

9034
9035

Diag. Cht. No. 4116

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey SHORELINE (PHOTOGRAMMETRIC)

Field No. _____ Office No. T-9034
T-9035

LOCALITY

State HAWAIIAN ISLANDS

General locality OAHU

Locality AHUA POINT-KEEHI LAGOON & HONOLULU
HARBOR

194 8.

CHIEF OF PARTY

L. C. Lande

L. C. Wilder

LIBRARY & ARCHIVES

DATE Dec. 21-1953

B-1870-1 (1)

DECLASSIFIED

AUTHORITY

Memo, Photogrammetry, 4-3-64

DATE

4-7-64

BY

DLB

DATA RECORD

T-9034

Quadrangle (II):

Project No. (II):

Field Office: Honolulu, Oahu I., Chief of Party: Lt. Comdr. L. C. Wilder
Hawaii.

Compilation Office:

Chief of Party: L. C. Lande

Graphic Compilation Section

Division of Photogrammetry, Washington, D. C.
Instructions dated (II III):Copy filed in Descriptive
Report No. T- (VI)

Completed survey received in office:

Reported to Nautical Chart Section:

Reviewed: 4 Feb. 1952

Applied to chart No. 4109

Date: 8/24/48

Redrafting Completed:

Registered: 20 April, 1953

Published:

Compilation Scale: 1:5,000

Published Scale:

Scale Factor (III): 1.000

Geographic Datum (III): Old Hawaiian

Datum Plane (III): ~~Sea Level~~ M H W

Reference Station (III): Station G

Lat.: 21° 18' 1,601.0 m.

Long.: 157° 55' 1,436.3 m.

Adjusted
~~Unadjusted~~

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
5-16 to 5-28	1946	?	1:5,000	?
xx-10 to xx-20				
6-4 to 6-25				
2-28 to 2-40				
(includes photos for T-9034 and T-9035)				

Accession No. 1779

<u>T-9034</u>	<u>T-9035</u>
<i>Run 1 Nos 4-13</i>	<i>Run 2 Nos. 28-30</i>
2 30-40	4 11-17
XX 10-13	5 17-28
	6 27-29
	XX 14-21

Tide from (III): Tide Tables

Mean Range: 1.2'

Spring Range: 1.9'

Camera: (Kind or source) Navy ~~K-18~~ (K-18)

Field Inspection by: None

date:

Field Edit by: Lt. Comdr. L.C. Wilder
for C.S. 402

date: Dec. 31, 1947

Date of Mean High-Water Line Location (III):

• Projection and Grids ruled by (III) T.L.J.

date: March 1948

" " " checked by: T.L.J.

date: March 1948

Control plotted by: B.J. Colner, L.M. Gazik

date: (3-48)
(3-17-47)

Control checked by: L. Martin Gazik

date: (3-20-47)
(3-48)

Radial Plot by: L. Martin Gazik

date: 4-48

Detailed by: L. Martin Gazik

date: 5-7-48

Reviewed in compilation office by:

date:

Elevations on Field Edit Sheet
checked by:

date:

STATISTICS (III)

Land Area (Sq. Statute Miles):

Shoreline (More than 200 meters to opposite shore):

Shoreline (Less than 200 meters to opposite shore):

Number of Recoverable Topographic Stations established:

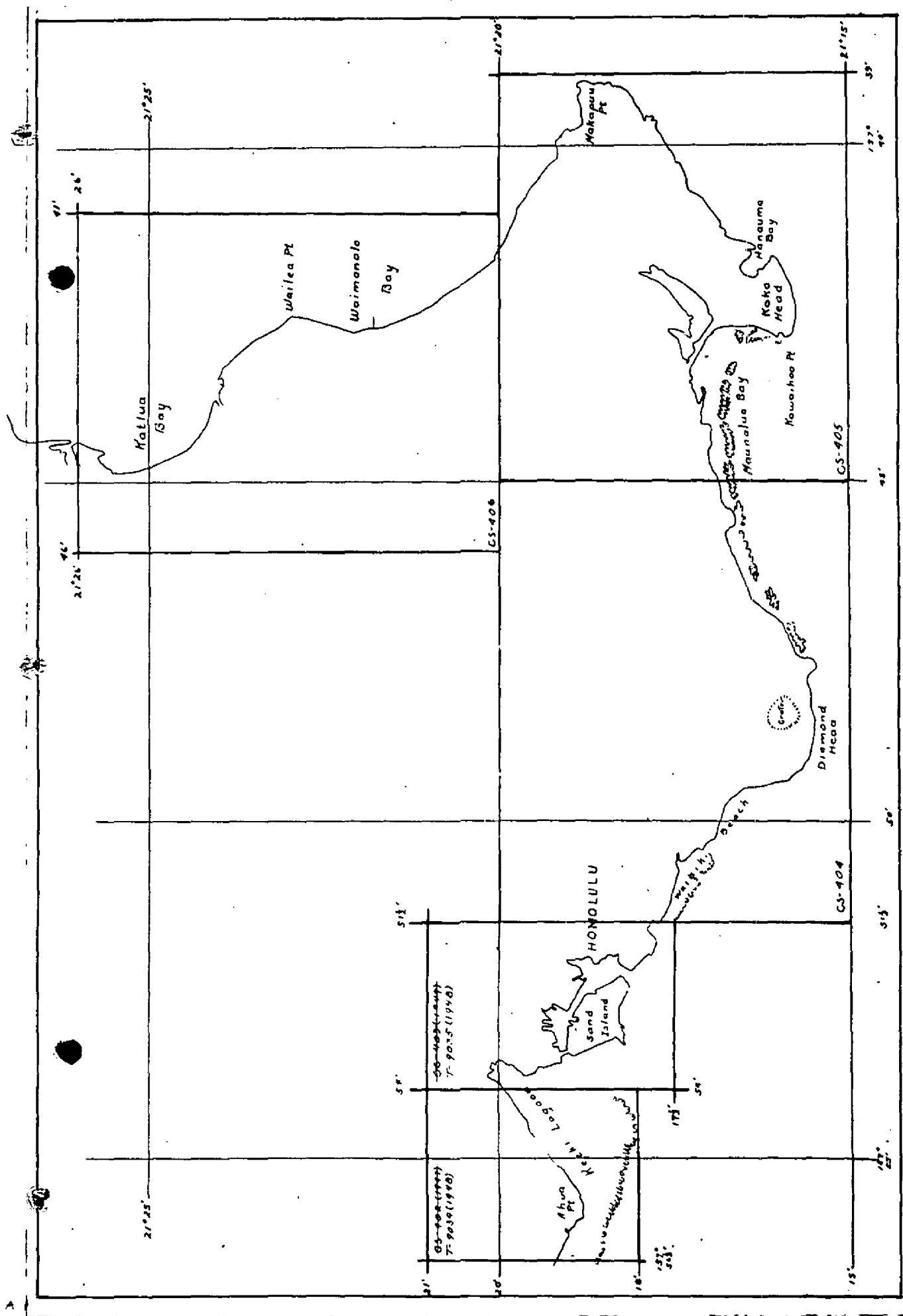
Number of Temporary Hydrographic Stations located by radial plot:

