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U.S. CEPARTMENT OF COMMERCE National ocean c and atmo P-Eric Administration National oceanogpan C data Center Records Section Rockville, Maryland 20852 FORM APPROVED O.M.B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data snipments should be sent to the above address.

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RECORDS VECTION
ROCKVILLE, MAR-LAND 20852

FORM APPROVED O.M.B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching teports, publications, or manuscripts which are reactly available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

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U.S. TEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MANY LAND 20852

FORM APPROVED O.M. B. No. 41-R265

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A. ORIGINATOR IDENTIFICATION

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10AA FORM 24-13

U.S. GEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEANOGRAPHIC DATA CENTER RECORDS SECTION NOCKVILLE, MARY LAND 20852 FORM APPROVED O.M.B. No. 41-R26.

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8. ARE DATA PROPRIETARY	?		SE DARKEN ALL			
X NO TYES		CONT	AINED IN YOUR	SUBMISSION W	ERE COLLECTE	ED.
IF YES, WHEN CAN THE				GENERAL AN	REA	
9. ARE DATA DECLARED NA PROGRAM (DNP)!	TIONAL	123° 120	140° + 10. 183 186° 140°	" 120" 106" 80" 60"	451 25° 0° 20	(Q EU' AG' 100"
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10. PERSON TO WHOM INQUIRE DATA SHOULD BE ADDRES PHONE NUMBER (AND ADE THAN IN ITEM-1)	SED WITH TELE-	,		100 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Mark
Eugene E. Collias		48			202-274	1257 197
Clifford A Barnes		186	2014 205	64 1. 12	. A500b ib.	511 100
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210 A A FO 250 24 12		L		··- <u></u>		

(OAA FORM 24-13

ILS, DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ADMOSPHERIC ADMINISTRATION NATIONAL OCEANOGRAINAL DETA CENTER RECORDS SECTION ROCKVILLE, MARYLAND 20852 FORM APPROVED O.M.B. No. 41-R2651

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis: and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

	A. ORIC	GINATOR	IDENTIFICAT	10N	•.		
THIS SECTION MUST BE COMP	LETED BY DONOR	FOR ALL (DATA TRANSMIT	TTALS			
1. NAME AND ADDRESS OF IN	STITUTION, LABOR	ATORY, O	R ACTIVITY WIT	H WHICH SUBM	ITTED DATA AF	RE ASSOCIATED	
Universtty of Washir	ngton	•	•	, '			
Department of Oceano	_		•	· .		•	
Seattle, Washington	98105	•					
				•			
2. EXPEDITION, PROJECT, O DATA WERE COLLECTED	R PROGRAM DURING	WHICH		ABER(S) USED A HIS SHIPMENT	Y ORIGINATION	TO IDENTIFY	
Technical Report No.	. 113		000.0	• '			
Technical Report No.	. 114		BB213				
			TR1362	· 		· 	
4. PLATFORM NAME(S)	5. PLATECRM TYPI (E.G., NHP, 1160		5. PLATFORM A NATIONALIT	NO OPERATOR Y(IES)		TES	
			PLATFORM	OPERATOR	FROM MODAY YE	TO: MO,DAY,YF	
	:	•					
Brown Bear	Shi p		u.s.	uis.	01/27/59	01/28/59	
B. ARE DATA PROPRIETARY					UARES IN WHICE		
X NO TYES		CONT	CNTAINED IN YOUR SUBMISSION WERE COLLECTED.				
IF YES, WHEN CAN THE		GENERAL AREA					
9. ARE DATA DECLARED NATE PROGRAM (DNP)?	TIONAL	10)' . ' 20 '	140" - 1GC" 183 - 184 143	14 120° 100° 80° 60°	49" 20" U' 70"	40'- 60 8G 100'	
(I.E., SHOULD THEY BE IN DATA CENTERS HOLDINGS TIONAL-EXCHANGE?)		4					
X NO THERE	COPECIES DELOWS		100		A. W.	15 July 10 Jul	
	•					N 1	
		20 1				W	
10. PERSON TO WHOM MOURE DATA SHOULD BE ADDRES MHONE NUMBER (AND ADD THAN IN TEMAL)	SED WITH TELE-	70		316		(2) 100 (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	
Eugene E. Collias		40.1	POST HID		344574	170	
Clifford A Barnes		in 1-75	y-, -75	W.	Land of	lsii loe	
		177	33. 1531 50 156	and A	510,051	540	
10 A A FORM 24.12			140" 160" 160" 160" 140		-4" - 30 - 0" - 30" -	-C. BN. 94, 100	

IDAA FORM 24-13

U.S. DEPARTMENT OF COMMERCA NATIONAL OCEANOL ATMOSPHERIC ADMINISTRATION NATIONAL OCEANOGRAPHIC DATA CENTER RECORDS SECTION ROCKVILLE, MARYLAND 18982 FORM APPROVED O.M.B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining perfinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

THIS SECTION MUST BE COMPL	ETED BY DONOR	FOR ALL	DATA TRANSMIT	TTALS		
1. NAME AND ADDRESS OF INST	TITUTION, LABOR	ATORY, O	R ACTIVITY WIT	H WHICH SUBM	ITTED DATA A	RE ASSOCIATED
University of Washing Department of Oceanog Seattle, Washington						•
2. EXPEDITION; PROJECT, OR DATA WERE COLLECTED	PROGRAM DURING	WHICH .		BER(S) USED I	BY ORIGINATOR	TO IDENTIFY
Technical Report No. Technical Report No.		, .	BB218			
	•		TR136	.3		
4. PLATFORM NAME(S) 5.	PLATFORM TYPE (E.G., SHIP, FUO		E.PLATFORM		1.	TES
			· PLATFORM	CPERATOR	FROM: MODAY/IF	TO: MO,DAY,YE
Brown Bear	Ship	· · · ·	uis.	u.s.	02/21/89	02/21/59
8. ARE DATA PROPRIETARY? YES IF YES, WHEN CAN THEY FOR CENERAL USE? YES	AR MONTH		SE DARKEN ALI AINED IN YOUR		ERE COLLECTI	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP): (i.e., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) X NO () YES () PART (SPECIFY HELOS)			140° 160° 160° 140° 140° 140° 140° 140° 140° 140° 14	17.00 100 10		40 50 80 100" 193 (1) 77 77 77 74 16 6 74 17 17 17 17 17 17 17 17 17 17 17 17 17
10. PERSON TO WHOM INDUIRIES DATA SHOULD BE ADDRESSE PHONE NUMBER (AND ADDRITEM). THAN IN ITEM-I) Eugene E. Collias Clifford A Barnes	D WITH TELE-	20 20 20				10 10 10 10 10 10 10 10

10AA FORM 24-13

U.S. GEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANIGE AND COMMERCE
RECORDS SECTION
ROCKVILLE, MANY LAND 20852

FORM APPROVED O.M.B. No. 41-R2651

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF IN	ISTITUTION, LABOR.	ATORY, C	RACTIVITYWIT	н мнісн ѕивм	ITTED DATA A	RE ASSOCIATED
University of Washin	ngton	•				_
Department of Ocean	-,					
Seattle, Washington	98105			•	•	
		•				
2. EXPEDITION: PROJECT, O DATA WERE COLLECTED	R PROGRAM DURING	WHICH		BER(S) USED I	BY ORIGINATOR	R TO IDENTIFY
Technical Report No Technical Report No			BB219		. ·	
1			TR1364			
4. PLATFORM NAME(S)	5. PLATFORM TYPS (E.G., SHP., BUC		S. PLATFORM A		7. DA	TES
	• •		PLATFORM	OPERATOR	FROM: MOJDAY/YE	TO: MO DAY / YE
Brown Bear	Ship		u.s.	u.s.	03/02/59	03/02/59
8. ARE DATA PROPRIETARY X NO YES IF YES, WHEN CAN THE FOR GENERAL USET	EY BE RELEASED YEAR,MONTH		SE DARKEN ALI		ERE COLLECTI	
9. ARE DATA DECLARED NA PROGRAM (DNP)? (I.E., SHOULD THEY BE IN DATA CENTERS POLDINGS TIONAL EXCHANGE?) X NO TYPES PARCEL OF THE SHOULD BURNESSED FOR HOMBER (AND ADLITIONAL IN ITEM-1)	CLUDED IN WORLD FOR INTERNA- (CPECIET DELOW) ES CONCERNING ISED WITH TELE-	1037 1207	160 190 190 190 190 190 190 190 190 190 19	128 196 80 60 60 60 60 60 60 60 60 60 60 60 60 60	20 10 10 10 10 10 10 10 10 10 10 10 10 10	60
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120 4 A FORM124-13					1	(*****)

NOAA FORM 24-13

U.S. CEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
MATIONAL OCEANOGRAPHIC DATA CENTER
ACCORDS SECTION
ROCKVILLE, MARYLAND 20852

FORM APPROVED O.M. B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritter submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

					
1. NAME AND ADDRESS OF INSTITUTION, LABOR	ATORY, CI	RACTIVITYWIT	H WHICH SUBM	IITTED DATA AI	RE ASSOCIATED
University of Washington		•	•		•
Department of Oceanography					
Seattle, Washington 98105			·		
·					
		· · · · · · · · · · · · · · · · · · ·			1
2. EXPEDITION, PROJECT, OR PROGRAM DURING DATA WERE COLLECTED	WHICH		BERIS) USED I IS SHIPMENT	EY ORIGINATOR	R TO IDENTIFY
Technical Report No. 113			•	•	
Technical Report No. 114		BB221			
	•	· .			
	·	TR1365		•	
4. PLATFORM NAME(S) 5. PLATFORM TYFE (E.G., SEIP, BUO		6. PLATFORM A NATIONALIT		1.	TES .
		PLATFORM	OPERATOR	FROM: MOJDAY,YE	TO: MO, DAY, YE
					1
	•	1.0	us.	03/03/59	nalastea
Brown Bear Ship		u.s.	u.5.	103/03/87	000000
8. ARE DATA PROPRIETARY?	(*: 3) E A	i .	MARCE EN CO	IIADEC IN WHIC	H AND DATA
, , ,		SE DARKEN ALI AINED IN YOUR			
X NO YES	•				
		•			
IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE: /FARMONTH		•	GENERAL AF	REA .	
9. ARE DATA DECLARED NATIONAL					 -
PROGRAM (DNP):	1014 1707 1	1481 - 1881 - 1881 - 1881 - 143 1481 - 1881 - 1881 - 143	* 1787 1891 1891 601 ************************************	1 434 234 95 20 	49" 60" 66" 100"
(I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNA-	2.5			S 1 3 16 19 24	
TIONAL EXCHANGE ()	1,,		计数级等。	# / 4이라 / # i	
and the second s	ω i _e : I				50°
X NO THE YES THE PART ISPECTED BLLOW		2.31-111			
	48 1 194				40
			The Control		1849
10. PERSON TO WHOM INQUIRIES CONCERNING			1011		
D/ TA SHOULD BE ADDRESSED WITH TELE-	1		54-1		30 V. 0°
PHONE NUMBER (AND ADDRESS II: OTHER THAN IN ITEM-I)	76 277	10-1-1-2-1		1-1-100	150 1905 20°
	10 10	100			477 116 40
Eugene E. Collias	Jun 1.			on an	2.7
Clifford A Barnes	W.S.	gre: 1,00%	re 4.	450.51	511 506
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10 5 A FORM 24-13				· · · · · · · · · · · · · · · · · · ·	

