

DATA DOCUMENTATION FORM

TR3571

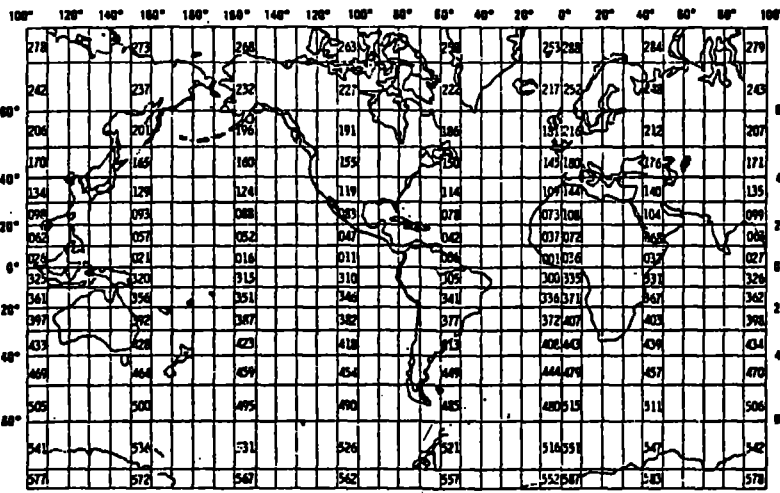
NOAA FORM 24-13
(4-72)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852FORM APPROVED
O.M.B. No. 41-R2651

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.

DDF A:3:08

A. ORIGINATOR IDENTIFICATION

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED U.S. Fish & Wildlife Service Office of Biological Seervices 800 A Street, Suite 110 Anchorage, Alaska 99501			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED N.O.A.A. Ship Discoverer		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW5004	
4. PLATFORM NAME(S) Discoverer	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Ship	6. PLATFORM AND OPERATOR NATIONALITY(IES) U.S.	7. DATES FROM: MO/DAY/YR TO: MO/DAY/YR 4/21/75 6/14/75
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR _____ MONTH _____		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA 	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)			
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1)			

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      d
      d
      d
    dddd      ppp      sss
  d   d      p   p      s   s
  d   d      p   p      s   s
    ddd      pppp      sss
                p       s
                p       s
                p       s

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DATA PROJECTS GROUP
333 Pastore Hall
University of R.I.
Kingston, RI 02881

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This Data Documentation Form (DDF) is composed of two parts. The first contains tape specifications and record format descriptions provided by the originator cited in Section A.1. The data have subsequently been validated by the Data Projects Group. Range and relational checks, code group checks, plus relocation of fields, unit conversions, and final tape recording techniques used in this process are given in the second part. Resolution of data errors found during this process has been made through contact with the originator.

B. SCIENTIFIC 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
Latitude/Longitude	Whole Degrees, minutes to tenths	Taken from NOAA ship log	N/A	N/A
Speed	Knots, to tenths	"	"	"
Course	Whole degrees	"	"	"
Height	Feet	"	"	"
Wind Direction	Whole degrees	"	"	"
Wind Speed	Whole knots	"	"	"
Wave Height	Feet	"	"	"
Swell Height	"	"	"	"
Sea Temp(Intake)	.1 Degrees C.	"	"	"
Sea Temp(X.B.T.)	.1 Degrees C.	"	"	"
Air Temp	"	"	"	"
Wet & Dry	"	"	"	"
Barom. Pressure	.1 millibars	"	"	"
Depth	fathoms	"	"	"
Surface Salinity	.1 ppt	"	"	"
Thermocline Depth	meters	"	"	"

C. DATA FORMAT

This information is requested only for data transmitted on punched cards or magnetic tape. Have one of your data processing specialists furnish answers either on the form or by attaching equivalent readily available documentation. Identify the nature and meaning of all entries and explain any codes used.

1. List the record types contained in your file transmittal (e.g., tape label record, master, detail, standard depth, etc.).
2. Describe briefly how your file is organized.
- 3-13. Self-explanatory.
14. Enter the field name as appropriate (e.g., header information, temperature, depth, salinity).
15. Enter starting position of the field.
16. Enter field length in number columns and unit of measurement (e.g., bit, byte, character, word) in unit column.
17. Enter attributes as expressed in the programming language specified in item 3 (e.g., "F 4.1," "BINARY FIXED (5.1)").
18. Describe field. If sort field, enter "SORT 1" for first, "SORT 2" for second, etc. If field is repeated, state number of times it is repeated.

COMPLETE THIS SECTION FOR PUNCH CARDS OR TAPE, MAGNETIC TAPE, OR SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE---
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Location Record	"1" in Column 15
Environment Record	"2" in Column 15
Ice Record	"3" in Column 15 (optional record)
Comment Record	"4" in Column 15
Activity Record	"5" in Column 15

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION -

The file is organized in Station number order with record types sequentially ordered within each Station. When multiple records exist for one record type, they are sequentially ordered by sequence number.

3. ATTRIBUTES AS EXPRESSED IN

☐ PL-1 ☐ ALGOL ☐ COBOL
☒ FORTRAN ☐ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Susan C. Bates
 ADDRESS same as above

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE

☐ BCD ☐ BINARY
☐ ASCII ☒ EBCDIC
☐ _____

6. NUMBER OF TRACKS (CHANNELS)

☐ SEVEN
☒ NINE
☐ _____

7. PARITY

☒ ODD
☐ EVEN

8. DENSITY

☐ 200 BPI ☐ 1600 BPI
☐ 556 BPI
☒ 800 BPI
☐ _____

9. LENGTH OF INTER-RECORD GAP (IF KNOWN)

☐ 3/4 INCH
☐ _____

10. END OF FILE MARK

☐ OCTAL '17'
☐ _____

11. PASTE-ON-PART ORIGINAL

(INCLUDE ATTACHMENTS)
U.S. Fish & Wildlife Service

FILE NO.

TITLE

FW5028

Henderson Cruise 10/8/75-10/14/75

CREATION DATE

REEL

OF

DRIVE

INITIALS

6/15/76

1

4

S Bates

RETENTION

REMARKS

12. PHYSICAL BLOCK LENGTH IN BYTES

4000 max

13. LENGTH OF BYTES IN BITS

RECORD FORMAT DESCRIPTION

RECORD NAME Location Record

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN bytes (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Data Type(File type) 1		3	Bytes	A3	
File Identifier	4	6	Bytes	A6	O.B.S. Internal Cruise Number
Station Number	10	5	Bytes	A5	Shipboard transect number
Record Type	15	1	Bytes	I1	
Start Latitude					
Degrees	16	2	Bytes	I2	
Minutes	18	3	Bytes	F3.1	To tenths of minutes
Longitude					
Degrees	21	3	Bytes	I3	
Minutes	24	3	Bytes	F3.1	To tenths of minutes
Hemisphere	27	1	Bytes	A1	E or W
O.B.S. Region	28	3	Bytes	F3.1	Region of State surveyed
Day	31	2	Bytes	I2	
Month	33	2	Bytes	I2	
Hour	35	2	Bytes	I2	
Minute	37	2	Bytes	I2	
End Latitude					
Degrees	39	2	Bytes	I2	
Minutes	41	3	Bytes	I2 F3.1	
End Longitude					
Degrees	44	3	Bytes	I3	
Minutes	47	3	Bytes	F3.1	To tenths of minutes
Hemisphere	50	1	Bytes	A1	E or W
Elapsed time	51	2	Bytes	I2	in minutes
Time Zone	53	1	Bytes	A1	"+" or "-"
Time Zone	54	2	Bytes	I2	Hours from G.M.T.

RECORD FORMAT DESCRIPTION

RECORD NAME Location Record (Continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Speed	56	4	Bytes	F4.1	In tenths of knots
Speed type	60	1	"	I1	"1" for Speed made good "2" for Indicated Speed
Course	61	3	"	I3	
Height	64	3	"	I3	
Ship or Aircraft Number	67	2	"	I2	O.B.S. internal number
Sampling Technique	69	1	"	A1	
Ship Activity	70	1	"	A1	
Photos taken	71	1	"	A1	
O.B.S. Observer Number	72	2	"	A2	O.B.S. internal number
Location of observer	74	1	"	A1	Location on ship
Blank	75	6	"	6X	

RECORD FORMAT DESCRIPTION

RECORD NAME Activity Card

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File type	1	3	Bytes	A3	O.B.S. internal abbreviations
File identifier	4	6	"	A6	
Station Number	10	5	"	A5	
Record type	15	1	"	I1	
Species Name Abbrev	16	4	"	A4	
Taxonomic Code	20	10	"	I10	
Sub Species	30	2	"	I2	
Species Group	32	2	"	A2	
Number of individuals	34	5	"	I5	
Begin Zone	39	2	"	I2	
End Zone	41	2	"	I2	Distance of zone beginning, in tens of meters
Time into Transect	43	3	"	F3.1	Distance of zone ending, in tens of meters
Behavior Code	46	2	"	A2	in tenths of minutes
Flight Direction of bird	48	2	"	A2	Positions of clock, 01-12
Age Code	50	1	"	A1	
Sex Code	51	1	"	A1	
Color Phase Code	52	1	"	A1	
Plumage Code	53	1	"	A1	
Molt Code	54	1	"	A1	
Association Code	55	2	"	A2	
Linkage	57	3	"	I3	
No. Species	60	2	"	I2	
Markings Code	62	1	"	A1	
Oil Code	63	1	"	A1	
Food Species					
Taxonomic Code	64	10	"	I10	

RECORD FORMAT DESCRIPTION

RECORD NAME: Comment Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	A3	
File Identifier	4	6	"	A6	
Station No.	10	5	"	A5	
Record Type	15	1	"	I1	
Text	16	62	"	62A1	
Sequence	78	3	"	I3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ice Record (Continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Miscellaneous(Cont'd)					
Ice Algae Layer	43	1	Bytes	A1	
Mammal trace Code	44	1	"	A1	
Other Features	45	1	"	A1	Use mammal trace code
Ice Not Coverable (see text card)	46	1	"	A1	
Blank	47	34	"	34X	

RECORD FORMAT DESCRIPTION

RECORD NAME Ice Record

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES.	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	A3	1= ship in lead, 2=ship in polyna 3=open water not discernable WMO 4300
File Identifier	4	6	"	A6	
Station Number	10	5	"	A5	
Record Type	15	1	"	I1	
<u>Ice in transect</u>					
Coverage Code	16	1	"	A1	
Pattern Code	17	1	"	A1	
Type Code	18	1	"	A1	
Form Code	19	1	"	A1	
Relief Code	20	1	"	A1	
Thickness Code	21	1	"	A1	
Melt Code	22	1	"	A1	
<u>Ice outside tran-</u> <u>sect</u>					
Coverage Code	23	1	"	A1	
Pattern Code	24	1	"	A1	
Type Code	25	1	"	A1	
Form Code	26	1	"	A1	
Relief Code	27	1	"	A1	
Thickness Code	28	1	"	A1	
Melt Code	29	1	"	A1	
<u>Visible Open Water</u>					
Area Code	30	1	"	A1	
Direction Code	31	1	"	A1	
Distance Code	32	1	"	A1	
Lead or Polyna Width Code	33	1	"	A1	
<u>Visible Ice</u>					
Form Code	34	1	"	A1	
Coverage Code	35	1	"	A1	
Direction Code	36	1	"	A1	
Distance Code	37	1	"	A1	
<u>Ship in Lead/Polyna</u>					
Location	38	1	"	A1	
Lead/Polyna width	39	1	"	A1	
Distance of ship from nearest lead/ polyna	40	1	"	A1	
<u>Miscellaneous</u>					
Arctic Cod observed	41	1	"	A1	
Excess Sediment	42	1	"	A1	

1= ship in lead, 2=ship in polyna
3=open water not discernable

WMO 4300

RECORD FORMAT DESCRIPTION

RECORD NAME Environmental Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	A3	
File Identifier	4	6	"	A6	
Station Number	10	5	"	A5	
Record Type	15	1	"	I1	
Weather Code	16	2	"		
Visibility Code	18	1	"		
Observing Conditions	19	1	"	I1	Internal code
Wind Direction	20	3	"	I3	
Wind Speed	23	2	"	I2	whole knots
Wave Height	25	2	"	I2	in feet
Swell Height	27	2	"	I2	in feet
Sea Temperature (Intake)	29	4	"	F4.1	in tenths degrees Centigrade
Sea Temperature (XBT)	33	4	"	F4.1	in tenths of degrees, Centigrade
Air Temperature (Wet Bulb)	37	4	"	F4.1	in tenths of degrees, Centigrade
Air Temperature (Dry Bulb)	41	4	"	F4.1	in tenths of degrees, Centigrade
Barometric Press.,	45	5	"	F5.1	in tenths of millibars
Barometric trend	50	1	"	A1	"+"=rising, "0"=steady, "-"=falling
Depth	51	4	"	I4	in fathoms
Surface Salinity	55	3	"	F3.1	Parts/thousand, in tenths
Thermocline Depth	58	3	"	I3	Whole meters
Glare Intensity	61	1	"	A1	See code sheet
Glare Area	62	1	"	A1	See code sheet
Turbidity Code	63	1	"	A1	See Code sheet
Blank	64	16	"	16X	

RECORD FORMAT DESCRIPTION

RECORD NAME Activity Record(Continued)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Debris Code	74	1	Bytes	A1	Indicates text card for this sighting
O.B.S. Observer Number	75	2	"	A2	
Text Flag Code	77	1	"	A1	
Sequence Number	78	3	"	I3	

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Record Type is coded in column 10 of each record as follows:

- 1 - Location
- 2 - Environment
- 3 - Ice Record
- 4 - Text Comments
- 5 - Data Observations

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File is organized by Station Number in Columns 11-15 of each record. Each Station contains one Type 1 card; one Type 2 card; zero to several Type 3 cards; and one to several Type 5 cards (one for each observation at that station).

3. ATTRIBUTES AS EXPRESSED IN

☒ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Data Projects Group (401)792-2320

ADDRESS 333 Pastore Hall, University of Rhode Island, Kingston, RI 02881

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE <input type="checkbox"/> BCD <input type="checkbox"/> BINARY <input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/> _____	9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> 1/2 inch
6. NUMBER OF TRACKS (CHANNELS) <input type="checkbox"/> SEVEN <input checked="" type="checkbox"/> NINE <input type="checkbox"/> _____	10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 IBM 3420 <input checked="" type="checkbox"/> Tape Mark
7. PARITY <input checked="" type="checkbox"/> ODD <input type="checkbox"/> EVEN	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME KEY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) <div style="border: 1px solid black; padding: 5px; margin: 5px;"> FW5004 on tape G02NDC included with cruises: → FW5004 FW6026 FW7026 FW5018 FW6028 FW7029 FW5034 FW6029 FW6093 FW6025 FW7027 </div>
8. DENSITY <input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI <input type="checkbox"/> 556 BPI <input type="checkbox"/> 800 BPI <input type="checkbox"/> _____	
12. PHYSICAL BLOCK LENGTH IN BYTES Lrecl=83 Blk size=4150	
13. LENGTH OF BYTES IN BITS 8	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Location Record

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., 22N, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 1
Station No	11	5	bytes	A5	
Latitude -					Starting Position
Degrees	16	2	bytes	I2	33-73 degrees
Minutes	18	2	bytes	I2	0-59 minutes
Seconds	20	2	bytes	I2	0-59 seconds
Hemisphere	22	1	bytes	A1	N hemisphere
Longitude -					Starting Position
Degrees	23	3	bytes	I3	118-180 degrees
Minutes	26	2	bytes	I2	0-59 minutes
Seconds	28	2	bytes	I2	0-59 seconds
Hemisphere	30	1	bytes	A1	W hemisphere
Date -					Starting date GMT
Year	31	2	bytes	I2	Last 2 digits
Month	33	2	bytes	I2	1-12 months
Day	35	2	bytes	I2	1-31 days
Time -					Starting time GMT
Hours	37	2	bytes	I2	0-23 hours
Minutes	39	2	bytes	I2	0-59 minutes
Latitude -					Ending Position
Degrees	41	2	bytes	I2	33-73 degrees
Minutes	43	2	bytes	I2	0-59 minutes
Seconds	45	2	bytes	I2	0-59 seconds
Hemisphere	47	1	bytes	A1	N hemisphere
Longitude -					Ending Position
Degrees	48	3	bytes	I3	118-180 degrees
Minutes	51	2	bytes	I2	0-59 minutes
Seconds	53	2	bytes	I2	0-59 seconds
Hemisphere	55	1	bytes	A1	W hemisphere
Elapsed Time	56	2	bytes	I2	0-30 whole minutes
Time Zone -					
Sign	58	1	bytes	A1	+ or - relative to GMT
Number	59	2	bytes	I2	Zone 01-12
Ships Speed	61	3	bytes	I3	Whole knots
Course Heading	64	2	bytes	I2	0-35 tens of degrees true

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Location (continued)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of Eyes Above Sea	66	3	bytes	I3	Whole meters
Platform Type	69	1	bytes	A1	NODC Platform Type Code
Sampling Technique	70	1	bytes	A2	NODC Sampling Technique Code
Ship Activity	71	1	bytes	A1	NODC Ship Activity Code
Photos Taken	72	1	bytes	A1	NODC Collection Code
Width of Transect	73	1	bytes	A1	NODC Zone Scheme Code
Angle of View	74	1	bytes	A1	NODC Angle of View Code
Observation Conditions	75	1	bytes	A1	NODC Observation Conditions Code
Distance Made Good	76	4	bytes	I4	Kilometers to tenths
Watch Type	80	1	bytes	A1	
Transect Width	81	3	bytes	I3	Tens of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment Record

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 2
Station No	11	5	bytes	A5	
Bottom Depth	16	4	bytes	I4	Whole meters
Thermocline Depth	20	3	bytes	I3	0-100 meters
Sea Surface Temperature	23	4	bytes	I4	-3 to +10 degrees to tenths Celsius
Salinity	27	3	bytes	I3	20 o/oo to 34 o/oo parts per thousand to tenths
Dry Bulb Temp	30	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Wet Bulb Temp	34	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Humidity	38	2	bytes	I2	00-99 percent
Barometric Pressure	40	4	bytes	I4	0.9600-1.0400 bars to tenths of millibars
Barometric Trend	44	1	bytes	A1	+ rising, - falling, 0 steady
Wind Direction	45	2	bytes	I2	NOBC Direction Code (WMO Codes 0885 & 0877)
Wind Speed	47	2	bytes	I2	0-50 knots
Sea State	49	1	bytes	A1	WMO Code 3700
Swell Direction	50	2	bytes	I2	NOBC Direction Code
Swell Height	52	3	bytes	I3	0-07.6 meters to tenths
Weather	55	2	bytes	A2	WMO Code 4677
Cloud Type	57	1	bytes	A1	WMO Code 0500
Cloud Amount	58	1	bytes	A1	WMO Code 2700

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Water Color	59	2	bytes	A2	NODC Water Color Code (Forel-Ule scale)
Visibility	61	1	bytes	A1	WMO Code 4300
Sun Direction	62	1	bytes	A1	NODC Compass Direction Code
Glare Intensity	63	1	bytes	A1	NODC Glare Intensity Code
Glare Area	64	1	bytes	A1	NODC Glare Area Code
Light Level	65	3	bytes	I3	Tens of Foot-candles
Moon Phase	68	1	bytes	A1	NODC Moon Phase Code
Tide Height	69	1	bytes	A1	NODC Tide Height Code
Tide Cycle	70	1	bytes	A1	+ rising, - falling, 0 slack water
Distance to Shore	71	4	bytes	I4	Whole nautical miles
Distance to Shelf break	75	3	bytes	I3	Whole nautical miles
SECCHI Depth	78	2	bytes	I2	Whole meters
Debris Code	80	1	bytes	A1	NODC Debris Code (for non- bird associated debris)
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Ice Record

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 3
Station No	11	5	bytes	A5	
Ice In Transect					
Cover	16	1	bytes	A1	WMO Code 0547
Type	17	1	bytes	A1	WMO Code 3763
Form	18	1	bytes	A1	WMO Code 1147
Relief	19	1	bytes	A1	WMO Code 3962
Thick	20	1	bytes	A1	WMO Code 4006
Melt	21	1	bytes	A1	WMO Code 2650
Ice Outside Transect					
Cover	22	1	bytes	A1	WMO Code 0547
Type	23	1	bytes	A1	WMO Code 3763
Form	24	1	bytes	A1	WMO Code 1147
Relief	25	1	bytes	A1	WMO Code 3962
Thick	26	1	bytes	A1	WMO Code 4006
Melt	27	1	bytes	A1	WMO Code 2650
Open Water					
Type	28	1	bytes	A1	WMO Code 4552
Direction	29	1	bytes	A1	WMO Code 0739
Distance	30	1	bytes	A1	WMO Code 3600
Lead/Polynya	31	1	bytes	A1	WMO Code 4300
Visible Ice					
Description	32	1	bytes	A1	WMO Code 0663
Direction	33	1	bytes	A1	WMO Code 0739
Distance	34	1	bytes	A1	WMO Code 3600
Miscellaneous					
Arctic Cod Excess	35	1	bytes	A1	NODC Collection Code
Sediment	36	1	bytes	A1	NODC Collection Code
Ice Algae	37	1	bytes	A1	NODC Collection Code
Mammal Trace	38	1	bytes	A1	NODC Mammal Trace Code
Other Features	39	1	bytes	A1	NODC Mammal Trace Code
Ice Pattern					
In Transect	40	1	bytes	A1	1-Regular, 2-Clumped
Outside Trans	41	1	bytes	A1	1-Regular, 2-Clumped

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Ice (continued)

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Ship in Lead or Polynya Location	42	1	bytes	A1	1-Lead, 2-Polynya, 3-Indeterminable
Width	43	1	bytes	A1	WMO Code 4300
Distance	44	1	bytes	A1	WMO Code 4300
Time of Ice Conditions	45	2	bytes	I2	Whole minutes from start time to observation time, must increase for a station
Water vs Land % Covered	47	2	bytes	I2	00-99 Percent
Pond Size	49	1	bytes	A1	NODC Size of Pond Code
Open Water Ice Description	50	1	bytes	A1	WMO Code 1147
Cover	51	1	bytes	A1	WMO Code 0547
Blank	52	26	bytes	X26	
Sequence Number	78	3	bytes	I3	Ascending numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Text Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 4
Station No	11	5	bytes	A5	
Text	16	62	bytes	A62	
Sequence Number	78	3	bytes	I3	Ascending Numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Data Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 5
Station No	11	5	bytes	A5	
Time into Transect	16	2	bytes	I2	Whole minutes from start time to observation time
Taxonomic Code	18	12	bytes	I12	Class 88-92, ends with paired trailing blanks
Species Group	30	2	bytes	I2	
Age	32	1	bytes	A1	NODC Age Class Group Code
Sex	33	1	bytes	A1	NODC Sex Code
Color	34	1	bytes	A1	NODC Color Phase Code
Plumage	35	1	bytes	A1	NODC Plumage Code
Molt	36	1	bytes	A1	NODC Molt Code
Number of Individuals	37	5	bytes	I5	Whole number, must not be omitted
Counting Method	42	1	bytes	A1	NODC Counting Method Code
Reliability	43	1	bytes	A1	NODC Reliability Code
Distance Measure Type	44	1	bytes	A1	NODC Distance Measurement Type Code
Distance to Birds	45	3	bytes	I3	Tens of meters
Direction of Flight	48	2	bytes	I2	00-35 Tens of degrees
Association	50	1	bytes	A1	NODC Type of Assoc Code
Linkage	51	3	bytes	I3	Sequence number of multi- species group in station
Species Number	54	2	bytes	I2	Number of species linked
Behavior	56	2	bytes	A2	NODC Behavior Code
Special Marks	58	1	bytes	A1	NODC Special Marks Code
Bird Condition	59	1	bytes	A1	NODC Bird Condition Code

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Data (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Food Source	60	1	bytes	A1	NODC Food Source Association Code
Tax Code of Food	61	10	bytes	I10	
Debris	71	1	bytes	A1	NODC Debris code
Oil	72	1	bytes	A1	NODC Oil Code
Distance from Breed Colony	73	3	bytes	I3	Nautical miles
Habitat	76	2	bytes	2A1	NODC Habitat Code, may code 2, left to right
Sequence Number	78	3	bytes	I3	Ascending numeric
Substrate	81	1	bytes	A1	NODC Substrate Code
Cover	82	1	bytes	A1	NODC Cover Code
Outside Zone	83	1	bytes	A1	NODC Outside Zone Code

Corrections Made to OCSEAP Data, File Type 033,
Subsequent to Submission to NODC
Reported Jun, 1979

78-0812

Data from RU#337

Processed by RU#527

NODC Track Number TR3577

Original File ID FW6029

STATION NUMBER	CARD TYPE	SEQUENCE NUMBER	FIELD ABBR	COLUMNS	FROM	TO
✓01478	5	016	TAX	18-29	88101000	881010

Corrections Made to OCSEAP Data, File Type 033,
Subsequent to Submission to NODC
Reported Jun, 1979

78-0812

Data from RU#337

Processed by RU#527

NODC Track Number TR3579

Original File ID FW7026

STATION NUMBER	CARD TYPE	SEQUENCE NUMBER	FIELD ABBR	COLUMNS	FROM	TO
<i>already done</i> ✓ 02569	1		ZON	58-58	4	+
<i>already done</i> ✓ 02869	5	048	TIM	16-17	0	blank

Corrections Made to OCSEAP Data, File Type 033,
Subsequent to Submission to NODC
Reported Jun, 1979

78-0812

Data from RU#337

Processed by RU#527

NODC Track Number TR3581

Original File ID FW7029

STATION NUMBER	CARD TYPE	SEQUENCE NUMBER	FIELD ABBR	COLUMNS	FROM	TO
✓ 29729	5	003	TAX	18-29	91090103	91290103
✓ 44829	1		MIN	51-52	0	00

done
in DB12R.DAT

already
done

78-0812

35781 aircraft
35913

⑦

Corrections

TR 3571

Station 11669, record '1', time zone corrected from 9P to 09

TR 3572

Station 00169, record '1', column 58 time zone corrected from Q to +.

Station 00969, record '1', column 58 time zone corrected from Q to +.

TR 3573

Station 00169, record '2', barometric pressure corrected from 021P to 0210.

TR 3577-3581

Tracks are not in ascending order.

Data was corrected by SORTING -
level 1 TRACK #, level 2 station #,
level 3 sequence # and level 4 record type

TR 3581

Taxonomy data reported in NODC codes. All other taxonomy data for this accession # is in Alaska Code. This track will

Corrections (CONT)

be 'DIPPED' separately.

TR 3577

- TR3577, station 00178, record '2' barometric pressure corrected from 969½ to 9690.

TR3577, station 00278, record '2' barometric pressure corrected from 977½ to 9770.

TR3577, station 00378, record '2' barometric pressure corrected from 977½ to 9770.

TR3577, station 00478, record '2' barometric pressure corrected from 979½ to 9790.

TR3577, station 00578, record '2' barometric pressure corrected from 977½ to 9770.

TR3577, station 00678, record '2' barometric pressure corrected from 013½ to 0130.

TR3577, station 00778, record '2' barometric pressure corrected from 012½ to 0120.

TR3577, station 00878, record '2' barometric pressure corrected from 013½ to 0130.

all zero filling for barometric pressure suggested by Jim Audet

TR 3579

Barometric pressure - zero filled in
column 43 - for stations 00569, 01569,
01669, 01769, 02266, 02369, 02769, 02869, 03169,
03269, 03369, 03469, 03568, 03668, 03769, 03869,
03969, 05069, 06969, 07068, 07168, 07268, 07968,
and 08169 per Jim Audet

Station 02569, record '1', col 58 time zone
corrected from 4 to +.

Station 02869, record '5', a zero
removed from col 16 Time (min)

TR 3581

Station 44829, record '1' illegal blanks
in END Longitude Minutes - zero
inserted in column 52

Corrections 78-0812

All corrections made on list from originator.

On Record '5's if a code occurred in the taxonomic code field (18 for 10) and 0 in number of individuals field (37 for 5) — these records were made into text records — a '4' was put in col. 10 and 'No Birds Sighted' was inserted as text.

