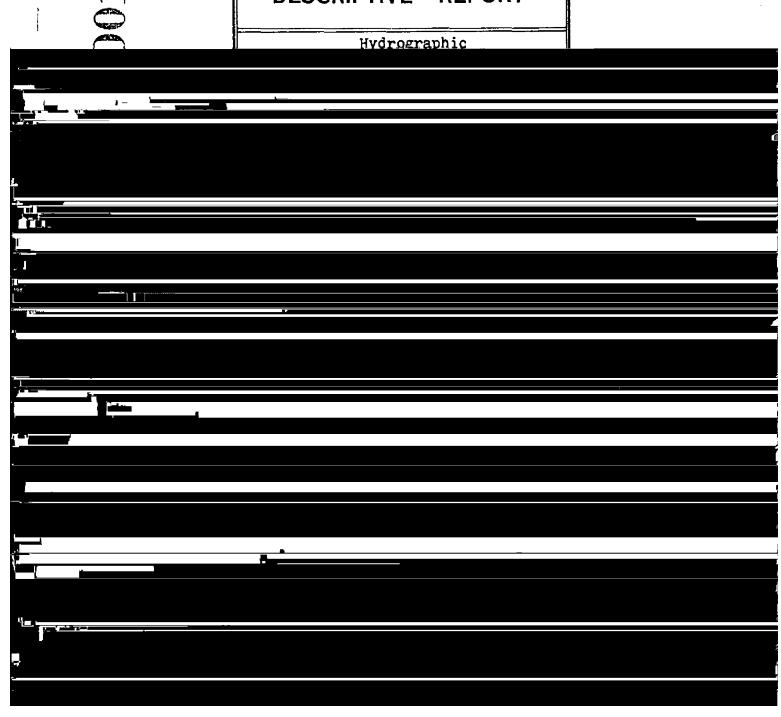
TP-00174 THRU 00177

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT



U.S. DEPARTMENT OF COMMERCE (2-70) ENVIRONMENTAL SCIENCE SERVICES ADMIN. COAST AND GEODETIC SURVEY	TYPE OF SURVEY		
	M ORIGINAL	SURVEY TP	00174
DESCRIPTIVE REPORT - DATA RECORD			6002
	REVISED	ЈОВ РН	6903
PHOTOGRAMMETRIC OFFICE	FOR REVISED	SURVEY USE	ONLY
Rockville, Maryland		JOB PH	ı .
OFFICER-IN-CHARGE	ORIGINAL SURVEY DATA:	DATES:	
		19	TO 19
Jack E. Guth			
I. INSTRUCTIONS DATED			
1. OFFICE	2.	FIELD	
General Instructions - 4/14/69	4/8/69		
II. DATUMS			
III. DATOMS	OTHER (Specify)		
1. HORIZONTAL: 1927 NORTH AMERICAN	Puerto Rico		
MEAN HIGH-WATER	OTHER (Specify)		
MEAN LOW-WATER			
2. VERTICAL: MEAN LOWER LOW-WATER			
MEAN SEA LEVEL			
3. MAP PROJECTION	4.	GRID(S)	
25	STATE	ZONE	
Mercator	None	NC	ne
5. SCALE 1:5,000	None	ZONE	ne
	Mone	110	ne
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS	NAME		DATE
I. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY	H.P. Eichert/S	aperste1	n 10/1/69
	Inapplicable		12/1/60
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradi Plotter CHECKED BY	P.J. Dempsey		12/1/69
	P. J. Dempsey E. L. Rolle		12/1/69
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY	E. L. Rolle		3/21/20
INSTRUMENT: Wild B-8 under CONTOURS BY	E. L. Rolle		3/21/20
scale: 1:7,500 water & soundingsed by	H.R. Brooks/E.	T. Rolle	3/21/20
4. MANUSCRIPT DELINEATION PLANIMETRY BY	E. L. Rolle	T. MOTTE	4/27/70
CHECKED BY	E. L. Rolle		4/27/70
under coursus su	E. L. Rolle		4/27/70
METHOD: Drafted water & soundingsked by	H.R. Brooks/E.	L. Rolle	4/27/70
HYDRO SUBBORT DATA BY	None		
SCALE: 1:5,000 CHECKED BY	None		
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	Inapplicable		
6. APPLICATION OF FIELD EDIT DATA	E. L. Rolle		9/28/71
CHECKED BY			
7. COMPILATION SECTION REVIEW BY	E. L Rolle		9/28/11
8. FINAL REVIEW BY			
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY	Figure Post O.		

ESSA FORM 76-36 A

10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH

BY F.A. WRIGHT (see page 28) BY P. J. Lewin 11. MAP REGISTERED - COASTAL SURVEY SECTION SUPERSEDES FORM C& GS 181 SERIES

70)	СОМ	TP-0017L	,	SCIENCE SERVICE	ENT OF COMMERCE ES ADMINISTRATION GEODETIC SURVEY
COMPILATION PHOTOGRAPHY		-			
AMERA(S)			HOTOGRAPHY	TIME RE	FERENCE
"E" and "L"		LEG	END	ZONE	
DE STAGE REFERENCE		(C) COLOR		8	X STANDAR
REFERENCE STATION RECORDS	Q.	(P) PANCHROI		MERIDIAN	DAYLIGH
TIDE CONTROLLED PHOTOGRAF	МА	(I) INFRAREL	_	60th	
NUMBER AND TYPE	DATE	TIME	SCALE	 	OF TIDE
69-E(C)-160 & 161	5/3/69	1625	1:15,000	MLW -	
69-E(C)-181 & 182	5/3/69		1:15,000	MLW -	
Intraved photograp see page 19 Item	phy used in	bridging a	anly.		
2. SOURCE OF MEAN HIGH-WATER Aerial photograph		/3/69			
3. SOURCE OF MEAN LOW-WATER		tography.		ter featu	

NORTH

NONE

TP-00175

REMARKS As this is a special project, no attempt was made to make junction with other contemporary surveys to the north and west.

ESSA FORM 76-36B

		mn.	00198	TAL SCIENCE SERVICES	EODETIC SURVE
		RECORD	00174 OF SURVEY USE		
I. MANUS	CRIPT COPIES				
		OMPILATION STAGES		DATE MANUSCR	IPT FORWARDED
	DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPOR
Under	water contours,				\
sound	ling data, rock and planimetry	9/27/71		1	
Inro	and planimetry	1/2///-			
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		}	•		
 		 			
į				}	l
		<u> </u>			<u> </u>
	MARKS AND AIDS TO NAVIG		TA DRANCH		
I. REI	PORTS TO MARINE CHART D		I A BRANCH		
NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED		REMARKS	

