10025

Diagram No. 8502-2

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. FA-10-4-82

Office No. H-10025

LOCALITY

State Alaska

General Locality Shelikof Strait

Locality Central Portion of Wide Bay

1982

CHIEF OF PARTY
CDR. W.F.Forster

LIBRARY & ARCHIVES

DATE Janurary 15, 1985

☆U.S. GOV. PRINTING OFFICE: 1980—766-230

10025

Cht
16570
16568
16013
16006

TO S1611 OF SEE "RECORD OF APPLICATION"

NOAA FORM 77-28 (11-72)

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

REGISTER NO.

H-10025

HYDROGRAPHIC TITLE SHEET

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

FIELD NO.

FA-10-4-82

State Alaska

General locality Shelikof Strait

Locality Central Portion of Wide Bay

Scale 1:10,000 Date of survey 16 June - 12 July, 1982

Instructions dated February 23, 1982 Project No. OPR-P146-FA-82

Vessel 2020, 2023, 2024, 2025, 2029

Chief of party Cdr. Walter F. Forster, NOAA, Commanding

Surveyed by ENS A. E. Francis, ENS F. J. Migaiolo, ENS P. T. Steele, ENS G. H. Tuell, CST E. R. Krick

Soundings taken by echo sounder, hand lead, pole Ross Model 5000 Fineline

Graphic record scaled by Ship's Personnel

Graphic record checked by Ship's Personnel

Verification ~~Processed~~ by A. A. Luceno Automated plot by PMC Xynetics Plotter

Evaluation ~~Verification~~ by Gordon E. Kay

Soundings in fathoms and tenths feet at MLW MLLW

REMARKS: Black ink notations in the Descriptive Report were made during evaluation at the Pacific Marine Center, Seattle, Washington.

AWOIS + SURF MSM 6/12/85

Appd to Std 1-15-86

NOAA FORM 77-28 SUPERSEDES FORM C&GS-537.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1978-665-010-1174

DESCRIPTIVE REPORT

FA-10-4-82

OPR-P146-FA-82

Central Wide Bay, Shelikof Strait, Alaska

A. Project

This hydrographic survey was conducted in accordance with Project Instructions - OPR-P146-FA-82, Shelikof Strait, Alaska dated February 23, 1982, Supplement to Instructions Change Number 1, dated ~~June 3, 1982,~~ MAY 25, 1982 and the PMC OPORDER.

All references to the Hydrographic Manual in this report refer to the 4th Edition updates through Change Number 3.

B. Area Surveyed

This survey is located in Central Wide Bay. The western boundary is a rock and gravel beach to the south with rock ledges to the north. Onshore the terrain is tundra covered sand dunes, with rugged 2000 to 3000 foot mountains 2 miles inshore. Contemporary survey H-10019 junctions with this survey to the southwest.

The corner boundaries of this survey are:

Northwest	Latitude 57° 26' 28"N	Longitude 156° 14' 55"W
Northeast	Latitude 57° 25' 17"N	Longitude 156° 13' 09"W
Southwest	Latitude 57° 22' 13"N	Longitude 156° 24' 15"W
Southeast	Latitude 57° 21' 03"N	Longitude 156° 22' 27"W

With shoreline extending from the northwest to the southwest boundaries. Hydrography began on 16 June 1982 (J.D. 167) and finished on 12 July 1982 (J.D. 193).

C. Sounding Vessel

Hydrographic Data Acquisition and Bottom Samples were conducted with Jensen survey launches FA-3 (2023), FA-4 (2024) and FA-5 (2025). The FAIRWEATHER (2020) conducted all Nansen casts on the survey.

MonArk (2029) was used to take two hydrographic detached positions (Position No. 8000, 8001). The RT unit was mounted on a 2x4 board eight feet above the boats water line, Mini Ranger console 703 was placed within the boat. All fixes taken with this vessel configuration were range/range with a third range as a check.

No other unusual vessel configurations were used on this survey.

D. Sounding Equipment and Corrections to Echo Soundings

Ross Fineline 5000 narrow beam echo sounders were used on all launches in this survey (see Table I, Sounding Equipment). Phase calibrations and belt tension checks were made at the beginning and ending of each day and whenever paper was changed. ✓

Launch personnel checked fathometer initial frequently during the day for correct paper alignment. All analog and digital data were scanned to compare values and to insert peaks and deeps where they occurred between sounding marks. Depths ranged from -0.7 to 41 fathoms on this survey. ✓

There were no faults in the echo sounding equipment affecting the accuracy of soundings. ✓

Velocity of sound was calculated from 3 deep water Nansen casts. For dates and locations see Table II, Nansen Casts. ✓

Velocity corrector Tables II and III apply to this survey (see Table III, Velocity Corrector Table Dates). *see Evaluation Report section I*

Nansen bottle thermometers and the Beckman Salinometer (S/N 59435) used for the velocity corrector calculations were calibrated by Northwest Calibration Center, Seattle, Washington in March 1982. ✓

TABLE I

Sounding Equipment

Vessel	Instrument	Model	Analog	Digitizer	Inverter	Transceiver
2023	Ross Fineline	5000	1047	1054	1046	1047
2024	Ross Fineline	5000	1097	1046	1054	1046
2025	Ross Fineline	5000	1036	1036	1053	1054

✓

TABLE II

Nansen Casts

Station No.	Date	Latitude	Longitude
002	21 June 1982 (J.D. 172)	57° 21.33'N	156° 23.51'W
003	7 July 1982 (J.D. 188)	57° 22.1'N	156° 21.3'W
004	15 July 1982 (J.D. 196)	57° 19.4'N	156° 45.6'W

✓

TABLE III

Velocity Corrector Table Dates

Table No.	Beginning Date	Ending Date
2	J.D. 166	J.D. 181
3	J.D. 189	J.D. 195

Due to foul weather and large swells, two bar checks per day were not always possible, but were attempted when conditions allowed. Bar checks were used to confirm fathometer systems function and to provide data to compute TRA correctors.

