continue  
8 working with the State, the helicopter operators as well as  
9 other landowners to find a long-term solution to the problem  
10 at hand. Thank you.

11 MR. HONMA: Stanford Achi.

12 MR. ACHI: My name is Stanford Achi. I'm the  
13 spokesperson for the Niumalu-Nawiliwili Tenants Association.  
14 I lived here at Niumalu for 62 years, and I'm right close by  
15 at this airport here.

16 This evening when they were showing the slides  
17 where the helicopter lands and they take off, that's where  
18 they're going -- straight down to where I live.

19 And I'm not saying all of the helicopters, but a  
20 few of them go down below the 500 mark just to show the  
21 tourists that there's caves up here, and it's very annoying.  
22 And in five minutes, we have five helicopters -- tac, tac,  
23 tac, tac, tac, tac, tac.

24 People don't know this, but you try and live down  
25 in Niumalu. Now our association is going to build homes



1 down there for low and moderate income, and that's going to  
2 be about another 20 extra homes now at Niumalu. And the  
3 Kanoe Estates, they have some other lands down Niumalu, and  
4 I'm pretty sure that it's going to be for homes also and  
5 it's going to be quite a few of it. So you just can imagine  
6 that Niumalu will have a lot of homes.

7 And also I understand that the Nawili, under the  
8 pier, it's going to be improved, and can you imagine the  
9 noise, the pollution? Everything is going to be down at  
10 Niumalu. And I feel personally -- I'm speaking for myself,  
11 my family and the Niumalu Tenants Association -- that this  
12 heliport down here should be abolished. Shouldn't increase.  
13 Shouldn't have it down here. That's it. Because if they're  
14 going to have it here, that's one foot in the door already,  
15 and who knows if in the future we'll have more -- more of  
16 these helicopters here. Can you imagine? Just what our  
17 Mayor says. They had this quarterback thing at the Westin  
18 and they couldn't hear when they presented the awards.  
19 Okay.

20 And as far as I'm concerned, these people don't  
21 live there all year. They just come here. They live -- I  
22 mean they stay for a couple days and they're gone. I live  
23 down there permanently. We all do live down here. So I say  
24 again that they shouldn't have this heliport down here, down  
25 at this airport. It's bad enough in the future they're

1 going to expand the airport 500 feet towards Niumalu.

2 This couple weekends, Aloha Airlines, Hawaiian  
3 Airlines passed my house to land at the airport. Can you  
4 imagine the airlines and some other small planes that are  
5 landing over here at this airport? I don't know. It's -- I  
6 feel that enough is enough because people are getting tired,  
7 sick and tired, of this public hearings. You come, you  
8 talk. For what? They still do it.

9 So I hope these gentlemen here, with the help of  
10 our Mayor who supports us -- that they'll take this thing  
11 into consideration. I thank you.

12 MR. HONMA: Paul Asmus.

13 MR. ASMUS: I hope I can work with this tricky  
14 mic. I'm Paul Asmus. I'm the President of South Sea  
15 Helicopters here on Kauai. And just for the record, the  
16 reason I'm appearing is I wanted to get on the record my  
17 opinions or comments concerning this EIS, which I received a  
18 copy of today. So what I want to do is just go through it  
19 and bring up some points which I believe are -- I have a  
20 different opinion about or maybe it should be looked into.

21 First on page 3, which is "Economic  
22 Characteristics," this new heliport at the airport would  
23 provide construction jobs and so on and so forth to the tune  
24 of \$2.3 million. I would just like to point out that our  
25 inland site would also generate jobs and income. So if

1 there are those that are afraid that they might lose the  
2 income if it weren't for the construction jobs and such at  
3 the airport, that would just be transferred over to the  
4 inland site.

5 Also, they talk about social characteristics. And  
6 it says, "There will be no on-site population impact due to  
7 this project as the facilities are largely replacements to  
8 house on-going activities." That is definitely an  
9 inaccurate statement. In actuality, it's going to take care  
10 of existing but also expansion.

11 What I see that they tend to gloss over is that  
12 there will be five transient pads also with a terminal at  
13 the new facility which will allow a large number of  
14 additional helicopters and companies to start on the island.  
15 So when they state that it's just to take care of the  
16 existing operations, it's not quite accurate.

17 As a matter of fact, each of those pads could  
18 probably operate or move at least 12 helicopters an hour.  
19 So when you multiply that by five, you can imagine that's --  
20 that's just for new uses, not handling existing ones.

21 Also -- we'll skip the zoning. I was just kind of  
22 curious when they refer to existing zoning on page 4. They  
23 talk about the State Land Use Commission. I was curious  
24 about the County zoning and if they need to have a Planning  
25 Department approval. It doesn't say anything about County.

1 It just says "State."

2 Also, I notice they talk about the Exhibit 7, the  
3 1983 helicopter flight pattern. On page 8 they say, "Note  
4 that over 90 percent of the approaches are over the  
5 Hanamaulu canefields ending in a left turn to runway 3-21."  
6 It's interesting to note, and the Mayor brought it up, that  
7 those Hanamaulu canefields are now going to have homes in  
8 the near future. So 90 percent of the helicopters or  
9 whatever are going to be flying over future homes. They  
10 don't mention anything about the future homes in the report.

11 Also, on page 10 they mention the FAR part 150  
12 noise compatibility study. When they had a meeting here  
13 recently on the study, they had a chart for 1993. But as I  
14 recall, they didn't include helicopters because the noise  
15 consultant didn't believe or was under the impression the  
16 heliport wouldn't be built by then. That's as I recall. If  
17 that's still the case, I wonder if that's been adjusted for  
18 in here, you know. If they can answer that question, I'd  
19 appreciate it.

20 They talk about the resort down on the same page,  
21 Regional Development Proposals -- no resort units are  
22 proposed in excess of Ldn 60, section A. They say, "The  
23 project satisfies the State Land Use Condition that no  
24 resort units be located within the noise exposure forecast  
25 contour in excess of 25 or roughly Ldn 60. No resort units

1 are proposed in areas in excess of Ldn 60." We all know  
2 that the Westin is right next to the airport and it's going  
3 to be expanding, and I don't know. It's just to me that  
4 they're kind of glossing over that. I'm kind of curious.  
5 If they can give more detail in that area --

6 And it says, "Using conservative assumptions, the  
7 results still indicate that even in the 1995 projection, no  
8 resort units will be located in excess of the Ldn 60  
9 contour." Again, it seems a little vague.

10 Another question I have is on the Exhibit 13,  
11 helicopter noise level. They refer to "helicopters, Bell  
12 Model 206, having the lowest approach noise level, as shown  
13 on Exhibit 15, noise levels of various helicopters." When  
14 they say "lowest approach noise level," I'm curious if  
15 they're referring to -- it says there, I believe, a thousand  
16 feet. But when we fly over Hanamaulu area, generally a lot  
17 of the aircraft -- some of them are traveling at a somewhat  
18 high airspeed and so I don't know if that would be  
19 considered an approach or not. But it may be a flaw in the  
20 study where if they're measuring the noise in Hanamaulu,  
21 whether or not it still comes under the approach criteria or  
22 a different criteria.

23 They also on page 14 mention "There will be  
24 changes in the noise footprint due to the movement of the  
25 helipad and subsequent approach/departure realignment," and

1 they give some existing routes with Exhibit 7 and Hanamaulu  
2 Saddle, Exhibit 16. And then underneath they say, "To  
3 motivate noise generated from takeoffs and landings, the  
4 routes will follow Ahukini Road for landings during  
5 tradewinds and takeoffs during Kona conditions."

6 As an operator, I'm real curious what they're saying  
7 here because they've been very vague in the report as to how  
8 we're supposed to get in and out. If -- according to the  
9 drawing, they don't show us flying down Ahukini Road. Now,  
10 they have us going down where on Ahukini Road? If they're  
11 talking about over the town, we know that's a problem.  
12 Years ago we stopped flying over Lihue town and flying over  
13 Ahukini Road because of the noise.

14 Now if they plan for us to fly over Ahukini Road,  
15 then the noise study is flawed because I don't see any -- it  
16 doesn't -- it doesn't fit with their maps.

17 Also, they go on -- they make mention here on page  
18 15, "Once the pilot has transitioned from cruise to the  
19 approach glide slope, he can tailor his airspeed and rate of  
20 descent to fit local conditions, avoid unsafe regimes, and  
21 still guarantee minimum noise."

22 Now, on their drawing now, the exhibit of the  
23 approach, they have us making a very steep approach at the  
24 very final end, a very steep turn and descent right near the  
25 terminal area, which kind of contradicts the statement here

1 because it makes it sound, the way I interpret it, that they  
2 anticipate us to make a gradual, simple, straight-in  
3 approach, which would be one thing. But if we start making  
4 an abrupt and such, you're going to have a lot different  
5 noise setup, especially with your blade slap.

6 Now, there's the departure mentioned here,  
7 "Takeoffs are reasonably quiet operations, but you can limit  
8 the total ground area exposed to helicopter sound by using a  
9 high rate-of-climb and making a very smooth transition to  
10 forward flight. Your departure route should take you over  
11 areas which are the least sensitive to noise."

12 Now, first of all under their plan, it's confusing  
13 as to where we're going to go. They have us going back over  
14 Hanamaulu. But I'd like to point out for the record that  
15 most of our operations are at max gross weight, and we don't  
16 have -- some of us don't have that high rate of flying power  
17 and so we can't necessarily limit our ground exposure noise  
18 using that -- that intended high rate of climb.

19 Now, they also say on recommendations, or they  
20 call it here -- let's see what they call it here -- findings  
21 and reasons supporting determination. On page 20, item 10,  
22 they say, "The proposed action does not detrimentally affect  
23 air or water quality of ambient noise levels." And in here  
24 it states, "If aircraft traffic is increased, it will be a  
25 result of other factors, tourism, recreation needs, etc.,

1 and not due to replacement of existing facilities."

2           Again, as I stated earlier, that's not accurate  
3 because they're saying if traffic is increased, it's caused  
4 by tourism and other things, not by the replacement. But  
5 the replacement facilities will allow an increase in traffic  
6 because there will be no limits or it will open it up to a  
7 lot more number of people.

8           And just a couple of other things I want to share  
9 in closing. In the very back, they have a letter here from  
10 one of the operators. In fact, it's Jack Harter  
11 Helicopters, dated July 14th, 1987, to Akinaka & Associates,  
12 stating his feelings on this plan.

13           And he states here, "Please investigate plans to  
14 reopen a public school at the Hanamaulu facility. It is very  
15 close to the flight path." Nowhere in this report, and  
16 there's two letters of this kind -- nowhere in this report  
17 does it mention that possibility. In fact, in a recent  
18 discussion with an FAA official, he was totally surprised  
19 this was even happening; yet here's a letter on file as of  
20 July 20, 1987, telling them to look into it, but it's not in  
21 the report.

22           Also, he says, "To provide separation for both  
23 approaches and departures from the proposed site, copters  
24 will have to make wider turns," which goes again to what I  
25 was saying earlier, speed turns, "at low altitudes, closer



1 to the hospital and Hanamaulu. The airport cut-off road  
2 being constructed lies directly under either approach or  
3 departure from the proposed heliport. Copters turning final  
4 on approach or departing on Kona days will be very low over  
5 or across the new highway. Please assess potential  
6 distraction of drivers." Again, no comments in here about  
7 that.

8 And there's one final letter in here, which also  
9 was from the Sierra Club, and it's also July of '87, where  
10 it says here under item 3, "Hanamaulu and Nukolii are noise  
11 sensitive areas and should not be subjected to the increased  
12 frequency of low helicopter overflights which this facility  
13 would create. In fact, a public school may be reopening in  
14 Hanamaulu, which would make that area even more incompatible  
15 with low overflights."

16 Now, I just want to also go on record that  
17 yesterday my chief pilot and myself flew this proposed  
18 route, which is an exhibit in here, and we had a very  
19 difficult time achieving our objective, trying to safely  
20 maneuver the aircraft around to make the approach into this  
21 new facility. So I think that some really, really serious  
22 questions need to be brought up.

23 And in Exhibit 16 it shows the approach coming in  
24 with a steep turn at the -- at the approach end and  
25 departure still over Hanamaulu Bay over the Nukolii area and

1 back across Saddle, crossing cross traffic. The industry, I  
2 believe some time ago, well over a year, year and a half  
3 ago, went on record saying that's totally unsafe. I was led  
4 to believe that that was not going to happen, and yet it's  
5 still in the report here. There's no concise, something  
6 written, to tell me what they intend to do.

7 So I would appreciate it if the D.O.T. and their  
8 consultants will review what I have stated and maybe send me  
9 some answers or -- to these questions and/or modify the  
10 report. Thank you.

11 MR. HONMA: Insomuch as there will be, according  
12 to the sign-up sheet, only five more testimonies, and to  
13 allow the speakers an opportunity to complete their  
14 testimony to maintain continuity of their testimony, once  
15 you start, you can complete it unless your testimony is  
16 substantially longer than the original five minutes, okay?

17 Mark Phillips.

18 MR. PHILLIPS: Good evening, Department of  
19 Transportation, people, politicians, legislators. For the  
20 record, my name is Mark Phillips and tonight I'll be  
21 representing myself.

22 Although I am a member of the Kauai Helicopter  
23 Local Advisory Council, I've been sitting on the Kauai  
24 Community Relations Helicopter Planning Board, and I'm also  
25 the conservation chairman for the Sierra Club.

1           And I'd like to put on record right now that the  
2 Sierra Club is in support of whatever we can do to develop  
3 an inland heliport as an alternative to this proposed  
4 interim or replacement helicopter facility in Lihue.

5           Helicopters benefit our community and helicopters  
6 also impact our community. I would like the possibility for  
7 our community to resolve these differences. As a community,  
8 we can do it. But with this plan, we can't.

9           Over the last couple of years, the community and the  
10 helicopter industry have been working very hard together to  
11 resolve the differences. There was a time when there was  
12 really, really hard feelings. When I look around me tonight  
13 and I see a lot of people that I've been working with on the  
14 same table, face to face, eye to eye, then I believe that  
15 we're very close to making some kind of progress in reaching  
16 some agreements.

17           But should this facility be built and the  
18 population of helicopters, companies and number of flights  
19 go out of control, everything that we've worked for and all  
20 the progress we've made is going to be lost. The community,  
21 which is on the verge now of working with the operators, is  
22 going to become totally alienated against the helicopter  
23 industry. The industry is going to suffer tremendous, you  
24 know, hatred and resentment from the community.

25           Well, we're close to working our problems out now,

1 but should this replacement facility be built, we're going  
2 to lose all that work. I just want to say that this new  
3 facility eliminates our option of working together as a  
4 community. Thank you.

5 MR. HONMA: Steve Glass.

6 MR. GLASS: Good evening. I'm just representing  
7 myself -- very brief, few statements here. Most of the talk  
8 has been about coming into the airport over Hanamaulu area.  
9 For three-and-a-half years I've been working on the Huleia  
10 Stream as a kayak guide on the tour that runs past the  
11 Menehune Fishpond.

12 Over the last three years, it's become absolutely  
13 impossible to talk with people on the trip. As we go up the  
14 river, the helicopters go over. I assume that they're at  
15 their proper height level at that time, but we just have to  
16 stop talking and wait for them to go by, and that happens  
17 every few minutes. I assume in the future there's going to  
18 be developments up along the rim of the stream there. It's  
19 starting to push out that way now, so that's another  
20 consideration. Obviously, I'm for moving the heliport  
21 somewhere inland, too, if it's possible to do.

22 Another question that kind of came to my mind  
23 tonight -- and I don't know the ins and outs of all these  
24 things -- but I don't quite understand why the State should  
25 be building a facility for a private industry anyway. It

1 seems that's their own business to build a heliport. Seems  
2 like it's subsidizing a sector of the private community.  
3 It's not public transportation, so I don't know why they  
4 should be involved in this at all.

5           And one other point I'd like to throw out. This  
6 may be a little different from the point tonight, but as  
7 long as we're thinking about all of this, it's time to think  
8 about an absolute limit on the flights per day on this  
9 island. We've limited the charter boat operations on the  
10 North Shore as to how many trips they can make, and I think  
11 it's getting time to think about that, too. Thank you.

12           MR. HONMA: Eddie Sarita.

13           MR. SARITA: My name is Eddie Sarita. I'm a  
14 resident of Hanamaulu. The opinion that I express tonight  
15 is personal, but it raises from discussions and  
16 conversations with area residents.

17           I reviewed the draft of the SEIS for the proposed  
18 helicopter facility at the airport. The people at Hanamaulu  
19 and Lihue have been impacted by noise levels from the  
20 airport. But the airport is essential to us all and we have  
21 had to adjust our lives to accommodate it. Over the years,  
22 we have tolerated the buildup of helicopter operations at  
23 the airport and it's accompanying noises. Initially, the  
24 small number of helicopters were of little concern. Now due  
25 to the growing numbers, the State wants to build bigger

1 facilities.

2 I submit to you that by doing this, the State will  
3 encourage more growth in the helicopter operations at the  
4 airport. This means that more noise will be generated for  
5 area residents. The helicopter approach pattern to the  
6 airport comes close to Hanamaulu. It passes over Hanamaulu  
7 Beach Park, which is a popular resident and visitor  
8 recreational area. Families go there to relax and enjoy a  
9 day at the beach. Helicopters overflying will certainly  
10 create more disturbances.

11 Hanamaulu now has an estimated resident population  
12 of 3,000 people. The majority are moderate income with  
13 young and growing families. Being close to Lihue, it is a  
14 good place to live.

15 The County has approved housing developments towards  
16 the east and north and closer to the approach pattern. The  
17 current plans will allow nearly 400 more housing units.  
18 Along with this, the D.O.E. is considering removing of the  
19 school, and I have here an article which is dated June 8th,  
20 Wednesday, 1988, "New School for Hanamaulu and Homesteads."  
21 And in it there is no question that the D.O.E. intends to  
22 proceed with construction. In fact, they project an opening  
23 of 1990 for the school.

24 And this school will be located -- according to this  
25 article, "The new Hanamaulu School will serve not only

1 Hanamaulu children, but Wailua Homesteads children as well.  
2 Governor John Waihee has approved the site next to Peter  
3 Rayno Ballpark. The old Hanamaulu School, used in recent  
4 years for Hale Hauoli, a day care center for handicapped  
5 adults, will be demolished to make way for the 20-classroom  
6 building."

7 And it goes on to say the construction is  
8 scheduled to begin on the Hanamaulu School this summer, so  
9 there's no doubt that the school is going to be built. And  
10 I say that the State must give consideration to noise impact  
11 that it will bring if it proceeds with the construction of  
12 this facility. We will have to live with this in the  
13 foreseeable future. We want to reduce the noise levels; in  
14 fact, eliminate it if possible.

15 This facility should not be built at this location  
16 selected. Construction of the facility away from the  
17 airport is the better alternative. Thank you.

18 MR. HONMA; Jack Harter.

19 MR. HARTER: My name is Jack Harter and I'm here  
20 basically to represent myself, but I'm also going to  
21 represent many other people. We have published in the local  
22 paper and spread about the island here, a few statements  
23 regarding people's opinions concerning the inland heliport  
24 facility. I'd like to present these to you. (Hands  
25 documents to Mr. Honma.)

