

AD-A037 300

NAVAL OCEANOGRAPHIC OFFICE WASHINGTON D C
AERIAL ICE RECONNAISSANCE AND SATELLITE ICE INFORMATION MICROFI--ETC(U)
AUG 76 P A MITCHELL

F/G 8/12

UNCLASSIFIED

N00-RP-17

NL

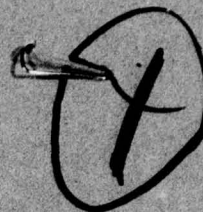
| of |
ADA037300



END

DATE
FILMED
4-77

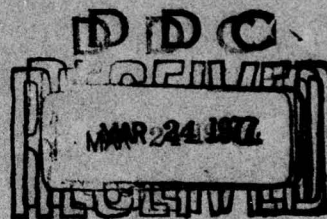
ADA 037300



FG

AERIAL ICE RECONNAISSANCE AND SATELLITE ICE INFORMATION MICROFILM FILE

AUGUST 1976



CW

COPY AVAILABLE TO DDC DOES NOT
PERMIT FULLY LEGIBLE PRODUCTION

Approved for public release; distribution unlimited.

DEPARTMENT OF THE NAVY
WASHINGTON, D. C. 20373

AD No. [unclear]
DDC FILE COPY

Abstract

The Aerial Ice Reconnaissance and Satellite Ice Information Microfilm File of the Naval Oceanographic Office contains 35-mm microfilm copies of ice information gathered subsequent to 1969 in the Antarctic and 1971 in the Arctic during U.S. Navy, U.S. Coast Guard, and Danish polar operations, and from visual, infrared, and microwave satellite imagery. This file, which consists of all unclassified chart analyses of aerial ice reconnaissance and satellite ice information compiled by Fleet Weather Facility, Suitland, Maryland, was established in 1975 to preserve ice data after the termination of the Oceanographic Office annual reports of the arctic and antarctic ice observing and forecasting programs. Listings of available microfilm through calendar year 1975 for the eastern Arctic, western Arctic, and the Antarctic, along with procedures for ordering copies, are given.

14 NOO-RP-17

6
**AERIAL ICE RECONNAISSANCE
AND SATELLITE ICE INFORMATION
MICROFILM FILE**

10 PETER A. MITCHELL

11 AUG ~~1976~~

12 37 p.

DDC
RECEIVED
MAR 24 1977
C



Approved for public release; distribution unlimited.

NAVAL OCEANOGRAPHIC OFFICE
WASHINGTON, D. C. 20373

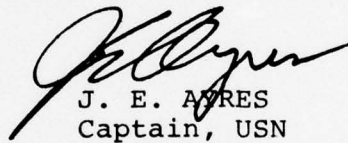
250 450

ACCESSION FOR	
NTIS	White Section <input checked="" type="checkbox"/>
DDC	Blue Section <input type="checkbox"/>
UNCLASSIFIED	<input type="checkbox"/>
RESTRICTED	<input type="checkbox"/>
BY	
ACQUISITION AVAILABILITY CODES	
Dist	Avail. or Special
A	

FOREWORD

Interest in the polar regions has increased manyfold in recent years principally due to the newly developing economic incentives and revived military significance of the Arctic and the continuing scientific research in the Antarctic. Improvement and further development of operational sea ice forecasting techniques that allow our naval forces to operate safely in these areas depend heavily upon the maintenance of historical ice data files.

The Aerial Ice Reconnaissance and Satellite Ice Information Microfilm File effectively substitutes for the terminated Oceanographic Office annual reports of the arctic and antarctic ice observing and forecasting programs. This publication provides the researcher with listings of available microfilm in one of the Navy's more extensive ice data files and describes the procedures to follow to obtain copies of the original chart analyses of aerial ice reconnaissance and satellite ice data.


J. E. AYRES
Captain, USN
Commander

CONTENTS

	PAGE
Introduction	1
Aerial Ice Reconnaissance and Satellite Ice Charts . . .	1
Microfilm Ice File	2
Procedure to Obtain Microfilm	2
Microfilm Listing	3
References	4

Figures

1 - Eastern Arctic Satellite Ice Chart	5
2 - Western Arctic Satellite Ice Chart	6
3 - Antarctic Satellite Ice Chart	7
4 - Ice Code Breakdown and Key to Ice Symbols	8
5 - Chart Analysis of Aerial Ice Reconnaissance	9
6 - Chart Analysis of Danish Aerial Ice Reconnaissance .	10
7 - 35-mm Aperture Card	11

Tables

1. Microfilm, Eastern Arctic	12
2. Microfilm, Western Arctic	22
3. Microfilm, Antarctic	27

INTRODUCTION

Realistic and proven dynamic sea ice forecasting models for polar regions using easily measurable and routinely reportable meteorological and oceanographic parameters in the polar regions are still to be developed. Until they are, the operational sea ice forecaster must rely heavily upon statistical and/or analog forecasting methods based on historical ice data. These data also serve as an invaluable aid to the researcher when attempting to correlate measured meteorological and oceanographic parameters to the observed growth, decay, and movement of sea ice.

The principal source of unclassified, historical synoptic ice data gathered during U.S. Navy, U.S. Coast Guard, and Danish polar operations and made available to the Naval Oceanographic Office (NAVOCEANO) has been the annual reports of both the Arctic and Antarctic ice observing and forecasting programs (Naval Oceanographic Office, 1953-1974). These NAVOCEANO publications provide in chart form ice conditions observed by aerial reconnaissance and interpreted from satellite imagery for the eastern and western sectors of the North American Arctic and in selected portions of the seas surrounding the Antarctic Continent. These series terminated with the 1969 and 1971 annual reports for the Antarctic and Arctic, respectively. The Arctic annual report series actually consists of 20 issues covering the time period from 1952 through 1971, and the Antarctic series consists of 8 issues detailing sea ice data from 1962 through 1969. Many of these reports are no longer in print; therefore, complete sets are not available.

In order to preserve the ice data gathered subsequent to 1969 in the Antarctic and 1971 in the Arctic, a microfilm file of all unclassified chart analyses of aerial ice reconnaissance and satellite ice information compiled by the Ice Department of Fleet Weather Facility, Suitland, Maryland has been established within the Fleet Applications Department (Code 3700) of NAVOCEANO.

AERIAL ICE RECONNAISSANCE AND SATELLITE ICE CHARTS

The satellite ice analyses charts included in the microfilm file present a comprehensive picture of the ice conditions on a weekly basis for the eastern (east of 90°W and west of 90°E) and western (west of 90°W and east of 90°E) Arctic and the entire Antarctic region. Most of the ice information presented on these charts was compiled utilizing imagery from microwave radiometers and the visual and infrared imagery from the Scanning Radiometer (SR) and Very High Resolution Radiometer (VHRR) sensors on board earth-orbiting satellites. Ice condition information from ship and shore reports and from aerial reconnaissance was also included when available. Examples of satellite ice charts for the eastern and western Arctic regions and for the Antarctic are shown in figures 1, 2, and 3, respectively.

The chart analyses of aerial ice reconnaissance have limited areal extent and will generally be found to be scattered over both time and space for a specific geographical area, due to the nature of such reconnaissance. The majority of data gathered by aerial ice reconnaissance flown by U.S. Navy and Coast Guard personnel is disseminated through the use of a detailed ice-reporting code. A breakdown of the code and a key to the ice symbols that are plotted on most of the aerial ice reconnaissance charts are presented in figure 4. A more complete and definitive breakdown of the ice-reporting code will be found in the Ice Observers Manual, NAVOCEANO Technical Note 3700-49-76. An example of a chart analysis of aerial ice reconnaissance utilizing the terminology and symbols listed in figure 4 is shown in figure 5.

Frequently, ice conditions reported by other nations, such as Denmark, will not be in the same format as that used by U.S. observers. A plain-language format generally will be used in these instances to report observed ice conditions by message. However, personnel of Fleet Weather Facility, Suitland attempt to incorporate as much as possible of the terminology and ice symbols shown in figure 4 into their chart analyses when plain-language ice reports are received. An example of a chart analysis of a plain-language Danish aerial ice reconnaissance message is shown in figure 6.