ESSA FORM 76-36a (2-70) U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMIN. COAST AND GEODETIC SURVEYS	TYPE OF SURVEY		
COAST AND GEODETIC SURVEY	X ORIGINAL	SURVEY TE	. 00175
DESCRIPTIVE REPORT - DATA RECORD	ORIGINAL		
	REVISED	JOB PH	6903
PHOTOGRAMMETRIC OFFICE	FOR REVISED	SURVEY USE	ONLY
Rockville, Maryland		JOB PI	1
OFFICER-IN-CHARGE	ORIGINAL SURVEY DATA:	DATES:	
Jack E. Guth		19	TO 19
I. INSTRUCTIONS DATED	.		
1. OFFICE	2.	FIELD	
General Instructions 4/14/69	4/8/69		
			W
II. DATUMS	OTHER (Specify)		
1. HORIZONTAL: 1927 NORTH AMERICAN	Puerto Rico		
MEAN HIGH-WATER MEAN LOW-WATER MEAN LOWER LOW-WATER MEAN SEA LEVEL	OTHER (Specify)	43	
3. MAP PROJECTION	4.	GRID(S)	
Mercator	None	ZONE	ne
5. SCALE 1:5,000	None	ZONE	ne
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS	NAME		DATE
I. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY	H.P. Eichert/I	I Sapers	tein 10/1/
2. CONTROL AND BRIDGE POINTS PLOTTED BY	P. J. Dempsey		12/1/69
METHOD: Coradi Plotter CHECKED BY	P. J. Dempsey		12/1/69
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY	E. L. Rolle		1/15/70
COMPILATION CHECKED BY	E. L. Rolle		1/15/70
INSTRUMENT: Wild B98 under- CONTOURS BY SCALE: 1:7,500 water & soundingsked by	E. L. Rolle	Dell-	1/15/70
4. MANUSCRIPT DELINEATION PLANIMETRY BY	H.R. Brooks-EL E. L. Rolle	. KOTTE	1/15/70
CHECKED BY	E. L. Rolle		4/10/20
	E. L. Rolle		4/10/70
метнор: Drafted under - сонтоиях ву water & sound ing seскер ву	H.R. Brooks-E.	L. Rolle	4/10/70
SCALE: 1:5,000 HYDRO SUPPORT DATA BY	E. L. Rolle		4/10/70
CHECKED BY	H.R. Brooks-E.	L. Rolle	4/10/70
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	None		
6. APPLICATION OF FIELD EDIT DATA CHECKED BY	None Inapplicable		
7. COMPILATION SECTION REVIEW BY	E. L. Rolle		9/24/71
3. FINAL REVIEW BY			
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY			11
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	F. Wright (see pag	(28)	7/24/14
11. MAP REGISTERED - COASTAL SURVEY SECTION BY ESSA FORM 76-36A SUPERSEDES FORM C& GS 181 SERIES			OMM-DC 46200-P70

FSSA	FORM	76-36b
(2-70)		

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY

TP-00175 COMPILATION SOURCES

1. COMPILATION PHO	TOGRAPHY						
"E" and "L"		TYPES OF PHOTOGRAPHY LEGEND		ТІМ	TIME REFERENCE		
TIDE STAGE REFERE		*	(C) COLOR (P) PANCHROMATIC		ZONE	8	
REFERENCE STAT			(I) INFRARE		MERIDIAN 6	oth	DAYLIGHT
NUMBER AND	TYPE	DATE	TIME	SCALE	ST	AGE OF T	IDE
69-E(C)-153	& 154 5	/3/69	1619	1:15,000	MIM		
69-E(C)-174	5	/3/69	1635	1:15,000	MIM		
69-E(C)-194	-196 5	/3/69	1645	1:15,000	MIM		
Infrared Sce Page	photography 19 Item	used in	bridging	only.			_
REMARKS							
2. SOURCE OF MEAN	HIGH-WATER LINE						
Aerial p	hotography	dated 5/	3/69				
3. SOURCE OF MEAN	LOW-WATER OR ME	AN LOWER LO	W-WATER LINE	UNDERW	ater feat	ures	
m: 3	4	is I what		Defen t			
	trolled aer			Reier to	the encl	Losed	
Photogra	mme cric Fic	c Kepor			-		
			1.4				
4. CONTEMPORARY	HYDROGRAPHIC SUI	RVEYS (List on	aly those surveys	that are sources for	or photogrammetric	survey infe	ormation.)
SURVEY NUMBER	DATE(S)	SURVEY COP	Y USED SURV	YEY NUMBER	DATE(S)	SURVEY	COPY USED
		1,21					
5. FINAL JUNCTIONS							
None	EAST	one	SOUT	P-00177	WEST	P-001	74
REMARKS	•			-11			
As this i	s a special					ake ju	nction
	r contempor						

ESSA FORM 76-36B



ESSA FORM 76-36c (2-70)		ENVIRONMEN	TAL SCIENCE SER	RTMENT OF COMMERCE VICES ADMINISTRATION AND GEODETIC SURVEY
	TP-00175 HISTORY OF FIELD	OPERATIONS		
I. TIELD INSPECTION OPE	RATION FIEL	D EDIT OPERATION	Identifica	ation of l control onl
ОР	ERATION	T	NAME	DATE
1. CHIEF OF FIELD PARTY		J. K. Wi	lson	April '69
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY	D 77 7/2		A
2. VERTICAL CONTROL	PRE-MARKED OR IDENTIFIED BY RECOVERED BY	R. E. Kes		April '69
3. VERTICAL CONTROL	ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None		
4. LANDMARKS AND AIDS TO NAVIGATION	ECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	None		
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION COMPLETE SPECIFIC NAMES ONLY NO INVESTIGATION	None		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None		
7. BOUNDARIES AND LIMITS	SURVEYED OR (DENTIFIED BY	None		
II. SOURCE DATA 1. HORIZONTAL CONTROL IDE From C&GS 152	NTIFIED	2. VERTICAL CO	NTROL IDENTIFIER	0
PHOTO NUMBER	STATION: NAME	рното мимвек	STATION	DESIGNATION
69-E(C)-196 TUI	r, 1969 (substation) RN 2, 1966			
3. PHOTO NUMBERS (Clariticat	ion of details)	<u> </u>		
None 4. Landmarks and aids to h	AVIGATION IDENTIFIED			
None				
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	083	ECT NAME
5. GEOGRAPHIC NAMES:	REPORT A NONE	6. BOUNDARY AN	ID LIMITS: R	EPORT X NONE
7. SUPPLEMENTAL MAPS AND				
8. OTHER FIELD RECORDS (Sk	etch books, etc. DO NOT list data submit	tted to the Geodesy L	Division)	
l book labeled	PH-6903, Field Notes			
E55A FORM 76-36C				
				USCOMM-DC 46200-P70

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:J)A	FORM	/D-30d			
2-70)				