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:



SUMMARY TO ACCOMPANY T-9034 and T-9035

These two shoreline surveys were not assigned a ~~project~~ project number, but are considered part of a "miscellaneous" group. No Completion Report will be written, therefore this summary serves as a record of procedures and data. The two map manuscripts were made in 1948 to replace correction sheets CS-402 and CS-403 made in 1947. Three other correction sheets (CS-404, CS-405, and CS-406), also made in 1947, were of charting accuracy and were applied to charts.

T-9034 extends from Latitude $21^{\circ}18'$ to 21° , Longitude $157^{\circ}54'$ to $56\frac{1}{2}'$. It includes Ahua Point and Keehi Lagoon. T-9035 extends from Latitude $21^{\circ}17\frac{1}{2}'$ to 21° ; Longitude $157^{\circ}51\frac{1}{2}'$ to $54'$. This is the Honolulu-Sand Island area.

No field inspection was made prior to compilation of CS-402 to CS-406, inclusive. Ozalid prints of these five map manuscripts, together with the photographs used, were forwarded to Lt. Comdr. L. C. Wilder at the Honolulu Field Office on October 15, 1947. These prints, with field edit notes added, were returned to the Washington Office where the indicated additions and corrections were applied to the map manuscripts.

In the case of CS-402 and CS-403 the field edit disclosed inaccuracies which made the sheets unfit for charting purposes. Consequently positions for eight new control stations and one USE station were furnished in order that a new, better-controlled plot could be laid, using the photographs of the earlier plot. The new map manuscripts were numbered T-9034 and T-9035 and the map manuscripts for CS-402 and CS-403 were discarded.

Data pertaining to T-9034 and T-9035:

1. Chart Letters: (filed in Nautical Charts Division)

(a) No. 257 (1944)

Correspondence re: control
Geographic positions USE control.

(b) No. 764 (1947), includes

*Field Edit Report for CS-402 & CS-403
*Geographic positions for new control

(c) No. 65 (1948), includes

Field Edit Report for CS-404, CS-405, CS-406.

2. Field Edit Instructions, CS-402 to CS-406, inclusive
Ahua Point to Kapoho Point. 1 October 1947

*Copies are attached to this Descriptive Report.

Copy

FIELD EDIT REPORT
Manuscripts CS 402 - T-9034
CS 403 - T-9035
Honolulu, T.H.

Nov. 4, 1947

Methods - Adequacy for Charting - Changes in the Manuscripts -
Additional Control - Accuracy

Method of Field Edit: This office has on file mosaics of the areas covered by these two sheets, which were made in this office from a set of the same photographs which were used for the office compilation. The use of these mosaics coupled with the fact that I am particularly familiar with most of the area of these two sheets, required very little field inspection. Only those areas or objects regarding which there was some uncertainty were inspected, in the field. The mosaics were a great help in checking the compilations.

Adequacy for Chart Revision: I believe that these two compilations are satisfactory for chart revision. I have not attempted to check the accuracy. (This is the subject of a following paragraph). As regards the coverage and completeness for chart revision, the manuscripts are good.

Changes in the Manuscripts: I have indicated, on the manuscripts returned, deletions by a zig-zag line (usually in blue) and additions by a rough outline of the object or a note explaining the omission (generally in red). I have deleted a number of temporary buildings which have been removed. The Army and Navy are removing some of their war installations. I have also deleted some roads which were little more than trails and consequently unimportant. Where a street should have been drawn through a city block, I have drawn a line. If a street was drawn through erroneously, I have deleted.

Additional Control: Additional control, requested in your instructions, is appended to this report.

Accuracy of the Manuscripts: The additional control which I obtained for sheet CS 402 did not agree well with manuscript positions. I take this to mean that the control used was scant and inadequate. This is an indication of the inaccuracy of the manuscript without adequate control. If your office had requested control at the time of the compilation, this office could have obtained same. I believe that I indicated in one of my letters my ability to obtain the control needed upon request by your office.

I have not attempted to check the accuracy of the compilations and do not see how this is possible without considerable field work on CS 402. I would judge that the plotting of additional triangulation on CS 403 (triangulation which was not used in the radial plot) would serve as a satisfactory check. Such stations as Kalihi Fire Sta.,

Kapalama Incinerator Chy and Kewalo Incinerator Chy are available from Special Publication 156 or the Nautical Chart Section.

Geographic Names: The following names have been checked as correct: Honolulu Airport, Keehi-Lagoon, Kapalama Basin, Sand Island, Kewalo Basin, and Kalihi Entrance. I believe that these are the only names on Chart 4109, regarding which there might be some question.

Landmarks and Prominent or Important Buildings: "Landmarks for Charts" is attached.

It is recommended that the following items in addition to "Landmarks for Charts" be charted and named on Chart 4109. (These are named on CS 403). Quarantine Station, Immigration Station, Seamen's Institute, Aala Park, Irwin Park, O. R. & I. Depot, Iolani Palace and Library of Hawaii.

Submitted by,

November 4, 1947

L. C. Wilder, Lieut. Comdr.
Supervisor, Pacific District

Copy

4 November 1947
Honolulu, T.H.

Additional Control located for control of radial plot.
In most cases the highest part of the object was located.
The part that was located, in all cases, was pricked on the
photographs. (Not a position vertically below the part located).
These objects were cut in by D&R (Berger 7") from three stations,
which gave a check on one distance.