MICROFILM ICE FILE

At present, the NAVOCEANO microfilm ice file consists solely of 35-mm microfilm copies of Fleet Weather Facility, Suitland chart analyses on aperture cards; a sample of which is shown in figure 7. This file is updated on a quarterly basis. All interested commands and agencies may view this file at NAVOCEANO; or copies of the microfilm, either in an 18- by 24-inch, electrostatic paper copy format or as duplicate 35-mm, diazo aperture cards, will be made available at cost. The microfilm listing presented in this report includes all sea ice data on microfilm available from NAVOCEANO through the end of calendar year 1975. Starting in 1977, this listing will be updated at the start of each new calendar year, adding ice information available for the preceding year. For example, the 1977 supplement will list all available microfilm through the end of calendar year 1976.

Parties desiring copies of the annual reports of the Arctic or Antarctic ice observing and forecasting programs should contact the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, which will provide microfiche copies.

PROCEDURE TO OBTAIN MICROFILM

Requests for duplicate copies of microfilm should be sent to Commander, Naval Oceanographic Office, Washington, D.C. 20373*

*COMNAVOCEANO, NSTL, Bay St. Louis, MS 39520 after 1 July 1978.

specifying the areas, time periods, and copy format desired. The file will then be searched, and a listing of all microfilm available for the regions and dates specified along with reproduction costs will be sent to the requester. NAVOCEANO, upon receipt of payment, will order reproduction of the microfilm from another agency and forward the copies to the requesting agency or individual as quickly as possible. Requesters should allow from 4 to 6 weeks for delivery after payment is made.

MICROFILM LISTING

The available microfilm is listed according to three geographical areas: eastern Arctic, western Arctic, and Antarctica (tables 1, 2, and 3). Other pertinent information included in the listing is as follows: (1) type of data (aerial reconnaissance (RECCO) or satellite interpretation (SAT)); (2) date of mission, in the case of aerial reconnaissance, or date of issuance of the satellite ice chart, which in most cases details ice conditions for the preceding week or portion thereof; (3) nation that flew the aerial reconnaissance; and (4) the number of microfilm images needed to present the entire chart analyses of the aerial reconnaissance mission. A single satellite ice chart for each geographical area is contained on one image.

REFERENCES

- U.S. Naval Oceanographic Office, Antarctic ice observations October 1962 - March 1963, Spec. Pub. SP-80 (62), 58 pp., Washington, D.C., 1963.
- U.S. Naval Oceanographic Office, Antarctic ice observations October 1963 - January 1964, Spec. Pub. SP-80 (63), 26 pp., Washington, D.C., 1965.
- U.S. Naval Oceanographic Office, Report(s) of the Antarctic ice observing and forecasting program - 1964-69, Special Pubs. SP80 - (64) through 80 - (69), Washington, DC, 1966-1971.
- U.S. Naval Oceanographic Office, Report(s) of the Arctic ice observing and forecasting program - 1960-71, Spec. Pubs. SP-70 (60) through 70 (71), Washington, D.C. 1962-1974.
- U.S. Navy Hydrographic Office, Report of ice observations and forecasting for the season 1953, H.O. MISC. 15869 (1953), 65 pp., Washington, D.C., 1954.
- U.S. Navy Hydrographic Office, Report of ice operations Labrador Sea, Baffin Bay, and Canadian Arctic summer 1952, H.O. MISC. 15721-52, 67 pp., Washington, D.C., 1953.
- U.S. Navy Hydrographic Office, Report(s) of ice observing and forecasting program - 1954-57, Tech. Reports TR-49 through 52, Washington, D.C., 1955-1958.
- U.S. Navy Hydrographic Office, Report of the ice observing and forecasting program-1958, Tech. Report TR-66, 148 pp., Washington, D.C., 1959.
- U.S. Navy Hydrographic Office, Report of the ice observing and forecasting program-1959, Tech. Report TR-69, 121 pp., Washington, D.C., 1961.
- U.S. Naval Oceanographic Office, Ice observers manual, Tech. Note 3700-49-76, (In preparation).

