

DATA DOCUMENTATION FORM

TR3860

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

F033

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.

DDP A:2:07

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 FW6050	
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 USA	7. DATES FROM: MO/DAY/YR TO: MO/DAY/YR 5-4-76 5-5-76
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

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)

3. 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 SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>337 033 FW6050 DISCO TRANSIT 76-05-02 76-05-05 LENSINK 9TRK, 800BPI, ODD, EBCDIC</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 DESCRIPTOR

RECORD NAME Location (continued) - Ship and Aircraft Census

FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., hln, 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., A3B, 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	"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

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 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
- | | | |
|--|--------------------------------|--------------------------------|
| <input checked="" type="checkbox"/> PL-1 | <input type="checkbox"/> ALGOL | <input type="checkbox"/> COBOL |
| <input type="checkbox"/> FORTRAN | <input type="checkbox"/> _____ | 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> <table border="0"> <tr> <td><input type="checkbox"/> BCD</td> <td><input type="checkbox"/> BINARY</td> </tr> <tr> <td><input type="checkbox"/> ASCII</td> <td><input checked="" type="checkbox"/> EBCDIC</td> </tr> <tr> <td colspan="2"><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> BCD	<input type="checkbox"/> BINARY	<input type="checkbox"/> ASCII	<input checked="" type="checkbox"/> EBCDIC	<input type="checkbox"/> _____		<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> 1/2 inch</p>		
<input type="checkbox"/> BCD	<input type="checkbox"/> BINARY								
<input type="checkbox"/> ASCII	<input checked="" type="checkbox"/> EBCDIC								
<input type="checkbox"/> _____									
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <table border="0"> <tr> <td><input type="checkbox"/> SEVEN</td> </tr> <tr> <td><input checked="" type="checkbox"/> NINE</td> </tr> <tr> <td><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> SEVEN	<input checked="" type="checkbox"/> NINE	<input type="checkbox"/> _____	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 IBM 3420 <input checked="" type="checkbox"/> Tape Mark</p>					
<input type="checkbox"/> SEVEN									
<input checked="" type="checkbox"/> NINE									
<input type="checkbox"/> _____									
<p>7. PARITY</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/> ODD</td> </tr> <tr> <td><input type="checkbox"/> EVEN</td> </tr> </table>	<input checked="" type="checkbox"/> ODD	<input type="checkbox"/> EVEN	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME KEY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) FW6050 ON TAPE 608 NDC WITH: → FW6050 FW6078 FW6051 FW6083 FW6052 FW6092 FW6064 FW6094 FW6077 FW6095</p>						
<input checked="" type="checkbox"/> ODD									
<input type="checkbox"/> EVEN									
<p>8. DENSITY</p> <table border="0"> <tr> <td><input type="checkbox"/> 200 BPI</td> <td><input checked="" type="checkbox"/> 1600 BPI</td> </tr> <tr> <td><input type="checkbox"/> 556 BPI</td> <td></td> </tr> <tr> <td><input type="checkbox"/> 800 BPI</td> <td></td> </tr> <tr> <td colspan="2"><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> 200 BPI	<input checked="" type="checkbox"/> 1600 BPI	<input type="checkbox"/> 556 BPI		<input type="checkbox"/> 800 BPI		<input type="checkbox"/> _____		<p>12. PHYSICAL BLOCK LENGTH IN BYTES Lrcl=83 Blk size= 3135</p> <p>13. LENGTH OF BYTES IN BITS 8</p>
<input type="checkbox"/> 200 BPI	<input checked="" type="checkbox"/> 1600 BPI								
<input type="checkbox"/> 556 BPI									
<input type="checkbox"/> 800 BPI									
<input type="checkbox"/> _____									

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/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 Excess	35	1	bytes	A1	NOBC Collection Code
Sediment	36	1	bytes	A1	NOBC Collection Code
Ice Algae	37	1	bytes	A1	NOBC Collection Code
Mammal Trace	38	1	bytes	A1	NOBC Mammal Trace Code
Other Features	39	1	bytes	A1	NOBC 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

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

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

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

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.

DATA DOCUMENTATION FORM

NUMBER

79-0049

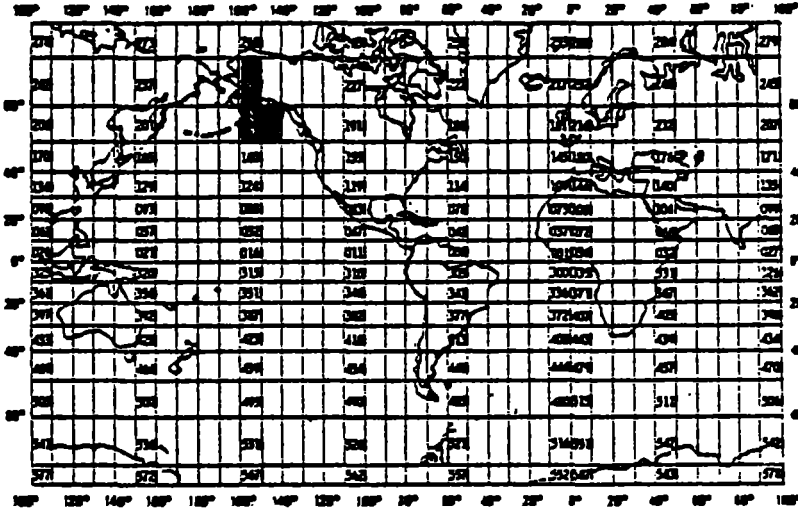
TR3861

NOAA FORM 24-13
(7-73)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20882FORM APPROVED
O.M.B. 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		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW6051									
4. PLATFORM NAME(S) NOAA RV Discoverer	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>5-6-76</td><td>5-9-76</td></tr></tbody></table>		PLATFORM	OPERATOR	FROM: MO, DAY, YR	TO: MO, DAY, YR	USA	USA	5-6-76	5-9-76
PLATFORM	OPERATOR	FROM: MO, DAY, YR	TO: MO, DAY, YR								
USA	USA	5-6-76	5-9-76								
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

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)

3. 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-GE, 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 FW6051 DISCO 76AV 76-05-06 76-05-08 LENSINK 9TRK, 800BPI, ODD, EBCDIC
8. DENSITY <input type="checkbox"/> 200 SPI <input type="checkbox"/> 1600 SPI <input type="checkbox"/> 356 SPI <input checked="" type="checkbox"/> 800 SPI <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 DESCRIPT. 1

RECORD NAME Location (continued) - Ship and Aircraft Census

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	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

CORD NAME Location - Ship and Aircraft Census

12. FIELD NAME	13. POSITION FROM-1 MEASURED IN (e.g., Min, 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., 120, 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., 280, 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, 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