Settlement and Squat for all launches was determined at Shilshole Bay Marina, Seattle, Washington in March 1982, in accordance with Section 4.9.4.2 of the Hydrographic Manual, 4th Edition.

A Ziess level on shore, observing on a stadia rod held vertical, directly over the launch transducer, determined the settlement and squat for each launch at speed increments of 200 RPM.

Settlement and squat correctors are required at certain launch speeds (see Table IV, Restrictive Launch Speeds). Hydrography was not run at these restricted launch speeds, thereby eliminating the need for settlement and squat correctors.

For further details, see Corrections to Echo Sounding Report.

TABLE IV

Restrictive Launch Speeds

Launch	Restrictive Speeds
2023	2250 to 2700 RPM
2024	2400 to 2700 RPM
2025	2300 to 2700 RPM

E. Hydrographic Sheets

All field sheets were plotted aboard the FAIRWEATHER using two PDP8/e computers (S/N 09524 and S/N 01020) and two Complot plotters (S/N 5557-5 and S/N 5848-17).

All hydrographic data from this survey will be sent to Pacific Marine Center, Seattle, Washington for verification and smooth plotting.

The final smooth field sheet is plotted on mylar, dimensions are 21.5x54 inches with a skew of 40°, at a scale of 1:10,000.

Presurvey Review item 27 is plotted on a 1:2,500, paper sheet. Dimensions are 17x20 inches with a skew of 145°.

F. Control Stations

Horizontal control for the survey was performed by FAIRWEATHER personnel. Conventional traverse and triangulation methods were used throughout the survey with the exception of station PIPE ~~1982~~ which was located by one single direct and intersection methods. All control was based on the North American 1927 Datum. All field measurements and shipboard calculations were accomplished to Third Order Class I accuracy or better. For further details, see Horizontal Control Report, OPR-P146-FA-82. (Horizontal Control Report to be submitted to Pacific Marine Center by 16 August 1982). The following stations were used in support of this survey:

Station Name	Signal Number
TITCLIFF, 1923	301 located off survey area limits
PIPE, ~~1982~~* +	208
TERRACE, 1923	310
EAST CHANNEL, 1923	276
SHANNON, 1923	230

*Non-monumented stations + Offshore control positions

~~None~~ all except Titcliff of these signals are located within the limits of this survey.

G. Hydrographic Position Control

All electronic position control of the survey launches was with the Motorola Mini Ranger III system. Range/range (R/R) methods were used exclusively for launch positioning.

Critical calibration of electronic position instruments as per PMC OPORDER Appendixes M and S, were made on an offshore calibration pole (PIPE, signal number 208) located 200 meters southwest of the edge of the survey limits.

All calibrations on electronic position instruments meet or exceed the requirements of section 1.3.3.2.4 of the Hydrographic Manual.

There were no signal strengths below the minimum set from the BLC and no poor geometric configurations.

Bottom samples taken using launch 2025 were positioned by range/range methods with a third range as a check.

Mini Ranger Baseline Calibrations (BLC) were performed on a baseline measured to Third Order accuracy by a Hewlett-Packard 3808A EDMI.

The beginning BLC was conducted in Port Frederick, Alaska on 22 May 1982 (J.D. 142).

The final BLC was conducted in Kodiak, Alaska on 19, 21, and 30 July 1982 (J.D.'s 200, 202, 211).

The final correctors for the electronic positioning instruments were calculated by taking the mean value from the initial and final BLC's.

On 9 July 1982 (J.D. 190) MR Code 8 began responding to intergradations of all Mini Ranger codes. Only FA-4 (2024), (Mini Ranger Console S/N 701) was using Code 8 for positioning on this day. Code 8 was taken off the air and found to have water inside. Repairs were made and the unit was not used again until the final BLC.

During the final BLC Mini Ranger Console 702 was inadvertently adjusted on Code 8, yielding a 30 meter corrector. Mini Ranger Consoles 701, 703 and B0323 had acceptable correctors with this code.

Critical calibrations on Code 8 during survey operations showed Code 8 to be within the acceptable limits of BLC correctors on all Mini Ranger consoles used.

Code 8 was used only with console 701 during this survey and no problems were encountered with this combination.

No other problems with the electronic Positioning Instruments were encountered.

H. Shoreline

Shoreline was taken from 1:10,000 scale, digitized shoreline manuscripts compiled by Pacific Marine Center from 1:20,000 scale shoreline manuscripts TP-00629 and TP-00927.* A comparison between this survey and the compiled shoreline shows no discrepancies. However, this shoreline and that of Chart 16570 do not agree in areas around the mouths of creeks. (See Section L, Comparison with the Chart for details.)

*digitized to change scale only

All shoreline details have been field edited, with changes transferred to the final field sheet.

Hydrographic methods have located the ledge in the area of latitude 57° 25' 45"N, longitude 156° 16' 30"W, further offshore than the photogrammetric records show. The hydrographic records depict the zero fathom curve very well, along this ledge. The FAIRWEATHER recommends that the hydrographic data be used to compile ledge limits on the next edition of the Chart.

