

JUN 1978
 U. S. DEPARTMENT OF COMMERCE
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEAN SURVEY, NATIONAL GEODETIC SURVEY

HORIZONTAL CONTROL DATA

by the
 National Ocean Survey
 OLD HAWAIIAN DATUM

QUAD 211573 STATION 1388
 HAWAII
 LATITUDE 21 ° 00' TO 21 ° 30'
 LONGITUDE 157 ° 30' TO 158 ° 00'
 DIAGRAM NF 4-11 OAHU

U.S. Quarantine Station Flagstaff (Honolulu County, Hawaii,
 E.O.H., 1940)--The U.S. Quarantine flagstaff is in the city of
 Honolulu, on Sand Island. It is near the NW corner of the boathouse
 at the Quarantine Station.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION US QUARANTINE STA FLAGSTAFF
 STATE HAWAII YEAR 1940 THIRD ORDER

SOURCE G- 9849

GEODETIC LATITUDE:	21 18 38.321	ELEVATION:	METERS
GEODETIC LONGITUDE:	157 52 35.483		FEET

STATE COORDINATES (Feet)				
STATE & ZONE	CODE	X	Y	θ (OR Δ θ) ANGLE*
HI 3	5105	542,031.67	52,314.01	+ 0 02 42

* PLANE AZIMUTH HAS BEEN COMPUTED BY THE θ (OR Δ θ) FORMULA NEGLECTING THE SECOND TERM.

TO STATION OR OBJECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH* (From south)	CODE

QF 149

HORIZONTAL CONTROL DATA

by the
 National Ocean Survey
 OLD HAWAIIAN DATUM

QUAD 211573 STATION 1389
 HAWAII
 LATITUDE 21° 00' TO 21° 30'
 LONGITUDE 157° 30' TO 158° 00'
 DIAGRAM NF 4-11 OAHU

United States Engineers north base (Oahu Island, O. B. French, 1909).—On made ground about ¼ mile northwest of the lighthouse at the entrance to Honolulu Harbor. Marked by concrete post.

FORM 57
 (11-6-5)
 U. S. DEPARTMENT OF COMMERCE - NATIONAL OCEAN SURVEY
 RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: USE NORTH BASE
 ESTABLISHED BY: O.B.F. YEAR: 1909 STATE: Hawaii
 RECOVERED BY: D.G. Rushford YEAR: 1964 COUNTY: Honolulu

Detailed statement as to the fitness of the original description; including marks found, stampings, changes made, and other pertinent facts:

Station was recovered and found in good condition, although it is now marked with a concrete platform with iron pipe in center, instead of with a concrete post as previously described. The station will probably be in the way of future development of Sand Island so no reference marks were set. A complete description follows:

Station is located near the southeast end of Sand Island, about 750 yards southwest, across the harbor, from the Aloha Tower, along the southwest side of the main road and in northeast edge of storage yard of the C.S. Pedro Auto Wrecking Yard.

To reach station from intersection of Nimitz Highway and Sand Island Access Road, go 1.3 miles on Sand Island Access Road to drawbridge. Cross bridge and continue for 1.4 miles to station on right.

Station is center of 1-1/2-inch iron pipe, set flush, in center of a 5-foot-square, concrete platform that is flush with ground. "USED NORTH BASE" is inscribed in the top of the platform. It is 2.5 feet southwest of fence, 23 feet northwest of gatepost, 48.5 feet west-southwest of power pole #37, and on direct line with station PUNCHBOWL target and the northwest 1 of the 5 stacks on the Hawaiian Electric Co. plant.

* Name of chief of party should be inserted here. The officer who actually visited the station should sign his name at the end of the recovery note.
 Note.—One of these forms must be used for every station recovered. COMB-DC 343 14

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: USE NORTH BASE
 STATE: HAWAII YEAR: 1909 THIRD -ORDER

SOURCE: G-SP156

GEODETIC LATITUDE	21° 18' 24.105	ELEVATION	3	METERS
GEODETIC LONGITUDE	157 52 27.532	SCALED		FEET

STATE COORDINATES (Feet)				
STATE & ZONE	CODE	X	Y	β OR Δ or ANGLE °
HI-3	5103	542,784.62	50,880.23	+ 0 02' 44"

* PLANE AZIMUTH HAS BEEN COMPUTED BY THE β OR Δ or FORMULA NEGLECTING THE SECOND TERM.