1 I think they far outnumber the people here in the  
2 building tonight, so we're doubling our representation with  
3 this. And each is signed and they're obviously not  
4 official, but they're indicative. We'll probably receive a  
5 great many more, but we'll send it to you when we get them.  
6 But they're public impression, how people feel about the  
7 situation as it is today, and we were quite surprised as to  
8 how good the response is.

9 I also am going to be representing -- Mark Phillips  
10 just said so. We had a phone call this morning from Bill  
11 Mowry (phonetic spelling) from the mainland, and he  
12 authorized me to state that the -- that both the State and  
13 the local Helicopter Advisory Council is 100 percent behind  
14 an inland heliport, as Mark Phillips suggested. So we have  
15 Bill Mowry, who's running the show, saying definitely that  
16 they are for it.

17 Also, you've already heard from the Mayor, and we  
18 have his statement which we'll include, personally signed by  
19 the Mayor, to the effect that he is also for it. And we've  
20 heard from him and we're delighted to have him here to get  
21 his viewpoint.

22 My position on this thing is so well known, I  
23 don't want to take any more of your time, but I do want to  
24 clarify a couple points. One, I'm speaking for myself in  
25 all these matters and I do not represent any helicopter



1 company on the island as a spokesman for them. We are an  
2 independent bunch of people and what happened basically is  
3 this. I just want to verify for everybody that this is  
4 true.

5 All the operators have agreed to move with an inland  
6 heliport. We have a verbal agreement from each operator,  
7 and more than that in that we have finally put together a  
8 fairly workable group. I am their coordinator. I do not  
9 speak for any of them, but we are a viable group.

10 We're now putting together a careful study. We do  
11 know that the inland facility can be built, so in getting  
12 back to the question of EIS and the study at the airport  
13 facility, we all don't like it; not just from the safety  
14 standpoint, the noise standpoint, but because of the  
15 operation standpoint. We want to move inland. Makes sense  
16 economically, locally. Everybody -- everyone is for it.  
17 But so I don't take any more time, but I wanted to add one  
18 or two little thoughts that have slipped by the whole system  
19 here.

20 The question of the school located -- what we're  
21 trying to do apparently is to find some way of not having --  
22 not being able if necessary to build a facility at the  
23 airport through some regulation or whatever. I'd like to  
24 toss one out to you. When we were trying to get approval  
25 for a site near the Seventh Day Adventist School at Kahili

1 Mountain Park -- that was a previous site that I had chosen.  
2 We ended up trying for the tree tunnel, which was not my  
3 desire, but it ended up being that way. The site that I had  
4 hoped for was near the Seventh Day Adventist School.

5 In trying to get that approved, the regional  
6 office, the FAA regional office in California, passed on  
7 this location. They work with air route structures and the  
8 basic recommendations for safety, noise abatement, impact  
9 and such, and they said you can't. You're within 6,000 feet  
10 of a school. So I went out and measured very carefully and  
11 it turned out we were exactly 6,000 feet. They said if you  
12 can get the school's permission, we would approve it. So we  
13 got the school's permission, but nothing came of it. That  
14 whole thing folded.

15 But I'm making the point that the new school,  
16 which Mr. Sarita just pointed out, is going to be built  
17 within 4,000 feet that this new facility is planned. If  
18 that site was not approved, certainly this one can't.

19 So I'm going to suggest that you look into that in  
20 your report and the possibility that the site isn't even  
21 legal in that regard. Beyond that, I don't have much too  
22 add. The fact is that I don't think there's a person on  
23 this island that -- certainly none of the operators -- that  
24 wants that facility at the airport. We got the feeling from  
25 -- from the report here a little while ago that even the

1 State doesn't want it. So let's go ahead with the inland  
2 heliport for sure.

3 I have one further thought. When you put together  
4 these beautiful studies, and they're well done. We have to  
5 congratulate the State for doing a good job. They have  
6 really looked into it within the framework of noise  
7 detection and such. I have got to add that when he showed  
8 the graph on the screen there, it pointed out that public  
9 parks and schools were the most critical within the  
10 framework of the noise abatement.

11 And the question that I have is: How can they  
12 judge the impact of a sound like a helicopter based on a  
13 simple instrument, when we know for a fact that the sound is  
14 so obtrusive and so terrible, that even though it doesn't  
15 record on instruments, it still drives people nuts. I'd  
16 like to use an analogy, the noise of a chain saw in a  
17 forrest. You couldn't even record a chain saw at a  
18 distance, but it eats in your mind, and that's the way it is  
19 with helicopters. And I hate to say so because they're my  
20 livelihood and my wife's. But we have to somehow avoid this  
21 going over Hanamaulu, Niumalu and around Lihue by moving  
22 inland. Thank you.

23 MR. HONMA: Bev Harter.

24 MS. HARTER: My name is Bev Harter, and I want to  
25 read testimony prepared by Margie Parker, Executive Director

1 of the Poipu Beach Resort Association. She asked us to read  
2 this for her because she was unable to attend. The  
3 testimony reads as follows:

4 "The Poipu Beach Resort Association, on behalf of  
5 the Lihue Airport helicopter operator members, is in favor  
6 of establishing an inland heliport facility to take the  
7 place of existing helicopter operations at the airport.

8 "We favor such a facility because it takes  
9 helicopter traffic away from the airport and from  
10 surrounding residential and commercial developments. Most  
11 importantly, if this inland facility were developed, it  
12 would establish a flight pattern away from Kauai's  
13 population and resort centers, an issue this association  
14 strongly supports.

15 "It is important, however, that this facility be a  
16 replacement of helicopter facilities at the airport, rather  
17 than in addition to an airport helicopter facility. Any  
18 measure taken to establish helicopter flight operations and  
19 patterns away from populated regions of Kauai, would be more  
20 conducive to providing an environment of peace and  
21 tranquility, which is one of the key motives for tourists  
22 who choose to come to Kauai, as well as for residents who  
23 choose to live here.

24 "We recognize the valuable experience that the  
25 helicopter operators provide for our visitors, and we hope

1 that the State can work with these operators on providing  
2 the best of all solutions for the existing industry.

3 "We continue to have strong concerns about flight  
4 patterns over resort and residential areas, and urge the  
5 State to support helicopter operations which would solve  
6 this issue.

7 "Respectfully submitted, Margie Parker, Executive  
8 Director." Thank you.

9 MR. HONMA: Some of you have you learned more  
10 about the new helicopter facility SEIS and may not be  
11 prepared to submit statements tonight. The State Department  
12 of Transportation will continue to accept written statements  
13 through June 30th, 1988.

14 If you are not able to complete your written  
15 testimony within this period, please call the Department of  
16 Transportation for an extension of time. The number to call  
17 is 836-6526. I assure you that any reasonable request will  
18 be considered. It is the Department's expectation that your  
19 testimony will be a valuable addition to the studies which  
20 they are conducting and will help to guide them in adopting  
21 the best solution for the proposal.

22 The staff of the Department of Transportation will  
23 weigh the effects of your testimonies and information  
24 presented tonight, together with factual data they already  
25 have. If it is believed that the data, views or arguments

1 indicate a necessity for any revisions, these revisions will  
2 be made.

3 We thank you for taking the time to attend and to  
4 participate in this hearing.

5 It is now 8:50 p.m. and I declare this public  
6 hearing concerning the Lihue Airport new helicopter facility  
7 SEIS is hereby concluded.

8

--ooOoo--

C E R T I F I C A T I O N

I, KATHLEEN L. SAKAMOTO, Certified Shorthand Reporter and Notary Public of the State of Hawaii, do hereby certify that the foregoing pages comprise a complete, true and accurate transcript of the proceedings held on Wednesday, June 16, 1988, relative to the aforementioned matter.

Dated this 23rd day of June, 1988.

Kathleen L. Sakamoto  
KATHLEEN L. SAKAMOTO  
Certified Shorthand Reporter No. 180  
Notary Public, State of Hawaii

16 June 1988

Public Hearing Testimony  
Regarding the  
Lihue Airport New Helicopter Facility  
Supplemental EIS

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HASTERT  
& KIMURA  
Planners  
**HH&K**

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Glenn T.  
KIMURA

Associates

Nancy I.  
NISHIKAWA  
AICP

Thomas A.  
FEE  
AICP

Kevin M.  
YOUNG  
ASLA

Time: 7:00 p.m.  
Date: June 16, 1988  
Location: Wilcox Elementary School,  
Lihue, Kauai

Good evening. My name is Glenn Kimura, principal of Helber, Hastert & Kimura, Planners. Our firm has been retained by Amfac Property Development Corp. as the planning consultant for its lands in the Lihue area and my comments tonight are made on behalf of Amfac.

As planners, we recognize that the Lihue/Hanamaulu area is Kauai's civic and residential center today and should logically continue to be the center of urbanization in the future.

Amfac owns a major portion of the lands impacted by the proposed helicopter facility expansion and its proposed flight paths. In addition to owning the lands adjacent to the airport, Amfac also has land zoned for residential development in Molokoa and Hanamaulu which would be designed to meet the housing needs of the local community. Amfac has been working with the State Housing Finance and Development Corporation on plans for affordable housing in Hanamaulu, and is currently preparing a comprehensive master plan for all of its lands in the Lihue region to meet Kauai's mid and long range urban needs. Given anticipated expansion of residential development in the Lihue and Hanamaulu areas, especially in light of Kauai's housing shortage, we are concerned about potentially adverse noise and safety impacts.

It appears that a Supplemental EIS evaluating the impacts of the proposed helicopter facility site is premature since it has not been determined that the Lihue Airport is the preferred site. Rather, we urge the State Department of Transportation to examine alternative sites before expending the effort to finalize the EIS.

We feel that the time is right for a study of alternative sites. As I mentioned earlier, Amfac is undergoing a major planning effort that will identify areas for residential and other compatible land uses. Resort areas have matured so that, today, we are better able to assess the needs of the primary helicopter-using population. Finally, as we all know, this issue has dramatically captured the public's attention and we can expect active participation by the community. We believe this combination of factors will enhance the process of finding a solution which provides efficient helicopter service while safeguarding Kauai's options for prudent urban expansion.

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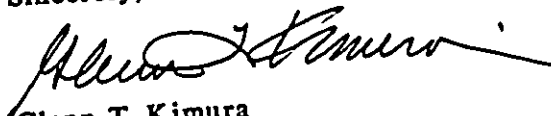
JUN 18 1988

AKINAKA & ASSOCIATES, LTD.



Amfac has recently met with the State DOT Airport Division, their planners, and the helicopter operators to search for more viable alternative sites, such as an inland site away from existing and potential population centers. And, for the record, Amfac is willing to continue working with the State, the helicopter operators, and other landowners to find a long term solution to the problem at hand. Thank you.

Sincerely,

  
Glenn T. Kimura  
Vice President

5559 Kuamoo Road  
Kapaa HI 96746  
June 14, 1988

Mr. Dean Nakagawa  
3901 Mokualele Loop -- Box 6  
Lihue HI 96766-9797

re: Public Hearing at Wilcox School  
Lihue, HI on June 17, 1988

Concerning Helicopters and low-  
flying Aircraft

Dear Mr. Nakagawa:

We urge that all aircraft flying over Kauai be based at the two airports, at Lihue and Princeville, where some regulations are enforceable.

The first consideration is safety: in case of an accident on takeoff or landing, immediate attention can be provided at an airport.

The second consideration is operational: parking, toilets, food, shelter, flight fuel, oil, repairs, etc., are in place at airports.

Self-regulation of flights on Kauai by helicopters is recently liveable, except for one company which consistently flies over populated areas.

We no longer swim or enjoy picnics at Salt Pond, because of noise from helicopters and grit blown by them on our bodies and food.

Sincerely,

*Lois A. Birnbaum*  
*H. F. Birnbaum*

Lois A. Birnbaum  
Harold F. Birnbaum



**POIPU BEACH  
RESORT ASSOCIATION**

P.O. Box 730, Koloa, Kauai, HI 96756 (808) 742-7444

**INLAND HELIPORT  
TESTIMONY**

**JUNE 16, 1988**

The Poipu Beach Resort Association, on behalf of its Lihue Airport Helicopter Operator Members, is in favor of establishing an inland heliport facility to take the place of existing helicopter operations at the airport. We favor such a facility because it takes helicopter traffic away from the airport and from surrounding residential and commercial development. Most importantly, if this inland facility were developed it would establish a flight pattern away from Kauai's population and resort centers, an issue this Association strongly supports. It is important, however, that this facility be a replacement of helicopter facilities at the airport rather than in addition to airport helicopter facilities. Any measure taken to establish helicopter flight operations and patterns away from populated regions of Kauai would be more conducive to providing the environment of peace and tranquility, which is one of the key motives for tourists who choose to come to Kauai as well as for residents who choose to live here.

We recognize the valuable experience that the helicopter operators provide for our visitors and we hope that the State can work with these operators on providing the best of all solutions for the existing industry. We continue to have strong concerns about flight patterns over resort and residential areas and urge the State to support helicopter operations which would solve this issue.

Respectfully submitted

*Margy Parker*  
Margy Parker  
Executive Director

*John - please  
submit this as  
written testimony.  
Also, please feel  
free to read it as  
well at the meeting  
if you want. M.P.*

GARY L. BLAICH, M.D.  
Box 404  
Kilauea, Kauai, Hawaii 96754  
Practice Limited to Psychiatry

6/16/88

Dear Mr. Miyamoto,

An emergency with one of my patients this evening keeps me from the public hearing.

I ask that the expanded heliport be dropped. Helicopter tour activity, for safety & reduced impact on surrounding areas, should be relocated to a nearby site.

Thank you for your attention to my concerns.

Sincerely,

Gary L. Blauch

JUNE 16, 1988

I urge the state to close Lihue Airport to all scenic tour helicopter operations and to permit the immediate construction of a private sector facility away from all noise sensitive area.

Concerned About Helicopter Noise

JACK SMITH

Jack Smith

1750 Ahi Ahi Kapaa 96746

SUSANNE GARFIELD

Susanne Garfield

163 Kaka Lee Kapaa 96746

PH

SEAN BURNS

Sean Burns

1291 Kapaa Hi 96746

VICKY BISHOP

Vicki Bishop

90 Box 46 - KILAUEA

LORRAINE KEKAOLE

Lorraine Kekaoale

P.O. BOX 501 KILAUEA

LILY DOWLING

Lily Dowling

P.O. BOX 514 Kapaa 96746

MARGARET COX

Margaret Cox

2889 HOOKAHO, Lihue 96766

PUBLIC HEARING FOR NEW HELICOPTER FACILITY  
 WILCOX ELEMENTARY SCHOOL, LIHUE, KAUAI  
 JUNE 16, 1988

SIGN-UP SHEET

NAME (PLEASE PRINT)	ORGANIZATION	MAILING ADDRESS	PHONE NUMBER	TESTIMONY (YES OR NO)
1. Patricia Chevalier DAVID CHEVALIER	South Sea Helicopters PARTNER	Kahului Helicopter Hangar 108 Kahului	871-8844	NO
2. Tony T. Kaminan Paul D. Asmus	South Sea Helicopters KAMAHI Koloa, Kauai	P.O. Box 221 Koloa, Kauai	742-6834 245-3385 245-7485	" YES (YES)
4. Mark J Phillips	Self 9 Stars	P.O. Box 1111 Kapaa HI 96746	822-1020	YES
5. STEVE GLASS	SELF	6277-A PUKOPEAE RD NAPAA, HI 96746	822-2351	YES
6.				
7.				
8.				

PUBLIC HEARING FOR NEW HELICOPTER FACILITY  
 WILCOX ELEMENTARY SCHOOL, LIHUE, KAUAI  
 JUNE 16, 1988

SIGN-UP SHEET

NAME (PLEASE PRINT)	ORGANIZATION	MAILING ADDRESS	PHONE NUMBER	TESTIMONY (YES OR NO)
1. Stanford H. AcHi	Nihoa Island - Middle School Parents Association	PO Box 382, Lihue, HI 96766	245-4933	<del>NO</del> YES
2.				
3.				
4.				
5.				
6.				
7.				
8.				

PUBLIC HEARING FOR NEW HELICOPTER FACILITY  
 WILCOX ELEMENTARY SCHOOL, LIHUE, KAUAI  
 JUNE 16, 1988

SIGN-UP SHEET

NAME (PLEASE PRINT)	ORGANIZATION	MAILING ADDRESS	PHONE NUMBER	TESTIMONY (YES OR NO)
1. Eileen Kimura	HAWK / Onyao Prop. Dev. Corp	733 Bishop St. #2590 Hon. HI 96813	545-2055	Yes
2. CHRIS MILLS	MLA ASSOCIATES	1451 S. KING ST. RM. 507 HONOLULU, HI 96814	955-2469	No
3. George Brosky	Self	3020 Noela St. Honolulu 96815	922-6961	No
4. Adreian Miura	Self	465 S. KING #109 Honolulu HI 96813	548-6915	No
5. Ronald T. Yama	Akinaka & Assoc., Ltd		536-7121	No
6. Henry S. Morita	"		"	No
7. Salvador M. Quitoriano	"		"	No
8. BRYAN MAMAGLAY	KAWAI PLANNING DEPT.	4280 RICE ST. LIHUE	245-3919	NO



PUBLIC HEARING FOR NEW HELICOPTER FACILITY  
 WILCOX ELEMENTARY SCHOOL, LIHUE, KAUAI  
 JUNE 16, 1988

SIGN-UP SHEET

NAME (PLEASE PRINT)	ORGANIZATION	MAILING ADDRESS	PHONE NUMBER	TESTIMONY (YES OR NO)
1. EDDIE SARTIA	PERSONAL	5088 PANA DR. LIHUE, HI 96766	245-6118 (B)	YES
2. JACK HARTER	JACK HARTER HELICOPTERS	P.O. Box 306 LIHUE HI 96766	245- 3774	YES
3. Bev Harter	Personal	"	"	"
4. B. "Kaipo" Asimela		P.O. Box 1643 Lihue, Kauai	245-4553	
5. JOICHI EBISU	J. EBISU ASSOC.	1126 12th Ave. #205 H. HI 96816	735-1634	NO
6.				
7.				
8.				

PUBLIC HEARING FOR NEW HELICOPTER FACILITY  
 WILCOX ELEMENTARY SCHOOL, LIHUE, KAUAI  
 JUNE 16, 1988

SIGN-UP SHEET

NAME (PLEASE PRINT)	ORGANIZATION	MAILING ADDRESS	PHONE NUMBER	TESTIMONY (YES OR NO)
1. TOM ANUSEWICZ	HENNEKER AVIATION	BOX 1708 KAHULUI HI 96732	877-7059	No
2. Tim Teixeira	Henneker Aviation	Box 3710 Lihue, HI 96766	246-9074	No
3.				
4.				
5.				
6.				
7.				
8.				

MEDIA NOISE STATEMENT

**PLEASE HELP REDUCE HELICOPTER NOISE**

If the state proceeds with the airport plan, they will soon build 19 new pads used by as many as 40 helicopters. NOISE and HAZARDS to residents and resorts around the airport will become UNBEARABLE.