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY

TP-00175 RECORD OF SURVEY USE

		RECO	RD OF SURVE	Y USE		
I. MANUSC	RIPT COPIES					
	co	MPILATION STAGE	S	•	DATE MANUSCR	PT FORWARDED
	DATA COMPILED	DATE	RE	MARKS	MARINE CHARTS	HYDRO SUPPORT
	ater contours,					
soundi	ng data, rock					•
info a	nd planimetry	9/28/71			<u> </u>	<u> </u>
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		<u> </u>	<u>_</u>		J	<u> </u>
II. LANDM	ARKS AND AIDS TO NAVIGA	TION				
), REP	ORTS TO MARINE CHART DI	VISION, NAUTICAL	DATA BRANCH			
	CHARTLETTER	DATE		DE	MARKS	
NUMBÉR	NUMBER ASSIGNED	FORWARDED	<u> </u>		WATERS	
						· .
			<u> </u>			
		<u></u>	ļ. <u>.</u> .		 _	
		L	<u> </u>			
==	REPORT TO MARINE CHART					
	REPORT TO AERONAUTICA		, AERONAUTICAI	DATA SECTION.	DATE FORWARDED:	
III. FEDER	RAL RECORDS CENTER DAT	'A		•		
	BRIDGING PHOTOGRAPHS;	_	BRIDGING REPO	· <u>—</u>	ER READOUTS.	ł
	CONTROL STATION IDENTI		_			ŀ
3.	SOURCE DATA (except for G ACCOUNT FOR EXCEPTION		eport) AS LISTED	IN SECTION II, ES\$	A FORM 76-36C.	
	NOODSIN' TON EXCENTION					
4	DATA TO 5505041 D5600	Seconder Dan				
4	DATA TO FEDERAL RECOF					
IV. SURVE	Y REVISION (This section sh	JOB NUMBE		y is registered.)		
F.D-T	TP.	(2) PH -	· · ·	REMARKS		ļ
FIRST REVISION	, 		IELD COLT	ł		
	DATE OF PHOTOGRAPH	TY DATE OF F	IELD EUII			
	SURVEY NUMBER	ЈОВ МИМВЕ		REMARKS		
			D.	N EMMANNS		
SECOND REVISION	, 	(3) PH-	IEL D EDIT	ļ		
	DATE OF PHOTOGRAPH	DATE OF FI	IELD EDIT			
	SUBVEY NUMBER	- 150 500 50		254.0%		
	SURVEY NUMBER	JOB NUMBE	R	REMARKS		:
THIRD REVISION	TP . DATE OF PHOTOGRAPH	(4) PH -	ELD ED'T	ļ		
TE A IOIO	. PATE OF FROIDSKAP	DATE OF FI	دحرن حالان			
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	ESSA FORM 76-360 U.S. DEPARTMENT OF COMMERCE (2-70) ENVIRONMENTAL SCIENCE SERVICES ADMIN.	TYPE OF SURVEY		
	COAST AND GEODETIC SURVEY	Y_	SURVEY TP -	00176
	DESCRIPTIVE REPORT DATA RECORD	ORIGINAL	SURVEY TP -	00270
-	DESCRIPTIVE REPORT - DATA RECORD	REVISED-	JOB PH -	6903
	PHOTOGRAMMETRIC OFFICE	FOR REVISED	SURVEY USE ON	NLY
	Dealessille Moretyland			
	Rockville, Maryland officer.in-charge	ORIGINAL	JOB PH -	
		SURVEY DATA:	19TO	19
	Jack E. Guth			
	I. INSTRUCTIONS DATED			
	1. OFFICE	2.	FIELD	
	General Instructions 4/14/69	4/8/69		
	· · · · · · · · · · · · · · · · · · ·			
	·			
	II. DATUMS	OTHER (Specify)		
	1. HORIZONTAL: 1927 NORTH AMERICAN	Puerto Rico		
	MEAN HIGH-WATER	OTHER (Specify)		
	MEAN LOW-WATER			
	2. VERTICAL: MEAN LOWER LOW-WATER			
-	MEAN SEA LEVEL			
П				
	3. MAP PROJECTION		GRID(S)	
		state None	ZONE None	
	3. MAP PROJECTION Mercator 5. SCALE	None State	None Zone	
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000	None None	None	
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS	None state None None	None Zone	DATE
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION BY	STATE None STATE None	None ZONE None	DATE 10/1/69
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS	None STATE None None NAME H. Eichert/I. Sa	None ZONE None	
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY 2. CONTROL AND BRIDGE POINTS PLOTTED BY	None NAME None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey	None ZONE None	12/1/69
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY METHOD: Coradi Plotter CHECKED BY	None STATE None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey	None ZONE None	12/1/69 12/1/69 12/1/69
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY METHOD: Coradi Plotter CHECKED BY 3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY	None NAME None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle	None ZONE None	12/1/69
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY 2. CONTROL AND BRIDGE POINTS METHOD: Coradi Plotter 3. STEREOSCOPIC INSTRUMENT COMPILATION PLANIMETRY BY CHECKED BY	None NAME None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle E. L. Rolle	None ZONE None	12/1/69 12/1/69 12/1/69
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY 2. CONTROL AND BRIDGE POINTS METHOD: Coradi Plotter CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY	None NAME None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle E. L. Rolle	None None None	12/1/69 12/1/69 12/1/69
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY 2. CONTROL AND BRIDGE POINTS METHOD: Coradi Plotter CHECKED BY STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: B-8 UNDERWATER CHECKED BY SCALE: 1:7,500 & SOUNDINGS CHECKED BY	None NAME None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle E. L. Rolle E. L. Rolle H.R. Brooks/E.L E. L. Rolle	None None None	12/1/69 12/1/69 12/1/69
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY 2. CONTROL AND BRIDGE POINTS METHOD: Coradi Plotter 3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: B-8 UNDERWATER SCALE: 1:7,500 & SOUNDINGS CHECKED BY 4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY	None NAME None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle E. L. Rolle H.R. Brooks/E.L E. L. Rolle E. L. Rolle E. L. Rolle E. L. Rolle	None None None	12/1/69 12/1/69 12/1/69
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY 2. CONTROL AND BRIDGE POINTS METHOD: Coradi Plotter 3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: B-8 SCALE: 1:7,500 & SOUNDINGS 4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY	None NAME None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle E. L. Rolle H.R. Brooks/E.L E. L. Rolle	None None None Repersteir	12/1/69 12/1/69 12/1/69
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY 2. CONTROL AND BRIDGE POINTS METHOD: Coradi Plotter 3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: B-8 SCALE: 1:7,500 & SOUNDINGS CHECKED BY 4. MANUSCRIPT DELINEATION METHOD: Drafted & SOUNDINGS CHECKED BY CHECKED BY CHECKED BY CHECKED BY	None NAME None None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle	None None None Repersteir	12/1/69 12/1/69 12/1/69
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY 2. CONTROL AND BRIDGE POINTS METHOD: Coradi Plotter 3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: B-8 SCALE: 1:7,500 & SOUNDINGS CHECKED BY 4. MANUSCRIPT DELINEATION METHOD: Drafted & SOUNDINGS CHECKED BY CHECKED BY CHECKED BY CHECKED BY	None NAME None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle	None ZONE None None Rolle Rolle	12/1/69 12/1/69 12/1/69
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY 2. CONTROL AND BRIDGE POINTS METHOD: Coradi Plotter 3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: B-8 SCALE: 1:7,500 & SOUNDINGS CHECKED BY 4. MANUSCRIPT DELINEATION METHOD: METHOD: METHOD: Drafted & SOUNDINGS CHECKED BY	None NAME None None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle	None ZONE None None Rolle Rolle	12/1/69 12/1/69 12/1/69 3/9/70 3/9/70 3/9/70 4/21/70 4/21/70 4/21/70 4/21/70 4/21/70
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY 2. CONTROL AND BRIDGE POINTS METHOD: Coradi Plotter 3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: B-8 SCALE: 1:7,500 & SOUNDINGS CHECKED BY 4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY CHECKED BY UNDERWATER ON TOURS BY CHECKED BY HYDRO SUPPORT DATA BY SCALE: 1:5,000 SOFFICE INSPECTION PRIOR TO FIELD EDIT BY	None NAME None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle H.R. Brooks/E.L Rolle H.R. Brooks/E.L None None None	None ZONE None None Rolle Rolle	12/1/69 12/1/69 12/1/69 3/9/70 3/9/70 3/9/70 4/21/70 4/21/70 4/21/70 4/21/70 4/21/70
	Mercator 5. scale 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY METHOD: Coradi Plotter COMPILATION INSTRUMENT: B-8 SCALE: 1:7,500 & SOUNDINGS AMANUSCRIPT DELINEATION METHOD: With the control of the co	None NAME None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle H.R. Brooks/E.L	None ZONE None None Rolle Rolle	10/1/69 12/1/69 12/1/69 3/9/70 3/9/70 3/9/70 4/21/70 4/21/70 4/21/70 4/21/70 4/21/70 4/21/70
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY METHOD: Coradi Plotter 3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: B-8 UNDERWATER SCALE: 1:7,500 & SOUNDINGS CHECKED BY 4. MANUSCRIPT DELINEATION METHOD: WETHOD: WETHO	None NAME None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle H.R. Brooks/E.L Rolle H.R. Brooks/E.L None None None	None ZONE None None Rolle Rolle	12/1/69 12/1/69 12/1/69 3/9/70 3/9/70 3/9/70 4/21/70 4/21/70 4/21/70 4/21/70 4/21/70
	Mercator 5. scale 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY METHOD: Coradi Plotter COMPILATION INSTRUMENT: B-8 SCALE: 1:7,500 & SOUNDINGS AMANUSCRIPT DELINEATION METHOD: With the control of the co	None NAME None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle H.R. Brooks/E.L	None ZONE None None Rolle Rolle	10/1/69 12/1/69 12/1/69 3/9/70 3/9/70 3/9/70 4/21/70 4/21/70 4/21/70 4/21/70 4/21/70 4/21/70
	3. MAP PROJECTION Mercator 5. SCALE 1:5,000 III. HISTORY OF OFFICE OPERATIONS OPERATIONS 1. AEROTRIANGULATION METHOD: Analytical LANDMARKS AND AIDS BY METHOD: Coradi Plotter COMPILATION INSTRUMENT: B-8 SCALE: 1:7,500 & SOUNDINGS CHECKED BY 4. MANUSCRIPT DELINEATION METHOD: Underwater — CONTOURS BY CHECKED BY UNDERWATER — CONTOURS BY CHECKED BY CHECKED BY	None NAME None NAME H. Eichert/I. Sa Inapplicable P. J. Dempsey P. J. Dempsey E. L. Rolle H.R. Brooks/E.L	None None None Reperstein Rolle Rolle L. Rolle	10/1/69 12/1/69 12/1/69 3/9/70 3/9/70 3/9/70 4/21/70 4/21/70 4/21/70 4/21/70 4/21/70 4/21/70