On record '5's, ^{all} taxonomic codes changed from Alaska to NODC

TAPE ASSIGNMENT SHEET (MRL) 11/6/78

ACCESSION NO: 78-0812

TYPE OF TAPE	TAPE NUMBER	LABEL	LRECL	BLKSIZE	RECFM	REMARKS
ORIGINATOR	G02NDC	NL	83	3735	FB	
DUPPLICATE	002226	NL	83	4565	FB	
REFORMATTED						
CORRECTED FAST USER	004000	SL	83	4150	FB	DSN = BIRD1
CORRECTED FAST BACKUP USER	010049	SL	83	4150	FB	DSN = BIRD2

Data Set Route Sheet

Accession #

78-0812

Step	Completion Date/Init.	Tape #, # of Files	BLKSIZE,	LRECL
1. Originator Tape #	781107 JLO	602NDC 11	3735	83
2. QUAD Duplicate Tape #	781113 JLO	002226 11	4565	83
3. DDF Evaluation				
4. Quality Review				
5. Preliminary Data Sort				
6. Preliminary Check				
7. First User Tape #				
8. Final User Tape #				
9. Final Check				
10. NAPIS Inventory				
11. DIP Inventory				
12. Data Set 'Finalized'				

Error Correction Documentation Form

DATE: 12/1/78

TO:

FROM: 0781 JES

SUBJECT: Error Correction in Processing of Data Set - Accession # 78-0812

- 1) File Type: 033
- 2) Project Ident.: OCSEAP
- 3) Track Nos.: TR3571-3581

I. Error Corrections as reported to Principal Investigator:

Error

Correction Completed (Check)

II. Additional error corrections:

Error

Correction Completed (Check)

III. Processor Name: _____

all correction made CMB
Corrections Made to OCSEAP Data, File Type 033,
Subsequent to Submission to NODC
Reported Jun, 1979

78-0812

Data from RU#337

Processed by RU#527

NODC Track Number TR3571

Original File ID FW5004

STATION NUMBER	CARD TYPE	SEQUENCE NUMBER	FIELD ABBR	COLUMNS	FROM	TO
✓ 39766	5	008	TAX	18-29	8913050106	9221030107 ✓
✓ 40166	5	011	TAX	18-29	8913050106	9221030107 ✓
✓ 40266	5	014	TAX	18-29	8913050106	9221030107 ✓
✓ 40566	5	010	TAX	18-29	8913050106	9221030107 ✓

Corrections Made to OCSEAP Data, File Type 033,
Subsequent to Submission to NODC
Reported Jun, 1979

78-0812

Data from RU#337

Processed by RU#527

NODC Track Number TR3575

Original File ID FW6026

STATION NUMBER	CARD TYPE	SEQUENCE NUMBER	FIELD ABBR	COLUMNS	FROM	TO
✓ 01073	5	020	TAX	18-29	8810040704	8810080704

DATA DOCUMENTATION FORM

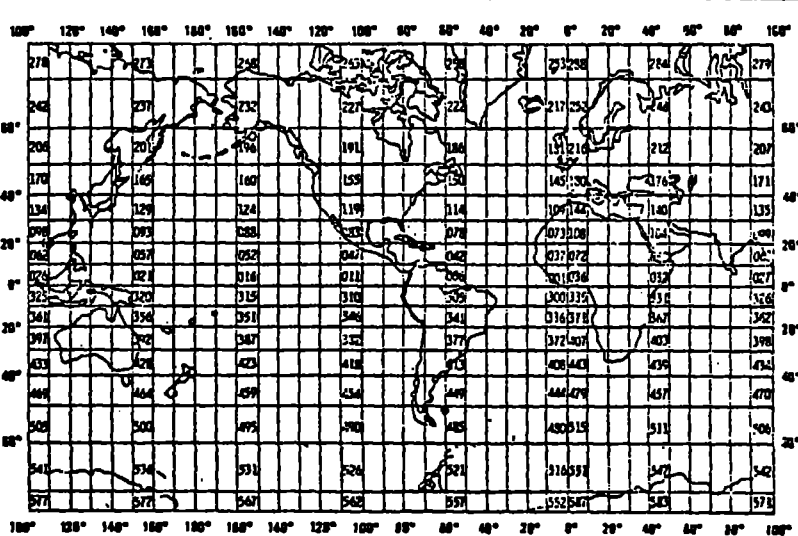
TR3572

NOAA FORM 24-13
(4-72)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852FORM 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

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED U.S. Fish & Wildlife Service Office of Biological Services 800 A Street, Suite 110 Anchorage, Alaska 99501			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED N.O.A.A. Cruise 033		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW5018	
4. PLATFORM NAME(S) Miller Freeman	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Ship	6. PLATFORM AND OPERATOR NATIONALITY(IES) U.S. U.S.	7. DATES FROM: MO/DAY/YR TO: MO/DAY/YR 8/12/75 9/4/75
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR MONTH		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA 	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)			
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1)			

```

d
d
d
ddd  ppp  sss
d  d  p  p  s  s
d  d  p  p  s  s
ddd  pppp  sssss
      p      s
      p      s
      p      sss

```

```

DATA PROJECTS GROUP
333 Pastore Hall
University of R.I.
Kinsston, RI 02881

```

This Data Documentation Form (DDF) is composed of two parts. The first contains tape specifications and record format descriptions provided by the originator cited in Section A.1. The data have subsequently been validated by the Data Projects Group. Range and relational checks, code group checks, plus relocation of fields, unit conversions, and final tape recording techniques used in this process are given in the second part. Resolution of data errors found during this process has been made through contact with the originator.

B. SCIENTIFIC 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
Latitude/Longitude	Whole Degrees, minutes to tenths	Taken from NOAA ship log	N/A	N/A
Speed	Knots, to tenths	"	"	"
Course	Whole degrees	"	"	"
Height	Feet	"	"	"
Wind Direction	Whole degrees	"	"	"
Wind Speed	Whole knots	"	"	"
Wave Height	Feet	"	"	"
Swell Height	"	"	"	"
Sea Temp(Intake)	.1 Degrees C.	"	"	"
Sea Temp(X.B.T.)	.1 Degrees C.	"	"	"
Air Temp	"	"	"	"
Wet & Dry	"	"	"	"
Barom. Pressure	.1 millibars	"	"	"
Depth	fathoms	"	"	"
Surface Salinity	.1 ppt	"	"	"
Thermocline Depth	meters	"	"	"

C. DATA FORMAT

This information is requested only for data transmitted on punched cards or magnetic tape. Have one of your data processing specialists furnish answers either on the form or by attaching equivalent readily available documentation. Identify the nature and meaning of all entries and explain any codes used.

1. List the record types contained in your file transmittal (e.g., tape label record, master, detail, standard depth, etc.).
2. Describe briefly how your file is organized.
- 3-13. Self-explanatory.
14. Enter the field name as appropriate (e.g., header information, temperature, depth, salinity).
15. Enter starting position of the field.
16. Enter field length in number columns and unit of measurement (e.g., bit, byte, character, word) in unit column.
17. Enter attributes as expressed in the programming language specified in item 3 (e.g., "F 4.1," "BINARY FIXED (5.1)").
18. Describe field. If sort field, enter "SORT 1" for first, "SORT 2" for second, etc. If field is repeated, state number of times it is repeated.

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCH CARDS OR TAPE, MAGNETIC TAPE, OR SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE---
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Location Record "1" in Column 15
 Environment Record "2" in Column 15
 Ice Record "3" in Column 15 (optional record)
 Comment Record "4" in Column 15
 Activity Record "5" in Column 15

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

The file is organized in Station number order with record types sequentially ordered within each Station. When multiple records exist for one record type, they are sequentially ordered by sequence number.

3. ATTRIBUTES AS EXPRESSED IN

☐ PL-1☐ ALGOL☐ COBOL☒ FORTRAN

LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Susan C. Bates
 ADDRESS same as above

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE

☐ BCD ☐ BINARY☐ ASCII ☒ EBCDIC☐6. NUMBER OF TRACKS
(CHANNELS)☐ SEVEN☒ NINE☐

7. PARITY

☒ ODD☐ EVEN

8. DENSITY

☐ 200 BPI ☐ 1600 BPI☐ 556 BPI☒ 800 BPI☐9. LENGTH OF INTER-
RECORD GAP (IF KNOWN)☐ 3/4 INCH☐

10. END OF FILE MARK

☐ OCTAL 17☐11. PASTE-ON-PAPER
ORIGINALINCLUDE
NOTESFILE NO.
FW5028TITLE
Henderson Cruise 10/8/75-10/16/75

CREATION DATE

REEL

OF

DRIVE

INITIALS

6/15/76141S Bates

RETENTION

REMARKS

12. PHYSICAL BLOCK LENGTH IN BYTES

4000 max

13. LENGTH OF BYTES IN BITS

RECORD FORMAT DESCRIPTION

RECORD NAME Location Record

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN bytes (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Data Type(File type)	1	3	Bytes	A3	
File Identifier	4	6	Bytes	A6	O.B.S. Internal Cruise Number
Station Number	10	5	Bytes	A5	Shipboard transect number
Record Type	15	1	Bytes	I1	
Start Latitude					
Degrees	16	2	Bytes	I2	
Minutes	18	3	Bytes	F3.1	To tenths of minutes
Longitude					
Degrees	21	3	Bytes	I3	
Minutes	24	3	Bytes	F3.1	To tenths of minutes
Hemisphere	27	1	Bytes	A1	E or W
O.B.S. Region	28	3	Bytes	F3.1	Region of State surveyed
Day	31	2	Bytes	I2	
Month	33	2	Bytes	I2	
Hour	35	2	Bytes	I2	
Minute	37	2	Bytes	I2	
End Latitude					
Degrees	39	2	Bytes	I2	
Minutes	41	3	Bytes	I2 F3.1	
End Longitude					
Degrees	44	3	Bytes	I3	
Minutes	47	3	Bytes	F3.1	To tenths of minutes
Hemisphere	50	1	Bytes	A1	E or W
Elapsed time	51	2	Bytes	I2	in minutes
Time Zone	53	1	Bytes	A1	"+" or "-"
Time Zone	54	2	Bytes	I2	Hours from G.M.T.

RECORD FORMAT DESCRIPTION

RECORD NAME: Location Record(Continued)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Speed	56	4	Bytes	F4.1	In tenths of knots
Speed type	60	1	"	I1	"1" for Speed made good "2" for Indicated Speed
Course	61	3	"	I3	
Height	64	3	"	I3	
Ship or Aircraft Number	67	2	"	I2	O.B.S. internal number
Sampling Technique	69	1	"	A1	
Ship Activity	70	1	"	A1	
Photos taken	71	1	"	A1	
O.B.S. Observer Number	72	2	"	A2	O.B.S. internal number
Location of observer	74	1	"	A1	Location on ship
Blank	75	6	"	6X	

RECORD FORMAT DESCRIPTION

RECORD NAME Environmental Record

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	A3	
File Identifier	4	6	"	A6	
Station Number	10	5	"	A5	
Record Type	15	1	"	I1	
Weather Code	16	2	"		
Visibility Code	18	1	"		
Observing Conditions	19	1	"	I1	Internal code
Wind Direction	20	3	"	I3	
Wind Speed	23	2	"	I2	whole knots
Wave Height	25	2	"	I2	in feet
Swell Height	27	2	"	I2	in feet
Sea Temperature (Intake)	29	4	"	F4.1	in tenths degrees Centigrade
Sea Temperature (XBT)	33	4	"	F4.1	in tenths of degrees, Centigrade
Air Temperature (Wet Bulb)	37	4	"	F4.1	in tenths of degrees, Centigrade
Air Temperature (Dry Bulb)	41	4	"	F4.1	in tenths of degrees, Centigrade
Barometric Press.	45	5	"	F5.1	in tenths of millibars
Barometric trend	50	1	"	A1	"+"=rising, "0"=steady, "-"=falling
Depth	51	4	"	I4	in fathoms
Surface Salinity	55	3	"	F3.1	Parts/thousand, in tenths
Thermocline Depth	58	3	"	I3	Whole meters
Glare Intensity	61	1	"	A1	See code sheet
Glare Area	62	1	"	A1	See code sheet
Turbidity Code	63	1	"	A1	See Code sheet
Blank	64	16	"	16X	

RECORD FORMAT DESCRIPTION

RECORD NAME Ice Record

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	A3	1= ship in lead, 2=ship in polyna 3=open water not discernable WMO 4300
File Identifier	4	6	"	A6	
Station Number	10	5	"	A5	
Record Type	15	1	"	I1	
<u>Ice in transect</u>					
Coverage Code	16	1	"	A1	
Pattern Code	17	1	"	A1	
Type Code	18	1	"	A1	
Form Code	19	1	"	A1	
Relief Code	20	1	"	A1	
Thickness Code	21	1	"	A1	
Melt Code	22	1	"	A1	
<u>Ice outside tran-</u> <u>sect</u>					
Coverage Code	23	1	"	A1	
Pattern Code	24	1	"	A1	
Type Code	25	1	"	A1	
Form Code	26	1	"	A1	
Relief Code	27	1	"	A1	
Thickness Code	28	1	"	A1	
Melt Code	29	1	"	A1	
<u>Visible Open Water</u>					
Area Code	30	1	"	A1	
Direction Code	31	1	"	A1	
Distance Code	32	1	"	A1	
Lead or Polyna Width Code	33	1	"	A1	
<u>Visible Ice</u>					
Form Code	34	1	"	A1	
Coverage Code	35	1	"	A1	
Direction Code	36	1	"	A1	
Distance Code	37	1	"	A1	
<u>Ship in Lead/Polyna</u>					
Location	38	1	"	A1	
Lead/Polyna width	39	1	"	A1	
Distance of ship from nearest lead/ polyna	40	1	"	A1	
<u>Miscellaneous</u>					
Arctic Cod observed	41	1	"	A1	
Excess Sediment	42	1	"	A1	

WMO 4300

RECORD FORMAT DESCRIPTION

RECORD NAME Ice Record (Continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Miscellaneous(Cont'd)					
Ice Algae Layer	43	1	Bytes	A1	
Mammal trace Code	44	1	"	A1	
Other Features	45	1	"	A1	Use mammal trace code
Ice Not Coverable (see text card)	46	1	"	A1	
Blank	47	34	"	34X	

RECORD FORMAT DESCRIPTION

RECORD NAME: Comment Record

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN ---- (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	Bytes	A3	
File Identifier	4	6	"	A6	
Station No.	10	5	"	A5	
Record Type	15	1	"	I1	
Text	16	62	"	62A1	
Sequence	78	3	"	I3	

RECORD FORMAT DESCRIPTION

RECORD NAME Activity Card

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File type	1	3	Bytes	A3	O.B.S. internal abbreviations
File identifier	4	6	"	A6	
Station Number	10	5	"	A5	
Record type	15	1	"	I1	
Species Name Abbrev	16	4	"	A4	
Taxonomic Code	20	10	"	I10	
Sub Species	30	2	"	I2	
Species Group	32	2	"	A2	
Number of individuals	34	5	"	I5	
Begin Zone	39	2	"	I2	
End Zone	41	2	"	I2	Distance of zone ending, in tens of meters
Time into Transect	43	3	"	F3.1	Distance of zone beginning, in tens of meters
Behavior Code	46	2	"	A2	in tenths of minutes
Flight Direction of bird	48	2	"	A2	Positions of clock, 01-12
Age Code	50	1	"	A1	
Sex Code	51	1	"	A1	
Color Phase Code	52	1	"	A1	
Plumage Code	53	1	"	A1	
Molt Code	54	1	"	A1	
Association Code	55	2	"	A2	
Linkage	57	3	"	I3	
No. Species	60	2	"	I2	
Markings Code	62	1	"	A1	
Oil Code	63	1	"	A1	
Food Species					
Taxonomic Code	64	10	"	I10	

RECORD FORMAT DESCRIPTION

RECORD NAME: Activity Record(Continued)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Debris Code	74	1	Bytes	A1	Indicates text card for this sighting
O.B.S. Observer Number	75	2	"	A2	
Text Flag Code	77	1	"	A1	
Sequence Number	78	3	"	I3	

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Record Type is coded in column 10 of each record as follows:

- 1 - Location
- 2 - Environment
- 3 - Ice Record
- 4 - Text Comments
- 5 - Data Observations

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File is organized by Station Number in Columns 11-15 of each record. Each Station contains one Type 1 card; one Type 2 card; zero to several Type 3 cards; and one to several Type 5 cards (one for each observation at that station).

3. ATTRIBUTES AS EXPRESSED IN ☒ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Data Projects Group (401)792-2320

ADDRESS 333 Pastore Hall, University of Rhode Island, Kingston, RI 02881

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE <input type="checkbox"/> BCD <input type="checkbox"/> BINARY <input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/> _____	9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> 1/2 INCH
6. NUMBER OF TRACKS (CHANNELS) <input type="checkbox"/> SEVEN <input checked="" type="checkbox"/> NINE <input type="checkbox"/> _____	10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 IBM 3420 <input checked="" type="checkbox"/> Tape Mark
7. PARITY <input checked="" type="checkbox"/> ODD <input type="checkbox"/> EVEN	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) <div style="border: 2px solid black; padding: 5px; margin: 5px;"> FWS018 on tape G02NDC included with cruises: FWS004 Fw6025 Fw7027 → FWS018 Fw6026 Fw7026 FWS034 Fw6028 Fw7029 Fw6029 Fw6093 </div>
8. DENSITY <input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI <input type="checkbox"/> 536 BPI <input type="checkbox"/> 800 BPI <input type="checkbox"/> _____	12. PHYSICAL BLOCK LENGTH IN BYTES Lrcl=83 Blk size=4150 13. LENGTH OF BYTES IN BITS 8

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Location Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 1
Station No	11	5	bytes	A5	
Latitude -					Starting Position
Degrees	16	2	bytes	I2	33-73 degrees
Minutes	18	2	bytes	I2	0-59 minutes
Seconds	20	2	bytes	I2	0-59 seconds
Hemisphere	22	1	bytes	A1	N hemisphere
Longitude -					Starting Position
Degrees	23	3	bytes	I3	118-180 degrees
Minutes	26	2	bytes	I2	0-59 minutes
Seconds	28	2	bytes	I2	0-59 seconds
Hemisphere	30	1	bytes	A1	W hemisphere
Date -					Starting date GMT
Year	31	2	bytes	I2	Last 2 digits
Month	33	2	bytes	I2	1-12 months
Day	35	2	bytes	I2	1-31 days
Time -					Starting time GMT
Hours	37	2	bytes	I2	0-23 hours
Minutes	39	2	bytes	I2	0-59 minutes
Latitude -					Ending Position
Degrees	41	2	bytes	I2	33-73 degrees
Minutes	43	2	bytes	I2	0-59 minutes
Seconds	45	2	bytes	I2	0-59 seconds
Hemisphere	47	1	bytes	A1	N hemisphere
Longitude -					Ending Position
Degrees	48	3	bytes	I3	118-180 degrees
Minutes	51	2	bytes	I2	0-59 minutes
Seconds	53	2	bytes	I2	0-59 seconds
Hemisphere	55	1	bytes	A1	W hemisphere
Elapsed Time	56	2	bytes	I2	0-30 whole minutes
Time Zone -					
Sign	58	1	bytes	A1	+ or - relative to GMT
Number	59	2	bytes	I2	Zone 01-12
Ships Speed	61	3	bytes	I3	Whole knots
Course Heading	64	2	bytes	I2	0-35 tens of degrees true

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Location (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of Eyes Above Sea	66	3	bytes	I3	Whole meters
Platform Type	69	1	bytes	A1	NODC Platform Type Code
Sampling Technique	70	1	bytes	A2	NODC Sampling Technique Code
Ship Activity	71	1	bytes	A1	NODC Ship Activity Code
Photos Taken	72	1	bytes	A1	NODC Collection Code
Width of Transect	73	1	bytes	A1	NODC Zone Scheme Code
Angle of View	74	1	bytes	A1	NODC Angle of View Code
Observation Conditions	75	1	bytes	A1	NODC Observation Conditions Code
Distance Made Good	76	4	bytes	I4	Kilometers to tenths
Watch Type	80	1	bytes	A1	
Transect Width	81	3	bytes	I3	Tens of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment Record

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 2
Station No	11	5	bytes	A5	
Bottom Depth	16	4	bytes	I4	Whole meters
Thermocline Depth	20	3	bytes	I3	0-100 meters
Sea Surface Temperature	23	4	bytes	I4	-3 to +10 degrees to tenths Celsius
Salinity	27	3	bytes	I3	20 o/oo to 34 o/oo parts per thousand to tenths
Dry Bulb Temp	30	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Wet Bulb Temp	34	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Humidity	38	2	bytes	I2	00-99 percent
Barometric Pressure	40	4	bytes	I4	0.9600-1.0400 bars to tenths of millibars
Barometric Trend	44	1	bytes	A1	+ rising, - falling, 0 steady
Wind Direction	45	2	bytes	I2	NODC Direction Code (WMO Codes 0885 & 0877)
Wind Speed	47	2	bytes	I2	0-50 knots
Sea State	49	1	bytes	A1	WMO Code 3700
Swell Direction	50	2	bytes	I2	NODC Direction Code
Swell Height	52	3	bytes	I3	0-07.6 meters to tenths
Weather	55	2	bytes	A2	WMO Code 4677
Cloud Type	57	1	bytes	A1	WMO Code 0500
Cloud Amount	58	1	bytes	A1	WMO Code 2700

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Water Color	59	2	bytes	A2	NODC Water Color Code (Forel-Ule scale)
Visibility	61	1	bytes	A1	WMO Code 4300
Sun Direction	62	1	bytes	A1	NODC Compass Direction Code
Glare Intensity	63	1	bytes	A1	NODC Glare Intensity Code
Glare Area	64	1	bytes	A1	NODC Glare Area Code
Light Level	65	3	bytes	I3	Tens of Foot-candles
Moon Phase	68	1	bytes	A1	NODC Moon Phase Code
Tide Height	69	1	bytes	A1	NODC Tide Height Code
Tide Cycle	70	1	bytes	A1	+ rising, - falling, 0 slack water
Distance to Shore	71	4	bytes	I4	Whole nautical miles
Distance to Shelf break	75	3	bytes	I3	Whole nautical miles
SECCHI Depth	78	2	bytes	I2	Whole meters
Debris Code	80	1	bytes	A1	NODC Debris Code (for non- bird associated debris)
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Ice Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 3
Station No	11	5	bytes	A5	
Ice In Transect					
Cover	16	1	bytes	A1	WMO Code 0547
Type	17	1	bytes	A1	WMO Code 3763
Form	18	1	bytes	A1	WMO Code 1147
Relief	19	1	bytes	A1	WMO Code 3962
Thick	20	1	bytes	A1	WMO Code 4006
Melt	21	1	bytes	A1	WMO Code 2650
Ice Outside Transect					
Cover	22	1	bytes	A1	WMO Code 0547
Type	23	1	bytes	A1	WMO Code 3763
Form	24	1	bytes	A1	WMO Code 1147
Relief	25	1	bytes	A1	WMO Code 3962
Thick	26	1	bytes	A1	WMO Code 4006
Melt	27	1	bytes	A1	WMO Code 2650
Open Water					
Type	28	1	bytes	A1	WMO Code 4552
Direction	29	1	bytes	A1	WMO Code 0739
Distance	30	1	bytes	A1	WMO Code 3600
Lead/Polynya	31	1	bytes	A1	WMO Code 4300
Visible Ice					
Description	32	1	bytes	A1	WMO Code 0663
Direction	33	1	bytes	A1	WMO Code 0739
Distance	34	1	bytes	A1	WMO Code 3600
Miscellaneous					
Arctic Cod Excess	35	1	bytes	A1	NODC Collection Code
Sediment	36	1	bytes	A1	NODC Collection Code
Ice Algae	37	1	bytes	A1	NODC Collection Code
Mammal Trace	38	1	bytes	A1	NODC Mammal Trace Code
Other Features	39	1	bytes	A1	NODC Mammal Trace Code
Ice Pattern					
In Transect	40	1	bytes	A1	1-Regular, 2-Clumped
Outside Trans	41	1	bytes	A1	1-Regular, 2-Clumped

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Ice (continued)

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Ship in Lead or Polynya Location	42	1	bytes	A1	1-Lead, 2-Polynya, 3-Indeterminable
Width	43	1	bytes	A1	WMO Code 4300
Distance	44	1	bytes	A1	WMO Code 4300
Time of Ice Conditions	45	2	bytes	I2	Whole minutes from start time to observation time, must increase for a station
Water vs Land % Covered	47	2	bytes	I2	00-99 Percent
Pond Size	49	1	bytes	A1	NODC Size of Pond Code
Open Water Ice Description	50	1	bytes	A1	WMO Code 1147
Cover	51	1	bytes	A1	WMO Code 0547
Blank	52	26	bytes	X26	
Sequence Number	78	3	bytes	I3	Ascending numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Text Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 4
Station No	11	5	bytes	A5	
Text	16	62	bytes	A62	
Sequence Number	78	3	bytes	I3	Ascending Numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Data Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 5
Station No	11	5	bytes	A5	
Time into Transect	16	2	bytes	I2	Whole minutes from start time to observation time
Taxonomic Code	18	12	bytes	I12	Class 88-92, ends with paired trailing blanks
Species Group	30	2	bytes	I2	
Age	32	1	bytes	A1	NODC Age Class Group Code
Sex	33	1	bytes	A1	NODC Sex Code
Color	34	1	bytes	A1	NODC Color Phase Code
Plumage	35	1	bytes	A1	NODC Plumage Code
Molt	36	1	bytes	A1	NODC Molt Code
Number of Individuals	37	5	bytes	I5	Whole number, must not be omitted
Counting Method	42	1	bytes	A1	NODC Counting Method Code
Reliability	43	1	bytes	A1	NODC Reliability Code
Distance Measure Type	44	1	bytes	A1	NODC Distance Measurement Type Code
Distance to Birds	45	3	bytes	I3	Tens of meters
Direction of Flight	48	2	bytes	I2	00-35 Tens of degrees
Association	50	1	bytes	A1	NODC Type of Assoc Code
Linkage	51	3	bytes	I3	Sequence number of multi- species group in station
Species Number	54	2	bytes	I2	Number of species linked
Behavior	56	2	bytes	A2	NODC Behavior Code
Special Marks	58	1	bytes	A1	NODC Special Marks Code
Bird Condition	59	1	bytes	A1	NODC Bird Condition Code

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Data (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Food Source	60	1	bytes	A1	NODC Food Source Association Code
Tax Code of Food	61	10	bytes	I10	
Debris	71	1	bytes	A1	NODC Debris code
Oil	72	1	bytes	A1	NODC Oil Code
Distance from Breed Colony	73	3	bytes	I3	Nautical miles
Habitat	76	2	bytes	2A1	NODC Habitat Code, may code 2, left to right
Sequence Number	78	3	bytes	I3	Ascending numeric
Substrate	81	1	bytes	A1	NODC Substrate Code
Cover	82	1	bytes	A1	NODC Cover Code
Outside Zone	83	1	bytes	A1	NODC Outside Zone Code

ACCESSION
NUMBER

78-0812

DATA DOCUMENTATION FORM

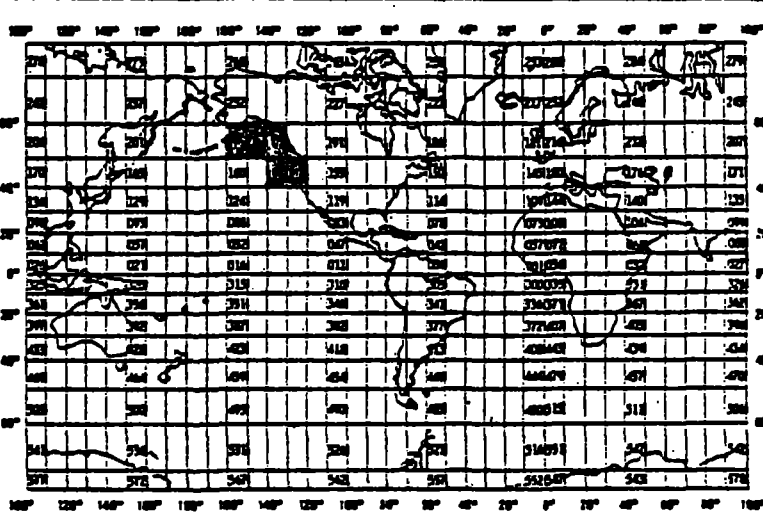
TR 3573

NOAA FORM 24-13
(4-72)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20862FORM 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

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED Dr. Calvin Lensink U. S. Fish and Wildlife Service- Office of Biological Services-Coastal Ecosystems 1011 East Tudor Rd. Anchorage, Alaska, 99503			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED OCSEAP RU - 337		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW 5034	
4. PLATFORM NAME(S) NOAA R/V Discoverer		5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Ship	
6. PLATFORM AND OPERATOR NATIONALITY(IES) USA		7. DATES FROM: MO/DAY/YR TO: MO/DAY/YR 11-17-75 12-8-75	
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR MONTH		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNPI)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)			
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) Dr. Calvin Lensink Dr. Patrick Gould (907) 276-3800			

B. SCIENTIFIC 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
Station Type	N/A	See Attached Codes	N/A	N/A
Start Latitude & Longitude	Degrees, Minutes, Seconds, Hemisph.	Combined Radar Fixes and Depth Charts	N/A	N/A
Date - Time	Year, Month, Day Hour, Minute	Always GMT	N/A	N/A
Elapsed Time	Minutes	N/A	N/A	N/A
Time Zone	International Standard	N/A	N/A	N/A
Speed	Knots made good	Derived from plotted positions	N/A	N/A
Course	10's of degrees true made good	Derived from plotted positions	N/A	N/A
Height	Whole meters	Measured with steel Tape	N/A	N/A
Obs. Conditions	033 code	Observers opinion of all factors influencing observations - subjective	N/A	N/A
Transect Width	10's of meters	Estimated, based on periodic checks with a range finder.	N/A	N/A
Depth	meters	Fathometer and Charts	N/A	N/A
Surface Temp.	tenths of degrees centigrade .	Temp. gage at ships intake	N/A	N/A
Sea State	WMO 3700 codes	Observation	N/A	N/A
Weather	WMO 4677 codes selected	Observation - see attached list of selected codes	N/A	N/A
Taxonomic Code	NODC Taxonomic codes	1977 version	N/A	N/A
Age	033 codes	Observation	N/A	N/A
Sex	033 Codes	Observation	N/A	N/A
Color Phase	033 Codes	Observation	N/A	N/A

```

d
d
d
dddd   ppp   sss
d   d   p   p   s   s
d   d   p   p   s   s
ddd     pppp   sssss
      p           s
      p           s
      p           sss