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 LABEL SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) FW6051 ON TAPE G08NDC WITH: FW6050 FW6078 → FW6051 FW6083 FW6052 FW6092 FW6064 FW6094 FW6077 FW6095
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= 3735
		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
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

Ship and Aircraft Census Data - Environment (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		
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 053
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 (0-6, 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; max 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


```

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   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.

DATA DOCUMENTATION FORM

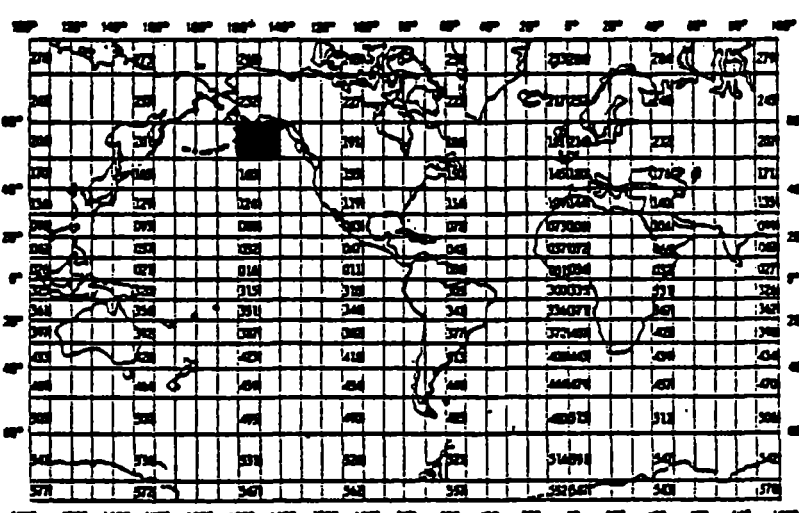
TR 3862

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		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW 6053 FW 6052	
4. PLATFORM NAME(S) NOAA RU Discoverer	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Ship	6. PLATFORM AND OPERATOR NATIONALITY(IES) PLATFORM OPERATOR USA USA	7. DATES FROM: MO/DAY/YR TO: MO/DAY/YR 5-12-76 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 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

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)

3. 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)
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 - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., Address, 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 Location (continued) - Ship and Aircraft Census

FIELD NAME	15. POSITION FROM-1 MEASURED IN (m, km, 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

12. FIELD NAME	13. 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 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., 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.

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 style="text-align: center;">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> <p style="text-align: center;">FW6052 ON TAPE G08NDC WITH:</p> <table style="width: 100%;"> <tr> <td>FW6050</td> <td>FW6078</td> </tr> <tr> <td>FW6051</td> <td>FW6083</td> </tr> <tr> <td>→ FW6052</td> <td>FW6092</td> </tr> <tr> <td>FW6064</td> <td>FW6094</td> </tr> <tr> <td>FW6077</td> <td>FW6095</td> </tr> </table>	FW6050	FW6078	FW6051	FW6083	→ FW6052	FW6092	FW6064	FW6094	FW6077	FW6095
FW6050	FW6078										
FW6051	FW6083										
→ FW6052	FW6092										
FW6064	FW6094										
FW6077	FW6095										
<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 style="text-align: center;">Lrecl=83 Blk size= 3735</p>										
	<p>13. LENGTH OF BYTES IN BITS</p> <p style="text-align: center;">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 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

d			
d			
d			
ddd	PPP	sss	
d	d	P	P
d	d	P	P
ddd	PPP	sss	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.

DATA DOCUMENTATION FORM

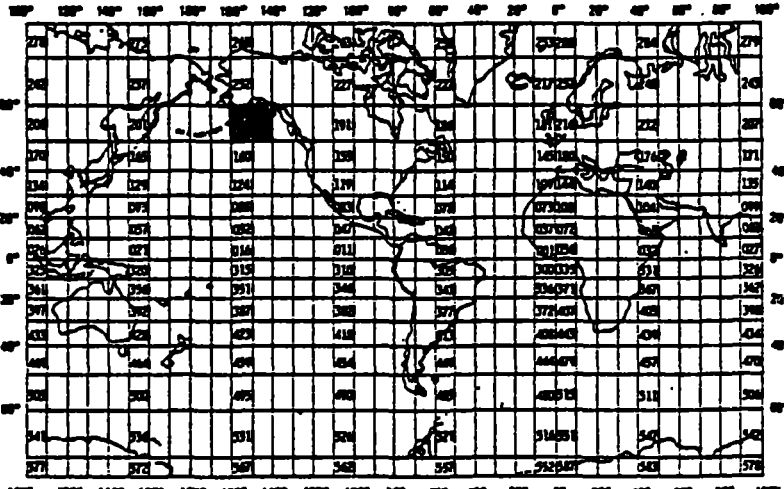
TR3863

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 6064	
4. PLATFORM NAME(S) NOAA R/V Surveyor	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Ship	6. PLATFORM AND OPERATOR NATIONALITY(IES) USA USA	7. DATES FROM: MO, DAY, YR TO: MO, DAY, YR 5/25/76 6/3/76
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 (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

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)

3. 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 - FW6064 NOAA RV Discoverer 76/5/25 - 76/6/3 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"/> _____		
		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., 100, 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., 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
Outsice Zone	83	1	bytes	A1	0 = birds within transect width defined in RT 1, bytes 81-83. 1-9 = birds other thar. above.

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

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 OF DATA TYPE, VOLUME NUMBER)</p> <p>FW6064 ON TAPE GDSNDC WITH:</p> <table> <tr> <td>FW6050</td> <td>FW6078</td> </tr> <tr> <td>FW6051</td> <td>FW6083</td> </tr> <tr> <td>FW6052</td> <td>FW6092</td> </tr> <tr> <td>→ FW6064</td> <td>FW6094</td> </tr> <tr> <td>FW6071</td> <td>FW6095</td> </tr> </table>	FW6050	FW6078	FW6051	FW6083	FW6052	FW6092	→ FW6064	FW6094	FW6071	FW6095
FW6050	FW6078										
FW6051	FW6083										
FW6052	FW6092										
→ FW6064	FW6094										
FW6071	FW6095										
<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= 3135</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 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

Ship and Aircraft Census Data - Environment (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		
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 053
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

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

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 Polynaa Location	42	1	bytes	A1	1-Lead, 2-Polynaa, 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	NOOC 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

```

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   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.