DAA FORM 24-13

U.S. DEPARTMENT OF COMMERCE RECORDS SECTION ROCK VILLE, MARS L'AND 20852

This form should accompany all data aubmissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

THIS SECTION WOST BE COMP	PLETED BY DONCK	FOR ALL L	AYTA TKŸK2W()	I (AL)		
1. NAME AND ADDRESS OF IN	STITUTION, LABOR	ATORY, OF	ACTIVITY WIT	H WHICH SUBM	ITTED DATA A	RE ASSOCIATED
Universtty of Washir	naton					
Department of Oceano	-			•	•	•
Seattle, Washington	-,	•	• •			
					•	
<u> </u>			. •			
2. EXPEDITION, PROJECT, O	R PROGRAM DURING	WHICH			Y ORIGINATOR	TO DENTIFY
DATA WERE COLLECTED	•		DATA IN TH	IS SHIPMENT	•	•
Technical Report No.	. 113					
Technical Report No.			BB222	i		
· .					•	•
			T21.36			
4. PLATFORM NAME(S)	5. PLATFORM TYFE (E.G., SHIP, BUO		S. PLATFORM A		7. DA	TES
	:	- 1 - 4.1 - 1 - 1.1 /	PLATFORM	OPERATOR	FROM MODAY A	MO, DAY, YE
				J. C.	FROM: 7	[10: / /
			1. 6	3.1 '-	03/19/59	2 12 1 60
Brown Bear	Ship		u.s.	us.	03/17/59	03/20/39
			·	<u> </u>]	
8. ARE DATA PROPRIETARY			SE DARKEN ALL NINED IN YOUR			
X NO YES	٠.					
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FOR GENERAL USER			•	GENERAL AR	EA	į
9. ARE DATA DECLARED NAT		!		·		 -
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(I.E., SHOULD THEY BE IN DATA CENTERS ROLDINGS		1.1.1.3.	了中央大学。		1 2 - 1	
TIONAL EXCHANGE!					[/[444/5/]	
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10. THRSON TO WHOM INQUIRE			787			7 .
DATA SHOULD BE ADDRES PHONE NUMBER (AND ADD		70 /4		1 10		331 175
THAN IN ITEM-19			307 1124	122	112/2/1	305,
Eugene E. Collias					415,144	497 40
Clifford A Barnes		"") . _ _ 	500			511 500
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			7 bir	1 300 100	[5] [5] [5] [5] [5] [5] [5] [5] [5] [5]	
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OAA FORM 24-13

J.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSP SERIC ADMINISTRATION
NATIONAL OCEANIGRAPHIC DATA CENTER
RECORDS SECTION
ROCK VILLE, MARK LAND 10852

FORM APPROVED O.M.B. No. 41-R2651

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the temaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF INST	TUTION, LABOR	ATORY, C	R ACTIVITY WITH	H WHICH SUBM	MITTED DATA AF	E ASSOCIATED
University of Washingt Department of Oceanogr Seattle, Washington 9	on aphy					•
2. EXPEDITION; PROJECT, OR P DATA WERE COLLECTED	PROGRAM DURING	WHICH		BER(S) USED IS SHIPMENT .	EY ORIGINATOR	TO IDENTIFY
Technical Report No. 1 Technical Report No. 1			BB223			
- -		•	Te1367			·
	PLATFORM TYPE (E.G., ShIP, BUG		S. PLATFORM A		7. DA	TES .
		٠.	PLATFORM	OPERATOR	FROM: MOJNAY AT	TO: MO/DAY/YE
Brown Bear	Ship	:	u.s.	uis.	03/24/59	03/27/59
IF YES, WHEN CAN THEY FOR CENSHAL USE: YES 9. ARE DATA DECLARED NATIO PROGRAM (DNP): U.C., SHOULD THEY SE INCL.	NAL	16 P 170	140° 151 (343 150 144°	GENERAL AI	REA	10° 60° 86° 100°
DATA CENTERS HOLDINGS FO TIONAL EXCHANGE XINO () YES () PART /S	20 CH				10 171 40 171 40 171 40	
10. PARSON TO WHOM INCURRES CONCERNING DATA SHOULD BE ADDRESSED WITH TELE- PHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-I) Eugene E. Collias Clifford A Barnes		21: 21: 21: 21: 21: 21: 21: 21: 21: 21:	100 100 100 100 100 100 100 100 100 100		(102) pt. (102)	10 10 10 10 10 10 10 10 10 10 10 10 10 1
NOAK FORW24-13	· · · · · · · · · · · · · · · · · · ·	27/3 170°	551 551 1507 140° 140°		51, 551, 551, 551, 551, 551, 551, 551,	543 543 575 575 575 575 575 575 575

CAA FORM 24-13

U.S. PEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ADMOSPHENC ADMINISTRATION NATIONAL OCEANOGRAPHIC DATA CENTER RECORDS STOTION ROCKVILLE, MARTIAND 20852 FORM APPROVED O.M.B. No. 41-R205

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are reactly available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address:

A. ORIGINATOR IDENTIFICATION

					•	
1. NAME AND ADDRESS OF IT	ISTITUTION, LABORA	TORY, O	R ACTIVITY WIT	H WHICH SUBN	MITTED DATA A	RE ASSOCIATED
University of Washin	ngton			-		
Department of Ocean	ography			•		
Seattle, Washington	98105		•			
					-	
			•			
2. EXPEDITION, PROJECT, O DATA WERE COLLECTED	R PROGRAM DURING	WHICH .		ABER(S) USED IS SHIPMENT	EY ORIGINATOR	R TO IDENTIFY
Technical Report No	. 113		بيسممضا		•	•
Technical Report No			BB 224			
~			j.			
			TR1368			,
4. PLATFORM NAME(S)	5. PLATFORM TYFE (E.G., SHIP, BUG)		5. PLATFORM A NATIONALIT		1.	TES
			PLATFORM	OPERATOR	FROM:	TO: MO, DAY, YE
	* * * * * * * * * * * * * * * * * * * *	•	1		,	
Brown Bear	Ship		u.s.	4.5	03/30/59	04/01/59
BIOWII BEAL	Ship				""	
B. ARE DATA PROPRIETARY	?	11. PLEA:	SE DARKEN ALI	_ MARSDEN SQ	JARES IN WHIC	H ANY DATA
(7)	:	CONT	AINED IN YOUR	SUBMISSION W	ERE COLLECT	ED.
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IF YES, WHEN CAN TH FOR GENERAL 15E1				GENERAL A	REA	
9. ARE DATA DECLARED NA	,					
PROGRAM (DNP):	S UDED IN HOS D	101° 170° 113-174	140° • 160° 180 180 143	r 1791, 1991 80" 60 "The help of 1 10	' 40° 20° 0° 70° 	40. 60. 10. 10.
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DIONAL EXCHANGE ()		en 1-1			4./1994/2/21	
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		40.	에 되지 않는			7.4.
		20		The state of the s		20
10. PERSON 16 WHOM INGUIR	ES CONCERNING					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
DATA SHOULD BE ADDRES PHONE NUMBER (AND AD)			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		3 - 2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	301 35
THAN IN TTEM-I)	Reas a Other	70" HAC	100			20 178
Eugene E. Collias	**	42 (141		م و ایا - افغام	3 442	40"
Clifford A Barnes		## i			414 774	1357
CITTOIG A Daines		60:	7981 (495)			
•		34 j	1 m	5.0 1 1	et	
		一河上		Tiblicia		
		100" 120"	140" (50" 160" 160" 140). 159. 100. 8 0. CO	· 43· · 20· 0· 25·	40" 50" 10" 100"
NO 46 FORM: 24-13	i					<u>۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔۔</u>

10A4 FORM 24-13

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSTHERIC ADMINISTRATION NATIONAL OCEANOGRAPHIC DATA CENTER RECORDS SECTION ROCK VILLE, MARY LAND 20852 FORM APPROVED O.M.B. No. 41-R2651

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A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF I	ISTITUTION, LABOR	ATORY, OF	RACTIVITY WIT	H WHICH SUBM	NTTED DATA A	RE ASSOCIATED
University of Washi	ngton	· •	•			
Department of Ocean	ography					• !
Seattle, Washington	98105	•		• -		
			·		٠.	
			· · ·			
2. EXPEDITION: PROJECT, C DATA WERE COLLECTED	OR PROGRAM DURING	WHICH		ABER(S) USED I NS SHIPMENT	EY ORIGINATOR	TO IDENTIFY
						<u> </u>
Technical Report No			BB233	•		
Technical Report No	, 114		130233			
			TR1369			
4. PLATFORM NAME(S)	5. PLATFORM TYPE (E.G., SHIP, BUC		6. PLATFORM A		7. DA	TES
		,, ,,,,,,,	PLATFORM	OPERATOR	FROM: MOJE AY YE	- MO, DAY, YE
	• .		1 1277 1 27134	3. [FROM: /	10: 7 7
			u.s.		21-1	1
Brown Bear	Ship		W, 5.	u.s.	06/03/59	06/05/59
B. ARE DATA PROPRIETARY	?	11. PLEÁS	SE DARKEN ALI	L MARSDEN SQ	UARES IN WHIC	H ANY DATA
			AINED IN YOUR			
X NO. YES	• •					
IF YES, WHEN CAN TH FOR GENERAL USE!				GÉNERAL AF	REA .	
9. ARE DATA DECLARED NA PROGRAM (DNP):	TIONAL	10), 150.	40' - 163 - 180' - 163 - 145)" 179" 109" 80" 66	· 40 ' 20" U" ' 20"	40" 60" 80" 100"
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X NO YES PAR	v especiely relion).					
	•	49 49			1-	7 (4: 25
	•	10 had		1		200
10. PERSON TO WHOM INCUIR	ES CONCERNING		100			
DATA SHOULD BE ADDRES		1			Dones A	301 1295 Jim 1992 100
PHONE NUMBER (AND ADI THAN IN ITEM-I)	JKESS IF OTHER	20	1 324			-37 375
Eugene E. Collias	• 4	40 - 37 - 4	M M HEL	المرابع المنافعة	7	42.9
Clifford A Barnes			1 (5) (5) (5) (5) (7)		4500.4	557
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U.S. CEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ADMOSPHERIC ADMINISTRATION
NATIONAL OCEANIOSPAN-1C DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852

FORM APPROVED O.M.B. No. 41-R2051

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF IN	ISTITUTION, LABOR	ATORY, OF	CACTIVITY WIT	H WHICH SUBM	NTTED DATA A	RE ASSOCIATED
University of Washir	ngton		•	•		
Department of Oceano						•
Seattle, Washington	•		•	•	•	
beareze, masizingeen		•				
	•				•	
2. EXPEDITION; PROJECT, O	R PROGRAM DURING	WHICH .	3. CRUISE NUN	BER(S) USED	EY ORIGINATOR	TO DENTIFY
DATA WERE COLLECTED	•		DATA IN TH	IS SHIPMENT		
Technical Report No.	112		0.0	• •	•	
Technical Report No.			BB234		•	; . <u>.</u>
Technical Report No.	, 114	•		:	•	
			TR 137			
4. PLATFORM NAME(S)	5. PLATFORM TYP	## (C) V	C. PLATFORM	NOGREBATOR	7 04	TES.
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Brown Bear	Ship .		u.s.		06/18/59	06/19/37
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IF YES, WHEN CAN THE FOR GENERAL USE:			•	GENERAL AF	REA .	
9. ARE DATA CECLARED NA		 				
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10AA FORM 24-13