```

```

DATA PROJECTS GROUP
333 Pastore Hall
University of R.I.
Kingston, RI 02881

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This Data Documentation Form (DDF) is composed of two parts. The first contains tape specifications and record format descriptions provided by the originator cited in Section A.1. The data have subsequently been validated by the Data Projects Group. Range and relational checks, code group checks, plus relocation of fields, unit conversions, and final tape recording techniques used in this process are given in the second part. Resolution of data errors found during this process has been made through contact with the originator.

B. SCIENTIFIC 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
Number	Number of individual organisms	Binoculars	N/A	N/A
Flight Direction	10's of degrees true	Observation	N/A	N/A
Linkage	033 codes	N/A	N/A	N/A
Behavior	Selected 033 codes	See attached list of Selected codes	N/A	N/A
Outside Zone	033 codes	N/A	N/A	N/A

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Type 1 = Location

Type 2 = Environment

Type 4 = Text

Type 5 = Data

These are differentiated by byte 10

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File organized by Station Number (Record Type 1, Bytes 11-13)

ATTRIBUTES AS EXPRESSED IN

☐ PL-1

☐ ALGOL

☐ COBOL

☐ FORTRAN

☐

LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert L. Blanscett 907-276-3800

ADDRESS U.S.F.&W.S., OBS-CE, 1011 E. Tudor Rd. Anchorage, Alaska, 99503

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE <input type="checkbox"/> BCD <input type="checkbox"/> BINARY <input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/>	9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input type="checkbox"/>
6. NUMBER OF TRACKS (CHANNELS) <input type="checkbox"/> SEVEN <input checked="" type="checkbox"/> NINE <input type="checkbox"/>	10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 <input type="checkbox"/>
7. PARITY <input checked="" type="checkbox"/> ODD <input type="checkbox"/> EVEN	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) 337 033 FW5034 DI75III 75-11-18 75-12-06 LENSINK 9TRK, 800BPI, ODD, EBCDIC
8. DENSITY <input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI <input type="checkbox"/> 556 BPI <input checked="" type="checkbox"/> 800 BPI <input type="checkbox"/>	12. PHYSICAL BLOCK LENGTH IN BYTES 83
	13. LENGTH OF BYTES IN BITS 8

RECORD FORMAT DESCRIPTION

RECORD NAME Location - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., 34th, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	"Always 033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	"Always 1"
Station Number	11	5	bytes	A5	4th byte coded for ship type 5th byte coded for transect type
Latitude, Degrees	16	2	bytes	I2	Starting Position
Minutes	18	2	bytes	I2	" "
Seconds	20	2	bytes	I2	" "
Hemisphere	22	1	bytes	A1	"N" or "S"
Longitude, Degrees	23	3	bytes	I3	Starting Position
Minutes	26	2	bytes	I2	" "
Seconds	28	2	bytes	I2	" "
Hemisphere	30	1	bytes	A1	"E" or "W"
Year	31	2	bytes	I2	Last two digits of year = Starting Time GMT
Month	33	2	bytes	I2	" " "
Day	35	2	bytes	I2	" " "
Hour	37	2	bytes	I2	" " "
Minute	39	2	bytes	I2	" " "
Latitude, Degrees	41	2	bytes	I2	Ending Position
Minutes	43	2	bytes	I2	" "
Seconds	45	2	bytes	I2	" "
Hemisphere	47	1	bytes	A1	"N" or "S"
Longitude, Degrees	48	3	bytes	I3	Ending Position
Minutes	51	2	bytes	I2	" "
Seconds	53	2	bytes	I2	" "
Hemisphere	55	1	bytes	A1	"E" or "W"
Elapsed Time	56	2	bytes	I2	whole minutes
Time Zone	58	1	byte	A1	"+" or "-"
Time Zone	59	2	bytes	A2	01-12
Speed Made Good	61	3	bytes	I3	in whole knots
Course Made Good	64	2	bytes	I2	tens of degrees true

RECORD FORMAT DESCRIPT. X

RECORD NAME Location (continued) - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., Mts, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of eyes above sea	66	3	bytes	I3	In whole meters
Observation conditions	75	1	bytes	A1	1-7 bad-excellent
Transect width	81	3	bytes	I3	10's of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Environmental - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., A10, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "2"
Depth	16	4	bytes	I4	In whole meters
Surface Temp.	23	4	bytes	I4	In tenths of degrees Centigrade
Surface Salinity	27	3	bytes	I3	In parts per hundred
Barometric Pressure	40	4	bytes	I4	In tenths of millibars
Barometric Trend	44	1	bytes	A1	+ = rising, 0 = steady, - = falling
Wind Direction	45	2	bytes	I2	In 10's of degrees true See WMO codes 0885 & 0877
Wind Speed	47	2	bytes	I2	In whole knots
Sea State	49	1	bytes	A1	WMO code 3700
Weather	55	2	bytes	A2	WMO code 4677 with restricted choice as shown below: 00, 03, 41, 43, 68, 69, 87, 88, 71, 73

RECORD FORMAT DESCRIPTION

RECORD NAME / Data - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "5"
Station Number	11	5	bytes	A5	bytes 14-15 define ship and observation types
Taxonomic Code	18	10	bytes	I10	NODC 1977 codes
Subspecies	28	2	bytes	I2	
Species Group	30	2	bytes	A2	
Age Class	32	1	bytes	A1	
Sex	33	1	bytes	A1	
Color Phase	34	1	bytes	A1	
Number of Individuals	37	5	bytes	I5	whole numeric
Flight Direction	48	2	bytes	I2	In 10's of degrees
Linkage	51	3	bytes	I3	Sequence number of a group within one observation
Behavior	56	2	bytes	A2	
Sequence	78	3	bytes	I3	Ascending numeric, for sorting
Outsice Zone	83	1	bytes	A1	0 = birds within transect width defined in RT 1, bytes 81-83. 1-9 = birds other than above.

D. INSTRUMENT CALIBRATION

This calibration information will be utilized by NOAA's National Oceanographic Instrumentation Center in their efforts to develop calibration standards for voluntary acceptance by the oceanographic community. Identify the instruments used by your organization to obtain the scientific content of the DDF (i.e., STD, temperature and pressure sensors, salinometers, oxygen meters, velocimeters, etc.) and furnish the calibration data requested by completing and/or checking ("✓") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

INSTRUMENT TYPE MFR., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Record Type is coded in column 10 of each record as follows:

- 1 - Location
- 2 - Environment
- 3 - Ice Record
- 4 - Text Comments
- 5 - Data Observations

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File is organized by Station Number in Columns 11-15 of each record. Each Station contains one Type 1 card; one Type 2 card; zero to several Type 3 cards; and one to several Type 5 cards (one for each observation at that station).

3. ATTRIBUTES AS EXPRESSED IN ☒ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Data Projects Group (401)792-2320

ADDRESS 333 Pastore Hall, University of Rhode Island, Kingston, RI 02881

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> 1/2 inch</p>												
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17</p> <p>IBM 3420 <input checked="" type="checkbox"/> Tape Mark</p>												
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME KEY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <div style="border: 1px solid black; padding: 5px;"> <p>FWS034 on tape G02NDC included with cruises:</p> <table border="0"> <tr> <td>FWS004</td> <td>FW6025</td> <td>FW7027</td> </tr> <tr> <td>FWS018</td> <td>FW6026</td> <td>FW7026</td> </tr> <tr> <td>→ FWS034</td> <td>FW6028</td> <td>FW7029</td> </tr> <tr> <td></td> <td>FW6029</td> <td>FW6093</td> </tr> </table> </div>	FWS004	FW6025	FW7027	FWS018	FW6026	FW7026	→ FWS034	FW6028	FW7029		FW6029	FW6093
FWS004	FW6025	FW7027											
FWS018	FW6026	FW7026											
→ FWS034	FW6028	FW7029											
	FW6029	FW6093											
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>Lrec1=83 Blk size=4150</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>												

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Location Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 1
Station No	11	5	bytes	A5	
Latitude -					Starting Position
Degrees	16	2	bytes	I2	33-73 degrees
Minutes	18	2	bytes	I2	0-59 minutes
Seconds	20	2	bytes	I2	0-59 seconds
Hemisphere	22	1	bytes	A1	N hemisphere
Longitude -					Starting Position
Degrees	23	3	bytes	I3	118-180 degrees
Minutes	26	2	bytes	I2	0-59 minutes
Seconds	28	2	bytes	I2	0-59 seconds
Hemisphere	30	1	bytes	A1	W hemisphere
Date -					Starting date GMT
Year	31	2	bytes	I2	Last 2 digits
Month	33	2	bytes	I2	1-12 months
Day	35	2	bytes	I2	1-31 days
Time -					Starting time GMT
Hours	37	2	bytes	I2	0-23 hours
Minutes	39	2	bytes	I2	0-59 minutes
Latitude -					Ending Position
Degrees	41	2	bytes	I2	33-73 degrees
Minutes	43	2	bytes	I2	0-59 minutes
Seconds	45	2	bytes	I2	0-59 seconds
Hemisphere	47	1	bytes	A1	N hemisphere
Longitude -					Ending Position
Degrees	48	3	bytes	I3	118-180 degrees
Minutes	51	2	bytes	I2	0-59 minutes
Seconds	53	2	bytes	I2	0-59 seconds
Hemisphere	55	1	bytes	A1	W hemisphere
Elapsed Time	56	2	bytes	I2	0-30 whole minutes
Time Zone -					
Sign	58	1	bytes	A1	+ or - relative to GMT
Number	59	2	bytes	I2	Zone 01-12
Ship's Speed	61	3	bytes	I3	Whole knots
Course Heading	64	2	bytes	I2	0-35 tens of degrees true

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Location (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of Eyes Above Sea	66	3	bytes	I3	Whole meters
Platform Type	69	1	bytes	A1	NODC Platform Type Code
Sampling Technique	70	1	bytes	A2	NODC Sampling Technique Code
Ship Activity	71	1	bytes	A1	NODC Ship Activity Code
Photos Taken	72	1	bytes	A1	NODC Collection Code
Width of Transect	73	1	bytes	A1	NODC Zone Scheme Code
Angle of View	74	1	bytes	A1	NODC Angle of View Code
Observation Conditions	75	1	bytes	A1	NODC Observation Conditions Code
Distance Made Good	76	4	bytes	I4	Kilometers to tenths
Watch Type	80	1	bytes	A1	
Transect Width	81	3	bytes	I3	Tens of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 2
Station No	11	5	bytes	A5	
Bottom Depth	16	4	bytes	I4	Whole meters
Thermocline Depth	20	3	bytes	I3	0-100 meters
Sea Surface Temperature	23	4	bytes	I4	-3 to +10 degrees to tenths Celsius
Salinity	27	3	bytes	I3	20 o/oo to 34 o/oo parts per thousand to tenths
Dry Bulb Temp	30	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Wet Bulb Temp	34	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Humidity	38	2	bytes	I2	00-99 percent
Barometric Pressure	40	4	bytes	I4	0.9600-1.0400 bars to tenths of millibars
Barometric Trend	44	1	bytes	A1	+ rising, - falling, 0 steady
Wind Direction	45	2	bytes	I2	NODC Direction Code (WMO Codes 0885 & 0877)
Wind Speed	47	2	bytes	I2	0-50 knots
Sea State	49	1	bytes	A1	WMO Code 3700
Swell Direction	50	2	bytes	I2	NODC Direction Code
Swell Height	52	3	bytes	I3	0-07.6 meters to tenths
Weather	55	2	bytes	A2	WMO Code 4677
Cloud Type	57	1	bytes	A1	WMO Code 0500
Cloud Amount	58	1	bytes	A1	WMO Code 2700

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Water Color	59	2	bytes	A2	NODC Water Color Code (Forel-Ule scale)
Visibility	61	1	bytes	A1	WMO Code 4300
Sun Direction	62	1	bytes	A1	NODC Compass Direction Code
Glare Intensity	63	1	bytes	A1	NODC Glare Intensity Code
Glare Area	64	1	bytes	A1	NODC Glare Area Code
Light Level	65	3	bytes	I3	Tens of Foot-candles
Moon Phase	68	1	bytes	A1	NODC Moon Phase Code
Tide Height	69	1	bytes	A1	NODC Tide Height Code
Tide Cycle	70	1	bytes	A1	+ rising, - falling, 0 slack water
Distance to Shore	71	4	bytes	I4	Whole nautical miles
Distance to Shelf break	75	3	bytes	I3	Whole nautical miles
SECCHI Depth	78	2	bytes	I2	Whole meters
Debris Code	80	1	bytes	A1	NODC Debris Code (for non- bird associated debris)
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Ice Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 3
Station No	11	5	bytes	A5	
Ice In Transect					
Cover	16	1	bytes	A1	WMO Code 0547
Type	17	1	bytes	A1	WMO Code 3763
Form	18	1	bytes	A1	WMO Code 1147
Relief	19	1	bytes	A1	WMO Code 3962
Thick	20	1	bytes	A1	WMO Code 4006
Melt	21	1	bytes	A1	WMO Code 2650
Ice Outside Transect					
Cover	22	1	bytes	A1	WMO Code 0547
Type	23	1	bytes	A1	WMO Code 3763
Form	24	1	bytes	A1	WMO Code 1147
Relief	25	1	bytes	A1	WMO Code 3962
Thick	26	1	bytes	A1	WMO Code 4006
Melt	27	1	bytes	A1	WMO Code 2650
Open Water					
Type	28	1	bytes	A1	WMO Code 4552
Direction	29	1	bytes	A1	WMO Code 0739
Distance	30	1	bytes	A1	WMO Code 3600
Lead/Polygons	31	1	bytes	A1	WMO Code 4300
Visible Ice					
Description	32	1	bytes	A1	WMO Code 0663
Direction	33	1	bytes	A1	WMO Code 0739
Distance	34	1	bytes	A1	WMO Code 3600
Miscellaneous					
Arctic Cod	35	1	bytes	A1	NODC Collection Code
Excess					
Sediment	36	1	bytes	A1	NODC Collection Code
Ice Algae	37	1	bytes	A1	NODC Collection Code
Mammal Trace	38	1	bytes	A1	NODC Mammal Trace Code
Other					
Features	39	1	bytes	A1	NODC Mammal Trace Code
Ice Pattern					
In Transect	40	1	bytes	A1	1-Regular, 2-Clumped
Outside Trans	41	1	bytes	A1	1-Regular, 2-Clumped

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Ice (continued)

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Ship in Lead or Polynya Location	42	1	bytes	A1	1-Lead, 2-Polynya, 3-Indeterminable
Width	43	1	bytes	A1	WMO Code 4300
Distance	44	1	bytes	A1	WMO Code 4300
Time of Ice Conditions	45	2	bytes	I2	Whole minutes from start time to observation time, must increase for a station
Water vs Land % Covered	47	2	bytes	I2	00-99 Percent
Pond Size	49	1	bytes	A1	NODC Size of Pond Code
Open Water Ice Description Cover	50	1	bytes	A1	WMO Code 1147
	51	1	bytes	A1	WMO Code 0547
Blank	52	26	bytes	X26	
Sequence Number	78	3	bytes	I3	Ascending numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Text Record

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 4
Station No	11	5	bytes	A5	
Text	16	62	bytes	A62	
Sequence Number	78	3	bytes	I3	Ascending Numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Data Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 5
Station No	11	5	bytes	A5	
Time into Transact	16	2	bytes	I2	Whole minutes from start time to observation time
Taxonomic Code	18	12	bytes	I12	Class 88-92, ends with paired trailing blanks
Species Group	30	2	bytes	I2	
Age	32	1	bytes	A1	NODC Age Class Group Code
Sex	33	1	bytes	A1	NODC Sex Code
Color	34	1	bytes	A1	NODC Color Phase Code
Plumage	35	1	bytes	A1	NODC Plumage Code
Molt	36	1	bytes	A1	NODC Molt Code
Number of Individuals	37	5	bytes	I5	Whole number, must not be omitted
Counting Method	42	1	bytes	A1	NODC Counting Method Code
Reliability	43	1	bytes	A1	NODC Reliability Code
Distance Measure Type	44	1	bytes	A1	NODC Distance Measurement Type Code
Distance to Birds	45	3	bytes	I3	Tens of meters
Direction of Flight	48	2	bytes	I2	00-35 Tens of degrees
Association	50	1	bytes	A1	NODC Type of Assoc Code
Linkage	51	3	bytes	I3	Sequence number of multi- species group in station
Species Number	54	2	bytes	I2	Number of species linked
Behavior	56	2	bytes	A2	NODC Behavior Code
Special Marks	58	1	bytes	A1	NODC Special Marks Code
Bird Condition	59	1	bytes	A1	NODC Bird Condition Code

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Data (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Food Source	60	1	bytes	A1	NODC Food Source Association Code
Tax Code of Food	61	10	bytes	I10	
Debris	71	1	bytes	A1	NODC Debris code
Oil	72	1	bytes	A1	NODC Oil Code
Distance from Breed Colony	73	3	bytes	I3	Nautical miles
Habitat	76	2	bytes	2A1	NODC Habitat Code, may code 2, left to right
Sequence Number	78	3	bytes	I3	Ascending numeric
Substrate	81	1	bytes	A1	NODC Substrate Code
Cover	82	1	bytes	A1	NODC Cover Code
Outside Zone	83	1	bytes	A1	NODC Outside Zone Code

ACCESSION
NUMBER

78-0812

DATA DOCUMENTATION FORM

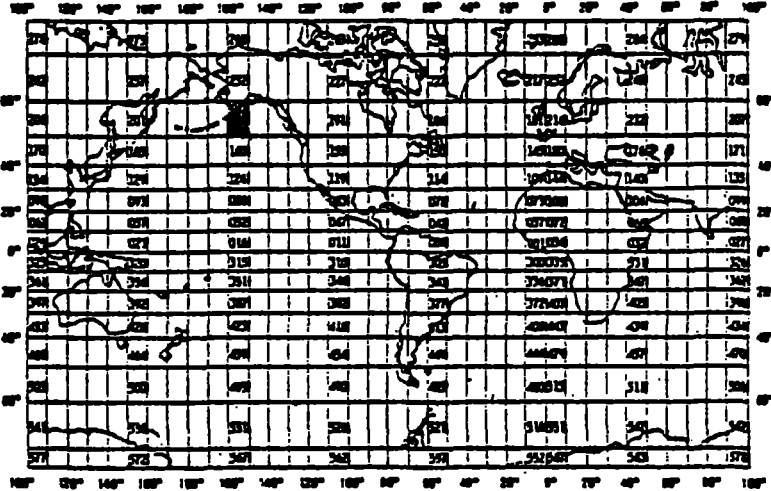
TR 3574

NOAA FORM 24-13
(4-72)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852FORM 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

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED Dr. Calvin Lensink U. S. Fish and Wildlife Service- Office of Biological Services-Coastal Ecosystems 1011 East Tudor Rd. Anchorage, Alaska, 99503											
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED OCSEAP RU - 337 033		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW 6025									
4. PLATFORM NAME(S) MV Nordic Prince	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Ship	6. PLATFORM AND OPERATOR NATIONALITY(IES) <table border="1"><thead><tr><th>PLATFORM</th><th>OPERATOR</th></tr></thead><tbody><tr><td>USA</td><td>USA</td></tr></tbody></table>	PLATFORM	OPERATOR	USA	USA	7. DATES <table border="1"><thead><tr><th>FROM: MO/DAY/YR</th><th>TO: MO/DAY/YR</th></tr></thead><tbody><tr><td>5-1-76</td><td>5-11-76</td></tr></tbody></table>	FROM: MO/DAY/YR	TO: MO/DAY/YR	5-1-76	5-11-76
PLATFORM	OPERATOR										
USA	USA										
FROM: MO/DAY/YR	TO: MO/DAY/YR										
5-1-76	5-11-76										
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR _____ MONTH _____		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA 									
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)											
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) Dr. Calvin Lensink Dr. Patrick Gould (907) 276-3800											

B. SCIENTIFIC 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
Station Type	N/A	See Attached Codes	N/A	N/A
Start Latitude & Longitude	Degrees, Minutes, Seconds, Hemisph.	Combined Radar Fixes and Depth Charts	N/A	N/A
Date - Time	Year, Month, Day Hour, Minute	Always GMT	N/A	N/A
Elapsed Time	Minutes	N/A	N/A	N/A
Time Zone	International Standard	N/A	N/A	N/A
Speed	Knots made good	Derived from plotted positions	N/A	N/A
Course	10's of degrees true made good	Derived from plotted positions	N/A	N/A
Height	Whole meters	Measured with steel Tape	N/A	N/A
Obs. Conditions	033 code	Observers opinion of all factors influencing observations - subjective	N/A	N/A
Transect Width	10's of meters	Estimated, based on periodic checks with a range finder.	N/A	N/A
Depth	meters	Fathometer and Charts	N/A	N/A
Surface Temp.	tenths of degrees centigrade .	Temp. gage at ships intake	N/A	N/A
Sea State	WMO 3700 codes	Observation	N/A	N/A
Weather	WMO 4677 codes selected	Observation - see attached list of selected codes	N/A	N/A
Taxonomic Code	NODC Taxonomic codes	1977 version	N/A	N/A
Age	033 codes	Observation	N/A	N/A
Sex	033 Codes	Observation	N/A	N/A
Color Phase	033 Codes	Observation	N/A	N/A

d					
d					
d					
dddd	PPP	sss			
d d	P P	s s			
d d	P P	s s			
ddd	PPPP	ssss			
	P	s			
	P	s s			
	P	sss			

DATA PROJECTS GROUP
333 Pastore Hall
University of R.I.
Kingston, RI 02881

This Data Documentation Form (DDF) is composed of two parts. The first contains tape specifications and record format descriptions provided by the originator cited in Section A.1. The data have subsequently been validated by the Data Projects Group. Range and relational checks, code group checks, plus relocation of fields, unit conversions, and final tape recording techniques used in this process are given in the second part. Resolution of data errors found during this process has been made through contact with the originator.

B. SCIENTIFIC 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
Number	Number of individual organisms	Binoculars	N/A	N/A
Flight Direction	10's of degrees true	Observation	N/A	N/A
Linkage	033 codes	N/A	N/A	N/A
Behavior	Selected 033 codes	See attached list of Selected codes	N/A	N/A
Outside Zone	033 codes	N/A	N/A	N/A

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Type 1 = Location

Type 2 = Environment

Type 4 = Text

Type 5 = Data

These are differentiated by byte 10

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File organized by Station Number (Record Type 1, Bytes 11-13)

ATTRIBUTES AS EXPRESSED IN ☐ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert L. Blanscett 907-276-3800

ADDRESS U.S.F.&W.S., OBS-CE, 1011 E. Tudor Rd. Anchorage, Alaska, 99503

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE <input type="checkbox"/> BCD <input type="checkbox"/> BINARY <input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/> _____	9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input type="checkbox"/> _____
6. NUMBER OF TRACKS (CHANNELS) <input type="checkbox"/> SEVEN <input checked="" type="checkbox"/> NINE <input type="checkbox"/> _____	10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 <input type="checkbox"/> _____
7. PARITY <input checked="" type="checkbox"/> ODD <input type="checkbox"/> EVEN	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) OCSEAP - USFWS/OBSCE 337 033 - FW6025 MV Nordic Prince 76/5/1 - 76/5/11 LENSINK 9TRK, 800BPI, ODD, EBCDIC NON LABELED-IBM UTILITY B
8. DENSITY <input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI <input type="checkbox"/> 356 BPI <input checked="" type="checkbox"/> 800 BPI <input type="checkbox"/> _____	12. PHYSICAL BLOCK LENGTH IN BYTES 83 13. LENGTH OF BYTES IN BITS 8

RECORD FORMAT DESCRIPTION

RECORD NAME Location (continued) - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN _____ (e.g., hls, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of eyes above sea	66	3	bytes	I3	In whole meters
Observation conditions	75	1	bytes	A1	1-7 bad-excellent
Transect width	81	3	bytes	I3	10's of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Location - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., 22a, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	"Always 033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	"Always 1"
Station Number	11	5	bytes	A5	4th byte coded for ship type 5th byte coded for transect type
Latitude, Degrees	16	2	bytes	I2	Starting Position
Minutes	18	2	bytes	I2	" "
Seconds	20	2	bytes	I2	" "
Hemisphere	22	1	bytes	A1	"N" or "S"
Longitude, Degrees	23	3	bytes	I3	Starting Position
Minutes	26	2	bytes	I2	" "
Seconds	28	2	bytes	I2	" "
Hemisphere	30	1	bytes	A1	"E" or "W"
Year	31	2	bytes	I2	Last two digits of year = Starting Time GMT
Month	33	2	bytes	I2	" " "
Day	35	2	bytes	I2	" " "
Hour	37	2	bytes	I2	" " "
Minute	39	2	bytes	I2	" " "
Latitude, Degrees	41	2	bytes	I2	Ending... Position
Minutes	43	2	bytes	I2	" "
Seconds	45	2	bytes	I2	" "
Hemisphere	47	1	bytes	A1	"N" or "S"
Longitude, Degrees	48	3	bytes	I3	Ending Position
Minutes	51	2	bytes	I2	" "
Seconds	53	2	bytes	I2	" "
Hemisphere	55	1	bytes	A1	"E" or "W"
Elapsed Time	56	2	bytes	I2	whole minutes
Time Zone	58	1	byte	A1	"+" or "-"
Time Zone	59	2	bytes	A2	01-12
Speed Made Good	61	3	bytes	I3	in whole knots
Course Made Good	64	2	bytes	I2	tens of degrees true

RECORD FORMAT DESCRIPTION

RECORD NAME / Data - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "5"
Station Number	11	5	bytes	A5	bytes 14-15 define ship and observation types
Taxonomic Code	18	10	bytes	I10	NODC 1977 codes
Subspecies	28	2	bytes	I2	
Species Group	30	2	bytes	A2	
Age Class	32	1	bytes	A1	
Sex	33	1	bytes	A1	
Color Phase	34	1	bytes	A1	
Number of Individuals	37	5	bytes	I5	whole numeric
Flight Direction	48	2	bytes	I2	In 10's of degrees
Linkage	51	3	bytes	I3	Sequence number of a group within one observation
Behavior	56	2	bytes	A2	
Sequence	78	3	bytes	I3	Ascending numeric, for sorting
Outsice Zone	83	1	bytes	A1	0 = birds within transect width defined in RT 1, bytes 81-83. 1-9 = birds other than above.

RECORD FORMAT DESCRIPTION

RECORD NAME Environmental - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., 325, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "2"
Depth	16	4	bytes	I4	In whole meters
Surface Temp.	23	4	bytes	I4	In tenths of degrees Centigrade
Surface Salinity	27	3	bytes	I3	In parts per hundred
Barometric Pressure	40	4	bytes	I4	In tenths of millibars
Barometric Trend	44	1	bytes	A1	+ = rising, 0 = steady, - = falling
Wind Direction	45	2	bytes	I2	In 10's of degrees true See WMO codes 0885 & 0877
Wind Speed	47	2	bytes	I2	In whole knots
Sea State	49	1	bytes	A1	WMO code 3700
Weather	55	2	bytes	A2	WMO code 4677 with restricted choice as shown below: 00, 03, 41, 43, 68, 69, 87, 88, 71, 73

D. INSTRUMENT CALIBRATION

This calibration information will be utilized by NOAA's National Oceanographic Instrumentation Center in their efforts to develop calibration standards for voluntary acceptance by the oceanographic community. Identify the instruments used by your organization to obtain the scientific content of the DDF (i.e., STD, temperature and pressure sensors, salinometers, oxygen meters, velocimeters, etc.) and furnish the calibration data requested by completing and/or checking ("✓") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

INSTRUMENT TYPE (MFR., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Record Type is coded in column 10 of each record as follows:

- 1 - Location
- 2 - Environment
- 3 - Ice Record
- 4 - Text Comments
- 5 - Data Observations

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File is organized by Station Number in Columns 11-15 of each record. Each Station contains one Type 1 card; one Type 2 card; zero to several Type 3 cards; and one to several Type 5 cards (one for each observation at that station).

3. ATTRIBUTES AS EXPRESSED IN

☒ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Data Projects Group (401)792-2320

ADDRESS 333 Pastore Hall, University of Rhode Island, Kingston, RI 02881

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input checked="" type="checkbox"/> 1/2 inch</p>												
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17</p> <p>IBM 3420 <input checked="" type="checkbox"/> Tape Mark</p>												
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <div style="border: 1px solid black; padding: 5px;"> <p>FW6025 on tape G02NDC included with cruises:</p> <table border="0"> <tr> <td>FW5004</td> <td>→ FW6025</td> <td>FW7027</td> </tr> <tr> <td>FW5018</td> <td>FW6026</td> <td>FW7026</td> </tr> <tr> <td>FW5034</td> <td>FW6028</td> <td>FW7029</td> </tr> <tr> <td></td> <td>FW6029</td> <td>FW6093</td> </tr> </table> </div>	FW5004	→ FW6025	FW7027	FW5018	FW6026	FW7026	FW5034	FW6028	FW7029		FW6029	FW6093
FW5004	→ FW6025	FW7027											
FW5018	FW6026	FW7026											
FW5034	FW6028	FW7029											
	FW6029	FW6093											
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>Lrcl=83 Blk size=4150</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>												

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Location Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 1
Station No	11	5	bytes	A5	
Latitude -					Starting Position
Degrees	16	2	bytes	I2	33-73 degrees
Minutes	18	2	bytes	I2	0-59 minutes