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., 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

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)

3. 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 FW6094 MOANA WAVE 76CVI 76-10-23 76-11-06 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

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

DATA DOCUMENTATION FORM

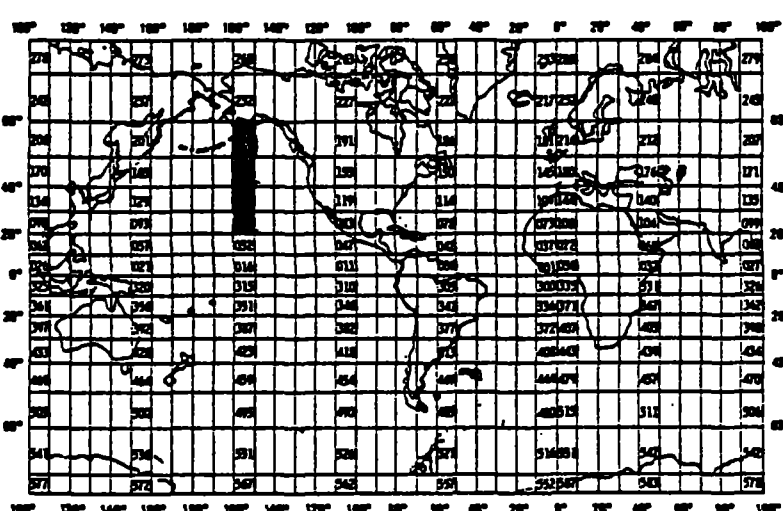
TR 3868

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		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW6094									
4. PLATFORM NAME(S) CUT NOAA RV MONANA WAVE	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>10-23-76</td><td>11-6-76</td></tr></tbody></table>	FROM: MO, DAY, YR	TO: MO, DAY, YR	10-23-76	11-6-76
PLATFORM	OPERATOR										
USA	USA										
FROM: MO, DAY, YR	TO: MO, DAY, YR										
10-23-76	11-6-76										
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. 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	NOEC 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   ggg
d  d   P   P   g   g
d  d   P   P   g   g
ddd   PPPP   gggg
      P       g
      P       g
      P       ggg

```

DATA PROJECTS GROUP
 333 Pastore Hall
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 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.

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</p> <p><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> <p>FW6092 ON TAPE 608 NDC WITH:</p> <table style="width: 100%;"> <tr> <td>FW6050</td> <td>FW6078</td> </tr> <tr> <td>FW6051</td> <td>FW6083</td> </tr> <tr> <td>FW6052</td> <td>→ FW6092</td> </tr> <tr> <td>FW6064</td> <td>FW6094</td> </tr> <tr> <td>FW6077</td> <td>FW6095</td> </tr> </table>	FW6050	FW6078	FW6051	FW6083	FW6052	→ FW6092	FW6064	FW6094	FW6077	FW6095
FW6050	FW6078										
FW6051	FW6083										
FW6052	→ FW6092										
FW6064	FW6094										
FW6077	FW6095										
<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= 3735</p>										
	<p>13. LENGTH OF BYTES IN BITS</p> <p style="text-align: center;">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
Ship's 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	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/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 stator
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	NOBC Age Class Group Code
Sex	33	1	bytes	A1	NOBC Sex Code
Color	34	1	bytes	A1	NOBC Color Phase Code
Plumage	35	1	bytes	A1	NOBC Plumage Code
Molt	36	1	bytes	A1	NOBC Molt Code
Number of Individuals	37	5	bytes	I5	Whole number, must not be omitted
Counting Method	42	1	bytes	A1	NOBC Counting Method Code
Reliability	43	1	bytes	A1	NOBC Reliability Code
Distance Measure Type	44	1	bytes	A1	NOBC 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	NOBC 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	NOBC Behavior Code
Special Marks	58	1	bytes	A1	NOBC Special Marks Code
Bird Condition	59	1	bytes	A1	NOBC 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, max 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 / 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., 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, 72

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., hdm, 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

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

23748 41 NTMS 1 23 23748 41 NTMS 1 23

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)

3. 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 - FW6092 NOAA RV Miller Freeman 76/10/18 - 76/10/29 LENSINK 9TRK, 800BPI, ODD, EBCDIC NON LABELED-IBM UTILITY B 12. PHYSICAL BLOCK LENGTH 83
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"/> _____	
13. LENGTH OF BYTES IN BITS 8	

DATA DOCUMENTATION FORM

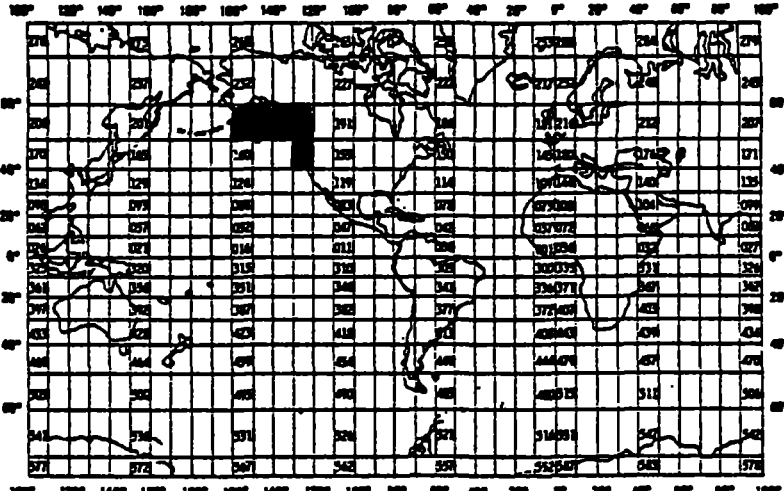
TR3864

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 FW6077									
4. PLATFORM NAME(S) NOAA R/V Discoverer	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>7-16-76</td><td>7-19-76</td></tr></tbody></table>	FROM: MO, DAY, YR	TO: MO, DAY, YR	7-16-76	7-19-76
PLATFORM	OPERATOR										
USA	USA										
FROM: MO, DAY, YR	TO: MO, DAY, YR										
7-16-76	7-19-76										
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

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)

3. 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 - FW6077 NOAA R/V Discoverer 76/7/16 - 76/7/19 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 DESCRIPT. 1

RECORD NAME Location (continued) - Ship and Aircraft Census

1. 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 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 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., 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

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</p> <p><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 LABEL SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p style="text-align: center;">FW6077 ON TAPE 608NDC WITH</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>FW6050</td> <td>FW6078</td> </tr> <tr> <td>FW6051</td> <td>FW6083</td> </tr> <tr> <td>FW6052</td> <td>FW6092</td> </tr> <tr> <td>FW6064</td> <td>FW6094</td> </tr> <tr> <td>→FW6077</td> <td>FW6095</td> </tr> </table>	FW6050	FW6078	FW6051	FW6083	FW6052	FW6092	FW6064	FW6094	→FW6077	FW6095
FW6050	FW6078										
FW6051	FW6083										
FW6052	FW6092										
FW6064	FW6094										
→FW6077	FW6095										
<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>lrc1=83 Blk size= 3735</p>										
	<p>13. LENGTH OF BYTES IN BITS</p> <p style="text-align: center;">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
Lisht 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 053
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 Polynsa Location	42	1	bytes	A1	1-Lead, 2-Polynsa, 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 stat
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 03Z