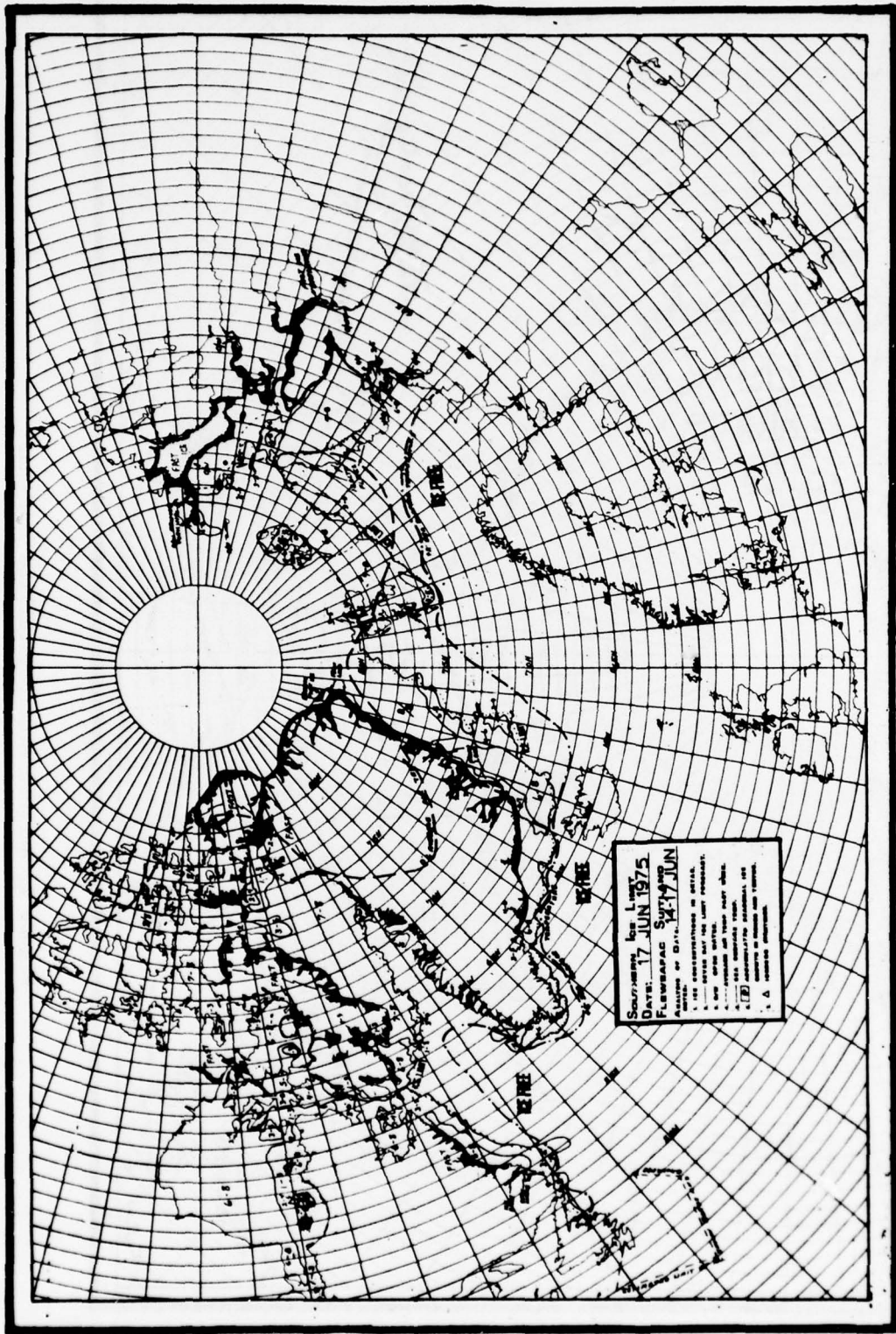


Figure 1. Eastern Arctic satellite ice chart

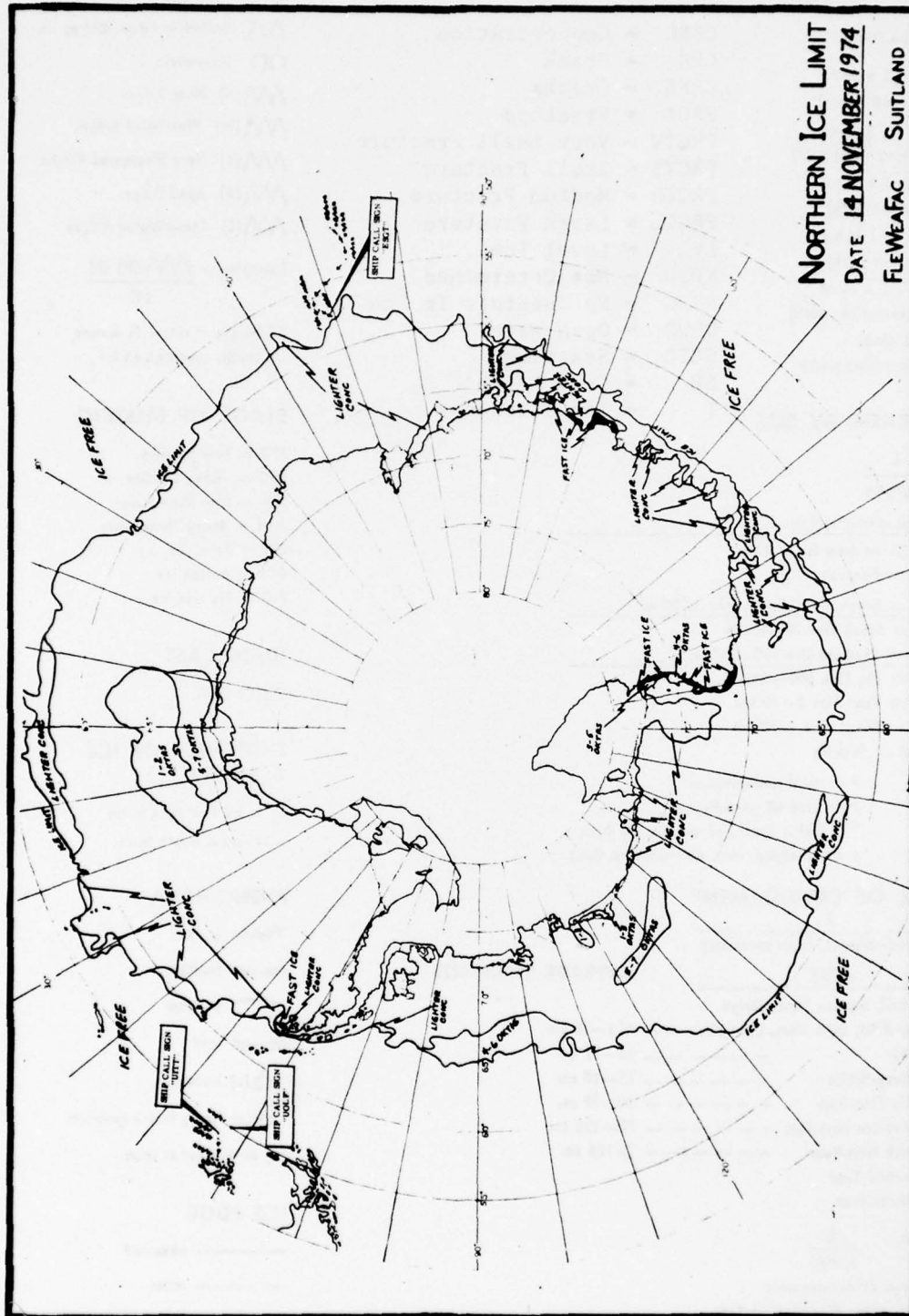



Figure 3. Antarctic satellite ice chart

KEY TO ICE SYMBOLS USED IN PLOTTING ICE FEATURES

TOTAL CONCENTRATION

-  Ice free
-  <1 okta* (open water)
-  1- <3 oktas (very open pack)
-  3- <6 oktas (open pack)
-  6- <7 oktas (close pack)
-  7- <8 oktas (very close pack)
-  8 oktas (compact pack)

- CONC = Concentration
- CRK = Crack
- CRKS = Cracks
- FRCT = Fracture
- FRCTV = Very Small Fracture
- FRCTS = Small Fracture
- FRCTM = Medium Fracture
- FRCTL = Large Fracture
- LVL = Level Ice
- NDTR = Not Determined
- NOPG = No Openings in Ice
- OPWR = Open Water
- SCTD = Scattered
- SD = Snow Depth
- T = Ice Thickness

COVERAGE BY SIZE

- $\frac{C}{n_1 n_2 n_3}$
- C = total concentration
-
- SS/NL = New Ice or Nilas
- ⁿ¹ PK = Pancake < 3 m
-
- CK = Crush, Small Cake, Cake < 20 m
- SF = Small Floe 20-100 m
- ⁿ² MF = Medium Floe 100-500 m
-
- BF = Big Floe 500-2000 m
- VF = Vast Floe 2-10 km
- ⁿ³ GF = Giant Floe > 10 km
- Fst = Fast Ice
- Example: $\frac{7}{124} PK$
- 7 = total concentration
 - 1 = okta all pancake ice
 - 124 = 2 = oktas small and medium ice floes
 - PK = 4 = oktas big, vast, and giant ice floes

STAGE OF DEVELOPMENT

A

oktas predominant, oktas secondary








	AVERAGE THICKNESS
SS = Frazil, Grease, Slush, Shuga	
NL = Ice Rind, Dark Nilas, Light Nilas	— < 5-10 cm
G = Gray	----- 10-15 cm
GW = Gray-White	----- 15-30 cm
FL = Thin First-Year	----- 30-70 cm
FM = Medium First-Year	----- 70-120 cm
FT = Thick First-Year	----- > 120 cm
SY = Second-Year	
MY = Multi-Year	

Example: $\frac{A}{SFM3G}$

A = Stage of development
 SFM = 5 oktas Medium First-Year
 3G = 3 oktas Gray

*One okta equals one-eighth ice concentration

TOPOGRAPHY

-  Rafted or Finger-Rafted Ice
-  Hummocks
-  M(N) New Ridges
-  M(W) Weathered Ridges
-  M(V) Very Weathered Ridges
-  M(A) Aged Ridges
-  M(C) Consolidated Ridges


Example: $\frac{M(N)(h)}{(n)}$

(h) height of ridges in meters
 (n) tenths coverage on ice

STAGE OF MELTING

- FPD = Few Puddles
- MPD = Many Puddles
- FTH = Few Thaw Holes
- MTH = Many Thaw Holes
- DRI = Dried Ice
- ROT = Rotten Ice
- FLO = Flooded Ice





UNDERCAST

 Limit

THICKNESS OF ICE & SNOW

t_i = ice thickness in cm
 s = snow depth in cm

PHENOMENA

-  crack
 -  fracture
 -  polynya
 -  lead
 - $\Delta(n)$ icebergs
 - $\Delta(n)$ bergy bits & growlers
- (n) = number in area

ICE EDGE





-  observed
-  radar
-  limit of observed data
-  satellite data

Figure 4. Partial ice code breakdown and key to ice symbols used in plotting ice features