Concur

There are no control stations located seaward of the shoreline on this survey. Station PIPE (208) located on H-10019 (latitude 57° 21' 54.09"N, longitude 156° 24' 07.13"W) is approximately 0.5 mile offshore and 200 yards southwest of the limit of the survey. PIPE is an intersection station on a well casing approximately 3 feet in diameter and 20 feet above MLLW.* The station was used as a support for tide station (945-8461), as a calibration pole, and as a Mini Ranger electronic control station.

* using predicted tides

I. Crosslines

Crossline comparison is excellent, with 21.1 nm run comprising 14% of the main scheme. A discrepancy of 1 fathom at latitude 57° 23' 11"N, longitude 156° 18' 35"W is due to a rapidly changing bottom contour. This discrepancy has a main scheme depth of 15 fathoms and a crossline depth of 16 fathoms. ✓

This comparison meets section 1.1.2, Part II.1 of the Hydrographic Manual. ✓

J. Junctions

✓

This survey junctions to the east with contemporary survey H-10026 (FA-10-5-82) and to the south with H-10019 (FA-10-3-82).

The juctions to the south and east are both good with one exception each. ✓ See Table V, Junction Discrepancies. These discrepancies appear in areas of rapidly changing contours and the lack of exact coincidence of soundings explains these discrepancies. Recommend using the soundings of this survey on the next edition of the chart. Concur

TABLE V

Junction Discrepancies

Position	H-10025	H-10026	H-10019	
Latitude 57° 22' 42"N, Longitude 156° 18' 51"W	33	34	--	✓
Latitude 57° 21' 29"N, Longitude 156° 23' 03"W	26	--	27	

K. Comparison with Prior Surveys and H-4925

This survey was compared with H-4296, "Wide Bay - Central Part", dated 13 August to 14 September 1923. The scale of H-4296 was 1:20,000. An enlargement of H-4296 at a scale of 1:10,000 was overlayed for comparisons. All soundings were checked. Ninety six percent (96%) fell within the guidelines from section 1.1.2 Part B II.1 of the Hydrographic Manual.

Shoaling of 1 to 2 fathoms has occurred in two areas of 1/2 mile radius centered at latitude 57° 22' 15"N, longitude 156° 19' 00"W and latitude 57° 24' 10"N, longitude 156° 16' 35"W. ✓

The shoaling in this area appears to be due to an inflow of silt from the many creeks in the area. Bottom samples confirm this, as all taken in the area are fine, sand and mud. ✓

For a discrepancy in soundings and shoreline see Table VI, Comparisons with Prior Surveys.

All discrepancies between this and the prior survey have been resolved in the field. All soundings and features of this survey should supercede all prior surveys and be used to update the next edition of the chart. See Evaluation Report Section 6

TABLE VI

Comparisons with Prior Surveys

	Position	H-4295 and H-4296	H-10025	Comments	
1.	Latitude 57° 22' 05"N, Longitude 156° 23' 06"W	7 3/4'	~~13'~~ 7.5 Pos# 2098/2	The prior survey sounding appears to be in positional error, due to the distortion of the prior survey enlargement and the large size of the sounding character on that sheet. Recommend contemporary survey sounding be used on the next edition of the chart.	Concur
2.	Latitude 57° 21' 48"N, Longitude 156° 22' 04"W	35'	~~37~~ 36 Pos# 2157	These soundings are in an area where bottom changes rapidly. In exact coincidence of soundings on a steep slope account for these discrepancies. Recommend contemporary survey soundings be used on the next edition of the chart.	Concur
3.	Latitude 57° 22' 47"N, Longitude 156° 21' 44"W	15'	~~17~~ 15.8	"	Concur
4.	Latitude 57° 22' ~~24~~ 5"N, Longitude 156° 20' 58"W	16'	18'	"	Concur
5.	Latitude 57° ~~22~~ 3 00"N, Longitude 156° 19' 35"W	25'	27'	"	Concur
6.	Latitude 57° 24' 05"N, Longitude 156° 20' 40"W	~~Ledge~~ Reef	1.4-1.8' Reef	Contemporary survey shows no sign of a ~~ledge~~ reef here. Appears that prior survey has this ~~ledge~~ incorrectly charted. Recommend ledge be charted at latitude 57° 24' 05"N, longitude 156° 20' 55"W as comtemporary survey shows this to be the true location. chart as reflect this location	

Table VI Cont.

	Position	H-4295 and H-4296	H-10025	Comments
7	Latitude 57° 24' 05"N, Longitude 156° 20' 55"W	.5'	Ledge	This is the true location of the above discrepancy. Recommend contemporary survey limits of this ledge be used on the next edition of the chart. Charts reef at this location
8.	Latitude 57° 23' 56"N, Longitude 156° 20' 58"W	Rock Awash	Rock Awash Surrounded by ~~Ledge~~ Reef	Contemporary survey has this rock surrounded by a ~~ledge~~ reef. Recommend new chart show same. Rock uncovers 4 ft at MLLW
9.	Latitude 57° 25' 21"N, Longitude 156° 19' 25"W	.25'	Rock Awash Post 8000	Located during contemporary survey, recommend rock be plotted on chart. Rock uncovers 2 ft at MLLW
10.	Latitude 57° 25' 21"N, Longitude 156° 19' 22"W	.25'	Rock Awash Post 8001	" rock uncovers 1 ft at MLLW

11. Shoreline between this survey and the prior survey compares very closely except at the mouths of creeks where silting has occurred over the last 60 years. ✓

12. The ledge in the area of latitude 57° 25' 45"N, longitude 156° 16' 30"W was developed extensively by hydro methods. The contemporary survey limit of this ledge is further offshore than the prior survey. Recommend ledge limits of this survey be used on the next edition of the chart. Concur

PSR Item 27

A 200% side scan sonar investigation was conducted over ~~20%~~ 10% of the area outlined in the AWOIS listing of Pre Survey Review (PSR) item 27. For description of this PSR item see Table VII, AWOIS, PSR Item 27.