Seconds	20	2	bytes	I2	0-59 seconds
Hemisphere	22	1	bytes	A1	N hemisphere
Longitude -					Starting Position
Degrees	23	3	bytes	I3	118-180 degrees
Minutes	26	2	bytes	I2	0-59 minutes
Seconds	28	2	bytes	I2	0-59 seconds
Hemisphere	30	1	bytes	A1	W hemisphere
Date -					Starting date GMT
Year	31	2	bytes	I2	Last 2 digits
Month	33	2	bytes	I2	1-12 months
Day	35	2	bytes	I2	1-31 days
Time -					Starting time GMT
Hours	37	2	bytes	I2	0-23 hours
Minutes	39	2	bytes	I2	0-59 minutes
Latitude -					Ending Position
Degrees	41	2	bytes	I2	33-73 degrees
Minutes	43	2	bytes	I2	0-59 minutes
Seconds	45	2	bytes	I2	0-59 seconds
Hemisphere	47	1	bytes	A1	N hemisphere
Longitude -					Ending Position
Degrees	48	3	bytes	I3	118-180 degrees
Minutes	51	2	bytes	I2	0-59 minutes
Seconds	53	2	bytes	I2	0-59 seconds
Hemisphere	55	1	bytes	A1	W hemisphere
Elapsed Time	56	2	bytes	I2	0-30 whole minutes
Time Zone -					
Sign	58	1	bytes	A1	+ or - relative to GMT
Number	59	2	bytes	I2	Zone 01-12
Ships Speed	61	3	bytes	I3	Whole knots
Course Heading	64	2	bytes	I2	0-35 tens of degrees true

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Location (continued)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of Eyes Above Sea	66	3	bytes	I3	Whole meters
Platform Type	69	1	bytes	A1	NODC Platform Type Code
Sampling Technique	70	1	bytes	A2	NODC Sampling Technique Code
Ship Activity	71	1	bytes	A1	NODC Ship Activity Code
Photos Taken	72	1	bytes	A1	NODC Collection Code
Width of Transect	73	1	bytes	A1	NODC Zone Scheme Code
Angle of View	74	1	bytes	A1	NODC Angle of View Code
Observation Conditions	75	1	bytes	A1	NODC Observation Conditions Code
Distance Made Good	76	4	bytes	I4	Kilometers to tenths
Watch Type	80	1	bytes	A1	
Transect Width	81	3	bytes	I3	Tens of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment Record

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 2
Station No	11	5	bytes	A5	
Bottom Depth	16	4	bytes	I4	Whole meters
Thermocline Depth	20	3	bytes	I3	0-100 meters
Sea Surface Temperature	23	4	bytes	I4	-3 to +10 degrees to tenths Celsius
Salinity	27	3	bytes	I3	20.0/00 to 34.0/00 parts per thousand to tenths
Dry Bulb Temp	30	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Wet Bulb Temp	34	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Humidity	38	2	bytes	I2	00-99 percent
Barometric Pressure	40	4	bytes	I4	0.9600-1.0400 bars to tenths of millibars
Barometric Trend	44	1	bytes	A1	+ rising, - falling, 0 steady
Wind Direction	45	2	bytes	I2	NOBC Direction Code (WMO Codes 0885 & 0877)
Wind Speed	47	2	bytes	I2	0-50 knots
Sea State	49	1	bytes	A1	WMO Code 3700
Swell Direction	50	2	bytes	I2	NOBC Direction Code
Swell Height	52	3	bytes	I3	0-07.6 meters to tenths
Weather	55	2	bytes	A2	WMO Code 4677
Cloud Type	57	1	bytes	A1	WMO Code 0500
Cloud Amount	58	1	bytes	A1	WMO Code 2700

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Water Color	59	2	bytes	A2	NODC Water Color Code (Forel-Ule scale)
Visibility	61	1	bytes	A1	WMO Code 4300
Sun Direction	62	1	bytes	A1	NODC Compass Direction Code
Glare Intensity	63	1	bytes	A1	NODC Glare Intensity Code
Glare Area	64	1	bytes	A1	NODC Glare Area Code
Light Level	65	3	bytes	I3	Tens of Foot-candles
Moon Phase	68	1	bytes	A1	NODC Moon Phase Code
Tide Height	69	1	bytes	A1	NODC Tide Height Code
Tide Cycle	70	1	bytes	A1	+ rising, - falling, 0 slack water
Distance to Shore	71	4	bytes	I4	Whole nautical miles
Distance to Shelf break	75	3	bytes	I3	Whole nautical miles
SECCHI Depth	78	2	bytes	I2	Whole meters
Debris Code	80	1	bytes	A1	NODC Debris Code (for non- bird associated debris)
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Ice Record

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 3
Station No	11	5	bytes	A5	
Ice In Transect					
Cover	16	1	bytes	A1	WMO Code 0547
Type	17	1	bytes	A1	WMO Code 3763
Form	18	1	bytes	A1	WMO Code 1147
Relief	19	1	bytes	A1	WMO Code 3962
Thick	20	1	bytes	A1	WMO Code 4006
Melt	21	1	bytes	A1	WMO Code 2650
Ice Outside Transect					
Cover	22	1	bytes	A1	WMO Code 0547
Type	23	1	bytes	A1	WMO Code 3763
Form	24	1	bytes	A1	WMO Code 1147
Relief	25	1	bytes	A1	WMO Code 3962
Thick	26	1	bytes	A1	WMO Code 4006
Melt	27	1	bytes	A1	WMO Code 2650
Open Water					
Type	28	1	bytes	A1	WMO Code 4552
Direction	29	1	bytes	A1	WMO Code 0739
Distance	30	1	bytes	A1	WMO Code 3600
Lead/Polynya	31	1	bytes	A1	WMO Code 4300
Visible Ice					
Description	32	1	bytes	A1	WMO Code 0663
Direction	33	1	bytes	A1	WMO Code 0739
Distance	34	1	bytes	A1	WMO Code 3600
Miscellaneous					
Arctic Cod Excess	35	1	bytes	A1	NODC Collection Code
Sediment	36	1	bytes	A1	NODC Collection Code
Ice Algae	37	1	bytes	A1	NODC Collection Code
Mammal Trace	38	1	bytes	A1	NODC Mammal Trace Code
Other Features	39	1	bytes	A1	NODC Mammal Trace Code
Ice Pattern					
In Transect	40	1	bytes	A1	1-Regular, 2-Clumped
Outside Trans	41	1	bytes	A1	1-Regular, 2-Clumped

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Ice (continued)

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Ship in Lead or Polynya Location	42	1	bytes	A1	1-Lead, 2-Polynya, 3-Indeterminable
Width	43	1	bytes	A1	WMO Code 4300
Distance	44	1	bytes	A1	WMO Code 4300
Time of Ice Conditions	45	2	bytes	I2	Whole minutes from start time to observation time, must increase for a station
Water vs Land % Covered	47	2	bytes	I2	00-99 Percent
Pond Size	49	1	bytes	A1	NODC Size of Pond Code
Open Water Ice Description Cover	50	1	bytes	A1	WMO Code 1147
	51	1	bytes	A1	WMO Code 0547
Blank	52	26	bytes	X26	
Sequence Number	78	3	bytes	I3	Ascending numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Text Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 4
Station No	11	5	bytes	A5	
Text	16	62	bytes	A62	
Sequence Number	78	3	bytes	I3	Ascending Numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Data Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 5
Station No	11	5	bytes	A5	
Time into Transect	16	2	bytes	I2	Whole minutes from start time to observation time
Taxonomic Code	18	12	bytes	I12	Class 88-92, ends with paired trailing blanks
Species Group	30	2	bytes	I2	
Age	32	1	bytes	A1	NODC Age Class Group Code
Sex	33	1	bytes	A1	NODC Sex Code
Color	34	1	bytes	A1	NODC Color Phase Code
Plumage	35	1	bytes	A1	NODC Plumage Code
Molt	36	1	bytes	A1	NODC Molt Code
Number of Individuals	37	5	bytes	I5	Whole number, must not be omitted
Counting Method	42	1	bytes	A1	NODC Counting Method Code
Reliability	43	1	bytes	A1	NODC Reliability Code
Distance Measure Type	44	1	bytes	A1	NODC Distance Measurement Type Code
Distance to Birds	45	3	bytes	I3	Tens of meters
Direction of Flight	48	2	bytes	I2	00-35 Tens of degrees
Association	50	1	bytes	A1	NODC Type of Assoc Code
Linkage	51	3	bytes	I3	Sequence number of multi- species group in station
Species Number	54	2	bytes	I2	Number of species linked
Behavior	56	2	bytes	A2	NODC Behavior Code
Special Marks	58	1	bytes	A1	NODC Special Marks Code
Bird Condition	59	1	bytes	A1	NODC Bird Condition Code

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Data (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Food Source	60	1	bytes	A1	NODC Food Source Association Code
Tax Code of Food	61	10	bytes	I10	
Debris	71	1	bytes	A1	NODC Debris code
Oil	72	1	bytes	A1	NODC Oil Code
Distance from Breed Colony	73	3	bytes	I3	Nautical miles
Habitat	76	2	bytes	2A1	NODC Habitat Code, may code 2, left to right
Sequence Number	78	3	bytes	I3	Ascending numeric
Substrate	81	1	bytes	A1	NODC Substrate Code
Cover	82	1	bytes	A1	NODC Cover Code
Outside Zone	83	1	bytes	A1	NODC Outside Zone Code

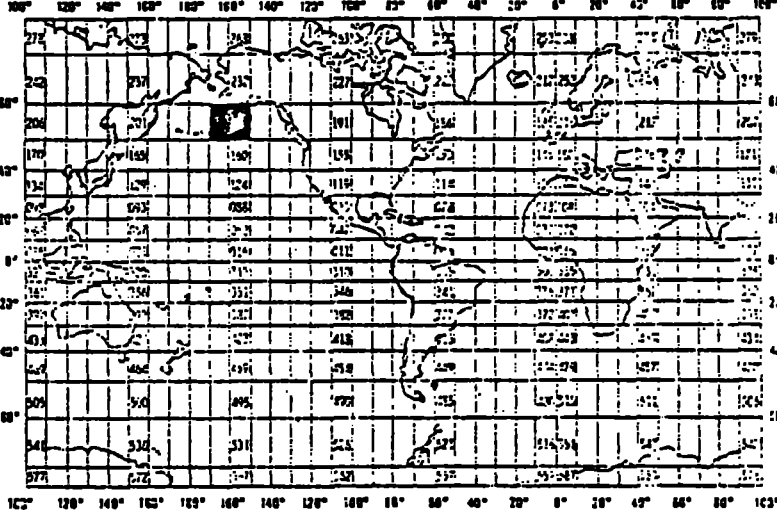
DATA DOCUMENTATION FORM

78-0812
TR 3581NOAA FORM 24-13
(4-72)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852FORM 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

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED Dr. Calvin Lensink U.S. Fish and Wildlife Service - Office of Biological Services - Coastal Ecosystems 800 A Street Suite 110 Anchorage, Alaska 99501			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED OCSEAP RU-337 033		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW7029	
4. PLATFORM NAME(S) Grumann Goose	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Aircraft	6. PLATFORM AND OPERATOR NATIONALITY(IES) PLATFORM OPERATOR USA USA	7. DATES FROM: MO/DAY/YR TO: MO/DAY/YR 04/20/77 04/26/77
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR MONTH		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA 	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)			
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) Dr. Calvin Lensink Mr. Craig Harrison (907) 265-5401			

d					
d					
d					
ddd	ppp	sss			
d	d	p	p	s	s
d	d	p	p	s	s
ddd	pppp	ssss			
	p			s	
	p	s	s		
	p	sss			

DATA PROJECTS GROUP
333 Pastore Hall
University of R.I.
Kingston, RI 02881

This Data Documentation Form (DDF) is composed of two parts. The first contains tape specifications and record format descriptions provided by the originator cited in Section A.1. The data have subsequently been validated by the Data Projects Group. Range and relational checks, code group checks, plus relocation of fields, unit conversions, and final tape recording techniques used in this process are given in the second part. Resolution of data errors found during this process has been made through contact with the originator.

B. SCIENTIFIC 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
Station Type	N/A	See Attached Codes	N/A	N/A
Start Latitude & Longitude	Degrees, Minutes, Seconds, Hemis.	GNS 500 (VLF output)	N/A	N/A
Date - Time	Year, Month, Day, Hour, Minute	Always GMT	N/A	N/A
End Latitude & Longitude	Degrees, Minutes, Seconds, Hemis.	GNS 500 (VLF output)	N/A	N/A
Time Zone	International Standard	N/A	N/A	N/A
Speed	Knots	GNS 500 (VLF output)	N/A	N/A
Course	10's of degrees true made good	Compass	N/A	N/A
Height	Whole Meters	Radio altimeter	N/A	N/A
Transect Width	10's of meters	Estimated, based on clinometer and trigonometry	N/A	N/A
Sea State	WMO 3700 codes	Observation	N/A	N/A
Weather	WMO 4677 codes selected	Observation - see attached list of selected codes	N/A	N/A
Taxonomic Code	NODC Taxonomic Codes	1977 Version	N/A	N/A
Number	Number of individual organisms	Observation	N/A	N/A
Linkage	033 Codes	N/A	N/A	N/A
Outside Zone	033 Codes	N/A	N/A	N/A

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Type 1 = Location

Type 2 = Environmental

Type 4 = Text

Type 5 = Data

These are differentiated by byte 10

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File organized by Station Number (Record Type 1, Bytes 11-13)

3. ATTRIBUTES AS EXPRESSED IN ☐ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert L. Blanscett (907) 265-5401ADDRESS U.S.F.W.S., OBS-CE, 800 A St., Suite 110, Anchorage, Alaska 99501

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE <input type="checkbox"/> BCD <input type="checkbox"/> BINARY <input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/> _____	9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input type="checkbox"/> _____
6. NUMBER OF TRACKS (CHANNELS) <input type="checkbox"/> SEVEN <input checked="" type="checkbox"/> NINE <input type="checkbox"/> _____	10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 <input type="checkbox"/> _____
7. PARITY <input checked="" type="checkbox"/> ODD <input type="checkbox"/> EVEN	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) OCSEAP - USFWS/OBSCE 337 033 FW7029 Grumann Goose Aerial Survey 77/04/20 - 77/04/26 LENSINK 9 TRK, 800 BPI, ODD, EBCDIC
8. DENSITY <input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI <input type="checkbox"/> 556 BPI <input checked="" type="checkbox"/> 800 BPI <input type="checkbox"/> _____	12. PHYSICAL BLOCK LENGTH IN BYTES 83 13. LENGTH OF BYTES IN BITS 8

RECORD FORMAT DESCRIPTION

RECORD NAME Location - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	"Always 033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	"Always 1"
Station Number	11	5	bytes	A5	4th byte coded for ship type 5th byte coded for transect type
Latitude, Degrees	16	2	bytes	I2	Starting Position
Minutes	18	2	bytes	I2	" "
Seconds	20	2	bytes	I2	" "
Hemisphere	22	1	bytes	A1	"N" or "S"
Longitude, Degrees	23	3	bytes	I3	Starting Position
Minutes	26	2	bytes	I2	" "
Seconds	28	2	bytes	I2	" "
Hemisphere	30	1	bytes	A1	"E" or "W"
Year	31	2	bytes	I2	Last two digits of year = Starting Time GMT
Month	33	2	bytes	I2	" " "
Day	35	2	bytes	I2	" " "
Hour	37	2	bytes	I2	" " "
Minute	39	2	bytes	I2	" " "
Latitude, Degrees	41	2	bytes	I2	Ending... Position
Minutes	43	2	bytes	I2	" "
Seconds	45	2	bytes	I2	" "
Hemisphere	47	1	bytes	A1	"N" or "S"
Longitude, Degrees	48	3	bytes	I3	Ending Position
Minutes	51	2	bytes	I2	" "
Seconds	53	2	bytes	I2	" "
Hemisphere	55	1	bytes	A1	"E" or "W"
Time Zone	58	1	byte	A1	"4" or "-"
Time Zone	59	2	bytes	A2	01-12
Speed Made Good	61	3	bytes	I3	in whole knots
Course Made Good	64	2	bytes	I2	tens of degrees true

RECORD FORMAT DESCRIPTION

, NAME Location (continued) - Ship and Aircraft Census

LD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
ight of eyes ove sea	66	3	bytes	I3	In whole meters
ansect width	81	3	bytes	I3	10's of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Environmental - Aircraft Censuses

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Always 2
Wind Direction	45	2	bytes	I2	In 10's of degrees true See WMO codes 0885 & 0877
Wind Speed	47	2	bytes	I2	In whole knots
Sea State	49	1	bytes	A1	WMO code 3700
Weather	55	2	bytes	A2	WMO code 4677 with restricted choice as shown below: 00,03,41,43,68,69,87,88,71,73

RECORD FORMAT DESCRIPTION

1 ACCESSION 1

RECORD NAME Data - Aircraft Censuses

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Always 5
Station Number	11	5	bytes	A5	bytes 14-15 define ship and observation types
Taxonomic Code	18	10	bytes	I10	NODC 1977 codes
Subspecies	28	2	bytes	I2	
Species Group	30	2	bytes	A2	
Number of Individuals	37	5	bytes	I5	whole numeric
Linkage	51	3	bytes	I3	Sequence number of a group within one observation
Sequence	78	3	bytes	I3	Ascending numeric, for sorting
Outside Zone	83	1	bytes	A1	0=birds within transect width defined in RT 1, bytes 81-83. 1-9=birds other than above

D. INSTRUMENT CALIBRATION

This calibration information will be utilized by NOAA's National Oceanographic Instrumentation Center in their efforts to develop calibration standards for voluntary acceptance by the oceanographic community. Identify the instruments used by your organization to obtain the scientific content of the DDF (i.e., STD, temperature and pressure sensors, salinometers, oxygen meters, velocimeters, etc.) and furnish the calibration data requested by completing and/or checking ("✓") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

INSTRUMENT TYPE (MFR., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED (✓)
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Record Type is coded in column 10 of each record as follows:

- 1 - Location
- 2 - Environment
- 3 - Ice Record
- 4 - Text Comments
- 5 - Data Observations

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File is organized by Station Number in Columns 11-15 of each record. Each Station contains one Type 1 card; one Type 2 card; zero to several Type 3 cards; and one to several Type 5 cards (one for each observation at that station).

3. ATTRIBUTES AS EXPRESSED IN

☒ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Data Projects Group (401)792-2320

ADDRESS 333 Pastore Hall, University of Rhode Island, Kingston, RI 02881

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input checked="" type="checkbox"/> 1/2 inch</p>												
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17</p> <p>IBM 3420 <input checked="" type="checkbox"/> Tape Mark</p>												
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS)</p> <div style="border: 1px solid black; padding: 5px;"> <p>FW7029 on tape G02NDC</p> <p>included with cruises:</p> <table border="0"> <tr> <td>FW5004</td> <td>FW6025</td> <td>FW7027</td> </tr> <tr> <td>FW5018</td> <td>FW6026</td> <td>FW7026</td> </tr> <tr> <td>FW5034</td> <td>FW6028</td> <td>→ FW7029</td> </tr> <tr> <td></td> <td>FW6029</td> <td>FW6093</td> </tr> </table> </div>	FW5004	FW6025	FW7027	FW5018	FW6026	FW7026	FW5034	FW6028	→ FW7029		FW6029	FW6093
FW5004	FW6025	FW7027											
FW5018	FW6026	FW7026											
FW5034	FW6028	→ FW7029											
	FW6029	FW6093											
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>Lrecl=83 Blk size=4150</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>												

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Location Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 1
Station No	11	5	bytes	A5	
Latitude -					Starting Position
Degrees	16	2	bytes	I2	33-73 degrees
Minutes	18	2	bytes	I2	0-59 minutes
Seconds	20	2	bytes	I2	0-59 seconds
Hemisphere	22	1	bytes	A1	N hemisphere
Longitude -					Starting Position
Degrees	23	3	bytes	I3	118-180 degrees
Minutes	26	2	bytes	I2	0-59 minutes
Seconds	28	2	bytes	I2	0-59 seconds
Hemisphere	30	1	bytes	A1	W hemisphere
Date -					Starting date GMT
Year	31	2	bytes	I2	Last 2 digits
Month	33	2	bytes	I2	1-12 months
Day	35	2	bytes	I2	1-31 days
Time -					Starting time GMT
Hours	37	2	bytes	I2	0-23 hours
Minutes	39	2	bytes	I2	0-59 minutes
Latitude -					Ending Position
Degrees	41	2	bytes	I2	33-73 degrees
Minutes	43	2	bytes	I2	0-59 minutes
Seconds	45	2	bytes	I2	0-59 seconds
Hemisphere	47	1	bytes	A1	N hemisphere
Longitude -					Ending Position
Degrees	48	3	bytes	I3	118-180 degrees
Minutes	51	2	bytes	I2	0-59 minutes
Seconds	53	2	bytes	I2	0-59 seconds
Hemisphere	55	1	bytes	A1	W hemisphere
Elapsed Time	56	2	bytes	I2	0-30 whole minutes
Time Zone -					
Sign	58	1	bytes	A1	+ or - relative to GMT
Number	59	2	bytes	I2	Zone 01-12
Ships Speed	61	3	bytes	I3	Whole knots
Course Heading	64	2	bytes	I2	0-35 tens of degrees true

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Location (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of Eyes Above Sea	66	3	bytes	I3	Whole meters
Platform Type	69	1	bytes	A1	NODC Platform Type Code
Sampling Technique	70	1	bytes	A2	NODC Sampling Technique Code
Ship Activity	71	1	bytes	A1	NODC Ship Activity Code
Photos Taken	72	1	bytes	A1	NODC Collection Code
Width of Transect	73	1	bytes	A1	NODC Zone Scheme Code
Angle of View	74	1	bytes	A1	NODC Angle of View Code
Observation Conditions	75	1	bytes	A1	NODC Observation Conditions Code
Distance Made Good	76	4	bytes	I4	Kilometers to tenths
Watch Type	80	1	bytes	A1	
Transect Width	81	3	bytes	I3	Tens of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment Record

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 2
Station No	11	5	bytes	A5	
Bottom Depth	16	4	bytes	I4	Whole meters
Thermocline Depth	20	3	bytes	I3	0-100 meters
Sea Surface Temperature	23	4	bytes	I4	-3 to +10 degrees to tenths Celsius
Salinity	27	3	bytes	I3	20 o/oo to 34 o/oo parts per thousand to tenths
Dry Bulb Temp	30	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Wet Bulb Temp	34	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Humidity	38	2	bytes	I2	00-99 percent
Barometric Pressure	40	4	bytes	I4	0.9600-1.0400 bars to tenths of millibars
Barometric Trend	44	1	bytes	A1	+ rising, - falling, 0 steady
Wind Direction	45	2	bytes	I2	NODC Direction Code (WMO Codes 0885 & 0877)
Wind Speed	47	2	bytes	I2	0-50 knots
Sea State	49	1	bytes	A1	WMO Code 3700
Swell Direction	50	2	bytes	I2	NODC Direction Code
Swell Height	52	3	bytes	I3	0-07.6 meters to tenths
Weather	55	2	bytes	A2	WMO Code 4677
Cloud Type	57	1	bytes	A1	WMO Code 0500
Cloud Amount	58	1	bytes	A1	WMO Code 2700

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Water Color	59	2	bytes	A2	NODC Water Color Code (Forel-Ule scale)
Visibility	61	1	bytes	A1	WMO Code 4300
Sun Direction	62	1	bytes	A1	NODC Compass Direction Code
Glare Intensity	63	1	bytes	A1	NODC Glare Intensity Code
Glare Area	64	1	bytes	A1	NODC Glare Area Code
Light Level	65	3	bytes	I3	Tens of Foot-candles
Moon Phase	68	1	bytes	A1	NODC Moon Phase Code
Tide Height	69	1	bytes	A1	NODC Tide Height Code
Tide Cycle	70	1	bytes	A1	+ rising, - falling, 0 slack water
Distance to Shore	71	4	bytes	I4	Whole nautical miles
Distance to Shelf break	75	3	bytes	I3	Whole nautical miles
SECCHI Depth	78	2	bytes	I2	Whole meters
Debris Code	80	1	bytes	A1	NODC Debris Code (for non- bird associated debris)
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Ice Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 3
Station No	11	5	bytes	A5	
Ice In Transect					
Cover	16	1	bytes	A1	WMO Code 0547
Type	17	1	bytes	A1	WMO Code 3763
Form	18	1	bytes	A1	WMO Code 1147
Relief	19	1	bytes	A1	WMO Code 3962
Thick	20	1	bytes	A1	WMO Code 4006
Melt	21	1	bytes	A1	WMO Code 2650
Ice Outside Transect					
Cover	22	1	bytes	A1	WMO Code 0547
Type	23	1	bytes	A1	WMO Code 3763
Form	24	1	bytes	A1	WMO Code 1147
Relief	25	1	bytes	A1	WMO Code 3962
Thick	26	1	bytes	A1	WMO Code 4006
Melt	27	1	bytes	A1	WMO Code 2650
Open Water					
Type	28	1	bytes	A1	WMO Code 4552
Direction	29	1	bytes	A1	WMO Code 0739
Distance	30	1	bytes	A1	WMO Code 3600
Lead/Polynga	31	1	bytes	A1	WMO Code 4300
Visible Ice					
Description	32	1	bytes	A1	WMO Code 0663
Direction	33	1	bytes	A1	WMO Code 0739
Distance	34	1	bytes	A1	WMO Code 3600
Miscellaneous					
Arctic Cod	35	1	bytes	A1	NODC Collection Code
Excess					
Sediment	36	1	bytes	A1	NODC Collection Code
Ice Algae	37	1	bytes	A1	NODC Collection Code
Mammal Trace	38	1	bytes	A1	NODC Mammal Trace Code
Other					
Features	39	1	bytes	A1	NODC Mammal Trace Code
Ice Pattern					
In Transect	40	1	bytes	A1	1-Regular, 2-Clumped
Outside Trans	41	1	bytes	A1	1-Regular, 2-Clumped

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Ice (continued)

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Ship in Lead or Polynya Location	42	1	bytes	A1	1-Lead, 2-Polynya, 3-Indeterminable
Width	43	1	bytes	A1	WMO Code 4300
Distance	44	1	bytes	A1	WMO Code 4300
Time of Ice Conditions	45	2	bytes	I2	Whole minutes from start time to observation time, must increase for a station
Water vs Land % Covered	47	2	bytes	I2	00-99 Percent
Pond Size	49	1	bytes	A1	NODC Size of Pond Code
Open Water Ice Description Cover	50	1	bytes	A1	WMO Code 1147
	51	1	bytes	A1	WMO Code 0547
Blank	52	26	bytes	X26	
Sequence Number	78	3	bytes	I3	Ascending numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Text Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN _____ (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 4
Station No	11	5	bytes	A5	
Text	16	62	bytes	A62	
Sequence Number	78	3	bytes	I3	Ascending Numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Data Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 5
Station No	11	5	bytes	A5	
Time into Transact	16	2	bytes	I2	Whole minutes from start time to observation time
Taxonomic Code	18	12	bytes	I12	Class 88-92, ends with paired trailing blanks
Species Group	30	2	bytes	I2	
Age	32	1	bytes	A1	NODC Age Class Group Code
Sex	33	1	bytes	A1	NODC Sex Code
Color	34	1	bytes	A1	NODC Color Phase Code
Plumage	35	1	bytes	A1	NODC Plumage Code
Molt	36	1	bytes	A1	NODC Molt Code
Number of Individuals	37	5	bytes	I5	Whole number, must not be omitted
Counting Method	42	1	bytes	A1	NODC Counting Method Code
Reliability	43	1	bytes	A1	NODC Reliability Code
Distance Measure Type	44	1	bytes	A1	NODC Distance Measurement Type Code
Distance to Birds	45	3	bytes	I3	Tens of meters
Direction of Flight	48	2	bytes	I2	00-35 Tens of degrees
Association	50	1	bytes	A1	NODC Type of Assoc Code
Linkage	51	3	bytes	I3	Sequence number of multi- species group in station
Species Number	54	2	bytes	I2	Number of species linked
Behavior	56	2	bytes	A2	NODC Behavior Code
Special Marks	58	1	bytes	A1	NODC Special Marks Code
Bird Condition	59	1	bytes	A1	NODC Bird Condition Code

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Data (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Food Source	60	1	bytes	A1	NODC Food Source Association Code
Tax Code of Food	61	10	bytes	I10	
Debris	71	1	bytes	A1	NODC Debris code
Oil	72	1	bytes	A1	NODC Oil Code
Distance from Breed Colony	73	3	bytes	I3	Nautical miles
Habitat	76	2	bytes	2A1	NODC Habitat Code, may code 2, left to right
Sequence Number	78	3	bytes	I3	Ascending numeric
Substrate	81	1	bytes	A1	NODC Substrate Code
Cover	82	1	bytes	A1	NODC Cover Code
Outside Zone	83	1	bytes	A1	NODC Outside Zone Code

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Data (continued)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Food Source	60	1	bytes	A1	NODC Food Source Association Code
Tax Code of Food	61	10	bytes	I10	
Debris	71	1	bytes	A1	NODC Debris code
Oil	72	1	bytes	A1	NODC Oil Code
Distance from Breed Colony	73	3	bytes	I3	Nautical miles
Habitat	76	2	bytes	2A1	NODC Habitat Code, may code 2, left to right
Sequence Number	78	3	bytes	I3	Ascending numeric
Substrate	81	1	bytes	A1	NODC Substrate Code
Cover	82	1	bytes	A1	NODC Cover Code
Outside Zone	83	1	bytes	A1	NODC Outside Zone Code

DATA DOCUMENTATION FORM

TR 3578

NOAA FORM 24-13
(4-72)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852FORM APPROVED
O.M.B. No. 41-K2651

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 MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED			
Dr. Calvin Lensink U.S. Fish and Wildlife Service - Office of Biological Services - Coastal Ecosystems 800 A Street Suite 110 Anchorage, Alaska 99501			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT	
OCSEAP RU-337 033		FW6093	
4. PLATFORM NAME(S)	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.)	6. PLATFORM AND OPERATOR NATIONALITY(IES)	7. DATES
Grumann Goose	Aircraft	PLATFORM OPERATOR	FROM: MO/DAY/YR TO: MO/DAY/YR
		USA USA	10/04/76 10/15/76
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR _____ MONTH _____		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED.	
9. ARE DATA DECLARED NATIONAL PROGRAM (ONP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNA- TIONAL EXCHANGE?) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)		GENERAL AREA	
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELE- PHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) Dr. Calvin Lensink Mr. Craig Harrison (907) 265-5401			

d						
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ddd	d	PPP		SSS		
d	d	P	P	S	S	
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ddd		PPPP		SSSS		
		P			S	
		P		S	S	
		P		SSS		

DATA PROJECTS GROUP