			<u>Photo.No.</u>	<u>Remarks</u>
Flag Staff (top of)	21-20-02.70	157-55-26.96	6 - 7	No check
Water Tank (top of) Sand Island	21-18-40.16	157-53-02.16	6 - 18	
Steel Tower (an upright in one corner)	21-18-57.21	157-55-27.66	2 - 35	Top of
Radar (Appears like water tank)	21-19-20-81	157-56-12.92	2 - 38	
Hangar (North gable)	21-19-49.91	157-55-20.53	6 - 8	
Radar (most westerly and highest)	21-20-45.83	157-54-50.60	XX-11	Bottom of aerial
Beacon, Honolulu Airport	21-19-33.08	157-54-49.33	6 - 10	
Building, Center of, at Pistol Range	21-19-45.38	157-54-18.35	6 - 12	
Igloo USE Use for check on item n.1	21-19-52.44	157-56-08.63	2 - 39	Not sure of pricked point

DESCRIPTIVE REPORT: T-9034
PROJECT:
LOCATION: AHUA POINT - KEEHI LAGOON, OAHU, HAWAII.
SCALE: 1:5,000

T-9034 was compiled principally to furnish corrections for Nautical Charts No. 4110 at 1:80,000, No. 4132 and No. 4133 at 1:20,000 scales. T-9034 extends from AHUA POINT in the vicinity of HONOLULU to WAILEA POINT on the eastern coast of OAHU.

Compilation was facilitated by field records and notes furnished by Lt. Comdr. Wilder in Chart Letter 764.

This T-sheet is filed in the Division of Photogrammetry and L.764 (1947) is filed in Nautical Charts Branch.

COMPILATION REPORT FOR T-9034
(including a Radial Plot Report for T-9035)

26 CONTROL

Two ^{pages} sheets, listing the control held and the control not held accompany this report. Included are the following: 17 triangulation stations, 9 stations established by Lt. Comdr. Wilder (especially for T-9034) and 15 U.S.E. stations that were considered held in the plot; those considered not held were 4 U.S.E. and 5 C. & G.S. stations. Of those stations not held, four were ground markers of doubtful office recovery without field verification and the remaining five landmark stations could not be held due to inadequacies of the photographs discussed in the following Radial Plot Report.

27 RADIAL PLOT REPORT FOR T-9034 and T-9035

A continuous plot of some 60 transparent acetate templates was laid for T-9034 and T-9035.

CONTROL DENSITY - Although there seemed to be more than the usual amount of control available, the density at the large scale of 1:5,000 wasn't all that could be desired, particularly, for T-9034. Only 2 or 3 photographs out of 28 on T-9034 had as many as 3 control stations from which to begin a plot with some certainty of having a fixed position.

CONTROL IDENTIFICATION - Verification of the office recovery of control stations that are landmarks was not necessary. However, field verification of the office recovery of the U.S.E. ground stations would have been helpful.

PHOTOGRAPHS - The Navy photographs used are on single weight paper which has a high distortion factor. Although they were flown in 1946, the flights were not all flown on the same or even succeeding days. The flight designated by the number 6 is of larger scale than that of the manuscript while that designated by the number 2 is of approximately the same scale as the manuscript.

CLOSURE AND ADJUSTMENT - The flights held to control and the closure of the pass point intersections was satisfactory in each of their respective areas. However, the intersections of the pass points between flights (in the sidelap) were formed by small angles - very often 15 degrees or less - due to the inadequate sidelap which was approximately 10 per cent.

AREAS OF QUESTIONABLE ACCURACY - None other than those in the sidelap between flights mentioned in the preceeding paragraph.

Templates 6-19 to 6-25 along the shore in the S.E. portion of the T-9035 were relaid to obtain stronger positions for SAND ISLAND, TWIN STACKS, the KEWALO INCINERATOR STACK and the lights in the area.

28 DETAILING

The flight designated by number 6 with a larger scale than the manuscript required the use of the projector. Flight 2, along the shoreline, was very close to scale and obviated its use.

Any difficulties encountered in the compilation of any sidelay areas were due principally to the factors already mentioned above under RADIAL PLOT.

Lack of two cuts in the N.W. corner of the manuscript is the reason for not continuing the compilation to the limit of the projection.

Recent field information furnished and used for this compilation includes the following:

- (1) Positions for 9 additional stations - see item CONTROL above.
- (2) Ozalid for C.S. 402 with corrections and additional information.
- (3) Chart 4132, 7-28-45, with additional information.

29 SUPPLEMENTAL DATA

A Navy construction plan, dated June 30, 1945, OA-NI-1350, of approximately the same area as T-9034 was compared for the azimuths of the airport and the seaplane runways.

30 MEAN HIGH WATER LINE

Other than the year 1946 in which these photographs were taken, no information is available as to time and date of exposure. The range of tide in the Honolulu area is somewhat ^{where} between 1 and 2 feet and the shoreline compilation was made at the tide level appearing on the photographs.

The small shoal area in the western portion of the manuscript also includes an indefinite shoreline which is indicated by a ^{dashed} thin line. The whiteness and flatness in this area produced no clear image under the stereoscope.

31 LOW WATER AND SHOAL LINES

The coral and shoal lines have been indicated by appropriate symbols.

32 LANDMARK AND AIDS TO NAVIGATION

Positions of Landmarks and Aids in the areas for T-9034 and T-9035 have been submitted by Lt. Comdr. Wilder, December 31, 1947, Chart L 764.

36 LANDING FIELDS AND AERONAUTICAL AIDS

Manuscript T-9034 includes all of Honolulu Airport and most of the Naval Seaplane Base. The position of the Honolulu Airport Beacon is given in the Chart Letter mentioned in the preceding paragraph.

Positions of the lights along the seaplane runways have been determined for the most part by radial plot. The various color markings of these lights have been omitted but such particular information may be obtained from the Aeronautical Chart Branch.

37 CLASSIFIED INFORMATION

Much of the information contained in this manuscript is classified "RESTRICTED". See ozalid for this sheet furnished by Lt. Comdr. Wilder.

38 GEOGRAPHIC NAMES

Geographic name form M234 accompanies this report. Kamehameha Highway on T-9034 becomes Dillingham Boulevard after crossing the bridge over Moanalua Stream into Honolulu proper on T-9035 - from a road map furnished by the Honolulu Office.

