FE126
WIRE DRAG

Diagram No. 8102-3

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT
(HYDROGRAPHIC)

Type of Survey Wire Drag

Field No.

Office No. FE-126WD

LOCALITY

State Southeast Alaska

General Locality Dixon Entrance

Locality Surf Point

1954

CHIEF OF PARTY
J. Bowie

LIBRARY & ARCHIVES

DATE August 30, 1954

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

FE 126
WIRE DRAG

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 previuosly registered as;

FE No.5 1954WD

FE No. 5
1954

FE-126

Diag. Cht. No. 8102-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. SPECIAL Office No F.E.No.5,1954
Wire Drag

LOCALITY

State SOUTHEAST ALASKA

General locality DIXON ENTRANCE

Locality SURF POINT

194 54

CHIEF OF PARTY

J. Bowie

LIBRARY & ARCHIVES

DATE AUG 30 1954

B-1870-1 (1)

FE No. 5
1954

FE No. 5, 1954

REPORT, SPECIAL SURVEY, S. E. ALASKA.

DIXON ENTRANCE, SURF POINT

1. This survey was executed in accordance with Instructions 22/MEK, S-2-HO dated 10 September 1953 and 22/MEK, S-2-HO dated 18 December 1953.

2. The purpose of the survey was to determine the least depth in the vicinity of the charted sunken rock, latitude 54 - 41.1', longitude 132 - 09.7, and to prove or disprove the existence of a reported rock 200 meters south of this position, and to provide additional hydrography in this vicinity.

3. Control was furnished by recovery of triangulation station SURF 1908-21; hydrographic stations EDGE, HEM, and DUB (Survey T-3826) (signal DUB was erroneously called DUD and was so recorded in the record books); hydrographic station BET, (Survey H-3042). Stations from T-3826 were pricked through from a tracing of H-4160 (1918). The geographic position of BET was furnished by the Washington Office.

4. Hydrography was executed using 808 type fathometers in launches 98 and 134. An east west system of lines, maximum spacing 100 meters, was run between meridians 132 - 07.7' and 132 - 10.2' from parallel 54 - 40.8' northward to 200 to 300 meters south of the beach line. An additional system of closely spaced lines was run in a north and south direction over the charted sunken rock and the reported rock. The shoalest depth found in the vicinity of the reported rock was 8.4 fathoms. The charted 7½ fathom sounding near latitude 54 - 41.3', longitude 132 - 08.1' was verified by a 7 fathom sounding 130 meters southwest of the charted sounding.

5. The charted sunken rock and the reported uncharted rock were disproved by wire drag. The first days dragging was with an effective depth of 31 feet. The second days dragging was with an effective depth of 37 and 38 feet. The charted ~~and reported~~ position of the rock ~~were both~~ was cleared with an effective depth of 37½ feet. An adequate overlap was made with previous wire drag surveys (H-4159 WD, 1920). Rep. Rk. cleared by eff. depth of 31 ft. See Review Tp 3

In the dragging 20 July the strip, positions 1 - 12 were run with the current, and when the drag was reversed to start back the current had increased so that very little headway could be made and it was necessary to discontinue dragging.

In the dragging 26 July the strip, positions 1 - 12 were run near slack current. In returning to the ship the drag was reversed and towed back over the same area. No recording was made of this run.

6. Tides from a portable tide gage at Tah Bay were used to reduce the sounding and dragging to M.L.L.W. Letter 36-rjb dated 11 August 1953 advised that the tides at Minnie Bay and Tah Bay were practically identical and either could be used without time or heighth correction. The Tah Bay gage was in operation and in view of this letter it was not considered necessary to install a gage at Minnie Bay.

When the marigram was removed from Tah Bay gage 21 September it indicated that the intake was partially plugged. This was cleared. The following comparison was made with predicted tides and Tah Bay record to determine if this partial plugging had affected the record for 20 September.