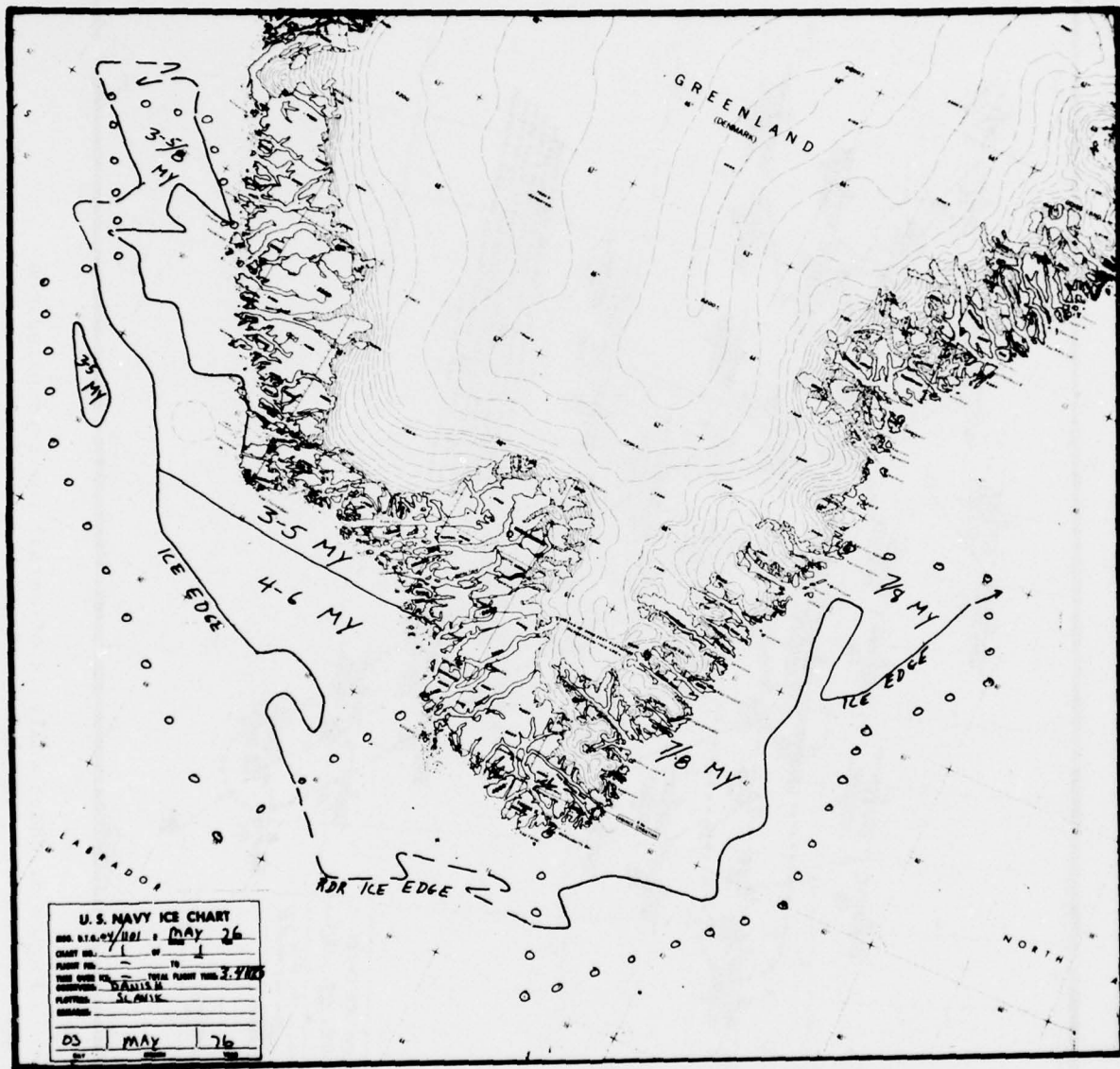


Figure 6. Chart analysis of Danish aerial ice reconnaissance

BEST AVAILABLE COPY

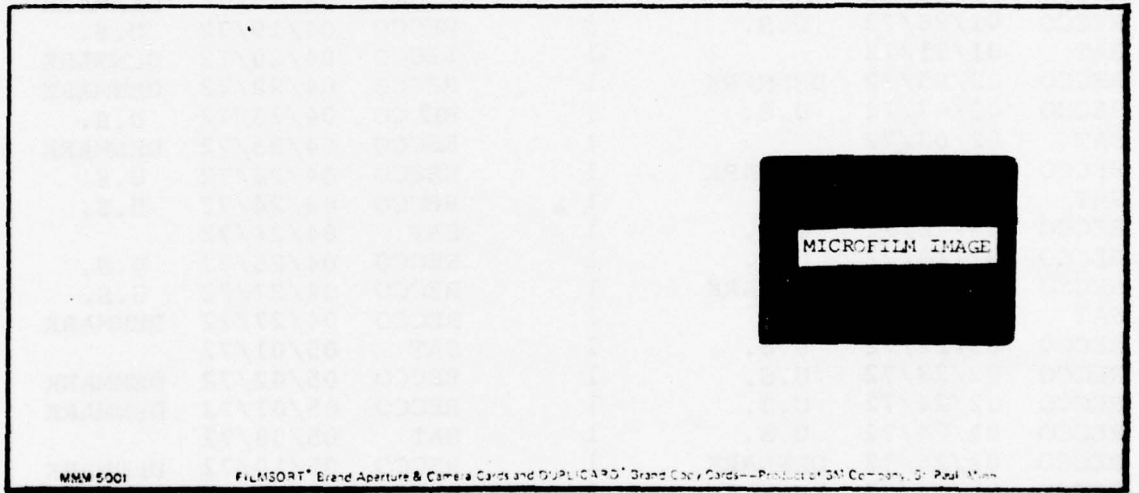


Figure 7. 35-mm aperture card

TABLE 1. MICROFILM, EASTERN ARCTIC

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
SAT	01/03/72		1	RECCO	03/30/72	DENMARK	2
RECCO	01/10/72	DENMARK	1	SAT	04/03/72		1
SAT	01/10/72		1	RECCO	04/04/72	DENMARK	1
RECCO	01/11/72	U.S.	1	RECCO	04/09/72	DENMARK	1
RECCO	01/12/72	U.S.	3	SAT	04/10/72		1
RECCO	01/14/72	DENMARK	1	RECCO	04/13/72	DENMARK	1
RECCO	01/17/72	DENMARK	1	RECCO	04/14/72	U.S.	1
SAT	01/17/72		1	RECCO	04/16/72	U.S.	2
RECCO	01/25/72	DENMARK	2	RECCO	04/16/72	U.S.	2
SAT	01/25/72		1	SAT	04/17/72		1
RECCO	01/26/72	U.S.	1	RECCO	04/18/72	DENMARK	1
RECCO	01/28/72	U.S.	6	RECCO	04/19/72	U.S.	1
SAT	01/31/72		1	RECCO	04/20/72	DENMARK	1
RECCO	02/05/72	DENMARK	1	RECCO	04/22/72	DENMARK	1
RECCO	02/07/72	U.S.	1	RECCO	04/23/72	U.S.	1
SAT	02/07/72		1	RECCO	04/23/72	DENMARK	1
RECCO	02/12/72	DENMARK	1	RECCO	04/24/72	U.S.	1
SAT	02/14/72		1	RECCO	04/24/72	U.S.	5
RECCO	02/18/72	U.S.	1	SAT	04/24/72		1
RECCO	02/19/72	U.S.	1	RECCO	04/25/72	U.S.	5
RECCO	02/19/72	DENMARK	1	RECCO	04/27/72	U.S.	1
SAT	02/21/72		1	RECCO	04/27/72	DENMARK	1
RECCO	02/22/72	U.S.	1	SAT	05/01/72		1
RECCO	02/23/72	U.S.	1	RECCO	05/02/72	DENMARK	1
RECCO	02/24/72	U.S.	1	RECCO	05/07/72	DENMARK	1
RECCO	02/24/72	U.S.	1	SAT	05/08/72		1
RECCO	02/26/72	DENMARK	1	RECCO	05/10/72	DENMARK	1
RECCO	02/28/72	DENMARK	2	RECCO	05/12/72	U.S.	2
SAT	02/28/72		1	RECCO	05/13/72	DENMARK	1
RECCO	03/06/72	DENMARK	1	RECCO	05/15/72	U.S.	1
SAT	03/06/72		1	SAT	05/15/72		1
RECCO	03/10/72	U.S.	5	RECCO	05/16/72	U.S.	1
RECCO	03/11/72	DENMARK	1	RECCO	05/16/72	U.S.	4
SAT	03/13/72		1	RECCO	05/17/72	U.S.	1
RECCO	03/16/72	U.S.	1	RECCO	05/17/72	U.S.	3
RECCO	03/17/72	U.S.	4	RECCO	05/19/72	U.S.	1
RECCO	03/18/72	U.S.	1	RECCO	05/19/72	DENMARK	1
SAT	03/20/72		1	RECCO	05/21/72	U.S.	1
RECCO	03/22/72	U.S.	1	SAT	05/22/72		1
RECCO	03/22/72	DENMARK	1	RECCO	05/24/72	U.S.	1
RECCO	03/27/72	U.S.	1	RECCO	05/24/72	DENMARK	2
SAT	03/27/72		1	RECCO	05/24/72	U.S.	1