(10)

ESSA	FORM	76-36b
(2- /0)		

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

TP-00176

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY							
CAMERA(S) "E" and "L"		TYPES OF PH LEG			TIME	REFERE	NCE
TIDE STAGE REFERENCE PREDICTED TIDES		(C) COLOR (P) PANCHROM	IATIC	ZONE	8		STANDAR
REFERENCE STATION RECORDS TIDE CONTROLLED PHOTOGRAP	нү	(I) INFRARED		MERIDI	60th		DAYLIGH
NUMBER AND TYPE	DATE	TIME	SCALE		STA	GE OF TIE	DE
69-E(C)-183-185	5/3/69	1640	1:15,000		MLW		
69-E(C)-221 & 222					MIW		
Infrared photogra see Item 26, Reg	phy used	in bridging	only.				
REMARKS			_				
2. SOURCE OF MEAN HIGH-WATER L	.INE:						
					*		
Tide-controlled aerial photography. Refer to the enclosed Photogrammetric Plot Report.							
4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.) SURVEY NUMBER DATE(S) SURVEY COPY USED SURVEY NUMBER DATE(S) SURVEY COPY USED							
5. FINAL JUNCTIONS							
TP-00174	TP-00177	SOUTH	None		WEST	None	
REMARKS As this is a junction with	special prother con	roject, no	attempt surveys	was ma	de t	to mak	e d west.

ESSA FORM 76-36B

ESSA FORM 76-36c (2-70)