The side scan sonar run in the area showed no prominent bottom features, only a smooth, gradually sloping bottom. The main scheme hydrography through the remaining 80% of PSR item 27 shows only a gradually sloping, smooth bottom.

AWOIS # 50277 6/13/85 MSM

Bottom samples in the area reveal a sandy, mud bottom. The agreement between the side scan sonar and main scheme hydrography does not warrent further side scan investigation of the area. On 3 August a radio message was sent to Chief, Marine Surveys Branch, CPM3, Pacific Marine Center, and Chief, Requirements Branch, C351, Rockville, Maryland, stating that further side scan operations on PSR item 27 would not be conducted due to the lack of meaningful side scan returns and adequacy of this surveys hydrography. See Appendix "J" for copy of this message.

The feature was confirmed by this survey H-10025 and is adequately charted

All side scan sonar sweeps are plotted on a 1:2,500 scale, development sheet. The limits of this sheet are:

Latitude 57° 24' 36"N	Longitude 156° 17' 20"W
Latitude 57° 25' 06"N	Longitude 156° 16' 44"W
Latitude 57° 23' 59"N	Longitude 156° 16' 06"W
Latitude 57° 24' 38"N	Longitude 156° 15' 29"W

TABLE VII

AWOIS, PSR Item 27

History
Fan Like Feature: Bottom character ranges from soft sand to mud and indicates absence of strong currents and wave action at the depth in the area (7 1/2 to 34 fms). An alluvial source is indicated. The bottom appears generally smooth with no isolated pinnalces and outcroppings.

Survey Requirements
Side Scan Sonar Investigation: A complete development yielding 200% bottom coverage is required. Specific depth dependent operating requirements are defined in Change 1 to the Project Instructions. The operating area is assigned: OPR-P146, Item 27. The fanlike feature was confirmed by this survey and is adequately charted

L. Comparison with Chart

Comparisons were made with Chart 16570 "Portage and Wide Bay", 8th Edition, 18 February 1978 scale 1:50,000. A 1:10,000 scale photo enlargement was overlaid for comparison.

Shoaling of 1 to 2 fathoms has occurred within a 1/2 mile radius of latitude 57° 25' 22"N, longitude 156° 15' 18"W.

For discrepancies in soundings and features, see Table VIII, Comparison with Chart.

All discrepancies between this survey and the chart have been resolved in the field. All soundings and features of this survey should supercede all prior surveys and be used to update the next edition of the chart. Concur

TABLE VIII

Comparison with Chart

	Position	16570	H-10025	Comments
1.	Latitude 57° 25' 22"N Longitude 156° 15' 18"W	13	11	The area is a very flat bottom, appears to have shoaled over the past 60 years. Recommend using contemporary survey soundings on the next edition of the chart. Concur

Table VIII Cont.

	Position	16570	H-10025	Comments
2.	Latitude 57° 25' 39"N, Longitude 156° 15' 57"W	9'	6.5'	These soundings are in an area where bottom changes rapidly. In-exact coincidence of soundings on a steep slope account for these discrepancies. Recommend contemporary survey soundings be used on the next edition of the chart. Concur
3.	Latitude 57° 24' 07"N, Longitude 156° 16' 19"W	13'	17'	" Concur
4	Latitude 57° 22' 56"N, Longitude 156° 19' 08"W	25'	27'	" Concur
5.	Latitude 57° 24' 05"N, Longitude 156° 20' 40"W	Ledge Reef	1.4-1.8'	Contemporary survey shows no sign of a ~~ledge~~ reef here. Appears that the chart has this ~~ledge~~ reef incorrectly charted. Recommend ledge be charted at latitude 57° 24' 05"N, longitude 156° 20' 55"W as contemporary survey shows this to be the true location. chart a reef at this location. also reference D.R. paragraph K table VI, #6+7
6.	Latitude 57° 24' 05"N, Longitude 156° 20' 55"W	.5'	reef ~~Ledge~~	This is the true location of the above discrepancy. Recommend survey limits of this ~~ledge~~ reef be used on the next edition of the chart. Concur also reference D.R. paragraph K table VI, #6+7
7.	Latitude 57° 25' 21"N, Longitude 156° 19' 25"W	1/4'	Rock Awash	Located during contemporary survey, recommend rock be plotted on chart and supercede prior survey data. Concur Rock uncovers 3 ft at MLLW also reference D.R. paragraph K, table VI #7, 8
8.	Latitude 57° 25' 21"N, Longitude 156° 19' 22"W	1/4'	Rock Awash Pat #0001	" Concur Rock uncovers 1 ft at MLLW

9. The ledge in the area of latitude 57° 24' 45"N, longitude 156° 16' 30"W was developed extensively by hydrography methods. The contemporary survey limit of this ledge is further offshore than the chart. Recommendation is made that ledge limits of this survey be used on the next edition of the chart. Concur

10. Shoreline between this survey and the chart compares very closely except at the mouths of creeks where silting has created small deltas. Concur

Keith

M. Adequacy of Survey

This survey is adequate to supercede all prior surveys. The Commanding Officer inspected data on a daily basis. No further work is necessary.

N. Aids to Navigation

There are no aids to navigation located within this survey. A well casing (station ~~PIEP~~ PIPE S/N 208) located approximately 200 yards southwest of the survey limits is a useful navigational landmark. See section H, Shoreline for further details.