TO STATION OR OBJECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH* (From south)	CODE

QI 358

HORIZONTAL CONTROL DATA

by the
 National Ocean Survey
 OLD HAWAIIAN DATUM

QUAD 211573 STATION 1390
 HAWAII
 LATITUDE 21 ° 00' TO 21 ° 30'
 LONGITUDE 157 ° 30' TO 158 ° 00'
 DIAGRAM NF 4-11 OAHU

Waiahole (Oahu Island, E. R. Hand, 1926).—On the eastern coast of Oahu, near the shore of Kaneohe Bay, and back from the main highway where it runs along the shore of the bay, between Libbyville and Waikane, and at a point where the concrete road bends sharply around the end of the ridge between the Waiahole and Kaalaea Valleys. Station is at the most southeasterly part of curve, back from the road and up the slope about 65 feet. The telephone wires cut across the end of the ridge, passing almost directly over the station. Marked according to note 5; the rock in which the mark is placed is about 4 feet high and is the only rock in the vicinity.

WAI AHOLE (Hawaii, E. R. H., 1926; H. A. P., 1932)
 --Recovered in good condition. Station is 13 meters N of a cornfield and about 3 meters W of a path under the telephone line.

(H. A. P., 1933)--Recovered in good condition. The clearing has now been extended N to the station and a fence built near the mark.

(11-8-55)

RECOVERY NOTE, TRIANGULATION STATION

NAME OF STATION: WAI AHOLE
 ESTABLISHED BY: E. R. H. YEAR: 1926 STATE: Hawaii
 RECOVERED BY: D. G. Rushford YEAR: 1964 COUNTY: Honolulu

Detailed statement as to the fitness of the original description; including marks found, stampings, changes made, and other pertinent facts:

Station mark was recovered in good condition. Line of sight to all old stations is blocked by banana trees so no reference marks were established. A complete description follows:

Station is located about 5 miles northwest of Kaneohe, on point of ridge between Waiahole and Kaalaea Valleys, just above the highway where it rounds the end of the ridge, and is at the north end of the yard at the home at 47-896 Kamehameha Highway.

To reach station from the post office in Kaneohe, go north on Kamehameha Highway for 6.0 miles to mailbox on left with address 47-896. Turn left up steep driveway for about 75 yards to station.

Station mark is a standard disk stamped WAI AHOLE 1926, cemented in a drill hole in a 4 x 6-foot boulder that projects 3 feet. It is 1 foot south of fence, 12 feet west from center of large mango tree, 10.5 feet east of the east 1 of 2 palms, and 92.2 feet north-northwest of the northeast corner of the house.

* Name of chief of party should be inserted here. The officer who actually visited the station should sign his name at the end of the recovery note.
 Note.—One of these forms must be used for every station recovered.

COMB-DC 34314

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: WAI AHOLE
 STATE: HAWAII YEAR: 1926 THIRD ORDER
 SOURCE: G-SP156

GEODETIC LATITUDE: 21 ° 28' 43.636	ELEVATION: 15 METERS
GEODETIC LONGITUDE: 157 50 43.980	SCALED FEET

STATE COORDINATES (Feet)				
STATE & ZONE	CODE	X	Y	θ OR Δ or ANGLE *
HI 3	5103	552,514.88	113,399.69	+ 0 ° 03' 24 "

* PLANE AZIMUTH HAS BEEN COMPUTED BY THE θ OR Δ or FORMULA NEGLECTING THE SECOND TERM

TO STATION OR OBJECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH * (From south)	CODE

QI 417

HORIZONTAL CONTROL DATA

by the
 National Ocean Survey
 OLD HAWAIIAN DATUM

QUAD 211573 STATION 1391
 HAWAII
 LATITUDE 21 ° 00' TO 21 ° 30'
 LONGITUDE 157 ° 30' TO 158 ° 00'
 DIAGRAM NF 4-11 OAHU

DEPARTMENT OF COMMERCE
 U. S. COAST AND GEODETIC SURVEY
 FORM 538 D

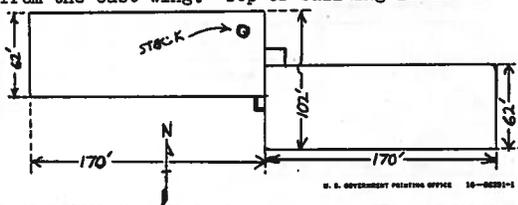
DESCRIPTION OF TRIANGULATION INTERSECTION STATION

Waiialae,
 NAME OF STATION: Kahala-Hilton Year: 1964 STATE: Hawaii COUNTY: Honolulu
 Hotel, stack
 CHIEF OF PARTY: Dewey G. Rushford

Description, including sketch of object: Located about 2 miles northeast of Diamond Head, near seashore, on Waiialae Golf Course.