J.S. GEPARTHENT OF COMMERCE
NATIONAL OCEANIC AND ATMODIMERIC ADMINISTRATION
NATIONAL DEFANOGRAPHIC DATA CENTER
ACCORDS SECTION
ROCK VILLE, MARY LAND 20852

FORM APPROVED O.M.B. No. 41-R2651

This form should accompany all dara submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertiaent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, bandwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

THIS SECTION MUST BE COME	LETED BY DONOR	FOR ALL	DATA TRANSMIT	TTALS		
1. NAME AND ADDRESS OF IN	ISTITUTION, LABOR	ATORY, O	R ACTIVITY WIT	H WHICH SUBM	ITTED DATA A	REASSOCIATED
Universtty of Washin	ngton	•	•		•	
Department of Oceand	ography					·
Seattle, Washington	98105			٠		;
						·
2. EXPEDITION: PROJECT, O	R PROGRAM CURING	WHICH'	3. CRUISE NUM	BER(S) USED I	EY ORIGINATOR	TO IDENTIFY
DATA WERE COLLECTED	•		DATAINTH	IS SHIPMENT.		
Technical Report No.	. 113		j .			
Technical Report No.	•	,	BB242			
			TR1371			
4. PLATFORM NAME(S)	5. PLATFORM TYP	77 (S) Y	E. PLATFORMA	NOOPERATOR	7. 04	TES
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Brown Bear	Ship		uis.	u.s.	10/26/59	10/29/59
8. ARE DATA PROPRIETARY	···.		SE BARKEN ALI			
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9. ARE DATA DECLARED NA PHOGRAM (DNP):	TIONAL .	10)* 129	14C' • 19C	* 120° 100° 40° \$6°	424 205 115 207	40. 40. 40. 100.
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ICAA FORM 24-13

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMODINERIC ADMINISTRATION NATIONAL OCEANIGRAPHIC DATA CENTER SECONDS SECTION ROCK VILLE, MARY LAND 20852 FORM APPROVED O.M.B. No. 41-R2651

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

THIS SECTION MUST BE COMP				•		· ·
1. HEME AND ADDRESS OF IN	ISTITUTION, LABOR	ATORY, O	R ACTIVITY WIT	H WHICH SUDM	ITTED DATA AF	RE ASSOCIATED
University of Washin	ngton		•		•	
Department of Oceand	ography		•			•
Seattle, Washington	98105	•	•			. {
1	5			•	. * "	
		<u> </u>		· · · · · · · · · · · · · · · · · · ·		
2. EXPEDITION: PROJECT, O DATA WERE COLLECTED	R PROGRAM DURING	WHICH		BER(S) USED E IS SHIPMENT	EY ORIGINATOR	TO IDENTIFY
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Technical Report No.			00000			
' Technical Report No	, 114		BB243	· .	•	1
			TO. 1.			
4. PLATFORM NAME(S)	5. PLATFORM TYP	= / s· \	5. PLATFORM A	NOOREDATOR		TES
4. PERIFORM NAME(S)	(E.G., SLIP, EUG		NATIONALIT		52	1 23
	:		PLATFORM	OPERATOR	FROM: MODAY TE	TO: MO DAY YE
		•				
Brown Bear	Ship		u.s.	u.s.	11/02/59	11/04/59
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B. ARE DATA PROPRIETARY X NO YES IF YES, WHEN CAN THE FOR GENERAL USE!	EY BE RELEASED		SE DARKEN ALL		ERE COLLECTE	
9. ARE DATA DECLARED NAPPOGRAM (DNP)? (I.E., SHOULD THEY BE IN DATA CENTERS HOLDINGS TIONAL EXCHANGE?) X NO YES PART	CLUDED IN WORLD FOR INTERNA- TOPECIEV BELOW)	(a) 126	10° 18° 340° 160 340°	170° 105° 60° 60°		10° 50° 100° 100° 100° 100° 100° 100° 10
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10AA FORM 24-13

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEANIGRAPHIC DATA CENTER RECORDS SECTION ROCK VILLE, MARY LAND 20852 FORM APPROVED
OMB. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, pandwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

	A. ORIG	SHATOR	IDENTIFICAT	10N	·.	
THIS SECTION MUST BE COM	PLETED BY DONOR	FOR ALL (DATA TRANSMIT	TTALS,		
1. NAME AND ADDRESS OF IT	STITUTION, LABOR	ATORY, C	R ACTIVITY WIT	H WHICH SUBM	ITTED DATA A	RE ASSOCIATED
University of Washi Department of Ocean Seattle, Washington	ography		•			•
				·		
2. EXPEDITION, PROJECT, O DATA WERE COLLECTED	R PROGRAM DURING	WHICH .		ABER(S) USED E IS SHIPMENT	Y ORIGINATOR	TO IDENTIFY
Technical Report No	. 113		0000			
Technical Report No	. 114		BB245	••		
1	•		TE1373			
4. FLATFORM NAME(S)	5. PLATFORM TYPE (E.G., SLIP, BUG		S. PLATFORM A	ND OPERATOR		TES
			PLATFORM	OFERATOR	FROM: MOPAY PE	TO: MO,DAY,YE
Brown Bear	Ship		u.s.	u.s.	11/30/59	}
8. ARE DATA PROPRIETARY	7		SE CARKEN ALI			
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IF YES, WHEN CAN THE FOR GENERAL USE:		<u> </u>		GENERAL AR	EA	
9. ARE DATA DECLARED NA PROGRAM (DNP):	TIONAL	103, 150. 1	149" • 1 5 0" 180" 160" 140	" 170° 100° 80° 66°	43" 70" U" 20"	40. En. 90, 100.
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10AA FORM 24-13

. U.S. CEPARTMENT OF COMMERCE NATIONAL CCEANIC AND ATMOUSE ERIC ADMINISTRATION NATIONAL OCEANOGHAPHIC DATA CENTER RECORDS SIGNON ROCK VILLE, MARYLAND 20802

FORM APPROVED O.M.3. No. 41-R20-1

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

THIS SECTION MOST BE COM			ATA TRANSMIT	· · · · · · · · · · · · · · · · · · ·		<u> </u>
1. NAME AND ADDRESS OF IN	ISTITUTION, LABOR	ATORY, CE	R ACTIVITY WIT	H WHICH SUBM	ITTED DATA AI	RE ASSOCIATED
University of Washir Department of Oceano Seattle, Washington	ography					
		·			•	
2. EXPEDITION, PROJECT, O DATA WERE COLLECTED	R PROGRAM DURING	WHICH .	S	BER(S) USED E IS SHIPMENT	EY ORIGINATOR	TO IDENTIFY
Technical Report No. Technical Report No.			BB247			
1		·.	T21374			· ·
4. PLATFORM NAME(S)	5. PLATFORM TYFE (E.G., SHIP, BUC	Ξ(S) Υ.ΕΤC.)	6. PLATFORM A NATIONALIY		l·	TES
	·	:	PLATFORM	OPERATOR	FROM:	TO: MO/DAY/YE
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Brown Bear	SHIP			•		
B. ARE DATA PROPRIETARY			SE DARKEN ALL NINED IN YOUR		ERE COLLECT	
FOR GENERAL USE!	CEARMONTH	ļ 				
9. ARE DATA DECLARED NAT PROGRAM (DNP): (I.E., SHOULD THEY BE IN DATA CENTERS HOLDINGS TIONAL EXCHANGE?) X NO PART	CLUDED (N WORLD FOR INTERNA- CEPECITY HELOW)	103 120 223 24 45 45 47 20 54	10 166 160 160 140	1.00 100 60	25 20 0 70	40 60 80 100 100 100 100 100 100 100 100 100
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10AA FORM 24-13

U.S. U.P ARTMENT OF COMMERCE MATIONAL OCEANCY AND ATMOSPHERIC ADMINISTRATION MATIONAL OCEANOGRAPHIC DATA CENTER RECORDS SECTION ROCKVILLE, MARYLAND 19852

FORM APPROVED OM.B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

THIS SECTION MUST BE COMP						
1. NAME AND ADDRESS OF IN	STITUTION, LABOR	ATORY, O	ACTIVITY WIT	H WHICH SUBM	ITTED DATA AF	RE ASSOCIATED
Universtty of Washin	ngton		•			Ì
Department of Oceano	ography	٠,		•		,
Seattle, Washington	98105					
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2. EXPEDITION, PROJECT, O	R PROGRAM DURING	WHICH :	3. CRUISE NUN	SER(S) USED E	Y ORIGINATOR	TO IDENTIFY
· DATA WERE COLLECTED	· .	•	DATAINTH	IS SHIPMENT		
Technical Report No.	. 113					
Technical Report No.		: •	BB248			
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		· · ·	TR1325	-	•	
4. PLATFORM NAME(S)	5, PLATFORM TYPE (E.G., SEIP, BUO		S. PLATFORM A	NDOPERATOR	7. DA	TES
	(E.O., S.A.P., 1909)	7, 1: (0.)	PLATFORM	OPERATOR	MODAY,YE	TO: MO,DAY,YR
			TILAT FORM	OFERA OR	FROM:	TO: , /
•			u.s.	u.s.	12/12/20	interior
Brown Bear	Ship		W.3.	W.5,	12/10/59	1411/27
8. ARE DATA PROPRIETARY			SE DARKEN ALI			
X NO TYES		CUNT	AINED IN YOUR	SUBMISSION WI	ERE COLLECT	-D.
IF YES, WHEN CAN THE				GENERAL AR	EA	·
9. ARE DATA DECLARED NA	TIONAL	10) 120	(6C) + 18C) 18J 18G 14G	" 120" 106" #0" -\$6"	457 252 07 207	40. 60: 46° 100°
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Clifford A Barnes		1,0	May Dr.	1 4 1 4.	890)15	Sii 4'is 60°
		4	1 34 1 34	50 Julia	514541.	34
		河土		1 2	1 1 5 5 5 5	
		100" 120"	140° 160° 160° 165° 145	" 120° 100° 46° ED°	43' 20' 0' 23'	40" 60' 40" 100"
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YOAA FORM 24-13

GE-PRINGE A PURI

U.S. CEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSS FERC ADMINISTRATION NATIONAL OCEANOGRAPHIC DATA CENTER RECORDS SECTION ROCKVILLE, MARY LAND 20052 FORM APPROVED C.M.B. No. 41-R2651