44 COMPARISONS WITH EXISTING TOPOGRAPHIC QUADRANGLES

Changes brought about by the construction of the airport and seaplane base are not included in any quadrangles of the area now available and satisfactory comparison is not possible.

45 COMPARISON WITH NAUTICAL CHARTS

Chart 4132, dated 8/11/47 at 1:20,000 includes the area compiled. Mapunapuna, Ahua, Kaihikapu and Weli Ponds (the last two are not within the area of T-9034) are now completely filled in as indicated by the field edit for C.S. 402. Two of the three Railroad spurs and the Railroad line coming down from the North in the Northwest corner of Chart 4132, 8/11/47 have not been found on the photographs and no reference is made to their omission from C.S. 402 in the field edit and therefore they are not shown on T-9034.

It is believed that the manuscript adequately portrays the required topographic detail and shoreline structure in the area.

Date: 9-29-48
Submitted by:

L. Martin Zajik

Date: _____
Reviewed by: _____

Date: 9/29/48
Approved by:

L C Lande

CONTROL STATIONS HELD IN
RADIAL PLOT FOR T-9034 and T-9035

NAME OF CONTROL STATION	SOURCE	TYPE MARKER	RECOVERY	VERIFI- CATION	DATE
Allen & Robinson, Warehouse	T-9035	C&S	Landmark	Office	- 1925
Incinerator Stack	"	"	"	"	- 1930
Judiciary Building, Flagstaff (TOWER)	"	"	"	"	- 1909
Post Office, Tower, Flagstaff - N.W.	"	"	"	"	- 1925
Post Office, Tower, Flagstaff - S.E.	"	"	"	"	- "
Radio Station KGU, Mast - West	"	"	"	"	- 1930
Radio Station KGU, Mast - East	"	"	"	"	- "
American Cannery Co., Water Tower	"	"	"	"	- 1927
Pineapple Tank	"	"	"	"	- 1928
Red Gas Tank	"	"	"	"	- 1925
Aloha Tower	"	"	"	"	- 1928
Dome, American Factor's Building	"	"	"	"	- 1925
Kalihi, Fire Station, Tower	"	"	"	"	- "
Ft. Schafter, Flagstaff	"	"	"	"	- 1909
Oahu Pen., Tower	"	"	"	"	- 1925
Station G, Tower (TOWER)	T-9034	"	"	"	- "
Igloo	"	U.S.E.	Ground	Field	Field 1947
Radar, Tower, Fire Control	"	Field	Landmark	"	"
Hangar, N. Gable	"	"	"	"	"
Steel Tower	"	"	"	"	"
Honolulu Airport Beacon (AERO)	"	"	"	"	"
Radar, Tower, Westerly & Highest	"	"	"	"	"
Centre of Building, Pistol Range	"	"	"	"	"
Tank, Sand Island (STANDPIPE)	T-9035	"	"	"	"
Flagstaff	T-9034	"	"	"	"
Ocean	1616 TZ, G-6039	U.S.E.	Ground	Office	None 1942-44
Shoal	"	"	"	"	"
Jeff	"	"	"	"	"
Hindes	T-9035	"	"	"	"
Auk	"	"	"	"	"
Pier 36	"	"	"	"	"
Pier 32	"	"	"	"	"
Koa	"	"	"	"	"
Pohia	"	"	"	"	"
Coal Dock	"	"	"	"	"
Pier 10	"	"	"	"	"
Pier 8	"	"	"	"	"
Terminal	T-9034	"	"	"	"
East End Runway	"	"	"	"	"
Kapalama Basin	T-9035	"	"	"	"
U.S. Quarantine, Flagstaff	"	C&G	Landmark	"	- 1928
Pier 2	"	U.S.E.	Ground	Office	None
Pumping Station Chimney (STACK)	"	C&G	Landmark	"	- 1909
Sand Island, South Base, 1927	"	"	Ground	"	None
Tower	"	U.S.E.	Landmark	"	-

Chart Letter
#0764 (1947)

CONTROL STATIONS NOT HELD

NAME OF CONTROL STATION	SOURCE	TYPE MARKER	RECOVERY	VERIFI- CATION	DATE
Pier 40	6-6037 79035	U.S.E.	Ground	Office	None
Concrete Monument	" "	"	"	"	-
Ft. Armstrong, Flagstaff	"	C&G	Landmark ✓	"	-
Cupola, City Hall	"	"	"	"	-
St. Andrews Cathedral, Highest Tower	"	"	"	"	-

✓ = Appear as landmarks on chart 4132 and 4109

✓ = " " " " " "

DATA RECORD

T- 9035

Quadrangle (II):

Project No. (II):

Field Office: Honolulu
Oahu I., Hawaii

Chief of Party: Lt. Comdr. L. C. Wilder

Compilation Office:

Chief of Party: L. C. Lande

Graphic Compilation Section

Division of Photogrammetry, Washington, D. C.

Instructions dated (II III):

Copy filed in Descriptive
Report No. T- (VI)

Completed survey received in office:

Reported to Nautical Chart Section:

Reviewed: 4 Feb. 1952

Applied to chart No.

Date:

Redrafting Completed:

Registered: 20 April, 1953

Published:

Compilation Scale: 1:5,000

Published Scale:

Scale Factor (III): 1:00

Geographic Datum (III): Old Hawaiian

Datum Plane (III): M H W

Reference Station (III): Sand Island south base, 1927

Lat.: 21° 18' 306.4 m.

Long.: 157° 52' 644.5 m.

Adjusted
~~Used~~ Adjusted

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
5-16 to 5-28 xx-10 to xx-20 6-4 to 6-25 2-28 to 2-40 (includes photos for T-9034 and T-9035)	1946	?	1:5,000	?