The mixing of helicopters with airplanes has already become dangerous. Please give us your support for a safe facility away from everyone and built with private sector funds.

PLEASE CLIP

**STATEMENT**

I urge the state to close Lihue Airport to all scenic tour helicopter operations and to permit the immediate construction of

a private sector facility away from all noise sensitive areas.

SEND TO:

Concern About Helicopter Noise  
P.O. Box 306, Lihue, Hawaii 96766

SIGNED \_\_\_\_\_

PLEASE PRINT NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

PHONE \_\_\_\_\_

NEW HELICOPTER FACILITY  
LIHUE AIRPORT, KAUAI, HI.

LIST OF STATEMENT SIGNERS RECEIVED AT SUPPLEMENTAL  
ENVIRONMENTAL IMPACT STATEMENT PUBLIC HEARING,  
JUNE 20, 1988, 7:00 P.M. AT WILCOX ELEMENTARY SCHOOL,  
LIHUE, KAUAI

ADVERTISEMENT: "PLEASE HELP REDUCE HELICOPTER NOISE

If the state proceeds with the airport plan, they will soon build 19 new pads used by as many as 40 helicopters. NOISE and HAZARDS to residents and resorts around the airport will become UNBEARABLE.

The mixing of helicopters with airplanes has already become dangerous. Please give us your support for a safe facility away from everyone and built with private sector funds."

STATEMENT: "I urge the state close Lihue Airport to all scenic tour helicopter operations and to permit the immediate construction of a private sector facility away from all noise/sensitive areas."

NO.	SIGNER	ADDRESS	TOWN	PHONE
1	ABREU, NADINE	P.O. BOX 742	KALAHEO	332-7015
2	ACHI, JUNE K.	P.O. BOX 382	LIHUE	245-4933
3	ACHI, STANFORD H.	P.O. BOX 382	LIHUE	245-4933
4	AKANA, DYNNE A.	2519 NIUMALU ROAD	LIHUE	245-4605
5	AKANA, JOHN F.	P.O. BOX 187	KALIHIWAI	828-1780
6	AKANA, WILLIAM K.	2519 NIUMALU ROAD	LIHUE	245-4605
7	ANO, CHRISTOPHER	RR-1 BOX 321-F	KAPAA	822-0068
8	ANSAGAY, LIGAYA		KALAHEO	322-7428
9	APUNA, FRANCES	4923 ALI ALI ROAD	KAPAA	822-7908

NO.	SIGNER	ADDRESS	TOWN	PHONE
10	APUNA, NATHAN F.	4923 ALI ALI ROAD	KAPAA	822-7908
11	APUNA, SUSAN	P.O. BOX 552	KAPAA	822-7908
12	ARMSTRONG, ELIZABETH	6428 KIPAPA RD.	KAPAA	822-3806
13	ARZADON, HAZEL K.	3345C WAIKOMO RD.	KOLOA	245-9727
14	ASHTON, ELLEN R.	3-3400 KUHIO HWY, B408	LIHUE	245-6867
15	ASMUS, GERALDINE F.	P.O. BOX 1850	LIHUE	245-7485
16	ASMUS, PAUL D.	P.O. BOX 1850	LIHUE	245-7485
17	AYVES, JOAQUIN JR.	4754 OPUKEA STREET	LIHUE	245-8978
18	BACTAD, ROBERTA	P.O. BOX 563	KAPAA	822-9578
19	BAILEY, PERCIVAL	P.O. BOX 1007	LIHUE	245-5104
20	BALMIDIAIANO, RUDY	HANAPEPE HGTS	HANAPEPE	335-6032
21	BALOCAN, CORA	P.O. BOX 897	KOLOA	742-1708
22	BECK, JENNIE	P.O. BOX 1815	LIHUE	245-5991
23	BECK, RON	P.O. BOX 163	HANAPEPE	826-6974
24	BETTENCOURT, ROSALIE	P.O. BOX 3218	LIHUE	822-3748
25	BIGELOW, KENNETH W.	P.O. BOX 611	HANAPEPE	332-9769
26	BLOOMBERG, MARJORIE J.	3-3400 KUHIO HWY B-209	LIHUE	246-0237
27	BOYLE, KATHLEEN N.	P.O. BOX 4930	HANAPEPE	335-5083
28	BRAUN, MARGARET	206 NOKEKULA CIRCLE	LIHUE	245-6006
29	BRAUN, NORMAN L.	2978 PUA NANI ST.	LIHUE	245-6223
30	BREDE, PAUL	ANAHOLA, KAUAI	ANAHOLA	822-3273
31	BRIANT, WALTER	2381 KIPUKA STREET	KOLOA	742-6523
32	BROOKS, SHERI-LIN	P.O. BOX 3624	LIHUE	245-3042

NO.	SIGNER	ADDRESS	TOWN	PHONE
33	BROYLES, RICHARD SR.	P.O. BOX 456	KEKAHA	337-1113
34	BUCAO, BRADLEY	P.O. BOX 3371	LIHUE	245-8093
35	BUCK, PAMELA BOHNER	P.O. BOX 273	KILAUEA	828-1687
36	BUFORD, WILLIAM C.	91-510 HULEIA PLACE	EWA BEACH	689-8135
37	BUNGCAYAO, FRED A.	P.O. 2060	PUHI	245-5242
38	BURNS, JOAN L.	P.O. BOX 958	HANAIEI	826-6690
39	CABEBA, LOUI	1337 PUUOPAE RD.	KAPAA	822-9772
40	CAMARILLO, ARCHIE	P.O. BOX 148	KALAHEO	332-7120
41	CAMPOS, ROSE	NUUAMUU, LIHUE	LIHUE	
42	CANALES, CONNIE	PUHI, KAUAI, HI.	PUHI	245-6202
43	CANTRELL, DAWN	271 LANAKILA ROAD	KAPAA	245-9075
44	CARHART, RICHARD L. DR.	4560 LAWAI ROAD	KOLOA	742-6637
45	CAROLAN, NANCY	P.O. BOX 421	LAWAI	742-9053
46	CAROLAN, SEAN	P.O. BOX 421	LAWAI	742-9053
47	CARTER, DEBORAH	P.O. BOX 826	KALAHEO	332-8391
48	CARVALHO, HOWARD J.	3243 UIKI PL.	LIHUE	245-3036
49	CHOW, AH HING	P.O. BOX 1106	LIHUE	245-2088
50	CHUAN, EUGENIA N.	P.O. BOX 1183	HANAIEI	826-6814
51	CHUAN, RAYMOND L.	P.O. BOX 1183	HANAIEI	826-6814
52	CLARK, KATHRYN	P.O. BOX 933	LAWAI	246-9321
53	CODE, MARC EVERETT	P.O. BOX 182	LAWAI	332-7407
54	CONTRADES, LESTER C.	1025 KEALOHA RD.	KAPAA	822-5838

NO.	SIGNER	ADDRESS	TOWN	PHONE
55	COOTS, JOHN V.	RRI BOX 556 KOLOA RD.	KOLOA	332-9613
56	COUCH, DENIS J.	P.O. BOX 610	KALAHEO	742-9266
57	CROWN, RON D.	POB 972	KALAHEO	332-9503
58	CURNAN, CORRINNE R. H.	P.O. BOX 1816	LIHUE	822-9431
59	DATO, KENNETH K.	P.O. BOX 252	KILAUEA	828-1725
60	DAVIS, CAROL ANN	RRI BOX 260	KOLOA	742-1700
61	DICKERSON, ANTHONY C.	P.O. BOX 223	LAWAI	332-7200
62	DOSS, MARTIN R.	P.O. BOX 471	KILAUEA	828-1979
63	DUARTE, CHERYL R.	4777 HAUAALA ROAD	KAPAA	822-3852
64	DUNGAN, CHARLES M.	P.O. BOX 1498	KAPAA	822-0382
65	DUNGAN, MARIA	P.O. BOX 1498	KAPAA	822-0382
66	ENOKA, WILLIAM K.	5135 HEKILI RD.	KAPAA	822-4512
67	ESTRELLA, FRANK	4207 KAULU PLACE	LIHUE	245-4137
68	FELIPE, LAUREN L.	2519 NIUMALU ROAD	LIHUE	245-7955
69	FERNANDEZ, BERNAL	P.O. BOX 568	KOLOA	332-8380
70	FINNIN, JACQUELINE	P.O. BOX 912	HANAIEI	826-9058
71	FORD MICHELE	P.O. BOX 1106	LIHUE	NONE
72	FORD, HERBERT A.	3445 WILCOX RD.	LIHUE	
73	FOSTER, DOROTHY	6525 KUAMOO RD.	KAPAA	822-5503
74	FOSTER, LYLE	6525 KUAMOO RD.	KAPAA	822-5503
75	FRANK, WILLIAM E.	339 MOLO STREET	KAPAA	822-3296
76	FUJIMURA, CALVIN	4122 HILI STREET	LIHUE	245-6824
77	FURUIKE, ESTELLE C.	P.O. BOX 267	ELEELE	335-3534

NO.	SIGNER	ADDRESS	TOWN	PHONE
78	GAITHER, ROBERT L.	4704 E AKOA STREET	KAPAA	822-2345
79	GANAGAN, GEORGIELYN	1283 ULU ST.	KAPAA	822-9459
80	GANDOZA, JOHN G.	4270 HARDY STREET	LIHUE	245-4289
81	GARMA, DEBORAH	267 IANAKELA ROAD	KAPAA	245-1877
82	GARMA, TED	P.O. BOX 897	KOLOA	742-1708
83	GATIUAN, DEBORAH	187 MELIA STREET	KAPAA	245-6757
84	GENOVESE, ANDREA	KALAPAKI VILLAS 201	LIHUE	245-5939
85	GERMAN, SUSAN A.	P.O. BOX 3327	LIHUE	
86	GROTH, B. JEAN	P.O. BOX 1466	KAPAA	822-0803
87	GUGINO, JEROME P.	P.O. BOX 544	LAWAI	332-9082
88	HALVORSON, HEIDI	4170 MAHINA PLACE	HANAIEI	826-6124
89	HAMILTON, JOANN	P.O. BOX 110	HANAIEI	826-6289
90	HAMMES, JOHN W.	P.O. BOX 176	HANAIEI	826-7478
91	HANIE, CHRISTINA	P.O. BOX 977	KAPAA	
92	HARTER, BEVERLY	P.O. BOX 306	LIHUE	245-3774
93	HARTER, JACK	P.O. BOX 306	LIHUE	245-3774
94	HIGA, WES	P.O. BOX 1424	LIHUE	
95	HILACION, PHILIP	P.O. BOX 954	KOLOA	742-1236
96	HILEMAN, DONALD E.	P.O. BOX 3394	LIHUE	245-6370
97	HOFFMAN, A. J.	P.O. BOX 273	KILAUEA	828-1687
98	HOWARD, BEVERLY	4180 UPA ROAD	KOLOA	742-6144
99	HOWARD, JOHN	4180 UPA ROAD	KOLOA	742-6144
100	IMAMURA, DENNIS T.		KEKAHA	337-1861



NO.	SIGNER	ADDRESS	TOWN	PHONE
101	INOUE, DOUGLAS J.	137 ALEO ST.	KAPAA	822-3107
102	IVES-BOYNTON, SHERYL	BOX 651	WAIMEA	332-8740
103	IWASE, CRAIG	P.O. BOX 726	KOLOA	742-6759
104	JACINTO, MERCEDES	P.O. BOX 81	KOLOA	742-6172
105	JARGER, DIANE	1951 MUKU PLACE	KOLOA	742-6600
106	JENKINS, BILL	BOX 1748	LIHUE	245-9527
107	JOHNSTON, STANLEY A.	4096 PUAONE STREET	LIHUE	245-4963
108	JONES, SUSAN M.	163 KAHOLALELE RD.	KAPAA	822-3281
109	JORDAN, JUDY	P.O. BOX 730	KILAUEA	828-1640
110	KAAUWAI, ALICIA E.	4462 KAMOA ROAD	KAPAA	822-5289
111	KAHOLOKULA, JIMMIE K.	1282 KAMALU ROAD	KAPAA	822-4901
112	KANESHIRO, GRACE	P.O. BOX 336	KALAHEO	245-7720
113	KASHIWABARA, KEN H.	4040 KAPENA ST.	LIHUE	245-3042
114	KAWAKAMI, DOUG	1725 KUHIO HIGHWAY	LIHUE	
115	KEALOHA, DONALD	P.O. BOX 1931	LIHUE	245-6535
116	KEAWE, ARLEEN L.	1283 ULU ST.	KAPAA	822-9459
117	KEAWE, NORA K.	1283 ULU ST.	KAPAA	822-9459
118	KELIPIO, ALEXANDER	6494 AHEUE DRIVE	KAPAA	245-4721
119	KELLEY, ANTONIA	3120 KUHIO HWY.	LIHUE	245-3461
120	KELLEY, ANTONIA MS.	3122 KUHIO HWY	LIHUE	245-3461
121	KHAMOUI, THAO	P.O. BOX 3514	LIHUE	246-9037
122	KIMI, GINGER	5326 KUMOLE RD.	KAPAA	822-1145
123	KINZIE, PAULA P.	P.O. BOX 424	KALAHEO	245-9555

NO.	SIGNER	ADDRESS	TOWN	PHONE
124	KLENK, JOHN S.	3-3400 KUHIO HIGHWAY #A-205	LIHUE	NONE
125	KOEPPE, DALE	P.O. BOX 1262	HANAIEI	826-7686
126	KOERTE, DONNA J.	P.O. BOX 2192	PUHI	245-6630
127	KUNIMURA, TONY T.	2582 WAHO STREET	KOLOA	742-6534
128	KUPO, PAULINE A.	P.O. BOX 301	WAIMEA	337-9098
129	KYONO, STEVEN	P.O. BOX 1886	LIHUE	322-8422
130	LAKE, KEONI	P.O. BOX 1106	LIHUE	NONE
131	LAKE, MICKEY	BOX 761	LIHUE	245-2767
132	LAKE, RONNIE	BOX 761	LIHUE	245-2767
133	LAPOSA, PATRICK A.	5186 KAWAIHAU ROAD	KAPAA	245-9714
134	LARKIN, JOSEPH B.	3226 ULUHUI STREET	LIHUE	245-9663
135	LARKIU, ALICE	5226 ULUHUI STREET	LIHUE	245-9663
136	LAYOSA, PATRICIA A.	4645 LAUKONA STREET	LIHUE	245-3729
137	LEAI, KEN	POB 876	KOLOA	332-9598
138	LEMUS, NINNI V.G.	4121 RICE STREET #201	LIHUE	245-9304
139	LEMUS, RICARDO A.	4121 RICE STREET #201	LIHUE	245-5939
140	LIBRE, YOLANDE	P.O. BOX 6	KAUMAKANI	335-6193
141	LOMOSAD, ALEJANDRO		HANAPEPE	245-4721
142	LOWERY, KATHRYN	P.O. BOX 340	WAIMEA	335-3502
143	LUM, CAROLYN	3925 KAPENA STREET	LIHUE	245-7255
144	LYON, JANIS D.	4644 HO'OMANA RD.	LIHUE	245-9498
145	MAHINAI, BEVERLY KUULEI	BOX 292	ANAHOLA	822-4809
146	MAKINA, FRED	P.O. BOX 498	PUHI	245-3558

NO.	SIGNER	ADDRESS	TOWN	PHONE
147	MANLEY, WALLACE J.	6015 KOLOPUA	KAPAA	822-5059
148	MARCHANT, MERCEDES	P.O. BOX 434	ELEELE	245-8280
149	MARTELL, DORRAINE	P.O. BOX 3747	LIHUE	338-1982
150	MARTIN-WILSON, C. PUALANI	1024 KAMALU ROAD	KAPAA	822-9419
151	MARUGAME, KENJI K.	P.O. BOX 3535	LIHUE	332-9332
152	MATATINO, MICHAEL	P.O. BOX 2116	PUHI	
153	MATHEWS, DARYL	6514 KALAMA RD.	KAPAA	245-7135
154	MATSUNAGA, JAY K.	P.O. BOX 270	LAWAI	332-9720
155	MATUTINO, MARLENE S.	P.O. BOX 816	KEKAHA	245-7720
156	McBRIDE, G. ANN	1070 PILGRIM PARKWAY	ELM GROVE	786-9537
157	McBRIDE, ROBERT E.	1070 PILGRIM PARKWAY	ELM GROVE	786-9537
158	McCARATHY JOSEPH	4857 MANULELE STREET	LIHUE	245-9027
159	McCARATHY, KATHY	4857 MANULELE STREET	LIHUE	245-9027
160	McCOM-GROUP, MARJORIE	P.O. BOX 927	LIHUE	
161	MILLER, CLARE	6154 HOLIO ROAD	LIHUE	245-8841
162	MIRANDA, LEON C.	2519 MIUMALU	LIHUE	245-6489
163	MITCHELL, WILLIAM K.	P.O. BOX 1103	LIHUE	245-4116
164	MITTON, DALE	4171 HILI STREET	LIHUE	245-4204
165	MOORE, BETTY J.	3-3400 KUHIO HIGHWAY	LIHUE	245-1994
166	MOORE, JOHN H. SR.	3-3400 KUHIO HWY, C-310	LIHUE	245-1994
167	MOREY, DON	P.O. BOX 1351	HANAIEI	826-6659
168	MORGAN, ALBERT	4916 HALEILIO	KAPAA	822-4726
169	MURAYAMA, DENJI	P.O. BOX 3377	LIHUE	245-6284

NO.	SIGNER	ADDRESS	TOWN	PHONE
170	MURAYAMA, MASAKO	P.O. BOX 3377	LIHUE	245-6284
171	MURAYAMA, ROBIN	P.O. BOX 3377	LIHUE	245-6284
172	NAGANUMA, HENRY	2806 UPENA STREET	LIHUE	245-2311
173	NEWBURN, BERNICE L.	P.O. BOX 1324	KOLOA	742-7195
174	NEWBURN, C.B.	P.O. BOX 1324	KOLOA	742-7195
175	NUUANU, ALICE	4925 ALI ALI ROAD	KAPAA	822-3020
176	OBERG, STEVEN R.		OMAO	742-1430
177	OCLIT, ELOISE	2956 AUKELE ST.	LIHUE	245-2026
178	ODA, ANNETTE	3328 ELIMA STREET	LIHUE	245-4206
179	OTANI, MARIA	BOX 254 DR#1	KOLOA	742-6734
180	OWEN, BARB	P.O. BOX 148	KALAHEO	332-7120
181	PACHECO, DEREK UILANI	BOX 97	LIHUE	246-1197
182	PACINI, LUIS E.	4930 MOI RD.	HANAPEPE	335-5083
183	PALAMA, PATRICIA A.	P.O. BOX 246	KALAHEO	332-8018
184	PANUI, KARIN O.	P.O. BOX 804	LIHUE	245-8940
185	PARUNGAO, AMY	P.O. BOX 224	ELEELE	332-9954
186	PAULAUSKAS, ALINE	3-3400 KUHIO A404	LIHUE	245-3011
187	PERREIRA, GAYLORD	3253 ALOHI PL.	LIHUE	245-6223
188	POMROY, PAUL S.	3332 KAHUMOKU RD.	LIHUE	245-4140
189	RAMBOYAN, LEONARD		LIHUE	
190	RAPOZO, SANDRA	KAWAIHAU RD.	KAPAA	
191	REESE, JAMES	KOLOA 1230	KOLOA	
192	REYNOSO, ANGEL	6134 KALA KEA PLACE	KAPAA	822-1892

