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Aviation Support Facility Addition/Alteration at
Hilo International Airport

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FINAL

ENVIRONMENTAL ASSESSMENT
OF THE
HAWAII ARMY NATIONAL GUARD
LIMITED ARMY AVIATION SUPPORT
FACILITY (LAASF) ADDITION/ALTERATION,
AT
HILO INTERNATIONAL AIRPORT

PREPARED FOR THE STATE OF HAWAII DEPARTMENT OF DEFENSE, JUNE 1996
BY THE HAWAII ARMY NATIONAL GUARD FACILITIES MANAGEMENT OFFICE

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1. PURPOSE AND NEED FOR THE PROPOSED ACTION

Change in the Force Structure of the National Guard at the federal level has led to changes in the aviation program of the Hawaii Army National Guard (HIARNG).

The proposed action is needed to support the operations, based at the Limited Army Air Support Facility (LAASF) of the recently established Combat Enhanced Capability Aviation Team (CECAT) medical transport. Existing facilities at LAASF are inadequate to support and maintain the UH-60 Blackhawk helicopter unit. Aeromedical support for training at the Pohakuloa Training Area (PTA) on the Big Island, Hawaii Army National Guard (HIARNG) training requirements and other joint-military and multi-national training exercises within the state is to be provided by the CECAT Medical Aviation Detachment (air ambulance).

CECAT provides humanitarian assistance in the event of fires, floods, tropical storms, volcanic eruptions, hurricanes and assists ground medical services on the island of Hawaii under the command of the Governor. This support could be expanded to serve the entire state of Hawaii when required.

Lack of hangar space for Blackhawk helicopters adversely affect maintenance, sustainment and mission readiness. Lack of maintenance shop areas to accommodate new equipment sets, kits and outfits along with special tools and test equipment adversely impacts aircraft sustainment and results in readiness decrement. Lack of storage area for prescribed load list (PLL) and preposition authorized stockage list (ASL) would severely affect operational readiness rates.

Lack of covered ground support equipment maintenance and storage will decrease operational efficiency of the facility. Lack of petroleum, oil and lubricants (packaged and bulk) and hazardous material storage will impact compliance with EPA standards and increase liability to facility and command.

2. DESCRIPTION OF PROPOSED ACTION

The proposed action is to improve the present Limited Army Aviation Support Facility at Hilo. The needed improvements would support the Combat Enhanced Capability Aviation Team (CECAT) Medical Detachment (air ambulance), established as of September 1995. The improvements would provide the CECAT Medical Detachment space for administration, maintenance, training, and storage. The 22,179 square foot complex will serve as an armory and hanger for the UH-60 Blackhawk helicopters with a medical mission. The aviation facility will be a specially designed structure with permanent masonry and steel construction with standing seam roof, concrete floor, masonry partitions, mechanical and electrical equipment. Rigid and flexible pavement, aircraft parking apron, taxiways, access road, controlled waste and flammable storage area, and aircraft wash apron are included in the project. The anticipated start date would be September 1996.

Four (4) helicopters, UH-60A, are assigned to the CECAT unit, as well as 40 personnel, including officers and enlisted persons. The team needs its own team headquarters, flight operations section, maintenance section and air ambulance section. The unit will operate four air ambulances, each configured to carry six litter patients and one ambulatory patient. The four UH-60's will require extensive retrofitting to be able to function as air ambulances providing in-flight care. Retrofitting would change the UH-60A into a UH-60Q with medical lifesaving equipment built in. The air ambulances can also be reconfigured into different combinations to increase the number of litter patients.

Existing facilities at LAASF have been adequate on a temporary basis. Renovation and additions are now needed. Hangar space is needed for working on the UH-60s. An armory and ready room for standby crews will be collocated with the hangar. Ramp modifications will be needed.

The Reconnaissance Air Interdiction Detachment (RAID) is also stationed at LAASF. RAID assists federal, state and county officials by providing airborne reconnaissance and scouting support of drug interdiction, and surveillance during day and night operations in air space statewide.

This project is currently a conceptual plan. To date there are no permits and/or approvals.

3. ALTERNATIVES CONSIDERED

3.1 **ALTERNATIVE NO. 1: NO ACTION.** The no action alternative would impair the operations based at the LAASF. Overcrowding produces inefficiencies which detract from the valuable support to be provided to the State of Hawaii and especially the County of Hawaii in emergencies and during times of disaster. Annual training at Pohakuloa on the island of Hawaii would be impaired. The U.S. Army 68th Medical unit stationed on Oahu provides air ambulance support to the islands of Maui and Hawaii. The Hilo based unit would be in a better position to provide timely evacuation of patients and others in time of need.

The no action alternative would not allow the Hawaii Army National Guard to maintain mission readiness. The no action alternative is not possible in light of Force Structure changes made at the national level.

3.2 **ALTERNATIVE NO. 2: ACTION AT ANOTHER SITE ON THE ISLAND OF HAWAII.** There is no other Army Guard aviation support facility on the island of Hawaii. The proposed action is not of a magnitude to justify land acquisition and site developments elsewhere on the island.

3.3 **ALTERNATIVE NO. 3: ACTION ON ANOTHER ISLAND IN THE STATE.** Oahu is the only other island with an aviation support facility. The Army Aviation Support Facility (AASF #1) on Oahu is on Wheeler Army Air Field. AASF #1 has recently changed its structure to a medium lift company and its fleet to CH-47s and would not be able to accommodate the proposed action.

3.4 **ALTERNATIVE NO. 4: THE PREFERRED ALTERNATIVE.** Implementing this proposal on the island of Hawaii at LAASF at the Hilo International Airport is the proposal considered in this document. The LAASF possesses a location which would be able to serve the adjacent Keaukaha Military Reservation (KMR), the largest HIARNG unit on the island, as well as the HIARNG annual field training exercises held most summers at Pohakuloa Training Area and adjoining upland property. Hilo is the largest population center on the island. The proposed action would also serve training on Maui. LAASF now has an operating helicopter unit, necessary infrastructure and supporting services. What follows is a discussion of the affected environmental impacts, and mitigative measures.

4. AFFECTED ENVIRONMENT

This discussion of the affected environment is taken verbatim from the Environmental Assessment of the Activation of an Air Ambulance dated 1994 for the same site. The location of proposed action is the same in both cases. The sources for the information provided in this section came from reports listed under Section 9, Sources, of this environmental assessment. The source for a specific subsection is indicated by initials, for example BC indicates the Hilo International Airport Master Plan prepared by Belt Collins and

Associates, et al., and DG indicates the Atlas of Hawaii prepared by the Department of Geography, University of Hawaii.

4.1 LOCATION. The project site is the HIARNG Limited Army Aviation Support Facility (LAASF) located on the Hilo International Airport (HIA). The HIA is identified by Tax Map Key (TMK) 3-2-1:12. It is further identified by the intersection of north latitude 19 degrees 42 minutes and west longitude 155 degrees and four minutes. See location map, Exhibit 1. The low latitude indicates that the island of Hawaii is well within the tropics.

4.2 CLIMATE. According to Saul Price, regional climatologist, of the National Weather Service, "The climate of the island of Hawaii is unusually pleasant for the tropics. Its outstanding features are the remarkable difference in rainfall over short distances, the mild temperatures, the persistence of the northeasterly trade winds, and the development of distinct climatic regimes in localities sheltered from the prevailing wind."

"The major climatic controls in this region are exercised (1) by latitude; (2) by the surrounding ocean with its moderating influence on temperature; and (3) by the Pacific anticyclone from which the trade winds flow. Between October and April, storms moving eastward occasionally bring in spells of bad weather and widespread heavy rain." Price reports that over the open sea around the Hawaiian islands the rainfall averages 25-30 inches a year. Yet Hilo receives about 140 inches annually. The trade winds blow with a frequency of about 70 percent. Hurricanes are relatively infrequent in Hawaii according to Price. (USDA)

4.2.1 Hilo International Airport Master Plan (HIAMP). HIAMP states that data collected between October 1949 and July 1967 indicate that ceilings below 1,000 feet and/or visibility of less than 3 miles occurs less than 2 percent of the time. The same data indicate that runways 8-26 and 3-21 provide cross wind coverage (for winds of 15 miles per hour or less) of 96.9 percent and 96.5 percent, respectively. Together the two runways provide a total of 98.6 percent wind coverage for cross winds of 15 miles per hour or less.

4.2.2 Air Quality. "The air quality in the Hilo area can be termed good. Records of the State of Hawaii Department of Health, Pollution Investigation and Enforcement Branch, indicate that particulate matter concentrations in the air average 34 micrograms per cubic meter (ug/m3). This is well below the state requirement of less than 55 ug/m3." The quality of air in Hilo can be attributed to the prevailing trade winds and the lack of heavy industry in the area. (M&E Pac)

4.3 PHYSICAL SETTING. Hilo lies south of Hilo Bay on the southeast flank of Mauna Loa. Mauna Loa is probably the largest volcanic mountain in the world. The elevation at the LAASF is 37 feet above sea level.

4.3.1 The island of Hawaii is the youngest (geologically speaking) and the largest of the Hawaiian island chain. The Big Island comprises about 4,028 square miles or two thirds of the land area of the state. All the Hawaiian islands are the summits of great submerged volcanic mountains. The islands were each formed at a "hot spot" below the ocean floor. The ocean floor moved across the "hot spot" in a northwesterly direction.

Five volcanoes formed the Big Island. The present altitudes of their summits follow:

Mauna Kea	4,205	meters	above	sea	level
Mauna Loa	4,169	"	"	"	"
Hualalai	2,521	"	"	"	"
Kohala Mountain	1,670	"	"	"	"
Kilauea	1,248	"	"	"	"

Kohala Mountain in the north appears to be the oldest. Mauna Kea the highest of the mountains had probably reached its present size 9,100 years ago or more. Hualalei in the west is a dormant volcano which last erupted in 1800-1801. Mauna Loa probably nearly its present size by the end of the ice age continued to erupt during the last century and the first half of this century. Kilauea is still active. It protrudes from the southeast flank of Mauna Loa but appears to be an independent volcano. A sixth volcano (called Loihi Seamount) is growing on the floor of the ocean and may emerge as an island off the southeast coast of Hawaii within the next several thousands of years. (GAM)

The island of Hawaii is now about 150 kilometers in length and 122 kilometers in width. It has a land area of about 4,028 square miles. The Hilo area was built by lava flows from Mauna Loa. The Hilo International Airport (HIA) is located on the coastal lava plain at the foot of the southeastern flank of Mauna Loa on Hilo Bay.

4.3.2 Soils. The soil at the project site is called Keaukaha extremely rocky muck. Pahoehoe lava (bedrock) is found at a depth of less than 10 inches. The soil above the lava is rapidly permeable. The pahoehoe lava is very slowly permeable, but water moves rapidly through the cracks. Runoff is medium and erosion hazard is slight. (USDA)

4.3.3 Natural Hazards

4.3.3.1 Flooding. The project site on the HIA is outside the 500 year flood plain represented as Zone X on the Flood Insurance Rate Map for Hawaii County issued by the Federal Emergency Management Agency (based on consultation with staff of the planning division of the U.S. Army Engineer Division, Pacific Ocean).

The potential for flood damage has been considered in the developmental plans for the Hilo area and has limited the extent of urban development in flood prone areas. To mitigate the potential for flooding in certain areas, damage improvement programs have been initiated by the county. (M&E Pac)

4.3.3.2 Tsunamis. "Forty-three destructive tsunamis have reached Hilo since 1819, seven of which inflicted much loss of life and property damage. The tsunamis of April 1946 and May 1960 are well documented regarding inundation and severity of damage." (M&E Pac) The HIA lies outside the tsunami evacuation zone delineated by the Civil Defense. See Exhibit 6.

4.3.3.3 Volcanic Activity. "Lava flows are a common volcanic hazard in Hawaii. The greatest danger from volcanic activity in the Hilo area is from the northeast rift zone of Mauna Loa. Since 1880 most lava flows from Mauna Loa have stopped prior to reaching the urban areas of Hilo." (M&E Pac)

4.3.3.4 Earthquakes. According to reports by the U.S. Geological Survey, earthquakes in the Hilo area can be expected in the future. Since the risk of major damage from earthquakes is considerable for all areas of the island, stringent earthquake resistant designs of structures have been implemented. (M&E Pac)

4.3.3.5 Hurricanes. Hurricanes come to the state through several routes. Of a list of the twenty critical hurricanes in the central Pacific compiled by Paul Haraguchi for the years 1950-1983, five reached the Big Island: Dot, 1959; Celeste, 1972; Kate, 1976; Fico, 1978, and Susan, 1978. The only one of historical record to inflict major damage on the big island was the Kohala Cyclone. Hurricane Iniki which recently (1993) damaged Kauai so severely, caused surf damage to the island of Hawaii. (PH)

4.4 NATURAL RESOURCES. Conservation of natural resources, was set forth as a policy of the State of Hawaii in H.R.S. 344-3. Conservation District lands are described in H.R.S. 205-2. Such lands are mostly publicly owned lands (i.e., forest and water reserves), but can be privately owned. The intent of the regulations governing the use of Conservation District lands is to conserve natural resources on those lands.

The Conservation District land nearest to HIA surrounds Kionakapahu and Loloaka Ponds about a mile from the LAASF, near the coast, to the northeast.

4.4.1 Flora. "Because of the initial site grading for the airport and ongoing vegetation control measures designed to prevent encroachment of surrounding vegetation, the land within the airport boundary consists almost entirely of introduced species. For the most part these are grasses." The predominant plant species present in the Keaukaha area are listed in Exhibit 8. Flora existing in the general site area include Banyan (*Ficus sp.*), Guava (*Psidium*), Lilikoi (*Passiflora sp.*), Morning Glory (*Ipomea sp.*), and Hilo Grass (*Paspalum conjugatum*), according to the 1973 Final Environmental Impact Statement (EIS) for construction of a passenger terminal at the General Lyman Field (FAA, 1973). Additional species identified by field team members (M&E, 1991) include Ohia Lehua (*Metrosideros collina*), Koa Haole (*Leucaena leucocephala*), Screwpine (*Pandanus odoratissimus*), Coconut Palm (*Cocos nucifera*), and numerous ferns and grasses. Small stands of trees and scrub vegetation are also present. (BC), (M&E, 1991)

4.4.2 Fauna. Faunal elements reported in the site area include Feral Pig (*Sus scrofa*), Small Indian Mongoose (*Herpestes auropunctata*) field rats and mice, and numerous birds, according to the FAA, (1973). Birds include the House Sparrow (*Passer domesticus*), Zebra Dove (*Geopelia striata*), Pacific Golden Plover (*Pluvialis fulva*), and Common Mynah (*Acridotheres tristis*). No known rare or endangered species inhabit the area, according to the EIS (FAA, 1973). (M&E)

The HIA Master Plan, 1991, states that "a reconnaissance survey of the area indicates that no unique, rare, or endangered species are present." The Master Plan lists flora and fauna known to either inhabit or frequent the naturally vegetated lands adjacent to the airport in 1987. The only rare or endangered fauna species listed on the adjacent lands in 1987 was the Hawaiian Hawk. Birds seen at the airport during the Corps of Engineers 1990 site visit included the Cattle Egret (*Bulbulcus ibis*), as well as the Zebra Dove, the Plover, and the Mynah. Hawaii's only land based endangered mammal is the Hawaiian Hoary Bat. The HIA does not provide the type of habitat required by Hawaii's rare and endangered birds. Consultation with the Hilo DLNR Wildlife Management Office however indicates that the Hawaiian Hawk, the Hawaiian Owl, and the Hawaiian Bat may frequent the HIA area.