Tide from (III): Tide Tables

Mean Range: 1.2'

Spring Range: 1.9'

Camera: (Kind or source) Navy (Camera - K-18)

Field Inspection by: none

date:

Field Edit by: Lt. Comdr. L. C. Wilder
for C.S. 403

date: Dec. 31, 1947

Date of Mean High-Water Line Location (III):

Projection and Grids ruled by (III) T. L. J.

date:

" " " checked by: T. L. J.

date:

Control plotted by: B. J. Colner

date: 3-47

Control checked by: L. M. Gazik

date: 3-47

Radial Plot by: L. M. Gazik

date: 4-48

Detailed by: B. J. Colner, L. M. Gazik

date: (6-18-47
5-25-48)

Reviewed in compilation office by:

date:

Elevations on Field Edit Sheet
checked by:

date:

STATISTICS (III)

Land Area (Sq. Statute Miles):

Shoreline (More than 200 meters to opposite shore):

Shoreline (Less than 200 meters to opposite shore):

Number of Recoverable Topographic Stations established:

Number of Temporary Hydrographic Stations located by radial plot:

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:

Descriptive Report: T-9035

Project:

Location: Honolulu Harbor, Oahu I., Hawaii

Scale: 1:5000

T-9035 was compiled principally to furnish corrections for Nautical Charts # 4109 at 1:5000, # 4132 at 1:20,000, and # 4110 at 1:80,000. This is the second of six shoreline sheets extending from AHUA POINT in the vicinity of HONOLULU to WAILEA POINT on the eastern coast of OAHU.

Compilation was facilitated by field records and notes furnished by Lt. Comdr. L. C. Wilder in Chart letter 764(1947).

This T-sheet is filed in the Division of Photogrammetry and L. 764(1947) is filed in Nautical Charts Branch.

Compilation Report for T-9035

26. Control and 27. Radial Plot Report

This information will be found in the ^{preceding} Compilation Report for T-9034.

28. Detailing

The flight designated by number 6 - with a larger scale than the manuscript required the use of the projector. Flight 2 - along the shoreline, was very close to scale and use of projector was unnecessary. The last three photographs in this flight are over water so that azimuths between principal points were not available.

Any difficulties encountered in the compilation of the sidelap areas were due principally to the factors already mentioned above under Radial Plot.

Recent field information furnished and used for this compilation include the following:

1. Positions for nine additional control stations (all but the STANDPIPE on Sand Island fall on T-9034).
2. Ozalid for C.S. 403 with corrections and additions.
3. Chart 4132, 7-28-45, with additional information concerning the recently filled ponds in the N.W. corner of the manuscript. The photographs used in compiling this area show partial fills, while the latest field information indicates completion of the filling operations. It is suggested that the shoreline in this area be checked in the field since the fill operations may have gone beyond the waters edge.

Some additional information in the vicinity of Sand Island was taken from Navy 9x9 photographs at 1:10,000, taken November 16, 1946, K-17 camera. These photographs were not used in the radial plot. Run 6
4-10
Acc. No.
1559

Kalihi Hospital Flagstaff shown in red on the manuscript was transferred from T-4180.

29. Supplemental Data

A Navy construction plan, dated June 30, 1945, OA-NI-1350, at 1:4800 scale, which includes, approximately, the western half of this manuscript, was consulted for the azimuth of the sea-plane runway and additional information.

30. Mean High Water Line

For this information see the first paragraph under 30. Mean High Water Line in Compilation Report for T-9034.

31. Low Water and Shoal Lines

The coral and shoal lines have been indicated by appropriate symbols.

32. Landmarks and Aids to Navigation

Positions of Landmarks and Aids in the areas for T-9034 and T-9035 have been submitted by Lt. Comdr. Wilder, December 31, 1947, Chart L. 764.

36. Landing Fields and Aeronautical Aids

Only one of three seaplane runways of the Naval Seaplane Base falls within the limits of this manuscript.

37. Classified Information

Some of the information contained in this manuscript is classified "Restricted". See ozalid for this sheet furnished by Lt. Comdr. Wilder.

38. Geographic Names

Geographic name form M 234 accompanies this report.

44. Comparisons with Existing Topographic Quadrangles

Changes brought about by the construction of the seaplane base and considerable fill operations are not included in any quadrangles of the area now available, and satisfactory comparison is not possible.

45. Comparison with Nautical Charts

Chart 4109, dated March 17, 1947, at 1:5000, covers the Honolulu Harbor area found on the manuscript. Except for some minor changes and a few additional details, as recommended by field edit, the areas charted are in substantial agreement.

Other charts consulted were Chart 4132, 8-11-47 at 1:20,000; T-4180, 1925 at 1:5000; H-4537, 1925 at 1:5000; H-4537a, 1927 at 1:5000. The last three named manuscripts have few details and are not recent surveys to make satisfactory comparisons.

It is believed that the manuscript adequately portrays the required topographic detail and shoreline structures in the area.

Submitted by:

L. M. Gazik
L. M. Gazik

Approved by:

L. C. Lande
L. C. Lande

ADDITION TO T-9035

This addition - Latitude $21^{\circ}-20'00''$ to $21^{\circ}-21'-00''$ and Longitude $157^{\circ}-51'-30''$ to $157^{\circ}-54'-00''$ was necessary to complete the shoreline at the end of the NE - SW seaplane base runway. Photographs and templets from the radial plot described in the report for T-9034 were available to tie the northern portion of T-9034 to T-9035.

L. M. Gazik

November 1948

GEOGRAPHIC NAMES

Survey No. T-9034

GEOGRAPHIC NAMES										
Survey No. T-9034										
Name on Survey	On Chart	On previous survey	On U. S. quadrangle	From local	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
	No.	No.	Maps	information						
<u>Salt Lake</u>									B.G.N.	1
<u>Kamehameha Blvd.</u> ^{HWY.}										2
<u>Oahu R.R. and Land Co.</u>										3
<u>Honolulu Airport</u>										4
<u>Ahua Point</u>										5
<u>Keehi Lagoon</u>										6
<u>Mokuoee I</u>										7
<u>Maunapuna Pond</u>										8
<u>Ahua Pond</u>										9
<u>Kaihi Kapu Pond</u>										10
<u>Weli Pond</u>										11
<u>Oahu</u>									B.G.N.	12
										13
										14
										15
										16
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										21
										22
										23
										24
										25
										26
										27

Names underlined in red are approved 2-5-52 L. Heck

M 234

Names underlined in
red are approved
2-5-52
- Heck

GEOGRAPHIC NAMES

Survey No. T-9035

Name on Survey	<div>On Chart No.</div> <div>On previous survey No.</div> <div>On U. S. quadrangle Maps</div> <div>From local information</div> <div>On local Maps</div> <div>P. O. Guide or Map</div> <div>Rand McNally Atlas</div> <div>U. S. Light List</div>
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Recommend omission of this name, as it is now done on nautical charts.