TABLE 1. MICROFILM, EASTERN ARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
RECCO	05/24/72	DENMARK	1	SAT	08/14/72		1
SAT	05/29/72		1	RECCO	08/16/72	U.S.	3
RECCO	05/30/72	U.S.	1	RECCO	08/17/72	U.S.	3
RECCO	05/31/72	U.S.	1	SAT	08/21/72		1
RECCO	05/31/72	U.S.	2	SAT	08/28/72		1
RECCO	05/31/72	DENMARK	1	SAT	09/05/72		1
RECCO	06/01/72	U.S.	3	RECCO	09/09/72	U.S.	3
RECCO	06/02/72	U.S.	2	SAT	09/12/72		1
RECCO	06/02/72	DENMARK	1	SAT	09/19/72		1
SAT	06/05/72		1	RECCO	09/20/72	U.S.	1
RECCO	06/06/72	DENMARK	1	RECCO	09/21/72	U.S.	1
RECCO	06/06/72	U.S.	3	SAT	09/26/72		1
RECCO	06/07/72	U.S.	1	RECCO	09/27/72	U.S.	3
RECCO	06/07/72	DENMARK	1	RECCO	09/29/72	U.S.	2
RECCO	06/10/72	DENMARK	1	RECCO	10/02/72	U.S.	2
RECCO	06/12/72	U.S.	1	RECCO	10/03/72	U.S.	1
SAT	06/13/72		1	SAT	10/03/72		1
RECCO	06/14/72	U.S.	2	RECCO	10/04/72	U.S.	2
RECCO	06/15/72	U.S.	5	RECCO	10/06/72	U.S.	1
RECCO	06/17/72	U.S.	3	SAT	10/10/72		1
RECCO	06/17/72	DENMARK	1	RECCO	10/11/72	U.S.	3
RECCO	06/19/72	DENMARK	1	RECCO	10/13/72	U.S.	1
SAT	06/19/72		1	RECCO	10/17/72	U.S.	2
RECCO	06/20/72	U.S.	1	SAT	10/17/72		1
SAT	06/26/72		1	RECCO	10/19/72	U.S.	2
RECCO	06/28/72	DENMARK	1	RECCO	10/21/72	U.S.	4
RECCO	06/29/72	U.S.	2	SAT	10/24/72		1
RECCO	07/02/72	U.S.	1	RECCO	10/25/72	U.S.	1
SAT	07/03/72		1	RECCO	10/31/72	DENMARK	1
RECCO	07/04/72	U.S.	1	SAT	10/31/72		1
SAT	07/10/72		1	RECCO	11/01/72	U.S.	2
RECCO	07/17/72	U.S.	3	RECCO	11/01/72	U.S.	1
RECCO	07/17/72	DENMARK	1	RECCO	11/01/72	DENMARK	1
SAT	07/17/72		1	RECCO	11/02/72	U.S.	3
RECCO	07/18/72	U.S.	2	SAT	11/07/72		1
SAT	07/24/72		1	RECCO	11/08/72	U.S.	1
SAT	07/31/72		1	RECCO	11/12/72	U.S.	1
RECCO	08/02/72	U.S.	3	RECCO	11/13/72	DENMARK	1
RECCO	08/02/72	U.S.	1	RECCO	11/14/72	U.S.	1
RECCO	08/03/72	U.S.	2	SAT	11/14/72		1
SAT	08/07/72		1	RECCO	11/15/72	DENMARK	1
RECCO	08/13/72	DENMARK	1	RECCO	11/16/72	U.S.	1

TABLE 1. MICROFILM, EASTERN ARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
RECCO	11/17/72	U.S.	1	RECCO	12/07/72	DENMARK	1
RECCO	11/21/72	U.S.	1	SAT	12/12/72		1
SAT	11/21/72		1	RECCO	12/13/72	U.S.	1
RECCO	11/28/72	DENMARK	1	RECCO	12/14/72	DENMARK	1
SAT	11/28/72		1	RECCO	12/14/72	U.S.	1
RECCO	11/29/72	U.S.	2	RECCO	12/18/72	DENMARK	1
RECCO	11/30/72	U.S.	2	SAT	12/19/72		1
RECCO	12/01/72	U.S.	1	RECCO	12/21/72	DENMARK	1
RECCO	12/05/72	U.S.	1	RECCO	12/21/72	U.S.	2
SAT	12/05/72		1	RECCO	12/23/72	DENMARK	1
RECCO	12/06/72	DENMARK	1	RECCO	12/24/72	DENMARK	1
RECCO	12/07/72	U.S.	1	SAT	12/26/72		1
SAT	01/02/73		1	RECCO	03/16/73	U.S.	2
RECCO	01/04/73	DENMARK	1	RECCO	03/17/73	U.S.	2
SAT	01/09/73		1	RECCO	03/19/73	U.S.	2
RECCO	01/10/73	U.S.	2	RECCO	03/20/73	U.S.	4
RECCO	01/11/73	U.S.	1	SAT	03/20/73		1
RECCO	01/14/73	U.S.	2	RECCO	03/21/73	U.S.	2
RECCO	01/15/73	U.S.	1	RECCO	03/26/73	U.S.	1
RECCO	01/16/73	DENMARK	1	RECCO	03/27/73	U.S.	1
SAT	01/16/73		1	SAT	03/27/73		1
RECCO	01/17/73	U.S.	2	RECCO	03/30/73	DENMARK	2
SAT	01/23/73		1	RECCO	04/01/73	DENMARK	1
RECCO	01/27/73	DENMARK	1	SAT	04/03/73		1
SAT	01/30/73		1	RECCO	04/05/73	DENMARK	1
RECCO	01/31/73	U.S.	2	RECCO	04/10/73	DENMARK	1
SAT	02/06/73		1	RECCO	04/10/73	U.S.	1
RECCO	02/12/73	DENMARK	1	SAT	04/10/73		1
SAT	02/13/73		1	RECCO	04/14/73	U.S.	3
SAT	02/20/73		1	RECCO	04/15/73	U.S.	2
RECCO	02/21/73	U.S.	1	RECCO	04/16/73	U.S.	4
RECCO	02/22/73	U.S.	2	RECCO	04/17/73	U.S.	1
RECCO	02/22/73	DENMARK	1	SAT	04/17/73		1
RECCO	02/23/73	U.S.	1	RECCO	04/19/73	U.S.	1
RECCO	02/23/73	DENMARK	1	RECCO	04/20/73	DENMARK	2
SAT	02/27/73		1	RECCO	04/20/73	U.S.	1
RECCO	02/28/73	DENMARK	1	RECCO	04/21/73	U.S.	1
RECCO	03/02/73	DENMARK	1	RECCO	04/23/73	U.S.	1
SAT	03/06/73		1	SAT	04/24/73		1
RECCO	03/13/73	DENMARK	1	RECCO	04/26/73	U.S.	4
SAT	03/13/73		1	RECCO	04/27/73	U.S.	2
RECCO	03/15/73	DENMARK	2	RECCO	04/30/73	DENMARK	2