		Tide table time	Tide table height	Tah Bay time	Tah Bay height
9/19	L	22:12	1.4	22:15	1.6
9/20	H	04:04	12.0	04:00	11.8
	L	10:26	-0.5	10:28	-0.4
	H	16:52	12.5	16:35	12.4
	L	23:04	1.1	23:10	1.2

From this comparison it was concluded that the gage was not affected during the time surveys were in progress.

L 806 (53) ? Statement not found Wolf 8/12/55

7. It is noted that Mr. Howell begins his letter of 21 August 1953 with the statement that he was searching for a sunken wreck. If his position is good, it is possible he may have found the wreck and mistaken it for an uncharted rock. If so the wreck has since then either settled to the bottom or has been carried out of the area by the currents.

8. There are strong currents, estimated about 4 knots, in this area with heavy tide rips. With a heavy southwesterly swell the rips might give the appearance of breakers.

9. From the results of this investigation there are no rocks in the dragged area that are a menace to navigation.

The charted sunken rock and reported sunken rock do not exist and should be deleted from all charts. *(See TP 3 of Review)*

10. The data forwarded consists of;

2 volume Sounding record
1 volume Wire drag record
3 fathograms
1 sheet tide reducers
1 overlay showing area wire dragged
2 boat sheets (the soundings and positions on the boat sheets are field plot using predicted tides)

Respectfully submitted,

E. F. Hicks, Jr.
E. F. Hicks, Jr.,
Comdr. C&GS

Records and report approved and forwarded.

John Bowie
John Bowie,
Comdr. C&GS.
Comdg. Ship HODGSON

FE No. 5, 1954

REPORT, SPECIAL SURVEY, S. E. ALASKA.

DIXON ENTRANCE, SURF POINT

1. This survey was executed in accordance with Instructions 22/MEK, S-2-HO dated 10 September 1953 and 22/MEK, S-2-HO dated 18 December 1953.

2. The purpose of the survey was to determine the least depth in the vicinity of the charted sunken rock, latitude 54 - 41.1', longitude 132 - 09.7, and to prove or disprove the existence of a reported rock 200 meters south of this position, and to provide additional hydrography in this vicinity.

3. Control was furnished by recovery of triangulation station SURF 1908-21; hydrographic stations EDGE, HEM, and DUB (Survey T-3826) (signal DUB was erroneously called DUD and was so recorded in the record books); hydrographic station BET, (Survey H-3042). Stations from T-3826 were pricked through from a tracing of H-4160. The geographic position of BET was furnished by the Washington Office.

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5. The charted sunken rock and the reported uncharted rock were disproved by wire drag. The first days dragging was with an effective depth of 31 feet. The second days dragging was with an effective depth of 37 and 38 feet. The charted and reported position of the rock were both cleared with an effective depth of 38 feet. An adequate overlap was made with previous wire drag surveys.

In the dragging 20 July the strip, positions 1 - 12 were run with the current, and when the drag was reversed to start back the current had increased so that very little headway could be made and it was necessary to discontinue dragging.

In the dragging 26 July the strip, positions 1 - 12 were run near slack current. In returning to the ship the drag was reversed and towed back over the same area. No recording was made of this run.

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8. There are strong currents, estimated about 4 knots, in this area with heavy tide rips. With a heavy southwesterly swell the rips might give the appearance of breakers.

9. From the results of this investigation there are no rocks in the dragged area that are a menace to navigation.

The charted sunken rock and reported sunken rock do not exist and should be deleted from all charts.

10. The data forwarded consists of;

2 volumes Sounding record
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3 fathograms
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Respectfully submitted,

E. F. Hicks, Jr.,
Comdr. C&GS

Records and report approved and forwarded.

