

FE84

Diagram No.8202-2

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT (HYDROGRAPHIC)

Type of Survey ... Field Examination

Field No.

Office No. FE-84

LOCALITY

State Alaska

General Locality ... Skagway

Locality Off. White Pass and Yukon

..... Railroad Wharf

19 50

CHIEF OF PARTY

..... L.C. Johnson

LIBRARY & ARCHIVES

DATE June 26, 1950

☆ U.S. GOV. PRINTING OFFICE: 1976-669-441

NOTE: A new system for registering Field Examinations (FE's) was established in 1980. All FE's are now consecutively numbered as shown hereon. The date shown in the new format is the actual date of survey. This material was previously registered as:

FE No.2 1950

FE84

FENo.2 1950

FE-84

Diag. Cht. No. 8202-2

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TAGLINE SURVEY - FIELD EXAM.

Field No. Office No. F.E. No. 2, 1950

LOCALITY

State Alaska

General locality Skagway

Locality Off White Pass & Yukon Railroad

Wharf

194 50

CHIEF OF PARTY

L. C. Johnson

LIBRARY & ARCHIVES

DATE June 26, 1950

B-1870-1 (1)

FENo.2
1950

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER NO. F.E. No.2, 1950

Field No.

State Alaska

General locality Skagway

Locality Off White Pass and Yukon Railroad Wharf

Scale 1:2,000 Date of survey 22 & 23 May 1950

Instructions dated 5 May 1950

Vessel PATTON

Chief of party L.C. Johnson

Surveyed by W.C. Russell & J.W. Flint

Soundings taken by ~~fathometer, graphic recorder~~, hand lead, ~~wire~~

Fathograms scaled by

Fathograms checked by

Protracted by

Soundings penciled by

Soundings in ~~fathoms~~ feet at ~~MLLW~~ MLLW

REMARKS:

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22 WMS
21
22
JUN 19 1950

FE 2 (1950)

DESCRIPTIVE REPORT TO ACCOMPANY
TAGLINE SURVEY OFF WHITE PASS AND YUKON RAILROAD WHARF

SKAGWAY, ALASKA

SCALE 1:2000

USC&GSS PATTON, L. C. JOHNSON, COMDG.

22 & 23 MAY 1950

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PROJECT:

The work was performed in accordance with The Director's letter dated 5 May 1950, Reference 22/MEK, S-2-PA.

SURVEY LIMITS AND DATES:

A tagline survey was made along the face of the White Pass and Yukon Railroad Wharf out to a distance of 75 meters, or to the 20-fathom curve, where ever it was reached in less than 75 meters. This work was done on 22 and 23 May 1950. No junction was made with previous work.

VESSEL AND EQUIPMENT:

Soundings were taken with a handlead and leadline which was marked in fathoms and tenths of fathoms. One dory, propelled by outboard motor, was used by the sounding party. The distances out from the wharf were obtained by using a tagline made up of a logline seized about every two (2) feet to a stranded wire, and marked at 5-meter intervals, with the exception from zero to 10-meters, the tagline was marked at 2-meter intervals. This tagline was wound on a reel which was secured in the dory, with the free end having an arrangement for attaching it to a 4" x 4" timber, which was moved along behind the fender piles as the work progressed, and adjustable so that the zero end was on line with the outer face of the fender piles of the wharf.

TOPOGRAPHY:

No topography was accomplished to locate the position of the wharf. Tape measurements, within the limits of the survey, were made to physical features as located in the 1948 tagline survey, and checked. No new physical features have been established on or in the vicinity of the wharf since 1948 survey. Mr. Brown, White Pass and Yukon Railroad dock foreman, who has lived for 27 years in Skagway, stated: "The wharf within the limits of our survey has not changed. The wharf south of our survey has been torn down, and work as yet has not been completed". It is considered the location of the wharf as established by topography in 1948 is good.

Tagline Station "0" is at the knuckle of the wharf, in the same position of Station "0" as located in 1948 tagline survey. The numbered stations increase, at 10-meter intervals consecutively northeast along the face of the wharf. From Station "0" in a southwest direction, along the face of the wharf for 52 meters, and the present corner of the old wharf, the stations are lettered, at 10-meter intervals, and increase alphabetically.