NO.	SIGNER	ADDRESS	TOWN	PHONE
193	RICE, BUDD	3-3400 KUHIO HWY B-303	LIHUE	245-9406
194	RICE, CAROLYN	3-3400 KUHIO HWY B-303	LIHUE	245-9406
195	RICHARDS, TRACY	3206 INOUYE ST.	LIHUE	246-9091
196	RITA, RICHARD W.		KALAHEO	332-9622
197	RIVARD, MICHAEL G.	346 KAMOKILA STREET	KAPAA	822-3062
198	ROBELLO JR., FRANK	1120 PUULO DR.	KAPAA	822-4517
199	ROBERTSON, FORBERS(DR & MRS)	3-3400 KUHIO HWY.	LIHUE	245-5709
200	ROBINSON, EVANGELINE	2814 HOOLAKO STREET	LIHUE	245-3483
201	ROBLES, AGNES	2956 OHIOHI STREET	LIHUE	245-6623
202	ROBLES, ROWENA A.	2956 OHIOHI STREET	LIHUE	245-6623
203	ROESCH, J. ALBERT	3-3400 KUHIO HWY #307A	LIHUE	245-2960
204	ROLLINS, TAMI	P.O. BOX 560	ELEELE	
205	SANTOS, RICHARD A.	P.O. BOX 1241	KOLOA	742-9402
206	SCHAEFER, JERRE	3-3944-1 KUHIO HWY	HANAMAULU	246-9325
207	SHIGEMATSU, RYAN	2940 PUA NANI STREET	LIHUE	245-4646
208	SILVA, RAY A.	P.O. BOX 894	LIHUE	822-TOY-SHOP
209	SILVA, ROBBY C.	4120 HOOHANA	LIHUE	245-6381
210	SMITH, JAMES W.	3057 POIPU ROAD	KOLOA	742-6661
211	SMITH, NANCY M.	3816 OMAO RD.	KOLOA	742-6098
212	SOLOMON, ESTHER	6514 KALAMA RD.	KAPAA	245-7135
213	SOLTYSIK, LINDA S.	1702 MAKOI STREET	LIHUE	245-8022
214	SOTELO, BENJAMIN			
215	SOUZA, AUGUST	636 PUUOPAER	KAPAA	822-4625

NO.	SIGNER	ADDRESS	TOWN	PHONE
216	SQUYRES, RHONDA	P.O. BOX 1770	LIHUE	245-8881
217	SQUYRES, RHONDA	P.O. BOX 1770	LIHUE	245-8881
218	STEVENSON, NALANI	P.O. BOX 1017	LAWAI	332-8382
219	SUERO III, CATALINO G.	4362 UAHIAPELE ST.	LIHUE	245-4238
220	SUGANO, RUSSELL	302 KIHAPAI	KAPAA	822-9246
221	SUGUHAN, PAUL W.	3907 PALANI ROAD	LIHUE	245-8715
222	SUTER, JANE M.	BOX 1415	KAPAA	822-4454
223	SWANSON, ROBERT	P.O. BOX 1104	HANAIEI	826-9837
224	SWEET, DAVID L. (MR. & MRS.)	3149 POIPU ROAD	KOLOA	742-1349
225	TANDAL, RHONDA	P.O. BOX 411	KAPAA	822-0594
226	TERUI, WALLACE		KAPAA	245-9734
227	THOMPSON, JOSEPH J.	3-3400 KUHIO HWY C-302	LIHUE	245-7100
228	THOMPSON, LORRAINE M.	3-3400 KUHIO HWY C-302	LIHUE	245-7100
229	TSUKAMOTO, GEORGE	5470B KAWAIHAU RD	KAPAA	822-4577
230	TSUNODA, JOAN	P.O. BOX 277	HANAMAULU	245-2157
231	TUAZON, DELBERT	P.O. BOX 1546	KAPAA	822-1894
232	TUAZON, DIANA	P.O. BOX 1546	KAPAA	822-1894
233	TUCKER, TRACY	3925 KAPENA STREET	LIHUE	245-7255
234	VAN GIBSON, SOL	5338 KAHALA STREET	KAPAA	822-0050
235	VEGAS, JEFFREY R. SR.	P.O. BOX 1285	KAPAA	
236	VEGAS, LORI	P.O. BOX 1285	KAPAA	822-7546
237	VENIEGAS, TILLIE M.	3120 JEVES STREET E-7	LIHUE	245-5028
238	VERRILL, LUCILLE M.	1610 MAKANUI ROAD	KOLOA	742-1650

NO.	SIGNER	ADDRESS	TOWN	PHONE
239	VER, ARLEEN C.	P.O. BOX 187	KEAUA	822-4723
240	VICTORINO, DAYNA	P.O. BOX 2145	PUHI	245-4619
241	VIERRA, JOSEPH	P.O. BOX 47	LIHUE	245-6477
242	WAALANI, ELENA	2410 HULEMANU	LIHUE	245-6444
243	WAKUTA, PUANANI		KAPAA	
244	WALLACE, D. J.	P.O. BOX 371	KILAUEA	828-1924
245	WATSON, E.	3-3400 KUHIO HWY. A-406	LIHUE	245-1659
246	WATSON, MARY L.	4926 ALIALI ROAD	KAPAA	
247	WIEERS, DOROTHA		LIHUE	245-7848
248	WIGEN, B.	3100-7 KUHIO HWY.	LIHUE	245-9555
249	WILHELM, JACK	3208 PULAI ST.	LIHUE	245-6267
250	WINNING, PATT	P.O. BOX 3194	LIHUE	245-8841
251	WORLEY, LAURIE	P.O. BOX 519	KILAUEA	826-9596
252	WYATT, EDWIN K.	3-3400 KUHIO HWY.	LIHUE	245-7638
253	WYGLE, KAREN	4238 KAULU PLACE	LIHUE	245-9013
254	YAMAMOTOYA, DON T.	2942 MOHALA STREET	LIHUE	245-4179
255	YAMAMOTO, RONALD	P.O. BOX 185	HANAMAULU	245-6026
256	YAMASHITA, LARAINÉ	119 LOLOA STREET	KAPAA	822-3962
257	YOSHIMITSU, DEBBIE	P.O. BOX 545	HANAPEPE	335-6182
258	YOSHIMURA, DARLA	P.O. BOX 3075	LIHUE	245-7720
259	YOSHIOKA, IRENE S.	4811 MANUELE STREET	LIHUE	245-3755
260	CAPENER, BARBARA	1675 WANAAO RD.	KAPAA	

NO.	SIGNER	ADDRESS	TOWN	PHONE
261	MONIZ, TAMMY	P.O. BOX 745	ELEELE	245-3722
262	NAKAMURA, BARBARA G.	5170 HALEILIO RD.	KAPAA	822-1880
263	PICKELS, REBECCA LYNN	P.O. BOX 486	HANAIEI	826-6962
264	ROGERS, WILLIAM L.	POIPU SHORES RESORTS #3024	POIPU	742-7732
265	ROBINSON, JAN	P.O. BOX 86	LIHUE	245-7377
266	NAKAMURA, RICHARD	5170 HALEILIO RD.	KAPAA	822-1880
267	GERISCH, EVELYN M.	33400 KUHIO HIGHWAY	LIHUE	245-8411



APPENDIX C  
COMMENTS TO NOTICE OF  
DETERMINATION/ENVIRONMENTAL ASSESSMENT  
DATED APRIL 1987

FOR

NEW HELICOPTER FACILITY  
LIHUE AIRPORT COMPLEX  
LIHUE, KAUAI, HAWAII  
PROJECT NO. AK1046-14



## University of Hawaii at Manoa

Environmental Center  
Crawford 317 • 2550 Campus Road  
Honolulu, Hawaii 96822  
Telephone (808) 948-7381

June 8, 1987  
PN:0053

Mr. Dean Nakagawa  
Airports Division  
State Department of Transportation  
Honolulu International Airport  
Honolulu, Hawaii 96819

Dear Mr. Nakagawa:

Environmental Impact Statement (EIS) Preparation Notice  
Lihue Airport Complex - New Helicopter Facility  
Lihue, Kauai

It is our understanding that a Supplemental EIS has been required for the new helicopter facility. Consequently, the referenced document has been prepared to identify the potential impacts that are of major concern. The forthcoming Draft Supplemental EIS would focus its analysis on these major concerns and supplement the 1977 Lihue Airport Master Plan Study EIS. The Environmental Center has conducted a brief review of the noted Preparation Notice with the assistance of George Curtis, Hawaii Natural Energy Institute; Jon Matsuoka, Social Work; Pamela Bahnsen and Jennifer Crummer, Environmental Center.

The proposed project involves the replacement and centralization of fifteen helicopter parking positions rented on 30-day revocable permits, three State Department of Transportation controlled helipads, and three refueling positions at the Lihue Airport. In addition, a terminal building (3,100 sq. ft.) with parking would be provided to replace various structures now used for passenger and administrative needs. The airport fuel farm and underground fuel dispensing system would also be installed. This project is intended to promulgate safe and efficient helicopter operations at the Lihue Airport by segregating it from fixed wing airplane operations.

### General Comment

While we recognize that it is not specifically a consideration of this Preparation Notice, we would like to raise the issue that enhancement of helipad facilities may stimulate further growth of the helicopter

A Unit of Water Resources Research Center  
AN EQUAL OPPORTUNITY EMPLOYER

Mr. Dean Nakagawa

-2-

June 9, 1987

industry. The potential resulting impacts (noise/safety - primarily beyond the regulation of the Lihue Airport Control Tower) could be deleterious to the economic base of Kauai's tourist industry.

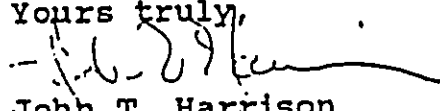
Specific Comment

Noise Impacts

The statement that "annoyance" resulting from sight-seeing helicopter noise levels is "dependent on the listener" is tautological. The issue of noise is significant in the context of impacts to wildlife and visitors at remote, scenic areas of Kauai. While there may be correspondence in decibel levels between helicopters and "familiar surface transportation vehicles," the latter are not normally a component of remote, scenic areas and would constitute a significant impact if they were. As noted earlier, we are concerned that proliferation of helicopter sight-seeing could ultimately undermine the economic base of Kauai's tourist industry. Enhancement of helicopter support facilities has the potential to encourage such proliferation.

We appreciate the opportunity to comment at the preparation stage.

Yours truly,

  
John T. Harrison  
Environmental Coordinator

cc: OEQC  
L. Stephen Lau  
George Curtis  
Jon Matsuoka  
Jacquelin Miller  
Pamela Bahnsen  
Jennifer Crummer



United States Department of the Interior

FISH AND WILDLIFE SERVICE

300 ALA MOANA BOULEVARD  
P. O. BOX 50167  
HONOLULU, HAWAII 96850

BS  
Room 6307  
JUN 22 1987

RECEIVED

JUN 23 1987

AKINAKA & ASSOCIATES, LTD.

Mr. Owen Miyamoto  
Airports Administrator  
Airports Division  
Department of Transportation  
Honolulu International Airport  
Honolulu, HI 96819

Re: AIR-EP 87.1829, New Helicopter Facility at Lihue Airport

Dear Mr. Miyamoto:

We have reviewed the referenced Notice of Determination/  
Environmental Assessment and offer the following comments for  
your consideration.

This report has been prepared under the authority of and in  
accordance with the provisions of the Fish and Wildlife  
Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et  
seq.) and other authorities mandating Department of the Interior  
concern for environmental values. It is also consistent with the  
intent of the National Environmental Policy Act.

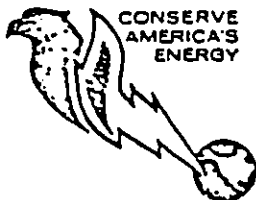
The proposed action will have little adverse impact on fish and  
wildlife resources within our jurisdiction. In view of this, we  
have no objection to your issuance of a permit for this project.

We appreciate this opportunity to comment.

Sincerely yours,

Ernest Kosaka  
Project Leader, Environmental Services  
Pacific Islands Office

cc: DLNR  
✓Akinaka & Associates, Ltd.



Save Energy and You Serve America!

July 1, 1987

Kauai Citizens Helicopter  
Advisory Board

P.O. Box 1071

Lawai, Hi, 96765

Dean Nakagawa

State of Hawaii Dept. of Transportation

Airports Division

Honolulu International Airport

Honolulu, Hi, 96819

Dear Mr. Nakagawa,

We respectfully request that our  
advisory board be granted consulted party  
status, and be allowed to respond to  
the Draft Environmental Impact Statement for  
a new Heliport at Lihue Airport. I  
apologize for this late application

Sincerely,

Mark Phillips

*Mark Phillips*  
Secretary K.C.H.A.S.

AMFAC PROPERTIES

700 Bishop Street  
PO Box 3140  
Honolulu, Hawaii 96802  
(808) 945-8144

*Amfac*

July 2, 1987

Mr. Owen Miyamoto  
State of Hawaii  
Department of Transportation  
Airports Division  
Honolulu International Airport  
Honolulu, Hawaii 96819

Subject: Lihue Airport Master Plan Update and  
Noise Compatibility Study, AIR-EP 87.1741

Dear Mr. Miyamoto:

Please inform your consultant that Amfac Properties and Lihue Plantation Company wish to be included as consulted parties in the preparation of the Environmental Assessment for the helicopter facility at Lihue Airport.

Sincerely,



Jeffrey M. Melrose  
Land Planner

JMM/kk

TONY T. KUNIMURA  
MAYOR



STEVEN M. KYONO  
COUNTY ENGINEER  
TELEPHONE 245-3318

RUSSELL SUGANO  
DEP COUNTY ENGINEER  
TELEPHONE 245-3602

COUNTY OF KAUAI  
DEPARTMENT OF PUBLIC WORKS  
4396 RICE STREET  
LIHUE, KAUAI, HAWAII 96766

July 1, 1987

Mr. Owen Miyamoto  
Airports Administrator  
Department of Transportation  
Honolulu International Airport  
Honolulu, HI 96819

Dear Mr. Miyamoto:

RE: NOTICE OF DETERMINATION/ENVIRONMENTAL ASSESSMENT  
NEW HELICOPTER FACILITY - LIHUE AIRPORT  
PROJECT NO. AK1046-14

Thank you for the opportunity to comment on the Environmental Assessment for the New Helicopter Facility at the Lihue Airport.

Inasmuch as dust control is addressed in the EIA, we would like to point out that during the construction of the north-south runway and the new terminal complex, there were times when dust became uncontrollable because of inadequate dust control equipment for the area exposed. To avoid similar problems during the construction of the helicopter facility, tighter procedures for controlling dust should be specified in your drawings and specifications. The procedures should not, however, call for a County grading permit, as work under the control of your agency is exempt from our grading ordinance.

Please feel free to call Ken Kitabayashi or Wallace Kudo of our Engineering Division at 245-4751 if you have questions regarding our grading ordinance.

Very truly yours,  
ORIGINAL SIGNED BY  
STEVEN KYONO

STEVEN KYONO, P.E.  
County Engineer

KM/sm

cc: Akinaka & Assoc., Ltd.



DEPARTMENT OF THE ARMY  
U. S. ARMY ENGINEER DISTRICT, HONOLULU  
BUILDING 230  
FT. SHAFTER, HAWAII 96858-5440

July 6, 1987

REPLY TO  
ATTENTION OF:

Mr. Owen Miyamoto, Airports Administrator  
State of Hawaii  
Department of Transportation  
Airports Division  
Honolulu International Airport  
Honolulu, HI 96819

Dear Mr. Miyamoto:

Thank you for the opportunity to review and comment on the Notice of Determination/Environmental Assessment for New Helicopter Facility, Lihue Airport, Lihue, Kauai. The following comments are offered:

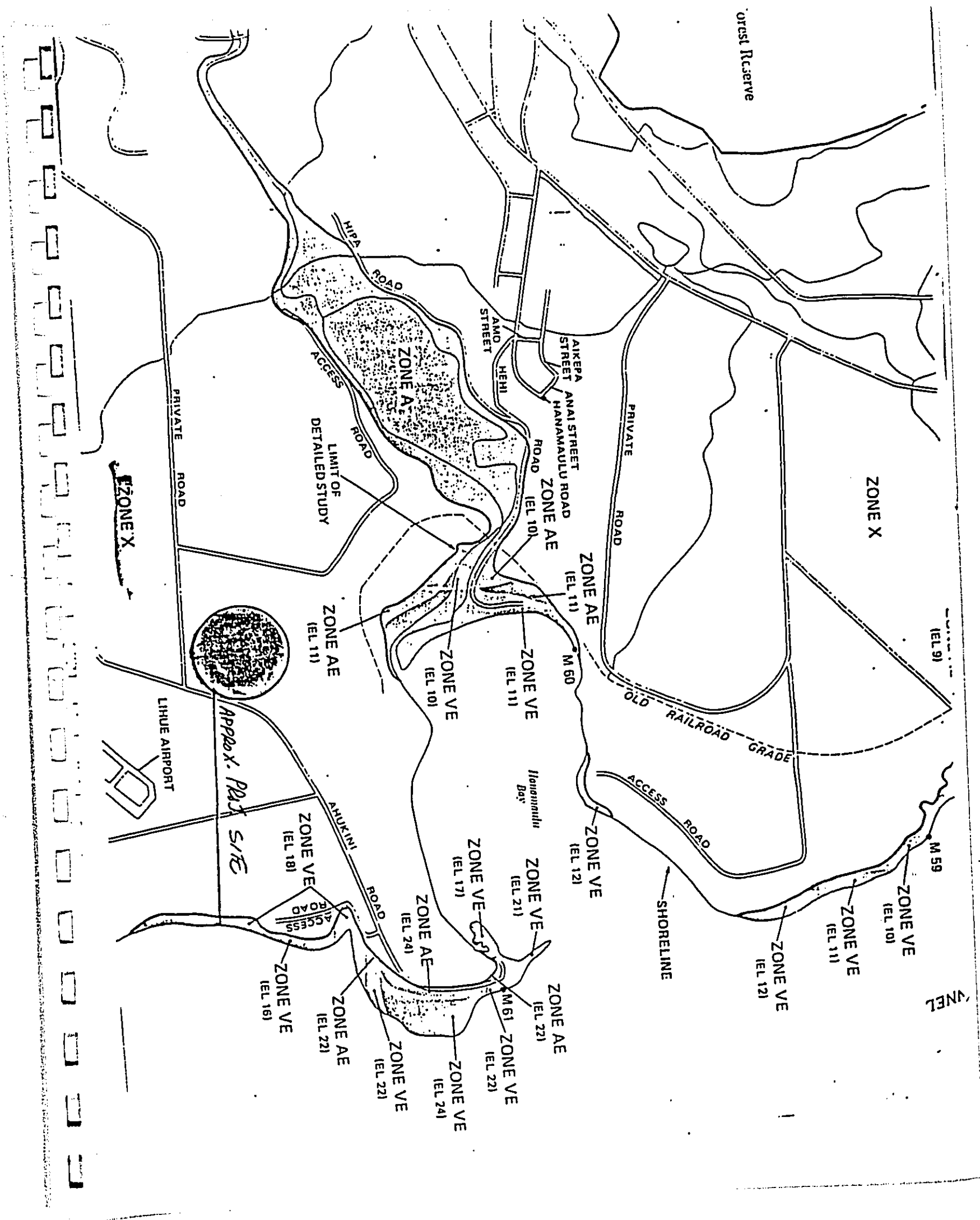
- a. A Department of the Army permit application is not needed.
- b. Without a tax key number, to identify the site, we can only provide an approximate flood hazard evaluation. According to the approximate location, the Flood Insurance Rate Map indicates the entire area around Ahukini Road is in Zone X, area of minimal flooding.

