FE146

Diagrams 78-3,1222-3, & 1227

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-146

LOCALITY

State Virginia

General Locality Lambert Point

Locality Norfolk & Western Railroad Piers No.3 & 4

19 57

CHIEF OF PARTY
D.A. Jones

LIBRARY & ARCHIVES

DATE May 23, 1957

☆ 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.5 1957

FE146

FE - 146

Diag. Cht. Nos. 78-3, 1222-3, & 1227.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

Special Investigation

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. ..... *Office No.* F.E.No.5.1957

LOCALITY

State Virginia

General locality Lambert Point

Locality Norfolk & Western Railroad

Piers No. 4 & 3.

194 57

CHIEF OF PARTY

Don A. Jones

LIBRARY & ARCHIVES

DATE .....

B-1870-1 (1)

REPORT OF SPECIAL HYDROGRAPHIC INVESTIGATION
NORFOLK AND WESTERN RAILROAD COAL PIERS NO. 4&3
LAMBERT POINT, NORFOLK, VIRGINIA

25 MARCH 1957

The area between coal piers 4 and 3 was very difficult to investigate accurately because of the sharp incline from 16 feet along pier 3 to 38 feet along pier 4, as the hydro survey indicates. In addition to the sharp incline, the bottom is covered with heavy silt. The area was controled with triangulation and hydrographic signals.

An attempt was made at first to sweep the area with a light chain, but after two unsuccessful efforts, this was given up because the chain would merely drag on the bottom for a short distance before dragging in and hanging in the heavy silt.

Then several attempts were made to sweep the area with a 300 foot section of standard wire drag wire, weighted at each end. This was unsuccessful, because both the weights and the wire dug into the silt until it could not be pulled.

Realizing that sweeping the area was not practical, standard wire drag proceedures were followed with moderate success. Because of the steep incline, the drag had to be stepped off. It is felt that even though the 300 foot section of wire was toggled every 100 feet, due to the slow speed and confined maneuvering area the wire sagged and hung on the bottom at deeper depths than the drag was actually set.

Finally, a 20 foot pipe drag was used to clear an area at 19 feet in about 24 feet of water, which previously had caused a wire drag hang at 13.5 feet and cleared at 12.5 feet. The pipe drag was controlled by setting up 12 foot spaced ranges ashore.

A list of the hangs and results follow:

1. A hang at position 3 at 26.5 feet was due to the guide launch maneuvering too close to shoal water.

2. A hang at position 13 at 26.0 feet was due to the guide launch maneuvering too close to shoal water.

3. A hang at position 7 at 24.5 feet was cleared at the same depth at position 9-10.

4. A hang at position 16 at 13.5 feet was assumed due to a deep sag in the wire, because investigations with fathometer soundings and lead line soundings only verified the hydrography. The area was cleared at position 18-19 at 12.5 feet. A pipe drag cleared the same area at 19 feet on 12 March.

A list of overlays follow:

1. Drag strips.
2. Effective drag depths.
3. Hydrographic survey (reduced soundings).
4. Hydrographic development (reduced soundings).
5. Pipe drag area.

} incorporated in this report

It is considered that no further investigation is necessary. Concurred

Norman E. Taylor
LCDR. USC&GS
Chief of Party

R14C

Form 712
(11-30-55)

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens: 16 April 1957

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

HYDROGRAPHIC SHEET F. E. No. 5 1957

Locality Norfolk, Virginia

Chief of Party: D. A. Jones in 1957

Plane of reference is mean low water, reading

2.3 ft. on tide staff ~~RX~~ (1957) at Hampton Roads

13.4 ft. below B.M. 6 (1927)

Height of mean high water above plane of reference is 2.5 feet.

Condition of records satisfactory except as noted below:

William Thofus
Signature

Chief, Tides Branch

Comm-DC 34330

D

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. F.E.No.5 (1957)

Records accompanying survey:

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

bomb vols. .....; graphic recorder rolls 1-Envelope

special reports, etc. .1-Special report of Hydrographic

investigation, 5-Wire Drag and Hydro. Overlays, and Tide Data.

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

Number of positions on sheet		.....
Number of positions checked		...4...
Number of positions revised		...1...
Number of soundings revised (refers to depth only)		...1...
Number of soundings erroneously spaced		...6...
Number of signals erroneously plotted or transferred		— .....
Topographic details	Time	— .....
Junctions	Time	— .....
Verification of soundings from graphic record	Time	½ .....