CONTROL OF HYDROGRAPHY:

From Tagline Station "0", a control line was established in a northeasterly and southwesterly direction, parallel to the wharf face, and points marked along it every 10 meters by measuring with a steel tape. The only exception is at Station "12" which is only 8 meters from Station "11", as bracing on the automobile elevator restricted the distance.

On the sheet, each tagline station is indicated by either a number or letter inside a circle, with a leader to the pricked hole marking the station. At each of these stations, a transit was set up, and the telescope turned to an angle of 90° to the face of the wharf. An observer at the transit used arm motions to direct the engineer on line. With a hand signal from the officer in the dory indicating a sounding was needed at the proper tagline interval, the observer at the transit indicated by hand signals when the leadsman was on line, and a sounding was taken. This method worked very well.

A leadline was dropped at the face of the dock at each station to give location to the hydrographic party of position for securing the tagline. The first sounding on each line, at zero distance from the wharf, was taken on the line of the outer side of the fender piles at each station. From zero to ten meters on the tagline, soundings were taken at 2-meter intervals, and the subsequent soundings were at 5-meter intervals, as governed by the tagline.

With a reversible outboard motor, the dory was run out on the line stern first; the tagline payed over the bow, and the leadsman sounded at the bow. In this manner, the engineer constantly watched his line by signals from the transit observer on the wharf, and the leadsman checked the tagline interval with the officer.

The dory was manned by an officer, a recorder, an engineer, a leadsmen and a man to operate the reel.

TIDAL DATA:

The tide staff of the Skagway Standard Tide Station on the wharf was used. During the progress of the soundings, this staff was read, at 10-minute intervals, by an observer in a dory.

ADEQUACY OF SURVEY:

The survey is adequate for the area covered, and in accordance with instructions. Due to the lines being normal to the face of the wharf, there is a hiatus between lines "O" and "A". Since the gap is small, and is beyond the 60-foot curve, in an area not dangerous to deep draft vessels, the survey was considered adequate and covered.

COMPARISON WITH PREVIOUS SURVEYS:

A comparison was made with the tagline survey executed in 1948, using the same scale and methods. In general, there is a very close agreement, especially in the northeast half of the survey. In the southwest half of the survey, beyond the 60-foot curve, the soundings, in general, are deeper than the earlier survey. With the soundings taken at every two meter interval up to 10 meters away from the wharf, there appears to be a closer delineation of the 30-foot curve. The indications are that it is closer to the face of the wharf than in the earlier survey. There is no indication of shoaling in the channel along the face of the wharf.

- see
Review

AIDS TO NAVIGATION:

There are no Aids to Navigation in the area covered by this survey.

TABULATION OF APPLICABLE DATA:

Data attached to this report:

- Tide Note
- Approval Note

3 June 1950

Approved and Forwarded:

L. C. Johnson
L. C. Johnson
CDR USC&GS
Cmdg., USC&GS PATTON

Respectfully submitted

William C. Russell

William C. Russell
LCDR USC&GS

TIDE NOTE TO ACCOMPANY
DESCRIPTIVE REPORT, TAGLINE SURVEY
SKAGWAY, ALASKA
22 & 23 MAY 1950

The staff of the standard tide station, on the White Pass and Yukon Railroad Wharf, Skagway, Alaska, was read and recorded at ten minute intervals, during the period of hydrographic survey.

The staff is located at Latitude $59^{\circ} 26.8'$ N and Longitude $135^{\circ} 19.3'$ W.

For the reduction of soundings, 4.9 feet on the tide staff corresponded to mean lower low water. There were no corrections for differences in time or height applied to the observed tides.

RHC

839

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~

27 June 1950

Division of Charts: R. H. Carstens

Plane of reference approved in
1 volumes of sounding records for

~~HYDROGRAPHIC SHEET~~ FE NO 2 1950

Locality Skagway, Alaska

Chief of Party: L. C. Johnson in 1950
Plane of reference is mean lower low water, reading
4.9 ft. on tide staff at Skagway
30.1 ft. below B. M. 1 (1921)

Height of mean high water above plane of reference is 15.9 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Section
Chief, ~~Division of Tides and Currents~~

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. F.E. No.2, 1950

Records accompanying survey:

Boat sheets ..¹...; sounding vols. ..¹...; wire drag vols.;
bomb vols.; graphic recorder rolls;
special reports, etc.
.....