Station is the small black stack, 20 inches in diameter and projecting 2 feet above roof-line of the Kahala-Hilton Hotel. It is 16 feet west of the north-south center line of the building, near northeast corner of west wing of the building and 18 feet south of north edge of roof.

The hotel is a 10-story, concrete structure, rectangular in shape and setting east-west. The west wing of the building is offset 40 feet north from the east wing. Top of building is 145 feet above ground.



U. S. GOVERNMENT PRINTING OFFICE 16-58291-1

Described by R. F. Hanson

RECOVERY NOTE, TRIANGULATION STATION INTERSECTION

NAME OF STATION: Waiialae, Kahala-Hilton Hotel Stack
 ESTABLISHED BY: D.G.R. YEAR: 1964 STATE: Hawaii BENCH MARK(S) ALSO
 RECOVERED BY: E. Pursel Jr. YEAR: 1969 COUNTY: Honolulu
 AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN: About 4 miles east of Honolulu

Detailed statement as to the fitness of the original description, including marks found, stampings, changes made, and other pertinent facts:
This mark was recovered in good condition as described.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: WAIALAE KAHALA HILTON STACK
 STATE: HAWAII YEAR: 1964 THIRD ORDER

SOURCE: G-12664

GEODETIC LATITUDE:	21 16' 31.286	ELEVATION:	METERS
GEODETIC LONGITUDE:	157 46 35.709		FEET

STATE COORDINATES (Feet)				
STATE & ZONE	CODE	X	Y	θ OR Δ OR ANGLE °
HI 3	5103	576,068.64	39,533.71	+ 0 04' 52"

* PLANE AZIMUTH HAS BEEN COMPUTED BY THE θ OR Δ OR α FORMULA NEGLECTING THE SECOND TERM.

TO STATION OR OBJECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH* (From south)	CODE

JUN 1978
 U. S. DEPARTMENT OF COMMERCE
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEAN SURVEY, NATIONAL GEODETIC SURVEY

HORIZONTAL CONTROL DATA

by the
 National Ocean Survey
 OLD HAWAIIAN DATUM

QUAD 211575 STATION 1392
 HAWAII
 LATITUDE 21 ° 00' TO 21 ° 30'
 LONGITUDE 157 ° 30' TO 158 ° 00'
 DIAGRAM NF 4-11 OAHU

NO TEXT

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: WAIKIKI CGS

STATE: HAWAII

YEAR: 1892

SECOND

ORDER

SOURCE: G-SP156

GEODETIC LATITUDE:	21 ° 16' 52.23	ELEVATION	2	METERS
GEODETIC LONGITUDE:	157 50 01.18	SCALED		FEET

STATE COORDINATES (Feet)				
STATE & ZONE	CODE	X	Y	φ OR Δ OR ANGLE *
HI 3	5103	556,633.23	41,622.95	+ 0° 03' 37"

* PLANE AZIMUTH HAS BEEN COMPUTED BY THE φ OR Δ OR ANGLE * FORMULA NEGLECTING THE SECOND TERM.

TO STATION OR OBJECT	GEODETIC AZIMUTH (From <i>sectb</i>)	PLANE AZIMUTH * (From <i>sectb</i>)	CODE

QD 400

HORIZONTAL CONTROL DATA

by the
 National Ocean Survey
 OLD HAWAIIAN DATUM

QUAD 211573 STATION 1393
 HAWAII
 LATITUDE 21 ° 00' TO 21 ° 30'
 LONGITUDE 157 ° 30' TO 158 ° 00'
 DIAGRAM NF 4-11 OAHU

Waikiki latitude, eccentric (Oahu Island, E. D. Preston, 1891).— Position refers to the trigonometric station which is 4.58 meters (15.0 feet) north and 19.38 meters (63.6 feet) west of the Coast and Geodetic Survey latitude pier at Waikiki, about 2 miles southeast of Honolulu, and about 400 feet from the sea-shore. The latitude pier of the observatory of the International Geodetic Association is 9.45 meters (31.0 feet) north and 9.39 meters (30.8 feet) west of the Coast and Geodetic Survey latitude pier.