O. Statistics

	2029	2023	2024	2025	Totals
Positions	2	1092	~~1143~~ 1103	~~28~~ 6	~~2260~~ 2223
Nautical Miles	--	155.9	140.1	--	296.0
Square Miles	--	--	--	--	11.6
Bottom Samples	--	--	--	21	21

No current or magnetic stations were performed within the limits of this survey. Tide control for this survey was from tide station 945-8461. For further details see Field Tide Note for OPR-P146-FA-82.

Three velocity casts were made, see section D, Sounding Equipment and Corrections to Echo Soundings.

P. Miscellaneous

There are no anomalous tidal currents or races in the area.

The area is used by the commercial fishing industry both as a fishing grounds and as a harbor of refuge.

Q. Recommendations

This survey should be used to update existing charts of Wide Bay and along with other contemporary surveys be used to produce new 1:50,000 scale charts of the area. For recommendations on changes to charted features see section L, Comparison with the Chart.

R. Automated Data Processing

The following is a list of the Hydroplot programs used for data acquisition and processing during this survey.

Number	Program Name	Version Date
RK 112	R/R Real Time Plot	3/19/81
RK 201	Grid, Signal and Lattice Plot	4/18/75
RK 211	R/R Non-real Time Plot	2/2/81
RK 212	Visual Station Load and Plot	4/1/74
RK 300	Utility Package	10/21/80
RK 330	Data Reformat and Check	5/4/76
PM 360	Electronic Corrector Abstract	2/2/76
AM 500	Predicted Tide Generator	11/10/72
RK 530	Velocity Correctors	5/10/76
RK 561	Geodetic Calibration	2/19/75
AM 602	Elinore	5/21/75

S. Referral to Reports

The following separate reports covering the 1982 season in Wide Bay can be referred to for further detail on specific items.

OPR-P146-FA-82

Horizontal Control Report
Electronic Control Report
Field Edit Report
Corrections to Echo Soundings Report
Geographic Names Report
Field Tide Note

CO
XO
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NOJ DE WTEB

T

RTTUZYUW RUHPTEB0102 2152000-UUUU--RUHPSUU.
ZNR UUUUU
P 032000Z AUG 82
FM NOAAS FAIRWEATHER
TO NOAACPM SEATLE WA
CM GRNC
RT
UNCLAS
PMC-59-FA/CPM3/C351
PRESENT PROJECT ACCOMPLISHMENT WARRENTS CHANGES TO PSR SIDE SCAN REQUIREMENTS. IN ADDITION, BASED UPON SIDE SCAN OPERATIONS IN ST. PAUL HARBOR AND BASIC HYDROGRAPHY IN WIDE BAY THE FOLLOWING CHANGES ARE WARRENTED TO PSR SIDE SCAN REQUIREMENTS:

1. PSR NR 27 AND 28- INITIAL SIDE SCAN IN 10 PER CENT OF AREA INDICATES NOTHING OF SIGNIFICANCE. FURTHUR STUDY IS NOT PRODUCTIVE UNLESS DIRECTED OTHERWISE.
2. PSR NR 25 AND 26- SIDE SCAN AREA IS TOO EXTENSIVE FOR WORKING AREA DUE TO WEATHER AND TYPE OF BOTTOM. ONE RECONIASSANCE LINE SHOWS NO SIGIFICANT FEATURES ON PSR NR 26. UNLESS OTHERWISE DIRECTED REDUCING AREA TO ACTUAL CHANNEL AREAS AND DEPTHS LESS THAN 10 FATHOMS. REQUEST ACKNOWLEDGED AGREEMENT.

RT
#0102

NNNN

	TOD
NOJ	032044 Z AUG 82
M	FREQ 6423

RT SSC (AUTOMATIC RELAY) -ZOC-

[illegible]Z AUG 82

FM NOAAS FAIRWEATHER

TO OA/NOAACPM SEATTLE WA

GR 8RNC

BT

UNCLAS

PMC-59-FA/CPM3/C351D

PRESENT PROJECT ACCOMPLISHMENT WARRENTS CHANGES TO PSR SIDE SCAN REQUIREMENTS. IN ADDITION, BASED UPON SIDE SCAN OPERATIONS IN ST. PAUL HARBOR AND BASIC HYDROGRAPHY IN WIDE BAY THE FOLLOWING CHANGES ARE WARRENTED TO PSR SIDE SCAN REQUIREMENTS:

1. PSR NR 27 AND 28- INITIAL SIDE SCAN IN 10 PER CENT OF AREA INDICATES NOTHING OF SIGNIFICANCE. FURTHUR STUDY IS NOT PRODUCTIVE UNLESS DIRECTED OTHERWISE.
2. PSR NR 25 AND 26- SIDE SCAN AREA IS TOO EXTENSIVE FOR WORKING AREA DUE TO WEATHER AND TYPE OF BOTTOM. ONE RECONNIASSANCE LINE SHOWS NO SIGIFICANT FEATURES ON PSR NR 26. UNLESS OTHERWISE DIRECTED REDUCING AREA TO ACTUAL CHANNEL AREAS AND DEPTHS LESS THAN 10 FATHOMS. REQUEST ACKNOWLEDGED AGREEMENT.

BT

TOD-03:03:22:44

FAXED TO C351 - 8-6-82

1 Boat for rest of project

OK'D BY C351 & PASSED TO SHIP. (8-11)

CPM 1 - Review and Coordinate Reply ASAP

Alan Anderson

1057

Faxed 8/6/82

NN

ACTION.....1.....REPLY BY:(LTR/MSG) DATE............ADD'L FOLLOW UP...