John Bowie,
Comdr. C&GS.
Comdg. Ship HODGSON

RHC

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~ 16 September 1954

Division of Charts: R. H. Carstens

Plane of reference approved in
3 volumes of sounding ~~records~~ and wire drag records for

~~HYDROGRAPHIC SHEET~~ F. E. No. 5 1954

Locality Dixon Entrance, Southeast Alaska

Chief of Party: J. Bowie in 1954
Plane of reference is mean lower low water, reading
3.2 ft. on tide staff at Tah Bay
14.2 ft. below B. M. 1 (1909)

Height of mean high water above plane of reference is 11.9 feet.

Condition of records satisfactory except as noted below:

E.C. McKay
Tides Branch

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE, 756675

GEOGRAPHIC NAMES

Survey No. F.E.No.5, 1954

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
										1
										2
										3
										4
										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. F.E.No.5.1954

Records accompanying survey:

Boat sheets ..2..; sounding vols. ..2..; wire drag vols. ..1...;

bomb vols. .....; graphic recorder rolls 1 Env.;

special reports, etc. 1 Overlay showing the area wire dragged; 1 sheet (folded with fathograms)

tide reducers: 1 report (special survey);

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

Number of positions on sheet		230
Number of positions checked		13
Number of positions revised		0
Number of soundings revised (refers to depth only)		0
Number of soundings erroneously spaced		0
Number of signals erroneously plotted or transferred		0
Topographic details	Time	0
Junctions	Time	1
Verification of soundings from graphic record	Time	1

Verification by L. W. Jeskind ..... Total time 16 Date 10/29/54

Reviewed by L. W. Jeskind ..... Time 22 Date 12/3/54

M-2232-1

Review of Field Examination No. 5, 1954

1. Authority

This combined wire-drag and hydrographic field examination was accomplished in compliance with Instructions 22/MEK,S-2-HO dated 10 September 1953 and 22/MEK,S-2-HO dated 18 December 1953.

2. Purpose

The purpose of the field examination was as follows:

a. To determine the least depth in the vicinity of the sunken rock which is shown on Chart 8145, dated June 21, 1954, in lat. 54°41.1', long. 132°09.7', and which originates with H-4159 WD (1920) as a 47 ft. grounding.

b. To prove or disprove the existence of the reported sunken rock which is shown on Chart 8145, dated June 21, 1954, about 200 meters south of the sunken rock mentioned in paragraph (a) above and which originates with Chart Letter 806 (1953).

c. To provide additional hydrography in the vicinity of the rocks mentioned in paragraphs (a) and (b) above.

3. Results

The results of the field examination are as follows:

a. The vicinity of the sunken rock mentioned in paragraph (2a) above was wire-dragged to an effective depth of 37 ft. without the wire-drag hanging or grounding. However, a least depth of 8.4 fms was obtained about 75 meters west of the charted rock after close development of the area by means of the fathometer.

b. The vicinity of the sunken rock mentioned in paragraph (2b) above was wire-dragged to an effective depth of 31 ft. without the wire-drag hanging or grounding. However, a least depth of 9 fms. was found about 100 meters north of the charted location of the reported sunken rock after close development of the area by means of the fathometer. The sunken rock is considered disproved in its reported position.

c. Hydrography was accomplished in the area as outlined in paragraph (4) of the Descriptive Report.

d. The effective depths determined by the present wire-drag operations are in harmony with the present depths.

4. Comparison with Prior Surveys

A. Hydrography

H-3042 (1909), 1:20,000
H-4160 (1920), 1:20,000

A comparison between the prior surveys and the hydrography of the field examination reveals only minor differences of 1-2 fms. in depths. The field examination, however, more closely develops the common area. Two soundings were carried forward to the present survey from H-4160.

With the addition of the 2 soundings from the prior survey, the field examination is adequate to supersede the prior surveys within the common area.

B. Wire-drag

H-4159 WD (1920), 1:20,000

Effective drag depths on the prior survey are in harmony with the hydrography on the present field examination within the common area.

5. Comparison with Chart 8145 (Latest print date 6-1/54)
(Hand corrected to Nov. 26, 1954)

Charted depths originate principally with the previously mentioned hydrographic surveys supplemented by a clearance depth from the present wire-drag field examination. The present effective wire-drag depths do not conflict with the charted depths

The present survey is adequate to supersede the charted depths within the common area.