333 Pastore Hall
University of R.I.
Kinsston, RI 02881

This Data Documentation Form (DDF) is composed of two parts. The first contains tape specifications and record format descriptions provided by the originator cited in Section A.1. The data have subsequently been validated by the Data Projects Group. Range and relational checks, code group checks, plus relocation of fields, unit conversions, and final tape recording techniques used in this process are given in the second part. Resolution of data errors found during this process has been made through contact with the originator.

B. SCIENTIFIC 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
Station Type	N/A	See Attached Codes	N/A	N/A
Start Latitude & Longitude	Degrees, Minutes, Seconds, Hemis.	GNS 500 (VLF output)	N/A	N/A
Date - Time	Year, Month, Day, Hour, Minute	Always GMT	N/A	N/A
End Latitude & Longitude	Degrees, Minutes, Seconds, Hemis.	GNS 500 (VLF output)	N/A	N/A
Time Zone	International Standard	N/A	N/A	N/A
Speed	Knots	GNS 500 (VLF output)	N/A	N/A
Course	10's of degrees true made good	Compass	N/A	N/A
Height	Whole Meters	Radio altimeter	N/A	N/A
Transect Width	10's of meters	Estimated, based on clinometer and trigonometry	N/A	N/A
Sea State	WMO 3700 codes	Observation	N/A	N/A
Weather	WMO 4677 codes selected	Observation - see attached list of selected codes	N/A	N/A
Taxonomic Code	NODC Taxonomic Codes	1977 Version	N/A	N/A
Number	Number of individual organisms	Observation	N/A	N/A
Linkage	033 Codes	N/A	N/A	N/A
Outside Zone	033 Codes	N/A	N/A	N/A

C. DATA FORMAT

12

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

ST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Type 1 = Location

Type 2 = Environmental

Type 4 = Text

Type 5 = Data

These are differentiated by byte 10

GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File organized by Station Number (Record Type 1, Bytes 11-13)

ATTRIBUTES AS EXPRESSED IN ☐ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert L. Blanscett (907) 265-5401

ADDRESS U.S.F.W.S., OBS-CE, 800 A St., Suite 110, Anchorage, Alaska 99501

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE <input type="checkbox"/> BCD <input type="checkbox"/> BINARY <input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/> _____		9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input type="checkbox"/> _____
6. NUMBER OF TRACKS (CHANNELS) <input type="checkbox"/> SEVEN <input checked="" type="checkbox"/> NINE <input type="checkbox"/> _____		10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 <input type="checkbox"/> _____
7. PARITY <input checked="" type="checkbox"/> ODD <input type="checkbox"/> EVEN		11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) OCSEAP - USFWS/OBSCE 337 033 FW6093 Grumann Goose Aerial Survey 76/10/04 - 76/10/15 LENSINK 9 TRK, 800 BPI, ODD, EBCDIC
8. DENSITY <input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI <input type="checkbox"/> 556 BPI <input checked="" type="checkbox"/> 800 BPI <input type="checkbox"/> _____		
		12. PHYSICAL BLOCK LENGTH IN BYTES 83
		13. LENGTH OF BYTES IN BITS 8

RECORD FORMAT DESCRIPTION

ORD NAME Location - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	"Always 033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	"Always 1"
Station Number	11	5	bytes	A5	4th byte coded for ship type 5th byte coded for transect type
Latitude, Degrees	16	2	bytes	I2	Starting Position
Minutes	18	2	bytes	I2	" "
Seconds	20	2	bytes	I2	" "
Hemisphere	22	1	bytes	A1	"N" or "S"
Longitude, Degrees	23	3	bytes	I3	Starting Position
Minutes	26	2	bytes	I2	" "
Seconds	28	2	bytes	I2	" "
Hemisphere	30	1	bytes	A1	"E" or "W"
Year	31	2	bytes	I2	Last two digits of year = Starting Time GMT
Month	33	2	bytes	I2	" " "
Day	35	2	bytes	I2	" " "
Hour	37	2	bytes	I2	" " "
Minute	39	2	bytes	I2	" " "
Latitude, Degrees	41	2	bytes	I2	Ending... Position
Minutes	43	2	bytes	I2	" "
Seconds	45	2	bytes	I2	" "
Hemisphere	47	1	bytes	A1	"N" or "S"
Longitude, Degrees	48	3	bytes	I3	Ending Position
Minutes	51	2	bytes	I2	" "
Seconds	53	2	bytes	I2	" "
Hemisphere	55	1	bytes	A1	"E" or "W"
Time Zone	58	1	byte	A1	"+" or "-"
Time Zone	59	2	bytes	A2	01-12
Speed Made Good	61	3	bytes	I3	in whole knots
Course Made Good	64	2	bytes	I2	tens of degrees true

RECORD FORMAT DESCRIPTION

NAME Location (continued) - Ship and Aircraft Census

FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of eyes above sea	66	3	bytes	I3	In whole meters
Transect width	81	3	bytes	I3	10's of meters

RECORD FORMAT DESCRIPTION

ORD NAME Environmental - Aircraft Censuses

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Always 2
Wind Direction	45	2	bytes	I2	In 10's of degrees true See WMO codes 0885 & 0877
Wind Speed	47	2	bytes	I2	In whole knots
Sea State	49	1	bytes	A1	WMO code 3700
Weather	55	2	bytes	A2	WMO code 4677 with restricted choice as shown below: 00,03,41,43,68,69,87,88,71,73

RECORD FORMAT DESCRIPTION

ORD NAME Data- Aircraft Censuses

4. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Always 5
Station Number	11	5	bytes	A5	bytes 14-15 define ship and observation types
Taxonomic Code	18	10	bytes	I10	NODC 1977 codes
Subspecies	28	2	bytes	I2	
Species Group	30	2	bytes	A2	
Number of Individuals	37	5	bytes	I5	whole numeric
Linkage	51	3	bytes	I3	Sequence number of a group within one observation
Sequence	78	3	bytes	I3	Ascending numeric, for sorting
Outside Zone	83	1	bytes	A1	0=birds within transect width defined in RT 1, bytes 81-83. 1-9=birds other than above

D. INSTRUMENT CALIBRATION

This calibration information will be utilized by NOAA's National Oceanographic Instrumentation Center in their efforts to develop calibration standards for voluntary acceptance by the oceanographic community. Identify the instruments used by your organization to obtain the scientific content of the DDF (i.e., STD, temperature and pressure sensors, salinometers, oxygen meters, velocimeters, etc.) and furnish the calibration data requested by completing and/or checking ("✓") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

INSTRUMENT TYPE (FR., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED (✓)
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Record Type is coded in column 10 of each record as follows:

- 1 - Location
- 2 - Environment
- 3 - Ice Record
- 4 - Text Comments
- 5 - Data Observations

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File is organized by Station Number in Columns 11-15 of each record. Each Station contains one Type 1 card; one Type 2 card; zero to several Type 3 cards; and one to several Type 5 cards (one for each observation at that station).

3. ATTRIBUTES AS EXPRESSED IN ☒ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Data Projects Group (401)792-2320

ADDRESS 333 Pastore Hall, University of Rhode Island, Kingston, RI 02881

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> 1/2 inch</p>												
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17</p> <p>IBM 3420 <input checked="" type="checkbox"/> Tape Mark</p>												
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS)</p> <div style="border: 1px solid black; padding: 5px;"> <p>FW6093 on tape GO2NDC included with cruises:</p> <table border="0"> <tr> <td>FW5004</td> <td>FW6025</td> <td>FW7027</td> </tr> <tr> <td>FW5018</td> <td>FW6026</td> <td>FW7026</td> </tr> <tr> <td>FW5034</td> <td>FW6028</td> <td>FW7029</td> </tr> <tr> <td></td> <td>FW6029</td> <td>→ FW6093</td> </tr> </table> </div>	FW5004	FW6025	FW7027	FW5018	FW6026	FW7026	FW5034	FW6028	FW7029		FW6029	→ FW6093
FW5004	FW6025	FW7027											
FW5018	FW6026	FW7026											
FW5034	FW6028	FW7029											
	FW6029	→ FW6093											
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 336 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>Lrecl=83 Blk size=4150</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>												

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Location Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 1
Station No	11	5	bytes	A5	
Latitude -					Starting Position
Degrees	16	2	bytes	I2	33-73 degrees
Minutes	18	2	bytes	I2	0-59 minutes
Seconds	20	2	bytes	I2	0-59 seconds
Hemisphere	22	1	bytes	A1	N hemisphere
Longitude -					Starting Position
Degrees	23	3	bytes	I3	118-180 degrees
Minutes	26	2	bytes	I2	0-59 minutes
Seconds	28	2	bytes	I2	0-59 seconds
Hemisphere	30	1	bytes	A1	W hemisphere
Date -					Starting date GMT
Year	31	2	bytes	I2	Last 2 digits
Month	33	2	bytes	I2	1-12 months
Day	35	2	bytes	I2	1-31 days
Time -					Starting time GMT
Hours	37	2	bytes	I2	0-23 hours
Minutes	39	2	bytes	I2	0-59 minutes
Latitude -					Ending Position
Degrees	41	2	bytes	I2	33-73 degrees
Minutes	43	2	bytes	I2	0-59 minutes
Seconds	45	2	bytes	I2	0-59 seconds
Hemisphere	47	1	bytes	A1	N hemisphere
Longitude -					Ending Position
Degrees	48	3	bytes	I3	118-180 degrees
Minutes	51	2	bytes	I2	0-59 minutes
Seconds	53	2	bytes	I2	0-59 seconds
Hemisphere	55	1	bytes	A1	W hemisphere
Elapsed Time	56	2	bytes	I2	0-30 whole minutes
Time Zone -					
Sign	58	1	bytes	A1	+ or - relative to GMT
Number	59	2	bytes	I2	Zone 01-12
Ships Speed	61	3	bytes	I3	Whole knots
Course Heading	64	2	bytes	I2	0-35 tens of degrees true

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Location (continued)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of Eyes Above Sea	66	3	bytes	I3	Whole meters
Platform Type	69	1	bytes	A1	NODC Platform Type Code
Sampling Technique	70	1	bytes	A2	NODC Sampling Technique Code
Ship Activity	71	1	bytes	A1	NODC Ship Activity Code
Photos Taken	72	1	bytes	A1	NODC Collection Code
Width of Transect	73	1	bytes	A1	NODC Zone Scheme Code
Angle of View	74	1	bytes	A1	NODC Angle of View Code
Observation Conditions	75	1	bytes	A1	NODC Observation Conditions Code
Distance Made Good	76	4	bytes	I4	Kilometers to tenths
Watch Type	80	1	bytes	A1	
Transect Width	81	3	bytes	I3	Tens of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment Record

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 2
Station No	11	5	bytes	A5	
Bottom Depth	16	4	bytes	I4	Whole meters
Thermocline Depth	20	3	bytes	I3	0-100 meters
Sea Surface Temperature	23	4	bytes	I4	-3 to +10 degrees to tenths Celsius
Salinity	27	3	bytes	I3	20 o/oo to 34 o/oo parts per thousand to tenths
Dry Bulb Temp	30	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Wet Bulb Temp	34	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Humidity	38	2	bytes	I2	00-99 percent
Barometric Pressure	40	4	bytes	I4	0.9600-1.0400 bars to tenths of millibars
Barometric Trend	44	1	bytes	A1	+ rising, - falling, 0 steady
Wind Direction	45	2	bytes	I2	NODC Direction Code (WMO Codes 0885 & 0877)
Wind Speed	47	2	bytes	I2	0-50 knots
Sea State	49	1	bytes	A1	WMO Code 3700
Swell Direction	50	2	bytes	I2	NODC Direction Code
Swell Height	52	3	bytes	I3	0-07.6 meters to tenths
Weather	55	2	bytes	A2	WMO Code 4677
Cloud Type	57	1	bytes	A1	WMO Code 0500
Cloud Amount	58	1	bytes	A1	WMO Code 2700

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment (continued)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Water Color	59	2	bytes	A2	NODC Water Color Code (Forel-Ule scale)
Visibility	61	1	bytes	A1	WMO Code 4300
Sun Direction	62	1	bytes	A1	NODC Compass Direction Code
Glare Intensity	63	1	bytes	A1	NODC Glare Intensity Code
Glare Area	64	1	bytes	A1	NODC Glare Area Code
Light Level	65	3	bytes	I3	Tens of Foot-candles
Moon Phase	68	1	bytes	A1	NODC Moon Phase Code
Tide Height	69	1	bytes	A1	NODC Tide Height Code
Tide Cycle	70	1	bytes	A1	+ rising, - falling, 0 slack water
Distance to Shore	71	4	bytes	I4	Whole nautical miles
Distance to Shelf break	75	3	bytes	I3	Whole nautical miles
SECCHI Depth	78	2	bytes	I2	Whole meters
Debris Code	80	1	bytes	A1	NODC Debris Code (for non-bird associated debris)
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Ice Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 3
Station No	11	5	bytes	A5	
Ice In Transect					
Cover	16	1	bytes	A1	WMO Code 0547
Type	17	1	bytes	A1	WMO Code 3763
Form	18	1	bytes	A1	WMO Code 1147
Relief	19	1	bytes	A1	WMO Code 3962
Thick	20	1	bytes	A1	WMO Code 4006
Melt	21	1	bytes	A1	WMO Code 2650
Ice Outside Transect					
Cover	22	1	bytes	A1	WMO Code 0547
Type	23	1	bytes	A1	WMO Code 3763
Form	24	1	bytes	A1	WMO Code 1147
Relief	25	1	bytes	A1	WMO Code 3962
Thick	26	1	bytes	A1	WMO Code 4006
Melt	27	1	bytes	A1	WMO Code 2650
Open Water					
Type	28	1	bytes	A1	WMO Code 4552
Direction	29	1	bytes	A1	WMO Code 0739
Distance	30	1	bytes	A1	WMO Code 3600
Lead/Polynya	31	1	bytes	A1	WMO Code 4300
Visible Ice					
Description	32	1	bytes	A1	WMO Code 0663
Direction	33	1	bytes	A1	WMO Code 0739
Distance	34	1	bytes	A1	WMO Code 3600
Miscellaneous					
Arctic Cod	35	1	bytes	A1	NODC Collection Code
Excess					
Sediment	36	1	bytes	A1	NODC Collection Code
Ice Algae	37	1	bytes	A1	NODC Collection Code
Mammal Trace	38	1	bytes	A1	NODC Mammal Trace Code
Other					
Features	39	1	bytes	A1	NODC Mammal Trace Code
Ice Pattern					
In Transect	40	1	bytes	A1	1-Regular, 2-Clumped
Outside Trans	41	1	bytes	A1	1-Regular, 2-Clumped

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Ice (continued)

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Ship in Lead or Polynya Location	42	1	bytes	A1	1-Lead, 2-Polynya, 3-Indeterminable
Width	43	1	bytes	A1	WMO Code 4300
Distance	44	1	bytes	A1	WMO Code 4300
Time of Ice Conditions	45	2	bytes	I2	Whole minutes from start time to observation time, must increase for a station
Water vs Land % Covered	47	2	bytes	I2	00-99 Percent
Pond Size	49	1	bytes	A1	NODC Size of Pond Code
Open Water Ice Description	50	1	bytes	A1	WMO Code 1147
Cover	51	1	bytes	A1	WMO Code 0547
Blank	52	26	bytes	X26	
Sequence Number	78	3	bytes	I3	Ascending numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Text Record

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN _____ (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 4
Station No	11	5	bytes	A5	
Text	16	62	bytes	A62	
Sequence Number	78	3	bytes	I3	Ascending Numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Data Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 5
Station No	11	5	bytes	A5	
Time into Transact	16	2	bytes	I2	Whole minutes from start time to observation time
Taxonomic Code	18	12	bytes	I12	Class 88-92, ends with paired trailing blanks
Species Group	30	2	bytes	I2	
Age	32	1	bytes	A1	NODC Age Class Group Code
Sex	33	1	bytes	A1	NODC Sex Code
Color	34	1	bytes	A1	NODC Color Phase Code
Plumage	35	1	bytes	A1	NODC Plumage Code
Molt	36	1	bytes	A1	NODC Molt Code
Number of Individuals	37	5	bytes	I5	Whole number, must not be omitted
Counting Method	42	1	bytes	A1	NODC Counting Method Code
Reliability	43	1	bytes	A1	NODC Reliability Code
Distance Measure Type	44	1	bytes	A1	NODC Distance Measurement Type Code
Distance to Birds	45	3	bytes	I3	Tens of meters
Direction of Flight	48	2	bytes	I2	00-35 Tens of degrees
Association	50	1	bytes	A1	NODC Type of Assoc Code
Linkage	51	3	bytes	I3	Sequence number of multi- species group in station
Species Number	54	2	bytes	I2	Number of species linked
Behavior	56	2	bytes	A2	NODC Behavior Code
Special Marks	58	1	bytes	A1	NODC Special Marks Code
Bird Condition	59	1	bytes	A1	NODC Bird Condition Code

ACCESSION
NUMBER

78-0812

DATA DOCUMENTATION FORM

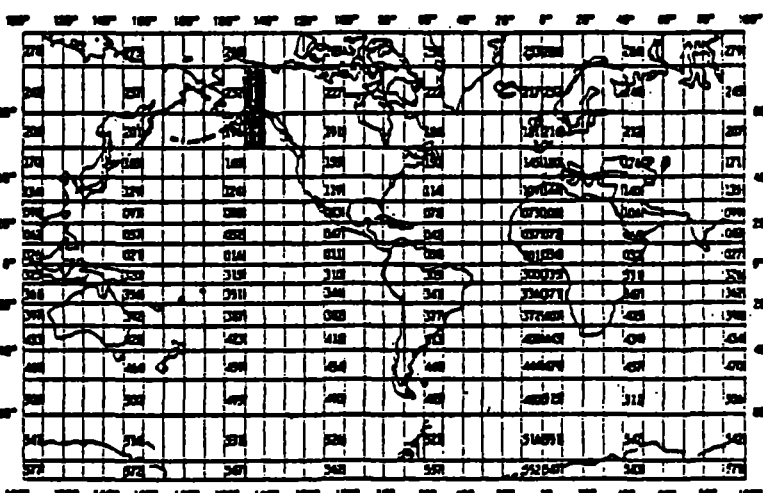
TR3575

NOAA FORM 24-13
(4-72)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20862FORM APPROVED
O.M.B. No. 41-R2631

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 MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED Dr. Calvin Lensink U. S. Fish and Wildlife Service- Office of Biological Services-Coastal Ecosystems 1011 East Tudor Rd. Anchorage, Alaska, 99503			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED OCSEAP RU - 337		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW6026	
4. PLATFORM NAME(S) MV Nordic Prince	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Ship 033	6. PLATFORM AND OPERATOR NATIONALITY(IES) USA USA	7. DATES FROM: MO, DAY, YR TO: MO, DAY, YR 5-18-76 5-20-76
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR MONTH		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA 	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)			
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) Dr. Calvin Lensink Dr. Patrick Gould (907) 276-3800			

B. SCIENTIFIC 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
Station Type	N/A	See Attached Codes	N/A	N/A
Start Latitude & Longitude	Degrees, Minutes, Seconds, Hemisph.	Combined Radar Fixes and Depth Charts	N/A	N/A
Date - Time	Year, Month, Day Hour, Minute	Always GMT	N/A	N/A
Elapsed Time	Minutes	N/A	N/A	N/A
Time Zone	International Standard	N/A	N/A	N/A
Speed	Knots made good	Derived from plotted positions	N/A	N/A
Course	10's of degrees true made good	Derived from plotted positions	N/A	N/A
Height	Whole meters	Measured with steel Tape	N/A	N/A
Obs. Conditions	033 code	Observers opinion of all factors influencing observations - subjective	N/A	N/A
Transect Width	10's of meters	Estimated, based on periodic checks with a range finder.	N/A	N/A
Depth	meters	Fathometer and Charts	N/A	N/A
Surface Temp.	tenths of degrees centigrade.	Temp. gage at ships intake	N/A	N/A
Sea State	WHO 3700 codes	Observation	N/A	N/A
Weather	WHO 4677 codes selected	Observation - see attached list of selected codes	N/A	N/A
Taxonomic Code	MONC Taxonomic codes	1977 version	N/A	N/A
Age	033 codes	Observation	N/A	N/A
Sex	033 Codes	Observation	N/A	N/A
Color Phase	033 Codes	Observation	N/A	N/A

d					
d					
d					
ddd	PPP	SSS			
d d	P P	S S			
d d	P P	S S			
ddd	PPP	SSS			
	P	S			
	P	S S			
	P	SSS			

DATA PROJECTS GROUP
333 Pastore Hall
University of R.I.
Kingston, RI 02881

This Data Documentation Form (DDF) is composed of two parts. The first contains tape specifications and record format descriptions provided by the originator cited in Section A.1. The data have subsequently been validated by the Data Projects Group. Range and relational checks, code group checks, plus relocation of fields, unit conversions, and final tape recording techniques used in this process are given in the second part. Resolution of data errors found during this process has been made through contact with the originator.

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Type 1 = Location

Type 2 = Environment

Type 4 = Text

Type 5 = Data

These are differentiated by byte 10

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File organized by Station Number (Record Type 1, Bytes 11-13)

ATTRIBUTES AS EXPRESSED IN

☐ PL-1
☐ FORTRAN

☐ ALGOL
☐ _____

☐ COBOL
LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert L. Blanscott 907-276-3800

ADDRESS U.S.F.&W.S., OBS-CE, 1011 E. Tudor Rd. Anchorage, Alaska, 99503

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input type="checkbox"/> _____</p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>OCSEAP - USFWS/OBSCE</p> <p>337 033 - FW6026</p> <p>MV Nordic Prince</p> <p>76/5/18 - 76/5/20 LENSINK</p> <p>9TRK, 800BPI, ODD, EBCDIC</p> <p>NON LABELED-IBM UTILITY B</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input checked="" type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>83</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>

B. SCIENTIFIC 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
Number	Number of individual organisms	Binoculars	N/A	N/A
Flight Direction	10's of degrees true	Observation	N/A	N/A
Linkage	033 codes	N/A	N/A	N/A
Behavior	Selected 033 codes	See attached list of Selected codes	N/A	N/A
Outside Zone	033 codes	N/A	N/A	N/A

RECORD FORMAT DESCRIPTION

RECORD NAME Location - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	"Always 033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	"Always 1"
Station Number	11	5	bytes	A5	4th byte coded for ship type 5th byte coded for transect type
Latitude, Degrees	16	2	bytes	I2	Starting Position
Minutes	18	2	bytes	I2	" "
Seconds	20	2	bytes	I2	" "
Hemisphere	22	1	bytes	A1	"N" or "S"
Longitude, Degrees	23	3	bytes	I3	Starting Position
Minutes	26	2	bytes	I2	" "
Seconds	28	2	bytes	I2	" "
Hemisphere	30	1	bytes	A1	"E" or "W"
Year	31	2	bytes	I2	Last two digits of year = Starting Time GMT
Month	33	2	bytes	I2	" " "
Day	35	2	bytes	I2	" " "
Hour	37	2	bytes	I2	" " "
Minute	39	2	bytes	I2	" " "
Latitude, Degrees	41	2	bytes	I2	Ending... Position
Minutes	43	2	bytes	I2	" "
Seconds	45	2	bytes	I2	" "
Hemisphere	47	1	bytes	A1	"N" or "S"
Longitude, Degrees	48	3	bytes	I3	Ending Position
Minutes	51	2	bytes	I2	" "
Seconds	53	2	bytes	I2	" "
Hemisphere	55	1	bytes	A1	"E" or "W"
Elapsed Time	56	2	bytes	I2	whole minutes
Time Zone	58	1	byte	A1	"+" or "-"
Time Zone	59	2	bytes	A2	01-12
Speed Made Good	61	3	bytes	I3	in whole knots
Course Made Good	64	2	bytes	I2	tens of degrees true

RECORD FORMAT DESCRIPT. 1

RECORD NAME Location (continued) - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., hft, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of eyes above sea	66	3	bytes	I3	In whole meters
Observation conditions	75	1	bytes	A1	1-7 bad-excellent
Transect width	81	3	bytes	I3	10's of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Environmental - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "2"
Depth	16	4	bytes	I4	In whole meters
Surface Temp.	23	4	bytes	I4	In tenths of degrees Centigrade
Surface Salinity	27	3	bytes	I3	In parts per hundred
Barometric Pressure	40	4	bytes	I4	In tenths of millibars
Barometric Trend	44	1	bytes	A1	+ = rising, 0 = steady, - = falling
Wind Direction	45	2	bytes	I2	In 10's of degrees true See WMO codes 0885 & 0877
Wind Speed	47	2	bytes	I2	In whole knots
Sea State	49	1	bytes	A1	WMO code 3700
Weather	55	2	bytes	A2	WMO code 4677 with restricted choice as shown below: 00, 03, 41, 43, 68, 69, 87, 88, 71, 73

RECORD FORMAT DESCRIPTION

RECORD NAME / Data - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "5"
Station Number	11	5	bytes	A5	bytes 14-15 define ship and observation types
Taxonomic Code	18	10	bytes	I10	NODC 1977 codes
Subspecies	28	2	bytes	I2	
Species Group	30	2	bytes	A2	
Age Class	32	1	bytes	A1	
Sex	33	1	bytes	A1	
Color Phase	34	1	bytes	A1	
Number of Individuals	37	5	bytes	I5	whole numeric
Flight Direction	48	2	bytes	I2	In 10's of degrees
Linkage	51	3	bytes	I3	Sequence number of a group within one observation
Behavior	56	2	bytes	A2	
Sequence	78	3	bytes	I3	Ascending numeric, for sorting
Outsice Zone	83	1	bytes	A1	0 = birds within transect width defined in RT 1, bytes 81-83. 1-9 = birds other thar above.

D. INSTRUMENT CALIBRATION

This calibration information will be utilized by NOAA's National Oceanographic Instrumentation Center in their efforts to develop calibration standards for voluntary acceptance by the oceanographic community. Identify the instruments used by your organization to obtain the scientific content of the DDF (i.e., STD, temperature and pressure sensors, salinometers, oxygen meters, velocimeters, etc.) and furnish the calibration data requested by completing and/or checking ("✓") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

INSTRUMENT TYPE (MFN., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Record Type is coded in column 10 of each record as follows:

- 1 - Location
- 2 - Environment
- 3 - Ice Record
- 4 - Text Comments
- 5 - Data Observations

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File is organized by Station Number in Columns 11-15 of each record. Each Station contains one Type 1 card; one Type 2 card; zero to several Type 3 cards; and one to several Type 5 cards (one for each observation at that station).

3. ATTRIBUTES AS EXPRESSED IN ☒ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Data Projects Group (401)792-2320

ADDRESS 333 Pastore Hall, University of Rhode Island, Kingston, RI 02881

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input checked="" type="checkbox"/> 1/2 inch</p>												
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17</p> <p>IBM 3420 <input checked="" type="checkbox"/> Tape Mark</p>												
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME KEY SPECIFICATIONS OF DATA)</p> <div style="border: 2px solid black; padding: 5px;"> <p>FW6026 on tape GO2NDC included with cruises:</p> <table border="0"> <tr> <td>FW5004</td> <td>FW6025</td> <td>FW7027</td> </tr> <tr> <td>FW5018</td> <td>→ FW6026</td> <td>FW7026</td> </tr> <tr> <td>FW5034</td> <td>FW6028</td> <td>FW7029</td> </tr> <tr> <td></td> <td>FW6029</td> <td>FW6093</td> </tr> </table> </div>	FW5004	FW6025	FW7027	FW5018	→ FW6026	FW7026	FW5034	FW6028	FW7029		FW6029	FW6093
FW5004	FW6025	FW7027											
FW5018	→ FW6026	FW7026											
FW5034	FW6028	FW7029											
	FW6029	FW6093											
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>Lrecl=83 Blk size=4150</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>												

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Location Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 1
Station No	11	5	bytes	A5	
Latitude -					Starting Position
Degrees	16	2	bytes	I2	33-73 degrees
Minutes	18	2	bytes	I2	0-59 minutes
Seconds	20	2	bytes	I2	0-59 seconds
Hemisphere	22	1	bytes	A1	N hemisphere
Longitude -					Starting Position
Degrees	23	3	bytes	I3	118-180 degrees
Minutes	26	2	bytes	I2	0-59 minutes
Seconds	28	2	bytes	I2	0-59 seconds
Hemisphere	30	1	bytes	A1	W hemisphere
Date -					Starting date GMT
Year	31	2	bytes	I2	Last 2 digits
Month	33	2	bytes	I2	1-12 months
Day	35	2	bytes	I2	1-31 days
Time -					Starting time GMT
Hours	37	2	bytes	I2	0-23 hours
Minutes	39	2	bytes	I2	0-59 minutes
Latitude -					Ending Position
Degrees	41	2	bytes	I2	33-73 degrees
Minutes	43	2	bytes	I2	0-59 minutes
Seconds	45	2	bytes	I2	0-59 seconds
Hemisphere	47	1	bytes	A1	N hemisphere
Longitude -					Ending Position
Degrees	48	3	bytes	I3	118-180 degrees
Minutes	51	2	bytes	I2	0-59 minutes
Seconds	53	2	bytes	I2	0-59 seconds
Hemisphere	55	1	bytes	A1	W hemisphere
Elapsed Time	56	2	bytes	I2	0-30 whole minutes
Time Zone -					
Sign	58	1	bytes	A1	+ or - relative to GMT
Number	59	2	bytes	I2	Zone 01-12
Ships Speed	61	3	bytes	I3	Whole knots
Course Headings	64	2	bytes	I2	0-35 tens of degrees true

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Location (continued)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of Eyes Above Sea	66	3	bytes	I3	Whole meters
Platform Type	69	1	bytes	A1	NODC Platform Type Code