Form 528
 (11-8-65)

U. S. DEPARTMENT OF COMMERCE - LAND AND GEODETIC SURVEY
RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: WAIKIKI LATITUDE ECCENTRIC
 ESTABLISHED BY: E.D. Preston YEAR: 1891 STATE: Hawaii
 RECOVERED BY: D.G. Rushford YEAR: 1964 COUNTY: Honolulu

Detailed statement as to the fitness of the original description; including marks found, stampings, changes made, and other pertinent facts:

Station is gone. This location is in the heavily built up beach front part of Waikiki that is occupied by hotels.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: WAIKIKI LATITUDE ECC
 STATE: HAWAII YEAR: 1891 THIRD ORDER

SOURCE: G-SP156

GEODETIC LATITUDE:	21 ° 16' 52.384	ELEVATION:	METERS
GEODETIC LONGITUDE:	157 50 01.856		FEET

STATE COORDINATES (Feet)				
STATE & ZONE	CODE	X	Y	θ (OR Δ) ANGLE *
HI 3	5105	556,569.28	41,638.42	+ 0 ° 03' 37"

* PLANE AZIMUTH HAS BEEN COMPUTED BY THE θ (OR Δ) ANGLE FORMULA NEGLECTING THE SECOND TERM.

TO STATION OR OBJECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH * (From south)	CODE

* Name of chief of party should be inserted here. The officer who actually visited the station should sign his name at the end of the recovery note.
 Note.—One of these forms must be used for every station recovered.

HORIZONTAL CONTROL DATA

by the
 National Ocean Survey
 OLD HAWAIIAN DATUM

QUAD 211573 STATION 1395
 HAWAII
 LATITUDE 21° 00' TO 21° 30'
 LONGITUDE 157° 30' TO 158° 00'
 DIAGRAM NF 4-11 OAHU

NO ORIGINAL TEXT

WHITE CHURCH SPIRE (Hawaii, O.B.F., 1910; H.A.P., 1932)
 --Station is the Catholic Church in Waikane,
 a yellow wooden building 19 by 49 feet, standing 52 meters W of
 the paved highway. On the S end of the building there is a square,
 yellow cupola with a yellow pyramidal roof with a cross as the
 finial.

Form 526
 (11-8-55)

U. S. DEPARTMENT OF COMMERCE - COAST AND GEODETIC SURVEY
RECOVERY NOTE, TRIANGULATION STATION
 INTERSECTION

R

NAME OF STATION: White Church Spire
 ESTABLISHED BY: O.B.F. YEAR: 1910 STATE: Hawaii
 RECOVERED BY: D.M. Whipp YEAR: 1965 COUNTY: Honolulu

Detailed statement as to the fitness of the original description; including marks found, stampings, changes made, and other pertinent facts:

A church was found at the site, however it is somewhat larger than the one described originally. It has a cupola at the southwest corner. From St. Annes Rectory in Kaneohe it was learned that the church was rebuilt in the 1930's, but it was not known there if it was rebuilt on the same site and around the old spire and cupola. The church cannot be seen from any distance because of trees so it could not be checked by angle from a triangulation station. Station is probably lost.

* Name of chief of party should be inserted here. The officer who actually visited the station should sign his name at the end of the recovery note.
 Note.—One of these forms must be used for every station recovered. COM-DC 34314

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: WHITE CHURCH SPIRE
 STATE: HAWAII YEAR: 1910 THIRD -ORDER

SOURCE: G-SP156
 NO OBSERVATION CHECK ON THIS POSITION

GEODETIC LATITUDE:	21° 29' 53.22	ELEVATION:	METERS
GEODETIC LONGITUDE:	157 51 16.80		FEET

STATE COORDINATES (Feet)				
STATE & ZONE	CODE	X	Y	θ OR Δ OR ANGLE °
HI 3	5103	549,408.57	120,417.84	+ 0 03 12 "

* PLANE AZIMUTH HAS BEEN COMPUTED BY THE θ OR Δ OR FORMULA NEGLECTING THE SECOND TERM.