Verification by W. Evans III ....Total time ..3.... Date 5/28/57.

Reviewed by W. Evans III ..... Time ..2..... Date 5/29/57.

M-2232-1

Field Examination No. 5, 1957

February 14 - 15, 1957

This examination was made as a result of complaints to the Coast Guard by tugboat operators who contend that there is no need for the Lambert Point Obstruction Buoy, charted position lat. 36°52.55', long. 76°19.93'. That buoy presumably marked obstructions remaining after removal of a pier which formerly extended off Lambert Point between the present Piers 3 and 4. This special investigation was ordered by the Director's letter of 6 February 1957 (copy of which is filed in chart letter 152, 1957) to determine or disprove the existence of obstructions in that area.

The result of the sounding and dragging done in this examination are shown on 5 overlay tracings incorporated in the Descriptive Report. The results were given to the 5th Coast Guard District by the Norfolk District Officer. On the basis of this investigation the 5th Coast Guard District is recommending that the Lambert Point Obstruction Buoy be discontinued (CL 152, 1957). The existence of dangerous obstructions in the area is considered disproved by the present examination.

The field examination prior to verification and review was applied to Correction Drawing No. 21 (5/23/57) of Chart 452. No conflicts with the reviewed examination are noted.

Reviewed by - L. V. Evans, III 29 May 1957
Inspected by - R. H. Carstens

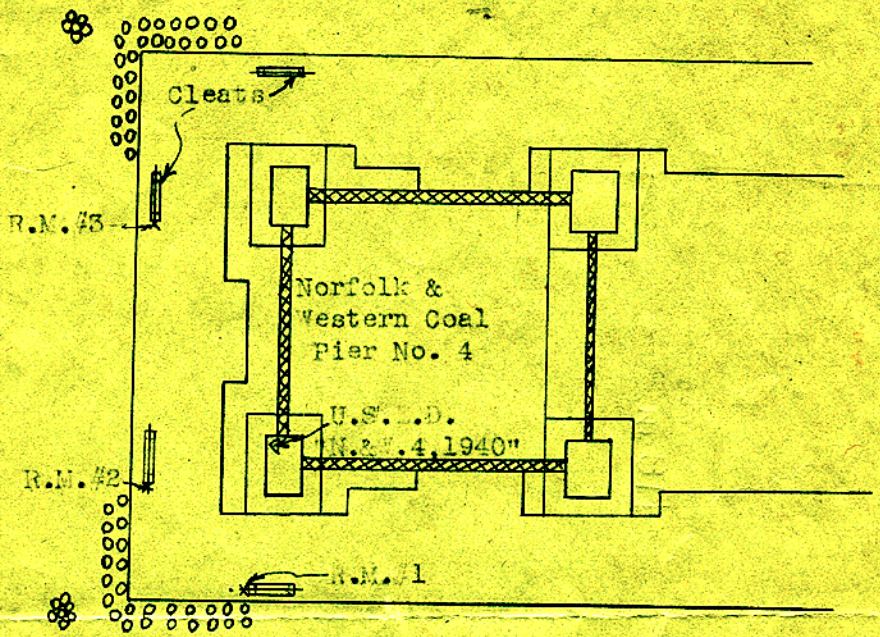
U. S. E. D.
NORFOLK, VA.
FORM T.D.-1. 1941