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

d			
d			
d			
dddd	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.

DATA DOCUMENTATION FORM

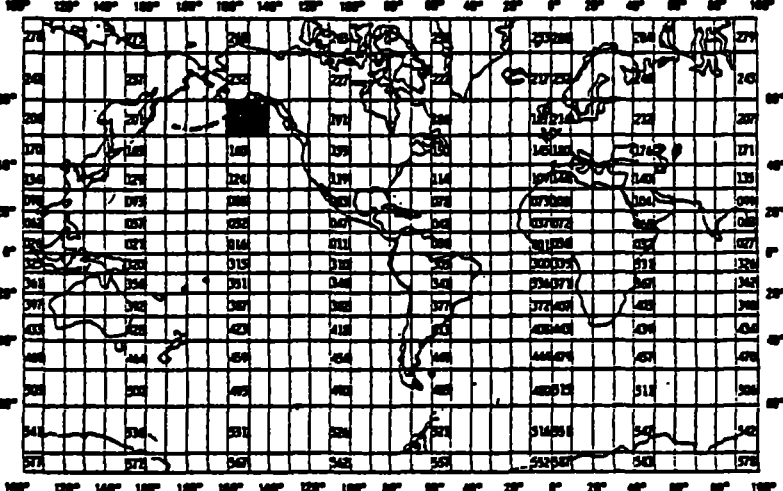
TR3865

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		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW6078	
4. PLATFORM NAME(S) NOAA RV Discoverer Discoverer	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Ship	6. PLATFORM AND OPERATOR NATIONALITY(IES) USA USA	7. DATES FROM: MO, DAY, YR TO: MO, DAY, YR 7-20-76 7-31-76
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

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)

3. 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 KEY SPECIFICATIONS OF DATA TYPE) OCSEAP - USFWS/OBSCE 337 033 - FW6078 NOAA RV Discoverer 76/7/20 - 76/7/31 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 - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (No. of 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., 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 Environmental - 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		
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 (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 LABEL SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p style="text-align: center;"> <u>PW6078 ON TAPE G08 NDC WITH:</u> <u>PW6050 → PW6078</u> <u>PW6051 PW6083</u> <u>PW6052 PW6092</u> <u>PW6064 PW6094</u> <u>PW6077 PW6095</u> </p>
<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>Block=83 Blk size= 3735</p>
	<p>13. LENGTH OF BYTES IN BITS</p> <p style="text-align: center;">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 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 0865 & 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 053
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 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

CORD 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 (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
- | | | |
|--|---|--------------------------------|
| <input checked="" type="checkbox"/> PL-1 | <input type="checkbox"/> ALGOL | <input type="checkbox"/> COBOL |
| <input type="checkbox"/> FORTRAN | <input type="checkbox"/> _____ 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> <table border="0"> <tr> <td><input type="checkbox"/> BCD</td> <td><input type="checkbox"/> BINARY</td> </tr> <tr> <td><input type="checkbox"/> ASCII</td> <td><input checked="" type="checkbox"/> EBCDIC</td> </tr> <tr> <td colspan="2"><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> BCD	<input type="checkbox"/> BINARY	<input type="checkbox"/> ASCII	<input checked="" type="checkbox"/> EBCDIC	<input type="checkbox"/> _____		<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> 1/2 inch</p>						
<input type="checkbox"/> BCD	<input type="checkbox"/> BINARY												
<input type="checkbox"/> ASCII	<input checked="" type="checkbox"/> EBCDIC												
<input type="checkbox"/> _____													
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <table border="0"> <tr> <td><input type="checkbox"/> SEVEN</td> </tr> <tr> <td><input checked="" type="checkbox"/> NINE</td> </tr> <tr> <td><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> SEVEN	<input checked="" type="checkbox"/> NINE	<input type="checkbox"/> _____	<p>10. END OF FILE MARK</p> <table border="0"> <tr> <td><input type="checkbox"/> OCTAL 17</td> </tr> <tr> <td>IBM 3420 <input checked="" type="checkbox"/> Tape Mark</td> </tr> </table>	<input type="checkbox"/> OCTAL 17	IBM 3420 <input checked="" type="checkbox"/> Tape Mark							
<input type="checkbox"/> SEVEN													
<input checked="" type="checkbox"/> NINE													
<input type="checkbox"/> _____													
<input type="checkbox"/> OCTAL 17													
IBM 3420 <input checked="" type="checkbox"/> Tape Mark													
<p>7. PARITY</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/> ODD</td> </tr> <tr> <td><input type="checkbox"/> EVEN</td> </tr> </table>	<input checked="" type="checkbox"/> ODD	<input type="checkbox"/> EVEN	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME KEY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>FW6094 ON TAPE 605NDE WITH:</p> <table border="0"> <tr> <td>FW6050</td> <td>FW6078</td> </tr> <tr> <td>FW6051</td> <td>FW6083</td> </tr> <tr> <td>FW6052</td> <td>FW6092</td> </tr> <tr> <td>FW6064</td> <td>→ FW6094</td> </tr> <tr> <td>FW6077</td> <td>FW6095</td> </tr> </table>	FW6050	FW6078	FW6051	FW6083	FW6052	FW6092	FW6064	→ FW6094	FW6077	FW6095
<input checked="" type="checkbox"/> ODD													
<input type="checkbox"/> EVEN													
FW6050	FW6078												
FW6051	FW6083												
FW6052	FW6092												
FW6064	→ FW6094												
FW6077	FW6095												
<p>8. DENSITY</p> <table border="0"> <tr> <td><input type="checkbox"/> 200 BPI</td> <td><input checked="" type="checkbox"/> 1600 BPI</td> </tr> <tr> <td><input type="checkbox"/> 556 BPI</td> <td></td> </tr> <tr> <td><input type="checkbox"/> 800 BPI</td> <td></td> </tr> <tr> <td colspan="2"><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> 200 BPI	<input checked="" type="checkbox"/> 1600 BPI	<input type="checkbox"/> 556 BPI		<input type="checkbox"/> 800 BPI		<input type="checkbox"/> _____		<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>lrecl=83 Blk size= 3735</p> <p>13. LENGTH OF BYTES IN BITS</p> <p style="text-align: center;">8</p>				
<input type="checkbox"/> 200 BPI	<input checked="" type="checkbox"/> 1600 BPI												
<input type="checkbox"/> 556 BPI													
<input type="checkbox"/> 800 BPI													
<input type="checkbox"/> _____													

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
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/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 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

d			
d			
d			
dddd	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.

DATA DOCUMENTATION FORM

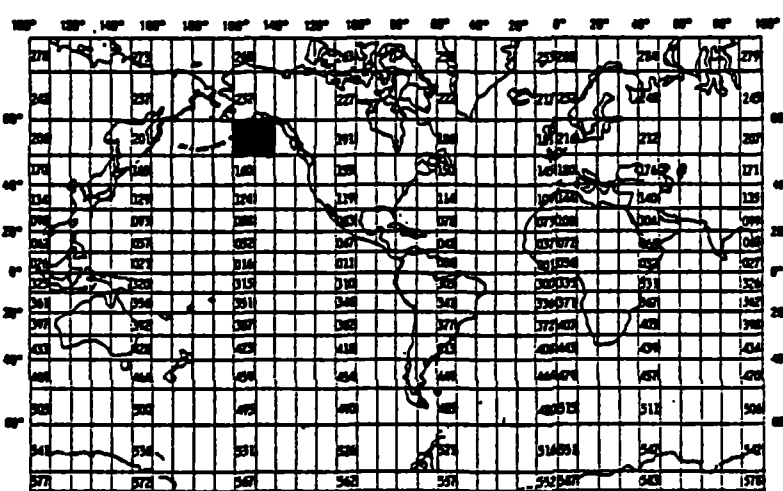