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

	A. ORIO	GINATOR	IDENTIFICAT	!ON		•
THIS SECTION MUST BE COMP	LETED BY DONOR	FOR ALL C	ATA TRANSMIT	TTALS		
1. NAME AND ADDRESS OF IN	STITUTION, LABOR	ATORY, OF	ACTIVITY WIT	H WHICH SUBM	ITTED DATA A	RE ASSOCIATED
University of Washin Department of Oceand Seattle, Washington	ography			٠		. ' •
	·				• :	
2. EXPEDITION: PROJECT, O DATA WERE COLLECTED	R PROGRAM DURING	з мятсін		IBER(S) USED E IS SHIPMENT	BY ORIGINATOR	R TO IDENTIFY
Technical Report No.			BB249			
	:		TR1376			
4. PLATFORM NAME(S)	5. PLATFORM TYP (E.G., SEIP, 1990)		6. PLATFORM A NATIONALIT		<u> </u>	TES
	·		PLATFORM	OPERATOR	FROM: MOJOAT/TE	TO: MO,DAY,YE
Brown Bear	Ship		u.s.	u.s	01/18/60	01/19/60
B. ARE DATA PROPRIETARY [X] NO YES IF YES, WHEN CAN THE FOR GENERAL USE	EY BE RELEASED		SE DARKEN ALI AINED IN YOUR		ERE COLLECT	
9. ARE DATA DECLARED NATHER PROGRAM (DNP)? (I.E., SHOULD THEY BE INDICATE CENTERS HOLDINGS TIONAL EXCHANGE?) X NO YES PARTITION OF A CONTROL OF A C	CLUDED IN WORLD FOR INTERNATION (ISPECIFY BELOW) ES CONCERNING SED WITH TELE-	10) 20	49 157 150 150 130 130 130 130 130 130 130 130 130 13	126 199 80 60 126 199 199 199 199 199 199 199 199 199 19	70 0 0 70 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	27.6
Eugene E. Collias Clifford A Barnes		60 (128)	500 150 150 160 160 160 160 160 160 160 160 160 16	61. (4. (4. (4. (4. (4. (4. (4. (4. (4. (4	21 (101) 261-27 251-351 49" - 20" - 0" - 20"	427

NOAA FOFM 24-13

U.S. LEPARTMENT OF COMMERCE
NATIONAL OCEAN'C AND ATMOSH-EARC ADMINISTRATION
HATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKYLLE, MARY LAND 19852

FORM APPROVED O.M.B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining perfinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

THIS SECTION MUST BE COMPLETED BY DONOR	FOR ALL	DATA TRANSMIT	TTALS		
1. NAME AND ADDRESS OF INSTITUTION, LABOR	ATORY, C	R ACTIVITY WIT	н мнісн ѕи́вм	NITTED DATA A	RE ASSOCIATED
University of Washington		••	•		
Department of Oceanography	•	·	• •		• .
Seattle, Washington 98105					
			•		
		·	<u>'</u>		
2. EXPEDITION, PROJECT, OR PROGRAM DURING DATA WERE COLLECTED	G WHICH		MEERIS) USED IS SHIPMENT	BY ORIGINATION	TO IDENTIFY
Technical Report No. 113				4	
Technical Report No. 114		B0251			
		1 TR1377			
4. PLATFORM NAME(S) 5. PLATFORM TYP (E.G., SLIP, FILE		5. PLATFORM /		1	TES
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		}		1	
Brown Bear Ship		u.s.	u.s.	01/25/60	01/29/60
IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE: YEAR MONTH. 9. ARE DATA DECLARED NATIONAL PROGRAM (DNP): (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE? (X)NO YES PART REPECIEV HELDE) 10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELE-PHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-I) Eugene E. Collias Clifford A Barnes	10) 170 10) 170 10 1	140° 160° 160° 160° 140° 140° 140° 140° 140° 140° 140° 14	GENERAL AND SOLUTION OF THE SO	20° 0 70 70 70 70 70 70 70 70 70 70 70 70 7	00" 60" 86" 100" Y.
	100° 120°	53 (33) 51 (30° 150° 150° 140	120° 100° 80° 60°	5.0555.	40° 60° 80° 100°

UAA FORM 24-13

U.S. DEPARTMENT OF COMMERCE NATIONAL DOCEMNO ATMOSTS ERIC ADMINISTRATION NATIONAL DOCEMNOGRAPHIC DATA CENTER RECORDS SECTION ROCKVILLE, MAIN LAND 20852

FORM APPROVED O.M.B. No. 41-R26)

This form should accompany all data submissions of NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining persinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED

Universtty of Washi Department of Ocean Seattle, Washington	ography		•			•
		•				•
2. EXPEDITION, PROJECT, O DATA WERE COLLECTED		WHICH	3. CRUISE NUM DATA IN TH		BY ORIGINATOR	TO IDENTIFY
Technical Report No Technical Report No			BB252			
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10AA FORM 24-13

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEANIGRAINS DATA CENTER RECORDS FUTION ROCKVILLE, MANY, LAND 20852 FORM APPROVED O.M.B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are reactly available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

University of Washington Department of Oceanography Seattle, Washington 98105 2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED Technical Report No. 113 Technical Report No. 114 BB2.57 TC-1379	· ·IFY
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UAA FORM 24-13

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEANIGRAPHIC DATA CENTER RECORDS TESTION ROCK VILLE, MARYLAND 10852

FORM APPROVED O.M.B. No. 41-R26)!

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining perminent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF IN	ISTITUTION, LABOR	ATORY, O	R ACTIVITY WIT	H WHICH SUBM	ITTED DATA AF	RE ASSOCIATED
University of Washir	ngton				ē	
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U.S. CEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSTS ERIC ADMINISTRATION
NATIONAL OCEANIOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20802

FORM APPROVED O.M.B. No. 41-R2651

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

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University of Washin	ngton	•	•	•		
Department of Ocean	ography			•		
Seattle, Washington	98105					
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10AA FORM 24-13

U.S. CEPARTMENT OF COMMERCE
NATIONAL GCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCTANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MANY LAND 20852

FORM-APPROVED O.M.B. No. 41-R2051

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining percinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifies. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

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University of Washir	ngton		•			_
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U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEANIOGNAPH C DATA CENTER RECORDS SCOTION HOCK VILLE, MARYLAND 20852 FORM APPROVED O.M.B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

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1. NAME AND ADDRESS OF IN	STITUTION, LABOR	ATORY, O	R ACTIVITY WIT	H WHICH SUBM	ITTED DATA AF	RE ASSOCIATED
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Department of Oceand	-,	•			•	
Seattle, Washington	98105					
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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
HADDRAL OCEANIGERAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARY LAND 10852

FORM APPROVED O.M.B. No. 41-R2051

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THIS SECTION MUST BE COMPLETED BY DONOR			•		
1. NAME AND ADDRESS OF INSTITUTION, LABOR	ATORY, OF	R ACTIVITY WIT	н мисн зивм	ITTED DATA A	RE ASSOCIATED
University of Washington Department of Oceanography		•			•
Seattle, Washington 98105	٠.		•		ļ
2. EXPEDITION: PROJECT, OR PROGRAM DURING DATA WERE COLLECTED	3 Which		BERIS) USED I S SHIPMENT	EY ORIGINATOR	TO IDENTIFY
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10AA FORM 24-13

J.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION MATIONAL OCEANICAND ATMOSPHERICAND RECORDS SECTION ROCKVILLE, MARYLLAND 20852

FORM APPROVED O.M.B. No. 41-R2011

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A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF INSTITUTION, LABORA	ATORY, OF	RACTIVITY WIT	H WHICH SUBM	ITTED. DATA AF	REASSOCIATED
University of Washington	• :	• .	•		
Department of Oceanography	÷				
Seattle, Washington 98105	•	•			İ
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10AA FORM 24-13

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANO AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOSPAPHIC DATA CENTER
RECORDS SIGTION
ROCKVILLE, MARYLAND 20852

FORM APPROVED O.M.B. No. 41-R2651

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THIS SECTION MUST BE COMPLET	ED BY DONOR	FOR ALL I	DATA TRANSMIT	TALS		
1. NAME AND ADDRESS OF INSTIT	UTION, LABO	RATORY, O	R ACTIVITY WIT	H WHICH SUBM	ITTED DATA AF	REASSOCIATED
University of Washington Department of Oceanogra Seattle, Washington 98	on aphy					•
2. EXPEDITION: PROJECT, OR PRODUCTED	ROGRAM DURIN	vg WHICH		BER(S) USED E IS SHIPMENT	Y ORIGINATOR	TO IDENTIFY
Technical Report No. 1. Technical Report No. 1.			BB272			
			TR1386	·	r 	·
	E.G., SLIF, BU		S. PLATFORMA NATIONALIT		1	res
			PLATFORM	OPERATOR	FROM: MOJE AY IY E	TO: MO,DAY,YF
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10AA FORM 24-13

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
MATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SCOTION
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FORM APPROVED O.M. S. No. 41-R207.

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

THIS SECTION MUST BE COMP				•		
1: NAME AND ADDRESS OF IN	STITUTION, LABOR	ATORY, O	R ACTIVITY WIT	H WHICH SUBM	ITTED DATA AF	REASSOCIATED
Universtty of Washir	ngton		•			. 1
Department of Oceano	graphy				•	
Seattle, Washington	9.8105				٠	
			•	•		
2. EXPEDITION, PROJECT, O DATA WERE COLLECTED	R PROGRAM DURING	WHICH		BER(S) USED E	Y ORIGINATOR	TO IDENTIFY
		•			• .	·.
Technical Report No.			00 7 72			
Technical Report No.	. 114	•	BB 273			
			TRB87	<u> </u>		
4. PLATFORM NAME(S)	 PLATFORM TYPE (E.G., SHIP, BUG) 		5. PLATFORMO NATIONALIT			TES
	: .		PLATFORM	OPERATOR	FROM: MO,DAY,YE	TO: MO, DAY, YE
Brown Bear	Ship		u.s.	u.s.	12/27/60	12/30/60
8. ARE DATA PROPRIETARY			SE DARKEN ALL			
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	·		·			

10AA FORM 24-13

U.S. CEPARTMENT OF COMMERCE NATIONAL OCEANIC AND AUMOSPHERIC ADMINISTRATION NATIONAL OCEANIOSHAPPIC DATA CENTER RECORDS SECTION ROCKVILLE, MARYLAND 20852 FORM APPROVED O.M.B. No. 41-8265

200200

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

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THIS SECTION MUST BE COMP						
1. NAME AND ADDRESS OF IN	STITUTION, LABOR	ATORY, OF	ACTIVITY WIT	H WHICH SUBM	ITTED DATA AF	E ASSOCIATED
Universtty of Washin	_		•	·		
Department of Oceand	•					_
Seattle, Washington	98105					<u>.</u>
2. EXPEDITION; PROJECT, O DATA WERE COLLECTED	R PROGRAM DURING	WHICH		BERIS) USED E	EY ORIGINATOR	TO IDENTIFY
Technical Report No.	112	•				
Technical Report No.			BB276			ĺ
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			TR138	5 6 .	•	
4. PLATFORM NAME(S)	5. PLATFORM TYFE (E.G., SLIP, BUG		5. PLATFORM A NATIONALIY		1	TES
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Brown Bear	Ship		૫.૬.	u.s.	02/06/61	02/06/61
8. ARE DATA PROPRIETARY	?	11. PLEAS	E DARKEN ALI	MARSDEN SQ	UARES IN WHIC	H ANY DATA
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IF YES, WHEN CAN TH		GENERAL AREA				
9. ARE DATA DECLARED NAT PROGRAM (DNP):	TIONAL	100° 120° 140° 160° 160° 160° 140° 120° 100° 80° 60° 40° 20° 20° 20° 40° 60° 80° 100°				
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10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELE- PHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-I)		20	[2] [7] [7] [7] [7] [7] [7] [7] [7] [7] [7	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(a) (b) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	
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NOAA FORM 24-13

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANOLATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOLATHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARY LAND 20852