The Hawaiian Hawk (*Buteo solitarius*), is widespread on the island of Hawaii, usually below 8,500 feet and is seen on a regular basis in Hawaii Volcanoes National Park near Hilo and in valleys along the Hamakua Coast. They are often seen soaring over forests, grasslands, and cane fields. Their major food sources are rodents, insects, and small birds, including young game birds.

4.5 LAND USE. State land use controls classify land as being in one of four districts: conservation, agriculture, rural, and urban. Hilo, including the HIA lies within the urban district. County land use control classifies the Airport as limited industrial, which includes airports and heliports. Neighboring land uses include the Keaukaha Military Reservation to the south, Hawaiian Homelands (zoned for 10,000 square feet residential lots), and Agriculture Land Use District to the south and east. The County zoned the land to the west as Commercial. The candidate site has been used as an airport since well before World War II. The old Hilo Airport was acquired by

the U.S. Army and Navy during World War II and transferred to the Territory of Hawaii in 1952. (M&E) It was called General Lyman Field until officially changed by the Legislature in 1989. Total aircraft operations at HIA (i.e., inter-island and overseas combined and including Air Carrier, Commuter/Air Taxi, General Aviation, and Military) rose from 52,000 in 1970 to 91,000 in 1992.

4.6 NOISE. The HIA Master Plan reports the following:

Existing background ambient noise levels (exclusive of aircraft noise) in the areas surrounding Hilo International Airport are estimated to range from 40 to 65 Ldn*. Noise measurements taken by Y. Ebisu & Associates as part of this study at ten monitoring stations within Hilo showed the following pattern:

- Noise levels higher than 65 Ldn* along the shoreline north of the Airport from Hilo Bay to Lelewi Point.
- Breaking waves produce noise levels from 60 to 65 Ldn* along the shoreline north of the Airport from Hilo Bay to Lelewi Point.
- The Hawaiian Home Lands Keaukaha residential area north of the Airport has extremely low background ambient noise levels (40-45 Ldn*, with minimum instantaneous noise levels of 30 dBA) due to its distance from the surf and major roadways.
- Locations along Banyan Drive and in downtown Hilo which are affected by traffic noise have background ambient noise levels ranging from 55 to 65 Ldn*.
- Hilo's background ambient noise levels are not enough to provide significant masking of aircraft noise.

*Ldn is FAA's standard metric for determining the cumulative exposure of individuals to noise. Ldn is defined as "the 24 hour average sound level, in decibels, for the period from midnight to midnight obtained after the addition of 10 decibels to sound levels for the periods between midnight and 7:00 a.m. and, between 10:00 p.m. and midnight, local time, as averaged over a span of one year."

4.7 WATER RESOURCES. The nearest surface fresh water bodies include Waiakea Stream about one mile west of the site and several unnamed intermittent streams located near the southwest border of the site. Groundwater underlying the project site and the entire South Hilo area occurs as basal water in the highly permeable Ka'u volcanic series lavas (Stearns and Macdonald, 1986). The direction of the groundwater flow is to the north.

Storm Drainage. As reported in the Master Plan the HIA and LAASF are "located on relatively permeable lava. Consequently despite the relatively large amount of rain that falls on the Airport, there are no major drainage problems. Storm run-off flows into the grassed areas on the side and percolates into the ground."

Wastewater at the LAASF drains into a cesspool. Individual cesspools handle wastewater from HIA facilities except for the passenger terminal that uses a self-contained wastewater treatment plant. The HIA Master Plan states no problems have been reported with the use of the cesspools.

4.8 WASTE DISPOSAL. Contract waste managers collect solid waste from the LAASF. Waste disposal is in compliance with Department of Health and Environmental Protection Agency regulations.

The LAASF is a conditionally exempt small quantity generator. Any hazardous waste generated by the LAASF is disposed of in accordance with the HIARNG Hazardous Waste Management Plan, the Resource Conservation and Recovery Act (RCRA), and the Code of Federal Regulations (40 CFR Parts 260-264).

4.9 CULTURAL RESOURCES. Archaeological sites are in lava tube caves at the northeast section of the airport according to a representative of Hawaiian Home Lands. No studies documenting the type and extent of archaeological remains were identified during a review of reports at the Department of Land and Natural Resources, Historic Preservation Division. Since developed areas of the site have been modified over the years, it is unlikely that prehistoric or historic sites remain on or near the surface at the project site. (M&E)

An ancient Hawaiian site known as Mokuola and used as a puuhonua or place of refuge is located near the airport but there are no known cultural or historic sites within the HIA.

4.10 SOCIOECONOMIC CHARACTERISTICS. Hilo is the county seat and largest town on the island of Hawaii (popularly called "the Big Island"). Hilo's 1990 population was 37,808. The 1992 resident population of the Big Island was 130,500. Population forecasts suggest that the bulk of the increase in population over the next few years will be in west Hawaii rather than in the Hilo side. Ethnicity is greatly varied. There is no major group. All are minorities. For 1989 the percentages were: Hawaiian and part Hawaiian, 30.1; Caucasian, 21.3; Japanese 19.3; mixed non-Hawaiian, 17.8; Filipino, 8.0; and other, 11.5. (DBEDT)

Residents of Hawaii (the state) are in general characterized by relatively high educational attainment, by high rates of participation in the labor force, by concentration in government and service employment, and by high family incomes. (DBEDT)

Principal industries in the county are: tourism, ranching, sugar, astronomy and diversified agriculture. Diversified agriculture includes: the largest macadamia nut industry in the world, the largest orchid growing industry in the world, the only major coffee industry in the United States, the major ginger producer in the U.S., and expanding export industries in papayas, tropical flowers, foliage, and dry land taro. (DBEDT)

Hilo not only serves as the center of government on the Big Island, it is also a transportation (air and shipping) center, the major trade center, the home of the University of Hawaii Hilo, and a tourist center.

Its deepwater port receives nearly all of the island's incoming cargo and is the main port for shipment of Hawaii's sugar crop to California for refining.

Agriculture is the major source of employment in the adjoining districts (Puna, North Hilo, Hamakua and Ka'u). Sugar, until recently the most important crop on the Big Island, is still produced in North Hilo and Ka'u, while Puna and Hamakua have a more diversified agriculture, growing papaya, macadamia nuts, and flowers.

4.11 ENERGY. The state of Hawaii "depends on imported petroleum for more than 90 percent of its energy needs. No other state is so dependent upon a single energy source for its residential and commercial electricity, industrial power, and transportation fuels." (DBEDT)

"Although Hawaii has no fossil fuels of its own - no oil, coal, or natural gas - it does have a wealth of renewable energy resources. These renewable energy resources include solar and wind energy, biomass, small-scale

hydroelectricity, geothermal heat, and ocean thermal energy conversion. To reduce Hawaii's oil dependence, the state is actively supporting development of a mix of these energy resources..." (DBEDT)

Alternative energy activities on the island of Hawaii include: eight hydropower plants, a solar-powered water desalination project, wind turbines for electrical generation. Biomass from sugar cane, macadamia nut shells and husks, and eucalyptus and kiawe trees are used as biomass energy sources. Farm vehicles operating on solar panel generated electricity, ocean thermal energy conversion, and geothermal energy used for electrical generation are other projects. (DBEDT)

A recently completed renewable energy assessment for DBEDT found that in general wind, hydroelectric, and biomass (particularly organic waste) projects are most cost effective today.

5. ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION

5.1 CLIMATE. Neither the proposed action nor any alternative proposals would have a significant impact on the climate of the Hilo International Airport or the surrounding area. During adverse weather conditions such as heavy rain producing flooding, tropical storms and hurricanes, the air ambulance team to be supported by the proposed action would benefit the community.

5.2 PHYSICAL SETTING. The LAASF is a small military facility on an international airport situated in the Urban Land Use District of Hilo. The natural environment of this part of the Hilo lava plain has been thoroughly disturbed by agricultural, military, and urban uses. This proposed project is not expected to produce any significant impact on the physical setting.

5.3 NATURAL RESOURCES. Vegetation. The vegetation at LAASF is limited. Most of the rest of the area is covered with impervious surfaces, asphalt, concrete, or roofing. The proposed addition of hanger space and the other alterations to the present armory are not expected to have any effect on area vegetation. There would be no impact on threatened or endangered species of vegetation.

Wildlife. Hawaii's only land based endangered mammal is the Hawaiian Hoary Bat. The HIA does not provide the type of habitat required by Hawaii's rare and endangered birds. The Hawaiian Hawk, the Hawaiian Bat, and the Hawaiian Owl may frequent the HIA, but none have been sighted at the LAASF by HIARNG personnel. The proposed change in aircraft and personnel is not expected to have any effect on area wildlife. There should be no impact on threatened and endangered species of wildlife.

5.4 LAND USE. There will be no change in land use on the subject land parcel. Neither will land ownership be changed. The proposed fielding of the Blackhawks is not expected to influence traffic patterns at the HIA. Neighboring land use is not expected to be affected by the proposed action, either.

5.5 NOISE. Current noise sources at the Hilo International include vehicular traffic and a variety of aircraft. Therefore, to evaluate the predicted noise impact of fielding helicopters, the HIARNG contracted for a noise study. The study was undertaken by the United States Army Environmental Hygiene Agency. Noise measurements were taken at the HIA in February 1993. The results have been published in USAEHA Environmental 52-34-QR40-93, Requirements for Installation Compatible Use Zone Studies at Four Facilities of the Hawaii Army National Guard: AASF #1, Wheeler Army Airfield, Oahu, Hawaii; AASF #2, LAASF Hilo International Airport, Hawaii; Ukumehame and Pimoe Firing Ranges, Maui, Hawaii, 7-14 January 1993.

The study concludes that "the noise of helicopter operations is overshadowed by the noise of the commercial jets." "There would not be a significant reduction in noise level around the HIA if Army National Guard helicopter operations were eliminated."

During the period of construction the noise level may be higher than normal but this higher level is not expected to affect other users of HIA or activities at KMR, or other surrounding users.

5.6 WATER RESOURCES. Implementing the preferred alternative would not have an impact on water resources. The proposal calls for a new wash rack but the fleet was reduced from six helicopters to four.

5.7 WASTE DISPOSAL. Waste disposal practices are not expected to change significantly. There might be occasional medical wastes after the MEDEVAC unit is in full operation. All medical wastes would be disposed of following regulations and established protocols for the disposal of such wastes. There is expected to be no significant impact on the environment including infrastructure.

5.8 CULTURAL RESOURCES. Archeological and historical. There would be no significant impact on archeological resources. There are no known archeological resources on site and the proposed action does not call for any excavation of the soil. None of the buildings involved are considered historical.

5.9 SOCIOECONOMIC CHARACTERISTICS. Socioeconomic characteristics of the Hilo area would not be significantly affected by the proposed changes at LAASF. The total cost of the proposed project is expected to be about six million dollars. How much money will go where cannot be determined with certitude, at this point in time. It is expected that any economic impact would be beneficial.

5.10 ENERGY. Electrical energy consumption is not expected to increase appreciably.

6. MITIGATIVE MEASURES

6.1 NOISE. Helicopters produce noise (unwanted sound). The sound produced by the HIARNG helicopters is more of an occasional nuisance than a danger to the residents of the area surrounding HIA. Measures undertaken to help alleviate disturbing sounds include those listed below. These measures were published in the Environmental Assessment for the Activation of an Air Ambulance Section, Medical Aviation Detachment, CECAT. The proposed action is for construction and not for any change in the air frame; however, State regulation calls for an environmental assessment as a helicopter facility is involved. The measures for mitigating unwanted helicopter sounds are repeated here for public information.

6.1.1 Crew Training. The Army "Fly Neighborly" Program will be incorporated into crew training and mission briefings. The Fly Neighborly Guide, published by the Helicopter Association International in February 1992 outlines the steps below as effective means of noise abatement.

* Control movement should be gradual and smooth.

* Noise exposure is:

- lower on the left side than on the right side of the helicopter;
- lower to the sides of the flight path than directly underneath; and,
- lower upwind than downwind of the helicopter.

- * Plan takeoff path away from noise sensitive areas.
- * Climb to cruise altitude at best rate of climb airspeed.
- * When crossing noise sensitive areas, limit airspeeds to 151 knots or Velocity not to exceed (Vne), whichever is less.
- * Use 100 RPM in level flight.
- * Plan routes to keep noise sensitive areas on the left side of the helicopter.
- * Near noise sensitive areas use 85 knots as the minimum airspeed and 1,000 FPM as the minimum rate of descent.
- * Plan the approach and landing to keep noise sensitive areas forward and to the left of the helicopter.
- * Avoid descending directly over the noise sensitive areas.

6.1.2 Use of Established Flight Corridors. Existing corridors in and out of Hilo LAASF will be used. Corridor and reporting procedures are contained in the HIA Standard Operating Procedures and will be adhered to.

6.1.3 Multiple Takeoffs. Closed traffic patterns at Hilo LAASF that require multiple takeoffs and landings within the airport boundaries will be in accordance with the HIA standard operating procedures.

6.1.4 Minimum Altitude. Require all aircraft on takeoff to climb to a minimum altitude of 1,500 feet above ground level and maintain at or above 2,000 feet for as long as the mission requirements allow.

6.1.5 Abatement Procedures. Designate noise sensitive areas and "NO FLY" areas on flight planning maps as an aid in preventing incursion into these areas. Briefing officers will incorporate noise abatement procedures and noise sensitive areas into the written air crew briefings.

6.1.6 Noise Complaints. Noise complaints are received through the Noise Hotline, Department of Defense. In Honolulu, contact the Public Affairs Office at 737-8839; in Hilo, contact the Limited Army Aviation Support Facility at 935-6900. The noise complaints received will be documented and investigated to preclude recurring noise problems. Any noise complaints received while the subject aircraft is still airborne would require Flight Operations to order the departure of the aircraft from the affected area.

6.1.7 Protective Devices. Air crews and support personnel will use protective devices to prevent injurious noise. All passengers will be provided with adequate hearing protection prior to takeoff.

6.1.8 Scheduling. Flights will be scheduled, in so far as possible, to avoid those hours when residents expect quiet, except when military operations are required. Unnecessary flights will not be permitted.

7. AGENCIES AND PERSONS CONSULTED

State of Hawaii, Department of Defense. COL Clarence M. Agena, COL Melvin M. Ida, COL Dennis Kamimura, COL George F. Sheridan, Jr, LTC Victor Chun, LTC Theodore Daligdig, LTC Gary Hara, LTC John K. Hao, LTC Emerick Y. Kaneshi, LTC Orlan L. Peterson, LTC Richard Young, MAJ C. Joseph

Gunderson, MAJ Ron Swafford, MAJ Melvin Tamaye, MAJ Michael L. Tarpley, CPT Thomas Madeira, 1LT Charles Anthony, Mr. Louis N.H. Miranda, Jr.

State Civil Defense Division. Mr. Melvin T. Nishihara.

State of Hawaii, Department of Land and Natural Resources, Division of Forests and Wildlife. Mr. Ronald Bachman.

State Historical Preservation Division staff.

State of Hawaii, Department of Transportation, Airports Division. Ms. Lynette Kawaoka.

U.S. Army Engineer Division, Pacific Ocean Planning Division. Mr. Steven Yamamoto.

U.S. Fish and Wildlife Service, Mr. Brooks Harper.