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY

TP-00176 HISTORY OF FIELD OPERATIONS

RECOVERED BY PRE-MARKED ON IDENTIFIED BY RECOVERED BY RECOVERD	HISTORY OF FIELD		
L CHIEF OF FIELD PARTY 2 HORIZONTAL CONTROL PREMARKEO OR IDENTIFIED BY RECOVERED BY RECOVERD BY RECOVE	I. FIELD INSPECTION OPERATION FIELD	D EDIT OPERATION Identification vertical con	on of hori.
RECOVERED BY PREMARKED OR IDENTIFIED BY R. E. KESSELTING April *69 3. VERTICAL CONTROL RECOVERED BY RECOVERD BY	OPERATION		
2. HORIZONTAL CONTROL PREMARKED OR IDENTIFIED BY RECOVERED BY RECOVERED BY RECOVERED BY PREMARKED OR IDENTIFIED BY PREMARKED OR IDENTIFIED BY RECOVERED (Trinquidation Stations) BY LOCATED (Field Methods) BY RECOVERED (Trinquidation Stations) BY LOCATED (Field Methods) BY RECOVERED (Trinquidation Stations) BY LOCATED (Field Methods) BY RECOVERED (Trinquidation Stations) BY RECOVERED (Trin	1. CHIEF OF FIELD PARTY	J. K. Wilson	April '69
RECOVERED BY PRE-MARKED ON 1984TIFIED BY PRE-MARKED ON 1984TIFIED BY RECOVERED CHANGED BY PRE-MARKED ON 1984TIFIED BY ALLANDMARKS AND AIDS TO NAVIGATION OF DETAILS BY NONE S. GEOGRAPHIC NAMES INVESTIGATION S. GEOGRAPHIC NAMES INVESTIGATION COMPLETE SINVESTIGATION COMPLETE SINVESTIGATION COMPLETE SINVESTIGATION COMPLETE NONE SINVESTIGATION NONE R. E. KESSELTING April '69 R. E.			
AL LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED BY AL LANDMARKS AND AIDS TO NAVIGATION SUPPLEMENTS (Clarification of details) B. CROCKAPHIC NAMES (Clarification of details) B. CROCKAPHIC NAMES (Clarification of details) B. CROCKAPHIC NAMES (Clarification of details) B. NONE C. PHOTO NUMBERS (Clarification of details) B. NONE C. PHOTO NUMBERS (Clarification of details) C. PHOTO NUMBERS (Clarification of details) B. PHOTO NUMBERS (Clarification of details) C.		R. E. Kesselring	April '69
RECOVERED (Trianglation Stations) BY LOCATED (Pield Methods) BY ADDITION TO THE PROPERTY OF TH		R. E. Kesselring	April '69
5. GEOGRAPHIC NAMES COMPLETE BY SPECIFIC NAMES ONLY	4. LANDMARKS AND HYDE LOCATED (Field Methods) BY AIDS TO NAVIGATION SIGNAL IDENTIFIED BY	R. E. Kesselring	April '69
6. PHOTO INSPECTION CLARIFICATION OF DETAILS BY 7. BOUNDARIES AND LIMITS SURVEYED OR IDENTIFIED BY NOTE 11. SOURCE DATA 1. HORIZONTAL CONTROL IDENTIFIED PHOTO NUMBER STATION DESIGNATION 69-E(C)-221 PHOTO NUMBER STATION NAME 69-E(C)-221 Float No. 1 (pass point 99221) 69-E(C)-133 Float No. 2 (pass point 99222) 69-E(C)-139 Float No. 2 (pass point 99222) 69-E(C)-180 Float No. 2 (pass point 99223) 3. PHOTO NUMBERS (Clarification of details) (pass point 9923) None 69-E(C)-180 Hydro Signal 510 (pass point 99510) 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED (pass point 99514) PHOTO NUMBER OBJECT NAME PHOTO NUMBER OBJECT NAME 69-E(C)-180 Hydro Signal 510 (pass point 99514) PHOTO NUMBER OBJECT NAME PHOTO NUMBER OBJECT NAME 7. SUPPLEMENTAL MAPS AND PLANS None 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Goodesy Division) 1 book labeled PH-6903 Field Notes	5. GEOGRAPHIC NAMES COMPLETE INVESTIGATION SPECIFIC NAMES ONLY	None	
T. BOUNDARIES AND LIMITS II. SOURCE DATA II. HORIZONTAL CONTROL IDENTIFIED PROM C&GS-152 PHOTO NUMBER STATION NAME 69-E(C)-221 NUN, 1969 69-E(C)-183 PHOTO NUMBERS (Clarification of details) NONE 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED PHOTO NUMBER OBJECT NAME 69-E(C)-182 Hydro Signal 510 (pass point 99223) 69-E(C)-183 Hydro Signal 514 (pass point 99510) Hydro Signal 514 (pass point 99514) PHOTO NUMBER OBJECT NAME PHOTO NUMBER OBJECT NAME 69-E(C)-182 Hydro Signal 514 (pass point 99514) PHOTO NUMBER OBJECT NAME FHOTO NUMBER OBJECT NAME 69-E(C)-183 Hydro Signal 514 PHOTO NUMBER OBJECT NAME FHOTO NUMBER OBJECT NAME FHOTO NUMBER OBJECT NAME FOR EACH TO NUMBER OBJECT NAME T. SUPPLEMENTAL MAPS AND PLANS NONE 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Coodesy Division) 1 book labeled PH-6903 Field Notes			
II. SOURCE DATA 1. HORIZONTAL CONTROL IDENTIFIED FROM C&GS-152 PHOTO NUMBER STATION NAME PHOTO NUMBER STATION NAME STATION NAME PHOTO NUMBER STATION DESIGNATION 69-E(C)-221 Float No. 1 (pass point 99221) 69-E(C)-183 Float No. 2 (pass point 99222) 69-E(C)-182 Float No. 3 (pass point 99223) 3. PHOTO NUMBERS (Clarification of details) None 69-E(C)-183 Hydro Signal 510 (pass point 99510) None 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED PHOTO NUMBER OBJECT NAME PHOTO NUMBER OBJECT NAME PHOTO NUMBER OBJECT NAME PHOTO NUMBER OBJECT NAME OBJECT NAME S. GEOGRAPHIC NAMES: REPORT X NONE REPORT X NONE 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division) 1 book labeled PH-6903 Field Notes			
PHOTO NUMBER STATION NAME PHOTO NUMBER STATION DESIGNATION 69-E(C)-221 Float No. 1 (pass point 99221) 69-E(C)-183 Float No. 2 (pass point 99222) 69-E(C)-182 Float No. 3 (pass point 99223) 3. PHOTO NUMBERS (Clarification of details) None 69-E(C)-182 Hydro Signal 510 (pass point 9921) 69-E(C)-183 Hydro Signal 514 (pass point 99514) PHOTO NUMBER OBJECT NAME PHOTO NUMBER OBJECT NAME PHOTO NUMBER OBJECT NAME 99-E(C)-183 Hydro Signal 510 69-E(C)-183 Hydro Signal 514 PHOTO NUMBER OBJECT NAME 69-E(C)-183 Hydro Signal 514 S. GEOGRAPHIC NAMES: REPORT NONE REPORT NONE 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data aubmitted to the Goodesy Division) 1 book labeled PH-6903 Field Notes			
69-E(C)-221 NUN, 1969 69-E(C)-183 Float No. 1 (pass point 99221) 69-E(C)-182 Float No. 3 (pass point 99223) 3. PHOTO NUMBERS (Clarification of details) None 69-E(C)-182 Hydro Signal 510 (pass point 99510) 69-E(C)-183 Hydro Signal 514 (pass point 99514) PHOTO NUMBER OBJECT NAME PHOTO NUMBER OBJECT NAME OBJECT NAME 69-E(C)-183 Hydro Signal 514 S. GEOGRAPHIC NAMES: REPORT NONE REPORT NONE 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division) 1 book labeled PH-6903 Field Notes		2. VERTICAL CONTROL IDENTIFIED	
(pass point 99221) 69-E(C)-183 Float No. 2 (pass point 99222) 69-E(C)-182 Float No. 3 (pass point 99223) 3. PHOTO NUMBERS (Clarification of details) None 69-E(C)-182 Hydro Signal 510 (pass point 99510) 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED 69-E(C)-183 Hydro Signal 514 PHOTO NUMBER OBJECT NAME PHOTO NUMBER OBJECT NAME 69-E(C)-182 Hydro Signal 510 69-E(C)-183 Hydro Signal 514 5. GEOGRAPHIC NAMES: REPORT NONE 7. SUPPLEMENTAL MAPS AND PLANS NONE 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Goodesy Division) 1 book labeled PH-6903 Field Notes	PHOTO NUMBER STATION NAME	PHOTO NUMBER STATION DESI	GNA TION
(pass point 99222) 3. PHOTO NUMBERS (Clarification of details) None 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED S. GEOGRAPHIC NAMES: REPORT NONE S. GEOGRAPHIC NAMES: REPORT NONE S. GEOGRAPHIC NAMES: REPORT NONE REPORT NONE C. BOUNDARY AND LIMITS: REPORT NONE REPORT NONE REPORT NONE REPORT NONE S. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division) 1 book labeled PH-6903 Field Notes	69-E(C)-221 NUN, 1969	69-E(C)-221 Float No.	1 .nt 99221)
3. PHOTO NUMBERS (Clarification of details) None 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED PHOTO NUMBER OBJECT NAME OBJECT NAME PHOTO NUMBER OBJECT NAME OBJECT NAME OBJECT NAME S. GEOGRAPHIC NAMES: REPORT IN NONE T. SUPPLEMENTAL MAPS AND PLANS NONE 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Goodesy Division) 1 book labeled PH-6903 Field Notes		(pass poi	nt 99222)
None Second Price Propert Pro	2 DUOTO NUMBERS (CL. 16 al. 16 al. 17 al. 18	(pass poi	nt 99223)
4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED (pass point 99514 PHOTO NUMBER OBJECT NAME PHOTO NUMBER OBJECT NAME O		(pass poi	nt 99510)
PHOTO NUMBER OBJECT NAME PHOTO NUMBER OBJECT NAME 69-E(C)-182 Hydro Signal 510 69-E(C)-183 Hydro Signal 514 5. GEOGRAPHIC NAMES: REPORT NONE 6. BOUNDARY AND LIMITS: REPORT NONE 7. SUPPLEMENTAL MAPS AND PLANS NONE 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Goodesy Division) 1 book labeled PH-6903 Field Notes			
69-E(C)-182 Hydro Signal 510 69-E(C)-183 Hydro Signal 514 5. GEOGRAPHIC NAMES: REPORT NONE 6. BOUNDARY AND LIMITS: REPORT NONE 7. SUPPLEMENTAL MAPS AND PLANS None 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division) 1 book labeled PH-6903 Field Notes	4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED	(pass poi	nt 99514
5. GEOGRAPHIC NAMES: REPORT NONE 6. BOUNDARY AND LIMITS: REPORT NONE 7. SUPPLEMENTAL MAPS AND PLANS None 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division) 1 book labeled PH-6903 Field Notes	PHOTO NUMBER OBJECT NAME	PHOTO NUMBER OBJECT N	NAME
7. SUPPLEMENTAL MAPS AND PLANS None 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Goodesy Division) 1 book labeled PH-6903 Field Notes	69-E(C)-182 Hydro Signal 510 69-E(C)-183 Hydro Signal 514		
7. SUPPLEMENTAL MAPS AND PLANS None 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Goodesy Division) 1 book labeled PH-6903 Field Notes	5. GEOGRAPHIC NAMES: REPORT X NONE	6. BOUNDARY AND LIMITS: REPOR	T NONE
8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Goodesy Division) 1 book labeled PH-6903 Field Notes	7. SUPPLEMENTAL MAPS AND PLANS		
l book labeled PH-6903 Field Notes	None		
ESSA FORM 76.96C	8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submit	ited to the Goodesy Division)	
ESSA FORM 76.96C	l hook labeled DU 6002 Biold Water		
ESSA FORM 76-26C	T DOOK Tabeled PH-0903 Fleid Notes		
ESSA FORM 76-26C			
USCOMM-DC 46200-P7	ESSA FORM 76-36C		

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TP-00176 RECORD OF SURVEY USE	ETTC JUNIVE