FORM APPROVED O.M.B. No. 41-R205

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

	A. ORIG	GINATOR	IDENTIFICAT	ICM		
THIS SECTION MUST BE COMP	LETED BY DONOR	FOR ALL	DAȚA TRANSMIT	TTALS		
1. NAME AND ADDRESS OF IN	STITUTION, LABOR	ATORY, C	F ACTIVITY.WIT	H WHICH SUBM	ITTED DATA AF	RE ASSOCIATED
University of Washin	ngton		•		•	
Department of Oceano	graphy		· .	•		•
Seattle, Washington	98105		•	•		•
	·					
2. EXPEDITION; PROJECT, O DATA WERE COLLECTED	R PROGRAM DURING	WHICH		BER(S) USED E	Y ORIGINATOR	TO IDENTIFY
Technical Report No.	113					· .:
Technical Report No.			BB279		•	
			TR1389			٠.
4. PLATFORM NAME(S)	5. PLATFORM TYP	E(S)	1	NOOPERATOR	7. DA	TES %
	(E.G., SHIP, BUO	Y. ETC.)	NATIONALIT	Y((ES)	ļ· .	· · · · · · · · · · · · · · · · · · ·
			PLATFORM	OPERATOR	FROM: MODAY, FE	TO: MO DAY / TR
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Brown Bear	Ship		Uis.	u.s.	02/28/61	02/28/61
8. ARE DATA PROPRIETARY			SE DARKEN ALI			
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IF YES, WHEN CAN THE FOR GENERAL USE:		GENERAL AREA				
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10. PERSON TO WHOM INQUIRE			777	7-7-3		100
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Clifford A Barnes		20.	[165]	1 100	45/51	511 500 60*
			53- 531	1 300 1 July 1	510051	24 4 4
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NOA4 FORM 24-13

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NATIONAL OCEANIC AND ATMOLPHENIC COMMISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS RECTION
RECORDS RECTION

FORM APPROVED O.M.B. No. 41-R265;

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

THIS SECTION MUST BE COMP	·					
1. NAME AND ADDRESS OF IN	ISTITUTION, LABOR.	ATORY, OF	RACTIVITYWIT	H WHICH SUBM	ITTED DATA AI	RE ASSOCIATED
.University of Washin		·	•			•
Department of Oceand						•
Seattle, Washington	98105					
		•		· .		
2. EXPEDITION: PROJECT, O DATA WERE COLLECTED	R PROGRAM DURING	WHICH		BERIS) USED E IS SHIPMENT	Y ORIGINATOR	TO IDENTIFY
:Technical Report No	. 113					• • •
Technical Report No		· .	BB284			
			TR1390			
4. PLATFORM NAME(S)	5. PLATFORM TYPS (E.G., SHIP, BHO		S. PLATFORM A NATIONALIT			TES'
		•	PLATFORM	OPERATOR	FROM: MODAY/YE	TO: MO,DAY,YR
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Brown Bear	Ship		us.	u.s.	04/17/61	04/21/61
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9. ARE DATA DECLARED NA PROGRAM (DNP)? (I.E., SHOULD THEY BE IN DATA CENTERS HOLDINGS TIONAL EXCHANGE?) X NO () YES I PART DATA SHOULD BE ADDRESS PHONE NUMBER (AND ADDRESS PHONE NUMBER (AND ADDRESS PHONE NUMBER (AND ADDRESS Clifford A Barnes	CLUDED IN WORLD FOR INTERNA- TISPECIEV BELOW. ES CONCERNING GED WITH TELE-	10) 126 tal 1/ 4.1 1/ 2.9 1/2 1/ 2.0 1/4 1/ 4.1 1/ 4.2 1/4 1/ 4.3 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4	140° 1501′ (ED) 150° 140° 140° 140° 140° 140° 140° 140° 14	170° 100° 60° 60° 60° 60° 60° 60° 60° 60° 60°	7 10 10 10 10 10 10 10 10 10 10 10 10 10	40° 60° 86° 100° 10° 70° 11° 70° 12°
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NOAA FORM 24-13

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
HATIONAL OCEANIOGRAPH C DATA CENTER
RECORDS SECTION
RECORDS SECTION
RECORD AND 20852

FORM APPROVED O.M.B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is nightly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

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THIS SECTION MUST BE COMP	PLETED BY DONOR I	FOR ALL (DATA TRANSMIT	TTALS		
1. NAME AND ADDRESS OF IN	ISTITUTION, LABOR	ATORY, O	R ACTIVITY WIT	H WHICH SUBM	ITTED DATA AF	RE ASSOCIATED
University of Washin	ngton		•			
Department of Oceand				•		
Seattle, Washington	98105					į
2. EXPEDITION; PROJECT, O DATA WERE COLLECTED	R PROGRAM SURING	WHICH		BER(S) USED E IS SHIPMENT	Y ORIGINATOR	TO IDENTIFY
Technical Report No.	. 113	•	م م			!
Technical Report No	. 114		136285	•	·	
L			TR1391		٠.	
4. PLATFORM NAME(S)	5. PLATFORM TYPE (E.G., SHIP, BUO		S. PLATFORM A NATIONALIT			TES
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Brown Bear	Ship		u.s.	u.s.	04/28/61	04/28/61
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IF YES, WHEN CAN TH FOR GENERAL USE:			•	GENERAL AR	EA	
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NOAA FORM 24-13

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCCANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCCANICAND PATA CENTER
RECORDS TACTION
ROCKVILLE, MARY LAND (20852)

FORM APPROVED O.M.B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted, it is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports; publications, or manuscripts which are readily available describing data collection, analysis, and format specifies. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF INSTITUTION, LABORA	ATORY, OF	R ACTIVITY WIT	н мнісн зпівм	ITTED DATA AF	RE ASSOCIATED
University of Washington	•	•	•	•	
Department of Oceanography					
Seattle, Washington 98105		• •			
			•		
		· · · · · · · · · · · · · · · · · · ·			
2. EXPEDITION, PROJECT, OR PROGRAM DURING DATA WERE COLLECTED	WHICH		ABER(S) USED E AS SHIPMENT	BY ORIGINATOR	TO IDENTIFY
DATA NERE COLLECTED		1 2015 14 10	13 SIIII MENI	•	
Technical Report No. 113					
Technical Report No, 114		BB288			
1					.
	·	TR139		· ·	
4. PLATFORM NAME(S) 5. PLATFORM TYPE (E.C., SUIP, HEO)		6. PLATFORM A NATIONALIT		ļ.	TES
	•	PLATFORM	OPERATOR	FROM: PAYIVE	TO: MO DAY YE
			·		
Brown Bear Ship	•	u.s.	uis	06/09/61	oblinkes
Brown Bear Ship	•			7 5 7 6 1	
IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE! YEAR MONTH. 9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)T (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE!) X NO YES PART SPECIFY HELDER 10. PERSON TO WHOM INDURSES CONCERNING DATA SHOULD BE ADDRESSED WITH TELE-PRONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-I) Eugene E. Collias Clifford A Barnes	10) 7 120 10) 7 120 43 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ACC 186° 180 130 143 40° 186° 180 130 143 41° 180° 180° 180° 180° 143 41° 180° 180° 180° 180° 180° 143	GENERAL AR	25 A 20 W 20 A 20 A 20 A 20 A 20 A 20 A 20	40° E9 40° 100° 2° 40° 100° 2° 40° 100° 2° 40° 100° 2° 40° 3° 40° 40° 40° 40° 40° 40° 40° 40°
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CA-A FORM 24-13

U.S. CEPARTMENT OF COMMERCE OCEANIC AND ATMOS-RESIG ADMINISTR TONAL OCEANOGRAPHIC DATA CENTER RECORDS SECTION
ROCKVILLE, MARILAND 20852

FORM APPROVED O.M.B. No. 41-R26)

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· · · · · · · · · · · · · · · · · · ·	LETED BY DONOR				· · ·	
1. NAME AND ADDRESS OF IN	•	ATORY, OF	CACTIVITY WIT	H WHICH SUBM	ITTED DATA A	RE ASSOCIATED
University of Washir				• •		
Department of Oceano		•			•	
Seattle, Washington	98105	•				
,		•			•	
2. EXPEDITION: PROJECT, O	R PROGRAM DURING	WHICH			Y ORIGINATOR	TO IDENTIFY
DATA WERE COLLECTED	•		DATAIN IN	IS SHIPMENT	•	
Technical Report No.	. 113		BB293	•	·	
Technical Report No.	114		002-15			3
	•.		TR1393)		
4. PLATFORM NAME(S)	5. PLATFORM TYPE		6. PLATFORM		7. DA	TES
	(E.G., SHIP, BUO	1, 131G.) !	NATIONALIT PLATFORM	Y(IES) OPERATOR	FROM: MOJDAY,YE	TO: MO,DAY,YA
			PLATFORM	OFERATOR	FROM: / /	TO: / /
					00/./	/ - /
Brown Bear	Shi p		u.s,	u.s.	09/14/61	09/15/61
8. ARE DATA PROPRIETARY					JARES IN WHIC	
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FOR GENERAL USE/	, 	<u></u>				
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			·			

OAA FORM 24-13

ROCKVILLE, MARY LAND 20852

FORM APPROVED O.M.B. No. 41-R205

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

THIS SECTION MUST BE COM						
1. HAME AND ADDRESS OF IN		ATORY, O	F ACTIVITY WIT	H WHICH SUBM	ITTED DATA A	RE ASSOCIATED
University of Washi		•				
Department of Ocean						
Seattle, Washington	98105 .		•			
2. EXPEDITION; FROJECT, C DATA WERE COLLECTED	DR PROGRAM DURING	WHICH.	3. CRUISE NUM CATA IN TH	BER(S) USED E	Y ORIGINATOR	R TO IDENTIFY
Technical Report No	. 113			•		
Technical Report No		., •	BB294		. •	
4. PLATFORM NAME(S)	TE DI ATEGRA	F- / \	Te1394		·	
4. PLATFORM NAME(S)	5. PLATFORM TYPE (E.G., SI/IP, BUG		5. PLATFORM ! NATIONALIT	IND OPERATOR 'Y(IES)	1.	TES:
			PLATFORM	OPERATOR	FROM: MOJD AY YE	TO: MO, DAY, YA
			·			
Brown Bear	Ship		น.ร.	u.s.	11/03/61	11/03/61
B. ARE DATA PROPRIETARY	?	1. PLEAS	SE DARKEN ALI	MARSDEN SQ	! UARES IN WHIC	H ANY DATA
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IF YES, WHEN CAN TH				GENERAL AR	EA	
9. ARE DATA DECLARED NA		1 1035 1287 1	Mart • 1601 180 180 140		40° 20° 0° 20	40. 60. 80. 100.
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Eugene E. Collias	•	40 ()			643.64	14.99 13.434 40- 1:57; 1:170]
Clifford A Barnes			301 35	+	4300	511 506
		60			┍┤╏ ┼┼┼┼┼	60°
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·		1900 1707 1	. 1 177 1	" 120" 100" 86", 60"	43° + 20° 0° 29°	40° 60° 80° 100°
TO LA ECOMOLIA		L	·	·		

DAA FORM 24-13

U.S. CEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSSHERIC ADMINISTRATION
MATIONAL OCEANISEPANSIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852

FORM APPROVED O.M.B. No. 41-R2051

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

THIS SECTION MUST BE COMP						
1. NAME AND ADDRESS OF IN	ISTITUTION, LABOR	ATORY, O	R ACTIVITY WIT	H WHICH SUBM	HTTED DATA A	RE ASSOCIATED
University of Washin	ngton	•				
Department of Oceano	ography					•
Seattle, Washington	98105				•	
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OAA FORM 24-13