Sincerely,

*Risuk Cheung*  
Risuk Cheung  
Chief, Engineering Division

Enclosure





# Jack Harter Helicopters

July 14, 1987



INVITATION TO ADVENTURE

RECEIVED

JUL 20 1987

AKINAKA & ASSOCIATES, LTD.

Akinaka & Associates, Ltd.  
250 North Beretania St.  
Suite 300  
Honolulu, HI 96817

Re: Project # AK1046-14

Aloha:

Please consider the following views in the compilation of your EIS followup on the proposed Lihue heliport.

As a preface, I would like to note that the Environmental Assessment has so far covered most factors very well. I am also compelled to explain that I have never offered any views on the heliport design because it is about the best that can be done with inadequate space in a terrible location.

These views, now offered, deal primarily with the impact on existing and planned residential areas as well as recreation and highways.

To reduce or eliminate the mixing of fixed-wing and helicopter traffic is essential. Regrettably, it leaves only one narrow corridor for both departure and approach. The frequency of flights near Hanamaulu and Nukolii is already too high. It would more than double in the future. To provide lateral separation between routes, the copters would have to go closer to each sensitive area.

All flights would pass almost over the Hanamaulu beach park with altitudes below 1000 feet because of fixed-wing traffic from the North.

Please investigate plans to reopen a public school at the Hanamaulu facility. It is very close to the flight path.

To provide separation for both approaches and departures from the proposed site, copters will have to make wider turns, at low altitudes, closer to the hospital and Hanamaulu. On a Kona wind day, with copters heavier at takeoff, the climb out would be even nearer to residential areas.

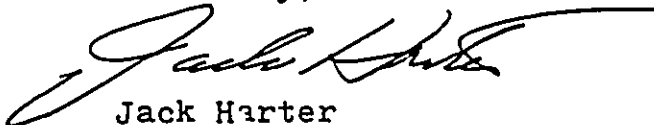
P. O. BOX 306, LIHUE, KAUAI, HAWAII 96766    PHONE 245-3774

Page 2

The airport cut-off road being constructed lies directly under either approach or departure from the proposed heliport. Helicopters turning final on approach or departing on Kona days will be very low over or across the new highway. Please assess potential distraction of drivers.

All these problems can only get worse as Lihue grows. Therefore, I am strongly in favor of moving the heliport to an area northwest of Lihue. This would eliminate virtually all environmental impact and surely benefit everyone.

Sincerely,



Jack Harter

JH:ar

974

JOHN WAIHEE  
GOVERNOR OF HAWAII



JOHN C. LEWIN, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
EPHSD

July 14, 1987

MEMORANDUM

To: Mr. Owen Miyamoto, Airports Administrator  
Airports Division, Department of Transportation

From: Chief, Environmental Protection & Health Services Division

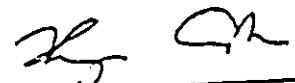
Subject: Notice of Determination/Environmental Assessment—New Helicopter Facility,  
Lihue Airport, Project No. AK1046-14

Thank you for allowing us to review and comment on the subject project. Our concerns are as follows:

1. The applicant shall provide minimum sanitary facilities according to Chapter 11, Sanitation of Title 11, Administrative Rules, State of Hawaii, Department of Health.
2. The entire development shall be connected to an approved sewage treatment work facility. Should the applicant connect to the Lihue Sewage Treatment Plant, it should be demonstrated to the Department of Health that the existing plant has adequate capacity.
3. The proposed development shall be provided with potable water from the Department of Water, County of Kauai.
4. Should the development include the construction of storage facilities for volatile organic compounds, an authority to construct permit issued through our Environmental Permits Branch is necessary.
5. Grubbed material and debris generated by land clearing shall be disposed in a manner and at a site approved by the Department of Health.
6. Effective dust and soil erosion control measures shall be implemented during all phases of development by the developer.

Due to the general nature of the application submitted, we reserve the right to implement further environmental restrictions when more detailed plans are submitted.

cc: Chief Sanitarian, Kauai

  
SHINJI SONEDA

**DEPARTMENT OF WATER**

COUNTY OF KAUAI

P. O. BOX 1708

LIHUE, HAWAII 96766-5708

July 14, 1987

Mr. Owen Miyamoto  
Airports Administrator  
Airports Division  
Dept. of Transportation  
Honolulu International Airport  
Honolulu, HI 96819

Re: Notice of Determination/Environmental Assessment, New  
Helicopter Facility, Lihue Airport, Project No.  
AK-1046-14

We reviewed the Notice of Determination/Environmental  
Assessment for the New Helicopter Facility at the Lihue  
Airport and have no comments to offer at this time.

Thank you for the opportunity to comment.



Raymond H. Sato  
Manager and Chief Engineer

WH:rm

SIERRA CLUB  
KAUAI GROUP OF THE HAWAII CHAPTER  
P.O. BOX 3412  
LIHUE, KAUAI, HAWAII 96766

July 17, 1987

Akinaka & Associates, Ltd.  
250 North Beretania Street, Suite 300  
Honolulu, HI 96817

RECEIVED

JUL 21 1987

AKINAKA & ASSOCIATES, LTD.

Re: April, 1987, Notice of Determination/Environmental Assessment  
for Project No. AK 1046-14 (new helicopter facility at Lihue  
Airport Complex).

Ladies & Gentlemen:

We would like to submit the following comments regarding this  
project. Section 4.5.6 states:

Basal groundwater in the vicinity of Lihue Airport is of  
limited quantity and poor quality and cannot be used as a source  
of potable water for the airport or the surrounding area.

No alternative is mentioned as a source of potable water.


Regarding heliport operations, we see these problems with the  
narrow corridor proposed for both departures and approaches:

- 1) We feel it would be dangerous to have both departures and  
approaches within such a narrow corridor.
- 2) Helicopters would have to fly very low over the new Ahukini  
cut-off road on days with Kona winds. This activity would  
provide a visual distraction to drivers on that road.
- 3) Hanamaulu and Nukolii are noise sensitive areas and should  
not be subjected to the increased frequency of low heli-  
copter overflights which this facility would create. In  
fact, a public school may be reopening in Hanamaulu, which  
would make that area even more incompatible with low overflights.

Finally, we disagree with the conclusion and recommendation of  
the "Report of the Committee to Develop Corrective Actions for the  
Helipad" (REF 8) to move the helipad to another location on the  
airport. We feel that in light of all the aforementioned  
problems, relocation of the helipad to another site altogether  
would be best. Either Port Allen Airport (Burns Field) or a site  
proposed northwest of Lihue would be preferable to Lihue Airport.

Thank you for the opportunity to comment on this proposal.

Sincerely,



Bert Lyon  
Conservation Chairman

cc: State Airports Division  
The Garden Island

2991

JOHN WAIHEE  
GOVERNOR



SUZANNE D. PETERSON  
CHAIRPERSON, BOARD OF AGRICULTURE

TADASHI TOJO  
DEPUTY TO THE CHAIRPERSON

State of Hawaii  
DEPARTMENT OF AGRICULTURE  
1428 So. King Street  
Honolulu, Hawaii 96814-2512

Mailing Address:  
P. O. Box 22159  
Honolulu, Hawaii 96822-0159

July 21, 1987

MEMORANDUM

To: Mr. Owen Miyamoto, Airports Administrator  
Airports Division  
Department of Transportation

Subject: Notice of Determination/Environmental Assessment  
New Helicopter Facility  
Lihue Airport  
Project No. AK1046-14  
TMK: 3-7-02: por. 1  
Area: approximately 30 acres

The Department of Agriculture has reviewed the subject Notice and offers the following comments.

According to the subject document, the applicant is seeking to construct and operate a fifteen-pad helicopter facility adjacent to the Lihue Airport. The subject area is mostly in sugarcane cultivation by Lihue Plantation Company. Also in the subject area are a car rental agency and two helicopter sight-seeing companies.

The Environmental Assessment should include a discussion on the amount of sugarcane acreage to be affected by the proposed project, the economic impact of the lost sugarcane production on Lihue Plantation Company, and any mitigating measures.

Thank you for the opportunity to comment.

SUZANNE D. PETERSON  
Chairperson, Board of Agriculture

cc: OEQC

JOHN WAIHEE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
P. O. BOX 621  
HONOLULU, HAWAII 96809

WILLIAM W. PATY, CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES

LIBERT K. LANGGRAF  
DEPUTY

AQUACULTURE DEVELOPMENT  
PROGRAM  
AQUATIC RESOURCES  
CONSERVATION AND  
ENVIRONMENTAL AFFAIRS  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

DOC. NO. 0807E  
FILE NO.: 87-234

JUL 27 1991

Mr. Owen Miyamoto, Airports Administrator  
Department of Transportation  
Airports Division  
Honolulu International Airport  
Honolulu, Hawaii 96819

Dear Mr. Miyamoto:

SUBJECT: Review of Environmental Assessment - Helicopter  
Facility at Lihue Airport, Department of  
Transportation, Airports Division  
Hanamaulu, Lihue, Kauai -- TMK: 3-5-01: 13

Thank you for the opportunity to review the subject  
undertaking. We offer the following comments:

Historic Sites Concerns:

The environmental assessment states on page 18 under "8.3  
WATER QUALITY" that "No significant impact on the quality of  
off-shore waters is anticipated as a result of the proposed  
project. Potential sources of degradation include storm water  
runoff to the ocean, which will be disposed through the use of the  
drainage system recently completed." and "To mitigate impacts from  
helicopter wash-downs, construction of an oil/water separator will  
be included in the project. Proper design and maintenance of the  
facility will assure that no oils, fuels, or similar material  
reaches the receiving waters." Also, the present use of cesspools  
and self-contained sewage treatment units would be eliminated as  
the new facility connects to a sewer system and pumping station.

We recommend all precautions be taken to ensure that eroded  
soils, petroleum products, fertilizers, pesticides, and other  
potential contaminants associated with the helicopter facility do  
not blow, leach, or flow into coastal waters.



Historic Sites Concerns:

This project area does not contain historic sites that are listed on the Hawaii Register or the National Register of Historic Places, or that have been determined eligible for inclusion on the National Register of Historic Places.

No archaeological surveys have taken place in the area, so it is uncertain if significant historic sites are present. However, our records indicate that the project area has been previously impacted by commercial agriculture activities and construction associated with existing rental car and helicopter facilities. Therefore, we have determined that the subject undertaking will have "no effect" to any known cultural resources.

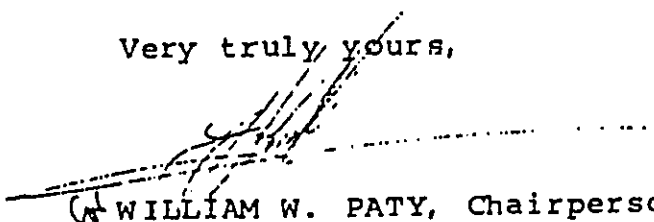
We do recommend that if historic remains such as artifacts, shell or charcoal deposits, burials, and stone platforms, pavings, or walls are found during construction, please direct the applicant to stop work in the immediate area and contact the Historic Sites Section at 548-7460 immediately. Our office will assess the situation and make recommendations for mitigative action, if needed.

Recreation Concerns:

While there are no state park concerns regarding the location of the subject project we have serious concerns regarding the number of helicopter flights over state park areas on Kauai; particularly over Waimea Canyon, Kokee and Na Pali Coast State Parks. We note that a concurrent study, the Statewide Airport Systems Plan, is to address "...secondary impacts in non-congested areas due to helicopter overflights...". We believe it is essential to determine the need for helicopters and the carrying capacity of scenic tour routes over our parks before committing the State to new helicopter facilities.

Thank you for your consideration of our concerns.

Very truly yours,

  
WILLIAM W. PATY, Chairperson  
Board of Land and Natural Resources

3267

TONY KUNIMURA  
MAYOR



DAMIEN D. VICTORINO  
FIRE CHIEF

COUNTY OF KAUAI  
FIRE DEPARTMENT  
4396 RICE STREET  
LIHUE, KAUAI, HAWAII 96786  
August 10, 1987

Mr. Owen Miyamoto  
Airports Administrator  
Department of Transportation  
Honolulu International Airport  
Honolulu, Hawaii 96819

Dear Mr. Miyamoto:

Re: New Helicopter Facility - Lihue Airport  
Project No. AK1046-14

We have reviewed the Notice of Determination/Environmental Assessment for the new helicopter facility and the following are our concerns:

Fire Protection

The complex shall be provided with water mains and fire hydrants complying with the Kauai Water Department standards to provide adequate fire protection.

Fueling

For the safety of all helicopter operators, we concur with the proposed fuel underground dispensing system. This system should be mandatory.

If you have any questions, please call me at 245-4721.

Very truly yours,

*Damien Victorino*  
Damien D. Victorino  
Fire Chief

WE:ly

3704

Q

TONY T. KUNIMURA  
MAYOR



AVERY H. YOUN  
PLANNING DIRECTOR

TOM H. SHIGEMOTO  
DEPUTY PLANNING DIRECTOR

TELEPHONE (808) 245-2919

COUNTY OF KAUAI  
PLANNING DEPARTMENT  
4280 RICE STREET  
LIHUE, KAUAI, HAWAII 96766

September 18, 1987

Mr. Owen Miyamoto  
Airports Administrator  
State Dept. of Transportation  
Airports Division  
Honolulu International Airport  
Honolulu, Hawaii 96819

Subject: Notice of Determination/Environmental Assessment for a  
New Helicopter Facility at Lihue Airport

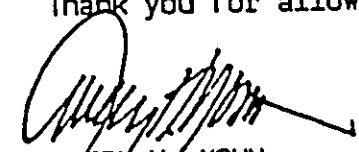
In reviewing the determination made on the subject matter, we have no alternative but to disagree with the statement that "other considerations of the proposed actions will not have a significant impact on the environment and have been satisfactorily discussed in previous documents." We believe that the extent of the supplemental environmental statement cannot be limited to "the acreage below the air space under the sole management of the Lihue Airport control tower."

Helicopter impacts extend well beyond this area and affects the entire island. Mitigative measures to minimize impacts to "other areas" as discussed on Page 16 are available. However, we have not seen these mentioned in the report, mainly:

- a. Establishment of strict flight patterns and flight elevations throughout the entire island and enforcement of such;
- b. Controlling the total number of tour helicopters allowed to operate commercially.

We are however, in favor of the new heliport facility (Site 1) west of Ahukini Road since it will improve safety at the existing airport.

Thank you for allowing us to comment on this application.

  
AVERY H. YOUN  
Planning Director

**APPENDIX D**

COMMENTS AND RESPONSES  
DRAFT TO ENVIRONMENTAL IMPACT STATEMENT  
DATED OCTOBER 1988

FOR

NEW HELICOPTER FACILITY  
LIHUE AIRPORT COMPLEX  
LIHUE, KAUAI, HAWAII  
PROJECT NO. AK1046-14



**DEPARTMENT OF BUSINESS AND ECONOMIC DEVELOPMENT**

DEPT. DIRECTOR, 335 MERCHANT ST., 3RD FL. HONOLULU, HAWAII 96813

JOHN WALKER  
GOVERNOR  
ROGER A. LEEBING  
COMMISSIONER  
BARBARA L. BLANCHARD  
DEPUTY DIRECTOR  
LESLIE S. MAZURKALA  
DEPUTY DIRECTOR

JOHN WALKER  
GOVERNOR



**STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION**

1101 KALANIANA'OLANI AVENUE - HONOLULU, HAWAII 96813

February 16, 1989

EDWARD YAMATA  
DIRECTOR

EDWIN HARRISON  
JOHN A. LUCASIA  
RONALD N. HERRING  
DAN T. KOCH

IN REPLY REFER TO  
AIR-EP  
89-1281

November 10, 1988

Dr. Marvin T. Miura  
Office of Environmental Quality Control  
465 South King Street, Room 104  
Honolulu, Hawaii 96813

Dear Dr. Miura:

Subject: Draft Environmental Impact Statement for the Interim Helicopter Facility, Lihue Airport Complex

Thank you for the opportunity to review the Draft EIS. We have no comments to offer at this time.

Sincerely,

*Maurice H. Kaya*  
MAURICE H. KAYA  
Energy Program Administrator

MHK/hk

cc: Dean Makagawa

Mr. Maurice H. Kaya  
Energy Program Administrator  
Department of Business and Economic Development  
Energy Division  
335 Merchant Street, Room 110  
Honolulu, Hawaii 96813

Dear Mr. Kaya:

Subject: Draft Supplemental Environmental Impact Statement  
Interim Helicopter Facility  
Lihue Airport Complex  
Lihue, Kauai, Hawaii

Thank you for reviewing the draft supplementary environmental impact statement for the Interim Helicopter Facility.

Your letter will be made part of the final environmental impact statement.

*Owen Miyamoto*  
Very truly yours,  
Owen Miyamoto  
Airports Administrator



United States Department of the Interior  
**FISH AND WILDLIFE SERVICE**  
 PACIFIC ISLANDS OFFICE  
 P.O. BOX 50167  
 HONOLULU, HAWAII 96850

ES  
 Room 6307  
 NOV 23 1988

Dr. Marvin T. Miura  
 Office of Environmental Quality Control  
 465 South King Street, Room 104  
 Honolulu, Hawaii 96813

Re: Environmental Impact Statement for Interim Helicopter  
 Facility, Lihue Airport Complex, Lihue, Kauai

Dear Dr. Miura:

We have reviewed the subject document and find that it adequately  
 addresses fish and wildlife resources within our jurisdiction.

We appreciate this opportunity to comment.

Sincerely yours,

*William R. Kramer*  
 Ernest Kosaka  
 Field Office Supervisor  
 Environmental Services

cc: Dean Nakagawa, DOT

JOHN W. HARRIS  
 COMMERCIAL



STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 AIRPORTS DIVISION  
 HONOLULU INTERNATIONAL AIRPORT - HONOLULU, HAWAII 96813  
 February 16, 1989

EDWARD HIRATA  
 DIRECTOR

EDWARD HIRATA  
 JOHN A. LUTHE  
 AIRPORTS DIVISION  
 HONOLULU INTERNATIONAL AIRPORT

REPLY SLIP TO  
 AIR-EP  
 89.1282

Mr. Ernest Kosaka  
 Field Office Supervisor, Environmental Services  
 U.S. Department of the Interior  
 Fish and Wildlife Service  
 Pacific Islands Office  
 P.O. Box 50167  
 Honolulu, Hawaii 96850

Dear Mr. Kosaka:

Subject: Draft Supplemental Environmental Impact Statement  
 Interim Helicopter Facility  
 Lihue Airport Complex  
 Lihue, Kauai, Hawaii

Thank you for reviewing the draft supplemental environmental statement  
 for the Interim Helicopter Facility.