		RECOI	RD OF SURVE	Y USE		
. MANUSCRI	PT COPIES					
	COM	PILATION STAGES	s _		DATE MANUSCR	PT FORWARDED
	ater contours,	DATE	RE	MARKS	MARINE CHARTS	HYDRO SUPPOR
	ng data, rock nd planimetry	9/25/71	<u> </u>			
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	RKS AND AIDS TO NAVIGAT		D. T. SPANSU			
I. HEPOF	CHART LETTER	DATE	DATA BRANCH			
NUMBER	NUMBER ASSIGNED	FORWARDED		F	REMARKS	
		•				
			<u> </u>			
						
					··-	
		··				
3. 🗀 RE	EPORT TO MARINE CHART EPORT TO AERONAUTICAL	CHART DIVISION				
III. FEDERA	L RECORDS CENTER DAT	A		•		
2 c 3 so	RIDGING PHOTOGRAPHS; ONTROL STATION IDENTIID DURCE DATA (except for Ga CCOUNT FOR EXCEPTION:	FICATION CARDS; cographic Names Re		SS 567 SUBMITTE		
	ATA TO FEDERAL RECOR		E FORWARDED:	·		-
IV. SURVEY	REVISION (This section she	all be completed wh	en a revised surve	ey is registered.)		
	SURVEY NUMBER	ЈОВ ИЏМВЕ		REMARKS	<u> </u>	<u> </u>
FIRST REVISION	TP -	(2) PH - Y DATE OF FI	ELD EDIT			
SECOND	SURVEY NUMBER	JOB NUMBER	R	REMARKS		
SECOND REVISION	DATE OF PHOTOGRAPH		ELD EDIT	-		
	SURVEY NUMBER	JOB NUMBE	R	REMARKS		
THIRD REVISION	TP -	(4) PH - Y DATE OF FI	ELD EDIT	-		

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(2-70) U.S. DEPARTMENT OF COMMERCI ENVIRONMENTAL SCIENCE SERVICES ADMIN COAST AND GEODETIC SURVEY	TYPE OF SURVEY		
	ORIGINAL	SURVEY T	P. 00177
DESCRIPTIVE REPORT - DATA RECORD			
	REVISED	JOB P	н. 6903
PHOTOGRAMMETRIC OFFICE	FOR REVISED	SURVEY USE	ONLY
Rockville, Maryland			
OFFICER-IN-CHARGE	ORIGINAL		н
Jack E. Guth	SURVEY DATA:	DATES:	TO 19
I. INSTRUCTIONS DATED			
1. OFFICE	2.	FIELD	
General Instructions 4/14/69	4/8/69	. 1225	
1110 11	4/0/09		
	The state of the s		
II. DATUMS			
1. HORIZONTAL: 1927 NORTH AMERICAN	OTHER (Specify)		
1927 NORTH AMERICAN	Puerto Rico		
	OTHER (Specify)		
2. VERTICAL: MEAN LOW-WATER			
MEAN SEA LEVEL			
3. MAP PROJECTION		GRID(S)	
Mercator	None	ZONE	ne
5. SCALE	STATE	ZONE	
1:5,000	None	No	ne
OPERATIONS	NAME		
1. AEROTRIANGULATION BY	H.P. Eichert/Sa	persteir	10/1/69
METHOD: Analytical LANDMARKS AND AIDS BY	Inapplicable		
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradi Plotter CHECKED BY	P.J. Dempsey		12/1/69
2 675050000000000000000000000000000000000	P.J. Dempsey E. L. Rolle		12/1/69
COMPILATION CHECKED BY	E.L. Rolle		12/15/69
INSTRUMENT: B-8 underwater CONTOURS BY	E.L. Rolle		12/15/69
	H.R. Brooks/E.L.	Rolle	12/15/69
	E.L. Rolle		4/3/70
underwater	E.L. Rolle E.L. Rolle		4/3/70
METHOD: DISTLET	H.R. Brooks/E.L.	Rolle	4/3/70
	E.L. Rolle		4/3/70
CHECKED BY	H.R. Brooks/E.L.	Rolle	4/3/70
RV	None None		
0. AFFLICATION OF FIELD EDIT DATA	Inapplicable		
7. COMPILATION SECTION REVIEW BY	E.L. Rolle		9/29/71
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY			
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	E12011/100		
11. MAP REGISTERED - COASTAL SURVEY SECTION BY	F. Wright (see po	ege 28	7-24-74
ESSA FORM 76-36A SUPERSEDES FORM C&GS 181 SERIES			

ESSA FORM 76-36b

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY

	CON	APILATION SOU	RCES		
1. COMPILATION PHOTOGRAPHY					
CAMERA(S) "E" and "L"			HOTOGRAPHY END	TIME REFE	RENCE
TIDE STAGE REFERENCE PREDICTED TIDES REFERENCE STATION RECORDS	,	(C) COLOR (P) PANCHRO	MATIC	ZONE 8	STANDARD
TIDE CONTROLLED PHOTOGRAP	нү	(I) INFRARED		60th	DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF	TIDE
69-E(C)-150-152 69-E(C)-192&193' 69=E(C)-9960 Infrared photogr See page 19, Ite	5/3/69 5/3/69 4/3/69 aphy used	1618 1645 0809 In bridgi	1:15,000 1:15,000 1:15,000	MLW MLW	
REMARKS 2. SOURCE OF MEAN HIGH-WATER Aerial photogra	LINE:				

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE: UNDERWATER Features

Tide-controlled aerial photography. Refer to the enclose Photogrammetric Plot Report.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED
5. FINAL JUNCTION					
TP-00175	EAST	None	None	west T	P-00176

REMARKS

As this is a special project, no attempt was made to make junction with other contemporary surveys to the south and the east.



ESSA	FORM	76-36c
(2-70)		