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS TUTTION
HOLY WILE IMARY AND CORES

FORM APPROVED O.M.B. No. 41-R2651

This form should accompany all data submissions to RODC. Section A, Originator Identification; must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifies. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

THIS SECTION MUST BE COMP	LETED BY DONOR	FOR ALL	DATA TRANSMIT	rtals :		•
1. NAME AND ADDRESS OF IN	STITUTION, LABOR.	ATORY, O	R ACTIVITY WIT	H WHICH SUBM	NITED DATAA	RE ASSOCIATED
University of Washin	gton			: •		•
Department of Oceano		•			_	
Seattle, Washington						
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OAA FORM 24-13

.U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEANIC PROSPERIC DATA CENTER RECORDS RECTION NOCKYILLE, MARYLAND 17882

FORM APPROVED O.M.B. No. 41-R265

This form should accompany all data submissions to WODC. Section A, Originator Identification; must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF IN	ISTITUTION, LABOR	ATORY, O	R ACTIVITY WIT	H WHICH SUBM	ITTED DATAA	RE ASSOCIATED
University of Washir	ngton ··		•		·	•
Department of Oceano			: .			
Seattle, Washington	98105	•				
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10AA FORM 24-13

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANICAND ATMOSTMENT ADMINISTRATION
NATIONAL OCEANOS PAPER DATA CENTER
RECORDS FECTION
ROCKYLLE, MARILAND 10852

FORM APPROVED O.M.B. Sec. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification; must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

THIS SECTION MUST BE COMPLETED BY DONOR					
1. NAME AND ADDRESS OF INSTITUTION, LABOR	RΛΤΟΞΥ, Ο	R ACTIVITY WIT	TH WHICH SUB	MITTED DATA A	RE ASSOCIATED
University of Washington	:	•			
Department of Oceanography					
Seattle, Washington 98105					
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2. EXPEDITION, PROJECT, OR PROGRAM DURIN DATA WERE COLLECTED	G WHICH		MBER(S) USED	BY ORIGINATOS	R TO IDENTIFY
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10AA FORM 24-13

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOSPAPHIC DATA CENTER
RECORDS HICTION
ROCKVILLE, MARYLAND 20852

FORM APPROVED O.M.B. No. 41-R265

This form should accompany all dara submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

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University of Washin Department of Oceano Seattle, Washington	ography	•	•			
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U.S. CEPARTMENT OF COMMERCE
NATIONAL OCEANO ATMOMENTE ADMINISTRATION
MATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARTLAND 19652

FORM APPROVED O.M.B. No. 41-R2651

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is nightly desirable for NODC to also receive the temaining pertinent information at that time. This may be most easily accomplished by attaching teports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

I . NAME AND ADDRESS OF INSTITUTION, LAB	IONATORY, O	R ACHVILY WIT	H WHICH SUEN	MITTED DATA A	RE ASSOCIATED
University of Washington			•		. •
Department of Oceanography		٠.			
Seattle, Washington 98105					
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2. EXPEDITION, PROJECT, OR PROGRAM DUP DATA WERE COLLECTED	HNG WHICH		ABER(S) USED	BY ORIGINATO	R TO IDENTIFY
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OAA FORM 24-13

U.S. PEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
PRETIONAL OCEANIC PROPERTY DATA CENTER
RECORDS SECTION
ROCKVILLE, MARTLAND 20852

FORM APPROVED O.M.B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

THIS SECTION MUST BE COMPLETED BY DONOR I	FOR ALL	DATA TRANSMIT	TALS .		
1. NAME AND ADDRESS OF INSTITUTION, LABOR	ATORY, O	A ACTIVITY WIT	H WHICH SUBM	ITTED DATA A	RE ASSOCIATED
University of Washington Department of Oceanography	•	•			•
Seattle, Washington 98105					
2. EXPEDITION, FROJECT, OR PROGRAM DURING DATA WERE COLLECTED	WHICH		ASER(S) USED (IS SHIPMENT	BY ORIGINATOP	YAITMAC, OT F
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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS'SCOTION
ROCKVILLE, MARY', AND 19852

FORM APPROVED O.M.B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF H	NSTITUTION, LABOR	ATORY, OF	ACTIVITY WIT	H WHICH SUBM	ITTED DATA A	RE ASSOCIATED
University of Wash	ington	·	•			
Department of Ocea	nography		•	••		· .
Seattle, Washingto	n 98105					
			•	•		
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IGAA FORM 24-13

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATLIBERED ADMINISTRATION MATIONAL OCEANIOGRAPHIC DATA CENTER RECORDS SITE ON ROCKVILLE, MARILLAND 129652 FORM APPROVED O.M.B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Rendable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED

University of Wash Department of Ocear Seattle, Washington	nography				¥	•
2. EXPEDITION PROJECT, O DATA WERE COLLECTED Technical Report N Technical Report N	o, 113	G WHICH		IS SHIPMENT	BY ORIGINATOS	R TO IDENTIFY
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NOAA FORM 24-13

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
FOCK VILLE, MARYLAND 20852

FORM APPROVED. O.M.B. No. 41-R265

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A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF IN	ISTITUTION, LABOR	ATORY, O	R ACTIVITY WIT	H WHICH SUBM	ITTED DATA AF	RE ASSOCIATED
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OAA FORM 24-13

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMO PHERIC ADMINISTRATION
NATIONAL OCEANICSHAPPLO DATA CENTER
RECORDS SUCTION
ROCKVILLE, MARYLAND 20852

FORM APPROVED O.M. B. No. 41-R265

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Ecoloble, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

University of Washington	
Department of Oceanography	
Seattle, Washington 98105	. 1
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FORM APPROVED O.M.B. No. 41-R265!

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A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED

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Department of Ocea			•		•	
Seattle, Washingto	n 98105					1
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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOMPHENIC ADMINISTRATION
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RECORDS SECTION
FOCK VILLE, MARYLAND (20852)

FORM APPROVED O.M.B. No. 41-R2651

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A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED

University of Washington					
Department of Oceanography				•	
Seattle, Washington 98105					
2. EXPEDITION, PROJECT, OR PROGRAM DURING DATA WERE COLLECTED	S WHICH '		MEER(S) USED IIS SHIPMENT.	BY ORIGINATOI	R TO IDENTIFY '
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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOMPHENIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCK VILLE, MARY LAND 20852

FORM APPROVED O.M.B. No. 41-R265

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A. ORIGINATOR IDENTIFICATION

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Department of Ocea	anography		• •			
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(I.E., SHOULD THEY BE II DATA CENTERS HOLDING TIONAL EXCHANGE?) [X NO [] YES [CT (SPECIFY BILOW) CT (SPECIFY BILOW) CT (SPECIFY BILOW) CT (SPECIFY BILOW) CT (SPECIFY BILOW)	40 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			(G. 10.5) (G. 10	217
G.FERSON TO WHOM INQUIR DATA SHOULD THEY BE IN X NO [] YES [] PARE OF THE PROPERTY OF THE PR	CT (SPECIFY BILOW) CT (SPECIFY BILOW) CT (SPECIFY BILOW) CT (SPECIFY BILOW) CT (SPECIFY BILOW)	40 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		170° 100° 80° 60° 170° 170° 170° 170° 170° 170° 170° 17	(63 (0.5) (60 (0.5) (700) (10) (700) (1	217

NOAA FORM 24-13

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852

FORM APPROVED. O.M.B. No. 41-R2651

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

1. NAME AND ADDRESS OF I	NSTITUTION, LABOR	ATORY, O	R ACTIVITY WIT	H WHICH SUBM	ITTED DATA A	RE ASSOCIATED
University of Washi Department of Ocean Seattle, Washington	ography		•	· · · · ·		
2. EXPEDITION; PROJECT, C DATA WERE COLLECTED	DR PROGRAM DURING	WHICH		BER(S) USED E	Y ORIGINATOR	TO IDENTIFY
Technical Report No. 113 Technical Report No. 114			DAG17 TR1401	٠	· ·	·
4. PLATFORM NAME(S)	5. PLATFORM TYP (E.G., SHIP, BUO		6. PLATFORM A NATIONAL!T			TES
		•	PLATFORM	OPERATOR	FROM: MODAY,YF	TO: MO/DAY/YR
Skiff	Ship		u.s.	u.s.	02/04/61	10/24/61
B. ARE DATA PROPRIETARY XX NO YES IF YES, WHEN CAN THE FOR GENERAL USE! 9. ARE DATA DECLARED NA	IEY BE RELEASED YEARMONTH	CONT	SE DARKEN ALI AINED IN YOUR	SUBMISSION W	ERE COLLECTI	ED.
PROGRAM (DNP)? (I.E., SHOULD THEY BE IN DATA CENTERS HOLDING: T:ONAL EXCHANGE?) XX NO YES PAR	100° 150″ 1 275 24° 24° 24° 24° 110° 24° 110° 24° 110° 24° 24° 24° 24° 24° 24° 24° 24° 24° 24	145" 150" 150" 140" 140" 140" 140" 140" 140" 140" 14	120° 100° 40° 60° 227 227 227 227 227 227 227 227 227 22	2: 4 e e e e e e e e e e e e e e e e e e	40° 60° 100° 120° 120° 120° 120° 120° 120° 12	
10 PERSON TO WHOM INQUIRED DATA SHOULD BE ADDREST PHONE NUMBER (AND ADDITEM-I) THAN IN ITEM-I) Eugene E. Collias	26° (51) 26° (56) 367 (40° (69)	127 016 2120 315 326 251 125	011 7 766 310 30 384 341 322 373 416 91	33657 33657 33757	632 627 632 320 567 362 403 366 20* 436 434 457 470	
Clifford A. Barnes		541 577 100° 120° 1	500 495	502 100° 30° 60°	516553 40° 20° ,6° 20°	500 500 500 500 500 500 500 500 500 500

B. SCIENTIL . CONTENT

NAME OF DATA FIELD	REPORTING UNITS OR CODE	METHODS OF OBSERVATION AND INSTRUMENTS USED (SPECIFY TYPE AND MODEL)	ANALYTICAL METHODS (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES	DATA PROCESSING TECHNIQUES WITH FILTERING AND AVERAGING
	/			
Temperature	^O Centigrade	"Determined by use of accepted Oceanographic procedures"		
Salinity	° / 00			
Sigma-t				
Oxygen	ML/L			
Phosphate	Microgram-at/L	, ,	·	
	•			
			·	
•				
			·.	