WAR DEPARTMENT — CORPS OF ENGINEERS, U. S. ARMY

Name of Station: U.S.E.D."N.& W.-4,1940" **State:** VIRGINIA

Established by: Wilson L. Carter **Year:** 1940

Locality: Norfolk, Va.-Elizabeth River



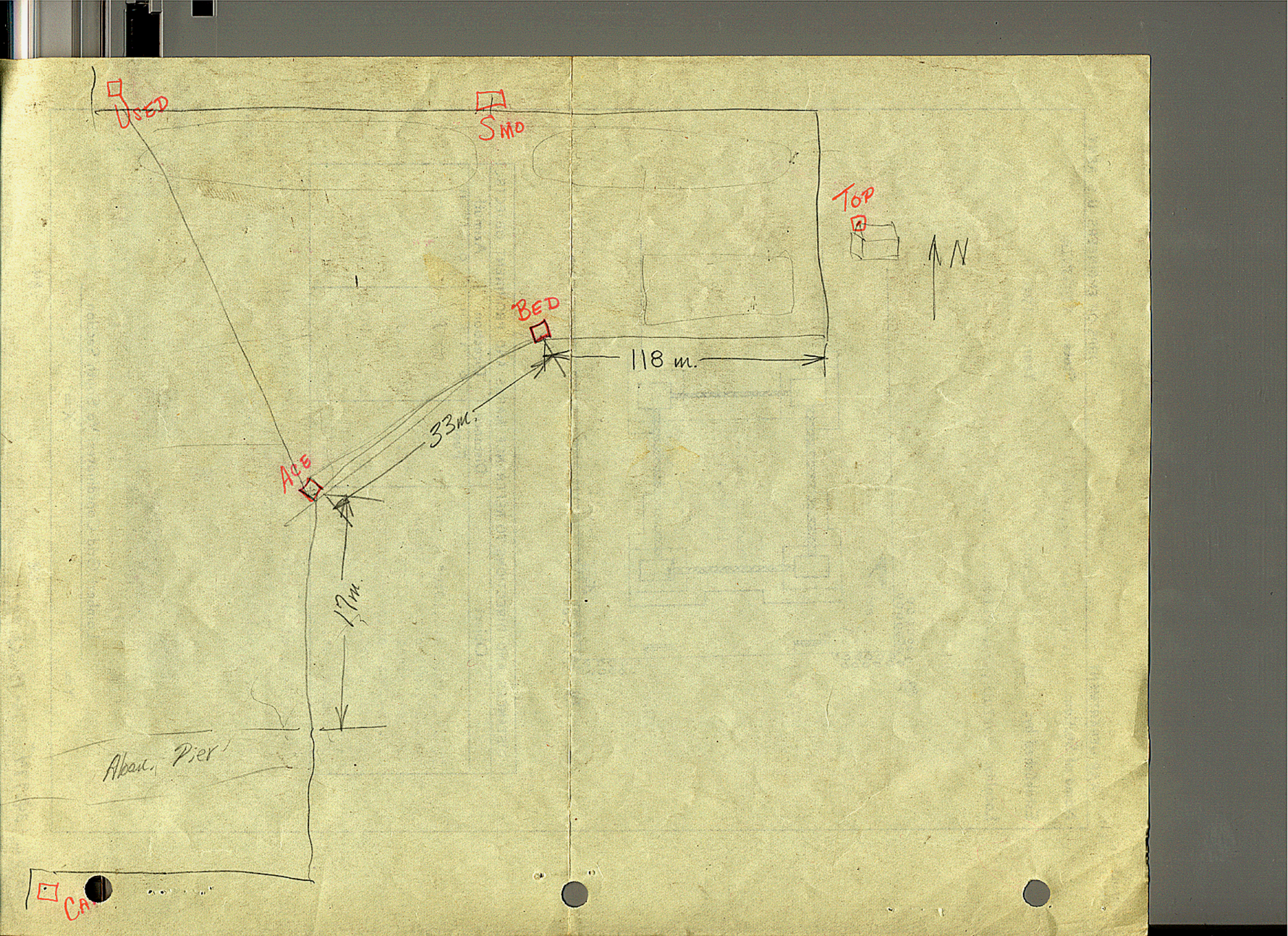
DISTANCES AND DIRECTIONS TO REFERENCE MARKS AND PROMINENT OBJECTS			
Object	Distance	Direction	Azimuth
	Feet	° ' "	° ' "
U.S.E.D."N.& W.5,1940"		0 00 00	209 12 43
R.M.#1-Cross chiseled in top of deck cleat.	13.54	142 11 00	318 23 43
R.M.#2-Cross chiseled in top of deck cleat.	10.17	232 47 00	78 59 43
R.M.#3-Cross chiseled in top of deck cleat.	28.70	303 45 00	149 57 43

Norfolk, Va., at the Norfolk & Western Railway's Coal Pier No. 4, near the southwest corner and on the northwest corner of the steel anchor plate of the southwest steel pier supporting the overhead tracks; a chiseled cross.