TR3869

NOAA FORM 24-13
5-4-73U.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 FW6095									
4. PLATFORM NAME(S) NOAA RU 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></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>11-4-76</td><td>11-23-76</td></tr></tbody></table>	FROM: MO/DAY/YR	TO: MO/DAY/YR	11-4-76	11-23-76
PLATFORM	OPERATOR										
USA	USA										
FROM: MO/DAY/YR	TO: MO/DAY/YR										
11-4-76	11-23-76										
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	NOEC 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

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)

3. 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 SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>OCSEAP - USFWS/OBSCE</p> <p>337 033 - FW6095</p> <p>NOAA RV Miller Freeman</p> <p>76/11/4 - 76/11/23 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"/> 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., 100, 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
	64	2	bytes	I2	tens of degrees true

RECORD FORMAT DESCRIPTION

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., 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 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
- | | | |
|--|--------------------------------|--------------------------------|
| <input checked="" type="checkbox"/> PL-1 | <input type="checkbox"/> ALGOL | <input type="checkbox"/> COBOL |
| <input type="checkbox"/> FORTRAN | <input type="checkbox"/> _____ | 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> <table border="0"> <tr> <td><input type="checkbox"/> BCD</td> <td><input type="checkbox"/> BINARY</td> </tr> <tr> <td><input type="checkbox"/> ASCII</td> <td><input checked="" type="checkbox"/> EBCDIC</td> </tr> <tr> <td colspan="2"><input type="checkbox"/> _____</td> </tr> </table> <p>6. NUMBER OF TRACKS (CHANNELS)</p> <table border="0"> <tr> <td><input type="checkbox"/> SEVEN</td> </tr> <tr> <td><input checked="" type="checkbox"/> NINE</td> </tr> <tr> <td><input type="checkbox"/> _____</td> </tr> </table> <p>7. PARITY</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/> ODD</td> </tr> <tr> <td><input type="checkbox"/> EVEN</td> </tr> </table> <p>8. DENSITY</p> <table border="0"> <tr> <td><input type="checkbox"/> 200 BPI</td> <td><input checked="" type="checkbox"/> 1600 BPI</td> </tr> <tr> <td><input type="checkbox"/> 556 BPI</td> <td></td> </tr> <tr> <td><input type="checkbox"/> 800 BPI</td> <td></td> </tr> <tr> <td colspan="2"><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> BCD	<input type="checkbox"/> BINARY	<input type="checkbox"/> ASCII	<input checked="" type="checkbox"/> EBCDIC	<input type="checkbox"/> _____		<input type="checkbox"/> SEVEN	<input checked="" type="checkbox"/> NINE	<input type="checkbox"/> _____	<input checked="" type="checkbox"/> ODD	<input type="checkbox"/> EVEN	<input type="checkbox"/> 200 BPI	<input checked="" type="checkbox"/> 1600 BPI	<input type="checkbox"/> 556 BPI		<input type="checkbox"/> 800 BPI		<input type="checkbox"/> _____		<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN)</p> <table border="0"> <tr> <td><input type="checkbox"/> 3/4 INCH</td> </tr> <tr> <td><input checked="" type="checkbox"/> 1/2 inch</td> </tr> </table> <p>10. END OF FILE MARK</p> <table border="0"> <tr> <td><input type="checkbox"/> OCTAL 17</td> </tr> <tr> <td>IBM 3420 <input checked="" type="checkbox"/> Tape Mark</td> </tr> </table> <p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p style="text-align: center;">FW6095 ON TAPE G08NDC WITH:</p> <table border="0" style="width: 100%;"> <tr> <td>FW6050</td> <td>FW6078</td> </tr> <tr> <td>FW6051</td> <td>FW6083</td> </tr> <tr> <td>FW6052</td> <td>FW6092</td> </tr> <tr> <td>FW6064</td> <td>FW6094</td> </tr> <tr> <td>FW6077</td> <td>→ FW6095</td> </tr> </table> <p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p style="text-align: center;">Lrecl=83 Blk size= 3735</p> <p>13. LENGTH OF BYTES IN BITS</p> <p style="text-align: center;">8</p>	<input type="checkbox"/> 3/4 INCH	<input checked="" type="checkbox"/> 1/2 inch	<input type="checkbox"/> OCTAL 17	IBM 3420 <input checked="" type="checkbox"/> Tape Mark	FW6050	FW6078	FW6051	FW6083	FW6052	FW6092	FW6064	FW6094	FW6077	→ FW6095
<input type="checkbox"/> BCD	<input type="checkbox"/> BINARY																																	
<input type="checkbox"/> ASCII	<input checked="" type="checkbox"/> EBCDIC																																	
<input type="checkbox"/> _____																																		
<input type="checkbox"/> SEVEN																																		
<input checked="" type="checkbox"/> NINE																																		
<input type="checkbox"/> _____																																		
<input checked="" type="checkbox"/> ODD																																		
<input type="checkbox"/> EVEN																																		
<input type="checkbox"/> 200 BPI	<input checked="" type="checkbox"/> 1600 BPI																																	
<input type="checkbox"/> 556 BPI																																		
<input type="checkbox"/> 800 BPI																																		
<input type="checkbox"/> _____																																		
<input type="checkbox"/> 3/4 INCH																																		
<input checked="" type="checkbox"/> 1/2 inch																																		
<input type="checkbox"/> OCTAL 17																																		
IBM 3420 <input checked="" type="checkbox"/> Tape Mark																																		
FW6050	FW6078																																	
FW6051	FW6083																																	
FW6052	FW6092																																	
FW6064	FW6094																																	
FW6077	→ FW6095																																	

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 053
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	NOBC 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 NAME Ship and Aircraft Census Data - Text Record

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