COMPLETE THIS SECTION FOR PUNCHED CARD	OS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.
1. LIST RECORD TYPES CONTAINED IN THE TRANSMITT 'VE METHOD OF IDENTIFYING EACH RECORD TYPE	AL OF YOUR FILE
FILE HEADER RECORD - "1" in col. 10 FIRST STATION HEADER RECORD - "2" in co SECOND STATION HEADER RECORD - "3" in c DATA RECORDS - "4" in col. 10	
2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION	
TRIBUTES AS EXPRESSED IN PL-1 XX FORTRAN	ALGOL COBOL LANGUAGE
4. RESPONSIBLE COMPUTER SPECIALIST:	
NAME AND PHONE NUMBER	
ADDRESS	
COMPLETE THIS SECTION IF DATA ARE ON MAGNE 5. RECORDING MODE	9. LENGTH OF INTER-
BCD BINARY	RECORD GAP (IF KNOWN) XX 3/4 INCH
ASCII XX EBCDIC	
	. 10. END OF FILE MARK OCTAL 17
6. NUMBER OF TRACKS	- — — — — — — — — — — — — — — — — — — —
(CHANNELS) SEVEN	
∑X NINE	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)
	Data on tape is in card image
7. PARITY	dcb = (recfm+fb,lrecl+80,blksize=3200)
EVEN	DSN = AC680201 ,vol=ser=007616
8. DENSITY 200 BPI XX 1600 BPI	9 Track tape; Standard Label.
556 BPI	12. PHYSICAL BLOCK LENGTH IN BYTES
800 BPI	3200 13. LENGTH OF BYTES IN BITS

NOAA FORM 24-13

FILE NAME: WATER PHYSICS and CHEMISTRY (File Type "004")

4. FIELD NAME	15. POSITION FROM - 1		ì	IB. USE AND MEANING
	MEASURED IN		 	
	(c.A., bils, bytes)	NUMBER		
File Header Reco	rd			•
File Type	1	3	A3	"004" (constant)
Track Number	4	6	6A1	NODC (in-house) Identifier
Record Type	10	1	A1	"1" (File Header Record)
Vessel	11	11	11A1	(left aligned)
Cruise	22	6	6AI	Originator's Cruise Identifier
Cruise Dates	28	17	5(I2,A1) I2	XX/XX/XX-XX/XX/XX Beginning Month, Day, Year; Ending Month, Day, Year
Senior Scientist	45	. 19	19A1	(left aligned)
Investigator	64	17	17A1	Responsible Institution
				(left aligned)
	· .			
			· ·	
	•			
5' ·				•
				•

FILE NAME: WATER PHYSICS and CHEMISTRY (File Type "004") .2 /5

4. FIELD NAME	15. POSITION FROM - 1	l	· · ·	18. USE AND MEANING
	MEASURED IN	NUMBER	(FORTMAN)	
	(e.g., ons, bytes)	<u>.</u>		
First Station He	ader Recor	<u>a</u>		•
File Type	1	3	A3	"004" (constant)
Track Number	4	. 6	6A1	NODC (in-house) Identifier
Record Type	10	1	A1	"2" (First Station Header Record)
Commen	11	j	I2	
Sequence		Э.	12	Sequence of this record type within station. (Leading zero or leading blanks.)
Station	14	. 5	5A1	Station Identifier
Latitude	19	; 6 _.	312	Degrees, Minutes, Seconds
Lathem	25	1	A1	Hemisphere "N" or "S"
Longitude	26	7	13, 212	Degrees, Minutes, Seconds
onhem	33	1	A1	Hemisphere "W" or "E"
Time	34	3	13	GMT in hour to tenths
Date	37	8	2(I2,A1), I2	XX/XX/XX Station Date; Month, Day, Year
Bottom	45	5	15	Water Depth, meters to tenths
Navigation	50	2	12	(See attached codes)
Method .	. 52	. 1	II.	(See attached codes)
Blank	53	28	28X	Blank
	Ì			
·	·			

14. FIELD NAME 15. POSITION 16. LENGTH . 17. ATTRIBUTES 18. USE AND MEANING FROM- 5 (FORTRAN) in butes MEASURED NUMBER (e.A., bits, bytes) Second Station Header Record A3 "004" (constant) File Type 1 3 6A1 NODC (in-house) Identifier 4 6 Track Number 10 1 AI"3" (Second Station Header Record Type Record) Sequence 11 . 3 **I**3 Sequence of this record type within station, (Leading zeros or leading blanks.) Station 14 **5**. 5A.1 Station Identifier 3 İ3 Pressure in millibars to tenths Barometer 19 **I4** Dry Bulb 22 . Air temperature; degrees Celsius to tenths 26 **I4** Air temperature; degrees Wet Bulb Celsius to tenths WMO code 0877; tens of degrees Wind Direction 30 2 12 *32* . 2 Knots Wind Speed *I2* 34 2 *I2* WMO code 0885; tens of degrees Sea Direction WMO code 1555 Sea Height . 36 1 Αl *3*7 2 12 Swell Direction WMO code 0885 Swell Height 39 1 Al. WMO code 1555 40 Il · WMO. code 4501 Weather 1 ; WMO code 0500 41 1 A1Cloud Type WMO code 2700 Cloud Cover 42 . 1 Il WMO code 4300 IJ Visibility ' 43 1. 44 4 **I4** Secchi Disk Depth; meters to Transparency tenths Turbidity Code 48 1 I1 (See attached codes) · 37X Blank 49 37 Blank

FILE NAME: WATER PHYSICS and CHEMISTRY (File Type "004") 4 /5

NOAA FORM 24-13

	FROM-I MEASURED IN	3 6 1 3	A3 6A1 A1 I3	"004" (constant) NODC (in-house) Identifier "4" (Data Record) Sequence of this record type within station. (Leading zer or leading blanks.)
Data Record File Type Track Number Record Type Sequence Station Depth Temperature	1 4 10 11 14 19	3 6 1 3	6AI A1 I3	NODC (in-house) Identifier "4" (Data Record) Sequence of this record type within station. (Leading zer
File Type Track Number Record Type Sequence Station Depth Temperature	4 10 11 14 19	6 1 3	6AI A1 I3	NODC (in-house) Identifier "4" (Data Record) Sequence of this record type within station. (Leading zer
Track Number Record Type Sequence Station Depth Temperature	4 10 11 14 19	6 1 3	6AI A1 I3	NODC (in-house) Identifier "4" (Data Record) Sequence of this record type within station. (Leading zer
Record Type Sequence Station Depth Temperature	10 11 14 19	1 3 5	Al I3	"4" (Data Record) Sequence of this record type within station. (Leading zer
Sequence Station Depth Temperature	11 14 19	3 5	I3	Sequence of this record type within station. (Leading zer
Station Depth Temperature	14 19	5		within station. (Leading zer
Depth Temperature	19		5 a 7	, , -
Temperature	·	·		Station Identifier
	22	. 4	14	Sample Depth; to tenths
Salinity		5	I5	Water Temp.; degrees Celsius to thousandths
•	28	5	I5	Salinity; parts per thousand to thousandths
∍igma-T	33	4	I4	Sigma-t to hundredths
Transmissivity	37	3	<i>I3</i>	Transmissivity; percent to tenths
pН	40	3	13	pH to hundredths
eН	43 -	4	I 4	eH to hundredths
Oxygen	47	4	I4	Dissolved; hundredths to ml./liter
Ammonia	51	. 3	13	Tenths of microgram (ug)- atoms/liter
Nitrite .	54	3	13	Hundredths of ug-atoms/liter
Nitrate	57	4 .	14	Hundredths of ug-atoms/liter
Silicate .	61	4	I4	Hundredths of ug-atoms/liter
Phosphate	65	3	I3	Inorganic; hundredths of ug- atoms/liter
Solids	68	4 .	14	Suspended solids in hundredth of mg./liter

RECORD FORMAT DESCRIPTION

FILE NAME: WATER PHYSICS and CHEMISTRY (File Type "004") .5 /5

Data Record (cont'd) Turbidity 72 4 I4 Turbidity; in hundredths of mg./liter	14. FIEL D NAME		15. POSITION FROM - 1 MEASURED	in by	GTH tes	17. ATTR		18. USE AND MEANING
Data Record (cont'd) Turbidity 72 4 I4 Turbidity; in hundredths of mg./liter Chlorophyll 76 5 I5 Chlorophyll; in hundredths of	· 		IN	Į.				
Chlorophyll 76 5 I5 Chlorophyll; in hundredths of	Data Record	(con	t'd)	·				-
Chlorophyll 76 5 I5 Chlorophyll; in hundredths of	Turbidity		72	4	1	4	•	Turbidity; in hundredths of mg./liter
	Chlorophyll		76	5	1	5		Chlorophyll; in hundredths of
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Special Coues

Water Physics and Chemistry

NAVIGATION

- Ol = Loran (mixed or unspecified)
- 02 = Radar and/or fixes
- 03 = Raydist without complications
- 04 = Reydist with errors, drifting, etc.
- 05 = Satellite
- 06 = Omega
- 07 = Loran A only
- 08 = Loran C only

TURBIDITY CODE .

- 1 = Turbidometer; in JTU
- 2 = Transmissometer; in percent of light transmission over a 10 cm. path.
- 3 = Flourometer; suspended solids calibration

METHOD CODE

- 1 = STD (Salinity, Temperature, and Depth recorder)
- 2 = XBT (Expendable Bathythermograph)
- 3 = Mansen Cast
- 4 = MBT (Mechanical Bathythermograph)

CODING INSTRUCTIONS

NODC COUNTRY-	CRUISE REFERENCE NO. 68-0201 , WRITER LWA DATE
CHECKED	BY DATE ; APPROVED BY DATE
SOURCE MATERI	AL (AUTHOR, TITLE, VOLUME, PART, PAGE, ETC.)
	copies of Technical Report No. 113 of Physical-Chemical Data
_	ound and Approaches from Un. of Washington in Seattle, Wash- e entire data batch - 68-0201 - consists of 54 sub-data sets
cruise. NOI	A File Header Record should be encoded for each individual DC Accession #68-0201; Vessel Names ASTOR and BROWN BEAR.
	ental sheets for specific cruise and ship match-ups. Origi-
	No varies with each individual cruise as do the Dates of Some of the observations are unreadable and they are so
_	may be ignored.
	
	
NODC PUB. M-2	IS TO BE USED IN CONJUNCTION WITH THESE INSTRUCTIONS
(General inst	ructions begin on Page 2)
	
INSTR. NO.	SPECIAL INSTRUCTIONS
	If an entry is made in any field on the Data Record, and that
#1	entry does not fill the entire field, zeros (0) should be prefixed to fill that particular field.
#2	Do not code decimal points. They are understood.
#3	There are several data sets (cruises) incorporated in the
	very last cruise (vessel=SKIFF). Although the cruise number
•	varies from 1-37 the cruise is to be treated as on single cruise. Therefore, only one (1) File Header Record need be
	coded for that particular cruise.
·	

Supplemental Sheet for 68-0201

Acces. No.	<u>Vessel</u>	Orig. Cruise No.	Dates or Operation	Senior Scientist	# Obs. In	stitution
68-0201	BROWN BEAR	BB182	01/02/58-01/03/58	Dr. R.G. Paquette	4√ Un	iv. of Wash.
<i>n</i>	> н	BB188	02/19/58-02/20/58	Dr. S.A. El Wardani	94	u
n	. 11	(BB198	06/07/58-06/08/58	W. Aron	4~	11
. "	n .	BB201	09/15/58-09/18/5ॄ8	J.H. Lincoln	54	11
11	n ·	BB205	11/17/58-11/21/58	n .	67 €	"
"	"	BB209	12/19/58-12/23/58	J. Dermody	70 /	11
n .	ļ u	BB213	01/27/59-01/28/59	<i>tt</i>	3 V	"
"	n	BB218	02/21/59-02/21/59	Dr. C.A. Barns	5 ~	"
n	"	BB219	03/02/59-03/02/59	Dr. R.G. Paquette	5⁄	II .
rr .	n,	BB221	03/03/59-03/05/59		29 🗸	"
"	"	BB222	03/19/59-03/20/59	Dr. M. Rattray	2/252	. ,,
u	"	BB223	03/24/59 - 03/27/59	R. Burns;	60 .	n 78
"	n	BB224	03/30/59-04/01/59-	Dr. G.C. Anderson	8 -	11
".	n	BB233	06/03/59-06/05/59	E.E. Collias	38 🗸	"
"	11	BB234	06/18/59-06/19/59	Dr. R.G. Paquette	18 🗸	n .
"	"	BB242	10/26/59-10/29/59	J. Dermody	63/	II
n	"	BB2 43	11/02/59-11/04/59	E.E. Collias	20/459	tt
"	11	BB245	11/30/59-12/02/59	R.A. Barkley	13 1	" .
. * n	u	BB247	12/05/59-12/05)/59	Dr. C.A. Barns	5 V	"