Lambert Grid Coordinates, Va South Section

Y= 204,890.47 X= 2,654,204.52

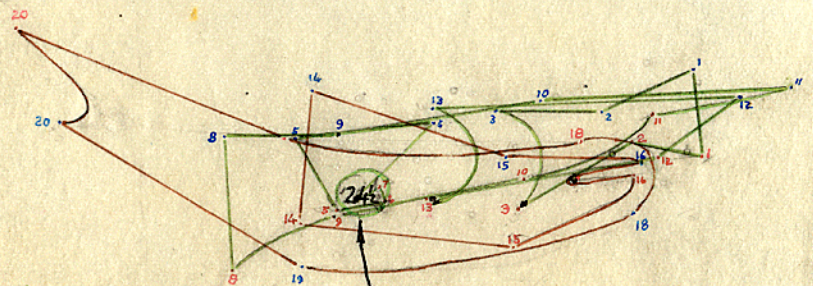
36-52-34.974" 76-M-53.885" .68 .84


USED
SMD
TOP
N
BED
118 m.
33m.
ACE
17m.
Aban. Pier

F.E. 5, 57

OVERLAY 1

Drag strips



76-20-00

36-52-30

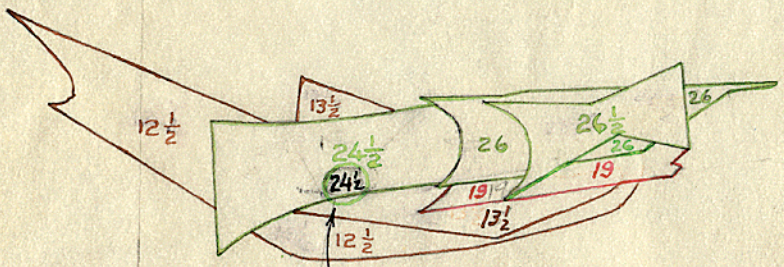
76-19-30

Fe 5-57

F.E. 5, 57

OVERLAY 2

Effective depth dragged



76-20-00

36-52-30

76-19-30

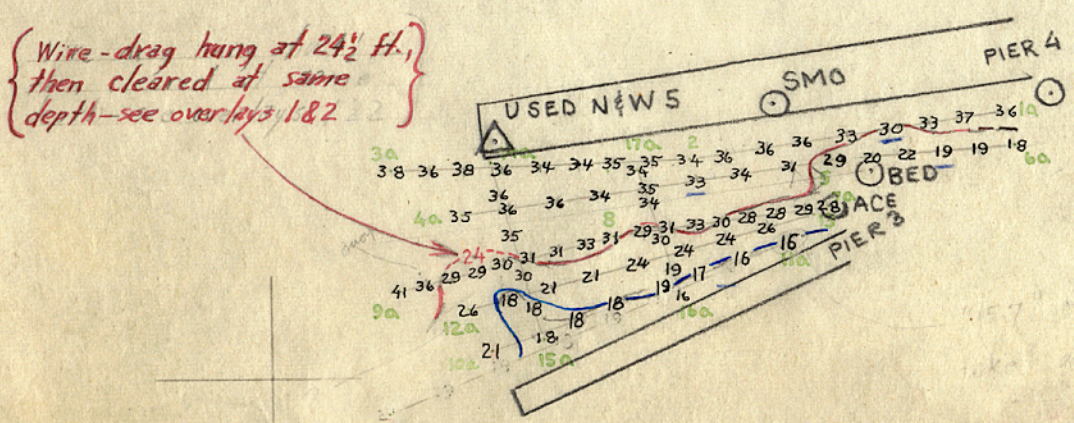
FR 5.7

F.E. 5-57

OVERLAY 3

Hydrography (Reduced soundings) a day

{Wire-drag hung at 24½ ft., then cleared at same depth—see overlays 1&2}



76-20-00