Names under legend on red are approved
2-5-52
H. Heck

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

TO BE CHARTED

~~TO BE DELETED~~

STRIKE OUT ONE

Honolulu, T. H.

November 5, 1934

I recommend that the following objects which have ~~(insert)~~ been inspected from seaward to determine their value as landmarks, be charted on ~~(detected from)~~ the charts indicated.

The positions given have been checked after listing.

This report covers Manuscripts Nos. 402 and 403
(principally Chart 4109)

L. O. Wilder

Chief of Party.

(* For Chart 4109)

GENERAL LOCALITY	NAME AND DESCRIPTION	POSITION					METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		LATITUDE		LONGITUDE		DATUM						
		°	'	°	'							
	(A complete list of landmarks for Charts 4132 and 4131 will later be submitted as soon as inspected from seaward by aircraft)											
	TOWER (Station C)	21-18	52.06	157-55	49.84	Hav	Triang.	1925	X	X		4132
	AERO ALT ELWAG EV 10 SEC (Honolulu Airport Beacon)	21-19	53.08	157-54	49.33	"	"	"	X	X		4102, 4110 and 4132
	TANK Sand Island Water Tank	21-18	40.16	157-53	02.16	"	"	1947	X	X		4109, 4132
	C.G. TOWER (C.G. Lookout Tower)	See USE Arc Sheet Nov. 1946 in Naut. Chart Sec.				"	Topo.	USED	X	X		4109, 4132
	TWIN STACKS (There is a 3rd stack, (Kapalana Incinerator	lower)	ditto			"	"	"	X	X		4109, 4132
	CHY 150 FT. Chimney)	21-19	32.41	157-52	21.18	"	Triang.	1946	X	X		4109, 4132
	TANK 140 FT F R LTS (Pineapple Shape)	21-19	12.51	157-52	26.59	"	"	1928	X	X		4109, 4132
	GAS TANK F R LTS (Southerly of 2)	Take from C.G. 403				"	Topo.	C.S. 403	X	X		4109, 4132
	DOMES (American Factors Bldg.)	21-18	40.89	157-51	59.86	"	Triang.	1925	X	X		4109, 4132
	SW STACK (Hawaiian Electric Co.)					"	"	"	X	X		4109, 4132
	TOWER (Federal Bldg.) (NW Tower)	21-18	33.72	157-51	48.56	"	"	"	X	X		4109, 4132
	CH SPIRE (St. Andrews Cath)	21-18	47.33	157-51	35.86	"	"	1925	X	X		4109, 4132

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* CUP CITY HALL (New City Hall 1911)	21-18	30.88	157-51	35.57	"	1931	x	4109, 4132
CHY (Pumping Sta 1909)	21-18	04.79	157-51	56.18	"	"	x	4109, 4132
✓ FLAGSTAFF (F.S. Ft. Armstrong 1933)	21-18	05.63	157-52	12.36	"	"	x	4109, 4132
* STACK 150 FT F R LTS (Kewalo Incinerator)	21-17	48.25	157-51	52.17	"	1946	x	4109, 4132
* STACK 130 FT (Incinerator Stack 1930)	21-17	43.11	157-51	47.85	"	"	x	4109, 4132
* R.TES NEON LIGHTED (W Tower) 6 to 12 PM (not occulting)	21-18	22.00	157-51	31.54	"	"	x	4109, 4132
* ALOHA TOWER (also has F R LTS)	21-18	34.75	157-52	07.42	"	1928	x	4102, 4109 and 4132
✓ TOWER FIRE STA (Kalihi Fire Sta 1925)	21-20	04.63	157-52	43.23	"	1925	x	4132
* FLAG STAFF (Oahu Prison)	21-19	57.86	157-53	11.57	"	1925	x	4132

Chk 65(1948)

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE DELETED~~

STRIKE OUT ONE

Pacific District Headquarters December 31, 1947

I recommend that the following objects which have ~~(been examined)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(state not from)~~ the charts indicated.

The positions given have been checked after listing by

L. C. Wilder

L. C. Wilder

Chief of Party.

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION						METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
				LATITUDE		LONGITUDE										DATUM
				°	'	D. M. METERS	°	'	D. P. METERS							
	*CHY 130 FT	Kewalo Old Incinerator		21-17	43.107	157-51	47.854		Haw			X		4132		
	*R. TR. (Neon Lts)	KPU East and West Towers		21-18	22.407	157-51	30.059		"			X		4132 A		
				21-18	22.000	157-51	31.543		"					4132		
	*R. TR. (Occ Lts)	KGMB		21-17	47.921	157-50	33.690		"		Triang.	X		4131 A		
	*R. TR. (Occ Lts)	KPOA		21-17	19.50	157-49	37.13				Triang. Cuts	X		4132		
	*R. TR. (Occ Lts)	KHON		21-17	26.63	157-50	20.66				Triang. Cuts	X		4131 A		
	CH SPIRE	Central Union Church		21-18	07.238	157-50	11.386				Triang.	X		4132		
	TOWER ON HOUSE	Kumulae 1925		21-17	45.166	157-49	41.222					X		4131		
	*HOTEL CUP	Royal Hawaiian Hotel		21-16	50.249	157-49	54.270				Triang.	X		4132		
	SIGN (Neon Lts)	Waikiki Theatre		21-16	54.467	157-49	49.749					X		4131		
	*HOTEL FLAGSTAFF	Moana Hotel		21-16	47.042	157-49	45.669					X		4132		
	TOWER KADUKI FIRE STATION			21-16	53.677	157-48	07.618				Triang.	X		4131		
	FLAGSTAFF	Crater Flagstaff		21-15	31.42	157-47	45.40					X		4132		
	*R. TR. (Occ. Lts)	Station KULA		21-16	42.54	157-46	44.05				Triang. Cuts	X		4131		
												X		4131 A		

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~DO NOT CHART~~ STRIKE OUT ONE

Pacific District Headquarters December 31, 1947

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~(attached)~~ the charts indicated.