Sampling Technique	70	1	bytes	A2	NODC Sampling Technique Code
Ship Activity	71	1	bytes	A1	NODC Ship Activity Code
Photos Taken	72	1	bytes	A1	NODC Collection Code
Width of Transect	73	1	bytes	A1	NODC Zone Scheme Code
Angle of View	74	1	bytes	A1	NODC Angle of View Code
Observation Conditions	75	1	bytes	A1	NODC Observation Conditions Code
Distance Made Good	76	4	bytes	I4	Kilometers to tenths
Watch Type	80	1	bytes	A1	
Transect Width	81	3	bytes	I3	Tens of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 2
Station No	11	5	bytes	A5	
Bottom Depth	16	4	bytes	I4	Whole meters
Thermocline Depth	20	3	bytes	I3	0-100 meters
Sea Surface Temperature	23	4	bytes	I4	-3 to +10 degrees to tenths Celsius
Salinity	27	3	bytes	I3	20 o/oo to 34 o/oo parts per thousand to tenths
Dry Bulb Temp	30	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Wet Bulb Temp	34	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Humidity	38	2	bytes	I2	00-99 percent
Barometric Pressure	40	4	bytes	I4	0.9600-1.0400 bars to tenths of millibars
Barometric Trend	44	1	bytes	A1	+ rising, - falling, 0 steady
Wind Direction	45	2	bytes	I2	NODC Direction Code (WMO Codes 0885 & 0877)
Wind Speed	47	2	bytes	I2	0-50 knots
Sea State	49	1	bytes	A1	WMO Code 3700
Swell Direction	50	2	bytes	I2	NODC Direction Code
Swell Height	52	3	bytes	I3	0-07.6 meters to tenths
Weather	55	2	bytes	A2	WMO Code 4677
Cloud Type	57	1	bytes	A1	WMO Code 0500
Cloud Amount	58	1	bytes	A1	WMO Code 2700

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Water Color	59	2	bytes	A2	NODC Water Color Code (Forel-Ule scale)
Visibility	61	1	bytes	A1	WMO Code 4300
Sun Direction	62	1	bytes	A1	NODC Compass Direction Code
Glare Intensity	63	1	bytes	A1	NODC Glare Intensity Code
Glare Area	64	1	bytes	A1	NODC Glare Area Code
Light Level	65	3	bytes	I3	Tens of Foot-candles
Moon Phase	68	1	bytes	A1	NODC Moon Phase Code
Tide Height	69	1	bytes	A1	NODC Tide Height Code
Tide Cycle	70	1	bytes	A1	+ rising, - falling, 0 slack water
Distance to Shore	71	4	bytes	I4	Whole nautical miles
Distance to Shelf break	75	3	bytes	I3	Whole nautical miles
SECCHI Depth	78	2	bytes	I2	Whole meters
Debris Code	80	1	bytes	A1	NODC Debris Code (for non- bird associated debris)
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Ice Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 3
Station No	11	5	bytes	A5	
Ice In Transect					
Cover	16	1	bytes	A1	WMO Code 0547
Type	17	1	bytes	A1	WMO Code 3763
Form	18	1	bytes	A1	WMO Code 1147
Relief	19	1	bytes	A1	WMO Code 3962
Thick	20	1	bytes	A1	WMO Code 4006
Melt	21	1	bytes	A1	WMO Code 2650
Ice Outside Transect					
Cover	22	1	bytes	A1	WMO Code 0547
Type	23	1	bytes	A1	WMO Code 3763
Form	24	1	bytes	A1	WMO Code 1147
Relief	25	1	bytes	A1	WMO Code 3962
Thick	26	1	bytes	A1	WMO Code 4006
Melt	27	1	bytes	A1	WMO Code 2650
Open Water					
Type	28	1	bytes	A1	WMO Code 4552
Direction	29	1	bytes	A1	WMO Code 0739
Distance	30	1	bytes	A1	WMO Code 3600
Lead/Polygons	31	1	bytes	A1	WMO Code 4300
Visible Ice					
Description	32	1	bytes	A1	WMO Code 0663
Direction	33	1	bytes	A1	WMO Code 0739
Distance	34	1	bytes	A1	WMO Code 3600
Miscellaneous					
Arctic Cod	35	1	bytes	A1	NODC Collection Code
Excess					
Sediment	36	1	bytes	A1	NODC Collection Code
Ice Algae	37	1	bytes	A1	NODC Collection Code
Mammal Trace	38	1	bytes	A1	NODC Mammal Trace Code
Other					
Features	39	1	bytes	A1	NODC Mammal Trace Code
Ice Pattern					
In Transect	40	1	bytes	A1	1-Regular, 2-Clumped
Outside Trans	41	1	bytes	A1	1-Regular, 2-Clumped

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Ice (continued)

RECORD NAME

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Ship in Lead or Polynya Location	42	1	bytes	A1	1-Lead, 2-Polynya, 3-Indeterminable
Width	43	1	bytes	A1	WMO Code 4300
Distance	44	1	bytes	A1	WMO Code 4300
Time of Ice Conditions	45	2	bytes	I2	Whole minutes from start time to observation time, must increase for a station
Water vs Land % Covered	47	2	bytes	I2	00-99 Percent
Pond Size	49	1	bytes	A1	NOBC Size of Pond Code
Open Water Ice Description Cover	50	1	bytes	A1	WMO Code 1147
	51	1	bytes	A1	WMO Code 0547
Blank	52	26	bytes	X26	
Sequence Number	78	3	bytes	I3	Ascending numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Text Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 4
Station No	11	5	bytes	A5	
Text	16	62	bytes	A62	
Sequence Number	78	3	bytes	I3	Ascending Numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Data Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 5
Station No	11	5	bytes	A5	
Time into Transact	16	2	bytes	I2	Whole minutes from start time to observation time
Taxonomic Code	18	12	bytes	I12	Class 88-92, ends with paired trailing blanks
Species Group	30	2	bytes	I2	
Age	32	1	bytes	A1	NODC Age Class Group Code
Sex	33	1	bytes	A1	NODC Sex Code
Color	34	1	bytes	A1	NODC Color Phase Code
Plumage	35	1	bytes	A1	NODC Plumage Code
Molt	36	1	bytes	A1	NODC Molt Code
Number of Individuals	37	5	bytes	I5	Whole number, must not be omitted
Counting Method	42	1	bytes	A1	NODC Counting Method Code
Reliability	43	1	bytes	A1	NODC Reliability Code
Distance Measure Type	44	1	bytes	A1	NODC Distance Measurement Type Code
Distance to Birds	45	3	bytes	I3	Tens of meters
Direction of Flight	48	2	bytes	I2	00-35 Tens of degrees
Association	50	1	bytes	A1	NODC Type of Assoc Code
Linkage	51	3	bytes	I3	Sequence number of multi- species group in station
Species Number	54	2	bytes	I2	Number of species linked
Behavior	56	2	bytes	A2	NODC Behavior Code
Special Marks	58	1	bytes	A1	NODC Special Marks Code
Bird Condition	59	1	bytes	A1	NODC Bird Condition Code

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Data (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Food Source	60	1	bytes	A1	NODC Food Source Association Code
Tax Code of Food	61	10	bytes	I10	
Debris	71	1	bytes	A1	NODC Debris code
Oil	72	1	bytes	A1	NODC Oil Code
Distance from Breed Colony	73	3	bytes	I3	Nautical miles
Habitat	76	2	bytes	2A1	NODC Habitat Code, may code 2, left to right
Sequence Number	78	3	bytes	I3	Ascending numeric
Substrate	81	1	bytes	A1	NODC Substrate Code
Cover	82	1	bytes	A1	NODC Cover Code
Outside Zone	83	1	bytes	A1	NODC Outside Zone Code

DATA DOCUMENTATION FORM

TR3576

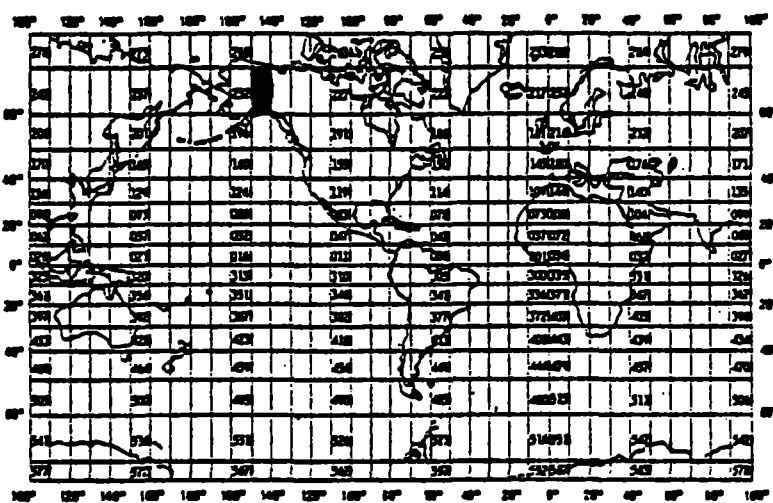
NOAA FORM 24-13
(4-73)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852FORM APPROVED
O.M.B. No. 41-R2651

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

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED Dr. Calvin Lensink U. S. Fish and Wildlife Service- Office of Biological Services-Coastal Ecosystems 1011 East Tudor Rd. Anchorage, Alaska, 99503			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED OCSEAP RU - 337		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW 6023	
4. PLATFORM NAME(S) MU Nordic Prince		5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Ship	
6. PLATFORM AND OPERATOR NATIONALITY(IES) USA		7. DATES FROM: MO, DAY, YR TO: MO, DAY, YR 6/17/76 6/17/76	
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR MONTH		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)		10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) Dr. Calvin Lensink Dr. Patrick Gould (907) 276-3800	



B. SCIENTIFIC TENT

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
Station Type	N/A	See Attached Codes	N/A	N/A
Start Latitude & Longitude	Degrees, Minutes, Seconds, Hemisphere	Combined Radar Fixes and Depth Charts	N/A	N/A
Date - Time	Year, Month, Day Hour, Minute	Always GMT	N/A	N/A
Elapsed Time	Minutes	N/A	N/A	N/A
Time Zone	International Standard	N/A	N/A	N/A
Speed	Knots made good	Derived from plotted positions	N/A	N/A
Course	10's of degrees true made good	Derived from plotted positions	N/A	N/A
Height	Whole meters	Measured with steel Tape	N/A	N/A
Obs. Conditions	033 code	Observers opinion of all factors influencing observations - subjective	N/A	N/A
Transect Width	10's of meters	Estimated, based on periodic checks with a range finder.	N/A	N/A
Depth	meters	Fathometer and Charts	N/A	N/A
Surface Temp.	tenths of degrees centigrade .	Temp. gage at ships intake	N/A	N/A
Sea State	WHO 3700 codes	Observation	N/A	N/A
Weather	WHO 4677 codes selected	Observation - see attached list of selected codes	N/A	N/A
Taxonomic Code	NODC Taxonomic codes	1977 version	N/A	N/A
Age	033 codes	Observation	N/A	N/A
Sex	033 Codes	Observation	N/A	N/A
Color Phase	033 Codes	Observation	N/A	N/A

d					
d					
d					
ddd	ppp	sss			
d	d	p	p	s	s
d	d	p	p	s	s
ddd	pppp	ssss			
	p			s	
	p	s	s		
	p	sss			

DATA PROJECTS GROUP
333 Pastore Hall
University of R.I.
Kingston, RI 02881

This Data Documentation Form (DDF) is composed of two parts. The first contains tape specifications and record format descriptions provided by the originator cited in Section A.1. The data have subsequently been validated by the Data Projects Group. Range and relational checks, code group checks, plus relocation of fields, unit conversions, and final tape recording techniques used in this process are given in the second part. Resolution of data errors found during this process has been made through contact with the originator.

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Type 1 = Location
Type 2 = Environment
Type 4 = Text
Type 5 = Data
These are differentiated by byte 10

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File organized by Station Number (Record Type 1, Bytes 11-13)

ATTRIBUTES AS EXPRESSED IN ☐ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert L. Blanscett 907-276-3800

ADDRESS U.S.F.&W.S., OBS-CE, 1011 E. Tudor Rd. Anchorage, Alaska, 99503

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE <input type="checkbox"/> BCD <input type="checkbox"/> BINARY <input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/> _____	9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input type="checkbox"/> _____
6. NUMBER OF TRACKS (CHANNELS) <input type="checkbox"/> SEVEN <input checked="" type="checkbox"/> NINE <input type="checkbox"/> _____	10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 <input type="checkbox"/> _____
7. PARITY <input checked="" type="checkbox"/> ODD <input type="checkbox"/> EVEN	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE. VOL. TIME NUMBER) OCSEAP - USFWS/OBSCE 337 033 - FW6028 MV Nordic Prince 76/6/17 - 76/6/17 LENSINK 9TRK, 800BPI, ODD, EBCDIC NON LABELED-IBM UTILITY B
8. DENSITY <input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI <input type="checkbox"/> 556 BPI <input checked="" type="checkbox"/> 800 BPI <input type="checkbox"/> _____	12. PHYSICAL BLOCK LENGTH IN BYTES 83
	13. LENGTH OF BYTES IN BITS 8

B. SCIENTIFIC 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
Number	Number of individual organisms	Binoculars	N/A	N/A
Flight Direction	10's of degrees true	Observation	N/A	N/A
Linkage	033 codes	N/A	N/A	N/A
Behavior	Selected 033 codes	See attached list of Selected codes	N/A	N/A
Outside Zone	033 codes	N/A	N/A	N/A

RECORD FORMAT DESCRIPTION

RECORD NAME Location - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., mile, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	"Always 033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	"Always 1"
Station Number	11	5	bytes	A5	4th byte coded for ship type 5th byte coded for transect type
Latitude, Degrees	16	2	bytes	I2	Starting Position
Minutes	18	2	bytes	I2	" "
Seconds	20	2	bytes	I2	" "
Hemisphere	22	1	bytes	A1	"N" or "S"
Longitude, Degrees	23	3	bytes	I3	Starting Position
Minutes	26	2	bytes	I2	" "
Seconds	28	2	bytes	I2	" "
Hemisphere	30	1	bytes	A1	"E" or "W"
Year	31	2	bytes	I2	Last two digits of year = Starting Time GMT
Month	33	2	bytes	I2	" " "
Day	35	2	bytes	I2	" " "
Hour	37	2	bytes	I2	" " "
Minute	39	2	bytes	I2	" " "
Latitude, Degrees	41	2	bytes	I2	Ending... Position
Minutes	43	2	bytes	I2	" "
Seconds	45	2	bytes	I2	" "
Hemisphere	47	1	bytes	A1	"N" or "S"
Longitude, Degrees	48	3	bytes	I3	Ending Position
Minutes	51	2	bytes	I2	" "
Seconds	53	2	bytes	I2	" "
Hemisphere	55	1	bytes	A1	"E" or "W"
Elapsed Time	56	2	bytes	I2	whole minutes
Time Zone	58	1	byte	A1	"+" or "-"
Time Zone	59	2	bytes	A2	01-12
Speed Made Good	61	3	bytes	I3	in whole knots
Course Made Good	64	2	bytes	I2	tens of degrees true

RECORD FORMAT DESCRIPT. 1

RECORD NAME Location (continued) - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., 50m, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of eyes above sea	66	3	bytes	I3	In whole meters
Observation conditions	75	1	bytes	A1	1-7 bad-excellent
Transect width	81	3	bytes	I3	10's of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Environmental - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., dda, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "2"
Depth	16	4	bytes	I4	In whole meters
Surface Temp.	23	4	bytes	I4	In tenths of degrees Centigrade
Surface Salinity	27	3	bytes	I3	In parts per hundred
Barometric Pressure	40	4	bytes	I4	In tenths of millibars
Barometric Trend	44	1	bytes	A1	+ = rising, 0 = steady, - = falling
Wind Direction	45	2	bytes	I2	In 10's of degrees true See WMO codes 0885 & 0877
Wind Speed	47	2	bytes	I2	In whole knots
Sea State	49	1	bytes	A1	WMO code 3700
Weather	55	2	bytes	A2	WMO code 4677 with restricted choice as shown below: 00, 03, 41, 43, 68, 69, 87, 88, 71, 73

RECORD FORMAT DESCRIPTION

RECORD NAME / Data - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "5"
Station Number	11	5	bytes	A5	bytes 14-15 define ship and observation types
Taxonomic Code	18	10	bytes	I10	NODC 1977 codes
Subspecies	28	2	bytes	I2	
Species Group	30	2	bytes	A2	
Age Class	32	1	bytes	A1	
Sex	33	1	bytes	A1	
Color Phase	34	1	bytes	A1	
Number of Individuals	37	5	bytes	I5	whole numeric
Flight Direction	48	2	bytes	I2	In 10's of degrees
Linkage	51	3	bytes	I3	Sequence number of a group within one observation
Behavior	56	2	bytes	A2	
Sequence	78	3	bytes	I3	Ascending numeric, for sorting
Outsice Zone	83	1	bytes	A1	0 = birds within transect width defined in RT 1, bytes 81-83. 1-9 = birds other than above.

D. INSTRUMENT CALIBRATION

This calibration information will be utilized by NOAA's National Oceanographic Instrumentation Center in their efforts to develop calibration standards for voluntary acceptance by the oceanographic community. Identify the instruments used by your organization to obtain the scientific content of the DDF (i.e., STD, temperature and pressure sensors, salinometers, oxygen meters, velocimeters, etc.) and furnish the calibration data requested by completing and/or checking ("✓") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

INSTRUMENT TYPE (MFR., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED (✓)
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Record Type is coded in column 10 of each record as follows:

- 1 - Location
- 2 - Environment
- 3 - Ice Record
- 4 - Text Comments
- 5 - Data Observations

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File is organized by Station Number in Columns 11-15 of each record. Each Station contains one Type 1 card; one Type 2 card; zero to several Type 3 cards; and one to several Type 5 cards (one for each observation at that station).

3. ATTRIBUTES AS EXPRESSED IN ☒ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Data Projects Group (401)792-2320

ADDRESS 333 Pastore Hall, University of Rhode Island, Kingston, RI 02881

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> 1/2 inch</p>												
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17</p> <p>IBM 3420 <input checked="" type="checkbox"/> Tape Mark</p>												
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS)</p> <div style="border: 1px solid black; padding: 5px;"> <p>Fw6028 on tape GO2NDC included with cruises:</p> <table border="0"> <tr> <td>Fw5004</td> <td>Fw6025</td> <td>Fw7027</td> </tr> <tr> <td>Fw5018</td> <td>Fw6026</td> <td>Fw7026</td> </tr> <tr> <td>Fw5034 → Fw6028</td> <td>Fw7029</td> <td></td> </tr> <tr> <td></td> <td>Fw6029</td> <td>Fw6093</td> </tr> </table> </div>	Fw5004	Fw6025	Fw7027	Fw5018	Fw6026	Fw7026	Fw5034 → Fw6028	Fw7029			Fw6029	Fw6093
Fw5004	Fw6025	Fw7027											
Fw5018	Fw6026	Fw7026											
Fw5034 → Fw6028	Fw7029												
	Fw6029	Fw6093											
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>Lrcl=83 Blk size=4150</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>												

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Location Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 1
Station No	11	5	bytes	A5	
Latitude -					Starting Position
Degrees	16	2	bytes	I2	33-73 degrees
Minutes	18	2	bytes	I2	0-59 minutes
Seconds	20	2	bytes	I2	0-59 seconds
Hemisphere	22	1	bytes	A1	N hemisphere
Longitude -					Starting Position
Degrees	23	3	bytes	I3	118-180 degrees
Minutes	26	2	bytes	I2	0-59 minutes
Seconds	28	2	bytes	I2	0-59 seconds
Hemisphere	30	1	bytes	A1	W hemisphere
Date -					Starting date GMT
Year	31	2	bytes	I2	Last 2 digits
Month	33	2	bytes	I2	1-12 months
Day	35	2	bytes	I2	1-31 days
Time -					Starting time GMT
Hours	37	2	bytes	I2	0-23 hours
Minutes	39	2	bytes	I2	0-59 minutes
Latitude -					Ending Position
Degrees	41	2	bytes	I2	33-73 degrees
Minutes	43	2	bytes	I2	0-59 minutes
Seconds	45	2	bytes	I2	0-59 seconds
Hemisphere	47	1	bytes	A1	N hemisphere
Longitude -					Ending Position
Degrees	48	3	bytes	I3	118-180 degrees
Minutes	51	2	bytes	I2	0-59 minutes
Seconds	53	2	bytes	I2	0-59 seconds
Hemisphere	55	1	bytes	A1	W hemisphere
Elapsed Time	56	2	bytes	I2	0-30 whole minutes
Time Zone -					
Sign	58	1	bytes	A1	+ or - relative to GMT
Number	59	2	bytes	I2	Zone 01-12
Ships Speed	61	3	bytes	I3	Whole knots
Course Headings	64	2	bytes	I2	0-35 tens of degrees true

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Location (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., km, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of Eyes Above Sea	66	3	bytes	I3	Whole meters
Platform Type	69	1	bytes	A1	NODC Platform Type Code
Sampling Technique	70	1	bytes	A2	NODC Sampling Technique Code
Ship Activity	71	1	bytes	A1	NODC Ship Activity Code
Photos Taken	72	1	bytes	A1	NODC Collection Code
Width of Transect	73	1	bytes	A1	NODC Zone Scheme Code
Angle of View	74	1	bytes	A1	NODC Angle of View Code
Observation Conditions	75	1	bytes	A1	NODC Observation Conditions Code
Distance Made Good	76	4	bytes	I4	Kilometers to tenths
Watch Type	80	1	bytes	A1	
Transect Width	81	3	bytes	I3	Tens of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment Record

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 2
Station No	11	5	bytes	A5	
Bottom Depth	16	4	bytes	I4	Whole meters
Thermocline Depth	20	3	bytes	I3	0-100 meters
Sea Surface Temperature	23	4	bytes	I4	-3 to +10 degrees to tenths Celsius
Salinity	27	3	bytes	I3	20 o/oo to 34 o/oo parts per thousand to tenths
Dry Bulb Temp	30	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Wet Bulb Temp	34	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Humidity	38	2	bytes	I2	00-99 percent
Barometric Pressure	40	4	bytes	I4	0.9600-1.0400 bars to tenths of millibars
Barometric Trend	44	1	bytes	A1	+ rising, - falling, 0 steady
Wind Direction	45	2	bytes	I2	NODC Direction Code (WMO Codes 0885 & 0877)
Wind Speed	47	2	bytes	I2	0-50 knots
Sea State	49	1	bytes	A1	WMO Code 3700
Swell Direction	50	2	bytes	I2	NODC Direction Code
Swell Height	52	3	bytes	I3	0-07.6 meters to tenths
Weather	55	2	bytes	A2	WMO Code 4677
Cloud Type	57	1	bytes	A1	WMO Code 0500
Cloud Amount	58	1	bytes	A1	WMO Code 2700

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Water Color	59	2	bytes	A2	NODC Water Color Code (Forel-Ule scale)
Visibility	61	1	bytes	A1	WMO Code 4300
Sun Direction	62	1	bytes	A1	NODC Compass Direction Code
Glare Intensity	63	1	bytes	A1	NODC Glare Intensity Code
Glare Area	64	1	bytes	A1	NODC Glare Area Code
Light Level	65	3	bytes	I3	Tens of Foot-candles
Moon Phase	68	1	bytes	A1	NODC Moon Phase Code
Tide Height	69	1	bytes	A1	NODC Tide Height Code
Tide Cycle	70	1	bytes	A1	+ rising, - falling, 0 slack water
Distance to Shore	71	4	bytes	I4	Whole nautical miles
Distance to Shelf break	75	3	bytes	I3	Whole nautical miles
SECCHI Depth	78	2	bytes	I2	Whole meters
Debris Code	80	1	bytes	A1	NODC Debris Code (for non- bird associated debris)
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Ice Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 3
Station No	11	5	bytes	A5	
Ice In Transect					
Cover	16	1	bytes	A1	WMO Code 0547
Type	17	1	bytes	A1	WMO Code 3763
Form	18	1	bytes	A1	WMO Code 1147
Relief	19	1	bytes	A1	WMO Code 3962
Thick	20	1	bytes	A1	WMO Code 4006
Melt	21	1	bytes	A1	WMO Code 2650
Ice Outside Transect					
Cover	22	1	bytes	A1	WMO Code 0547
Type	23	1	bytes	A1	WMO Code 3763
Form	24	1	bytes	A1	WMO Code 1147
Relief	25	1	bytes	A1	WMO Code 3962
Thick	26	1	bytes	A1	WMO Code 4006
Melt	27	1	bytes	A1	WMO Code 2650
Open Water					
Type	28	1	bytes	A1	WMO Code 4552
Direction	29	1	bytes	A1	WMO Code 0739
Distance	30	1	bytes	A1	WMO Code 3600
Lead/Polynea	31	1	bytes	A1	WMO Code 4300
Visible Ice					
Description	32	1	bytes	A1	WMO Code 0663
Direction	33	1	bytes	A1	WMO Code 0739
Distance	34	1	bytes	A1	WMO Code 3600
Miscellaneous					
Arctic Cod	35	1	bytes	A1	NODC Collection Code
Excess					
Sediment	36	1	bytes	A1	NODC Collection Code
Ice Algae	37	1	bytes	A1	NODC Collection Code
Mammal Trace	38	1	bytes	A1	NODC Mammal Trace Code
Other					
Features	39	1	bytes	A1	NODC Mammal Trace Code
Ice Pattern					
In Transect	40	1	bytes	A1	1-Regular, 2-Clumped
Outside Trans	41	1	bytes	A1	1-Regular, 2-Clumped

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Ice (continued)

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Ship in Lead or Polynya Location	42	1	bytes	A1	1-Lead, 2-Polynya, 3-Indeterminable
Width	43	1	bytes	A1	WMO Code 4300
Distance	44	1	bytes	A1	WMO Code 4300
Time of Ice Conditions	45	2	bytes	I2	Whole minutes from start time to observation time, must increase for a statcr
Water vs Land % Covered	47	2	bytes	I2	00-99 Percent
Pond Size	49	1	bytes	A1	NODC Size of Pond Code
Open Water Ice Description	50	1	bytes	A1	WMO Code 1147
Cover	51	1	bytes	A1	WMO Code 0547
Blank	52	26	bytes	X26	
Sequence Number	78	3	bytes	I3	Ascending numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Text Record

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN _____ (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 4
Station No	11	5	bytes	A5	
Text	16	62	bytes	A62	
Sequence Number	78	3	bytes	I3	Ascending Numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Data Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 5
Station No	11	5	bytes	A5	
Time into Transect	16	2	bytes	I2	Whole minutes from start time to observation time
Taxonomic Code	18	12	bytes	I12	Class 88-92, ends with paired trailing blanks
Species Group	30	2	bytes	I2	
Age	32	1	bytes	A1	NODC Age Class Group Code
Sex	33	1	bytes	A1	NODC Sex Code
Color	34	1	bytes	A1	NODC Color Phase Code
Plumage	35	1	bytes	A1	NODC Plumage Code
Molt	36	1	bytes	A1	NODC Molt Code
Number of Individuals	37	5	bytes	I5	Whole number, must not be omitted
Counting Method	42	1	bytes	A1	NODC Counting Method Code
Reliability	43	1	bytes	A1	NODC Reliability Code
Distance Measure Type	44	1	bytes	A1	NODC Distance Measurement Type Code
Distance to Birds	45	3	bytes	I3	Tens of meters
Direction of Flight	48	2	bytes	I2	00-35 Tens of degrees
Association	50	1	bytes	A1	NODC Type of Assoc Code
Linkage	51	3	bytes	I3	Sequence number of multi- species group in station
Species Number	54	2	bytes	I2	Number of species linked
Behavior	56	2	bytes	A2	NODC Behavior Code
Special Marks	58	1	bytes	A1	NODC Special Marks Code
Bird Condition	59	1	bytes	A1	NODC Bird Condition Code

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Data (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Food Source	60	1	bytes	A1	NODC Food Source Association Code
Tax Code of Food	61	10	bytes	I10	
Debris	71	1	bytes	A1	NODC Debris code
Oil	72	1	bytes	A1	NODC Oil Code
Distance from Breed Colony	73	3	bytes	I3	Nautical miles
Habitat	76	2	bytes	2A1	NODC Habitat Code, may code 2, left to right
Sequence Number	78	3	bytes	I3	Ascending numeric
Substrate	81	1	bytes	A1	NODC Substrate Code
Cover	82	1	bytes	A1	NODC Cover Code
Outside Zone	83	1	bytes	A1	NODC Outside Zone Code

ACCESSION
NUMBER

78-0812

DATA DOCUMENTATION FORM

TR 3579

NOAA FORM 24-13
(4-72)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852FORM APPROVED
O.M.B. No. 41-22651

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 MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED Dr. Calvin Lensink U. S. Fish and Wildlife Service- Office of Biological Services-Coastal Ecosystems 1011 East Tudor Rd. Anchorage, Alaska, 99503			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED OCSEAP RU - 337		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW 6029	
4. PLATFORM NAME(S) mv Nordic Prince	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Ship 033	6. PLATFORM AND OPERATOR NATIONALITY(IES) USA USA	7. DATES FROM: MO/DAY/YR TO: MO/DAY/YR 6-18-76 6-26-76
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR _____ MONTH _____		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)			
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) Dr. Calvin Lensink Dr. Patrick Gould (907) 276-3800			

B. SCIENTIFIC 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
Station Type	N/A	See Attached Codes	N/A	N/A
Start Latitude & Longitude	Degrees, Minutes, Seconds, Hemisph.	Combined Radar Fixes and Depth Charts	N/A	N/A
Date - Time	Year, Month, Day Hour, Minute	Always GMT	N/A	N/A
Elapsed Time	Minutes	N/A	N/A	N/A
Time Zone	International Standard	N/A	N/A	N/A
Speed	Knots made good	Derived from plotted positions	N/A	N/A
Course	10's of degrees true made good	Derived from plotted positions	N/A	N/A
Height	Whole meters	Measured with steel Tape	N/A	N/A
Obs. Conditions	033 code	Observers opinion of all factors influencing observations - subjective	N/A	N/A
Transect Width	10's of meters	Estimated, based on periodic checks with a range finder.	N/A	N/A
Depth	meters	Fathometer and Charts	N/A	N/A
Surface Temp.	tenths of degrees centigrade .	Temp. gage at ships intake	N/A	N/A
Sea State	WHO 3700 codes	Observation	N/A	N/A
Weather	WHO 4677 codes selected	Observation - see attached list of selected codes	N/A	N/A
Taxonomic Code	NODC Taxonomic codes	1977 version	N/A	N/A
Age	033 codes	Observation	N/A	N/A
Sex	033 Codes	Observation	N/A	N/A
Color Phase	033 Codes	Observation	N/A	N/A