Your letter will be made part of the final environmental impact  
 statement.

Very truly yours,  
*Owen Miyamoto*  
 Owen Miyamoto  
 Airports Administrator

EDWARD YAMATA  
DIRECTOR

EDWARD YAMATA  
DIRECTOR

WIRE CENTER  
AIR-EP  
89-1285



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION  
HONOLULU INTERNATIONAL AIRPORT - HAWAII  
February 16, 1989

JOHN WAIKANE  
GOVERNOR

JOSEPH A. CONANT  
EXECUTIVE DIRECTOR

MR. NINT NISHI  
TO



STATE OF HAWAII  
DEPARTMENT OF BUSINESS AND ECONOMIC DEVELOPMENT  
HOUSING FINANCE AND DEVELOPMENT CORPORATION  
P. O. BOX 2000  
HONOLULU, HAWAII 96813

88:PLNG/1747B JT

November 23, 1988

Mr. Joseph K. Conant  
Executive Director  
Housing Finance and Development Corporation  
Department of Business and Economic Development  
State of Hawaii  
P.O. Box 29360  
Honolulu, Hawaii 96820-1760

Dear Mr. Conant:

Subject: Draft Supplemental Environmental Impact Statement  
Interim Helicopter Facility  
Lihue Airport Complex  
Lihue, Kauai, Hawaii

Dr. Marvin T. Miura, Ph.D.  
Office of Environmental Quality Control  
465 South King Street, Room 104  
Honolulu, Hawaii 96813

Dear Dr. Miura:

Re: Draft Supplement Environmental Impact  
Statement for the Interim Helicopter  
Facility Lihue Airport Complex

Thank you for the opportunity to review the subject  
report. We have no comments to offer.

Sincerely,  
  
JOSEPH A. CONANT  
Executive Director

cc: Dean Nakagawa, Dept. of Transportation

Thank you for reviewing the draft supplementary environmental impact  
statement for the Interim Helicopter Facility.

Your letter will be made part of the final environmental impact  
statement.

Very truly yours,  
  
Owen Miyamoto  
Airports Administrator

**DEPARTMENT OF WATER**

COUNTY OF KAUAI  
P. O. BOX 1704  
LIHUE, HAWAII 96766-5706



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION  
HONOLULU INTERNATIONAL AIRPORT - HONOLULU, HAWAII 96819  
February 16, 1989

EDUARDO YAMATA  
DIRECTOR

MANAGEMENT  
AIRPORTS DIVISION  
HONOLULU INTERNATIONAL AIRPORT  
HONOLULU, HAWAII 96819

WALEYRIERTO  
AIR-EP  
89-1287

JOHN WARE  
COMMISSIONER

November 23, 1988

Marvin T. Miura, Ph.D.  
Office of Environmental Quality Control  
465 South King Street, Room 104  
Honolulu, HI 96813

Re: Interim Helicopter Facility, Lihue Airport  
Complex

We reviewed the Draft Supplement Environment Impact  
Statement for Interim Helicopter Facility, Lihue  
Airport Complex and have no comments to offer at  
this time.

Thank you for the opportunity to comment.

Raymond H. Sato  
Manager and Chief Engineer

WH:rm  
cc: Mr. Dean Nakagawa  
Airports Division  
Department of Transportation  
Honolulu International Airport  
Honolulu, HI 96819

Mr. Raymond Sato  
Manager and Chief Engineer  
Department of Water  
County of Kauai  
P.O. Box 1706  
Lihue, Hawaii 96766

Subject: Draft Supplemental Environmental Impact Statement  
Interim Helicopter Facility  
Lihue, Kauai, Hawaii

Dear Mr. Sato:

Thank you for reviewing the draft supplementary environmental impact  
statement for the Interim Helicopter Facility.

Your letter will be made part of the final environmental impact  
statement.

Very truly yours,

  
Owen Miyamoto  
Airports Administrator



JOHN WANG  
DIRECTOR



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
100 PUNAHOU STREET  
HONOLULU HAWAII 96813

EDWARD Y. HIRATA  
DIRECTOR  
DEAN NAKAGAWA  
RONALD N. HIRANO  
DANNY KOON  
JEANNE K. SCHULTZ

MINUTELY REFER TO

November 25, 1988

HAR-EP 2241

001-1  
HPL-1

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
**INTER-OFFICE MEMORANDUM**

**TO:** HAR  
**FROM:** AIR  
**SUBJECT:** Draft Supplemental Environment Impact Statement  
Interim Helicopter Facility  
Lihue Airport Complex

**DATE:** 02-16-89

Thank you for reviewing the subject document from a Harbors  
Operation standpoint.

Your letter will be included in the final environmental impact  
statement.

MEMORANDUM:

**TO:** Dr. Marvin Miura, Director  
Office of Environmental Quality Control

**FROM:** Director of Transportation

**SUBJECT:** DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR INTERIM  
HELICOPTER FACILITY, LIHUE AIRPORT COMPLEX  
LIHUE, KAUAI

We have reviewed the subject document from a Harbors  
Operation standpoint and have no substantive comments to offer.

Thank you for the opportunity to review the document which  
is returned herewith.

*Edward Y. Hirata*

Edward Y. Hirata

Enclosure

cc: Dean Nakagawa, Airports Division

*Owen Miyamoto*  
Owen Miyamoto  
Airports Administrator

UNITED STATES  
DEPARTMENT OF  
AGRICULTURE

SOIL  
CONSERVATION  
SERVICE

P. O. BOX 50004  
HONOLULU, HAWAII  
96850

November 29, 1988

Marvin Miura, Ph.D.  
Office of Environmental Quality Control  
465 S. King Street, Room 104  
Honolulu, HI 96813

Dear Dr. Miura:

Subject: Draft Environmental Impact Statement (DEIS) --  
Interim Helicopter Facility, Lihue Airport Complex,  
Lihue, Hawaii

We have no comments to offer at this time, however, we would appreciate the opportunity to review the final EIS.

Sincerely,

  
RICHARD N. DUNCAN  
State Conservationist

cc: /Denn Nakagawa, Airports Division, Department of Transportation, Honolulu  
International Airport, Honolulu, HI 96819



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION  
HONOLULU INTERNATIONAL AIRPORT - HONOLULU, HAWAII  
February 16, 1989

HONOLULU AIRPORT  
DIRECTOR

OPERATIONAL  
HAWAIIAN AIRLINES  
PASSENGER SERVICE  
UNIT ROOM

WRECKRYER RD  
AIR-EP  
89-1288

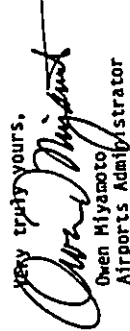
Mr. Richard N. Duncan  
State Conservationist  
U.S. Soil Conservation Service  
P.O. Box 50004  
Honolulu, Hawaii 96850

Dear Mr. Duncan:

Subject: Draft Supplemental Environmental Impact Statement  
Interim Helicopter Facility  
Lihue Airport Complex  
Lihue, Kauai, Hawaii

Thank you for reviewing the draft supplementary environmental impact statement for the Interim Helicopter Facility.

Your letter will be made part of the final environmental impact statement.

Very truly yours,  
  
Owen Miyamoto  
Airports Administrator

JOHN WAMBE  
COMMISSIONER



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION  
HONOLULU INTERNATIONAL AIRPORT - KAHALAUA HWAY  
February 16, 1989

EDWARD YAMATA  
DIRECTOR

DEPUTY DIRECTOR  
JOSEPH M. HAMA  
RONALD HIRAIWA  
DAIJI KOON

MARKY REZETO  
AIR-EP  
89-1286

(P) 2044.8

NOV 29 1988

Dr. Marvin T. Miura  
Director  
Office of Environmental  
Quality Control  
465 South King Street, Room 104  
Honolulu, Hawaii 96813

Dear Dr. Miura:

Subject: Draft Supplemental Environmental  
Impact Statement for Interim Helicopter  
Facility, Lihue Airport Complex

We have reviewed the subject document and have no  
comments to offer.

Very truly yours,

*T. Tomiaga*  
TEUANE TOMINAGA  
State Public Works Engineer

SM:jk  
cc: Mr. Dean Nakagawa

Mr. Teuane Tominaga  
State Public Works Engineer  
Department of Accounting and General Services  
State of Hawaii  
P.O. Box 119  
Honolulu, Hawaii 96810-0119

Dear Mr. Tominaga:

Subject: Draft Supplemental Environmental Impact Statement  
Interim Helicopter Facility  
Lihue Airport Complex  
Lihue, Kauai, Hawaii

Thank you for reviewing the draft supplementary environmental impact  
statement for the Interim Helicopter Facility.

Your letter will be made part of the final environmental impact  
statement.

Very truly yours,  
*Owen Miyamoto*  
Owen Miyamoto  
Airports Administrator

EDWARD Y. HRATA  
DIRECTOR

DEPUTY DIRECTOR  
JOHN K. UCHIDA  
RONALD N. HAKANO  
DAINT KOOP

IN REPLY REFER TO  
AIR-EP  
89-1284



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION  
HONOLULU INTERNATIONAL AIRPORT - HONOLULU, HAWAII 96813  
February 16, 1989

JOHN WAZEE  
COMMISSIONER

JOHN C. LEWIS, M.D.  
DIRECTOR OF HEALTH

IN REPLY, PLEASE REFER TO  
EPHSD



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. BOX 329  
HONOLULU, HAWAII 96801

November 29, 1988

**MEMORANDUM**

To: Dr. Marvin T. Miura, Director  
Office of Environmental Quality Control

From: Deputy Director for Environmental Health

Subject: Draft Supplemental Environmental Impact Statement (dSEIS) for Interim Helicopter Facility, Lihue Airport Complex, Lihue, Kauai, Hawaii

Thank you for allowing us to review and comment on the subject dSEIS. Our environmental health concerns are as follows:

1. Toilet facilities shall be provided for the passengers and workers of the helicopter services as required by Chapter 11, Sanitation, Title 11, Administrative Rules, State of Hawaii, Department of Health. Such toilet facilities for the workers shall be located within 200 feet of all locations at which workers are regularly employed.
2. Potable water from the County of Kauai Department of Water system shall be provided to the toilet facilities.
3. Wastewater generated from this toilet facility shall be disposed into the County of Kauai sewer system.
4. Applicable permits for the proposed fuel facility shall be obtained from the Department of Health prior to construction.
5. Grubbed material shall be taken to a disposal site having a Department of Health Solid Waste Management Permit.

*Bruce S. Anderson*  
BRUCE S. ANDERSON, Ph.D.

cc: DHO, Kauai  
Dean Nakagawa, DOT

Mr. Bruce S. Anderson, Ph. D.  
Deputy Director for Environmental Health  
State of Hawaii  
Department of Health  
P.O. Box 3378  
Honolulu, Hawaii 96801

Dear Mr. Anderson:

Subject: Draft Supplemental Environmental Impact Statement (dSEIS)  
Interim Helicopter Facility  
Lihue Airport Complex  
Lihue, Kauai, Hawaii

Thank you for reviewing the subject dSEIS. Your letter will be included in the final environmental impact statement. The following discussion is provided in response to your comments:

1. Regularly employed workers will not be stationed at the facility. Passengers will be bussed to the facility from Lihue town offices where adequate sanitary facilities are available. We propose to use the new commuter terminal to provide for the needs of the pilots and fuel services operators.
2. Potable water will be provided in vicinity of each passenger loading/unloading pad.
3. Wastewater generated by the commuter terminal sanitation facilities will be disposed into the County of Kauai sewer system.
4. Applicable permits for the fuel facility will be obtained prior to construction of the fuel facility.
5. The Contractor will be required to dispose of grubbed material at a site having a Department of Health Solid Waste Management Permit.

Your interest in this project is appreciated.

Very truly yours,

*Owen Miyamoto*  
Owen Miyamoto  
Airports Administrator



DEPARTMENT OF THE NAVY  
 COMMANDER  
 NAVAL BASE PEARL HARBOR  
 BOX 110  
 PEARL HARBOR, HAWAII 96820

JAMES WARREN  
 COMMANDER



STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 AIRPORTS DIVISION  
 HONOLULU INTERNATIONAL AIRPORT - HONOLULU, HAWAII, 96819  
 February 16, 1989

EDWARD YAMATA  
 DIRECTOR

DEPUTY DIRECTOR  
 JAMES LUTHERA  
 RONALD YAMANO  
 DAN I ADCH

MAIL REFERENCE  
 AIR-EP  
 89-1283

MAIL REFERENCE

5090 (848)  
 Ser 032/3062  
 1 Dec 1988

Marvin T. Miura, Ph.D.  
 Office of Environmental Quality Control  
 465 S. King St., Room 104  
 Honolulu, Hawaii 96813

Dear Dr. Miura:

The Draft Supplemental Environmental Impact Statement for the Interim Helicopter Facility, Lihue Airport Complex, has been reviewed and we have no comments to offer. Since we have no further use for the EIS, it is being returned to your office.

Thank you for the opportunity to review the draft.

Sincerely,

*W.K. Liu*

W.K. Liu  
 Assistant Base Civil Engineer  
 By direction of  
 Site Commander

Encl  
 DEIS Interim Helicopter  
 Facility, Lihue Airport Facility

Copy to: (w/o encl)  
 Dean Makagawa  
 Airports Division  
 Dept of Transportation  
 Honolulu Intl Airport  
 Honolulu, HI 96819

Mr. W. K. Liu  
 Assistant Base Civil Engineer  
 Department of the Navy  
 Naval Base Pearl Harbor  
 Box 110  
 Pearl Harbor, Hawaii 96860-5020

Dear Mr. Liu:

Subject: Draft Supplemental Environmental Impact Statement  
 Interim Helicopter Facility  
 Lihue Airport Complex  
 Lihue, Kauai, Hawaii

Thank you for reviewing the draft supplementary environmental impact statement for the Interim Helicopter Facility.

Your letter will be made part of the final environmental impact statement.

Very truly yours,  
  
 Owen Miyamoto  
 Airports Administrator



**OFFICE OF STATE PLANNING**  
Office of the Governor

STATE CAPITAL, HONOLULU, HAWAII 96825 TELEPHONE: (808) 541-3473

Ref. No. P-8990

December 6, 1988

MEMORANDUM

TO: Dr. Marvin T. Miura, Director  
Office of Environmental Quality Control

SUBJECT: Draft Environmental Impact Statement (DEIS) for Interim Helicopter Facility, Lihue Airport Complex, Lihue, Kauai

We have reviewed the subject document and have the following comments relative to the Hawaii Coastal Zone Management (CZM) Program.

Managing Development

The DEIS states that the interim helicopter facility will be constructed on Lihue Airport property as a relocation for the present helicopter operations area and is an integral item within the Lihue Airport development scheme. It is a CZM policy to effectively utilize and implement existing law to the maximum extent possible in managing present and future coastal zone development. In this regard, Act 397, SLH 1988, requires that the Department of Transportation develop and implement a helicopter master plan for each State-controlled airport. The Act further specifies that "the director shall not make or permit any addition or alteration to any helicopter facilities at any state airport other than those additions or alterations in conformity with the helicopter master plan for that state airport." (Section 261-c).

We understand that a helicopter master plan has not yet been developed for Lihue Airport. If this is the case, the EIS should clarify the apparent discrepancy between the proposed project and Act 397.

Coastal Resources

The DEIS also states that helicopter impacts extend well beyond the air space under jurisdiction of the Lihue Airport control tower. These impacts concern visual and noise intrusions into the Kauai lifestyle. In addition, secondary impacts from helicopter noise may impact endangered bird species in areas far removed from the facility itself. A CZM policy is to preserve valuable coastal ecosystems of biological or economic importance. Relative to

Dr. Marvin T. Miura  
Page 2  
December 6, 1988

this, we support your efforts in formulating a Statewide Helicopter System Plan (SHSP) which will examine the issues of helicopter noise impacts and provide recommendations on policies and regulatory issues. The EIS should address this important matter and also discuss the potential for impacts on the sound environment outside the immediate project area.

Thank you for the opportunity to review and comment on this DEIS. If you have any questions, please feel free to call 548-3961.

*Harold S. Masumoto*  
Harold S. Masumoto  
Director

cc: Mr. Dean Nakagawa,  
Airports Division  
Department of Transportation

APR 1989



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION  
HONOLULU INTERNATIONAL AIRPORT - HONOLULU, HAWAII  
February 16, 1989

EDWARD Y. IRIKATA  
DIRECTOR

SALES/RECEPTION:  
JOSEPH LUCHINA  
RONALD N. HARRIS  
DANI MOORE

PLEASE REFER TO  
AIR-EP  
89-1293

Mr. Harold S. Masumoto, Director  
Office of State Planning  
Office of the Governor  
State Capitol  
Honolulu, Hawaii 96813

Dear Mr. Masumoto:

Subject: Draft Supplementary Environmental Impact Statement  
Interim Helicopter Facility  
Lihue Airport Complex  
Lihue, Kauai, Hawaii  
(Ref. No. P-8990)

Thank you for reviewing the subject document. The following discussion responds to comments within your letter.

1. A helicopter master plan was indeed developed for Lihue Airport within the past year. However, due to objections by the helicopter operators on Kauai as well as the county's previous administration, the helicopter facility was reduced in scope. An interim facility is planned to accommodate existing operators until an inland facility is developed. The State Helicopter System Plan does reflect this interim facility for Lihue Airport.
2. To address the impacts of helicopter operations well outside of the Lihue Airport environs is beyond the purview of the subject DEIS. There is however sufficient disclosure that states that these impacts do occur in areas beyond airspace controlled by the Lihue Airport Tower and that, more appropriately, the State Helicopter System Plan is being developed to address this county and statewide concern.

Your interest in the project is appreciated. The final environmental impact statement will include a copy of your letter.

Very truly yours,  
*Owen Miyamoto*  
Owen Miyamoto  
Airports Administrator



DEPARTMENT OF THE ARMY  
U. S. ARMY ENGINEER DISTRICT, HONOLULU  
BUILDING 230  
FT SHAFTER, HAWAII 96858-5440

REPLY TO  
ATTENTION OF  
Planning Branch

December 8, 1988

Dr. Marvin Miura  
Office of Environmental Quality Control  
465 South King Street, Room 104  
Honolulu, Hawaii 96813

Dear Dr. Miura:

Thank you for the opportunity to review the Draft Supplemental Environmental Impact Statement (DSEIS) for the proposed Interim Helicopter Facility, Lihue Airport Complex, Lihue, Kauai, Hawaii. The following comments are offered:

- a. As noted in our earlier letter (DSEIS, Appendix C), a Department of the Army permit is not required for this project.
- b. According to the Flood Insurance Study for the County of Kauai, the project site is located in Zone D (areas in which flood hazards are undetermined).