6. Miscellaneous

The wire-drag and hydrographic field examination are plotted on the attached 4 sheets.

The Descriptive Report and attached correspondence adequately cover all other matters pertaining to this examination. No further discussion is considered necessary

I. M. Zeskind
12/3/54

Inspected by - R. H. Carstens

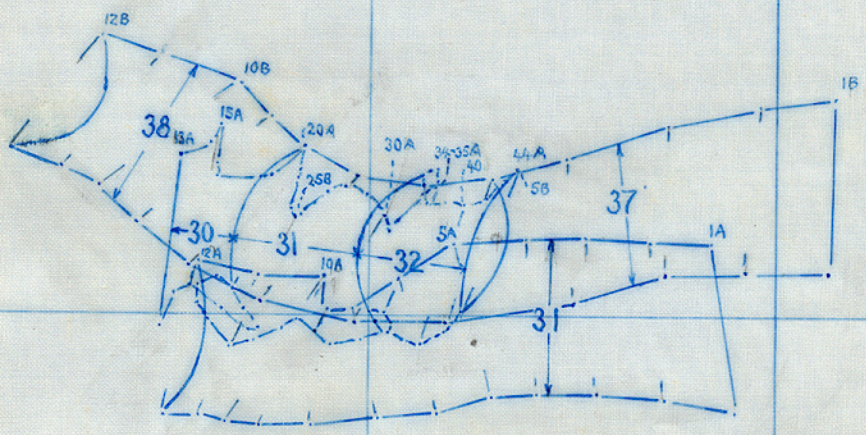
11'

132° 10'

09'

08'

42'



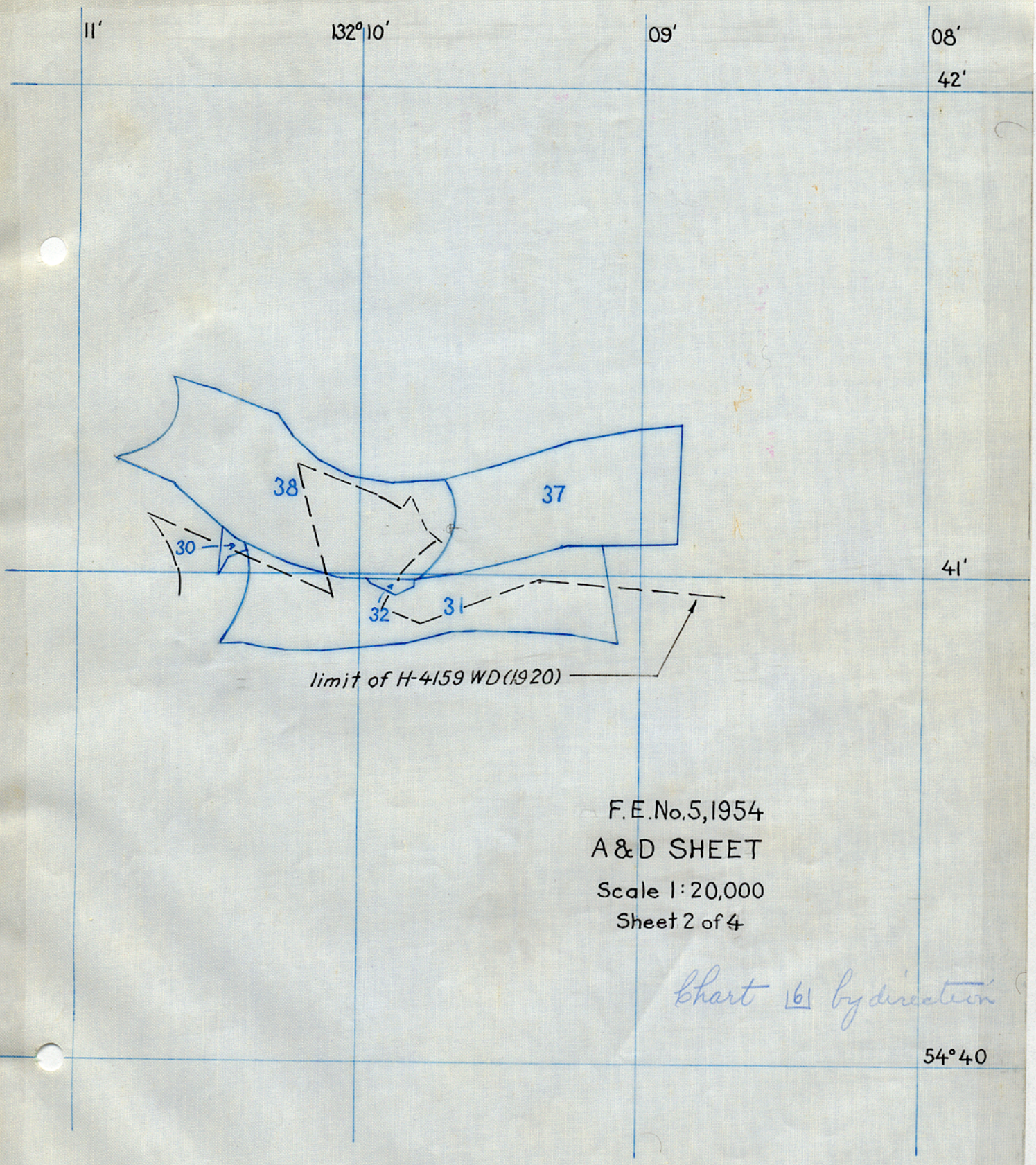
41'