TABLE 1. MICROFILM, EASTERN ARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
SAT	05/01/73		1	RECCO	07/05/73	DENMARK	1
RECCO	05/02/73	DENMARK	1	RECCO	07/06/73	DENMARK	1
RECCO	05/08/73	DENMARK	1	SAT	07/10/73		1
SAT	05/08/73		1	RECCO	07/13/73	DENMARK	1
RECCO	05/13/73	DENMARK	1	RECCO	07/15/73	DENMARK	2
SAT	05/15/73		1	RECCO	07/16/73	U.S.	3
RECCO	05/16/73	DENMARK	2	SAT	07/17/73		1
RECCO	05/18/73	DENMARK	1	RECCO	07/18/73	U.S.	3
RECCO	05/18/73	U.S.	1	RECCO	07/20/73	U.S.	1
RECCO	05/22/73	U.S.	3	SAT	07/24/73		1
SAT	05/22/73		1	RECCO	07/28/73	DENMARK	1
RECCO	05/23/73	DENMARK	1	RECCO	07/28/73	U.S.	1
RECCO	05/24/73	U.S.	2	RECCO	07/28/73	DENMARK	1
RECCO	05/29/73	DENMARK	1	RECCO	07/28/73	U.S.	4
SAT	05/29/73		1	RECCO	07/28/73	U.S.	3
RECCO	06/01/73	DENMARK	1	SAT	07/31/73		1
RECCO	06/03/73	DENMARK	2	RECCO	08/01/73	U.S.	1
RECCO	06/04/73	DENMARK	3	RECCO	08/02/73	U.S.	2
RECCO	06/05/73	DENMARK	2	RECCO	08/02/73	DENMARK	2
SAT	06/05/73		1	RECCO	08/05/73	DENMARK	1
RECCO	06/06/73	U.S.	1	RECCO	08/05/73	U.S.	2
RECCO	06/06/73	DENMARK	1	RECCO	08/06/73	U.S.	2
RECCO	06/10/73	DENMARK	1	SAT	08/07/73		1
RECCO	06/12/73	DENMARK	1	RECCO	08/08/73	U.S.	2
SAT	06/12/73		1	RECCO	08/08/73	DENMARK	4
RECCO	06/13/73	U.S.	2	RECCO	08/12/73	U.S.	2
RECCO	06/13/73	U.S.	4	RECCO	08/13/73	U.S.	2
RECCO	06/14/73	U.S.	3	RECCO	08/13/73	DENMARK	1
RECCO	06/14/73	U.S.	2	SAT	08/14/73		1
RECCO	06/15/73	U.S.	3	RECCO	08/15/73	U.S.	2
SAT	06/19/73		1	RECCO	08/16/73	U.S.	4
RECCO	06/20/73	DENMARK	1	RECCO	08/21/73	DENMARK	1
RECCO	06/20/73	U.S.	1	RECCO	08/21/73	U.S.	1
RECCO	06/21/73	DENMARK	1	SAT	08/21/73	U.S.	1
RECCO	06/24/73	DENMARK	2	RECCO	08/22/73	U.S.	2
SAT	06/26/73		1	RECCO	08/23/73	U.S.	2
RECCO	06/27/73	DENMARK	1	RECCO	08/24/73	DENMARK	1
RECCO	06/27/73	U.S.	2	RECCO	08/25/73	U.S.	1
RECCO	06/28/73	U.S.	3	RECCO	08/26/73	U.S.	1
RECCO	06/28/73	DENMARK	1	SAT	08/28/73		1
RECCO	06/29/73	U.S.	1	RECCO	08/29/73	U.S.	3
SAT	07/03/73		1	RECCO	08/31/73	U.S.	2

TABLE 1. MICROFILM, EASTERN ARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
SAT	09/04/73		1	RECCO	11/01/73	U.S.	1
RECCO	09/05/73	DENMARK	4	RECCO	11/02/73	DENMARK	2
SAT	09/11/73		1	SAT	11/06/73		1
SAT	09/18/73		1	RECCO	11/08/73	U.S.	2
RECCO	09/20/73	DENMARK	1	RECCO	11/10/73	DENMARK	3
SAT	09/25/73		1	RECCO	11/12/73	U.S.	4
RECCO	09/26/73	DENMARK	2	SAT	11/13/73		1
RECCO	10/01/73	DENMARK	2	RECCO	11/18/73	U.S.	3
SAT	10/02/73		1	RECCO	11/19/73	U.S.	2
RECCO	10/05/73	DENMARK	4	RECCO	11/20/73	U.S.	2
RECCO	10/08/73	DENMARK	1	SAT	11/20/73		1
SAT	10/09/73		1	RECCO	11/22/73	DENMARK	1
RECCO	10/11/73	U.S.	2	SAT	11/27/73		1
RECCO	10/12/73	DENMARK	1	RECCO	11/28/73	U.S.	1
RECCO	10/15/73	U.S.	3	SAT	12/04/73		1
RECCO	10/16/73	U.S.	2	RECCO	12/06/73	DENMARK	2
SAT	10/16/73		1	RECCO	12/07/73	U.S.	1
RECCO	10/17/73	U.S.	1	SAT	12/11/72		1
RECCO	10/18/73	U.S.	1	RECCO	12/13/73	U.S.	2
RECCO	10/20/73	DENMARK	1	RECCO	12/15/73	DENMARK	2
RECCO	10/21/73	U.S.	1	RECCO	12/16/73	U.S.	1
RECCO	10/22/73	DENMARK	1	SAT	12/18/73		1
SAT	10/23/73		1	RECCO	12/22/73	U.S.	3
RECCO	10/24/73	DENMARK	3	RECCO	12/22/73	DENMARK	2
RECCO	10/28/73	U.S.	3	SAT	12/24/73		1
RECCO	10/29/73	U.S.	1	RECCO	12/27/73	U.S.	1
SAT	10/30/73		1	RECCO	12/27/73	DENMARK	2
RECCO	10/31/73	DENMARK	1	SAT	12/31/73		1
RECCO	10/31/73	U.S.	4				
RECCO	01/04/74	DENMARK	3	SAT	01/22/74		1
SAT	01/08/74		1	RECCO	01/27/74	DENMARK	1
RECCO	01/09/74	U.S.	2	SAT	01/29/74		1
RECCO	01/11/74	DENMARK	1	SAT	02/05/74		1
RECCO	01/12/74	U.S.	1	RECCO	02/06/74	DENMARK	1
RECCO	01/14/74	U.S.	2	RECCO	02/10/74	DENMARK	2
SAT	01/15/74		1	SAT	02/12/74		1
RECCO	01/16/74	DENMARK	2	RECCO	02/18/74	U.S.	3
RECCO	01/18/74	DENMARK	1	RECCO	02/19/74	DENMARK	1
RECCO	01/18/74	U.S.	2	SAT	02/19/74		1
RECCO	01/20/74	DENMARK	1	RECCO	02/20/74	U.S.	4
RECCO	01/20/74	U.S.	2	RECCO	02/21/74	U.S.	2

TABLE 1. MICROFILM, EASTERN ARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
RECCO	02/22/74	U.S.	1	RECCO	05/03/74	DENMARK	1
RECCO	02/25/74	U.S.	1	RECCO	05/04/74	DENMARK	1
SAT	02/26/74		1	SAT	05/07/74		1
RECCO	02/27/74	U.S.	1	RECCO	05/10/74	DENMARK	2
RECCO	02/28/74	U.S.	1	RECCO	05/11/74	U.S.	2
RECCO	02/28/74	DENMARK	1	RECCO	05/13/74	DENMARK	1
RECCO	03/01/74	U.S.	2	SAT	05/14/74		1
RECCO	03/03/74	U.S.	3	RECCO	05/15/74	U.S.	4
SAT	03/05/74		1	RECCO	05/15/74	DENMARK	1
RECCO	03/06/74	U.S.	2	RECCO	05/18/74	U.S.	2
RECCO	03/07/74	U.S.	2	RECCO	05/20/74	U.S.	4
RECCO	03/08/74	U.S.	2	SAT	05/21/74		1
RECCO	03/10/74	U.S.	4	RECCO	05/22/74	DENMARK	3
RECCO	03/11/74	U.S.	1	RECCO	05/26/74	DENMARK	1
RECCO	03/12/74	U.S.	3	RECCO	05/27/74	DENMARK	1
SAT	03/12/74		1	SAT	05/28/74		1
RECCO	03/14/74	DENMARK	1	RECCO	06/03/74	U.S.	4
RECCO	03/17/74	DENMARK	1	RECCO	06/04/74	DENMARK	1
SAT	03/19/74		1	RECCO	06/04/74	U.S.	5
RECCO	03/23/74	U.S.	1	SAT	06/04/74		1
RECCO	03/24/74	U.S.	3	RECCO	06/05/74	U.S.	2
RECCO	03/25/74	U.S.	1	RECCO	06/08/74	DENMARK	1
SAT	03/26/74		1	SAT	06/11/74		1
RECCO	03/27/74	U.S.	2	RECCO	06/18/74	DENMARK	2
RECCO	03/27/74	DENMARK	2	SAT	06/18/74		1
RECCO	04/02/74	DENMARK	1	RECCO	06/21/74	DENMARK	1
SAT	04/02/74		1	RECCO	06/22/74	DENMARK	1
RECCO	04/09/74	DENMARK	1	RECCO	06/24/74	U.S.	5
SAT	04/09/74		1	RECCO	06/25/74	DENMARK	1
RECCO	04/13/74	DENMARK	1	RECCO	06/25/74	U.S.	4
RECCO	04/15/74	U.S.	1	SAT	06/25/74		1
RECCO	04/16/74	U.S.	3	RECCO	06/26/74	DENMARK	1
RECCO	04/16/74	DENMARK	1	RECCO	06/26/74	U.S.	2
SAT	04/16/74		1	RECCO	06/29/74	DENMARK	1
RECCO	04/18/74	U.S.	4	SAT	07/02/74		1
RECCO	04/18/74	U.S.	6	RECCO	07/03/74	DENMARK	1
RECCO	04/19/74	DENMARK	1	RECCO	07/05/74	DENMARK	1
RECCO	04/20/74	U.S.	6	RECCO	07/08/74	DENMARK	2
RECCO	04/22/74	DENMARK	1	SAT	07/09/74		1
SAT	04/23/74		1	RECCO	07/10/74	DENMARK	2
SAT	04/30/74		1	RECCO	07/12/74	DENMARK	3
RECCO	05/01/74	DENMARK	1	SAT	07/16/74		1