The positions given have been checked after listing by

L. C. Wilder

L. C. Wilder

Chief of Party.

STATE	* Particularly prominent	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
					LATITUDE		LONGITUDE							
					° ' "	D. M. METERS	° ' "	D. P. METERS						
TOWER	Stag				21-18	52.059	157-55	49.836	Triang.	1925		X		4132
*AERO FL W & G ev 10 SEC	Honolulu Airport Cont. Twr.				21-19	33.08	157-54	49.33	Hav.			X		4133
TOWER FIRE STA	Kalihi Fire Station				21-20-	04.657	157-52	43.277	"	1925		X		4132
CHY 150 FT FR LTS	Kapalama Incinerator Chy.				21-19	32.41	157-52	21.18	"	1946		X		4132
*TANK 140 FT FR LTS	(Pineapple shape) W.T. Hawn. Pine Co.				21-19	12.50	157-52	26.60		?		X		4132
C.G. TOWER	Coast Guard Tower				See USE	ARC Sheet Naut. Chart Section				"		X		4132
TWIN STACKS	2 of 3 steel stacks						ditto					X		4132
*ALOHA TOWER					21-18	36.751	157-52	07.419	Triang.	1928		X		4132 A
DOME	Dome Am. Factors				21-18	40.894	157-51	58.662		1925		X		4132
CH SPIRE	St. Andrews Church				21-18	47.329	157-51	35.850		1925		X		4132
F.S.	Ft. Armstrong F. S.				21-18	05.632	157-52	12.363		1933		X		4132
CUP CITY HALL	Cupole City Hall				21-18	30.98	157-51	35.57		1931		X		4132
CHY	Pump Sta. Chy. 1909				21-18	04.787	157-51	56.176		1925		X		4132
*CHY 150 FT FR LTS	New Kewalo Incinerator				21-17	48.25	157-51	52.17	Triang. Cuts.	1945		X		4132

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

~~NOT BE CHANGED~~
TO BE DELETED

STRIKE OUT ONE

Pacific District Headquarters

December 31, 19 47

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks be charted on (deleted from) the charts indicated.

The positions given have been checked after listing by

L. C. Wilder

L. C. Wilder

Chief of Party

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	NEARBY CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE	LONGITUDE	DATUM							
	HOUSE			21-16	157 - 49.3'								4131
	Flagstaff on Building			- - -	ditto - - -								"
	FLAG			- - -	ditto - - -								"
	Flagstaff			21 - 16.8'	157 - 46								"
	Cupola			- - -	ditto - - -								"
	FLAGSTAFF			21 - 16.9'	157 - 44.9								"
	W. TRIPOD			21 - 17.2	157 - 44								"
	Target			21 - 16	157 - 43								"
	Shack			21 - 17.7	157 - 40								"
	TOWER			21 - 18.7	158 - 01								4133
	TOWER			21 - 19.3	157 - 56.7								"
	WATER TOWER			21 - 19.7	157 - 56								"

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED STRIKE OUT ONE
~~TO BE DELETED~~

Pacific District Headquarters December 31, 19 47

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by L. C. Wilder

L. C. Wilder
Chief of Party.

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE		LONGITUDE							
				°	'	D. M. METERS	°						
		A - Recommended charting on 4110											
		one to four flashes											
	*AERO, Barbers Pt. Aero Beacon			21-18	48.4"	158-04	16.6"			Navy Topo.			4133 A
	*AERO, FL G&W												
	Hickam Field Aero Beacon			21-20	21.88	157-57	28.41			USE Topo			4133 A
	*TOWER & SPIRE												
	Hickam Field Water Tower			21-20	45.611	157-57	53.714			Triang.			4133 A
	*AERO FL R	West Lock Water Tank		21-21	19.972	158-00	29.885			Triang.		1932	4133 A
	*AERO, one to four flashes												
	Kaneohe NAS Aero Beacon			21-27	04.11	157-45	34.55			Navy Topo.			A
	*CHY	Kahuku Mill Chy.		21-40	55.523	157-57	09.660					1927	A
	*CHY	Waialea Mill Chy.		21-34	36.919	158-07	40.304					1927	A
	*CHY	Waialea Mill Chy.		21-26	51.257	158-11	23.226			Triang.		1927	A
	*CHYS	Ewa Mill Chys.		21-20	32.592	158-02	17.659			"			4133 A
	CHYS	Waipahu Mill Chys.		21-23	22.072	158-00	35.438						4133 A

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating* aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

1 October 1947

To: Lt. Comdr. L. C. Wilder
U. S. Coast and Geodetic Survey
P. O. Box 3887
Honolulu 12, T. H.

Subject: Field edit of photogrammetric manuscripts
C.S. 402 to C.S. 406 inclusive - Ahua Point
to Kapoho Point

1. The subject manuscripts together with the aerial photographs are being forwarded to you for field verification to determine their adequacy for nautical chart revisions. Enclosed with this letter is a layout showing both the manuscripts and aerial photographs from which they were compiled. You will please make a field examination of these manuscripts and return them to this office with a report and notes made directly on the manuscripts showing additions and changes necessary in order that the manuscripts will be complete and adequate for revision of nautical charts 4109, 4110, 4131, and 4132.

2. Your field inspection of these manuscripts shall be made in accordance with instructions contained in this letter and in accordance with the following paragraphs of Field Edit Instructions, dated August 24, 1945, a copy of which is enclosed: 1, 3, 9, 10, 15, 16, 17, 25, 28, 31, and 47.

3. The reference manuscripts were compiled in the Washington Office from aerial photographs taken by the Navy and furnished by you. The manuscripts have been compiled without the benefit of field identification of control points or the benefit of field clarification of photographic details. Therefore, they are subject to errors and omissions due to faulty office interpretation, and must be field inspected and subsequently revised before they can be considered as adequate for revising the nautical charts. These manuscripts when completed will be permanently filed as topographic surveys in the Bureau archives, but they will not be published as planimetric maps. Therefore,

1 October 1947

your field examination and the subsequent revision of the manuscripts may be confined to physical and cultural features of significance to the nautical charts, but need not include details which are not of significance to nautical charts.