```

d
d
d
dddd   PPP   SSS
d  d   P   P   S   S
d  d   P   P   S   S
ddd   PPPP   SSSS
      P       S
      P       S
      P       S

```

```

DATA PROJECTS GROUP
333 Pastore Hall
University of R.I.
Kingston, RI 02881

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This Data Documentation Form (DDF) is composed of two parts. The first contains tape specifications and record format descriptions provided by the originator cited in Section A.1. The data have subsequently been validated by the Data Projects Group. Range and relational checks, code group checks, plus relocation of fields, unit conversions, and final tape recording techniques used in this process are given in the second part. Resolution of data errors found during this process has been made through contact with the originator.

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Type 1 = Location
Type 2 = Environment
Type 4 = Text
Type 5 = Data
These are differentiated by byte 10

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File organized by Station Number (Record Type 1, Bytes 11-13)

ATTRIBUTES AS EXPRESSED IN ☐ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert L. Blanscett 907-276-3800
ADDRESS U.S.F.&W.S., OBS-CE, 1011 E. Tudor Rd. Anchorage, Alaska, 99503

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17</p> <p><input type="checkbox"/> _____</p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>OCSEAP - USFWS/OBSCE 337 033 - FW6029 MV Nordic Prince 76/6/18 - 76/6/26 LENSINK 9TRK, 800BPI, ODD, EBCDIC NON LABELED-IBM UTILITY B</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 SPI <input type="checkbox"/> 1600 SPI</p> <p><input type="checkbox"/> 556 SPI</p> <p><input checked="" type="checkbox"/> 800 SPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>83</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>

B. SCIENTIFIC 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
Number	Number of individual organisms	Binoculars	N/A	N/A
Flight Direction	10's of degrees true	Observation	N/A	N/A
Linkage	033 codes	N/A	N/A	N/A
Behavior	Selected 033 codes	See attached list of Selected codes	N/A	N/A
Outside Zone	033 codes	N/A	N/A	N/A

RECORD FORMAT DESCRIPTION

RECORD NAME Location - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., 10th, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	"Always 033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	"Always 1"
Station Number	11	5	bytes	A5	4th byte coded for ship type 5th byte coded for transect type
Latitude, Degrees	16	2	bytes	I2	Starting Position
Minutes	18	2	bytes	I2	" "
Seconds	20	2	bytes	I2	" "
Hemisphere	22	1	bytes	A1	"N" or "S"
Longitude, Degrees	23	3	bytes	I3	Starting Position
Minutes	26	2	bytes	I2	" "
Seconds	28	2	bytes	I2	" "
Hemisphere	30	1	bytes	A1	"E" or "W"
Year	31	2	bytes	I2	Last two digits of year = Starting Time GMT
Month	33	2	bytes	I2	" " "
Day	35	2	bytes	I2	" " "
Hour	37	2	bytes	I2	" " "
Minute	39	2	bytes	I2	" " "
Latitude, Degrees	41	2	bytes	I2	Ending... Position
Minutes	43	2	bytes	I2	" "
Seconds	45	2	bytes	I2	" "
Hemisphere	47	1	bytes	A1	"N" or "S"
Longitude, Degrees	48	3	bytes	I3	Ending Position
Minutes	51	2	bytes	I2	" "
Seconds	53	2	bytes	I2	" "
Hemisphere	55	1	bytes	A1	"E" or "W"
Elapsed Time	56	2	bytes	I2	whole minutes
Time Zone	58	1	byte	A1	"+" or "-"
Time Zone	59	2	bytes	A2	01-12
Speed Made Good	61	3	bytes	I3	in whole knots
Course Made Good	64	2	bytes	I2	tens of degrees true

RECORD FORMAT DESCRIPT. A

RECORD NAME Location (continued) - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of eyes above sea	66	3	bytes	I3	In whole meters
Observation conditions	75	1	bytes	A1	1-7 bad-excellent
Transect width	81	3	bytes	I3	10's of meters

RECORD FORMAT DESCRIPTION

RECORD NAME / Data - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "5"
Station Number	11	5	bytes	A5	bytes 14-15 define ship and observation types
Taxonomic Code	18	10	bytes	I10	NODC 1977 codes
Subspecies	28	2	bytes	I2	
Species Group	30	2	bytes	A2	
Age Class	32	1	bytes	A1	
Sex	33	1	bytes	A1	
Color Phase	34	1	bytes	A1	
Number of Individuals	37	5	bytes	I5	whole numeric
Flight Direction	48	2	bytes	I2	In 10's of degrees
Linkage	51	3	bytes	I3	Sequence number of a group within one observation
Behavior	56	2	bytes	A2	
Sequence	78	3	bytes	I3	Ascending numeric, for sorting
Outside Zone	83	1	bytes	A1	0 = birds within transect width defined in RT 1, bytes 81-83. 1-9 = birds other than above.

RECORD FORMAT DESCRIPTION

RECORD NAME Environmental - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., Mm, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "2"
Depth	16	4	bytes	I4	In whole meters
Surface Temp.	23	4	bytes	I4	In tenths of degrees Centigrad
Surface Salinity	27	3	bytes	I3	In parts per hundred
Barometric Pressure	40	4	bytes	I4	In tenths of millibars
Barometric Trend	44	1	bytes	A1	+ = rising, 0 = steady, - = falling
Wind Direction	45	2	bytes	I2	In 10's of degrees true See WMO codes 0885 & 0877
Wind Speed	47	2	bytes	I2	In whole knots
Sea State	49	1	bytes	A1	WMO code 3700
Weather	55	2	bytes	A2	WMO code 4677 with restricted choice as shown below: 00, 03, 41, 43, 68, 69, 87, 88, 71, 7

D. INSTRUMENT CALIBRATION

This calibration information will be utilized by NOAA's National Oceanographic Instrumentation Center in their efforts to develop calibration standards for voluntary acceptance by the oceanographic community. Identify the instruments used by your organization to obtain the scientific content of the DDF (i.e., STD, temperature and pressure sensors, salinometers, oxygen meters, velocimeters, etc.) and furnish the calibration data requested by completing and/or checking ("✓") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

INSTRUMENT TYPE (MFR., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED (✓)
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Record Type is coded in column 10 of each record as follows:

- 1 - Location
- 2 - Environment
- 3 - Ice Record
- 4 - Text Comments
- 5 - Data Observations

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File is organized by Station Number in Columns 11-15 of each record. Each Station contains one Type 1 card; one Type 2 card; zero to several Type 3 cards; and one to several Type 5 cards (one for each observation at that station).

3. ATTRIBUTES AS EXPRESSED IN ☒ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Data Projects Group (401)792-2320

ADDRESS 333 Pastore Hall, University of Rhode Island, Kingston, RI 02881

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE <input type="checkbox"/> BCD <input type="checkbox"/> BINARY <input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/> _____	9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> 1/2 inch												
6. NUMBER OF TRACKS (CHANNELS) <input type="checkbox"/> SEVEN <input checked="" type="checkbox"/> NINE <input type="checkbox"/> _____	10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 IBM 3420 <input checked="" type="checkbox"/> Tape Mark												
7. PARITY <input checked="" type="checkbox"/> ODD <input type="checkbox"/> EVEN	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS) <div style="border: 1px solid black; padding: 5px; margin: 5px;"> FW6029 on tape GO2NDC included with cruises: <table style="width: 100%;"> <tr> <td>FW5004</td> <td>FW6025</td> <td>FW7027</td> </tr> <tr> <td>FW5018</td> <td>FW6026</td> <td>FW7026</td> </tr> <tr> <td>FW5034</td> <td>FW6028</td> <td>FW7029</td> </tr> <tr> <td></td> <td>FW6029</td> <td>FW6093</td> </tr> </table> </div>	FW5004	FW6025	FW7027	FW5018	FW6026	FW7026	FW5034	FW6028	FW7029		FW6029	FW6093
FW5004	FW6025	FW7027											
FW5018	FW6026	FW7026											
FW5034	FW6028	FW7029											
	FW6029	FW6093											
8. DENSITY <input type="checkbox"/> 200 SPI <input checked="" type="checkbox"/> 1600 SPI <input type="checkbox"/> 356 SPI <input type="checkbox"/> 800 SPI <input type="checkbox"/> _____	12. PHYSICAL BLOCK LENGTH IN BYTES Lrecl=83 Blk size=4150												
	13. LENGTH OF BYTES IN BITS 8												

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Location Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 1
Station No	11	5	bytes	A5	
Latitude -					Starting Position
Degrees	16	2	bytes	I2	33-73 degrees
Minutes	18	2	bytes	I2	0-59 minutes
Seconds	20	2	bytes	I2	0-59 seconds
Hemisphere	22	1	bytes	A1	N hemisphere
Longitude -					Starting Position
Degrees	23	3	bytes	I3	118-180 degrees
Minutes	26	2	bytes	I2	0-59 minutes
Seconds	28	2	bytes	I2	0-59 seconds
Hemisphere	30	1	bytes	A1	W hemisphere
Date -					Starting date GMT
Year	31	2	bytes	I2	Last 2 digits
Month	33	2	bytes	I2	1-12 months
Day	35	2	bytes	I2	1-31 days
Time -					Starting time GMT
Hours	37	2	bytes	I2	0-23 hours
Minutes	39	2	bytes	I2	0-59 minutes
Latitude -					Ending Position
Degrees	41	2	bytes	I2	33-73 degrees
Minutes	43	2	bytes	I2	0-59 minutes
Seconds	45	2	bytes	I2	0-59 seconds
Hemisphere	47	1	bytes	A1	N hemisphere
Longitude -					Ending Position
Degrees	48	3	bytes	I3	118-180 degrees
Minutes	51	2	bytes	I2	0-59 minutes
Seconds	53	2	bytes	I2	0-59 seconds
Hemisphere	55	1	bytes	A1	W hemisphere
Elapsed Time	56	2	bytes	I2	0-30 whole minutes
Time Zone -					
Sign	58	1	bytes	A1	+ or - relative to GMT
Number	59	2	bytes	I2	Zone 01-12
Ships Speed	61	3	bytes	I3	Whole knots
Course Headings	64	2	bytes	I2	0-35 tens of degrees true

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Location (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of Eyes Above Sea	66	3	bytes	I3	Whole meters
Platform Type	69	1	bytes	A1	NODC Platform Type Code
Sampling Technique	70	1	bytes	A2	NODC Sampling Technique Code
Ship Activity	71	1	bytes	A1	NODC Ship Activity Code
Photos Taken	72	1	bytes	A1	NODC Collection Code
Width of Transect	73	1	bytes	A1	NODC Zone Scheme Code
Angle of View	74	1	bytes	A1	NODC Angle of View Code
Observation Conditions	75	1	bytes	A1	NODC Observation Conditions Code
Distance Made Good	76	4	bytes	I4	Kilometers to tenths
Watch Type	80	1	bytes	A1	
Transect Width	81	3	bytes	I3	Tens of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment Record

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 2
Station No	11	5	bytes	A5	
Bottom Depth	16	4	bytes	I4	Whole meters
Thermocline Depth	20	3	bytes	I3	0-100 meters
Sea Surface Temperature	23	4	bytes	I4	-3 to +10 degrees to tenths Celsius
Salinity	27	3	bytes	I3	20 o/oo to 34 o/oo parts per thousand to tenths
Dry Bulb Temp	30	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Wet Bulb Temp	34	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Humidity	38	2	bytes	I2	00-99 percent
Barometric Pressure	40	4	bytes	I4	0.9600-1.0400 bars to tenths of millibars
Barometric Trend	44	1	bytes	A1	+ rising, - falling, 0 steady
Wind Direction	45	2	bytes	I2	NODC Direction Code (WMO Codes 0885 & 0877)
Wind Speed	47	2	bytes	I2	0-50 knots
Sea State	49	1	bytes	A1	WMO Code 3700
Swell Direction	50	2	bytes	I2	NODC Direction Code
Swell Height	52	3	bytes	I3	0-07.6 meters to tenths
Weather	55	2	bytes	A2	WMO Code 4677
Cloud Type	57	1	bytes	A1	WMO Code 0500
Cloud Amount	58	1	bytes	A1	WMO Code 2700

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Water Color	59	2	bytes	A2	NODC Water Color Code (Forel-Ule scale)
Visibility	61	1	bytes	A1	WMO Code 4300
Sun Direction	62	1	bytes	A1	NODC Compass Direction Code
Glare Intensity	63	1	bytes	A1	NODC Glare Intensity Code
Glare Area	64	1	bytes	A1	NODC Glare Area Code
Light Level	65	3	bytes	I3	Tens of Foot-candles
Moon Phase	68	1	bytes	A1	NODC Moon Phase Code
Tide Height	69	1	bytes	A1	NODC Tide Height Code
Tide Cycle	70	1	bytes	A1	+ rising, - falling, 0 slack water
Distance to Shore	71	4	bytes	I4	Whole nautical miles
Distance to Shelf break	75	3	bytes	I3	Whole nautical miles
SECCHI Depth	78	2	bytes	I2	Whole meters
Debris Code	80	1	bytes	A1	NODC Debris Code (for non- bird associated debris)
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Ice Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 3
Station No	11	5	bytes	A5	
Ice In Transect					
Cover	16	1	bytes	A1	WMO Code 0547
Type	17	1	bytes	A1	WMO Code 3763
Form	18	1	bytes	A1	WMO Code 1147
Relief	19	1	bytes	A1	WMO Code 3962
Thick	20	1	bytes	A1	WMO Code 4006
Melt	21	1	bytes	A1	WMO Code 2650
Ice Outside Transect					
Cover	22	1	bytes	A1	WMO Code 0547
Type	23	1	bytes	A1	WMO Code 3763
Form	24	1	bytes	A1	WMO Code 1147
Relief	25	1	bytes	A1	WMO Code 3962
Thick	26	1	bytes	A1	WMO Code 4006
Melt	27	1	bytes	A1	WMO Code 2650
Open Water					
Type	28	1	bytes	A1	WMO Code 4552
Direction	29	1	bytes	A1	WMO Code 0739
Distance	30	1	bytes	A1	WMO Code 3600
Lead/Polynya	31	1	bytes	A1	WMO Code 4300
Visible Ice					
Description	32	1	bytes	A1	WMO Code 0663
Direction	33	1	bytes	A1	WMO Code 0739
Distance	34	1	bytes	A1	WMO Code 3600
Miscellaneous					
Arctic Cod Excess	35	1	bytes	A1	NODC Collection Code
Sediment	36	1	bytes	A1	NODC Collection Code
Ice Algae	37	1	bytes	A1	NODC Collection Code
Mammal Trace	38	1	bytes	A1	NODC Mammal Trace Code
Other Features	39	1	bytes	A1	NODC Mammal Trace Code
Ice Pattern					
In Transect	40	1	bytes	A1	1-Regular, 2-Clumped
Outside Trans	41	1	bytes	A1	1-Regular, 2-Clumped

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Ice (continued)

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Ship in Lead or Polynya Location	42	1	bytes	A1	1-Lead, 2-Polynya, 3-Indeterminable
Width	43	1	bytes	A1	WMO Code 4300
Distance	44	1	bytes	A1	WMO Code 4300
Time of Ice Conditions	45	2	bytes	I2	Whole minutes from start time to observation time, must increase for a station
Water vs Land % Covered	47	2	bytes	I2	00-99 Percent
Pond Size	49	1	bytes	A1	NODC Size of Pond Code
Open Water Ice Description	50	1	bytes	A1	WMO Code 1147
Cover	51	1	bytes	A1	WMO Code 0547
Blank	52	26	bytes	X26	
Sequence Number	78	3	bytes	I3	Ascending numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Text Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 4
Station No	11	5	bytes	A5	
Text	16	62	bytes	A62	
Sequence Number	78	3	bytes	I3	Ascending Numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Data Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 3
Station No	11	5	bytes	A5	
Time into Transect	16	2	bytes	I2	Whole minutes from start time to observation time
Taxonomic Code	18	12	bytes	I12	Class 88-92, ends with paired trailing blanks
Species Group	30	2	bytes	I2	
Age	32	1	bytes	A1	NODC Age Class Group Code
Sex	33	1	bytes	A1	NODC Sex Code
Color	34	1	bytes	A1	NODC Color Phase Code
Plumage	35	1	bytes	A1	NODC Plumage Code
Molt	36	1	bytes	A1	NODC Molt Code
Number of Individuals	37	5	bytes	I5	Whole number, must not be omitted
Counting Method	42	1	bytes	A1	NODC Counting Method Code
Reliability	43	1	bytes	A1	NODC Reliability Code
Distance Measure Type	44	1	bytes	A1	NODC Distance Measurement Type Code
Distance to Birds	45	3	bytes	I3	Tens of meters
Direction of Flight	48	2	bytes	I2	00-35 Tens of degrees
Association	50	1	bytes	A1	NODC Type of Assoc Code
Linkage	51	3	bytes	I3	Sequence number of multi- species group in station
Species Number	54	2	bytes	I2	Number of species linked
Behavior	56	2	bytes	A2	NODC Behavior Code
Special Marks	58	1	bytes	A1	NODC Special Marks Code
Bird Condition	59	1	bytes	A1	NODC Bird Condition Code

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Data (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Food Source	60	1	bytes	A1	NODC Food Source Association Code
Tax Code of Food	61	10	bytes	I10	
Debris	71	1	bytes	A1	NODC Debris code
Oil	72	1	bytes	A1	NODC Oil Code
Distance from Breed Colony	73	3	bytes	I3	Nautical miles
Habitat	76	2	bytes	2A1	NODC Habitat Code, may code 2, left to right
Sequence Number	78	3	bytes	I3	Ascending numeric
Substrate	81	1	bytes	A1	NODC Substrate Code
Cover	82	1	bytes	A1	NODC Cover Code
Outside Zone	83	1	bytes	A1	NODC Outside Zone Code

DATA DOCUMENTATION FORM

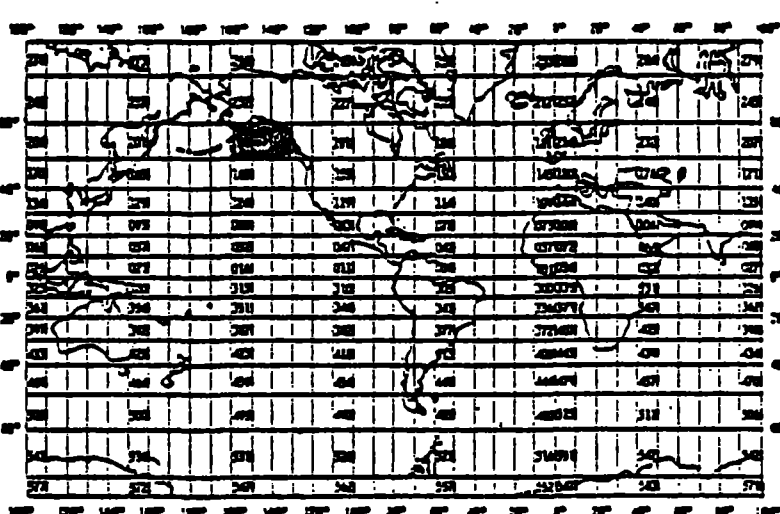
TR 3579

NOAA FORM 24-13
(4-73)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852FORM APPROVED
O.M.S. No. 41-R2551

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 MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED Dr. Calvin Lensink U. S. Fish and Wildlife Service- Office of Biological Services-Coastal Ecosystems 1011 East Tudor Rd. Anchorage, Alaska, 99503											
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED OCSEAP RU - 337 033		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW 7026									
4. PLATFORM NAME(S) NOAA RV Miller Freeman	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Ship	6. PLATFORM AND OPERATOR NATIONALITY(IES) <table border="1"><thead><tr><th>PLATFORM</th><th>OPERATOR</th><th>FROM: MO, DAY, YR</th><th>TO: MO, DAY, YR</th></tr></thead><tbody><tr><td>USA</td><td>USA</td><td>1-18-77</td><td>2-10-77</td></tr></tbody></table>		PLATFORM	OPERATOR	FROM: MO, DAY, YR	TO: MO, DAY, YR	USA	USA	1-18-77	2-10-77
PLATFORM	OPERATOR	FROM: MO, DAY, YR	TO: MO, DAY, YR								
USA	USA	1-18-77	2-10-77								
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR _____ MONTH _____		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA 									
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)											
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) Dr. Calvin Lensink Dr. Patrick Gould (907) 276-3800											

B. SCIENTIFIC 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
Station Type	N/A	See Attached Codes	N/A	N/A
Start Latitude & Longitude	Degrees, Minutes, Seconds, Hemisphere	Combined Radar Fixes and Depth Charts	N/A	N/A
Date - Time	Year, Month, Day Hour, Minute	Always GMT	N/A	N/A
Elapsed Time	Minutes	N/A	N/A	N/A
Time Zone	International Standard	N/A	N/A	N/A
Speed	Knots made good	Derived from plotted positions	N/A	N/A
Course	10's of degrees true made good	Derived from plotted positions	N/A	N/A
Height	Whole meters	Measured with steel Tape	N/A	N/A
Obs. Conditions	033 code	Observers opinion of all factors influencing observations - subjective	N/A	N/A
Transect Width	10's of meters	Estimated, based on periodic checks with a range finder.	N/A	N/A
Depth	meters	Fathometer and Charts	N/A	N/A
Surface Temp.	tenths of degrees centigrade	Temp. gage at ships intake	N/A	N/A
Sea State	WMO 3700 codes	Observation	N/A	N/A
Weather	WMO 4677 codes selected	Observation - see attached list of selected codes	N/A	N/A
Taxonomic Code	NODC Taxonomic codes	1977 version	N/A	N/A
Age	033 codes	Observation	N/A	N/A
Sex	033 Codes	Observation	N/A	N/A
Color Phase	033 Codes	Observation	N/A	N/A

```

      d
      d
      d
    dddd      ppp      sss
d      d      p      p      s      s
d      d      p      p      s      s
    ddd      pppp      sssss
      p      s      s
      p      s      s
      p      sss

```

DATA PROJECTS GROUP
 333 Pastore Hall
 University of R.I.
 Kingston, RI 02881

This Data Documentation Form (DDF) is composed of two parts. The first contains tape specifications and record format descriptions provided by the originator cited in Section A.1. The data have subsequently been validated by the Data Projects Group. Range and relational checks, code group checks, plus relocation of fields, unit conversions, and final tape recording techniques used in this process are given in the second part. Resolution of data errors found during this process has been made through contact with the originator.

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Type 1 = Location
Type 2 = Environment
Type 4 = Text
Type 5 = Data
These are differentiated by byte 10

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File organized by Station Number (Record Type 1, Bytes 11-13)

ATTRIBUTES AS EXPRESSED IN ☐ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert L. Blanscett 907-276-3800

ADDRESS U.S.F.&W.S., OBS-CE, 1011 E. Tudor Rd, Anchorage, Alaska, 99503

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE <input type="checkbox"/> BCD <input type="checkbox"/> BINARY <input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/> _____	9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input type="checkbox"/> _____
6. NUMBER OF TRACKS (CHANNELS) <input type="checkbox"/> SEVEN <input checked="" type="checkbox"/> NINE <input type="checkbox"/> _____	10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 <input type="checkbox"/> _____
7. PARITY <input checked="" type="checkbox"/> ODD <input type="checkbox"/> EVEN	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE. VOLUME NUMBER) OCSEAP - USFWS/OBSCE 337 033 - FW7026 RV NOAA Miller Freeman 77/1/18 - 77/2/10 LENSINK 9TRK, 800BPI, ODD, EBCDIC NON LABELED-IBM UTILITY B
8. DENSITY <input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI <input type="checkbox"/> 356 BPI <input checked="" type="checkbox"/> 500 BPI <input type="checkbox"/> _____	12. PHYSICAL BLOCK LENGTH IN BYTES 83 13. LENGTH OF BYTES IN BITS 8

B. SCIENTIFIC 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
Number	Number of individual organisms	Binoculars	N/A	N/A
Flight Direction	10's of degrees true	Observation	N/A	N/A
Linkage	033 codes	N/A	N/A	N/A
Behavior	Selected 033 codes	See attached list of Selected codes	N/A	N/A
Outside Zone	033 codes	N/A	N/A	N/A

RECORD FORMAT DESCRIPTION

RECORD NAME Location - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., 22N, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	"Always 033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	"Always 1"
Station Number	11	5	bytes	A5	4th byte coded for ship type 5th byte coded for transect type
Latitude, Degrees	16	2	bytes	I2	Starting Position
Minutes	18	2	bytes	I2	" "
Seconds	20	2	bytes	I2	" "
Hemisphere	22	1	bytes	A1	"N" or "S"
Longitude, Degrees	23	3	bytes	I3	Starting Position
Minutes	26	2	bytes	I2	" "
Seconds	28	2	bytes	I2	" "
Hemisphere	30	1	bytes	A1	"E" or "W"
Year	31	2	bytes	I2	Last two digits of year = Starting Time GMT
Month	33	2	bytes	I2	" " "
Day	35	2	bytes	I2	" " "
Hour	37	2	bytes	I2	" " "
Minute	39	2	bytes	I2	" " "
Latitude, Degrees	41	2	bytes	I2	Ending... Position
Minutes	43	2	bytes	I2	" "
Seconds	45	2	bytes	I2	" "
Hemisphere	47	1	bytes	A1	"N" or "S"
Longitude, Degrees	48	3	bytes	I3	Ending Position
Minutes	51	2	bytes	I2	" "
Seconds	53	2	bytes	I2	" "
Hemisphere	55	1	bytes	A1	"E" or "W"
Elapsed Time	56	2	bytes	I2	whole minutes
Time Zone	58	1	byte	A1	"+" or "-"
Time Zone	59	2	bytes	A2	01-12
Speed Made Good	61	3	bytes	I3	in whole knots
Course Made Good	64	2	bytes	I2	tens of degrees true

RECORD FORMAT DESCRIPT. .1

RECORD NAME Location (continued) - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (0-6, Mts, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of eyes above sea	66	3	bytes	I3	In whole meters
Observation conditions	75	1	bytes	A1	1-7 bad-excellent
Transect width	81	3	bytes	I3	10's of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Environmental - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., 322, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "2"
Depth	16	4	bytes	I4	In whole meters
Surface Temp.	23	4	bytes	I4	In tenths of degrees Centigrad
Surface Salinity	27	3	bytes	I3	In parts per hundred
Barometric Pressure	40	4	bytes	I4	In tenths of millibars
Barometric Trend	44	1	bytes	A1	+ = rising, 0 = steady, - = falling
Wind Direction	45	2	bytes	I2	In 10's of degrees true See WMO codes 0885 & 0877
Wind Speed	47	2	bytes	I2	In whole knots
Sea State	49	1	bytes	A1	WMO code 3700
Weather	55	2	bytes	A2	WMO code 4677 with restricted choice as shown below: 00, 03, 41, 43, 68, 69, 87, 38, 71, 7

RECORD FORMAT DESCRIPTION

RECORD NAME / Data - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., A12, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "5"
Station Number	11	5	bytes	A5	bytes 14-15 define ship and observation types
Taxonomic Code	18	10	bytes	I10	NODC 1977 codes
Subspecies	28	2	bytes	I2	
Species Group	30	2	bytes	A2	
Age Class	32	1	bytes	A1	
Sex	33	1	bytes	A1	
Color Phase	34	1	bytes	A1	
Number of Individuals	37	5	bytes	I5	whole numeric
Flight Direction	48	2	bytes	I2	In 10's of degrees
Linkage	51	3	bytes	I3	Sequence number of a group within one observation
Behavior	56	2	bytes	A2	
Sequence	78	3	bytes	I3	Ascending numeric, for sorting
Outsice Zone	83	1	bytes	A1	0 = birds within transect width defined in RT 1, bytes 81-83. 1-9 = birds other than above.

D. INSTRUMENT CALIBRATION

This calibration information will be utilized by NOAA's National Oceanographic Instrumentation Center in their efforts to develop calibration standards for voluntary acceptance by the oceanographic community. Identify the instruments used by your organization to obtain the scientific content of the DDF (i.e., STD, temperature and pressure sensors, salinometers, oxygen meters, velocimeters, etc.) and furnish the calibration data requested by completing and/or checking ("✓") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

INSTRUMENT TYPE (MFN., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALIBRATED
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Record Type is coded in column 10 of each record as follows:

- 1 - Location
- 2 - Environment
- 3 - Ice Record
- 4 - Text Comments
- 5 - Data Observations

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File is organized by Station Number in Columns 11-15 of each record. Each Station contains one Type 1 card; one Type 2 card; zero to several Type 3 cards; and one to several Type 5 cards (one for each observation at that station).