The following statistics will be submitted with the cartographer's report on the sheet:

| | | |
|---|------|-------|
| Number of positions on sheet | | ..35. |
| Number of positions checked | | ..35. |
| Number of positions revised | | ..0.. |
| Number of soundings revised (refers to depth only) | | ..0.. |
| Number of soundings erroneously spaced | | ..1.. |
| Number of signals erroneously plotted or transferred | | ..0.. |
| Topographic details | Time | ..0.. |
| Junctions | Time | ..0.. |
| Verification of soundings from graphic record | Time | ..0.. |

Verification by *P. Klosky*..... Total time 12.. Date *7/8/50*.....

Reviewed by *J. J. Jordan*..... Time ..7... Date *11/2/50*.....

Office Memorandum • UNITED STATES GOVERNMENT

TO : Chief, Coastal Surveys

DATE: 21 April 1950

FROM : Chief, Nautical Chart Branch

SUBJECT: Report of Grounding of U.S.S. MARIAS on 3 March 1950
at Skagway, Alaska

1. A harbor survey by Comdr. Pierce in 1943 (H-6945) shows 15-to 31-ft. depths along the face of the wharf where the recent grounding occurred.
2. A tag line survey by Comdr. Crosby in August 1945 (F.E. No. 2, 1946) shows 17 - to 33 - ft. depths.
3. The U.S.S. NECHES reported 21 - to 33 - ft. depths in July 1948.
4. A tag line survey by Comdr. Boothe in October 1948 (F.E. No. 8, 1948) shows 18 - to 32 - ft. depths.
5. The U.S.S. MARIAS reported 24 - to 30 - ft. depths in June 1949. Soundings taken at this time are not shoaler than depths shown on F.E. 8 (1948).
6. The U.S.S. MARIAS grounded on 3 March, 1950 when low tide was minus ~~2.5~~^{2.2} ft. (~~predicted~~^{actual}). Soundings obtained then and shown on attached sketch are not shoaler than depths on F.E. No. 8, 1948.
7. On 14 June 1949 the ~~29½~~^{29½} ft. average draft at a low tide of plus 4.1 ft. (~~predicted~~^{actual}) gives a keel depth at MLLW of 25½ ft. On 3 March, 1950 the 25½ ft. average draft at a low tide of minus 2½ ft. (~~predicted~~) gives a keel depth of 28 ft. at MLLW. Thus, although the draft was 4 ft. less in 1950, the low water level was ~~6½~~^{6.2} ft. (~~predicted~~^{actual}) lower, a net increase of 2½ ft. in the depth of the keel with respect to MLLW.
8. In a comparison of F.E. No. 2, 1946 with F.E. No. 8, 1948 the review of the latter survey reports an average decrease in depth of 7 feet where that survey shows 30 - to 48 ft. depths in the area of the reported grounding.
9. The Alaska Coast Pilot, 1949 Supplement, reported in detail the depth found on F.E. No. 8, 1948.