F.E.No.5, 1954

Scale 1:20,000

Sheet 1 of 4

54°40'



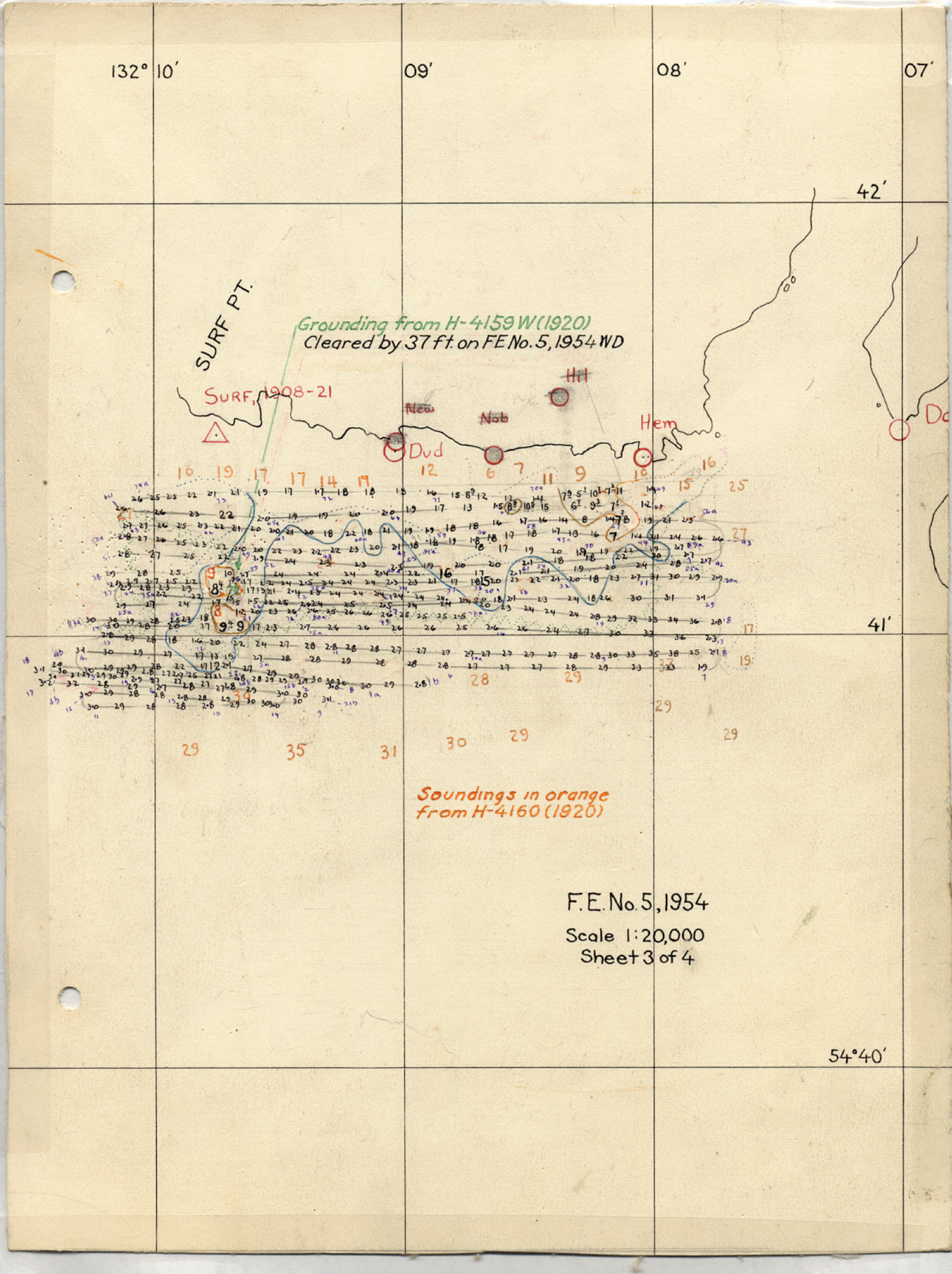
F.E.No.5,1954

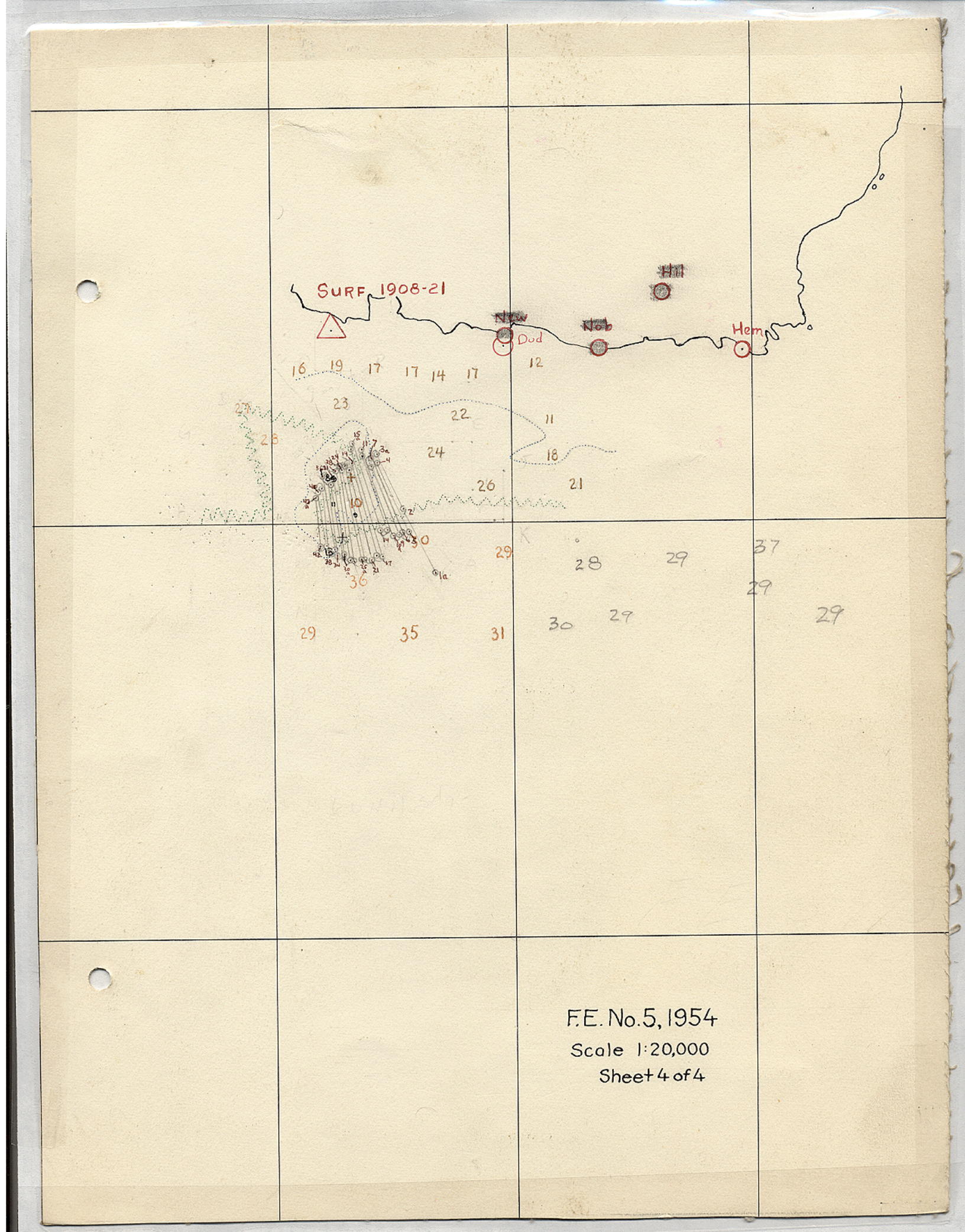
A & D SHEET

Scale 1:20,000

Sheet 2 of 4

Chart 161 by direction

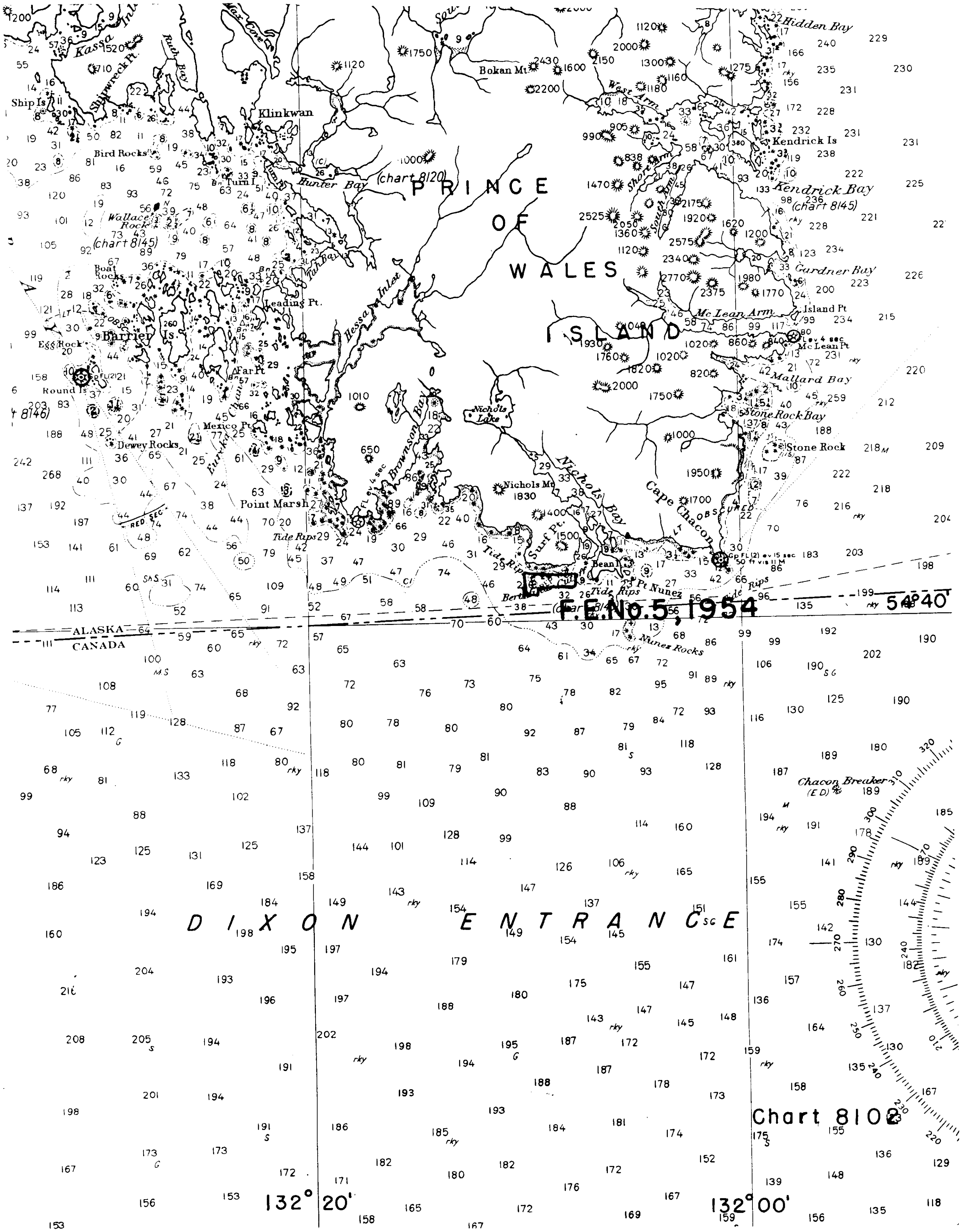

132° 10′
09′
08′
07′
42′
41′
SURF PT.
Grounding from H-4159 W (1920)
Cleared by 37 ft. on FE No. 5, 1954 WD
SURF, 1908-21
Hil
New
Nob
Hem
Dud
Soundings in orange