TABLE 1. MICROFILM, EASTERN ARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
RECCO	07/18/74	DENMARK	1	RECCO	10/24/74	DENMARK	3
RECCO	07/23/74	U.S.	1	SAT	10/29/74		1
SAT	07/23/74		1	RECCO	10/31/74		1
RECCO	07/24/74	U.S.	3	SAT	11/05/74		1
RECCO	07/25/74	U.S.	1	RECCO	11/06/74	DENMARK	1
SAT	07/30/74		1	RECCO	11/09/74	DENMARK	1
RECCO	08/01/74	U.S.	1	RECCO	11/11/74	U.S.	1
RECCO	08/01/74	DENMARK	1	SAT	11/12/74		1
RECCO	08/03/74	DENMARK	1	RECCO	11/15/74	DENMARK	1
SAT	08/06/74		1	SAT	11/19/74		1
RECCO	08/12/74	U.S.	2	RECCO	11/20/74	U.S.	1
RECCO	08/13/74	U.S.	2	RECCO	11/21/74	U.S.	2
SAT	08/13/74		1	RECCO	11/22/74	U.S.	2
SAT	08/20/74		1	RECCO	11/25/74	DENMARK	1
SAT	08/27/74		1	SAT	11/26/74		1
RECCO	08/28/74	U.S.	4	RECCO	11/28/74	DENMARK	1
SAT	09/03/74		1	RECCO	11/29/74	DENMARK	2
SAT	09/10/74		1	RECCO	12/03/74	DENMARK	1
SAT	09/17/74		1	SAT	12/03/74		1
SAT	09/24/74		1	RECCO	12/04/74	U.S.	1
SAT	10/01/74		1	RECCO	12/07/74	DENMARK	1
SAT	10/08/74		1	SAT	12/10/74		1
RECCO	10/15/74	DENMARK	1	RECCO	12/13/74	DENMARK	1
SAT	10/16/74		1	RECCO	12/14/74	DENMARK	1
RECCO	10/18/74	U.S.	1	RECCO	12/16/74	DENMARK	1
RECCO	10/19/74	U.S.	1	SAT	12/24/74		1
RECCO	10/20/74	U.S.	4	RECCO	12/27/74	DENMARK	1
SAT	10/22/74		1	SAT	12/31/74		1
RECCO	01/07/75	DENMARK	1	RECCO	01/23/75	U.S.	2
RECCO	01/07/75	DENMARK	1	RECCO	01/24/75	U.S.	1
SAT	01/07/75		1	RECCO	01/25/75	U.S.	3
RECCO	01/13/75	DENMARK	1	RECCO	01/28/75	DENMARK	1
SAT	01/14/75		1	SAT	01/28/75		1
RECCO	01/16/75	DENMARK	1	RECCO	02/01/75	DENMARK	1
RECCO	01/16/75	DENMARK	1	RECCO	02/02/75	DENMARK	1
RECCO	01/20/75	U.S.	1	RECCO	02/04/75	DENMARK	1
RECCO	01/20/75	DENMARK	1	SAT	02/04/75		1
SAT	01/21/75		1	RECCO	02/08/75	U.S.	1
RECCO	01/22/75	U.S.	1	RECCO	02/09/75	DENMARK	1
RECCO	01/23/75	DENMARK	1	RECCO	02/10/75	U.S.	2

TABLE 1. MICROFILM, EASTERN ARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
SAT	02/11/75		1	RECCO	04/21/75	U.S.	2
RECCO	02/13/75	DENMARK	1	RECCO	04/22/75	DENMARK	1
RECCO	02/13/75	DENMARK	1	SAT	04/22/75		1
RECCO	02/14/75	U.S.	1	RECCO	04/23/75	U.S.	2
RECCO	02/14/75	DENMARK	1	RECCO	04/27/75	DENMARK	1
RECCO	02/18/75	U.S.	1	RECCO	04/28/75	U.S.	1
SAT	02/18/75		1	RECCO	04/29/75	DENMARK	1
RECCO	02/19/75	U.S.	1	SAT	04/29/75		1
RECCO	02/21/75	DENMARK	1	RECCO	05/01/75	DENMARK	1
SAT	02/25/75		1	RECCO	05/01/75	DENMARK	1
RECCO	02/26/75	DENMARK	1	RECCO	05/02/75	U.S.	3
RECCO	03/03/75	DENMARK	1	RECCO	05/03/75	DENMARK	1
SAT	03/04/75		1	RECCO	05/03/75	DENMARK	1
RECCO	03/05/75	U.S.	1	RECCO	05/04/75	U.S.	1
RECCO	03/06/75	U.S.	2	RECCO	05/04/75	DENMARK	1
RECCO	03/06/75	U.S.	2	RECCO	05/05/75	U.S.	1
SAT	03/11/75		1	RECCO	05/06/75	DENMARK	1
RECCO	03/12/75	U.S.	1	SAT	05/06/75		1
RECCO	03/18/75	U.S.	1	RECCO	05/07/75	U.S.	1
RECCO	03/18/75	U.S.	2	RECCO	05/09/75	U.S.	3
SAT	03/18/75		1	RECCO	05/10/75	U.S.	2
RECCO	03/19/75	DENMARK	1	RECCO	05/10/75	DENMARK	1
RECCO	03/20/75	U.S.	1	RECCO	05/10/75	U.S.	2
RECCO	03/20/75	U.S.	2	SAT	05/13/75		1
RECCO	03/22/75	DENMARK	1	RECCO	05/15/75	DENMARK	1
RECCO	03/23/75	DENMARK	1	RECCO	05/19/75	DENMARK	1
RECCO	03/23/75	DENMARK	1	RECCO	05/19/75	U.S.	2
RECCO	03/24/75	U.S.	1	SAT	05/20/75		1
SAT	03/25/75		1	RECCO	05/23/75	DENMARK	1
RECCO	03/26/75	DENMARK	1	RECCO	05/23/75	U.S.	2
RECCO	03/29/75	DENMARK	1	SAT	05/27/75		1
SAT	04/01/75		1	RECCO	05/30/75	DENMARK	1
RECCO	04/03/75	U.S.	1	RECCO	06/02/75	DENMARK	1
RECCO	04/03/75	U.S.	1	SAT	06/03/75		1
RECCO	04/05/75	DENMARK	1	RECCO	06/04/75	DENMARK	1
SAT	04/08/75		1	RECCO	06/06/75	DENMARK	1
RECCO	04/10/75	DENMARK	1	RECCO	06/09/75	DENMARK	1
RECCO	04/13/75	DENMARK	1	SAT	06/10/75		1
RECCO	04/14/75	DENMARK	1	RECCO	06/12/75	U.S.	1
SAT	04/15/75		1	RECCO	06/13/75	DENMARK	1
RECCO	04/18/75	DENMARK	1	RECCO	06/16/75	DENMARK	1
RECCO	04/21/75	U.S.	2	SAT	06/17/75		1