CPM/1/121/X2 / / / IN DATE...03/03/82...MSG RELEASE.....

K. Approval Sheet

The Commanding Officer inspected all field sheets and data on a daily basis. All survey sheets, reports, and records are complete. This survey is adequate for charting purposes and no additional field work is necessary.

Submitted by:

Craig Bailey

Craig Bailey
Ensign, NOAA

Approved by:

Walter F. Forster
Commander, NOAA
Commanding Officer

SHELIKOF SIGNAL LISTING
OPR-P146-FA-82
FA 10-4-82 (H-10025)

PIPE 1978 571562 FAIRWEATHER
208 2 57 21 54088 156 24 07129 250 0005 000000

SHANNON 1923 571562 1020
230 0 57 25 02399 156 21 37601 250 0169 000000

EAST CHANNEL 1923 571562 1006
276 0 57 24 34100 156 11 55721 250 0026 000000

TITCLIFF 1923 571562 1023
301 7 57 19 50910 156 20 21839 250 0034 000000

TERRACE 1923 571562 1022
310 3 57 22 48321 156 16 12267 250 0095 000000

DATE: August 29, 1983

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Pacific Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): 945-8461 Wide Bay, Alaska

Period: June 6 - August 4, 1982

HYDROGRAPHIC SHEET: H-10025

OPR: P-146

Locality: Wide Bay, Shelikof Straits, Alaska

Plane of reference (mean lower low water): 0.54 ft.

Height of Mean High Water above Plane of Reference is 11.0 ft.

REMARKS: Recommended Zoning:

1. Zone Direct
2. For J-Day 188-194 no smooth tides are available.

Chief, Tidal Datums Section, Tides & Water Levels Branch

DATE: March 8, 1984

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Marine Center: Pacific

OPR: P146

Hydrographic Sheet: H-10025

Locality: Wide Bay, Alaska

Time Period: June 6-August 4, 1982

Tide Station Used: 945-8461 Wide Bay, Alaska

Plane of Reference (Mean Lower Low Water): 0.54 feet

Height of Mean High Water Above Plane of Reference: 11.0 feet

Remarks: Recommended Zoning:

Zone Direct

James R. Hubbard
Chief, Tidal Datums Section

NOAA FORM 76-155
(11-72)

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

SURVEY NUMBER

H-10025

GEOGRAPHIC NAMES

16570 8th Edition Feb 10, 1978

Name on Survey	A ON CHART NO.	B ON PREVIOUS SURVEY NO. H-4295	C ON U.S. QUADRANGLE MAPS Usashik B1 B2	D FROM LOCAL INFORMATION	E ON LOCAL MAPS	F P.O. GUIDE OR MAP	G RAND MCNALLY ATLAS	H U.S. LIGHT LIST	K	
Wide Bay	X	X	X							1
Short Creek	X		X							2
Pass Creek	X		X							3
Mount Shannon	X		X							4
Des Moines Creek	X		X							5
Lees Cabins	X		X							6
Sids Pass			X							7
Deer Mountain			X							8
Alaska Peninsula		X								9
										10
										11
										12
										13
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										25

☆ U.S. G.P.O. 1972-769-565/518 REG. #6

U.S. DEPARTMENT OF COMMERCE — REGISTRY NUMBER

HYDROGRAPHIC SURVEY STATISTICS

H-10025

RECORDS ACCOMPANYING SURVEY: To be completed when survey is processed.

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	1	SMOOTH OVERLAYS: POS., ARC, EXCESS	4
DESCRIPTIVE REPORT	1	FIELD SHEETS AND OTHER OVERLAYS	1

DESCRIPTION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR-GRAMS	PRINTOUTS	ABSTRACTS/ SOURCE DOCUMENTS	
ACCORDIAN FILES	1					
ENVELOPES						
VOLUMES	1					
CAHIERS						
BOXES						

SHORELINE DATA

SHORELINE MAPS (List):

PHOTOBATHYMETRIC MAPS (List):

NOTES TO THE HYDROGRAPHER (List):

SPECIAL REPORTS (List):

NAUTICAL CHARTS (List):

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS		
	VERIFICATION	EVALUATION	TOTALS
POSITIONS ON SHEET			2223
POSITIONS REVISED	8469		8469
SOUNDINGS REVISED	31		31
CONTROL STATIONS REVISED	2		2
	TIME-HOURS		
	VERIFICATION	EVALUATION	TOTALS
PRE-PROCESSING EXAMINATION	5		5
VERIFICATION OF CONTROL	4	2	6
VERIFICATION OF POSITIONS	102	6	108
VERIFICATION OF SOUNDINGS	99	20	119
VERIFICATION OF JUNCTIONS	2	4	6
APPLICATION OF PHOTOBATHYMETRY	0	0	0
SHORELINE APPLICATION/VERIFICATION	5	4	9
COMPILATION OF SMOOTH SHEET	73	4	77
COMPARISON WITH PRIOR SURVEYS AND CHARTS	4	26	30
EVALUATION OF SIDESCAN SONAR RECORDS	3	1	4
EVALUATION OF WIRE DRAGS AND SWEEPS	0	0	0
EVALUATION REPORT	15	31	46
~~XXXXX~~ Rework/Other	45	4	49
DIGITIZATION	15		15
TOTALS	372	102	474

Pre-processing Examination by	Beginning Date	Ending Date
Verification of Field Data by: A. A. Luceno	~~XXXXXXX~~ Beginning: 9/24/82	Ending Date: 10/15/84
Verification Check by: S. H. Otsubo, J. S. Green	Time (Hours): 38	Ending Date: 10/22/84
Evaluation and Analysis by: Gordon E. Kay	~~XXXXXXX~~ Beginning: 8/27/84	Ending Date: 11/8/84
Inspection by: D. Hill	Time (Hours): 2	Ending Date: 12/5/84