8. CONCLUSION

The proposed action would result in the most effective method for achieving compliance with the existing training and mission requirements of the Hawaii Army National Guard. The proposed action is not likely to involve any of the following:

- destruction of any natural or cultural resource;
- curtailment of the range of beneficial uses of the environment;
- conflict with the State's long-term goals or guidelines as expressed in Chapter 344, Hawaii Revised Statutes;
- substantial effects on public health;
- substantial secondary effects, such as population changes or infrastructure demands;
- substantial degradation of environmental quality;
- cumulatively a considerable effect on the environment, or to involve a commitment to a larger action;
- substantial effects on a rare, threatened, or endangered species, or its habit; and,
- significant effects on the air or water quality or ambient noise levels.

Should cumulative impacts over time appear to be affecting the human environment, additional mitigation measures will be implemented as appropriate.

Based on the above discussion, and taking into account the suggested mitigation measures, implementation of this project does not appear to be a major action significantly affecting the quality of the natural or human environment. There are no indications that implementation of the proposed action will violate Federal, State or County environmental laws or regulations. Therefore, an Environmental Impact Statement (EIS) will not be prepared. A Negative Declaration is anticipated. It will be published in the Bulletin of the Office of Environmental Quality Control.

9. SOURCES

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- Luz, George A., U.S. Army Environmental Hygiene Agency. Environmental Noise Study No. 52-34-OR40-93, Requirements for Installation Compatible Use Zone Studies at Four Facilities of the Hawaii Army National Guard. Aberdeen Proving Ground, Maryland, 1993.
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- McDonald, G.A. et al. Volcanoes in the Sea, The Geology of Hawaii, Second Edition. U.H. Press. Honolulu, 1983.
- Morrow, James W. et al. Characterization of Volcanic Aerosol in Two Populated Areas on the Island of Hawaii. Air and Waste Management Association. Vancouver, 1991.
- Rezachek, David. Some Renewables Cheaper than Conventional Power, in Transitions, #49. August, 1995.
- Sohmer, S.H. and R. Gustafson. Plants and Flowers of Hawaii. U.H. Press. Honolulu, 1987.
- State of Hawaii DBEDT. County of Hawaii 94 Facts and Figures. (brochure)
- U.S. Department of Agriculture, Soil Conservation Service. Soil Survey of the Island of Hawaii, State of Hawaii. August, 1972.
- University of Hawaii, Department of Geography. Atlas of Hawaii. U.H. Press. Honolulu, 1983.

10. EXHIBITS

1. Location Map
2. Hilo International Airport Existing Facilities
- 2A. Conceptual Site Plan AASF #2

- 2B. Conceptual Floor Plan AASF #2
3. Noise Sensitive Land Uses
4. Approach and Departure
5. Noise Exposure Map, 1986
6. Civil Defense Tsunami Evacuation Map 2, Hilo (part 2)
7. Vegetation Zones
8. Existing Flora and Fauna on Naturally Vegetated Lands Adjacent to Hilo International Airport

11. COMMENTS AND RESPONSES

1. County of Hawaii, Planning Office
2. State of Hawaii, Department of Hawaiian Home Lands
3. State of Hawaii, Department of Land and Natural Resources, Division of Forestry and Wildlife
4. State of Hawaii, Department of Land and Natural Resources, Historic Preservation Division
5. State of Hawaii, Office of Environmental Quality Control
6. State of Hawaii, Office of Hawaiian Affairs
7. U.S. Fish and Wildlife Service

EXHIBITS

Table 2-17
Existing Flora and Fauna on Naturally Vegetated Lands
Adjacent to Hilo International Airport

<u>Scientific Name</u>	<u>Hawaiian Name</u>	<u>Common Name</u>
Native Flora:		
<i>Cordyline terminalis</i>	Ti	
<i>Dicranopteris linearis</i>	'Uluhe	
<i>Hibiscus tiliaceus</i>	Hau	
<i>Metrosideros collina ssp. polymorpha</i>	'Ohia lehua	
<i>Pandanus odoratissimus</i>	Hala	Pandanus
Exotic Flora:		
<i>Tibouchina semidecandra</i>		Glory Bush
<i>Ardisia solanacea</i>		Jet Berry
<i>Brassaia actinophylla</i>		Octopus Tree
<i>Ficus benghalensis</i>		Indian Banyan
<i>Ficus retusa</i>		Chinese Banyan
<i>Terminalia catappa</i>		False Kamani
<i>Setaria palmifolia</i>		Palm Grass
<i>Casuarina equisetifolia</i>		Ironwood
<i>Psidium guajava</i>		Guava
Native Fauna:		
<i>Buteo solitarius</i>	'Io	Hawaiian Hawk
<i>Pluvialis fluva</i>	Kolea	Pacific Golden Plover
<i>Rattus exulans</i>	'Iole	Polynesian Rat
Introduced Fauna:		
<i>Sus scrofa</i>	Pua	Pig
<i>Rattus rattus</i>		Roof Rat
<i>Mus musculus</i>		House Mouse
<i>Herpestes auropunctatus</i>		Mongoose
<i>Canis familiaris</i>		Domestic Dog
<i>Felis catus</i>		Domestic Cat
<i>Acridotheres t. tristis</i>		Mynah
<i>Feopelia striata</i>		Barred Dove
<i>Cardopacus mexicanus frontalis</i>		House Finch
<i>Cardinalis cardinalis</i>		Cardinal
<i>Zosterops japonica</i>		Japanese White-eye

Source: Palapala, Ink. (February 5, 1987), Subsistence Homesteads: A Community Management Plan for Department of Hawaiian Home Lands Keaukaha Tract Honolulu.

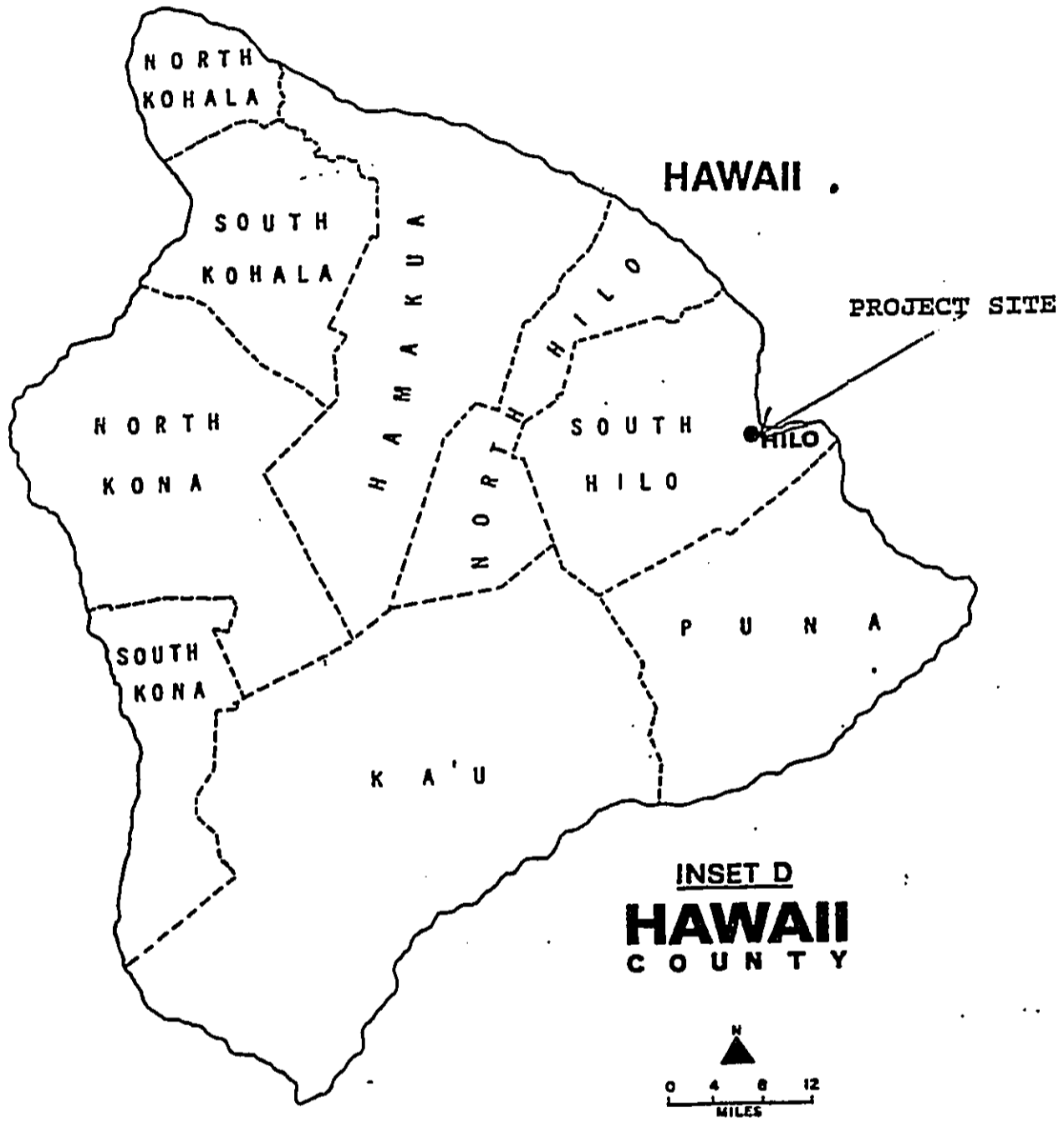
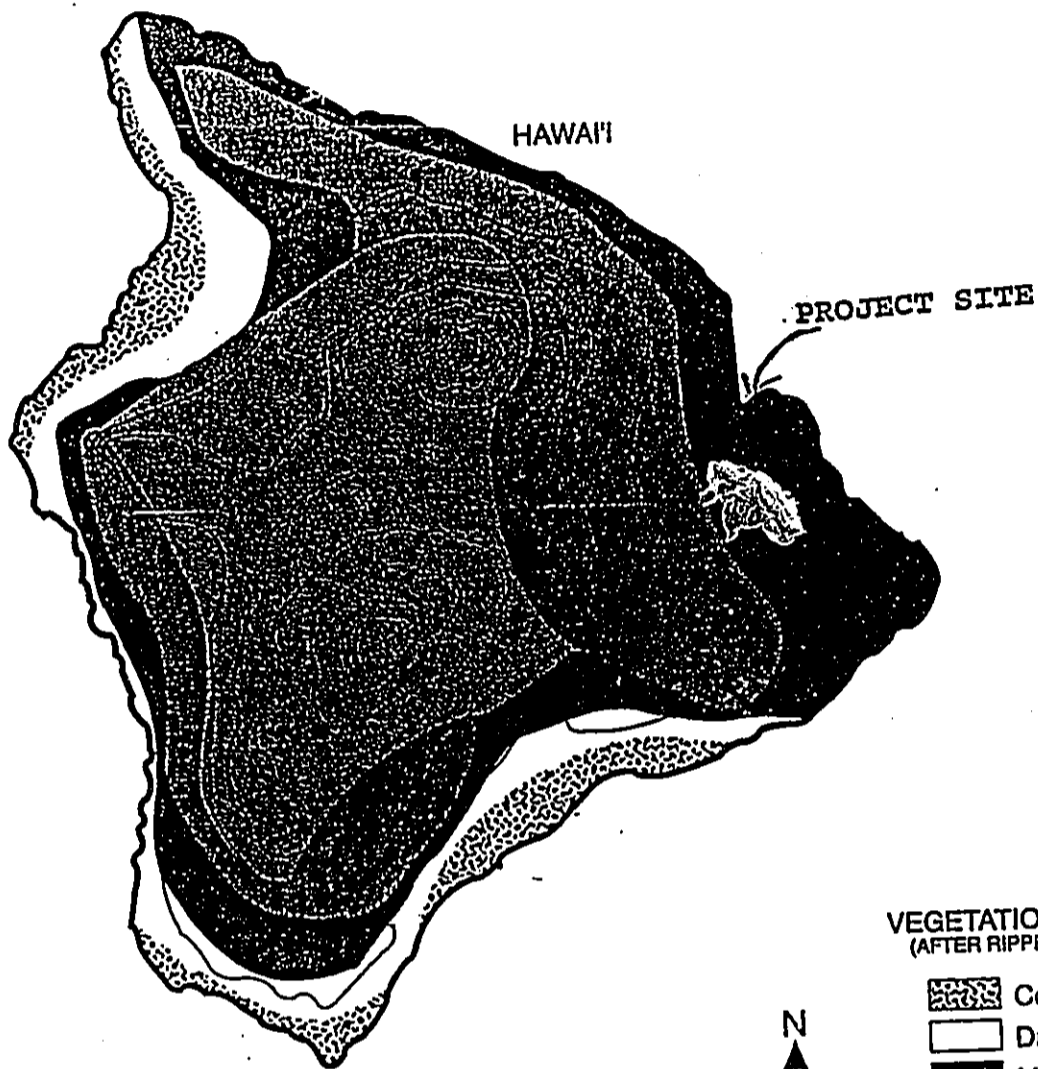





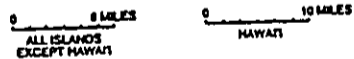


Exhibit 1. Location Map



VEGETATION ZONES OF HAWAII
(AFTER RIPPERTON AND HOSAKA, 1942)

-  Coastal
-  Dryland forest and shrub
-  Mixed mesic forest
-  Rain forest
-  Subalpine, alpine