TO STATION OR OBJECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH * (From south)	CODE

QI 416

HORIZONTAL CONTROL DATA

by the
 National Ocean Survey
 OLD HAWAIIAN DATUM

QUAD 211573 STATION 1396
 HAWAII
 LATITUDE 21° 00' TO 21° 30'
 LONGITUDE 157° 30' TO 158° 00'
 DIAGRAM NF 4-11 OAHU

NO ORIGINAL TEXT

Form 528
 (11-8-55)

U. S. DEPARTMENT OF COMMERCE - COAST AND GEODETIC SURVEY
**RECOVERY NOTE, TRIANGULATION STATION
 INTERSECTION**

114

R

NAME OF STATION: Wilhelmina Rise, center of reservoir shed
 ESTABLISHED BY: L.G.S. YEAR: 1928 STATE: Hawaii
 RECOVERED BY: D.G. Rushford YEAR: 1964 COUNTY: Honolulu

Detailed statement as to the fitness of the original description; including marks found, stampings, changes made, and other pertinent facts:

Station was recovered in good condition.
 It is a 9-foot-square, green structure with a peaked roof. The building sets on the north edge of a large, flat-topped, concrete water reservoir that projects 2 to 4 feet above ground line, excepting at the north side, where it is flush with the hillside.

The reservoir is located on Wilhelmina Rise at about 1100 feet elevation, 70 feet south-southwest of station KALEPEAMO, 250 feet northeast of Maunalani Circle and at the end of a concrete driveway leading through a locked gate off Maunalani Circle. It is in a grove of ironwood trees and not visible from a distance.

* Name of chief of party should be inserted here. The officer who actually visited the station should sign his name at the end of the recovery note.
 Note—One of these forms must be used for every station recovered.

COM-DC 34914

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: WILHELMINA C OF RESERVOIR SHED

STATE: HAWAII

YEAR: 1928

THIRD

ORDER

SOURCE: G- 7448

NO OBSERVATION CHECK ON THIS POSITION

GEODETIC LATITUDE:	21° 18' 04.73	ELEVATION:	METERS
GEODETIC LONGITUDE:	157 47 16.71		FEET

STATE COORDINATES (Feet)				
STATE & ZONE	CODE	X	Y	∠ OR Δ °' ANGLE *
HI 3	5103	572,178.15	48,956.78	+ 0 04 37

* PLANE AZIMUTH HAS BEEN COMPUTED BY THE ∠ OR Δ °' FORMULA NEGLECTING THE SECOND TERM.

TO STATION OR OBJECT	GEODETIC AZIMUTH (From <i>mark</i>)	PLANE AZIMUTH * (From <i>mark</i>)	CODE

QE 020

HORIZONTAL CONTROL DATA

by the
 National Ocean Survey
 OLD HAWAIIAN DATUM

QUAD 211573 STATION 1397
 HAWAII
 LATITUDE 21° 00' TO 21° 30'
 LONGITUDE 157° 30' TO 158° 00'
 DIAGRAM NF 4-11 OAHU

DEPARTMENT OF COMMERCE
 U. S. COAST AND GEODETIC SURVEY
 Form 526
 Rev. Oct., 1962

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: **Woodlawn**
 CHIEF OF PARTY: **L.G.S.**
 Surface-station mark, Note,*
 Underground-station mark, Note,*
 Reference mark, Note,*
 Reference mark, Note,*
 Azimuth mark, Note,*
 Witness mark, Note,*
 Height of light above station mark meters.
 Height of telescope above station mark meters.†

STATE: **Hawaii** LOCALITY: **Honolulu**
 YEAR: **1928**

DISTANCES AND DIRECTIONS TO REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND			
OBJECT	DISTANCE	DIRECTION	AZIMUTH

Detailed description: A standard bronze disk (Territory Survey) set in concrete pier on ground at the extreme east side of Manoa Valley on the upper eastern end of Kahaloa drive where it makes a sharp bend to the north. It is about 15 feet east of curb, just beyond the bend.

Form 526
 (11-8-65)

U. S. DEPARTMENT OF COMMERCE - COAST AND GEODETIC SURVEY
RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: **WOODLAWN**
 ESTABLISHED BY: **L.G.S.** YEAR: **1928** STATE: **Hawaii**
 RECOVERED BY: **D.M. Whipp** YEAR: **1965** COUNTY: **Honolulu**

Detailed statement as to the fitness of the original description; including marks found, stampings, changes made, and other pertinent facts:

Station was searched for but not found. The home of K.C. Yuen is now on this land. The yard is terraced and it is believed that the station was destroyed by the landscaping.