Chief, Nautical Chart Branch



Building

Building

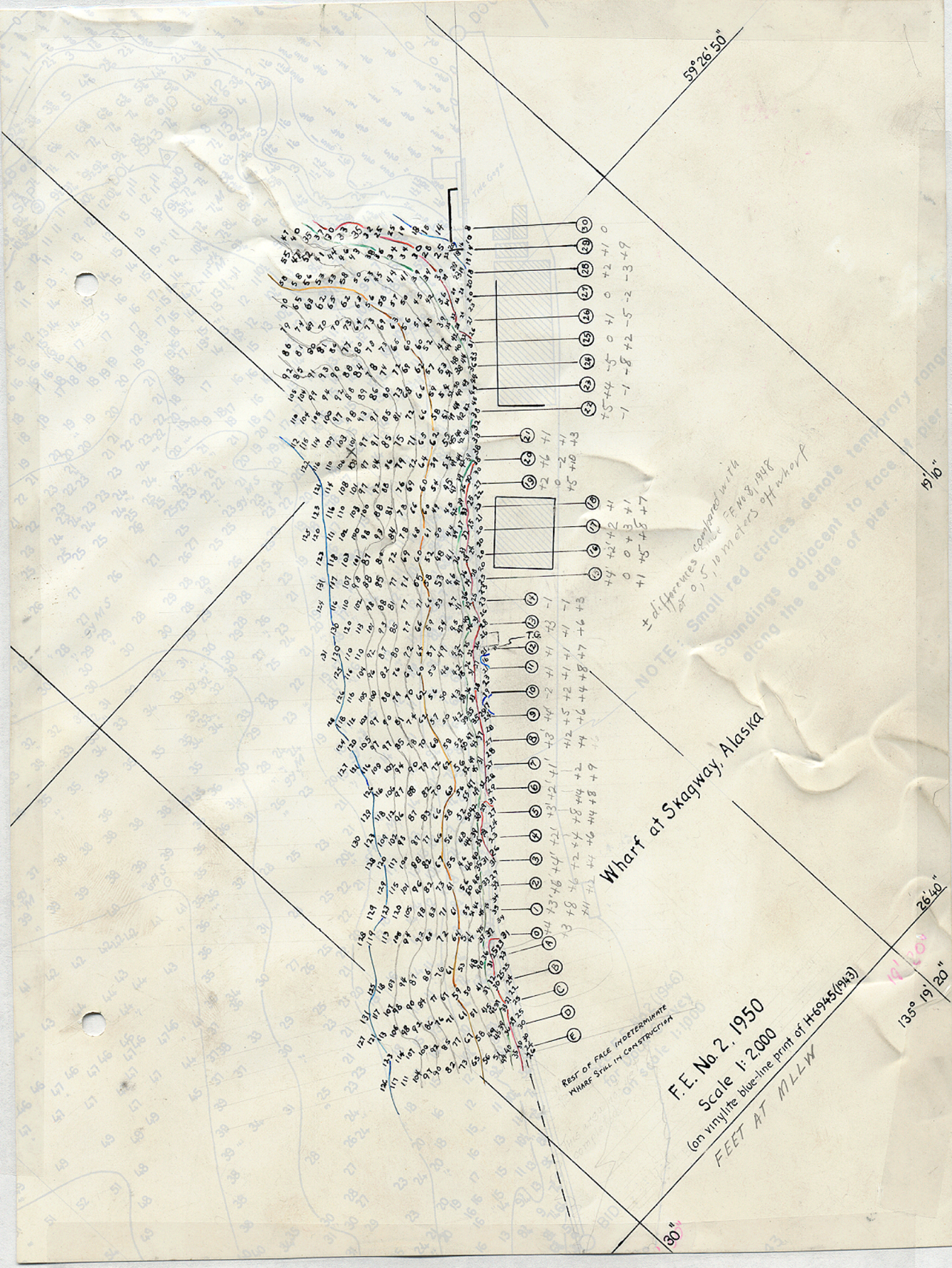
Grounding

U.S.S. MARIAS
3 March, 1950

WHARF AT SKAGWAY, ALASKA

This is a tracing of plotting done in April, 1950, subsequent to the report of grounding. The plotting of the ship's position on original overlays is attached to Instructions to the Comd'g Officer of the PATTON, dated 5 May, 1950 and filed in Coastal Surveys.

This tracing overlays F.E. No. 2, 1950.



59°26'50"

19'10"

± differences compared with
 of 0.5 meters F.P. No. 8, 1948
 Soundings adjacent to face of pier
 along the edge of pier.

Wharf at Skagway, Alaska

REST OF FALE INDETERMINATE
 WHARF STILL IN CONSTRUCTION

F.E. No. 2, 1950
 Scale 1:2,000

(on vinylite blue-line print of H-6945 (1943))
 FEET AT MLLW

26'40"

135° 19' 20"

30"

REVIEW OF FIELD EXAMINATION NO. 2, 1950

This field examination was made to investigate a reported ship grounding along the wharf at Skagway, Alaska.

A description of this tagline survey is given in the Descriptive Report. The work is plotted on the attached section of the blue-line copy of H-6945 (1943) furnished the field party. Also attached are an overlay and a memorandum. The overlay shows the position of the ship when grounded, and the office memorandum contains a summary of prior examinations and reported groundings compiled prior to the present examination.

Although present depths are in general deeper than on F. E. No. 8, 1948 they are about the same as depths on F. E. No. 2, 1946. The bottom is considered to be stable. The examination reveals no reason for the reported grounding.

The present examination was applied to Chart 8303 (print of November 1950) subsequent to verification.

G. F. Jordan

Inspected by: R. H. Carstens
November 21, 1950