```

d
d
d
dddd   PPP   sss
d   d   P   P   u   u
d   d   P   P   u   u
ddd    PPPP   sssu
        P      u
        P      u
        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.

DATA DOCUMENTATION FORM

TR 3866

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		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT FW6083									
4. PLATFORM NAME(S) UH R/V MOANAWAVE	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>7-22-76</td><td>7-31-76</td></tr></tbody></table>	FROM: MO, DAY, YR	TO: MO, DAY, YR	7-22-76	7-31-76
PLATFORM	OPERATOR										
USA	USA										
FROM: MO, DAY, YR	TO: MO, DAY, YR										
7-22-76	7-31-76										
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

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)

3. 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 FW6083 M WAVE 005 76-07-20 76-07-31 LENSINK 9TRK, 800BPI, ODD, EBCDIC
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 - Ship and Aircraft Census

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN (e.g., km, 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	
Station Number	11	5	bytes	A5	
Latitude, Degrees	16	2	bytes	I2	4th byte coded for ship type 5th byte coded for transect type
Minutes	18	2	bytes	I2	Starting Position
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.

RECORD 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
Observation conditions	75	1	bytes	A1	1-7 bad-excellent
Transect width	81	3	bytes	I3	10's of meters

RECORD FORMAT DESCRIPTION

CORD 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
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

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

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

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DATA DOCUMENTATION FORM

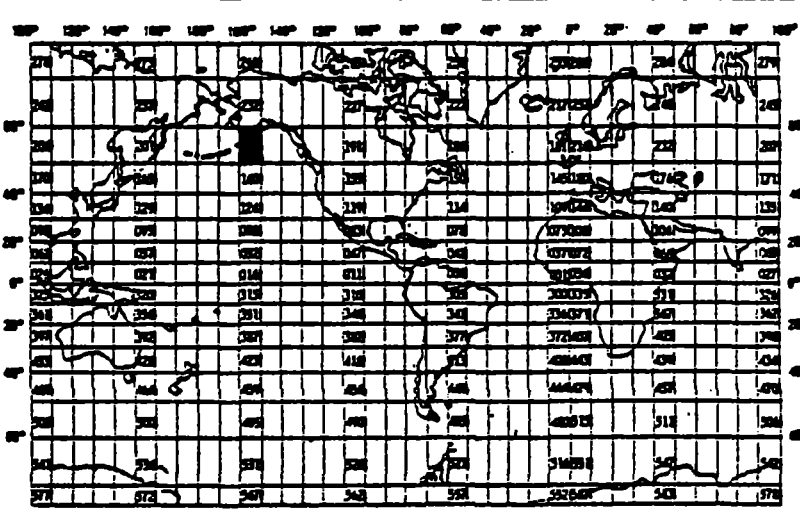
TR3867

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

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A. ORIGINATOR IDENTIFICATION

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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 FW6092	
4. PLATFORM NAME(S) NOAA RU Miller Freeman	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Ship	6. PLATFORM AND OPERATOR NATIONALITY(IES) PLATFORM OPERATOR USA USA	7. DATES FROM: MO, DAY, YR TO: MO, DAY, YR 10-18-76 10-29-76
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. gauge 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

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
- | | | |
|--|---|--------------------------------|
| <input checked="" type="checkbox"/> PL-1 | <input type="checkbox"/> ALGOL | <input type="checkbox"/> COBOL |
| <input type="checkbox"/> FORTRAN | <input type="checkbox"/> _____ 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> <table border="0"> <tr> <td><input type="checkbox"/> BCD</td> <td><input type="checkbox"/> BINARY</td> </tr> <tr> <td><input type="checkbox"/> ASCII</td> <td><input checked="" type="checkbox"/> EBCDIC</td> </tr> <tr> <td colspan="2"><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> BCD	<input type="checkbox"/> BINARY	<input type="checkbox"/> ASCII	<input checked="" type="checkbox"/> EBCDIC	<input type="checkbox"/> _____		<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> 1/2 INCH</p>		
<input type="checkbox"/> BCD	<input type="checkbox"/> BINARY								
<input type="checkbox"/> ASCII	<input checked="" type="checkbox"/> EBCDIC								
<input type="checkbox"/> _____									
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <table border="0"> <tr> <td><input type="checkbox"/> SEVEN</td> </tr> <tr> <td><input checked="" type="checkbox"/> NINE</td> </tr> <tr> <td><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> SEVEN	<input checked="" type="checkbox"/> NINE	<input type="checkbox"/> _____	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 IBM 3420 <input checked="" type="checkbox"/> Tape Mark</p>					
<input type="checkbox"/> SEVEN									
<input checked="" type="checkbox"/> NINE									
<input type="checkbox"/> _____									
<p>7. PARITY</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/> ODD</td> </tr> <tr> <td><input type="checkbox"/> EVEN</td> </tr> </table>	<input checked="" type="checkbox"/> ODD	<input type="checkbox"/> EVEN	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LABEL SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) FW06083 ON TAPE G08NDC WITH: <div style="display: flex; justify-content: space-between;"> <div> FW06050 FW06051 FW06052 FW06064 FW06077 </div> <div> FW06078 → FW06083 FW06092 FW06094 FW06095 </div> </div> </p>						
<input checked="" type="checkbox"/> ODD									
<input type="checkbox"/> EVEN									
<p>8. DENSITY</p> <table border="0"> <tr> <td><input type="checkbox"/> 200 BPI</td> <td><input checked="" type="checkbox"/> 1600 BPI</td> </tr> <tr> <td><input type="checkbox"/> 556 BPI</td> <td></td> </tr> <tr> <td><input type="checkbox"/> 800 BPI</td> <td></td> </tr> <tr> <td colspan="2"><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> 200 BPI	<input checked="" type="checkbox"/> 1600 BPI	<input type="checkbox"/> 556 BPI		<input type="checkbox"/> 800 BPI		<input type="checkbox"/> _____		<p>12. PHYSICAL BLOCK LENGTH IN BYTES Lrecl=83 Blk size= 3735</p> <p>13. LENGTH OF BYTES IN BITS 8</p>
<input type="checkbox"/> 200 BPI	<input checked="" type="checkbox"/> 1600 BPI								
<input type="checkbox"/> 556 BPI									
<input type="checkbox"/> 800 BPI									
<input type="checkbox"/> _____									

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/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