PACIFIC MARINE CENTER

EVALUATION REPORT

REGISTRY NO: H-10025 FIELD NO: FA-10-4-82

Alaska, Shelikof Strait, Central Portion of Wide Bay

SURVEYED: 16 June - 12 July, 1982

SCALE: 1:10,000 PROJECT NO: OPR-P146-FA-82

SOUNDINGS: Ross Model 5000 Fathometer CONTROL: Range/Range
Motorola Mini-Ranger III

Chief of Party.....Cdr. W. F. Forster

Surveyed by.....Ens. A. E. Francis
Ens. J. J. Migaiolo
Ens. R. T. Steele
Ens. G. H. Tuell
Cst. E. R. Krick

Automated Plot by.....PMC Xynetics Plotter

Verified by.....A. Luceno

Evaluated by.....Gordon E. Kay

1. INTRODUCTION

H-10025 is a basic hydrographic survey conducted by NOAA Ship FAIRWEATHER in accordance with the following:

Project instructions OPR-P146-FA-82, dated February 23, 1982
Change number 1, dated May 25, 1982

H-10025 is a one year survey situated in the central portion of Wide Bay, located just off of the western limits of Shelikof Strait, Alaska.

The following data were changed during verification.

a) Projection parameters were changed to center the hydrography on the smooth sheet and to change the projection to polyconic.

b) Tide levels values are from observed tides, see attached form 712.

c) Velocity correctors were changed after the velocity curves were redrawn and scaled, reflecting a new set of correctors.

2. CONTROL AND SHORELINE

Horizontal control and hydrographic positioning are adequately addressed in the ship's Descriptive Report paragraphs F and G and in the Horizontal Control Report for OPR-P146-FA-82.

The smooth sheet was plotted using preliminary adjusted field geographic positions on the North American Datum of 1927.

Applicable shoreline manuscripts and dates are as follows:

TP Number	Date of Photography	Date of Field Edit	Date of Final Review
T-00629	June 1976	None	November, 1982
T-00927	June 1976	None	December, 1982

Shoreline is not shown on H-10025 in accordance with N/CG memorandum, "Reduction of Marine Center Hydrographic Processing Backlog" dated February 16, 1984 (copy attached).

3. HYDROGRAPHY

Soundings at crosslines are in good agreement. The hydrography contained within this survey is adequate to determine the bottom configuration and least depths. Depth curves could be adequately drawn.

4. CONDITION OF SURVEY

The hydrographic records and final reports adequately conform to the requirements of the Hydrographic Manual, 4th Edition, revised through change 3, with the following exception: the hydrographer repetitiously discussed several items in the Descriptive Report, under both the comparison with prior surveys and comparison with chart. It is not necessary to duplicate information in paragraphs K and L. (Hydrographic Manual 5.3.4 paragraph L).

5. JUNCTIONS

H-10025 junctions the following:

Survey	Year	Scale	Note	Color	Junctions on
H-10019	1982	1:10,000	Joins	Violet	West
H-10026	1982	1:10,000	Joins	Brown	Southeast
H-10039	1982-83	1:10,000	Joins	Red	East
H-10089	1983	1:10,000	Joins	Brown	Northeast

The junctions have been adequately effected.

6. COMPARISON WITH PRIOR SURVEYS

H-4295 (1923) 1:20,000 Present survey data compares well with this prior survey. However, H-10025 survey data continues further inshore and delineates the zero fathom curve better than H-4295. There is one presurvey review item

located within the limits of H-10025, (item #27, AWOIS file #50277). It is adequately disposed of in the Descriptive Report, paragraph K. H-10025 is adequate to supersede H-4295 over its area of common coverage.

H-4296 (1923) 1:20,000 Present survey data compares well with this prior survey. However, H-10025 survey data continues further inshore and delineates the zero fathom curve better than H-4296. A rock located at latitude 57°26'22.8"North, longitude 156°14'59.4"West (NAD 1927) was not verified or disproven during the course of this survey. This rock, presently charted at the above location, has been transferred onto H-10025 (see section 9) in orange. H-10025 is adequate to supersede H-4296 over its area of common coverage.

7. COMPARISON WITH CHART

Chart 16570, 1:50,000, 8th Edition, February 10, 1978

a) Hydrography -- Charted common area data come from the before mentioned prior surveys. For an adequate item for item comparison see Descriptive Report paragraph L.

b) Controlling Depths -- There are no controlling depths located within the limits of H-10025.

c) Aids to Navigation -- There are no fixed or floating aids within the limits of H-10025.

There have been no dangers to navigation identified or reports submitted by either this NOAA Ship FAIRWEATHER or the Pacific Marine Center, Seattle, Washington on H-10025.

Geographic names appearing on the smooth sheet originate with the chart.

H-10025 is adequate to supersede Chart 16570 over its common areas.

8. COMPLIANCE WITH INSTRUCTIONS

H-10025 adequately complies with the instructions and changes listed in section 1 of this report.

9. ADDITIONAL FIELD WORK

H-10025 is a good hydrographic survey. Additional field work is recommended on a non-priority basis to verify or disprove the existence of a charted rock at latitude 57°26'22.8"North, longitude 156°14'59.4"West (reference section 6).

Submitted,

Gordon E. Kay

Gordon E. Kay
November 8, 1984

This survey has been examined by me and it meets the Charting and Geodetic Services survey standards and requirements for use in nautical charting except as noted in the Evaluation Report. The survey is recommended for approval.