36-52-30

76-19-30

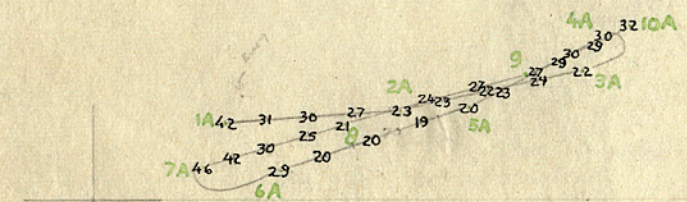
⊙ CAR applied clt 4½ 5-14-57 EGY

FR-5-57

FE 5-57

OVERLAY 4

Hydrography (Reduced soundings) A day



36-52-30

76-20-00

76-19-30

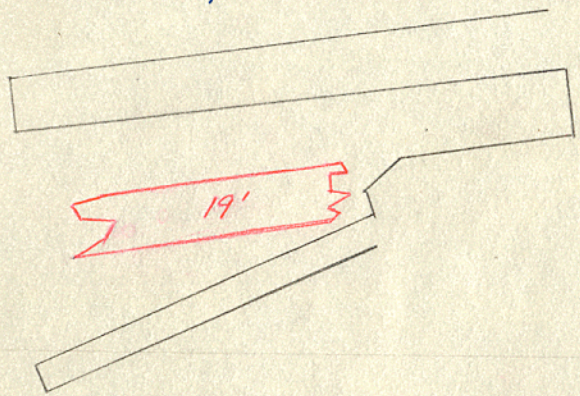
fe- 5-57

4

F.E. 5, '57

OVERLAY 5

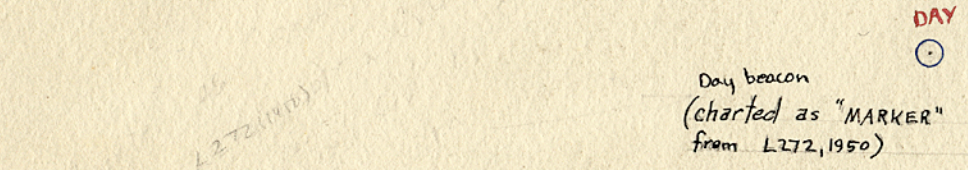
Pipe Drag



36°-52'-30"

76°-20'-00"

Fe-5-57



Day beacon
(charted as "MARKER"
from L272, 1950)

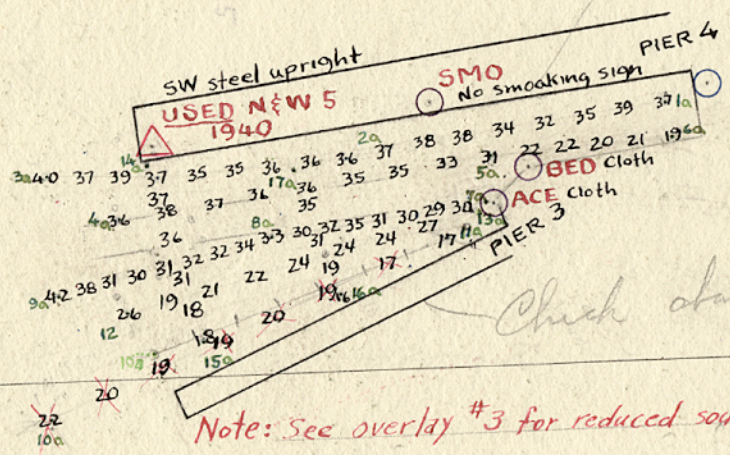
36°-52'-30"

76°-20'-30"

Boat Sheet: FE 5, 1957

Scale 1:5,000

Fe-5-57



LAMBERT POINT

TOP Gable of S gray shed

NORFOLK, VIRGINIA

36°52'30"