VEGETATION ZONES OF HAWAII
after Sohmer and Gustafson
1993

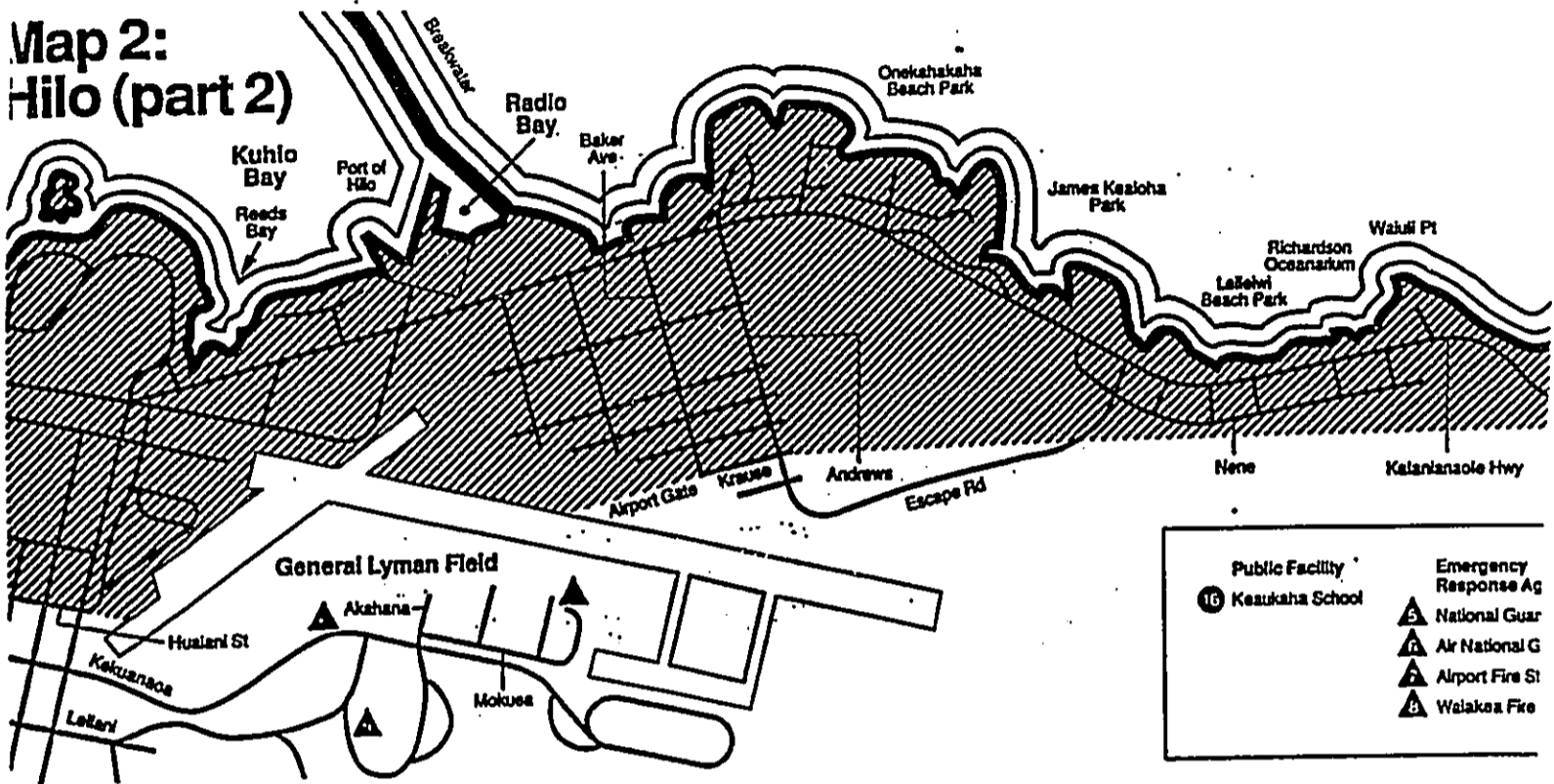
Exhibit 7. Vegetation Zones



CIVIL DEFENSE Tsunami Evacuation Maps



**Map 2:
Hilo (part 2)**



**Map 3:
South Hilo/
Puna**

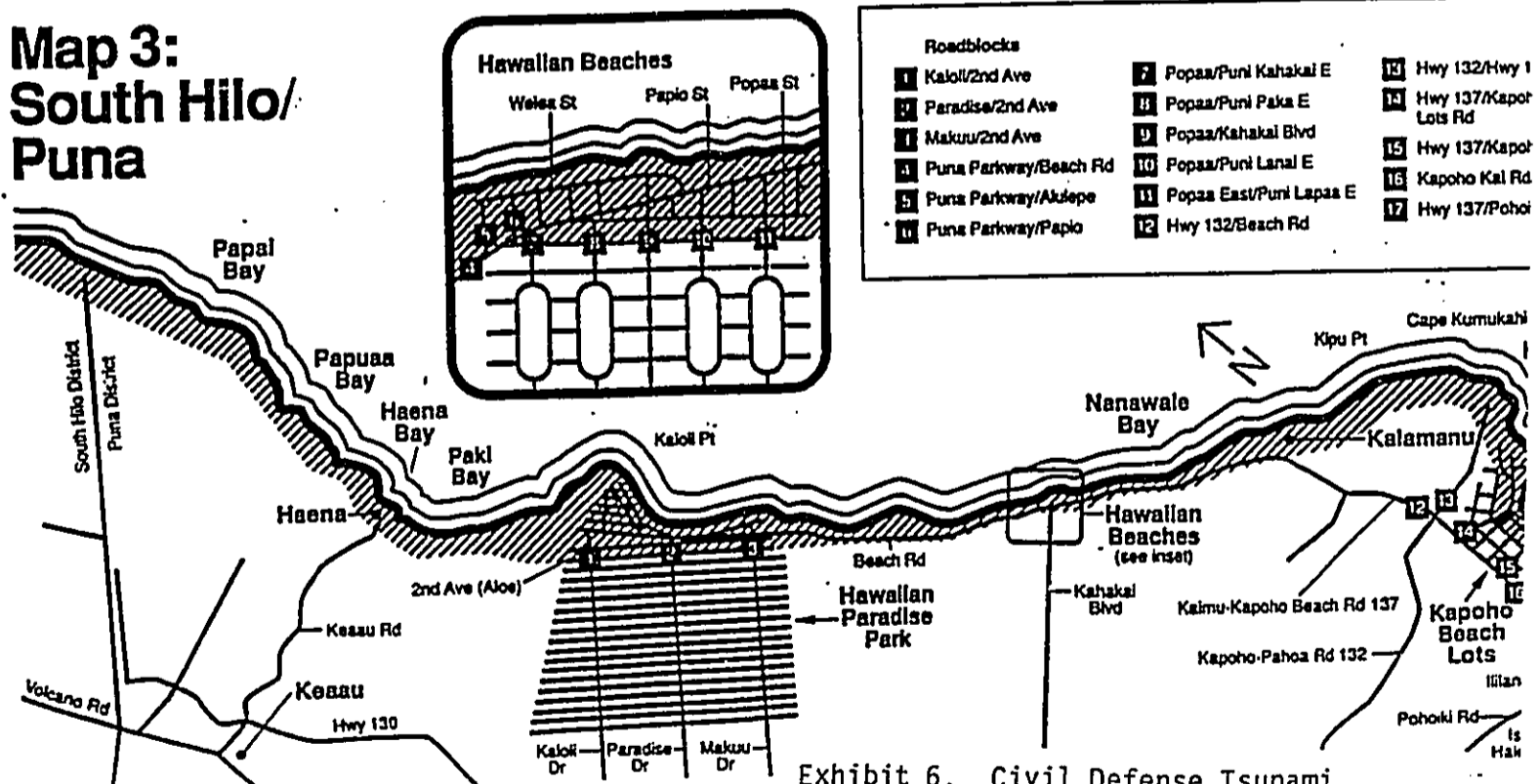
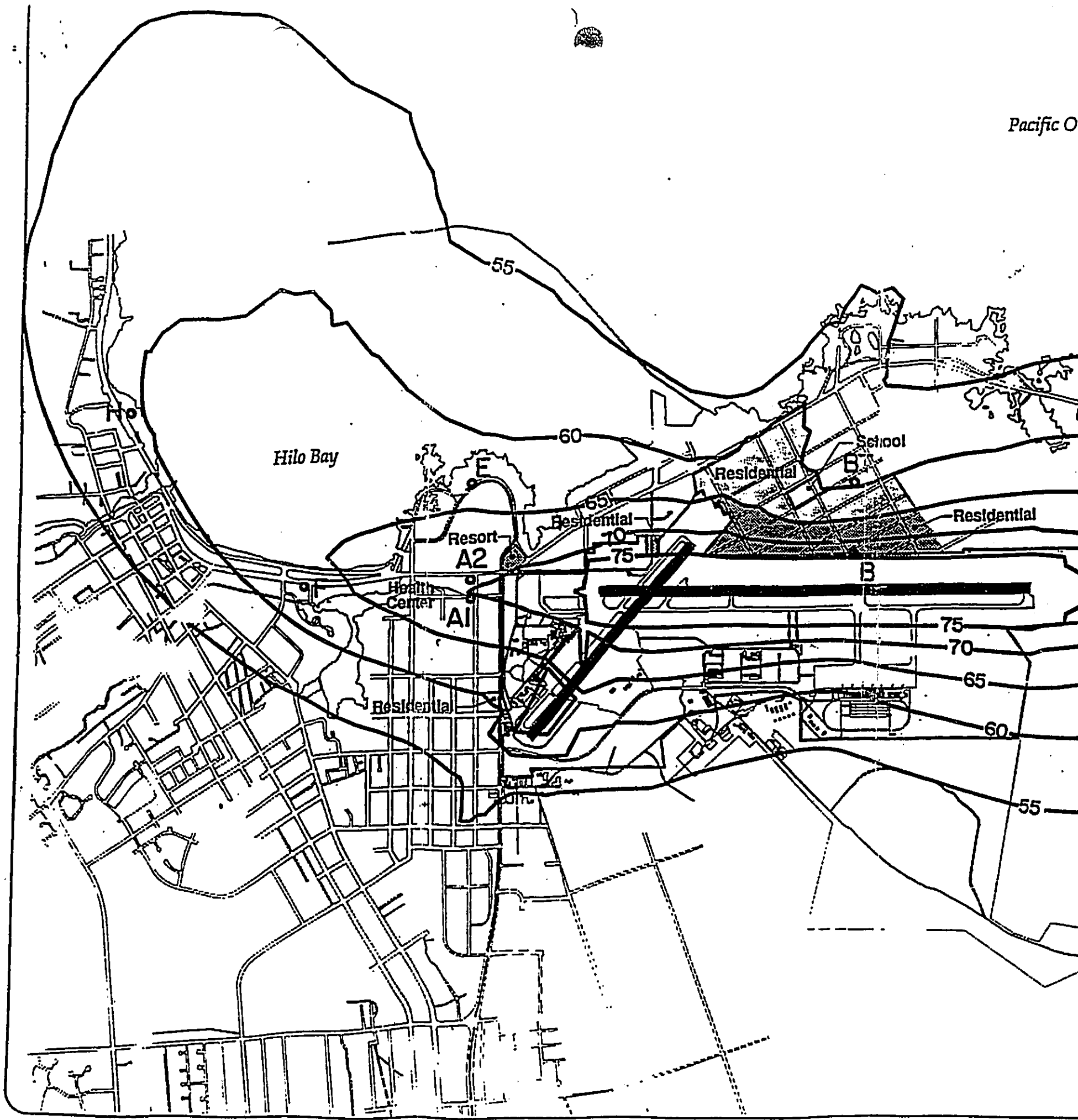


Exhibit 6. Civil Defense Tsunami Evacuation Map 2: Hilo (part 2)



Hilo Bay

55

60

Resort
A2

Health
Center

A1

Residential

Residential

Residential

School

Residential

B

75

70

65

60

55

South Hilo, Hawaii
State Project No. AH701
AIP Project No. 3-15-000

NOISE EXPOSURE MAP: 1986 BASE YEAR

Legend:

—60— DAY/NIGHT NOISE LEVELS (L_{dn}) IN DECIBELS

○ NOISE SAMPLING LOCATIONS

■ EXCEEDS STATE AND FEDERAL COMPATIBILITY CRITERIA

■ EXCEEDS STATE COMPATIBILITY CRITERIA



ISLAND OF HAWAII

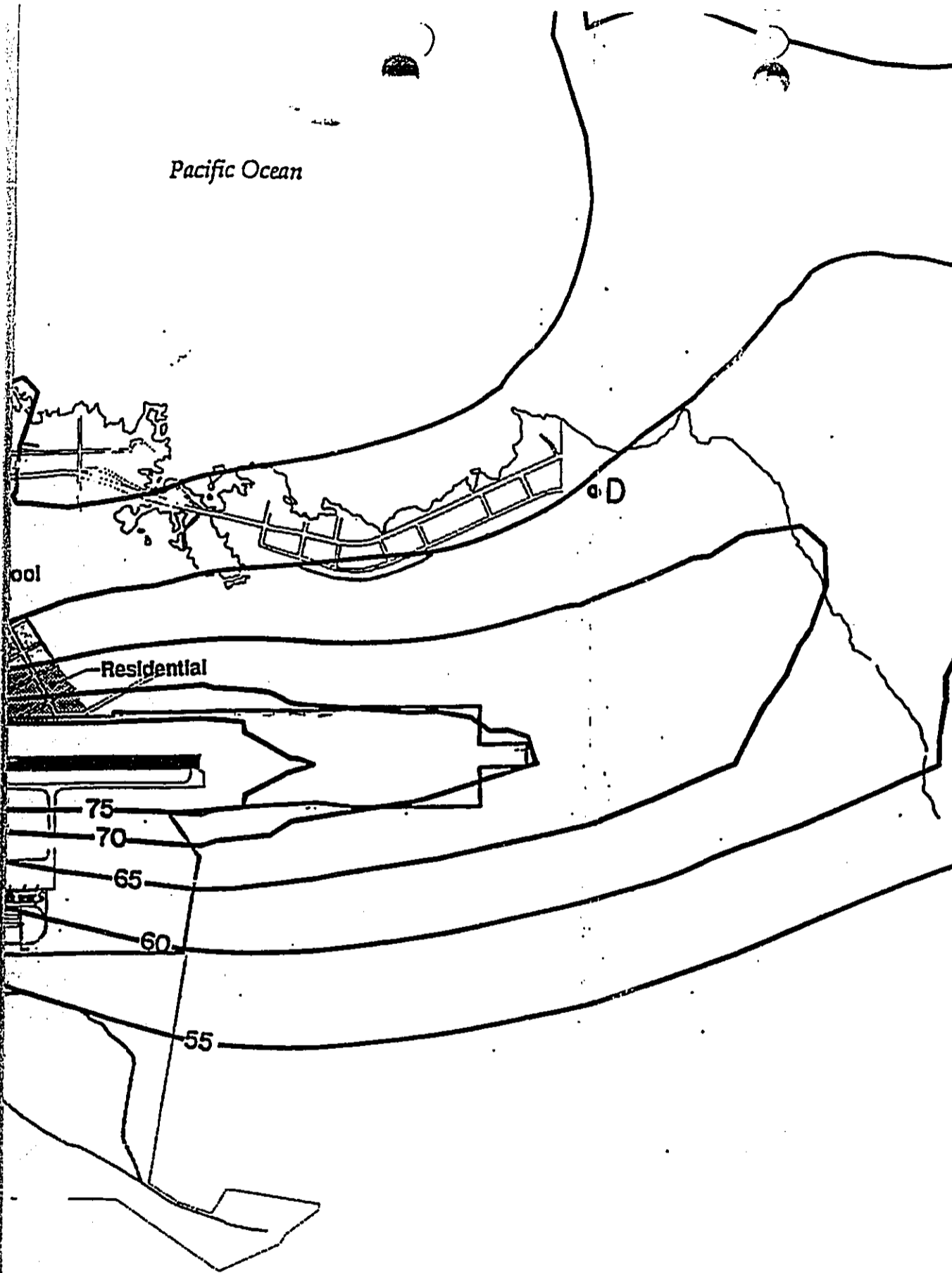


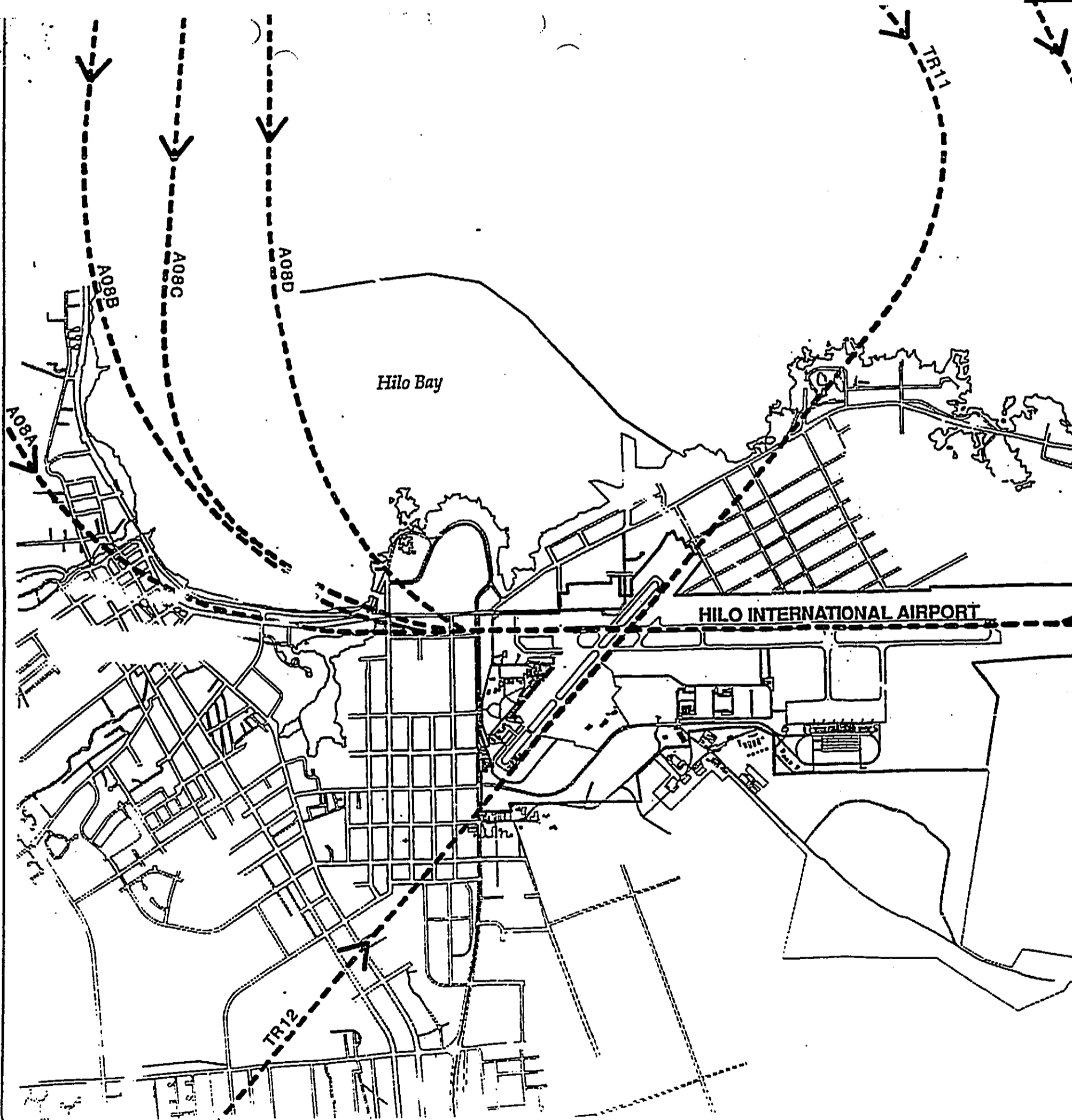
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Exhibit 5. Noise Exposure Map: 1986
-2-14

Belt Collins & Assoc
Aries Consultants
Y. Ebisu & Assoc

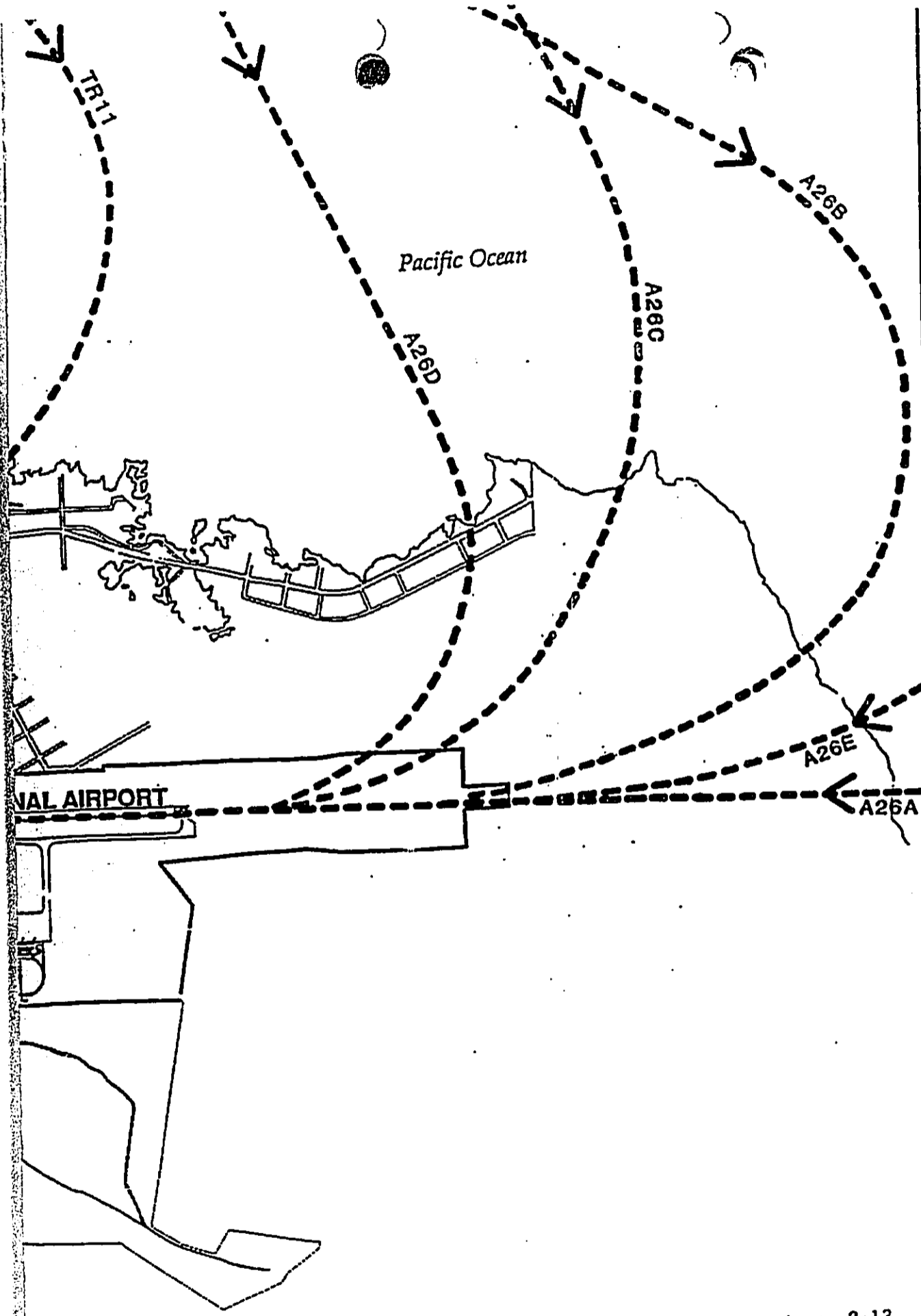
Figure 2-14





AIRPORT
MASTER PLAN
South Hilo, Hawaii
State Project No. AH701
AIP Project No. 3-15-00C

APPROACH
AND
DEPARTURE
FLIGHT
PATHS IN
THE
VICINITY OF
HILO
INTERNATIONAL
AIRPORT:
ARRIVALS



ISLAND OF HAWAII

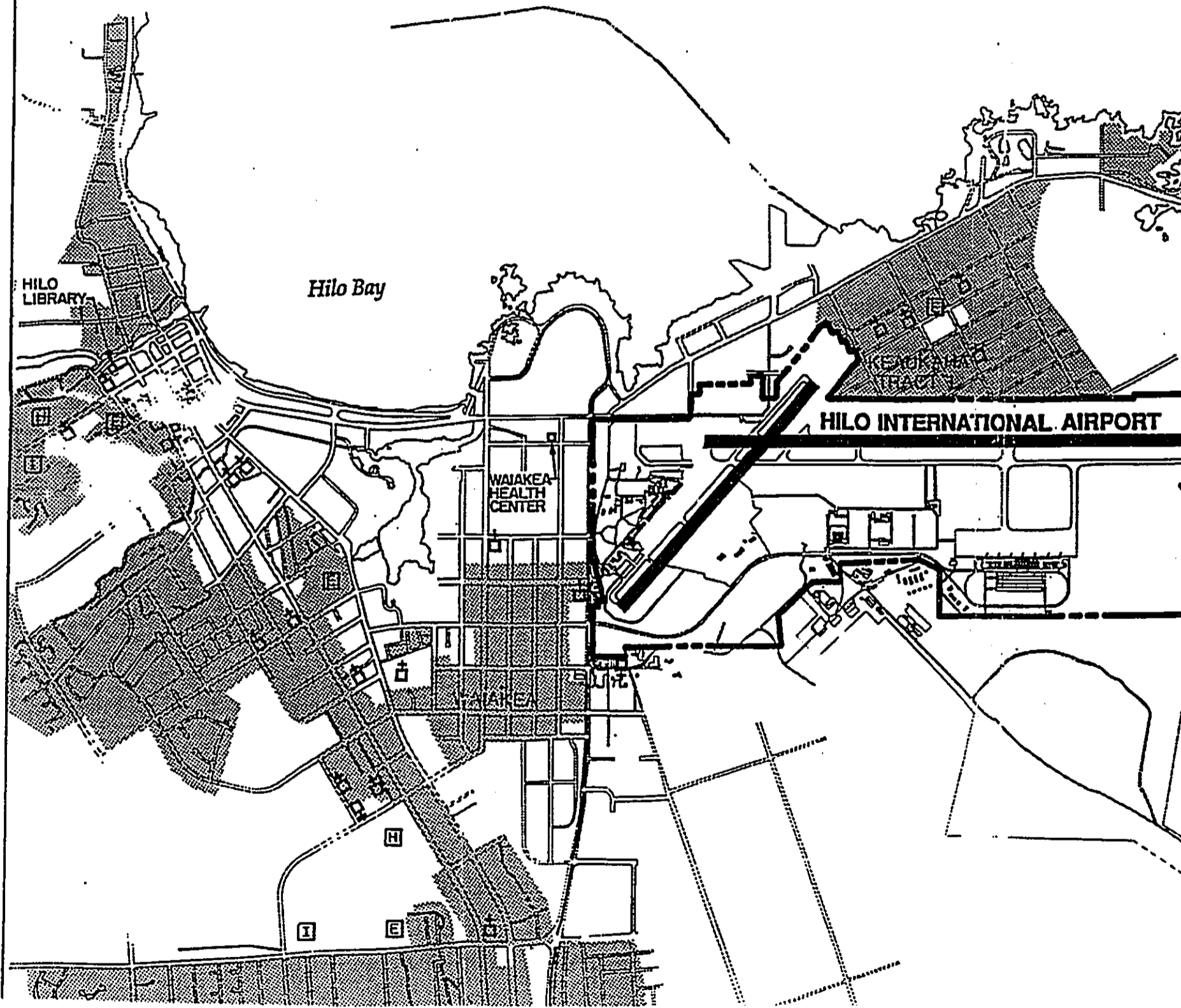


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Exhibit 4. Approach & Departure -2-13

Belt Collins & Assoc
Aries Consultants
Y. Ebisu & Associa






FIGURE 2-13

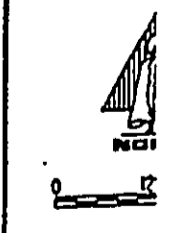


AIF
MAST
South I
State Projec
AIP Project I

NC
SEN:
LANE

Legend:

-  CH
-  EL SC
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-  HIC
-  RE AR



Belt Collins
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V Fhisi &

Pacific Ocean

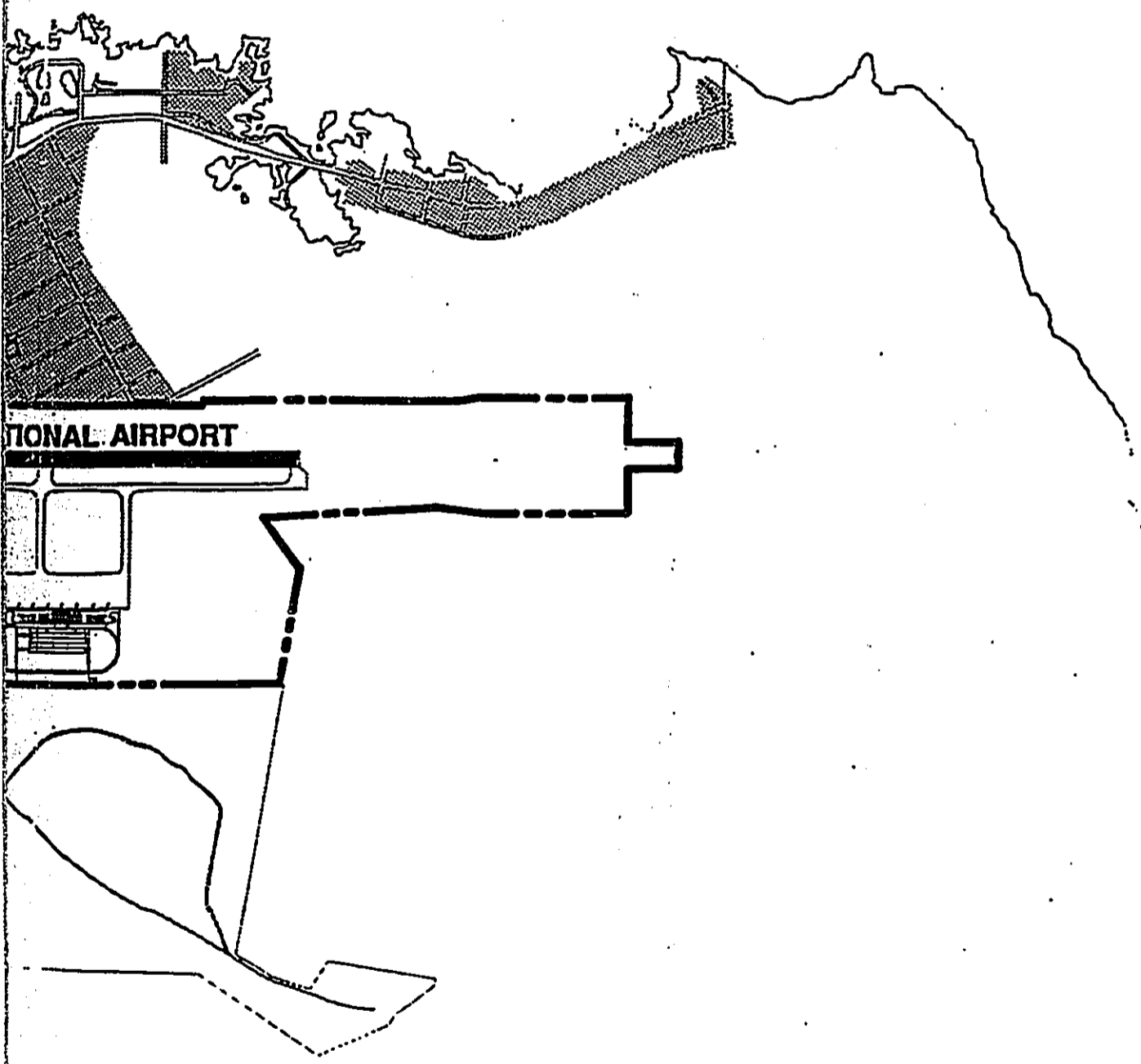
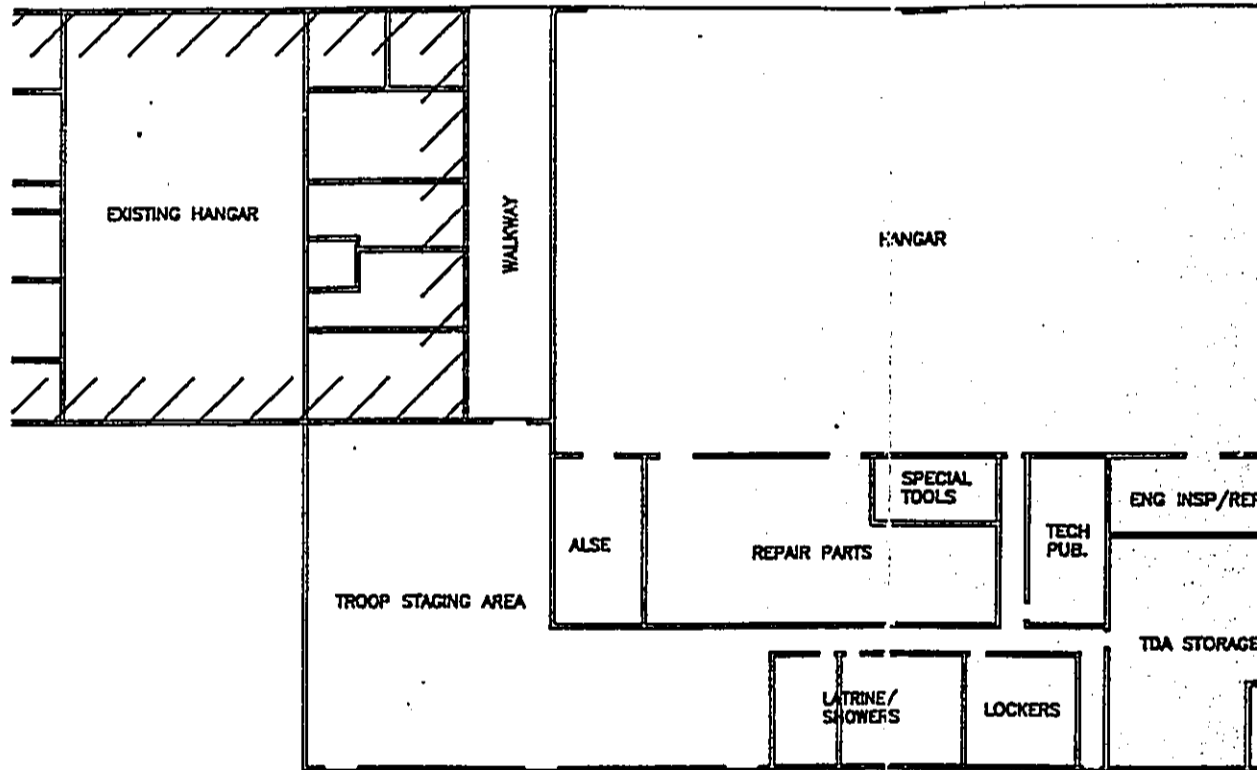