4. The limits of detailing on the manuscripts have been controlled by the coverage of the photographs and do not extend over the entire area covered by the charts listed above. The most important manuscripts are numbers 402 and 403, scale 1:5,000, which will be applied to chart 409. These will require a more detailed examination than the smaller scale manuscripts 404 to 406 inclusive. A copy of the office report covering the compilation of each manuscript will also be furnished to you for your information.

5. Landmarks. - Landmarks within the area covered by the manuscripts shall be inspected and reported on according to instructions in the Hydrographic Manual.

6. Shoreline. - Shoreline and water front structures within the harbor areas covered by manuscripts 402 and 403 shall be inspected in detail and required corrections indicated. The shoreline covered by manuscripts 404 to 406 along the open coast shall be inspected generally as regards the accuracy of office interpretation.

7. Buildings. - It is intended that the manuscripts when completed shall show only the buildings important for charting; that is, shall show all buildings immediately along the water front and only landmark buildings or important public buildings in the interior. Therefore, your inspection of buildings may be limited accordingly to water front buildings and landmark or important public buildings in the interior. The manuscripts are probably not complete for most water front buildings, but may have omitted important public or landmark buildings since these could not be selected from the photographs without field inspection information.

8. Where additions or revisions are necessary, you will please indicate that fact by a note on a print of the manuscript. If a feature is to be added and is visible on a photograph, the note should carry a reference to the particular photograph. Where you recommend that a feature be added but is not visible on the photographs, it will be necessary that you plot the feature in position on a print of the manuscript.

1 October 1947

9. Establishment and identification of additional control points. - The descriptive report for each manuscript contains a summary of the control available and the probable accuracy of the compilation. In general, the manuscripts are believed to be of sufficient accuracy for chart revisions, with the exception of possibly the western edge of manuscript 403 and all of manuscript 402. In the latter area, sufficient control could not be identified in the office, and it is necessary that control points be established and identified by you. These will then be used to test the manuscripts and to recompile manuscript 402 and part of manuscript 403 if necessary.

10. Triangulation and traverse stations for which positions were available in this office are plotted on manuscripts 402 and 403. Not all of these stations could be identified in the office to control the radial plot, but it is believed that these stations can be used by you to locate additional identifiable control points by three-point-fix, by intersection, or by distance and direction. Therefore, you will please endeavor to provide additional control points in places indicated approximately by red circles on one set of the prints of manuscripts 402 and 403 being forwarded to you.

11. The objects located by additional control shall be indicated approximately on the field edit sheet returned to this office and shall be indicated exactly on the clearest photograph.

12. Upon completion of this field examination, you will please return one set of the prints of manuscripts 402 to 406 with notes thereon indicating the desirable additions and changes. These shall be accompanied by one field edit report covering all six manuscripts and stating your conclusions as regards the revisions necessary and final adequacy of the maps for chart compilation. This report should also state any change in this procedure which you recommend for future projects of this kind.

13. You will please not hesitate to request clarification or amendment of this letter if you consider such to be desirable to accomplish the purpose indicated herein.

Director.

REVIEW REPORT T-9034 and T-9035
Shoreline Manuscripts
4 February 1952

62. Comparison with Registered Surveys:

T-3156	1:20,000	1910-11
T-4138	1:5,000	1925
T-4150	"	"
T-4180	"	"
T-4181	"	"

63. Comparison with Maps of Other Agencies:

None

64. Comparison with Contemporary Hydrographic Surveys:

None

65. Comparison with Nautical Charts:

4110	1:80,000	Oahu Id. ed. Aug. 1944, rev. Apr. 1951
4132	1:20,000	ed. July 1950, rev. Jan. 1951
4109	1:5,000	Honolulu Har. ed. Mar. 1949, rev. Feb. 1951

T-9034 and T-9035 were applied to charts 4109 and 4132 prior to review. No revisions of significance to charts were made during review.

66. Control:

The degree of accuracy of the control established in 1947 for the purpose of making a new radial plot is not known. No field records or computations were furnished the Washington Office. The stations are delineated on the map manuscripts by triangles, though they may be of only fourth order ~~accuracy~~ ^{accuracy}, except USE station IGL00 which is of third order accuracy (G-6039, geographic positions p.2). A copy of the list ~~submitted~~ ^{submitted} by Comdr. Wilder (Chart Letter No. 764, 1947) is attached to this report. ^{The Division of} Geodesy was informed that these control stations had been established and they have made note of the above facts in their card file.

67. Aids to Navigation:

Four aids, which were visible on the photographs, were added to T-9035 during review:

Kewalo Basin Lighted Buoy 8
Honolulu Channel Range Front
Honolulu Channel Range Rear
Honolulu Fort Street

The range lights for Kewalo Basin entrance have been rebuilt since T-9035 was delineated. The charts have them plotted in the new positions.

Triangulation Kapalama Basin Light No. 1, 1940 (USE) has been removed from the map manuscript T-9035 because this light no longer exists.

68. Mean High Water Line:

Because only the year of photography is known, the stage of tide recorded on the photographs cannot be accurately determined. Heading 30 of the Compilation Report says the shoreline was drawn at the level of water appearing on the photographs.

An examination of the photographs discloses that the stage of tide was probably at the lower high water, or near mean low water. This situation would place the MHW line farther inland. However, the shoreline in the area of T-9034 has little navigational significance, and the shoreline in the area of T-9035 is almost wholly seawall or bulkhead, so that the stage of tide does not affect the horizontal position of the MHW line.

No effort was made to adjust the shoreline during review.

69. Accuracy:

The shoreline and near-shore features are adequate for charting purposes.

In the interior, roads include the sidewalks, thus making buildings appear in contact with the road. Buildings are drawn too large and not always in true relationship. This inaccuracy of interior detail is largely due to the large scale of the photographs.

Reviewed by:

Lena T. Stevens
Lena T. Stevens

Approved:

S. V. Griffith 11/27/53
Chief, Review Section
Div. of Photogrammetry

H. E. Edmundson
Chief, Nautical Chart Branch
Division of Charts GFD

O. S. Reading
Chief, Div. Photogrammetry

Carl O. Heston
Chief, Div. Coastal Surveys
H/I

NAUTICAL CHARTS BRANCH

SURVEY NO. 9034

Record of Application to Charts

[illegible]

M-2168-I

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

NAUTICAL CHARTS BRANCH

SURVEY NO. *T 9035*

Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.