3. ATTRIBUTES AS EXPRESSED IN ☒ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Data Projects Group (401)792-2320

ADDRESS 333 Pastore Hall, University of Rhode Island, Kingston, RI 02881

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE <input type="checkbox"/> BCD <input type="checkbox"/> BINARY <input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/> _____	9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> 1/2 inch
6. NUMBER OF TRACKS (CHANNELS) <input type="checkbox"/> SEVEN <input checked="" type="checkbox"/> NINE <input type="checkbox"/> _____	10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 IBM 3420 <input checked="" type="checkbox"/> Tape Mark
7. PARITY <input checked="" type="checkbox"/> ODD <input type="checkbox"/> EVEN	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS) <div style="border: 1px solid black; padding: 5px; margin: 5px;"> FW7026 on tape G02NDC included with cruises: FW5004 FW6025 FW7027 FW5018 FW6026 → FW7026 FW5034 FW6028 FW7029 FW6029 FW6093 </div>
8. DENSITY <input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI <input type="checkbox"/> 356 BPI <input type="checkbox"/> 800 BPI <input type="checkbox"/> _____	12. PHYSICAL BLOCK LENGTH IN BYTES Lrcl=83 Blk size=4150 13. LENGTH OF BYTES IN BITS 8

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Location Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 1
Station No	11	5	bytes	A5	
Latitude -					Starting Position
Degrees	16	2	bytes	I2	33-73 degrees
Minutes	18	2	bytes	I2	0-59 minutes
Seconds	20	2	bytes	I2	0-59 seconds
Hemisphere	22	1	bytes	A1	N hemisphere
Longitude -					Starting Position
Degrees	23	3	bytes	I3	118-180 degrees
Minutes	26	2	bytes	I2	0-59 minutes
Seconds	28	2	bytes	I2	0-59 seconds
Hemisphere	30	1	bytes	A1	W hemisphere
Date -					Starting date GMT
Year	31	2	bytes	I2	Last 2 digits
Month	33	2	bytes	I2	1-12 months
Day	35	2	bytes	I2	1-31 days
Time -					Starting time GMT
Hours	37	2	bytes	I2	0-23 hours
Minutes	39	2	bytes	I2	0-59 minutes
Latitude -					Ending Position
Degrees	41	2	bytes	I2	33-73 degrees
Minutes	43	2	bytes	I2	0-59 minutes
Seconds	45	2	bytes	I2	0-59 seconds
Hemisphere	47	1	bytes	A1	N hemisphere
Longitude -					Ending Position
Degrees	48	3	bytes	I3	118-180 degrees
Minutes	51	2	bytes	I2	0-59 minutes
Seconds	53	2	bytes	I2	0-59 seconds
Hemisphere	55	1	bytes	A1	W hemisphere
Elapsed Time	56	2	bytes	I2	0-30 whole minutes
Time Zone -					
Sign	58	1	bytes	A1	+ or - relative to GMT
Number	59	2	bytes	I2	Zone 01-12
Ships Speed	61	3	bytes	I3	Whole knots
Course Heading	64	2	bytes	I2	0-35 tens of degrees true

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Location (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of Eyes Above Sea	66	3	bytes	I3	Whole meters
Platform Type	69	1	bytes	A1	NODC Platform Type Code
Sampling Technique	70	1	bytes	A2	NODC Sampling Technique Code
Ship Activity	71	1	bytes	A1	NODC Ship Activity Code
Photos Taken	72	1	bytes	A1	NODC Collection Code
Width of Transect	73	1	bytes	A1	NODC Zone Scheme Code
Angle of View	74	1	bytes	A1	NODC Angle of View Code
Observation Conditions	75	1	bytes	A1	NODC Observation Conditions Code
Distance Made Good	76	4	bytes	I4	Kilometers to tenths
Watch Type	80	1	bytes	A1	
Transect Width	81	3	bytes	I3	Tens of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment Record

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 2
Station No	11	5	bytes	A5	
Bottom Depth	16	4	bytes	I4	Whole meters
Thermocline Depth	20	3	bytes	I3	0-100 meters
Sea Surface Temperature	23	4	bytes	I4	-3 to +10 degrees to tenths Celsius
Salinity	27	3	bytes	I3	20 o/oo to 34 o/oo parts per thousand to tenths
Dry Bulb Temp	30	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Wet Bulb Temp	34	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Humidity	38	2	bytes	I2	00-99 percent
Barometric Pressure	40	4	bytes	I4	0.9600-1.0400 bars to tenths of millibars
Barometric Trend	44	1	bytes	A1	+ rising, - falling, 0 steady
Wind Direction	45	2	bytes	I2	NOBC Direction Code (WMO Codes 0885 & 0877)
Wind Speed	47	2	bytes	I2	0-50 knots
Sea State	49	1	bytes	A1	WMO Code 3700
Swell Direction	50	2	bytes	I2	NOBC Direction Code
Swell Height	52	3	bytes	I3	0-07.6 meters to tenths
Weather	55	2	bytes	A2	WMO Code 4677
Cloud Type	57	1	bytes	A1	WMO Code 0500
Cloud Amount	58	1	bytes	A1	WMO Code 2700

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Water Color	59	2	bytes	A2	NODC Water Color Code (Forel-Ule scale)
Visibility	61	1	bytes	A1	WMO Code 4300
Sun Direction	62	1	bytes	A1	NODC Compass Direction Code
Glare Intensity	63	1	bytes	A1	NODC Glare Intensity Code
Glare Area	64	1	bytes	A1	NODC Glare Area Code
Light Level	65	3	bytes	I3	Tens of Foot-candles
Moon Phase	68	1	bytes	A1	NODC Moon Phase Code
Tide Height	69	1	bytes	A1	NODC Tide Height Code
Tide Cycle	70	1	bytes	A1	+ rising, - falling, 0 slack water
Distance to Shore	71	4	bytes	I4	Whole nautical miles
Distance to Shelf break	75	3	bytes	I3	Whole nautical miles
SECCHI Depth	78	2	bytes	I2	Whole meters
Debris Code	80	1	bytes	A1	NODC Debris Code (for non-bird associated debris)
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Ice Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 3
Station No	11	5	bytes	A5	
Ice In Transect					
Cover	16	1	bytes	A1	WMO Code 0547
Type	17	1	bytes	A1	WMO Code 3763
Form	18	1	bytes	A1	WMO Code 1147
Relief	19	1	bytes	A1	WMO Code 3962
Thick	20	1	bytes	A1	WMO Code 4006
Melt	21	1	bytes	A1	WMO Code 2650
Ice Outside Transect					
Cover	22	1	bytes	A1	WMO Code 0547
Type	23	1	bytes	A1	WMO Code 3763
Form	24	1	bytes	A1	WMO Code 1147
Relief	25	1	bytes	A1	WMO Code 3962
Thick	26	1	bytes	A1	WMO Code 4006
Melt	27	1	bytes	A1	WMO Code 2650
Open Water					
Type	28	1	bytes	A1	WMO Code 4552
Direction	29	1	bytes	A1	WMO Code 0739
Distance	30	1	bytes	A1	WMO Code 3600
Lead/Polynya	31	1	bytes	A1	WMO Code 4300
Visible Ice					
Description	32	1	bytes	A1	WMO Code 0663
Direction	33	1	bytes	A1	WMO Code 0739
Distance	34	1	bytes	A1	WMO Code 3600
Miscellaneous					
Arctic Cod Excess	35	1	bytes	A1	NODC Collection Code
Sediment	36	1	bytes	A1	NODC Collection Code
Ice Algae	37	1	bytes	A1	NODC Collection Code
Mammal Trace	38	1	bytes	A1	NODC Mammal Trace Code
Other Features	39	1	bytes	A1	NODC Mammal Trace Code
Ice Pattern					
In Transect	40	1	bytes	A1	1-Regular, 2-Clumped
Outside Trans	41	1	bytes	A1	1-Regular, 2-Clumped

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Ice (continued)

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Ship in Lead or Polynya Location	42	1	bytes	A1	1-Lead, 2-Polynya, 3-Indeterminable
Width	43	1	bytes	A1	WMO Code 4300
Distance	44	1	bytes	A1	WMO Code 4300
Time of Ice Conditions	45	2	bytes	I2	Whole minutes from start time to observation time, must increase for a station
Water vs Land % Covered	47	2	bytes	I2	00-99 Percent
Pond Size	49	1	bytes	A1	NODC Size of Pond Code
Open Water Ice Description Cover	50	1	bytes	A1	WMO Code 1147
	51	1	bytes	A1	WMO Code 0547
Blank	52	26	bytes	X26	
Sequence Number	78	3	bytes	I3	Ascending numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Text Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 4
Station No	11	5	bytes	A5	
Text	16	62	bytes	A62	
Sequence Number	78	3	bytes	I3	Ascending Numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Data Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 5
Station No	11	5	bytes	A5	
Time into Transact	16	2	bytes	I2	Whole minutes from start time to observation time
Taxonomic Code	18	12	bytes	I12	Class 88-92, ends with paired trailing blanks
Species Group	30	2	bytes	I2	
Age	32	1	bytes	A1	NODC Age Class Group Code
Sex	33	1	bytes	A1	NODC Sex Code
Color	34	1	bytes	A1	NODC Color Phase Code
Plumage	35	1	bytes	A1	NODC Plumage Code
Molt	36	1	bytes	A1	NODC Molt Code
Number of Individuals	37	5	bytes	I5	Whole number, must not be omitted
Counting Method	42	1	bytes	A1	NODC Counting Method Code
Reliability	43	1	bytes	A1	NODC Reliability Code
Distance					NODC Distance
Measure Type	44	1	bytes	A1	Measurement Type Code
Distance to Birds	45	3	bytes	I3	Tens of meters
Direction of Flight	48	2	bytes	I2	00-35 Tens of degrees
Association	50	1	bytes	A1	NODC Type of Assoc Code
Linkage	51	3	bytes	I3	Sequence number of multi- species group in station
Species Number	54	2	bytes	I2	Number of species linked
Behavior	56	2	bytes	A2	NODC Behavior Code
Special Marks	58	1	bytes	A1	NODC Special Marks Code
Bird Condition	59	1	bytes	A1	NODC Bird Condition Code

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Data (continued)

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Food Source	60	1	bytes	A1	NODC Food Source Association Code
Tax Code of Food	61	10	bytes	I10	
Debris	71	1	bytes	A1	NODC Debris code
Oil	72	1	bytes	A1	NODC Oil Code
Distance from Breed Colony	73	3	bytes	I3	Nautical miles
Habitat	76	2	bytes	2A1	NODC Habitat Code, may code 2, left to right
Sequence Number	78	3	bytes	I3	Ascending numeric
Substrate	81	1	bytes	A1	NODC Substrate Code
Cover	82	1	bytes	A1	NODC Cover Code
Outside Zone	83	1	bytes	A1	NODC Outside Zone Code

ACCESSION
NUMBER

78-0812

DATA DOCUMENTATION FORM

TR3580

NOAA FORM 24-13
(4-73)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20862FORM APPROVED
O.M.S. No. 41-R2511

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 MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED Dr. Calvin Lensink U. S. Fish and Wildlife Service- Office of Biological Services-Coastal Ecosystems 1011 East Tudor Rd. Anchorage, Alaska, 99503			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED OCSEAP RU - 337		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW70 27	
4. PLATFORM NAME(S) NOAA RV Discoverer		5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Ship	
6. PLATFORM AND OPERATOR NATIONALITY(IES) USA		7. DATES FROM: MO/DAY/YR TO: MO/DAY/YR 8-14-77 3-23-77	
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR MONTH		11. PLEASE DARKEN ALL MARSCEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)			
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) Dr. Calvin Lensink Dr. Patrick Gould (907) 276-3800			

B. SCIENTIFIC 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
Station Type	N/A	See Attached Codes	N/A	N/A
Start Latitude & Longitude	Degrees, Minutes, Seconds, Hemisph.	Combined Radar Fixes and Depth Charts	N/A	N/A
Date - Time	Year, Month, Day Hour, Minute	Always GMT	N/A	N/A
Elapsed Time	Minutes	N/A	N/A	N/A
Time Zone	International Standard	N/A	N/A	N/A
Speed	Knots made good	Derived from plotted positions	N/A	N/A
Course	10's of degrees true made good	Derived from plotted positions	N/A	N/A
Height	Whole meters	Measured with steel Tape	N/A	N/A
Obs. Conditions	033 code	Observers opinion of all factors influencing observations - subjective	N/A	N/A
Transect Width	10's of meters	Estimated, based on periodic checks with a range finder.	N/A	N/A
Depth	meters	Fathometer and Charts	N/A	N/A
Surface Temp.	tenths of degrees centigrade .	Temp. gauge at ships intake	N/A	N/A
Sea State	WMO 3700 codes	Observation	N/A	N/A
Weather	WMO 4677 codes selected	Observation - see attached list of selected codes	N/A	N/A
Taxonomic Code	MONC Taxonomic codes	1977 version	N/A	N/A
Age	033 codes	Observation	N/A	N/A
Sex	033 Codes	Observation	N/A	N/A
Color Photo	033 Codes	Observation	N/A	N/A

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      d
      d
      d
    dddd      PPP      sss
    d  d      P  P      s  s
    d  d      P  P      s  s
    ddd      P P P P      s s s s
                P          s
                P          s
                P          s s s

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DATA PROJECTS GROUP
333 Pastore Hall
University of R.I.
Kingston, RI 02881

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This Data Documentation Form (DDF) is composed of two parts. The first contains tape specifications and record format descriptions provided by the originator cited in Section A.1. The data have subsequently been validated by the Data Projects Group. Range and relational checks, code group checks, plus relocation of fields, unit conversions, and final tape recording techniques used in this process are given in the second part. Resolution of data errors found during this process has been made through contact with the originator.

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Type 1 = Location

Type 2 = Environment

Type 4 = Text

Type 5 = Data

These are differentiated by byte 10

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File organized by Station Number (Record Type 1, Bytes 11-13)

4

ATTRIBUTES AS EXPRESSED IN

☐ PL-1

☐ ALGOL

☐ COBOL

☐ FORTRAN

☐

LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert L. Blanscett 907-276-3800

ADDRESS U.S.F.&W.S., OBS-CE, 1011 E. Tudor Rd. Anchorage, Alaska, 99503

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/></p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/></p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/></p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input type="checkbox"/></p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND CODE IF OF)</p> <p>OCSEAP - USFWS/OBSCE</p> <p>337 033 - FW7027</p> <p>NOAA RV Discoverer</p> <p>77/2/14 - 77/2/23 LENSINK</p> <p>9TRK, 800BPI, ODD, EBCDIC</p> <p>NON LABELED-IBM UTILITY B</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 336 BPI</p> <p><input checked="" type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/></p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>83</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>

B. SCIENTIFIC 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
Number	Number of individual organisms	Binoculars	N/A	N/A
Flight Direction	10's of degrees true	Observation	N/A	N/A
Linkage	033 codes	N/A	N/A	N/A
Behavior	Selected 033 codes	See attached list of Selected codes	N/A	N/A
Outside Zone	033 codes	N/A	N/A	N/A

RECORD FORMAT DESCRIPTION

RECORD NAME Location - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g. MM, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	"Always 033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	"Always 1"
Station Number	11	5	bytes	A5	4th byte coded for ship type 5th byte coded for transect type
Latitude, Degrees	16	2	bytes	I2	Starting Position
Minutes	18	2	bytes	I2	" "
Seconds	20	2	bytes	I2	" "
Hemisphere	22	1	bytes	A1	"N" or "S"
Longitude, Degrees	23	3	bytes	I3	Starting Position
Minutes	26	2	bytes	I2	" "
Seconds	28	2	bytes	I2	" "
Hemisphere	30	1	bytes	A1	"E" or "W"
Year	31	2	bytes	I2	Last two digits of year = Starting Time GMT
Month	33	2	bytes	I2	" " "
Day	35	2	bytes	I2	" " "
Hour	37	2	bytes	I2	" " "
Minute	39	2	bytes	I2	" " "
Latitude, Degrees	41	2	bytes	I2	Ending... Position
Minutes	43	2	bytes	I2	" "
Seconds	45	2	bytes	I2	" "
Hemisphere	47	1	bytes	A1	"N" or "S"
Longitude, Degrees	48	3	bytes	I3	Ending Position
Minutes	51	2	bytes	I2	" "
Seconds	53	2	bytes	I2	" "
Hemisphere	55	1	bytes	A1	"E" or "W"
Elapsed Time	56	2	bytes	I2	whole minutes
Time Zone	58	1	byte	A1	"+" or "-"
Time Zone	59	2	bytes	A2	01-12
Speed Made Good	61	3	bytes	I3	in whole knots
Course Made Good	64	2	bytes	I2	tens of degrees true

RECORD FORMAT DESCRIPT. 1

RECORD NAME Location (continued) - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., Mts, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of eyes above sea	66	3	bytes	I3	In whole meters
Observation conditions	75	1	bytes	A1	1-7 bad-excellent
Transect width	81	3	bytes	I3	10's of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Environmental - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., A20, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "2"
Depth	16	4	bytes	I4	In whole meters
Surface Temp.	23	4	bytes	I4	In tenths of degrees Centigrad
Surface Salinity	27	3	bytes	I3	In parts per hundred
Barometric Pressure	40	4	bytes	I4	In tenths of millibars
Barometric Trend	44	1	bytes	A1	+ = rising, 0 = steady, - = falling
Wind Direction	45	2	bytes	I2	In 10's of degrees true See WMO codes 0885 & 0877
Wind Speed	47	2	bytes	I2	In whole knots
Sea State	49	1	bytes	A1	WMO code 3700
Weather	55	2	bytes	A2	WMO code 4677 with restricted choice as shown below: 00, 03, 41, 43, 68, 69, 87, 88, 71, 7

RECORD FORMAT DESCRIPTION

RECORD NAME / Data - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., 100, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Allways "033"
File Identifier	4	6	bytes	A6	
Record Type	10	1	bytes	I1	Allways "5"
Station Number	11	5	bytes	A5	bytes 14-15 define ship and observation types
Taxonomic Code	18	10	bytes	I10	NODC 1977 codes
Subspecies	28	2	bytes	I2	
Species Group	30	2	bytes	A2	
Age Class	32	1	bytes	A1	
Sex	33	1	bytes	A1	
Color Phase	34	1	bytes	A1	
Number of Individuals	37	5	bytes	I5	whole numeric
Flight Direction	48	2	bytes	I2	In 10's of degrees
Linkage	51	3	bytes	I3	Sequence number of a group within one observation
Behavior	56	2	bytes	A2	
Sequence	78	3	bytes	I3	Ascending numeric, for sorting
Outside Zone	83	1	bytes	A1	0 = birds within transect width defined in RT 1, bytes 81-83. 1-9 = birds other than above.

D. INSTRUMENT CALIBRATION

This calibration information will be utilized by NOAA's National Oceanographic Instrumentation Center in their efforts to develop calibration standards for voluntary acceptance by the oceanographic community. Identify the instruments used by your organization to obtain the scientific content of the DDF (i.e., STD, temperature and pressure sensors, salinometers, oxygen meters, velocimeters, etc.) and furnish the calibration data requested by completing and/or checking ("✓") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

INSTRUMENT TYPE (MFN., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

Record Type is coded in column 10 of each record as follows:

- 1 - Location
- 2 - Environment
- 3 - Ice Record
- 4 - Text Comments
- 5 - Data Observations

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

File is organized by Station Number in Columns 11-15 of each record. Each Station contains one Type 1 card; one Type 2 card; zero to several Type 3 cards; and one to several Type 5 cards (one for each observation at that station).

3. ATTRIBUTES AS EXPRESSED IN ☒ PL-1 ☐ ALGOL ☐ COBOL
☐ FORTRAN ☐ _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Data Projects Group (401)792-2320

ADDRESS 333 Pastore Hall, University of Rhode Island, Kingston, RI 02881

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> 1/2 inch</p>												
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17</p> <p>IBM 3420 <input checked="" type="checkbox"/> Tape Mark</p>												
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME KEY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <div style="border: 1px solid black; padding: 5px;"> <p>FW7027 on tape GO2NDC included with cruises:</p> <table border="0"> <tr> <td>FW5004</td> <td>FW6025</td> <td>→ FW7027</td> </tr> <tr> <td>FW5018</td> <td>FW6026</td> <td>FW7026</td> </tr> <tr> <td>FW5034</td> <td>FW6028</td> <td>FW7029</td> </tr> <tr> <td></td> <td>FW6029</td> <td>FW6093</td> </tr> </table> </div>	FW5004	FW6025	→ FW7027	FW5018	FW6026	FW7026	FW5034	FW6028	FW7029		FW6029	FW6093
FW5004	FW6025	→ FW7027											
FW5018	FW6026	FW7026											
FW5034	FW6028	FW7029											
	FW6029	FW6093											
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 356 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>Lrcl=83 Blk size=4150</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>												

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Location Record

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 1
Station No	11	5	bytes	A5	
Latitude -					Starting Position
Degrees	16	2	bytes	I2	33-73 degrees
Minutes	18	2	bytes	I2	0-59 minutes
Seconds	20	2	bytes	I2	0-59 seconds
Hemisphere	22	1	bytes	A1	N hemisphere
Longitude -					Starting Position
Degrees	23	3	bytes	I3	118-180 degrees
Minutes	26	2	bytes	I2	0-59 minutes
Seconds	28	2	bytes	I2	0-59 seconds
Hemisphere	30	1	bytes	A1	W hemisphere
Date -					Starting date GMT
Year	31	2	bytes	I2	Last 2 digits
Month	33	2	bytes	I2	1-12 months
Day	35	2	bytes	I2	1-31 days
Time -					Starting time GMT
Hours	37	2	bytes	I2	0-23 hours
Minutes	39	2	bytes	I2	0-59 minutes
Latitude -					Ending Position
Degrees	41	2	bytes	I2	33-73 degrees
Minutes	43	2	bytes	I2	0-59 minutes
Seconds	45	2	bytes	I2	0-59 seconds
Hemisphere	47	1	bytes	A1	N hemisphere
Longitude -					Ending Position
Degrees	48	3	bytes	I3	118-180 degrees
Minutes	51	2	bytes	I2	0-59 minutes
Seconds	53	2	bytes	I2	0-59 seconds
Hemisphere	55	1	bytes	A1	W hemisphere
Elapsed Time	56	2	bytes	I2	0-30 whole minutes
Time Zone -					
Sign	58	1	bytes	A1	+ or - relative to GMT
Number	59	2	bytes	I2	Zone 01-12
Ships Speed	61	3	bytes	I3	Whole knots
Course Headings	64	2	bytes	I2	0-35 tens of degrees true

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Location (continued)

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Height of Eyes Above Sea	66	3	bytes	I3	Whole meters
Platform Type	69	1	bytes	A1	NODC Platform Type Code
Sampling Technique	70	1	bytes	A2	NODC Sampling Technique Code
Ship Activity	71	1	bytes	A1	NODC Ship Activity Code
Photos Taken	72	1	bytes	A1	NODC Collection Code
Width of Transect	73	1	bytes	A1	NODC Zone Scheme Code
Angle of View	74	1	bytes	A1	NODC Angle of View Code
Observation Conditions	75	1	bytes	A1	NODC Observation Conditions Code
Distance Made Good	76	4	bytes	I4	Kilometers to tenths
Watch Type	80	1	bytes	A1	
Transect Width	81	3	bytes	I3	Tens of meters

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment Record

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 2
Station No	11	5	bytes	A5	
Bottom Depth	16	4	bytes	I4	Whole meters
Thermocline Depth	20	3	bytes	I3	0-100 meters
Sea Surface Temperature	23	4	bytes	I4	-3 to +10 degrees to tenths Celsius
Salinity	27	3	bytes	I3	20 o/oo to 34 o/oo parts per thousand to tenths
Dry Bulb Temp	30	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Wet Bulb Temp	34	4	bytes	I4	-20 to +30 degrees to tenths Celsius
Humidity	38	2	bytes	I2	00-99 percent
Barometric Pressure	40	4	bytes	I4	0.9600-1.0400 bars to tenths of millibars
Barometric Trend	44	1	bytes	A1	+ rising, - falling, 0 steady
Wind Direction	45	2	bytes	I2	NODC Direction Code (WMO Codes 0885 & 0877)
Wind Speed	47	2	bytes	I2	0-50 knots
Sea State	49	1	bytes	A1	WMO Code 3700
Swell Direction	50	2	bytes	I2	NODC Direction Code
Swell Height	52	3	bytes	I3	0-07.6 meters to tenths
Weather	55	2	bytes	A2	WMO Code 4677
Cloud Type	57	1	bytes	A1	WMO Code 0500
Cloud Amount	58	1	bytes	A1	WMO Code 2700

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Environment (continued)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Water Color	59	2	bytes	A2	NODC Water Color Code (Forel-Ule scale)
Visibility	61	1	bytes	A1	WMO Code 4300
Sun Direction	62	1	bytes	A1	NODC Compass Direction Code
Glare Intensity	63	1	bytes	A1	NODC Glare Intensity Code
Glare Area	64	1	bytes	A1	NODC Glare Area Code
Light Level	65	3	bytes	I3	Tens of Foot-candles
Moon Phase	68	1	bytes	A1	NODC Moon Phase Code
Tide Height	69	1	bytes	A1	NODC Tide Height Code
Tide Cycle	70	1	bytes	A1	+ rising, - falling, 0 slack water
Distance to Shore	71	4	bytes	I4	Whole nautical miles
Distance to Shelf break	75	3	bytes	I3	Whole nautical miles
SECCHI Depth	78	2	bytes	I2	Whole meters
Debris Code	80	1	bytes	A1	NODC Debris Code (for non- bird associated debris)
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Ice Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 3
Station No	11	5	bytes	A5	
Ice In Transect					
Cover	16	1	bytes	A1	WMO Code 0547
Type	17	1	bytes	A1	WMO Code 3763
Form	18	1	bytes	A1	WMO Code 1147
Relief	19	1	bytes	A1	WMO Code 3962
Thick	20	1	bytes	A1	WMO Code 4006
Melt	21	1	bytes	A1	WMO Code 2650
Ice Outside Transect					
Cover	22	1	bytes	A1	WMO Code 0547
Type	23	1	bytes	A1	WMO Code 3763
Form	24	1	bytes	A1	WMO Code 1147
Relief	25	1	bytes	A1	WMO Code 3962
Thick	26	1	bytes	A1	WMO Code 4006
Melt	27	1	bytes	A1	WMO Code 2650
Open Water					
Type	28	1	bytes	A1	WMO Code 4552
Direction	29	1	bytes	A1	WMO Code 0739
Distance	30	1	bytes	A1	WMO Code 3600
Lead/Polynya	31	1	bytes	A1	WMO Code 4300
Visible Ice					
Description	32	1	bytes	A1	WMO Code 0663
Direction	33	1	bytes	A1	WMO Code 0739
Distance	34	1	bytes	A1	WMO Code 3600
Miscellaneous					
Arctic Cod Excess	35	1	bytes	A1	NODC Collection Code
Sediment	36	1	bytes	A1	NODC Collection Code
Ice Algae	37	1	bytes	A1	NODC Collection Code
Mammal Trace	38	1	bytes	A1	NODC Mammal Trace Code
Other Features	39	1	bytes	A1	NODC Mammal Trace Code
Ice Pattern					
In Transect	40	1	bytes	A1	1-Regular, 2-Clumped
Outside Trans	41	1	bytes	A1	1-Regular, 2-Clumped

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Ice (continued)

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Ship in Lead or Polynya Location	42	1	bytes	A1	1-Lead, 2-Polynya, 3-Indeterminable
Width	43	1	bytes	A1	WMO Code 4300
Distance	44	1	bytes	A1	WMO Code 4300
Time of Ice Conditions	45	2	bytes	I2	Whole minutes from start time to observation time, must increase for a station
Water vs Land % Covered	47	2	bytes	I2	00-99 Percent
Pond Size	49	1	bytes	A1	NODC Size of Pond Code
Open Water Ice Description	50	1	bytes	A1	WMO Code 1147
Cover	51	1	bytes	A1	WMO Code 0547
Blank	52	26	bytes	X26	
Sequence Number	78	3	bytes	I3	Ascending numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

RECORD NAME Ship and Aircraft Census Data - Text Record

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN _____ (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 4
Station No	11	5	bytes	A5	
Text	16	62	bytes	A62	
Sequence Number	78	3	bytes	I3	Ascending Numeric
Blank	81	3	bytes	X3	

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Data Record

RECORD NAME

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
File Type	1	3	bytes	A3	Always 033
File ID	4	6	bytes	A6	Identical for all records
Record Type	10	1	bytes	I1	Always 5
Station No	11	5	bytes	A5	
Time into Transect	16	2	bytes	I2	Whole minutes from start time to observation time
Taxonomic Code	18	12	bytes	I12	Class 88-92; ends with paired trailing blanks
Species Group	30	2	bytes	I2	
Age	32	1	bytes	A1	NODC Age Class Group Code
Sex	33	1	bytes	A1	NODC Sex Code
Color	34	1	bytes	A1	NODC Color Phase Code
Plumage	35	1	bytes	A1	NODC Plumage Code
Molt	36	1	bytes	A1	NODC Molt Code
Number of Individuals	37	5	bytes	I5	Whole number; must not be omitted
Counting Method	42	1	bytes	A1	NODC Counting Method Code
Reliability	43	1	bytes	A1	NODC Reliability Code
Distance Measure Type	44	1	bytes	A1	NODC Distance Measurement Type Code
Distance to Birds	45	3	bytes	I3	Tens of meters
Direction of Flight	48	2	bytes	I2	00-35 Tens of degrees
Association	50	1	bytes	A1	NODC Type of Assoc Code
Linkage	51	3	bytes	I3	Sequence number of multi- species group in station
Species Number	54	2	bytes	I2	Number of species linked
Behavior	56	2	bytes	A2	NODC Behavior Code
Special Marks	58	1	bytes	A1	NODC Special Marks Code
Bird Condition	59	1	bytes	A1	NODC Bird Condition Code

RECORD FORMAT DESCRIPTION

Ship and Aircraft Census Data - Data (continued)

RECORD NAME

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Food Source	60	1	bytes	A1	NODC Food Source Association Code
Tax Code of Food	61	10	bytes	I10	
Debris	71	1	bytes	A1	NODC Debris code
Oil	72	1	bytes	A1	NODC Oil Code
Distance from Breed Colony	73	3	bytes	I3	Nautical miles
Habitat	76	2	bytes	2A1	NODC Habitat Code, may code 2, left to right
Sequence Number	78	3	bytes	I3	Ascending numeric
Substrate	81	1	bytes	A1	NODC Substrate Code
Cover	82	1	bytes	A1	NODC Cover Code
Outside Zone	83	1	bytes	A1	NODC Outside Zone Code

Password:

accNo	flea	refNo	proj	inst	ship	startDate	cruise	catId
7800812	F033	TR3571	0081	31V5	31DS	1975/04/21	FW5004	308141
7800812	F033	TR3572	0081	31V5	31FN	1975/08/12	FW5018	308142
7800812	F033	TR3573	0081	31V5	31DS	1975/11/18	FW5034	308143
7800812	F033	TR3574	0081	31V5	32N3	1976/05/01	FW6025	308144
7800812	F033	TR3575	0081	31V5	32N3	1976/05/18	FW6026	308145
7800812	F033	TR3576	0081	31V5	32N3	1976/06/17	FW6028	308146
7800812	F033	TR3577	0081	31V5	32N3	1976/06/18	FW6029	308147
7800812	F033	TR3578	0081	31V5	3191	1976/10/05	FW6093	308148
7800812	F033	TR3579	0081	31V5	31FN	1977/01/20	FW7026	308149
7800812	F033	TR3580	0081	31V5	31DS	1977/02/15	FW7027	308150
7800812	F033	TR3581	0081	31V5	3191	1977/04/20	FW7029	308151

(11 rows affected)

Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
7800812	F033	TR3571	31DS	456	10243	75/04/21	75/06/14
7800812	F033	TR3572	31FN	202	3526	75/08/12	75/09/16
7800812	F033	TR3573	31DS	78	748	75/11/18	75/12/06
7800812	F033	TR3574	32N3	14	200	76/05/01	76/05/11
7800812	F033	TR3575	32N3	25	251	76/05/18	76/05/20
7800812	F033	TR3576	32N3	3	32	76/06/17	76/06/17
7800812	F033	TR3577	32N3	17	563	76/06/18	76/06/26
7800812	F033	TR3578	3191	801	3926	76/10/05	77/10/05
7800812	F033	TR3579	31FN	93	1908	77/01/20	77/02/08
7800812	F033	TR3580	31DS	109	627	77/02/15	77/02/21
7800812	F033	TR3581	3191	508	2619	77/04/20	77/04/26

(11 rows affected)