* Name of chief of party should be inserted here. † The officer who actually visited the station should sign his name at the end of the recovery note.
 Note.—One of these forms must be used for every station recovered.

Comm-DC 34314

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: **WOODLAWN**
 STATE: **HAWAII** YEAR: **1928** SECOND **SECOND** ORDER

SOURCE: **G- 7448**

GEODETIC LATITUDE: 21° 18' 45.372	ELEVATION: 122 METERS
GEODETIC LONGITUDE: 157° 48' 13.535	SCALED FEET

STATE COORDINATES (Feet)				
STATE & ZONE	CODE	X	Y	θ 10R Δ θ 1 ANGLE °
HI 3	5103	566,799.55	53,050.57	+ 0° 04' 17"

* PLANE AZIMUTH HAS BEEN COMPUTED BY THE θ 10R Δ θ 1 FORMULA NEGLECTING THE SECOND TERM.

TO STATION OR OBJECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH* (From south)	CODE

QE 010

HORIZONTAL CONTROL DATA

by the
 National Ocean Survey
 OLD HAWAIIAN DATUM

QUAD 211573 STATION 1398
 HAWAII
 LATITUDE 21 ° 00' TO 21 ° 30'
 LONGITUDE 157 ° 30' TO 158 ° 00'
 DIAGRAM NF 4-11 OAHU

NO ORIGINAL TEXT

WYLLIE (Hawaii, L.G.S., 1927; E.O.H., 1940)
 --This station is located at the N side of Nuuanu Valley,
 on the S slope of a ridge known as Alewa Heights. It is on the N
 extension of Wyllie Street.
 Station is marked by a Type C mark of the Hawaiian Terri-
 torial Survey.

(11-8-55)

RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: WYLLIE
 ESTABLISHED BY: L.G.S. YEAR: 1927 STATE: Hawaii
 RECOVERED BY: W.R. Porter YEAR: 1963 COUNTY: Honolulu

Detailed statement as to the status of the original description; including marks found, stampings, changes made, and other pertinent facts:

A "Type C" Hawaiian Territorial Survey signal was recovered and found in good condition.

A complete description follows:

Station is located about 2 miles airline north-northeast of the Federal Building in Honolulu; in the Alewa Heights District, and in back of the house at 1172 Kaumailuna Pl. To reach station from the junction of Beretania Street and Nuuanu Ave. in Honolulu, go northeast on Nuuanu Ave. for 1.5 miles; turn left on Wyllie Street and go 0.55 mile; turn left at T-intersection and follow Alewa Drive upgrade for 0.4 mile; turn right and go 0.15 mile on Alewa Drive to fork. Continue ahead, on right fork, Kaumailuna Pl., for 0.15 mile to end of street and station up behind house.

Station is center of 2-1/2-inch, iron pipe projecting from center of 5-foot-square, concrete floor on top of solid, stone and cement foundation that is 4 feet high. It sets in an L-corner at rear of house, 1.8 feet southeast of one eave trough and 3.6 feet northeast of other eave trough. The entire signal is heavily covered with vines.

NOTE: Because of the well-protected position of the station, and because there is no suitable location in the small yard area, no reference marks were established.

* Name of chief of party should be inserted here. The officer who actually visited the station should sign his name at the end of the recovery note.
 Note.—One of these forms must be used for every station recovered.

Comm-DC 343 14

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: WYLLIE
 STATE: HAWAII YEAR: 1927 SECOND ORDER

SOURCE: G- 7448

GEODETIC LATITUDE: 21 ° 20' 15.651	ELEVATION 160 METERS
GEODETIC LONGITUDE: 157 51 17.401	SCALED FEET

STATE COORDINATES (Feet)				
STATE & ZONE	CODE	X	Y	β OR Δ ± ANGLE *
HI 3	5103	549,405.74	62,140.83	+ 0 05 10 "

* PLANE AZIMUTH HAS BEEN COMPUTED BY THE β OR Δ ± FORMULA NEGLECTING THE SECOND TERM.

TO STATION OR OBJECT	GEODETIC AZIMUTH (From south)	PLANE AZIMUTH * (From south)	CODE

QE 006