Supplemental Sheet for 68-0201 (cont'd)

Acces. No.	Vesse1	Orig. Cruise No.	Dates of Operation	Senior Scientist	# Obs. Institution
				· · · · · · · · · · · · · · · · · · ·	
6 8- 0201	BROWN BEAR	BB248.	12/10/59-12/11/59	E.E. Collias	25 Sow Univ. of Wash.
"	"	BB2 49	01/18/60-01/19/60	Dr. T.S. English	9 – "
"	"	BB251	01/25/60-01/29/60	J. Dermody	69 — "
11	"	BB252	02/05/60-02/05/60	E.E. Collias	6 / "
n	11	BB257	04/19/60-04/22/60	11	13 " ,
н .	"	BB259	05/02/60-05/06/60	F.D. Henson	71 "
"	"	BB261	05/17/60-05/17/60	R.E. Burns	24 "
"	11	BB262	05/19/60-05/23/60	Dr. C.A. Barns	14
"	n	BB264	06/07/60-06/08/60	J. Dermody	16
11	11	BB265	06/10/60-06/11/60	E.E. Collias	11 "
n	n ·	BB271	12/08/60-12/08/60	W.A. Dawson	2 "
"	n,	BB272	12/14/60-12/20/60	E.E. Collias	84 🗸 "
"	u	BB273	12/27/60-12/30/60	R.E. Burns	21 / "
".	n	BB276	02/06/61-02/06/61	E.E. Collias	11 - "
" .	Ü	BB279	02/28/61-02/28/61	11	6-/ "
"	11	BB284	0 4 /17/61-04/21/61	11	59/ "
"	11	BB285	04/28/61-04/28/61	Dr. F.A. Richards	5 🗸 "
11	11	BB288	06/09/61-06/10/61	11	10/ "

Supplemental Sheet for 68-0201 (cont'd)

Acces. No.	<u>Vessel</u>	Orig. Cruise No.	Dates of Operation	Senior Scientist	# Obs. Institution
68-0201	BROWN .BEAR	BB293	09/14/61-09/15/61	E.E. Collias	7 Univ. of Wash.
11	11.	BB294	11/03/61-11/03/61	11	4 r- "
n .	n	BB296	11/13/61-11/17/61	J.W. Stevens	57. "
"	YTL 49	DAB2A1	09/02/59-09/04/59	T.J. Glancy	9- "
n	ır	DAB2A2	09/10/59-09/10/59	11	9 " .
"	"	DAB2A3	09/15/59-09/17/59	n	17 "
n .	"	DAB2A4	09/24/59-09/24/59	n	10. "
n .	ASTOR	DABO7	08/12/60-08/12/60	D.A. Damkaer	11 "
n	"	DAB0 8	08/30/60-09/01/60	. "	19 🗸 "
n	"	DAB09	09/14/60-09/16/60	"	06 "
"	n	DAB10	09/23/60-09/25/60	n	7 "
n .	HYDAH	DAB11	10/15/60-10/16/60	"	2 "
n	"	DAB12	10/29%60-10/30/60		3 "
n -	ıı	DAB13	11/12/60-11/13/60	"	3 "
<i>"</i>	n	DAB14	12/03/60-12/03/60	"	3 "
"	11	DAB15 👼	12/10/60-12/11/60	ıı .	3 "
"	SKIFF	D17-37	02/04/61-10/24/61	J.D. Larrance	21 "
					1124

	PAGE	1	OF	5	PAGES
CODING INSTRUCTIONS FOR CRUISE NO	• <u>68-020</u>	01			
File Header Record					

	CARD	M-2	
ITEM	COL. NO.	TABLE NO.	INSTRUCTIONS
File			
Туре	1-3		Constant entry of "004"
Acces.		}	· ·
Number	4-9		Enter "680201" on each File Header Record
Record			
<i>Typ</i> e	10		Constant entry of "1"
İ			Varies with each particular cruise. Enter as
Vessel	11-21	~	given for each individual cruise. (Also see
	•		supplemental sheet)
Org.	······································		Varies with each particular cruise. Enter as
Cr. ID	22-27		given for each individual cruise. (Also see
		,	supplemental sheet)
Dates			Enter beginning & ending dates of first & las
of Oper.	28-44		observation of each respective cruise (See
·		·	supplemental sheet)
Senior			Varies with each particular cruise. Enter as
Scien	<u>45-63</u>		given for each individual cruise. (Also see
}		·	supplemental sheet)
Insti-			Enter "UNIV. OF WASH." on each File Header
tution	64-80		Record
Ì			
			
• 1			
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			<u></u>
<u>1</u>		L	4
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PAGE	2	OF	5 .	PAGES

CODING INSTRUCTIONS FOR CRUISE NO. 68-0201

First - Station Header Record

<u> </u>	CARD	M-2	T
ITEM	COL. NO.	TABLE NO.	INSTRUCTIONS
File			
Type	1-3		Constant entry of "004"
Acces.	· · · · · · · · · · · · · · · · · · ·		
Number	4-9		Enter "680201" on each Station Header Record
Record			
Type	10		Constant entry of "2"
Record			
Seg.	11-13		Constant entry of "001"
Org.			Enter as given for each respective station
Sta. No.	14-18		(Right justified)
Lati-			Enter as given. Use the following table to
tude	19-24		convert tenths of minutes to seconds:
			Tenths of Minutes = Seconds
[]			1
			.2 = 12
į į			.3 = 18
<u> </u>			.4 = 24
]		·	.5 = 30
	· · · · · · · · · · · · · · · · · · ·	 	.6 = 36
1	•	ĺ	.7 = 42
			.8 = 48
1 1		{	.9 = 54
Hemi-			
sphere	25	l	Enter "N" throughout entire data set
Longi-			Enter as given. Use the table as given under
tude	26-32		Latitude to convert tenths of minutes to
cade	20-32		seconds
1			Seconds
Hemi-			
sphere	33		Enter "W" throughout entire data set
Time			
(GMT)	34-36	Tables #4&2	Time is recorded under "HR" and is given as
1041/	74-70	100153 11402	Pacific Standard Time and must be converted to
]			(GMT). Use table #2 to convert tenths of
Station		 	minutes to seconds Enter as given except where conversion to
Date	37-44	<u>·</u>	(GMT) changes the day
Water	3/-44		Sounding is recorded under "SDG" in meters.
Depth	45-49		Enter as given
Naviga-	4J-4J		Miles ab given
tion	50-51		Enter "Ø1"
EL CAI	30-31		MILLOI PI
Wath - 3	F.0		Enton !! 3!!
Method	52		Enter "3"
	5 <i>3</i> −80		Leave blank

PAGE	3	OF	5	PAGES

CODING INSTRUCTIONS FOR CRUISE NO. 68-0201

Second - Station Header Record

i	CARD	M-2	
ITEM	COL. NO.	TABLE NO.	INSTRUCTIONS
File	COLL. NO.	TABLE NO.	INSTRUCTIONS
Type	1-3		Constant entry of "004"
Acces.			
Number	4-9		Enter "680201" on each Station Header Record
Record Type	10		Constant entry of "3"
Record		 	doning of a
Seq.	11-13		Constant entry of "001"
Org.			
Sta. No.	14-18		Enter as given (Right justified)
Bar.		[Enter as given, when given. Record under
Pres.	19-21		"BAR"
AirTemp			Recorded under "DRY" in degrees Fahrenheit.
DryBulb	22-25	Table #20	Convert to degrees Celsius
Air Temp			Recorded under "WET" in degrees Fahrenheit.
Wet Bul	26-29	Table #20	Convert to degrees Celsius
Wind			Recorded under "DIR" adjacent to "WSPD""
Dir.	30-31	Table #9	Divide recorded value by ten (10) and enter
			resulting value
Wind	·		
Speed	32-33		Recorded under "WSPD." Enter as given
	3 4- 35		Leave blank
Sea	34-33		Recorded under "SEA." Enter when given as
Height	<i>36</i>		given
Swell	<u> </u>		
Dir Ht	37-39		Leave blank
			Recorded under "WEA." Given in a two digit
Weather	40	Table #23	code. Use table #23 to convert to single
			digit and enter
Cloud	· · · · · · · · · · · · · · · · · · ·		Recorded under "CL." Use the following table
Type	41		for Cloud Type conversion:
-350			If given as then code
}			
 		 	2 = 2.
[3 = 2
 		 	4 = 3
1. 1			5 = 3
 		 	
[•		6 = 6 7 = 5
L			<u> </u>

GE4	OF	5	PAGES
68-0201			

	CARD	M-2	
ITEM	COL. NO.	TABLE NO.	INSTRUCTIONS
			If given as then code 7 = 5
		·	8 = 8 9 = 9
	i	:	$\frac{z}{x} = \frac{z}{x}$
Cloud			Recorded under "AMT:" Enter when given as
Amount	42		given:
Visi-	40		
<i>bility</i>	43		Leave blank
Trans-	11-17		Recorded under "SCD." Enter when given as
parency Turbid-	44-47		qiven. (Prefix necessary zeros)
ity	48		Toawo hlank
119	30		Leave blank
	49-80		Leave blank
	•		
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CODING INSTRUCTIONS FOR CRUISE NO.	68-	0201			
Data Record					

	GADD.	· · · · · · · · · · · · · · · · · · ·	
7000	CARD	M-2	
ITEM	COL. NO.	TABLE NO.	INSTRUCTIONS
File	• •		C0050175
Туре	1-3		Constant entry of "004"
Acces.			
Number	4-9		Enter "680201" on each Data Record
Record			
Type	10		Constant entry of "4"
Record	77 72		Enter "001" on first Data Record and number
Seq.	11-13		subsequent Data Records consecutively.
l i		. "	(e.g., 001; 002; 003; 004; etc.)
 		 	
Orig.	14.10	}	
Sta. No.	14-18		Enter as given (Right justified)
Donath	10 00		December 1 and 1 a
Depth Temper-	19-22		Recorded under "Depth." Enter as given
ature	23-27		Dogandad undan IIII amnilii Batan an missan
acure	23-27		Recorded under "Temp" Enter as given
Salinity	28-32		Recorded under "Sal." Enter as given
Sigma-t	33-36		Recorded under "Sigma-t." Enter as given
	37-46		Leave blank
Oxygen	47 5 50		Oxygen, when given, is recorded under "Oxygen ML/L." Record when given as given
	51-64		Leave blank
Phos-			Phosphate, when given, is recorded under
phate	65-67		"Phos." Record when given as given
	68-80		Leave blank
 			
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