Sincerely,

*L. Jay*

Kisuk Cheung  
Chief, Engineering Division

Copy furnished:

Mr. Dean Nakagawa  
Airports Division  
Hawaii State Department of Transportation  
Honolulu International Airport  
Honolulu, Hawaii 96819

JOHN WARRER  
COMMISSIONER



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION  
HONOLULU INTERNATIONAL AIRPORT - TERESAULI, HAWAII 96819  
February 16, 1989

Mr. Kisuk Cheung, Chief  
Engineering Division  
U.S. Army Engineer District  
Department of the Army  
Bldg 230  
Fort Shafter, Hawaii 96858-5440

Attention: Planning Branch

Dear Mr. Cheung:

Subject: Draft Supplemental Environmental Impact Statement  
Interim Helicopter Facility  
Lihue Airport Complex  
Lihue, Kauai, Hawaii

Thank you for reviewing the subject documents. Your comments are appreciated. The final environmental impact statement will include a copy of your letter.

Very truly yours,  
*Owen Miyamoto*  
Owen Miyamoto  
Airports Administrator

EDWARD Y. TAMELA  
DIRECTOR

EDWARD Y. TAMELA  
DIRECTOR

REPORT REFER TO  
AIR-EP  
89-1292



TOM H. SHIGEMOTO  
Planning Director  
ROLAND D. YAGIN, III  
Deputy Planning Director  
Telephone (808)255-3919



COUNTY OF KAUAI  
PLANNING DEPARTMENT  
420 NICE STREET  
LIHUE, KAUAI, HAWAII 96746

JOANN YUKIMURA  
MAYOR

December 9, 1988

Mr. Marvin T. Miura, Ph.D.  
Office of Environmental Quality Control  
465 South King Street, Room 104  
Honolulu, Hawaii 96813

Subject: Draft Supplemental Environmental Impact Statement  
Interim Helicopter Facility, Lihue Airport Complex

The following information and comments are provided in response to the subject matter which has been submitted for our review:

1. As we understand, the development of an interim helicopter facility in lieu of a permanent one as initially proposed hinges on the proposed development of an inland helicopter facility. To date, we have not received any formal inquiries or permit applications for such a facility and its exact location. Section 2.3 of the draft statement states that the "interim facility concept was adopted to allow continuation of the airport development and abandonment after completion of the inland facility." Certain conclusions from this EIS are drawn as follows and we request that they be clarified by the Department of Transportation (DOT), Airports Division and/or the FAA:
  - a. Completion of the inland facility would mandate the relocation of all helicopter operators at Lihue Airport to such a facility.
  - b. DOT, Airports Division, and the person(s) involved in initiating the effort to establish an inland facility has a development schedule proposed to minimize any delays to the Lihue Airport Master Plan.

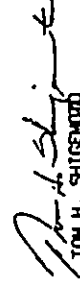
Mr. Marvin T. Miura, Ph.D.  
Page 2  
December 9, 1988

- c. DOT, Airports Division, and/or FAA can prohibit the establishment of new helicopter companies seeking to do business on Kauai irrespective of the available space that would result from the abandoned interim facility.

The aforementioned statement as cited in Section 2.3 of the draft SEIS to the effect that the interim facility will be abandoned is questionable since some of the operators may not wish to relocate to the inland facility. The Lihue Airport therefore may have to continue to accommodate some helicopter operators if such is the case.

2. We find that the interim helicopter facility conforms to the original plan for a permanent facility. This is appropriate to allow the alternative site improvements for a permanent facility in the event that establishment of an inland facility fails. At this time, we have no objections to the establishment of an interim facility since the primary goal is to achieve safer traffic conditions between helicopters and fixed wing aircraft at Lihue Airport.
3. Relative to the inland facility, the Planning Department can support this concept provided we are assured that helicopter operations at Lihue Airport will be discontinued once the inland facility is completed and that measures are instituted to control the number of commercial helicopter companies that can operate on Kauai.

Thank you for the opportunity to comment on this matter.

  
TOM H. SHIGEMOTO  
Planning Director

cc: Dean Nakagawa

JOHN WAIKAI  
DIRECTOR



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION  
HONOLULU INTERNATIONAL AIRPORT - HUKUNUKU MAHALANIUI

February 16, 1989

LEONARDY NGATA  
DIRECTOR

SENIOR DIRECTOR  
AIRPORTS DIVISION  
HAWALEI AIRWAY  
DAVID KOCH

MARKY BERTERO  
AIR-EP  
89-1291

Mr. Tom H. Shigemoto  
February 16, 1989  
Page 2

Thank you for your interest in the project. Your letter will be included in the final environmental impact statement.

Mr. Tom H. Shigemoto, Planning Director  
Planning Department  
County of Kauai  
4280 Rice Street  
Lihue, Kauai, Hawaii 96766

Dear Mr. Shigemoto:

Subject: Draft Supplemental Environmental Impact Statement  
Interim Helicopter Facility  
Lihue Airport Complex  
Lihue, Kauai, Hawaii

Very truly yours,  
  
Owen Miyamoto  
Airports Administrator

Thank you for reviewing the subject document. The following discussion responds to comments within your letter.

1. Our understanding is that if the inland site is developed by the State, then the Airports Division could possibly require all four helicopter operations to be relocated to this site from Lihue Airport. Incidentally, the Airports Division has requested funds in their biennium budget for development of an inland facility in the event that the private sector is unsuccessful in their bid to establish an inland facility themselves.
2. Establishment of an inland site does not have a bearing on the present Lihue Airport Master Plan which includes the interim facility. Relocation of the existing helicopter operations area at Lihue Airport to the interim facility site will enable the Airports Division to continue with the planned development of the airport. The master plan will be updated when the interim facility is abandoned and the site utilized for other airport related activity.
3. If conditions evolve in a manner that allows the abandonment of the interim facility, this area will be developed for other airport related uses thereby precluding its use for helicopter operations.

Honorable Marvin T. Miura

SECRET

- AGRICULTURE
- CONSERVATION
- LAND AND NATURAL RESOURCES
- PLANNING
- RECREATION
- TRANSPORTATION
- WATER AND LAND DEVELOPMENT



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 521  
HONOLULU, HAWAII 96809

DOC. NO.: 4744E  
FILE NO.: 89-265

DEC 13 1988

MEMORANDUM

TO: The Honorable Marvin T. Miura, Director  
Office of Environmental Quality Control

FROM: William W. Patey, Chairperson  
Board of Land and Natural Resources

SUBJECT: Draft Supplemental EIS  
Interim Helicopter Facility  
Lihue Airport Complex

Thank you for giving our Department the opportunity to comment on this matter. We have reviewed the materials you submitted and have the following comments.

Our Department's Historic Sites Section comments that while we agree that the project will have "no effect" on significant historic sites, we recommend some of the wording under the section on "Archaeology" (pp. 4-3 to -4) be revised, in part to accurately meet legal compliance concerns. We recommend the following changes:

- Under 4.8 - Archaeology, p. 4-4, Sentences starting "One archaeological site..." Revise to read "One archaeological site (30-11-100), Minini Heiau) has been identified in the Lihue Airport property. This site, in vicinity of Ninini Point Lighthouse, is a heiau which has been completely destroyed."
- Under 4.8, p. 4-4: Add a new sentence after the above sentence. "There is another heiau in the near vicinity of the Airport: site (30-11-101, Ahuhini Heiau) located near Ahukini Point. This site is also reported as being destroyed."

- Under 4.8, p. 4-4: Delete last sentence on "historical values". Values has no legal meaning; the concern is with historic sites. This last sentence should read, "This project area has not undergone archaeological survey. However, the project area has long been under intensive agricultural cultivation and any historic sites are likely to have been destroyed. Therefore it is highly unlikely that significant historic sites are in the project location."

If there are any questions, call our Historic Sites Section (548-7460). Nancy McMahon is the Staff Archaeologist handling Kauai County.

Our Recreation Section states that there are no existing or proposed state parks in the vicinity of the proposed project, but there is concern about the continued increase in tour helicopter over-flight activities in some of our remote, scenic park areas. It is noted on page 10-1 that the subject project is only intended to replace existing operational space needs for flightseeing tours. However, there already may be more helicopters and/or helicopter flights than desired. A helicopter master plan as requested by the 14th Legislature should therefore develop a carrying capacity for flightseeing tours, and address the need for helicopters before developing new facilities.

Based on the information provided, our Land Management Division has no objections to the interim facility. However, we strongly recommend, lacking any address to the water, that the approach and take off flight patterns to and from the interim facility avoid residential areas as well as concentrations of native bird life.

Please feel free to call me or Roy Schaefer of our Office of Conservation and Environmental Affairs, at 548-7837, if you have any questions.

*William W. Patey*  
WILLIAM W. PATEY

cc: Dean Nakagawa

KOHEA WALKER  
GOVERNOR



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION  
HONOLULU INTERNATIONAL AIRPORT - HONOLULU, HAWAII  
February 16, 1989

ENHANCED DATA  
DATE 11/89

REPLY TO:  
AIR-EP  
AIR-EP  
89-1290

IN REPLY REFER TO  
AIR-EP  
89-1290

Mr. William M. Paty, Chairman  
February 16, 1989  
Page 2

Thank you for your interest in the project. Your letter will be included in the final environmental impact statement.

Mr. William M. Paty, Chairman  
Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii 96809

Dear Mr. Paty:

Subject: Draft Supplemental Impact Statement  
Interim Helicopter Facility  
Lihue Airport Complex  
Lihue, Kauai, Hawaii

Very truly yours,

Owen Miyamoto  
Airports Administrator

Thank you for reviewing the subject document. The following discussion responds to comments within your letter.

1. Wording under the section on "Archaeology" will be revised to conform to your comments.
2. Your concern about increased flight activities in remote, scenic park areas is also of concern to us. However, it cannot be substantiated within the context of the DEIS that there already may be more helicopters and/or more helicopter flights than desired. What the DEIS does is disclose that there are impacts from helicopter operations well beyond the Lihue Airport environs. Accordingly, the Airports Division is currently developing a State Helicopter System Plan to address these and other county and statewide concerns as well as the requirements of Act 397.
3. The Interim Helicopter Facility is strictly a replacement for the existing facilities. It will consolidate the existing dispersed helicopter facilities to a single location thereby removing the mix of helicopters and fixed wing aircraft on the ground. There will be no changes to the current helicopter ingress and egress corridors to Lihue Airport.

One-hundred sixty plus feet from the actual refueling operation to where the passengers are waiting by the gate.

There are several safety factors involved in this choice. Fuel trucks stay stationary and they do not have to be readjusted as would be the case if the facility were to be located across on the eastside. All the helicopter companies that have been using fuel trucks of their own are located on the southside. All those using Hemmeter, and will probably continue doing so, are located on the northside by the two Hemmeter refueling pads that replace the ones now in existence.

This reduces the number of movements to the southside from landing pad to refueling pad, and can be accomplished in the same manner as is being used now (contact tower, move to fueling pad, in this case using the emergency access road, refuel, contact tower, move back). The aircraft involved in this movement are already aware of this maneuver and should put each other at minimum risk, under supervision.

Two fuel pads have been capable of handling these aircraft, and I've noticed the operators have already somewhat adjusted their schedules to compensate for refueling in a non-congested way throughout the day. By locating the fuel pads on the north end, and reducing the number of helicopters required to use them, we have accomplished several important safety features. Aircraft no longer are criss-crossing in an extremely hazardous manner from northeast to southwest, southeast to northwest, east to west, and visa-versa. This also eliminates the extremely hazardous potential of aircraft landing and taking off while other aircraft are hovering in the opposite direction.

A moment should be spent reflecting on the statistics that state 90% of all aircraft accidents or incidents occur in landing, take-off, and hover taxiing. Virtually all intermeshing rotorblade accidents occur in hover-taxiing situations.

I have divided the properties back into leased lots as this is the only practical way to approach the helicopter tour situation. For purposes of liability as you discussed, Owen, at the meeting on Oahu, we are all supposed to carry a minimum of insurance to cover our helicopter, ground taxiing operations, and the safety of our passengers as they embark and debark. In a leased-lot sit-

Will Squyres Helicopter Tours  
P. O. Box 1770  
Lihue, Hawaii 96766  
December 13, 1988

Mr. Henry S. Morita, P.E.  
c/o Akinaka & Associates, Ltd.  
250 North Beretania St., Suite 300  
Honolulu, Hawaii 96817

Owen and Henry,

Here is the revised Interim Facility I said I would send you both. I feel that it complies with the safety and efficiency that the EIS study states are the DOT's goal for the Interim Facility. There are a few changes; not many, but I feel they are all important.

I've gone back to the original parking lot for two reasons. Most operations need more than two stalls. I myself have had three for the past five years. When you get to the higher numbers of movements within a company, six to seven would be a minimum. Reason two: I don't think that the space should be cut down from the original that was allotted to us. I have used all the original space in somewhat the same design as the finished facility but with a lot less expense, and no building erections intended.

As I explained to you over the phone, we are down in the numbers on the facility being used. Since the intent stated by all is not to increase the size of the Interim Facility, I have reduced the new facility by three pads. Yet I feel I have brought utilization to a maximum. There are walkways to each individual pad, and portable toilets are spaced throughout the facility so pilots may find relief during their long day. I have included a waterline that could be three or four inch PVC and still be effective.

I have also included fuel truck access for those of us who have used fuel trucks over the many years. You'll notice that I have doubled the standard of twenty-five feet from a moving object to fifty feet, and allowed

uation as is the case now where my helicopter sits overnight, and is maintained by my maintenance people, washed down and cleaned by my ground crew, the State requires me to carry a minimum of one-million dollars liability. There isn't an insurance company in the world that will insure two helicopters from two different companies on the same piece of land. There must be a differentiation so that we can comply with what the State already requires.

From a practical standpoint, I have located the three companies most likely to use more than their allotted pads next to the transient-use helipads. Try to imagine coming in for a landing and my people are waiting for me on Helipad "3," but one of the operators has decided he will run several helicopters at that same period of time, and the only pad available to me is pad "15." It seems not only impractical, but unsafe (ie. crew rushing people back to van, quickly shuttle them out a one-way road, spin around to the opposite end to match up where the helicopter has finally landed). The slots themselves have been designated according to fuel usage, practicality and proximity to transient-use helipads, and companies utilizing more than one helicopter.

The second line of helipads as was discussed in the original plan are just as wide but ten feet narrower than the loading/unloading pads. All walkways go around these secondary helipads so that loading and unloading/refueling pads can be approached in a safe manner. All "A" pads are for parking, maintenance, or storage. They are not for the loading/unloading of passengers.

I feel that every pad, whether it be a main pad or storage pad with the exception of the transient pads, be assigned by "N" number. If any changes come about, the Tower or Airport Director should be notified.

No parking or waiting should be allowed on the taxi-route, or we'll be right back in the same situation as was created on the existing helicopter facility.

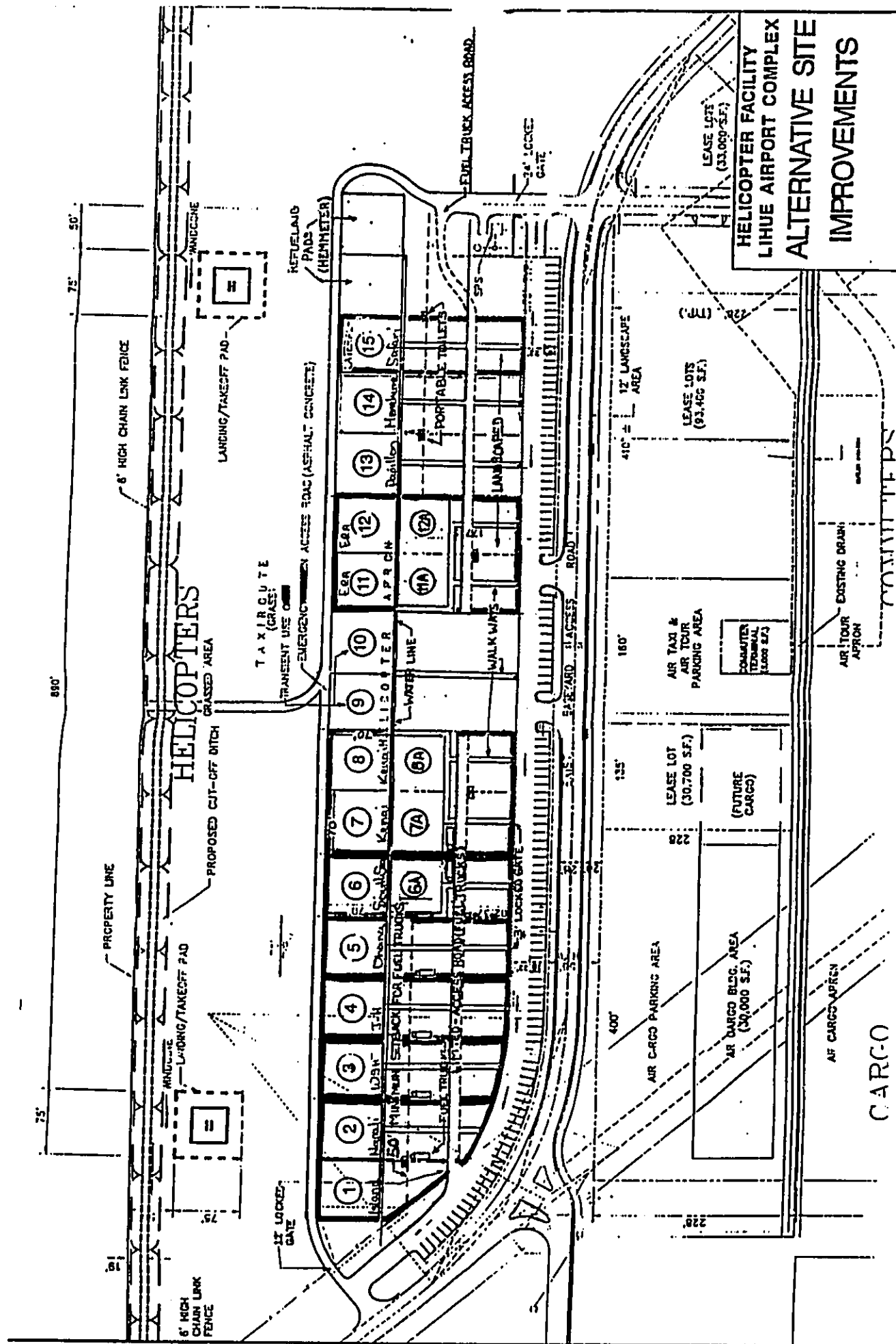
Depending on the needs of the emergency vehicles, access roads or emergency aprons could be grass, asphalt, or concrete.

I feel this is a workable plan. Expense is close to what is being planned, but utilization and safety, much, much improved. Anxious to hear from you both.

Respectfully,

*W. W. Squyars*  
W. W. Squyars, Owner/Pilot

P.S. We didn't know where the main water line was located, so we didn't know how to connect up. Also, Henry, you asked me for copies of the Hawaii statutes that gives the Department of Transportation the power to limit aircraft numbers by type for congestion and safety. You'll find that enclosed and underlined.