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

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

```

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   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.

TAPE ASSIGNMENT SHEET (MRL) 11/6/78

ACCESSION NO: 79-0049

TYPE OF TAPE	TAPE NUMBER	LABEL	LRECL	BLKSIZE	RECFM	REMARKS
ORIGINATOR	G08NDC	NL	83	3735	FB	
DUPLICATE	002531	NL	83	4565	FB	
REFORMATTED						
CORRECTED FIRST USER	008438	SL	83	4150	FB	DSN= TR3860
CORRECTED FINAL USER BACKUP	011125	SL	83	4150	FB	DSN= TR3860

Error Correction Documentation Form

DATE: 1-22-79

TO:

FROM: D781

SUBJECT: Error Correction in Processing of Data Set - Accession # 79-0049

- 1) File Type: 033
- 2) Project Ident.: OCSEAP
- 3) Track Nos.: TR3860 - 3869

I. Error Corrections as reported to Principal Investigator:

Error
OLD TAX CODES

Correction Completed (Check)
**SEE ATTACHED NOTES/
LETTERS FOR ALL CORRECTIONS**

II. Additional error corrections:

Error

Correction Completed (Check)

III. Processor Name: CLIFF HARTLEY, D7513

Data Set Route Sheet

Accession #

79-0049

Step	Completion Date/Init.	Tape #, # of Files	BLKSIZE,	LRECL
1. Originator Tape #	1-18-79 JPD	G08NDC 10	3735	83
2. QUADZ Duplicate Tape #	1-22-79 JPD	002531 10	4565	83
3. DDF Evaluation				
4. Quality Review				
5. Preliminary Data Sort				
6. Preliminary Check				
7. First User Tape #				
8. Final User Tape #	4/3/80 CH	008438 10	4150	83
Final Check				
10. NAFIS Inventory	4/7/80 CH	—		
11. DIP Inventory	4/8/80 CH	—		
12. Data Set 'Finalized'	5/1/80 DMS	—		

4/7/80

chick -

Here is some info that just came
in on FT 033 data. We might have
already taken care of it but please
check for sure.

sid.

all corrections
already made
See Submission
June 1979

CCH

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

Data from RU#337

Processed by RU#527

NODC Track Number TR3861

Original File ID FW6051

79-0049

STATION NUMBER	CARD TYPE	SEQUENCE NUMBER	FIELD ABBR	COLUMNS	FROM	TO
22569	5	017	TAX	18-29	881010030110	8810100301 ✓
22569	5	018	TAX	18-29	881010140110	8810101401 ✓
22569	5	019	TAX	18-29	881010060110	8810100601 ✓
22569	5	020	TAX	18-29	880302040710	8803020407 ✓
22569	5	021	TAX	18-29	881008030110	8810080301 ✓
25269	5	030	TAX	18-29	880303020110	8803030201 ✓

all corrections made
cmh

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

79-0049

Data from RU#337

Processed by RU#527

NODC Track Number TR3862

Original File ID FW6052

STATION NUMBER	CARD TYPE	SEQUENCE NUMBER	FIELD ABBR	COLUMNS	FROM	TO
07869	5	003	TAX	18-29	8800701021	8810070102 ✓
46869	5	003	TAX	18-29	8801014010	8810101401 ✓
32169	5	001	TAX	18-29	8803020708	8803020408 ✓
43768	5	044	TAX	18-29	8803032011	8803030201 ✓
31568	5	010	TAX	18-29	8806040901	8806010901 ✓
27868	5	004	TAX	18-29	88100312	88100412 ✓
46668	5	026	TAX	18-29	8830204073	8803020407 ✓

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

-0049

Data from RU#337

Processed by RU#527

NODC Track Number TR3863

Original File ID FW6064

STATION NUMBER	CARD TYPE	SEQUENCE NUMBER	FIELD ABBR	COLUMNS	FROM	TO
07468	5	001	TAX	18-29	8803020202	8803020201 ^v

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

049

Data from RU#337

Processed by RU#527

NODC Track Number TR3866

Original File ID FW6083

STATION NUMBER	CARD TYPE	SEQUENCE NUMBER	FIELD ABBR	COLUMNS	FROM	TO
02669	5	005	TAX	18-29	881010140110	8810101401 ✓
04669	5	004	TAX	18-29	881007010130	8810070101 ✓
04669	5	006	TAX	18-29	880302020130	8803020201 ✓
04769	5	005	TAX	18-29	880303020130	8803030201 ✓

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

19

Data from RU#337

Processed by RU#527

NODC Track Number TR3868

Original File ID FW6094

STATION NUMBER	CARD TYPE	SEQUENCE NUMBER	FIELD ABBR	COLUMNS	FROM	TO
14569	5	003	TAX	18-29	8803010012	8803010102 ✓
17769	5	002	TAX	18-29	8803020506 ✓	code ok
17869	5	002	TAX	18-29	8803020506 ✓	code ok
20069	5	002	TAX	18-29	✓ 8803020506 ✓	code ok
20669	5	001	TAX	18-29	8803020506	code ok
23969	5	003	TAX	18-29	✓ 8803020506 ✓	code ok
24469	5	003	TAX	18-29	✓ 8803020507 ✓	code ok
25969	5	001	TAX	18-29	✓ 8803020508 ✓	code ok
27269	5	001	TAX	18-29	✓ 8803020507 ✓	8803020507
27369	5	003	TAX	18-29	✓ 880302050901 ✓	code ok
28969	5	001	TAX	18-29	✓ 880302050902 ✓	code ok
29869	5	004	TAX	18-29	✓ 8803020508 ✓	code ok
31269	5	001	TAX	18-29	✓ 8803020510 ✓	code ok
31269	5	003	TAX	18-29	✓ 8804060102 ✓	code ok
31969	5	001	TAX	18-29	✓ 8803020511 ✓	code ok
31969	5	002	TAX	18-29	8803020510 ✓	code ok
31969	5	003	TAX	18-29	8803020506 ✓	code ok
31969	5	004	TAX	18-29	8803020508 ✓	code ok

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

0049

Data from RU#337

Processed by RU#527

NODC Track Number TR3869

Original File ID FW6095

STATION NUMBER	CARD TYPE	SEQUENCE NUMBER	FIELD ABBR	COLUMNS	FROM	TO
15269	5	034	TAX	18-29	8810080183	8810080108 ✓
17469	5	045	TAX	18-29	8810101402	8810101401 ✓
17469	5	046	TAX	18-29	8810101402	8810101401 ✓

TR 3860-3869

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d d P P 9 9
d d P P 9 9
ddd PPPP 9999
P 9
P 9 9
P 999

FT033

Ro 337

DATA PROJECTS GROUP
333 Pastore Hall
University of R.I.
Kingston, RI 02881
(401) 792-2320

APR 7 REG

March 28, 1979

Dr. Patrick J. Gould
U.S. Department of the Interior
Fish and Wildlife Service
1011 E. Tudor Road
Anchorage, Alaska 99503

Dear Pat:

I would like to follow up our phone conversation from Wednesday, 26 March. After I talked to you, I called Jim Audet from NODC to determine whether there were any twelve digit NODC "91" codes which paired with the birds you sighted during field operation FW6094. It seems that each of the birds in question had already been assigned one of these codes and therefore this field operation will be updated as per the attached sheet.

Thank you very much for being so helpful and for looking up (and spelling!) all of those scientific names for me.

Sincerely,

Patricia E. Ordzie

cc: Jim Audet (enc)
Francesca Cava
Harold Petersen, Jr.
William Johnson

Corrections Made to OCSEAP Data, File Type 033,
 Subsequent to Submission to NODC
 Reported March, 1980

Data from RU#337

Processed by RU#527

NODC Track Number TR3868

Original File ID FW6094

STATION NUMBER	CARD TYPE	SEQUENCE NUMBER	FIELD ABBR	COLUMNS	FROM	TO
17769	5	002	TAX	18-29	8803020506	9109020506
17869	5	002	TAX	18-29	8803020506	9109020506
20069	5	002	TAX	18-29	8803020506	9109020506
20669	5	001	TAX	18-29	8803020506	9109020506
23969	5	003	TAX	18-29	8803020506	9109020506
24469	5	003	TAX	18-29	8803020507	9109020510
25969	5	001	TAX	18-29	8803020508	9109020511
27369	5	003	TAX	18-29	880302050901	910902050701
28969	5	001	TAX	18-29	880302050902	910902050702
29869	5	004	TAX	18-29	8803020508	9109020511
31269	5	001	TAX	18-29	8803020510	9109020508
31269	5	003	TAX	18-29	8804060102	9110060102
31969	5	001	TAX	18-29	8803020511	9109020509
31969	5	002	TAX	18-29	8803020510	9109020508
31969	5	003	TAX	18-29	8803020506	9109020506
31969	5	004	TAX	18-29	8803020508	9109020511

3/26

Sid -

Pat Ordzie called from U.R.I.

Here are the 'official' scientific names
for each of the unidentified 88' codes
for Lonsink's data

		New codes	
88030205	<u>06</u> P. Neglecta	✓ 91090205	<u>06</u> ✓
<u>07</u>	P. Hypoleuca	✓	<u>10</u> ✓
<u>08</u>	P. Nigripennis	✓	<u>11</u> ✓
<u>0901</u>	P. Externa externa	✓	<u>0701</u> ✓
<u>0902</u>	P. Externa cervicalis	✓	<u>0702</u> ✓
<u>10</u>	P. Alba	✓	<u>08</u> ✓
<u>11</u>	P. Phyaeophysia	✓	<u>09</u> ✓
8804060102	Fregata minor	✓ 9110060102	✓

Everything should convert for the crinich
tape.

We should probably send a short memo
indicating final processing completed.

corrections made
Curt

ACC 79-0049

TR 3860-3869

d	TAPE SPECIFICATION FORM			
d				
d				
dddd	PPP	sss		
d d	P P	s s		
d d	P P	s s		
ddd	PPPP	ssss	DATA PROJECTS GROUP	
	P	s	333 Pastore Hall	
	P	s s	University of R.I.	
	P	sss	Kingston, RI 02881	
			(401) 792-2320	

Tape Identification -- **G08NDC**

Recording Specifications --

Tracks: 9	Tape Files: 1
Density: 1600 BPI	Record Format: FIXED BLOCK
Parity: ODD	Record Length: 83
Mode: EBCDIC	Block Size: 3735
Label: NON-LABELLED	

Data Specifications --

Received From: **DR. CALVIN LENSINK**

Coding Format: **NODC**

Data Set Names:

File#	Name	File#	Name
-------	------	-------	------

1 FILE WITH FIELD OPERATIONS AS FOLLOWS:

FW6050
FW6051
FW6052
FW6064
FW6077
FW6078
FW6083
FW6092
FW6094
FW6095

UMSL SYSTEMS SUPPORT UTILITIES - NON-STANDARD LABEL TAPE MAP

608NDC

VOLUME=SER=NLTP9

DATE 79.015 TIME 13.19.05

01

RECFM=F

LRECL= ?

83

BLKSIZE 3735

DEN=3

DATA SET CONTAINS

213 BLOCKS

END OF UTILITY - TAPE IS MAPPED

FW6050

FW6051

FW6052

FW6064

FW6077

FW6078

FW6083

FW6092

FW6094

FW6095

TRANSMITTAL AND RECEIPT FORM

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
P sss

DATA PROJECTS GROUP
333 Pastore Hall
University of R.I.
Kingston, RI 02881
(401) 792-2320

Mailed --

Date: *January 16, 1979*
By: *Nancy Clayton*
To: *Jim Audet*

Description -- *tape G08NDC with data for 10 field operations*
from Dr. Calvin Lussink 033 file type

Received --

Date:
By:

Please date, sign, and return. Thank you.

January 15, 1979

Mr. John J. Audet
NOAA/OCSEAP Data Coordinator
NODC Page Building 1
2001 Wisconsin Avenue
Washington, D. C. 20235

Dear Jim:

Under separate cover, I am sending magnetic tape G08NDC containing data for ten field operations from Dr. Calvin Lensink. All data is contained in one file and is arranged by field operation as follows:

FW6050	FW6078
FW6051	FW6083
FW6052	FW6092
FW6064	FW6094
FW6077	FW6095

An updated Data Documentation Form is included for each field operation. Also included are a Tape Specification Form and a computer-generated tapemap.

Sincerely,

Nancy W. Clayton
Data Validation Manager

NWC:le

cc: Francesca Cava

Password:

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
7900049	F033	TR3860	0081	31V5	31DS	1976/05/04	FW6050	308889
7900049	F033	TR3861	0081	31V5	31DS	1976/05/06	FW6051	308890
7900049	F033	TR3862	0081	31V5	31DS	1976/05/12	FW6052	308891
7900049	F033	TR3863	0081	31V5	31SU	1976/05/25	FW6064	308892
7900049	F033	TR3864	0081	31V5	31DS	1976/06/17	FW6077	308893
7900049	F033	TR3865	0081	31V5	31DS	1976/07/20	FW6078	308894
7900049	F033	TR3866	0081	31V5	32MW	1976/04/26	FW6083	308895
7900049	F033	TR3867	0081	31V5	31FN	1976/10/18	FW6092	308896
7900049	F033	TR3868	0081	31V5	32MW	1976/10/23	FW6094	308897
7900049	F033	TR3869	0081	31V5	31FN	1976/11/05	FW6095	308898

(10 rows affected)

Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
7900049	F033	TR3860	31DS	51	841	76/05/04	76/05/05
7900049	F033	TR3861	31DS	62	829	76/05/06	76/05/09
7900049	F033	TR3862	31DS	114	1909	76/05/12	76/05/20
7900049	F033	TR3863	31SU	35	668	76/05/25	76/06/03
7900049	F033	TR3864	31DS	51	279	76/06/17	76/07/19
7900049	F033	TR3865	31DS	41	329	76/07/20	76/09/21
7900049	F033	TR3866	32MW	101	1110	76/04/26	76/07/31
7900049	F033	TR3867	31FN	69	407	76/10/18	76/10/29
7900049	F033	TR3868	32MW	134	1176	76/10/23	76/11/06
7900049	F033	TR3869	31FN	76	2027	76/11/05	76/11/20

(10 rows affected)