Exhibit 3. Noise Sensitive Land Uses
-2-11



FLOOR PLAN
SC: 1/16" = 1'-0"

Ex

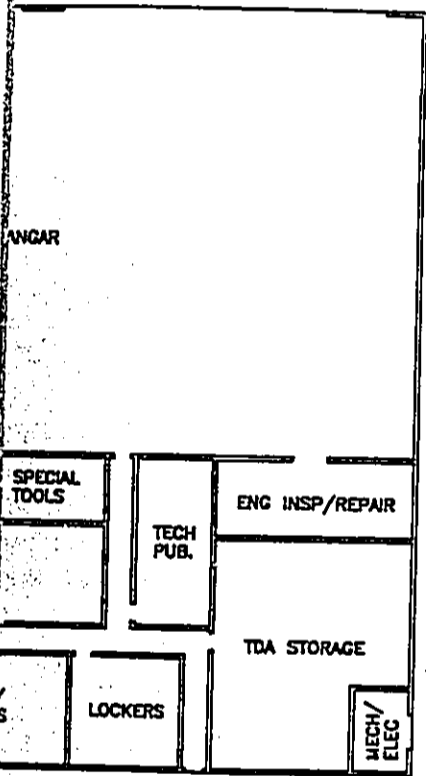
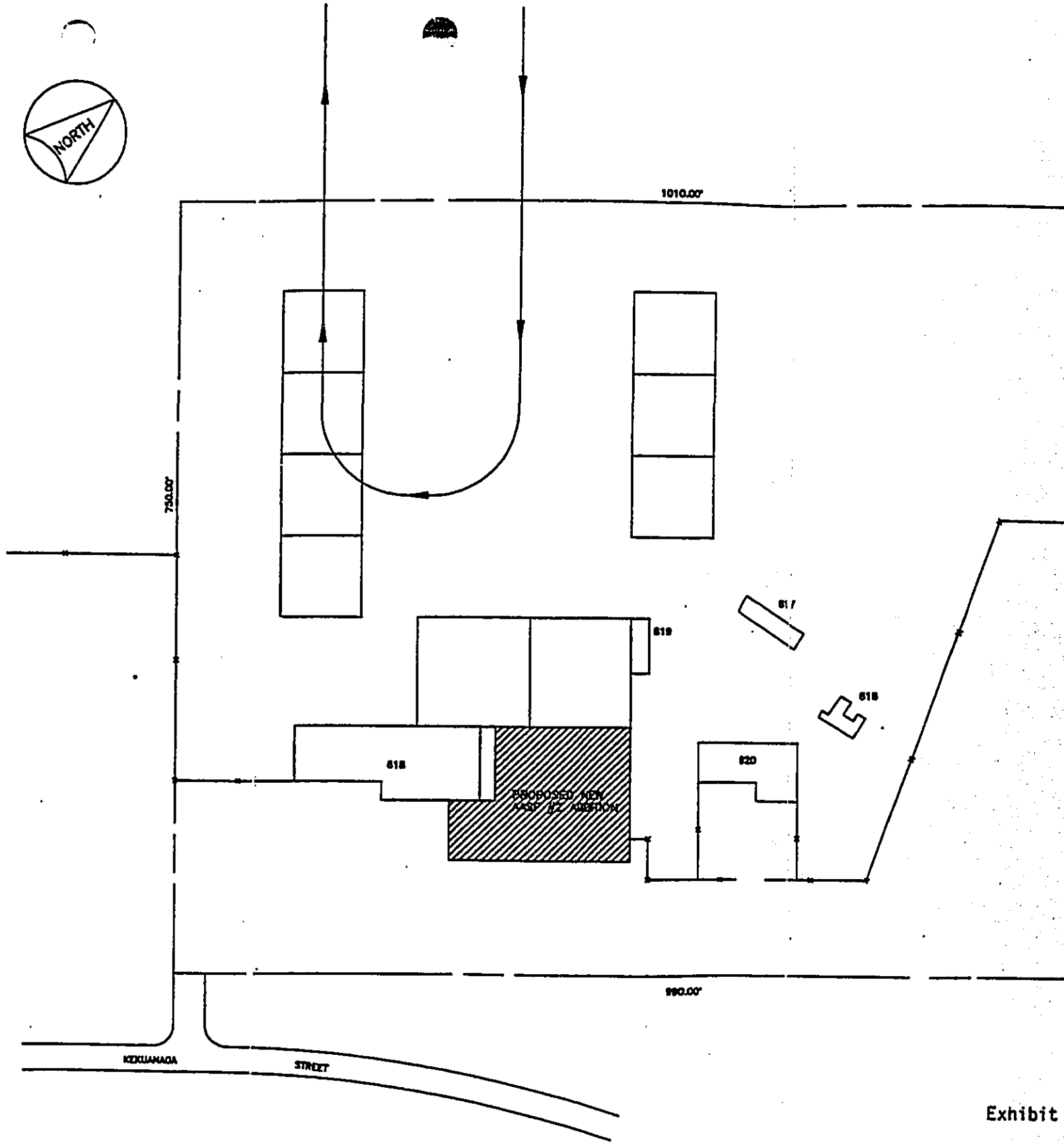
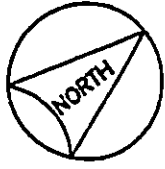


Exhibit 2B

REVISION NO.	DESCRIPTION	DATE	BY	CHK'D
DEPARTMENTS OF THE ARMY AND AIR FORCE NATIONAL GUARD OF HAWAII OFFICE OF THE ENGINEER, FORT RUGER, HAWAII				
DESIGNED:	CONCEPTUAL FLOOR PLAN AASF #2 HILO, HAWAII			
DRAWN:				
SAFETY:				
ENGINEER:				
APPROVED:	APPROVED:	DATE:	20 FEB 96	
APPROVED:	SCALE:		DRAWING NO.	
		SHEET:		



SITE PLAN - AASF #2
SC: 1" = 60'-0"

Exhibit

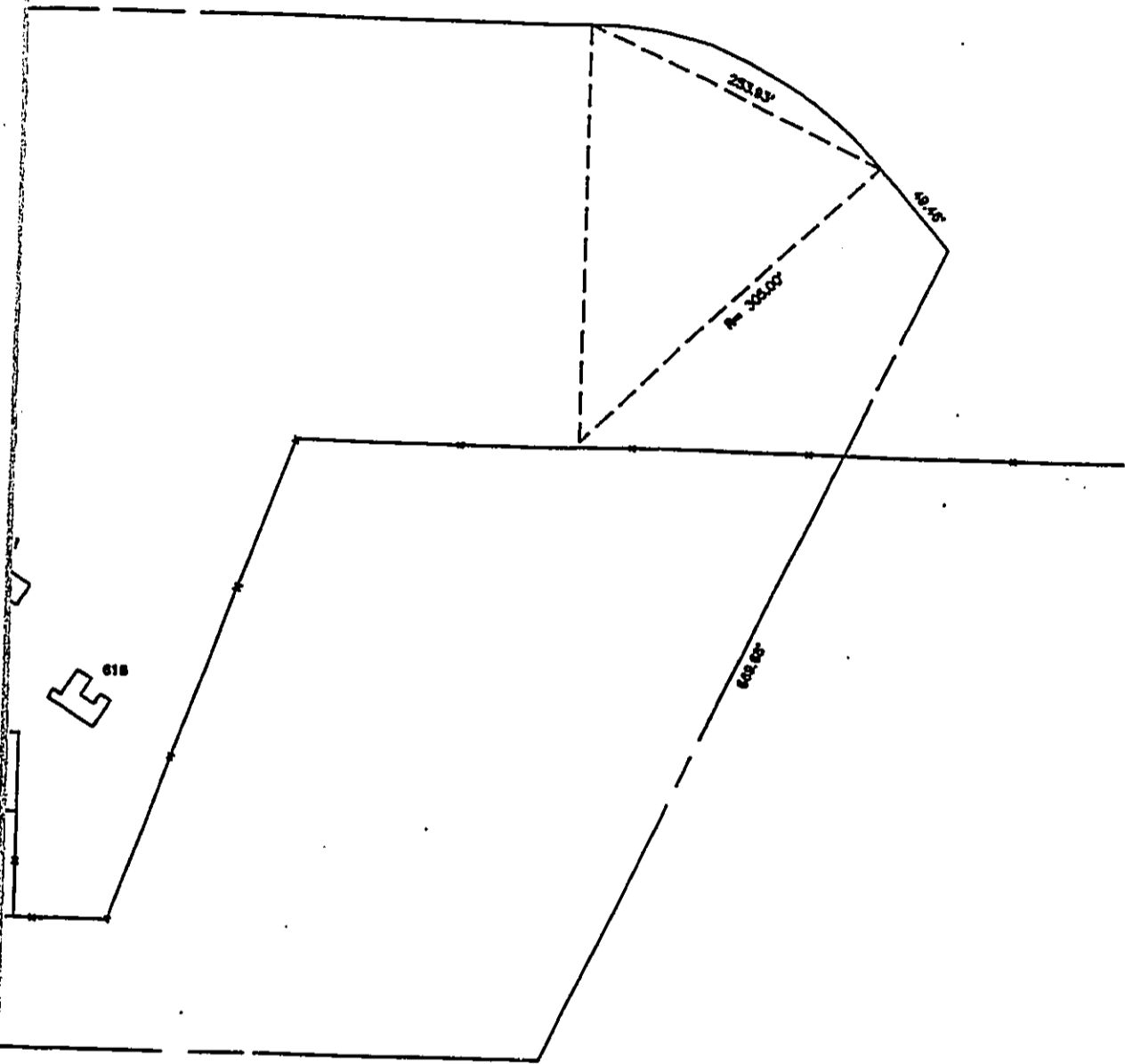
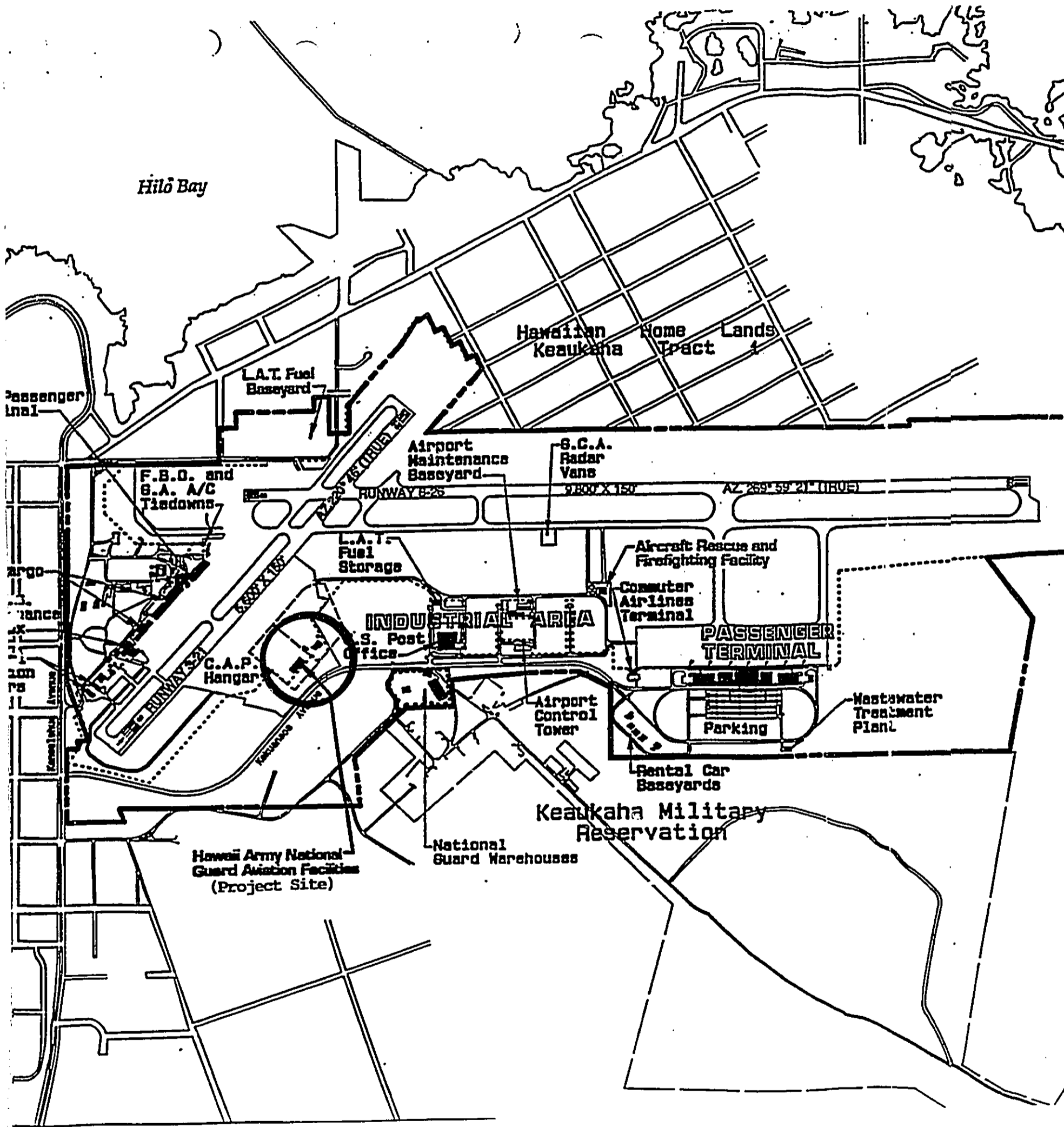