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY

TP-00177

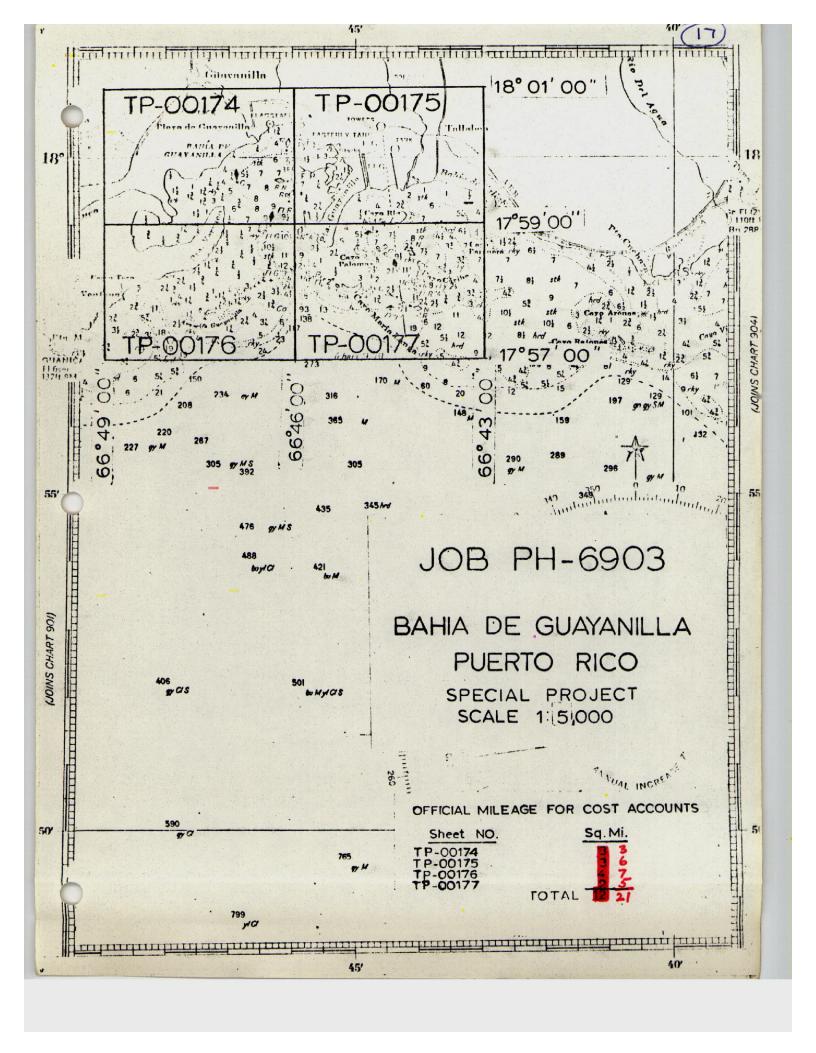
		HISTORY OF FIELD		Identification	on of homi
I. TIELD INSPECT	TION OPERA	TION FIE	D EDIT OPERATION	& vert. conti	rol only.
	OPE	RATION		NAME	DATE
1. CHIEF OF FIELD	PARTY		J. K. Wil	son	5/69
		RECOVERED BY			-
2. HORIZONTAL CON	ITROL	ESTABLISHED BY	D 17 17	selring	5/69
		RECOVERED BY			
3. VERTICAL CONTR	ROL	ESTABLISHED BY			- 1/2
		PRE-MARKED OR IDENTIFIED BY	R. E. Kes	selring	5/69
	RE	COVERED (Triangulation Stations) BY			
4. LANDMARKS AND AIDS TO NAVIGAT	ION	LOCATED (Field Methods) BY	D F Voc	selring	5/69
		TYPE OF INVESTIGATION	Transfer Mos		3/ -/
5. GEOGRAPHIC NAM	MES	COMPLETE			
INVESTIGATION		SPECIFIC NAMES ONLY			
		NO INVESTIGATION	None		
6. PHOTO INSPECTIO	ON	CLARIFICATION OF DETAILS BY			
7. BOUNDARIES AND	LIMITS	SURVEYED OR IDENTIFIED BY	None		
II. SOURCE DATA 1. HORIZONTAL CON	TROL IDEN	TIFIED	2. VERTICAL CO	NTROL IDENTIFIED	
Form C&GS-1					
PHOTO NUMBER		STATION NAME	PHOTO NUMBER	STATION DE	SIGNATION
	MARIA 2	2, 1969		Float #4 (pa 99224) lFloat #5 (pa	
3. PHOTO NUMBERS	(Clarificatio	on of details)		99225)	
4. LANDMARKS AND	AIDS TO NA	AVIGATION IDENTIFIED			
None					
PHOTO NUMBER		OBJECT NAME	PHOTO NUMBER	ОВЈЕСТ	NAME
5. GEOGRAPHIC NAM	MES:	REPORT NONE	6. BOUNDARY A	ND LIMITS: REPO	ORT NONE
7. SUPPLEMENTAL					
		tch books, etc. DO NOT list data sub		Division)	
l book la	beled]	PH-6903, Field Note:			
ESSA FORM 76-36C				U:	SCOMM-DC 46200-P70



\$\$A FORM 76-36d	U.S. DEPARTMENT
-70)	ENVIRONMENTAL SCIENCE SERVICES A
	 COAST AND GE

TP-00177

			RECO	RD OF SURVE	Y USE		
I. MANUSC	RIPT COPIES						
	co	MP1L A	ATION STAGE	<u>s</u>		DATE MANUSCRI	PT FORWARDED
	DATA COMPILED	<u> </u>	DATE	RERE	MARKS	MARINE CHARTS	HYDRO SUPPORT
soundi	water contours, ing data, rock and planimetry	9,	/28/71				
	The parameter of						
		\ \ \ \					
	ARKS AND AIDS TO NAVIGA						· · · · · · · · · · · · · · · · · · ·
]. REP	ORTS TO MARINE CHART DI	VISIO T	N, NAUTICAL	DATA BRANCH			
NUMBER	CHART LETTER NUMBER ASSIGNED	FC	DATE		F	REMARKS	
					<u> </u>		
	REPORT TO MARINE CHART REPORT TO AERONAUTICA						
III. FEDEI	RAL RECORDS CENTER DAT	A				<u> </u>	
	BRIDGING PHOTOGRAPHS; CONTROL STATION IDENTI SOURCE DATA (except for G ACCOUNT FOR EXCEPTION	FICA	TION CARDS;		SS 567 SUBMITTE		
4. []	DATA TO FEDERAL RECOR	≀DS Ç	ENTER. DAT	E FORWARDED:		· · · · · · · · · · · · · · · · · · ·	_
IV. SURVE	Y REVISION (This section sh	all be	completed wh	en a revised surve	ey is registered.)		
FIRST	SURVEY NUMBER	(2)	JOB NUMBE:		REMARKS		
REVISIO		<u> </u>	DATE OF FI	ELD EDIT	•		
	SURVEY NUMBER		JOB NUMBEI	R	REMARKS		
SECOND REVISION		(3)	PH- DATE OF FI	ELD EDIT		,	•
	SURVEY NUMBER		JOB NUMBEI	R	REMARKS		 -
THIRD REVISION	TP - DATE OF PHOTOGRAPH	(4) (Y	PH - DATE OF FI	ELD EDIT			



Photogrammetric Plot Report Job PH-6903 Bahia de Guayanilla, Puerto Rico

October 1969

21. Purpose

The purpose of this pilot project is to test the feasibility of furnishing hydrographic surveys by photogrammetric methods. An area in Puerto Rico, Bahia de Guayanilla, was selected for the test.

22. Method

Seven (7) strips of 1:15,000 color photographs were bridged by analytical aerotriangulation methods, using a forty (40) photograph block adjustment.

23. Control

Eight (8) horizontal and twenty-four (24) vertical control stations were weighted in the final block adjustment. Seven horizontal stations were targeted and one was a natural object.

Two types of vertical control points were used:

- 1. Underwater points near floating targets and fixed hydro targets, depths of which were field determined, and
- 2. Shoreline points using infrared photography taken at low water and transferred to the color bridging photography.

The elevations of all underwater points were reduced from tide staff readings to the datum required (low water). The refined coordinates for these underwater points were corrected for refraction.

Shoreline point 42201 has an error of +3 feet. Upon closer examination it was found that the point was drilled on the side of a bush and evidently thus measured. Point 42201 should be discarded.

24. Photography

The definition and quality of photography taken with the RC-8 "L" camera were good, except for occasional sun spots which made measuring underwater points difficult.

25. Accuracy

The RMS for the block is 10.3 micrometers, with an RMS vertical error of 0.16 meters. Horizontal errors were not foreseen as a problem and as they are insignificantly small are not plotable at map scale, require no special mention.

26. Conclusions and Recommendations

The use of infrared photography flown in tandem with color for the purpose of furnishing vertical control at the water line introduced some inaccuracies. No difficulty was encountered transferring shoreline points from the infrared to the color when flown in tandem, but transferring the point to adjoining color strips proved very difficult because of wave action.

In future jobs of this kind, it might prove worthwhile to use targets to determine elevations of vertical control points needed. A target could be placed near the shore and a hand level shot from the waters edge to target, with date and time recorded, would determine the elevation.

In order to get depths in water areas where vertical control is needed, concrete blocks painted white could be placed in the water. In all probability a target could be seen underwater to a depth of ten feet or more.