JOHN WAIKANE  
GOVERNOR



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION  
KOHOLA INTERNATIONAL AIRPORT - HONOLULU HAWAII  
February 16, 1989

EDWARD J. HARATA  
DIRECTOR

MARK HARRISON  
JOHN K. LUKOMA  
RONALD H. HARRIS  
DAVID MOORE

WIRELY REFER TO  
AIR-EP  
89.1296

Mr. Will Squyres  
February 16, 1989  
Page 2

Mr. Will Squyres  
Owner/Pilot  
Will Squyres Helicopter Tours  
P.O. Box 1770  
Lihue, Hawaii 96766

Subject: Draft Supplemental Environmental Impact Statement (dSEIS)  
Interim Helicopter Facility, Lihue Airport Complex  
Kauai, Hawaii

Dear Mr. Squyres,

Thank you for reviewing the subject dSEIS. The following discussion responds to comments provided by your letter:

1. The number of helicopter parking pads provided in the interim facility is the same as that exists in the present operational area.
2. Gates and walkways are minimized due to security concerns. Additional gates and walkways may be approved on the basis of your operator responsibility.
3. Toilets within the commuter terminal are being considered to service the helicopter facility. Passengers are expected to utilize facilities at the helicopter operator's office in Lihue.
4. Refueling is planned only at the three fueling pads. Refueling by fuel trucks at passenger loading/unloading pads and the indiscriminate storage of the trucks are objectionable.

The layout shown in the dSEIS conforms to "Diagram of Proposed Reconfigured Helicopter Parking Spots" within the Federal Aviation Administration (FAA) Study of Helicopter Operations in the State of Hawaii, May 26, 1986.

5. The document included a statement that the helipads would be assigned preferentially. This statement was based on anticipated federal financial participation and federal regulations prohibit

exclusive assignments. The project will now be entirely State funded and exclusive pad assignments are allowed. Conditions of pad assignment will be determined during the construction period.

6. The second line of helipads in the "original plan" was deleted as the interim facility will provide improvements equal to that in the existing operations area. This second line of helipads should be promoted for the inland facility for parking, maintenance, or storage.
7. Assignment of pad identification numbers will be addressed in the future but prior to leasing.
8. Movements on the taxiway will be under the jurisdiction of the airport tower. Circumstances will dictate usage of the taxiway.
9. The access roads for emergency vehicles will be asphalt concrete. Construction specifications will include compaction requirements such that embankments can support emergency vehicle loads.
10. Your plan appears workable but does not conform to the guidelines established for the interim facility. These guidelines and items within the plan that may be objectionable are:
  - a. Interim facility improvements should equal and not exceed facilities at the present operational area.
  - b. Minimize number of access gates for security reasons.
  - c. Discourage refueling at individual loading/unloading pads by fuel trucks for safety and indiscriminate storage of trucks.

Thank you for your interest in the project. Your letter and plan will be included in the final environmental impact statement.

Very truly yours,  
  
Owen Miyamoto  
Airports Administrator





December 18, 1988

Mr. Henry Morita  
Akinaka & Associates, Ltd.  
259 North Beretania Street, Suite 300  
Honolulu, Oahu, Hawaii 96817-4716

Dear Mr. Morita,

After reviewing my copy of the Draft Supplemental Environmental Impact Statement dated October, 1988, for the Interim Helicopter Facility at the Lihue Airport, I wish to make the following comments.

Based on discussions with State Airports Management, it is my understanding this Interim Facility will be used only on a temporary basis for the EXISTING helicopter operations at Lihue Airport; the pads will be assigned for preferential use; and there will only be twenty of them.

Now all this is confirmed by what is said in your Environmental Impact Statement Study except that your report goes into more detail and it is in this detail that concerns me. I will quote from the report:

Paragraph 2.2 Definition and Regulations  
Page 2-2

"As a public use heliport, it is available for the take off or landing of helicopters without prior authorization being required to use the facility."

This statement contradicts the intent that the State Airports Management has given to the operators for building these pads for the following reasons:

1. Presently we have assigned helipads. These pads are used for refueling, loading, and parking our helicopters. We do not share our assigned pads with any other operator simply because it wouldn't work. These pads are used for overnight parking, maintenance, etc. and therefore, the aircraft may sit on these pads for days. Under the preferential system we would conceivably have to share these pads. How could we do that if our aircraft are using them for parking or maintenance?

December 18, 1988

Mr. Henry Morita  
Akinaka & Associates, Ltd.

Page 2

2. At last count there were at least two dozen (24) helicopters based at Lihue, but in the Interim Plan, twenty helipads will be built. This shouldn't create a big problem as long as we don't add more helicopters because the extra aircraft belong to companies like Kenai Helicopters who can park them at their maintenance hangar.

However, your statement under Paragraph 2.2 and another on Page 6-8 says: "These unused airfield areas show that the capacity for increased helicopter activities already exists." It also says that the State does have the room to park more NEW helicopters at Lihue, and with the preferential system we would have to share our pads. This would only create a worse safety problem than we already have with the existing helipads due to increased congestion. If these pads are assigned under the preferential system, the State will legally have to let in any new helicopter company, or even allow the expansion of existing companies, which will contradict and defeat the perceived intent of this Interim Facility.

Concerning the Facility Design, I believe there are several major flaws in the design.

1. Refueling Pads: At the present heliport there are up to ten assigned refueling/parking pads used by seven different operators and two dedicated refueling pads presently being used by four operators. This totals twelve refueling pads. The new Interim design allows for only three refueling pads. The resulting congestion and time delays waiting to refuel would be a tremendous safety problem and cause financial losses.

At a meeting several months ago with Owen Miyamoto, he showed us this plan. We informed him that this would not work, and that instead the State should change the plan so that refueling could be accomplished at the loading pads. This would greatly reduce the need to move the aircraft to refuel and therefore, reduce congestion; thus, improving safety and increasing efficiency and thereby saving money.

December 18, 1988


Mr. Henry Morita  
Akinaka & Associates, Ltd.

Page 3

2. No where can I find any indication that the State or the Federal Aviation Administration has done any formal testing of the approach route and final approach path into this Interim Facility. I outlined my concerns in a previous letter that did not arrive in time for inclusion in this study, but I believe you will find it in Public Testimony.
3. I also don't see any mention of whether or not water, electricity, or tie-downs will be included in these helipads.
  - A. Water: The water is necessary to wash the aircraft to prevent severe corrosion. The aircraft are washed daily.
  - B. Electricity: Because almost all Daily Inspections of the aircraft are performed on these pads and usually at night, electricity is important.
  - C. Tie-Downs: These obviously are needed in case of high winds or hurricanes.

I sincerely hope that you will take into consideration these observations and suggestions before proceeding with this design. Your attention to this matter and an expedient reply would be greatly appreciated.

Yours truly,



*Paul*  
Paul D. Azmus  
President  
South Sea Helicopters, Inc.

JOHN WALKER  
GOVERNOR



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION  
KONOLUU INTERNATIONAL AIRPORT - HONOLULU HAWAII  
February 16, 1989

EDWARD Y. MIYATA  
DIRECTOR

SAFETY DIVISION  
JAMES W. HARRIS  
RONALD W. BURRICK  
DON T. ECCLE

PLEASE REFER TO  
AIR-EP  
89-1289

Mr. Paul D. Asmus  
February 16, 1989  
Page 2

Mr. Paul D. Asmus, President  
South Sea Helicopters, Inc.  
P. O. Box 1445  
Lihue, Kauai, Hawaii 96766

Dear Mr. Asmus:

Subject: Draft Supplemental Impact Statement  
Interim Helicopter Facility  
Lihue Airport Complex  
Lihue, Kauai, Hawaii

Thank you for reviewing the subject document. The following discussion responds to the comments contained in your letter.

1. The document included a statement that the helipads would be assigned preferentially. This statement was based on anticipated federal financial participation and federal regulations prohibit exclusive assignments. The project will now be entirely State funded and exclusive pad assignments are allowed. Conditions of pad assignment will be determined during the construction period.
2. A waiting list of operators desiring helicopter parking position exists at the Lihue Airport. The State has determined that the existing paved open areas are not conducive for helicopter operations. The State does not wish to create a safety problem due to increased congestion.
3. The desirability of fueling at the loading/unloading pads is recognized. The original plan (pre-inland facility) included underground fuel service to each pad. Present fueling by individual fuel trucks and their indiscriminate storage should not continue considering passenger loading/unloading at the same pad. The format of the fueling operations was developed by a committee of representatives from each major FAA program, the State Department of Transportation and industry. A diagram of the proposal is included in the FAA report "Study of Helicopter Operations in the State of Hawaii" May 29, 1986.

4. The FAA has conducted an airspace analysis under Aeronautical Study No. 88-AMP-1052-NRA. As discussed in the attached FAA letter, their review has determined that the plan is acceptable from an airspace utilization during daylight hours.

5. Potable water will be provided in vicinity of each helipad. Installation of meters and distribution system will be the users responsibility. No electricity will be provided as the present operational area does not include electrical service. Tie downs will be provided at each helipad.

Thank you for your interest in this project. Your letter will be included in the final environmental impact statement.

Very truly yours,  
*Owen Miyamoto*  
Owen Miyamoto  
Airports Administrator

Attachment



## University of Hawaii at Manoa

Environmental Center  
Crewford 317 • 2550 Campus Road  
Honolulu, Hawaii 96822  
Telephone (808) 948-7361

December 19, 1988  
RE:0513

Mr. Dean Nakagawa  
Airports Division  
Department of Transportation  
Honolulu International Airport  
Honolulu, Hawaii 96819

Dear Mr. Nakagawa:

Draft Supplemental Environmental Impact Statement  
Interim Helicopter Facility  
Lihue Airport Complex  
Lihue, Kauai

The Airports Division, State Department of Transportation (DOT), has proposed that an Interim Helicopter Facility be built on Lihue Airport property as a relocation for the present helicopter operations area. The helicopter facility is part of Phase III of the 1975-1995 Lihue Airport Master Plan Report. The facility will provide two landing pads (Final Approach/Takeoff Area) for arrivals and departures. A grass surfaced taxi route will lead to twenty 62.5-foot square asphalt concrete passenger boarding pads.

The Environmental Center has reviewed the above referenced Draft Supplemental Environmental Impact Statement (DSEIS) with the assistance of George Curtis, Hawaii Natural Energy Institute; Jon Matsuoka, Social Work; Yu-Si Fok, Water Resources Research Center; and Randall Rush, Environmental Center.

### General Comments

From the designation of an interim status for this facility and from commentary provided by the DOT at this public hearing, the State apparently supports the concept of an inland helicopter facility. It is not clear from the present document whether such a facility will operate under public or private jurisdiction, but references to offerings of privately-owned land for the facility suggests a private operation. It should be noted that staging commercial helicopter operations from a State facility as proposed in the subject DSEIS provides the opportunity to regulate such operations. As we pointed out in testimony before the Senate Committee on Transportation at a public hearing on February 23, 1988 considering SB 2681,

a Unit of Water Resources Research Center

AN EQUAL OPPORTUNITY EMPLOYER

Mr. Dean Nakagawa

-2-

December 19, 1988

Although the Federal Aviation Agency (FAA) regulates helicopter flight operations, the state has the authority to regulate all ground operations, and by judicious application of this authority, flight operations may be substantially regulated. Such an approach has been effectively implemented in other communities such as Los Angeles, California, where aircraft take-offs and landings are strictly controlled. Airport operators have been held responsible by court decisions in California for nuisances created by aircraft operating from their facilities.

We are confident that due consideration is being given to other states' regulatory strategies for application to the State Helicopter System Plan by the DOT. Regulatory control over operations at private airports may prove more problematic.

### Social Issues

The proposed plan will permit increased numbers of helicopter operations, while promoting safety during take-offs and landings. However, the document does not address results of encouraging increased helicopter use. More frequent tours over wilderness areas have greater impacts on hikers seeking tranquility. More importantly, congestion of airspace in scenic valleys subject to visibility restrictions poses serious safety concerns. These issues need to be further considered in the SEIS.

### Appendix B

Appendix B summarizes the Public Hearing and consists of transcript of the hearing, written testimonies, attendance list, and a listing of responders to the Media Notice Statement. In reference to the Media Notice Statement, we feel there may be confusion among the signers as to whether they were signing in favor of separate facilities, or signing in support of less noise.

We appreciate the opportunity to comment on this Draft Supplemental EIS.

Yours truly,

John T. Harrison  
Environmental Coordinator

cc: OEQC

L. Stephen Lau  
George Curtis  
Jon Matsuoka  
Yu-Si Fok  
Randall Rush

JOHN WILKINS  
GOVERNOR



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION  
HONOLULU INTERNATIONAL AIRPORT - HONOLULU, HAWAII  
February 16, 1989

EDWARD AMATA  
DIRECTOR

LETTERHEAD  
FOR OFFICIAL USE  
ONLY  
DATE: 1/20/89

REFER TO  
AIR-EP  
89-1294

Mr. John T. Harrison  
February 16, 1989  
Page 2

Mr. John T. Harrison  
Environmental Coordinator  
University of Hawaii at Manoa  
Environmental Center  
2550 Campus Road  
Honolulu, Hawaii 96822

Dear Mr. Harrison:

Subject: Draft Supplemental Environmental Impact Statement  
Interim Helicopter Facility  
Lihue Airport Complex, Kauai, Hawaii  
(RE: 0513)

Thank you for reviewing the subject document. The following discussion responds to comments within your letter.

1. Initially, the Airports Division had intended to develop a permanent, new helicopter facility on the premises of Lihue Airport. However, due to strenuous objections from the helicopter operators and the previous Kauai County Administration, the proposed new development was reduced in scope to an interim facility. It is the Airports Division's understanding that the helicopter operators through their newly formed corporation, Lihue Inland Helicopter Ltd., will pursue the development of a private inland facility. At this time, the Airports Division is awaiting action on this matter by the Lihue Inland Helicopter Ltd. organization. Meanwhile the Division has requested funds for the biennium budget for development of an inland facility in the event that the private sector is unable to proceed with their plans.
2. Although the Airports Division has the authority to regulate operations on the ground, any restrictions or inferred control of operations within the airspace is prohibited by the Federal Aviation Administration (FAA). Any and all control of airspace is preempted from the State by the FAA.
3. The interim facility is intended for temporary use only until an inland site is developed. It is simply a replacement of existing facilities to a single consolidated location on the Airport.

4. The concerns on the impact of helicopter operations in the wilderness areas which are well beyond the immediate airport environs, are (more appropriately) being addressed under the State Helicopter System Plan (SHSP).
5. Congestion of airspace and the associated safety concerns are primarily in the purview of the FAA. The Airports Division however, is addressing this matter within the SHSP.
6. The preamble of the Media Noise Statement is based on noise and hazards around the airport with the solution being a separate facility. Since the address of the Media Noise Statement promoters is the same as the organizers of the inland facility, it is apparent that the statement was intended to give support for the separate facility on the basis of reducing noise and hazards around the airport.

Your interest in the project is appreciated. The final environmental impact statement will include a copy of your letter.

Very truly yours,

Owen Miyamoto  
Airport Administrator

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
**MEMORANDUM**

TO: AIR-E  
FROM: HWY-K  
SUBJECT: INTERIM HELICOPTER FACILITY  
LIHUE AIRPORT COMPLEX  
LIHUE, KAUAI, HAWAII  
THK: FOURTH DIVISION 3-5-1: 8, 13

DOT 1.027  
(REV. 11/78)

HWY-KB 4-3875  
DATE Jan. 12, 1989

JOHN WARRER  
COMMISSIONER



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORTS DIVISION  
HONOLULU INTERNATIONAL AIRPORT • HONOLULU, HAWAII  
February 16, 1989

EDWARD J. HARRIS  
DIRECTOR

JOHN P. LEE  
DEPUTY DIRECTOR  
RONALD J. HARRIS  
DART KOCH

WHERE REFER TO  
AIR-EP  
89-1297

Mr. Shigeto Yamaguchi  
Highways District Engineer - Kauai  
Department of Transportation  
State of Hawaii  
3060 Ewa Street  
Lihue, Kauai, Hawaii 96766

Thank you for the opportunity to comment.  
We reviewed the Draft Supplemental Environmental Impact  
Statement for the subject project and have no comments to offer.

*Shigeto Yamaguchi*  
SHIGETO YAMAGUCHI

DN:jf

Subject: Draft Supplemental Environmental Impact Statement  
Interim Helicopter Facility  
Lihue, Kauai, Hawaii

Dear Mr. Yamaguchi:

Thank you for reviewing the draft supplementary environmental impact  
statement for the Interim Helicopter Facility.

Your letter will be made part of the final environmental impact  
statement.

Very truly yours,  
*Owen Miyamoto*  
Owen Miyamoto  
Airports Administrator



JOHN WAIHEE  
GOVERNOR

YUKIO KITAGAWA  
CHAIRPERSON, BOARD OF AGRICULTURE  
SUZANNE D. PETERSON  
DEPUTY TO THE CHAIRPERSON

JOHN WAIHEE  
GOVERNOR

State of Hawaii  
DEPARTMENT OF AGRICULTURE  
1428 So. King Street  
Honolulu, Hawaii 96814-2512  
January 12, 1989

Mailing Address:  
P. O. Box 22159  
Honolulu, Hawaii 96822-0159



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
AIRPORT DIVISION  
HONOLULU INTERNATIONAL AIRPORT - HONOLULU, HAWAII  
February 16, 1989

EDWARD Y. MIYATA  
DIRECTOR

DEPARTMENT OF  
TRANSPORTATION  
AIRPORT DIVISION  
HONOLULU INTERNATIONAL AIRPORT  
89-1295

Dr. Marvin T. Miura, Interim Director  
Office of Environmental Quality Control  
465 South King Street, Room 104  
Honolulu, Hawaii 96813

Dear Dr. Miura:

Subject: Draft Environmental Impact Statement (DEIS)  
Interim Helicopter Facility,  
Lihue Airport Complex  
Project No. AK1046-14  
TMK: 3-5-01: Por. 8, 13  
Lihue, Kauai  
Area: Approx. 13 acres

The Department of Agriculture has reviewed the subject DEIS  
and has no comments to offer.

Thank you for the opportunity to comment.

Sincerely,

*Yukio Kitagawa*

YUKIO KITAGAWA  
Chairperson, Board of Agriculture

cc: Mr. Dean Nakagawa  
State Dept., Airports Div.

Mr. Yukio Kitagawa  
Chairperson, Board of Agriculture  
Department of Agriculture  
State Of Hawaii  
1428 So. King Street  
Honolulu, Hawaii 96714-2512

Subject: Draft Supplemental Environmental Impact Statement  
Interim Helicopter Facility  
Lihue, Kauai, Hawaii

Dear Mr. Kitagawa:

Thank you for reviewing the draft supplementary environmental impact  
statement for the Interim Helicopter Facility.

Your letter will be made part of the final environmental impact  
statement.

Very truly yours,

*Owen Miyamoto*  
Owen Miyamoto  
Airports Administrator