Exhibit 2A

REVISION NO.	DESCRIPTION	DATE	BY	CHK'D
DEPARTMENTS OF THE ARMY AND AIR FORCE NATIONAL GUARD OF HAWAII OFFICE OF THE ENGINEER, FORT RUGER, HAWAII				
DESIGNED:	CONCEPTUAL SITE PLAN AASF #2 HILO, HAWAII			
DRAWN:				
CHECKED:				
APPROVED:				
APPROVED:	APPROVED:	DATE:	20 FEB 96	
APPROVED:	SCALE:		DRAWING NO.	
		SHEET:		



Hilō Bay

Hawaiian Home Lands
Keaukaha Tract

Passenger
Terminal

L.A.T. Fuel
Baseyard

Airport
Maintenance
Baseyard

S.C.A.
Radar
Vans

F.B.O. and
S.A. A/C
Tiadoms

RUNWAY B-25

9800' X 150'

AZ. 269° 59' 21" (TRUE)

ARGO

L.A. 15
Fuel
Storage

Aircraft Rescue and
Firefighting Facility

Computer
Air Lines
Terminal

PASSENGER
TERMINAL

Finance

INDUSTRIAL AREA

S. Post
Office

Parking

Wastewater
Treatment
Plant

200
78

C.A.P.
Hangar

Airport
Control
Tower

Rental Car
Baseyards


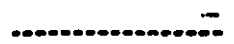


Hawaii Army National
Guard Aviation Facilities
(Project Site)

National
Guard
Warehouses

Keaukaha Military
Reservation

South Hilo, Hawaii
State Project No. AH7011-02
AIP Project No. 3-15-0004-01

EXISTING FACILITIES

- Legend:
-  AIRPORT BOUNDARY
 -  AIRPORT FENCE
 -  AIRPORT FACILITY
 -  RUNWAY NUMBER

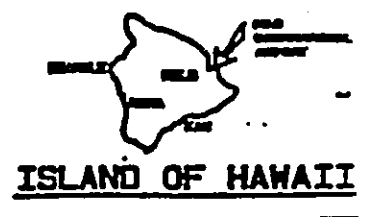
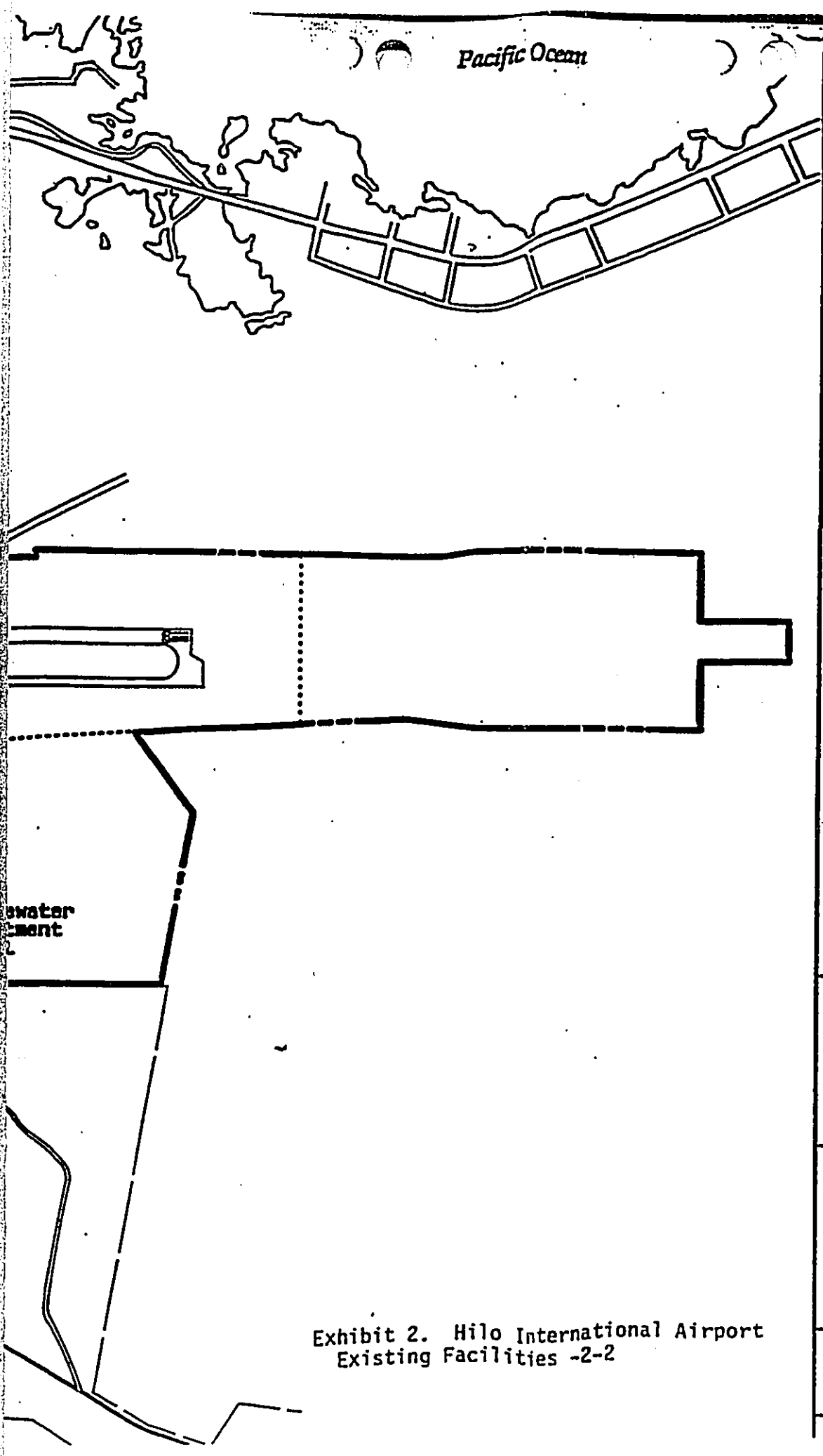


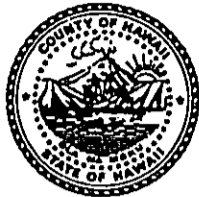
Exhibit 2. Hilo International Airport
Existing Facilities -2-2

Belt Collins & Associates
Aries Consultants Ltd.
Y. Ebiu & Associates

Figure 2-2

COMMENTS AND RESPONSES

Stephen K. Yamashiro
Mayor



Virginia Goldstein
Director

Norman Olesen
Deputy Director

County of Hawaii

PLANNING DEPARTMENT

25 Aupuni Street, Room 109 • Hilo, Hawaii 96720-4252
(808) 961-8288 • Fax (808) 961-9615

November 13, 1995

Mr. Richard Young
Lieutenant Colonel, EN
Hawaii Army National Guard
3949 Diamond Head Road
Honolulu, HI 96816-4495

Dear Mr. Young:

Preliminary Draft Environmental Assessment for the
Hawaii Army National Guard Limited Army Aviation
Support Facility
Tax Map Key: 2-1-12:Portion of 9

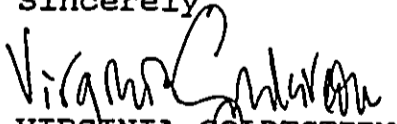
Thank you for your letter dated October 16, 1995, requesting comments regarding the preparation of the above-described document. We have completed our review and our comments are as follows:

1. A detailed site plan reflecting all existing and prepared improvement must be included within the Draft Environmental Assessment (DEA). The site plans included within the DEA is at too large a scale and does not provide meaningful information regarding the location of the proposed improvement with respect to existing facilities.

We have no further comments to offer. We look forward to our review of the Draft Environmental Assessment.

Please feel free to contact Daryn Arai of this office, should you have any further questions.

Sincerely,


VIRGINIA GOLDSTEIN
Planning Director

DSA:mjs

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

November 9, 1995

MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY
GILBERT COLOMA-AGARAN

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

Major Ronald Swafford, Facility Management Officer
Hawaii Army National Guard
Hawaii Department of Defense
3949 Diamond Head Road
Honolulu, Hawaii 96816-4495

LOG NO: 15769 ✓
DOC NO: 9511PM17

Dear Major Swafford:

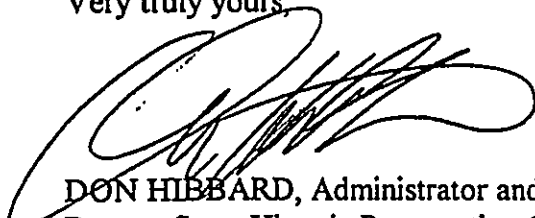
**SUBJECT: Preliminary Draft Environmental Assessment
of the Hawaii Army National Guard Limited Army Aviation
Support Facility (LAASF) Addition/Alteration
Hilo, South Hilo, Hawaii Island**

This is in response to the letter of October 16, 1995 from Lieutenant Colonel Richard Young with a request for our review and comments on the subject project.

There are no known historic sites in the subject area, and it is unlikely that any exist since this area has been disturbed on probably numerous occasions in the process of developing the airport and other facilities. Past projects have confirmed this pattern. We believe that the proposed improvements will have "no effect" on significant historic sites.

If you have any questions please contact Patrick McCoy (587-0006).

Very truly yours,


DON HIBBARD, Administrator and
Deputy State Historic Preservation Officer

PM:amk

BENJAMIN J. CAYETANO
GOVERNOR



GARY GILL
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
220 SOUTH KING STREET
FOURTH FLOOR
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-2452

November 29, 1995

Lt. Colonel Richard Young, Facility Management Officer
Hawaii Army National Guard
Department of Defense, State of Hawaii
3949 Diamond Head Road
Honolulu, Hawaii 96816-4495

Dear Lieutenant Colonel Young:

Having reviewed the draft environmental assessment (transmitted with your November 7, 1995, letter to this office) for the *Hawaii Army National Guard Limited Army Aviation Support Facility (LAASF) Addition/Alteration at Hilo International Airport*, we offer the following comments for your consideration and response in the final environmental assessment.

1. On page 14 of the environmental assessment, State Department of Defense consulted with in-house staff, the State Department of Land and Natural Resources, and the U. S. Army Engineer Division. Because the proposed action may have impacts on areas zoned residential and lands of concern to native Hawaiians, we request that you consult respectively with the Planning Department of the County of Hawaii, the State Department of Hawaiian Home Lands and the Office of Hawaiian Affairs.
2. Please indicate in the final environmental assessment the status of all required permits and approvals related to this project.

If there are any questions, please call Mr. Leslie Segundo, Environmental Health Specialist at 586-4185. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Gill".

GARY GILL
Director

BENJAMIN J. CAYETANO
GOVERNOR
STATE OF HAWAII



KALI WATSON
CHAIRMAN
HAWAIIAN HOMES COMMISSION

JOBIE M. K. M. YAMAGUCHI
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

P.O. BOX 1879
HONOLULU, HAWAII 96805

April 24, 1996

Lieutenant Colonel Richard Young
Facility Management Officer
Hawaii Army National Guard
3949 Diamond Head Road
Honolulu, Hawaii 96813

Dear Lieutenant Colonel Young:

Subject: DRAFT ENVIRONMENTAL ASSESSMENT OF THE HAWAII ARMY
NATIONAL GUARD LIMITED ARMY AVIATION SUPPORT FACILITY
(LAASF) ADDITION/ALTERATION, AT HILO INTERNATIONAL
AIRPORT

Thank you for your letter of March 21, 1996, requesting
our comments on the subject draft report dated November 1995.

The Department of Hawaiian Home Lands (DHHL) has
jurisdiction over much of the lands adjacent to and in the
vicinity of the airport. We would like to hold to a minimum,
and lessen whenever possible, any health risks or
inconveniences on our homestead families in the area by
operations at the airport.

We request that the environmental assessment clarify the
following potential issues and concerns:

1. DESCRIPTION OF THE PROPOSED ACTION

In addition to narrative descriptions, the report
should include plot plans showing locations and sizes
of existing and proposed facilities at LAASF. It
should be clearly stated if only physical
improvements are proposed, as well as operational
changes.

There is great concern in the local community of any
changes which would increase noise or the possibility
of aircraft crashes. The effects of airport
operations currently exceed federal standards in
significant portions of residential areas on Hawaiian
home lands. We oppose any operational changes which
would exacerbate the already bad conditions in the
area.

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
3949 DIAMOND HEAD ROAD, HONOLULU, HAWAII 96816-4495

EDWARD V. RICHARDSON
MAJOR GENERAL
ADJUTANT GENERAL

MICHAEL E. RAWLINS
COLONEL
DEPUTY ADJUTANT GENERAL

May 14, 1996

Engineering Office

Ms. Virginia Goldstein
Planning Director
County of Hawaii
Planning Department
25 Aupuni Street, Room 109
Hilo, Hawaii 96720-4252

Dear Ms. Goldstein:

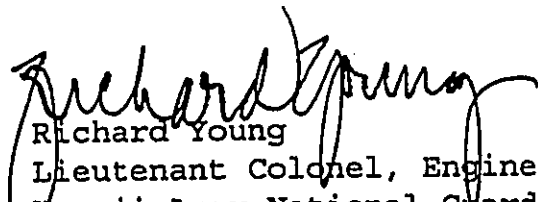
Subject: Draft Environmental Assessment (DEA) of the Hawaii
Army National Guard Limited Army Aviation Support Facility
(LAASF) Addition/Alteration at Hilo International Airport

Thank you for reviewing the DEA for our proposed addition/
alteration to the LAASF. We have the following response to your
comments:

Currently the project is a conceptual plan, therefore,
detailed plans are not available. We will provide plans showing
existing buildings and proposed improvements for the addition/
alteration in the final EA.

A copy of the final EA will be provided upon request. If there
are any questions, please have your staff contact Major Ron
Swafford, Environmental Protection Specialist, at 733-4214.

Sincerely,


Richard Young
Lieutenant Colonel, Engineer
Hawaii Army National Guard
Facility Management Officer



Lieutenant Colonel Richard Young
Page 2
April 24, 1996

Please verify that the proposed action will not increase noise levels in adjoining areas; that it will not involve operational changes in terms of the types of aircraft, the frequency and timing of their flights, or the routes and altitudes they will fly.

2. ENVIRONMENTAL IMPACTS

The last comprehensive study of aircraft noise and land use compatibility was undertaken in 1986 and reported in the NOISE EXPOSURE MAP REPORT, GENERAL LYMAN FIELD, HILO, HAWAII, October 1988. Since that report, have new aircraft and operations been added or altered that would justify an updated study? Our understanding is that under the FAR PART 150 AIRPORT NOISE COMPATIBILITY PROGRAM:

"(2) If, after the submission to the Secretary [of Transportation] of a noise exposure map under paragraph (1), any change in the operation of an airport would create any substantial new noncompatible use in any area surrounding such airport, the operator of such airport shall submit a revised noise exposure map showing such new noncompatible use." U.S. Code, TITLE 49, APPENDIX - TRANSPORTATION, CHAPTER 30- ABATEMENT OF AVIATION NOISE, SUBCHAPTER I-AIRPORT NOISE, Section 2103.

Even if no operational changes are proposed, we strongly suggest that the applicant conduct public informational meetings with the local community before proceeding with a Negative Declaration.