Respectively submitted,

I. I. Saperstéin

Approved and forwarded,

Henry A! Eichert

Chief, Aerotriangulation

Section

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODENIC SURVEY

FORM C&G5-164
4-68)
JSCOMM-DC
10318-P68

MAP T. TP-00174

DESCRIPTIVE REPORT CONTROL RECORD

PROJECT NO. PH-6903

SCALE OF MAP 1:5,000

SCALE FACTOR

DISTANCE FROM GRID OR PROJECTION LINE IN METERS (I $Pt. = 3048006 \ meter)$ (BACK) N.A. 1927 - DATUM FORWARD DATE LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE 17° 59' 57.82" 66° 45' 26.70" 60,386,169 378,128,960 CHECKED BY DATUM PH-6903 Field Notes SOURCE OF (INDEX) IBM Readout DATE STATION Sub point FAR 1969 FAR 1969 COMPUTED BY

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODENIC SURVEY

54	•
FORM C&GS-16.	15COMM-DC 0318-P68

DESCRIPTIVE REPORT CONTROL RECORD

SCALE FACTOR 1:5,000 SCALE OF MAP PH-6903 PROJECT NO. _ TP-00175

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. $1927 - DATUM$ DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meter) FORWARD (BACK)
	гооу - на		55,940,05*	
GOT 1969	Field Notes		385,278,49*	
	188		61,889,741	
TURN 2, 1966	Readout	ŀ	386,662,643	
# * * * * * * * * * * * * * * * * * * *	20		55,917,449	
GOT 1969	LbM Readout		385,286,510	
4. do	-			
ŀ				
COMPUTED BY	DATE		CHECKED BY	21

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEOGRAPH & SURVEY

FORM C&GS-164
4-68)
JSCOMM-DC
10318-P68

DESCRIPTIVE REPORT CONTROL RECORD PH-6903

MAP T. TP-00176 PROJECT NO.	PH-	PIIVE REP	6903 scale of MAP 1:5,000 scale	SCALE FACTOR
STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meter) FORWARD (BACK)
9961 NUN	PH-6903 Field Notes	•	17°57*43.90" 66°47*30.71"	
1969 NUN	IBM Readout	·	47,912.070	
COMPUTED BY	DATE		CHECKED BY	DATE

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT CONTROL RECORD

FORM C&GS-164 (4-68) USCOMM-DC 60318-P68

MAP T- TP-00177	РРВОЈЕСТ НО. РН-6903	SCA	SCALE OF MAP 1:5,000 SCAL	SCALE FACTOR
STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (I FI. = 3048006 moter) FORWARD (BACK)
MARIA 2, 1969	PH-6903 Field Notes		17°58°07.051" 66°45°17.515"	
Subpoint MARIA 2, 1969	IBM Readout		49,206,710° 388,243,828°	
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Compilation Report TP-00174 through TP-00177

These four surveys are to be compared with the latest hydrographic surveys of the area. The purpose for this special project is to analyze the possibilities for providing hydrographic surveys by photogrammetric methods.

31. Delineation

The Wild B-8 stereoscopic instrument was used to compile the four surveys.

32. Control

Refer to the Photogrammetric Plot Report bound with this report.

The identification, density and placement of horizontal and vertical control was adequate.

33. Supplemental Data

Inapplicable.

34. Contours (Underwater) and Drainage

All drainage on these four manuscripts is from office interpretation of the photographs.

The quality of the photographs and diapositives covering the following four surveys of this project was good except as noted in the following paragraphs.

TP-00174

The 6', 12' and 18' underwater contours (depth curves) and underwater spot elevations (soundings), were compiled in the areas not affected by a suspended silt and pollution condition of the water. The poor water conditions rendered it impossible to compile depth curves in the lagoon area west of Punta Verraco and the north shore extending from the lagoon to the eastern limits of this survey. If the water conditions had been favorable, this survey could have been compiled with a minimum of effort.

TP-00175

The 3', 6', 9' and 12' underwater contours and underwater spot elevations were compiled in the areas not affected by the suspended silt referred to in survey TP-00174.

An attempt was made to overcome the silting conditions by setting additional stereomodels in various ways. A stereomodel was cleared, leveled and horizontalized using color transparencies 69-E(C)-9960, dated April 30, 1969, time 0810 and 69-E(C)-174, dated May 3, 1969, time 1635. A few additional underwater spot elevations were obtained in this solution, but were considered weak.

Another stereomodel, using photography from two separate flights, 69-E(C)-175 and 69-E(C)-195, was set with negative results. Stereomodel 69-E(C)-195 and 69-E(C)-197, eliminating photo 69-E(C)-196, was also set, but it too was unproductive.

As in TP-00174, this survey could have been more completely compiled but for the poor condition of the water.

TP-00176

The 6', 12' and 18' underwater contours, underwater spot elevations, sunken rocks with spot elevations and rocks awash were compiled. In stereomodel 69-E(C)-182 and 69-E(C)-183, some difficulty was encountered compiling contours in an area where the bottom characteristics were grass and sticky mud. The grass and mud area appeared as a very soft part of an otherwise solid stereomodel.

Sunglare in stereomodels 69-E(C)-183 through 185 and the pollution in model 69-E(C)-221 and 69-E(C)-222 at latitude $17^{\circ}58'15"$ and longitude $66^{\circ}47'30"$, made it impossible to complete the 6' and 12' underwater curves in this small area.

TP-00177

The 3', 6', 9',12' and 15' underwater contours, underwater spot elevations, sunken rocks with spot elevations and rocks awash were compiled. The stereomodels set in this survey were soft below the 9' underwater curve, limiting the number of readable underwater spot elevations.

An additional model, 69-E(C)-9788 and 69-E(C)-9789 (1:10,000 scale transparencies) was set to supplement the underwater compilation, but no additional information was obtained.

The 6' and 9' underwater curves in the area of latitude 17°58'30" and longitude 66°45'30" are considered to be very weak.

Note:

Refraction corrections were applied to all of the underwater curves and underwater spot elevation compiled on the four manuscripts of this special project.

35. Shoreline and Alongshore Details

There was no shoreline inspection. The shoreline was delineated from office interpretation of the photographs. The mean low-water line was not delineated.

36. Offshore Details

Refer to Item 34 of this Compilation Report.

37. Landmarks and Aids

All landmarks and aids were located by office interpretation of the photographs.

No Form 567 submitted.

38. Control for Future Surveys

No Form 524 submitted.

39. Junctions

These four surveys have been joined together and the junctions are in agreement. As this is a special project, no attempt was made to make a junction with any other contemporary survey in the area.

40. Horizontal and Vertical Accuracy

No comment.

41. Conclusions and Recommendations

Refer to Item 26 of the Photogrammetric Plot Report bound with this report.

Underwater compilation was impeded in many areas throughout this project due to the polluted conditions of the water. Suspended silt in the water was evident in most of the stereomodels, limiting the penetration capabilities of the photography.

In future jobs involving water penetration, it would prove valuable to visually survey the area to be mapped, before aerial photography is recommended.

- 42. through 45. Not applicable.
- 46. Comparison with Existing Maps

No comparison made.

47. Comparison with Nautical Charts

Comparison has been made with Chart No. 928, scale 1:10,000, 6th Edition, December 16, 1968.

Items to be applied to Nautical Charts immediately: Copies of these four surveys should be forwarded to the Marine Chart Division for comparison with the most recent hydrographic surveys in the area.

Items to be carried forward: None

Respectfully submitted,

Edward L. Rolle Cartographer

Approved and Forwarded,

Harold R. Brooks

Chief, Revision Surveys Section

Harold R. Brooke

Quality Control Report (Map Registration)

Data was forwarded for registration without a thorough examination.

Submitted by,

Frank Wright July 1974

Chief, Photogrammetric Branch

Chief, Coastal Mapping Division