James S. Green
Supervisory Cartographer

ATTACHMENT TO DESCRIPTIVE REPORT FOR H-10025

I have reviewed the smooth sheet, accompanying data, and reports of this hydrographic survey. Except as noted in the Evaluation Report, the hydrographic survey meets or exceeds Charting and Geodetic Services (G&GS) standards, complies with instructions, and is accurately and completely represented by the smooth sheet and digital data file for use in nautical charting.

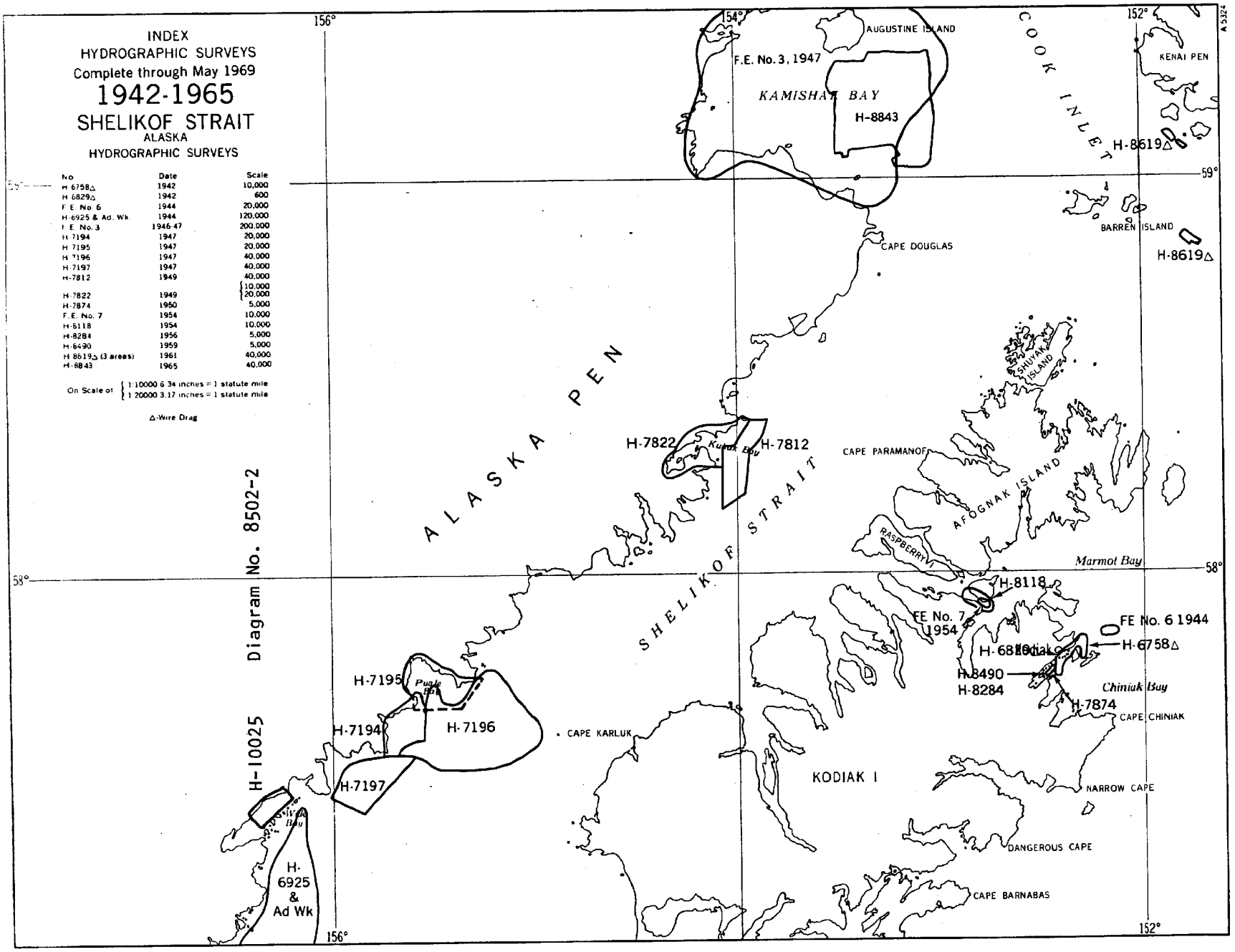
David W. Yeaman 12/07/84
Chief, Nautical Chart Branch (Date)

CLEARANCE: SIGNATURE AND DATE:

N/MOP2:LWMordock Larry W. Mordock 12/12/84

After review of the smooth sheet and accompanying reports, I hereby certify this survey is accurate, complete, and meets appropriate standards with only the exceptions as noted above. The above recommendations are forwarded with my concurrence.

Robert L. Faulkner 12-18-84
Director, Pacific Marine Center (Date)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SHUYAK ISLAND
RASPBERRY I.
Marmot Bay
Chiniak Bay
CAPE CHINIAK
CAPE KARLUK
KODIAK I
NARROW CAPE
DANGEROUS CAPE
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154°
152°
59°
58°
A 5324

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-10025

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
16570	3-3-87	Ralph B. Rose	(Full) Part Before (After) Verification Review Inspection Signed Via
			Drawing No. 10 Appl'd in full
16568	3-12-87	Joseph Prins	(Full) Part Before (After) Verification Review Inspection Signed Via
			Drawing No. 7 Applied in full
16013	2-21-89	ED MARTIN	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 28 EXAM NO CORR'S
16006	3-14-90	John Prins	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 26 Exam, no corrections
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

USCOMM-DC 8555-P63