Note: See overlay #3 for reduced soundings & final positions

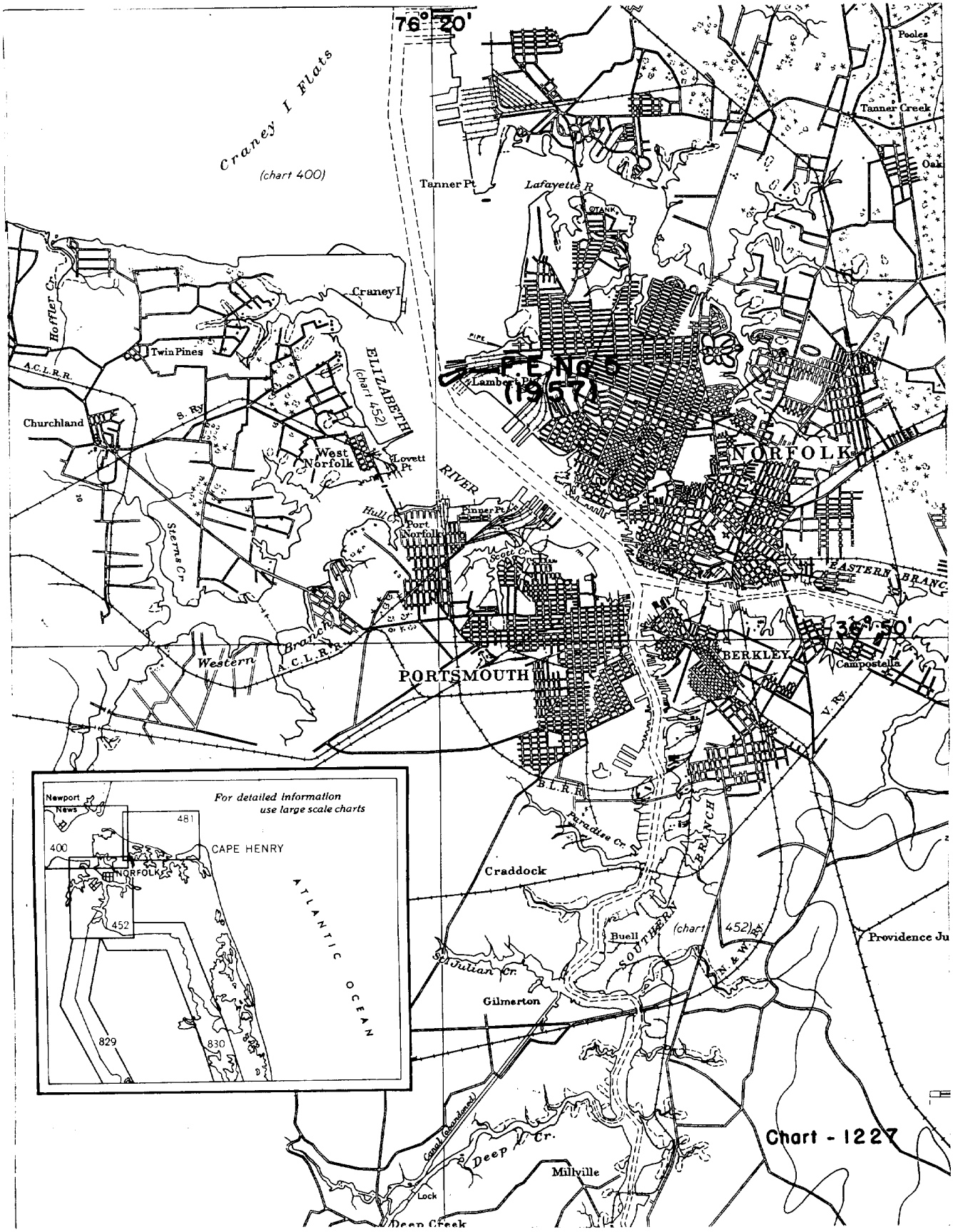
35°52'29"
76°19'57"

76°20'00"

CAP
Center of small gray shed on pier

Boat Sheet: FES, 1957

Scale 1:5,000


76° 20'
Craney I Flats
(chart 400)
Tanner Pt
Lafayette R
Pooles
Tanner Creek
Oak
Craney I
Hoffler Cr.
Twin Pines
A.C.L.R.R.
ELIZABETH
(chart 452)
Lambert Pt
P.E. No 5
(1957)
Churchland
S. Ry
West Norfolk
Lovett Pt
RIVER
NORFOLK
Hull Cr
Port Norfolk
Sterns Cr
Scott Cr
EASTERN BRANCH
Western Branch
A.C.L.R.R.
PORTSMOUTH
BERKLEY
Campostella
V. Ry
B.L.R.R.
Paradise Cr
Craddock
SOUTHERN BRANCH
Buell
(chart 452)
Providence Ju
St Julian Cr
Gilmerton
L.N. & W. Ry
Canal (abandoned)
Deep Cr.
Millville
Lock
Deep Creek
Newport News
481
400
CAPE HENRY
NORFOLK
452
ATLANTIC OCEAN
829
830
For detailed information
use large scale charts
Chart - 1227

NAUTICAL CHARTS BRANCH

SURVEY NO. F.E.No. 5
(1957)
Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
5/14/57	452	[illegible]	Before ~~After~~ Verification ~~and Review~~
8/27/57	400	[illegible]	~~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
			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.