3. ECONOMIC IMPACTS

The report should disclose the estimated costs for the proposed action and the sources of funding.

If you have any questions regarding our comments, please call Joe Chu of our Planning Office at 586-3838.

Warmest aloha,



Kali Watson, Chairman
Hawaiian Homes Commission

cc: State Department of Transportation
4005L5

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
3949 DIAMOND HEAD ROAD, HONOLULU, HAWAII 96816-4495

EDWARD V. RICHARDSON
MAJOR GENERAL
ADJUTANT GENERAL

MICHAEL E. RAWLINS
COLONEL
DEPUTY ADJUTANT GENERAL

May 14, 1996

Engineering Office

Mr. Kali Watson
Chairman
Hawaiian Homes Commission
Department of Hawaiian Home Lands
P.O. Box 1879
Honolulu, Hawaii 96805

Dear Mr. Watson:

Subject: Draft Environmental Assessment (DEA) of the Hawaii
Army National Guard Limited Army Aviation Support Facility
(LAASF) Addition/Alteration at Hilo International Airport

Thank you for reviewing the DEA for our proposed addition/
alteration to the LAASF. We have the following response to your
comments:

1. DESCRIPTION OF THE PROPOSED ACTION

Only physical improvements are proposed for the LAASF.
Operational changes were previously addressed in the Final
Environmental Assessment for CECAT. The project is currently
a conceptual plan therefore, detailed plans are not
available. We will include available plans showing the sizes
of existing and proposed facilities at LAASF in the Final EA.

The Hawaii Army National Guard has four UH-60 Blackhawks
operating out of the LAASF, providing transport and medical
support for training and other operations at the Pohakuloa
Training Area. The four Blackhawks will be converted to air



Mr. Kali Watson

Page 2

May 14, 1996

ambulances which will provide emergency care and transport for both military personnel and civilians. Conversion of the aircraft will not increase aircraft noise levels.

The aircraft will operate during normal work hours and there will be no increase in the frequency and timing of flights except in times of emergency. Routes and altitudes will be similar to those currently used in the airline's instrument and training routes.

2. ENVIRONMENTAL IMPACTS

Two reports regarding noise at the airport and more specifically, the LAASF, have been completed since 1986: Belt Collins & Associates, Hilo International Airport - FAR Part 150 Noise Compatibility Program, Volume II Noise Compatibility Report, December 1992 (BC&A, 1992), and U.S. Army Environmental Hygiene Agency, Environmental Noise Study No. 52-34-QR40-93, Requirements for Installation Compatible Use Zone Studies at Four Facilities of the Hawaii Army National Guard: AASF #1, Wheeler Army Airfield, Oahu, Hawaii; AASF #2, Hilo International Airport, Hawaii, Hawaii; Ukumehame and Pimoe Firing Ranges, Maui, Hawaii, 7-14 January 1993, June 29, 1993 (USAEHA, 1993).

In Volume II of the Noise Compatibility Program (BC&A, 1992), it is stated that, "Helicopter operations were not considered in preparing the noise contours because the sound levels associated with existing and proposed helicopter operations are insignificant when compared to jet aircraft. Therefore, Ldn contours would not be affected."

The Environmental Noise Study conducted by the USAEHA at the LAASF concluded that "...jet departures are the dominant noise events..." at Hilo International Airport.

We will hold an informational meeting addressing questions and concerns regarding the LAASF addition/alteration in Hilo. We will coordinate this meeting with Mr. Joe Chu of the Department of Hawaiian Home Lands, Planning Office.

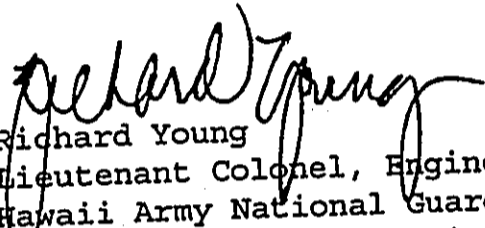
Mr. Kali Watson
Page 3
May 14, 1996

3. ECONOMIC IMPACTS

The estimated costs for the proposed addition/alteration is \$5.9 million dollars. The project will be financed one-hundred percent by the federal government.

A copy of the final EA will be provided upon request. If there are any questions, please have your staff contact Major Ron Swafford, Environmental Protection Specialist, at 733-4214.

Sincerely,


Richard Young
Lieutenant Colonel, Engineer
Hawaii Army National Guard
Facility Management Officer



United States Department of the Interior

FISH AND WILDLIFE SERVICE
PACIFIC ISLANDS ECOREGION
300 ALA MOANA BOULEVARD, ROOM 3108
BOX 50088
HONOLULU, HAWAII 96850
PHONE: (808) 541-3441 FAX: (808) 541-3470

In Reply Refer To: TR

MAY 31 1996

Lieutenant Colonel Richard Young
Hawaii Army National Guard
3949 Diamond Head Road
Honolulu, Hawaii 96816-4495

Dear Lt. Col. Young:

The U.S. Fish and Wildlife Service (Service) has received your May 14, 1996, letter requesting concurrence under section 7 of the U.S. Endangered Species Act with regard to the addition/alteration of the Hawaii Army National Guard Limited Aviation Support Facility (LAASF) at the Hilo International Airport.

According to the Draft Environmental Assessment (EA), the existing LAASF facilities at the airport will be renovated and an armory and hanger for helicopters will be added. The facility will be assigned four helicopters and 40 personnel. The EA states that the project will only modify a small area, most of which is already modified by buildings, concrete and asphalt. The helicopters will use previously existing flight paths, and noise levels as a result of helicopter use are not expected to be significant compared to the noise already created by commercial jets using the airport.

Although the federally listed Hawaiian hawk (*Buteo solitarius*) and Hawaiian hoary bat (*Lasiurus cinereus semotus*) may occur in the general vicinity of the project site, the Hilo International Airport is already a highly disturbed area, and the addition of this facility is not expected to destroy important habitat or increase disturbance of these endangered species.

Based on this information, the Service concurs that the addition/alteration of the LAASF is not likely to adversely affect any federally listed, proposed or candidate endangered and threatened species. We appreciate your concern for endangered species. If you have any questions, please contact our Program Leader for Interagency Cooperation, Ms. Margo Stahl, or Fish and Wildlife Biologist Tanya Rubenstein at the above numbers.

Sincerely,

Brooks Harper
Field Supervisor
Ecological Services

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HIER
DEPT. OF DEFENSE

Mr. Brooks Harper
Page 2
May 14, 1996

We appreciate your assistance in this matter. Please submit any comments you may have by June 3, 1996. If there are any questions, please have your staff contact Major Ron Swafford, Environmental Protection Specialist, at 733-4214.

Sincerely,



Richard Young
Lieutenant Colonel, Engineer
Hawaii Army National Guard
Facility Management Officer

Enc.

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
3949 DIAMOND HEAD ROAD, HONOLULU, HAWAII 96816-4495

EDWARD V. RICHARDSON
MAJOR GENERAL
ADJUTANT GENERAL

MICHAEL E. RAWLINS
COLONEL
DEPUTY ADJUTANT GENERAL

May 14, 1996

Engineering Office

Mr. Brooks Harper
U.S. Fish and Wildlife Service
300 Ala Moana Boulevard, Room 5302
Honolulu, Hawaii 96850

Dear Mr. Harper:

Subject: Draft Environmental Assessment (DEA) of the
Hawaii Army National Guard Limited Army Aviation Support
Facility (LAASF) Addition/Alteration at Hilo International
Airport, November 1995

Ms. Margo Stahl suggested that we request assistance from your department regarding the above subject project. I have enclosed a copy of the draft EA for your review and comment. We have received comments from several state agencies and are in the process of formulating responses.

The Office of Hawaiian Affairs expressed concern about the impact our proposed activities may have on the Hawaiian Hawk (I'o). Although the I'o has been seen in lands adjacent to the Hilo International Airport, there is no evidence at this time that it is present at the LAASF location. The LAASF consists mainly of 19 acres of land, a majority of which is covered with concrete, asphalt and buildings. This habitat is not consistent with that of the I'o, therefore, we do not believe our project will have a negative impact on this endangered species.




Ms. Linda M. Colburn

Page 2

May 14, 1996

A copy of the final EA will be provided upon request. If there are any questions, please have your staff contact Major Ron Swafford, Environmental Protection Specialist, at 733-4214.

Sincerely,


Richard Young
Lieutenant Colonel, Engineer
Hawaii Army National Guard
Facility Management Officer

BENJAMIN J. CAYETANO
CHIEF OF STAFF



STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
3949 DIAMOND HEAD ROAD, HONOLULU, HAWAII 96816-4495

EDWARD V. RICHARDSON
MAJOR GENERAL
ADJUTANT GENERAL

MICHAEL E. RAWLINS
COLONEL
DEPUTY ADJUTANT GENERAL

May 14, 1996

Engineering Office

Ms. Linda M. Colburn
Administrator
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813

Dear Ms. Colburn:

Subject: Draft Environmental Assessment (DEA) of the
Hawaii Army National Guard Limited Army Aviation
Support Facility (LAASF) Addition/Alteration at Hilo
International Airport

Thank you for reviewing the DEA for our proposed addition/
alteration to the LAASF. We have the following response to your
comments:

1. We have included information about the habitat and foraging
tendencies of the I'o in the final EA.

The LAASF addition/alteration will not impact the I'o since
the environment at the LAASF is not consistent with the
habitat of the I'o. To ensure our position, we have
provided a copy of the DEA to the U.S. Fish and Wildlife
Service for their review and comment. Their comments will
be included in the final EA.

2. The Hawaii Army National Guard has made arrangements with
the State of Hawaii, Forestry and Wildlife Division to
conduct an endangered species survey for all National Guard
facilities state-wide. This document will be available to
the public.





STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
567 SOUTH KING STREET, SUITE 100
HONOLULU, HAWAII 96813
(808) 548-8960
April 16, 1996

Mr. Richard Young
Lieutenant Colonel, Engineer
HIENG, Department of Defense
3949 Diamond Head Road
Honolulu, Hawai'i 96816-4495

Re: Preliminary Draft Environmental Assessment for the Hawai'i
Army National Guard Limited Army Aviation Support Facility
Addition/Alteration, at Hilo International Airport

Dear Colonel Young:

Thank you for the opportunity to review the Preliminary Draft Environmental Assessment for the Hawai'i Army National Guard Limited Army Aviation Support Facility (LAASF) Addition/Alteration, at Hilo International Airport.

At this time, our concern is for the endangered I'o believed to be found in the area surrounding the project. The EA should address the habitat and foraging tendencies of the I'o, the potential impacts of the project on the I'o and what measures will be used to minimize effects of the project on this endangered species.

If you have any question or need any additional information, please contact Linda Delaney, Land and Natural Resources Officer or Lynn Lee, EIS Planner at 594-1888.

Sincerely,

A handwritten signature in cursive script, appearing to read "Linda M. Colburn".

Linda M. Colburn
Administrator

cc: Clayton H.W. Hee, Chairperson
Board of Trustees

Kina'u Boyd Kamali'i, Chairperson
Land and Sovereignty Committee

Jamie Kawauchi, Hilo CRC

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
3948 DIAMOND HEAD ROAD, HONOLULU, HAWAII 96818-4495

EDWARD V. RICHARDSON
MAJOR GENERAL
ADJUTANT GENERAL

MICHAEL E. RAWLINS
COLONEL
DEPUTY ADJUTANT GENERAL

May 14, 1996

Engineering Office

Mr. Gary Gill
Director
Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

Dear Mr. Gill:

Subject: Draft Environmental Assessment (DEA) of the
Hawaii Army National Guard Limited Army Aviation Support
Facility (LAASF) Addition/Alteration at Hilo International
Airport

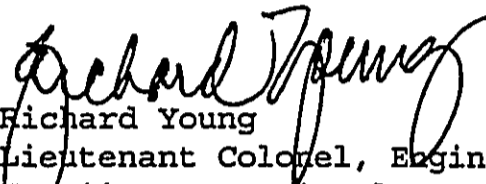
Thank you for reviewing the DEA for our proposed addition/
alteration to the LAASF. We have the following response to your
comments:

1. We have consulted with and received comments from the County of Hawaii Planning Department, the State Department of Hawaiian Home Lands and the Office of Hawaiian Affairs and are currently responding to the concerns addressed by each agency.
2. There are no permits and/or approvals for this project to date because it is a conceptual plan. Proper permits and approvals will be obtained from the state and county as required. This statement will be included in the final EA.

Mr. Gary Gill
Page 2
May 14, 1996

A copy of the final EA will be provided upon request. If there are any questions, please have your staff contact Major Ron Swafford, Environmental Protection Specialist, at 733-4214.

Sincerely,


Richard Young
Lieutenant Colonel, Engineer
Hawaii Army National Guard
Facility Management Officer

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
3949 DIAMOND HEAD ROAD, HONOLULU, HAWAII 96816-4495

May 14, 1996

EDWARD V. RICHARDSON
MAJOR GENERAL
ADJUTANT GENERAL

MICHAEL E. RAWLINS
COLONEL
DEPUTY ADJUTANT GENERAL

Engineering Office

Mr. Michael G. Buck
Administrator
Department of Land and Natural Resources
Division of Forestry and Wildlife
1151 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Buck:

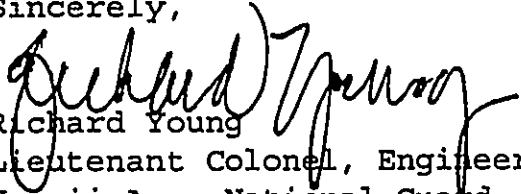
Subject: Draft Environmental Assessment (DEA) of the Hawaii
Army National Guard Limited Army Aviation Support Facility
(LAASF) Addition/Alteration at Hilo International Airport

Thank you for reviewing the DEA for our proposed addition/
alteration to the LAASF. We have the following response to your
comments:

The addition/alteration will take place within the present
location of the Hawaii Army National Guard facility. We will
include two additional exhibits, Exhibit 2A and 2B, in the final
EA to clarify the location of the addition/alteration.

Your support of the intents and purposes of the expanded
facility is appreciated. A copy of the final EA will be provided
upon request. If there are any questions, please have your staff
contact Major Ron Swafford, Environmental Protection Specialist,
at 733-4214.

Sincerely,


Richard Young
Lieutenant Colonel, Engineer
Hawaii Army National Guard
Facility Management Officer



BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

MICHAEL D. WILSON
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY
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AQUACULTURE DEVELOPMENT
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HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT
WATER RESOURCE MANAGEMENT

October 23, 1995

Lt. Col. Richard Young
Hawaii Army National Guard
Facility Management Officer
Office of the Adjutant General
3949 Diamond Head Road
Honolulu, HI 96816-4495

c:\w\c\d\ual\95961ryoung.ltr

Dear Lt. Col. Young:

SUBJECT: Preliminary Draft Environmental Assessment of the Hawaii Army National Guard Limited Army Aviation Support Facility (LAASF) Addition/Alteration, Hilo International Airport

We have had the opportunity to review the subject matter and have the following comments:

- (1) Exhibit 2 does not indicate where the addition/alteration will take place. I assume that it is within the present location of the Hawaii Army National Guard facility.
- (2) Inasmuch as the alteration/addition of the Hawaii Army National Guard facility is to provide continued and expanded services to the people of the Big Island, we fully support the intents and purposes of the proposed expanded facility.

Thank you for the opportunity to comment.

Very truly yours.

A handwritten signature in black ink, appearing to read "Michael G. Buck".

Michael G. Buck
Administrator

cc: Hawaii Branch