from H-4160 (1920)
F.E. No. 5, 1954
Scale 1:20,000
Sheet 3 of 4
54°40′



F.E. No. 5, 1954

Scale 1:20,000

Sheet 4 of 4



PRINCE OF WALES ISLAND
DIXON ENTRANCE
F.E.No.5, 1954
Chart 8102
ALASKA
CANADA
54°40'
132° 20'
132° 00'
Klinkwan
Hunter Bay
(chart 8120)
Bokan Mt.
Kassa Inlet
Shipwreck Pt.
Ruth Bay
Ship Is
Bird Rocks
Turn I.
Wallace Rock
(chart 8145)
Boat Rocks
Leading Pt.
Barrier Is.
Egg Rock
Round Is
Far Pt
Mexico Pt
Dewey Rocks
Eureka Channel
Point Marsh
Hessa Inlet
Brownson Bay
Nichols Lake
Nichols Mt
Nichols Bay
Surf Pt.
Tide Rips
Bean I.
Pt Nunez
Nunez Rocks
Cape Chacon
West Arm
McLean Arm
Hidden Bay
Kendrick Is
Kendrick Bay
Gardner Bay
Island Pt
McLean Pt
Mallard Bay
Stone Rock Bay
Stone Rock
Chacon Breaker

NAUTICAL CHARTS BRANCH

SURVEY NO. F.E.No.5, 1954

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
4/13/55	8102	J.J. Walker	~~Before~~ After Verification and Review Partially - Waiting for complete application to Ch 8145
9/30/55	8145	N.W. Burgoyne	~~Before~~ After Verification and Review Completely applied
5 Sept 57	8102	Nichols	~~Before~~ After Verification and Review Three chart 8145 -
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

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.