TABLE 1. MICROFILM, EASTERN ARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
RECCO	06/24/75	U.S.	1	RECCO	08/20/75	U.S.	1
SAT	06/24/75		1	SAT	08/26/75		1
RECCO	06/25/75	DENMARK	2	RECCO	08/30/75	DENMARK	2
RECCO	06/25/75	U.S.	2	RECCO	08/31/75	DENMARK	1
RECCO	06/26/75	U.S.	2	SAT	09/02/75		1
RECCO	06/30/75	DENMARK	1	RECCO	09/03/75	DENMARK	2
RECCO	07/01/75	DENMARK	1	RECCO	09/04/75	U.S.	1
SAT	07/01/75		1	RECCO	09/09/75	DENMARK	1
RECCO	07/03/75	DENMARK	1	SAT	09/09/75		1
RECCO	07/08/75	DENMARK	1	RECCO	09/13/75	U.S.	1
SAT	07/08/75		1	SAT	09/16/75		1
RECCO	07/11/75	DENMARK	1	RECCO	09/23/75	DENMARK	1
RECCO	07/11/75	U.S.	1	SAT	09/23/75		1
RECCO	07/11/75	DENMARK	1	RECCO	09/29/75	DENMARK	1
RECCO	07/15/75	U.S.	2	SAT	09/30/75		1
SAT	07/15/75		1	RECCO	10/02/75	U.S.	1
RECCO	07/16/75	U.S.	1	SAT	10/07/75		1
RECCO	07/16/75	DENMARK	1	RECCO	10/09/75	DENMARK	1
RECCO	07/17/75	U.S.	2	RECCO	10/14/75	DENMARK	2
RECCO	07/17/75	DENMARK	1	RECCO	10/14/75	DENMARK	1
RECCO	07/22/75	DENMARK	1	SAT	10/14/75		1
SAT	07/22/75		1	RECCO	10/17/75	U.S.	1
RECCO	07/24/75	U.S.	1	RECCO	10/21/75	DENMARK	1
RECCO	07/24/75	DENMARK	2	SAT	10/21/75		1
RECCO	07/26/75	DENMARK	1	SAT	10/28/75		1
RECCO	07/28/75	U.S.	1	RECCO	10/29/75	DENMARK	1
RECCO	07/29/75	U.S.	1	RECCO	10/31/75	DENMARK	1
SAT	07/29/75		1	RECCO	11/03/75	U.S.	1
RECCO	07/30/75	DENMARK	1	SAT	11/04/75		1
RECCO	08/03/75	DENMARK	1	RECCO	11/08/75	DENMARK	1
RECCO	08/04/75	DENMARK	1	SAT	11/11/75		1
SAT	08/05/75		1	SAT	11/18/75		1
RECCO	08/07/75	DENMARK	1	RECCO	11/22/75	U.S.	1
RECCO	08/09/75	DENMARK	1	RECCO	11/23/75	DENMARK	1
RECCO	08/11/75	DENMARK	1	RECCO	11/25/75	DENMARK	1
RECCO	08/12/75	DENMARK	1	SAT	11/25/75		1
SAT	08/12/75		1	RECCO	11/26/75	DENMARK	1
RECCO	08/17/75	U.S.	1	RECCO	11/27/75	DENMARK	1
RECCO	08/17/75	DENMARK	1	RECCO	11/27/75	U.S.	2
RECCO	08/18/75	U.S.	2	RECCO	11/28/75	DENMARK	1
RECCO	08/18/75	DENMARK	1	RECCO	11/28/75	U.S.	1
SAT	08/19/75		1	RECCO	11/30/75	U.S.	2

TABLE 1. MICROFILM, EASTERN ARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
RECCO	12/01/75	U.S.	1	RECCO	12/16/75	DENMARK	1
SAT	12/02/75		1	SAT	12/16/75		1
RECCO	12/06/75	DENMARK	1	RECCO	12/22/75	DENMARK	1
RECCO	12/08/75	U.S.	1	RECCO	12/22/75	DENMARK	2
RECCO	12/09/75	DENMARK	1	SAT	12/23/75		1
RECCO	12/09/75	DENMARK	1	RECCO	12/26/75	U.S.	2
SAT	12/09/75		1	RECCO	12/27/75	DENMARK	1
RECCO	12/11/75	DENMARK	1	SAT	12/30/75		1
RECCO	12/16/75	DENMARK	1				

TABLE 2. MICROFILM, WESTERN ARCTIC

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
SAT	01/03/72		1	SAT	06/26/72		1
RECCO	01/10/72	U.S.	2	SAT	07/03/72		1
SAT	01/10/72		1	RECCO	07/04/72	U.S.	2
SAT	01/17/72		1	RECCO	07/06/72	U.S.	1
RECCO	01/19/72	U.S.	2	RECCO	07/08/72	U.S.	1
RECCO	01/20/72	U.S.	1	SAT	07/10/72		1
SAT	01/31/72		1	RECCO	07/13/72	U.S.	1
RECCO	02/03/72	U.S.	1	SAT	07/17/72		1
SAT	02/07/72		1	RECCO	07/19/72	U.S.	1
RECCO	02/14/72	U.S.	1	RECCO	07/20/72	U.S.	2
SAT	02/14/72		1	RECCO	07/24/72	U.S.	1
SAT	02/21/72		1	SAT	07/24/72		1
SAT	02/28/72		1	RECCO	07/30/72	U.S.	1
SAT	03/06/72		1	RECCO	07/30/72	U.S.	1
RECCO	03/12/72	U.S.	3	SAT	07/31/72		1
SAT	03/13/72		1	RECCO	08/02/72	U.S.	1
RECCO	03/18/72	U.S.	1	RECCO	08/03/72	U.S.	1
SAT	03/20/72		1	RECCO	08/04/72	U.S.	2
RECCO	03/24/72	U.S.	1	RECCO	08/05/72	U.S.	1
RECCO	03/27/72	U.S.	1	SAT	08/07/72		1
SAT	03/27/72		1	RECCO	08/08/72	U.S.	1
SAT	04/03/72		1	RECCO	08/10/72	U.S.	1
SAT	04/10/72		1	RECCO	08/12/72	U.S.	1
RECCO	04/13/72	U.S.	1	SAT	08/14/72		1
SAT	04/17/72		1	RECCO	08/16/72	U.S.	1
RECCO	04/18/72	U.S.	2	RECCO	08/18/72	U.S.	1
SAT	04/24/72		1	SAT	08/21/72		1
RECCO	04/25/72	U.S.	1	RECCO	08/22/72	U.S.	1
SAT	05/01/72		1	RECCO	08/27/72	U.S.	1
SAT	05/08/72		1	SAT	08/28/72		1
RECCO	05/13/72	U.S.	1	RECCO	09/02/72	U.S.	2
RECCO	05/15/72	U.S.	2	SAT	09/05/72		1
SAT	05/15/72		1	SAT	09/12/72		1
SAT	05/22/72		1	SAT	09/19/72		1
SAT	05/30/72		1	RECCO	09/21/72	U.S.	1
RECCO	06/03/72	U.S.	2	SAT	09/26/72		1
SAT	06/05/72		1	SAT	10/03/72		1
RECCO	06/12/72	U.S.	1	RECCO	10/05/72	U.S.	1
SAT	06/13/72		1	SAT	10/10/72		1
RECCO	06/14/72	U.S.	2	RECCO	10/16/72	U.S.	2
RECCO	06/16/72	U.S.	2	RECCO	10/17/72	U.S.	2
SAT	06/19/72		1	SAT	10/17/72		1

TABLE 2. MICROFILM, WESTERN ARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
SAT	10/24/72		1	SAT	11/28/72		1
RECCO	10/31/72	U.S.	2	RECCO	12/04/72	U.S.	2
SAT	10/31/72		1	SAT	12/05/72		1
SAT	11/07/72		1	SAT	12/12/72		1
SAT	11/14/72		1	SAT	12/19/72		1
RECCO	11/18/72	U.S.	3	SAT	12/26/72		1
SAT	11/21/72		1				
SAT	01/02/73		1	SAT	04/17/73		1
RECCO	01/05/73	U.S.	1	SAT	04/24/73		1
SAT	01/09/73		1	SAT	05/01/73		1
SAT	01/16/73		1	SAT	05/08/73		1
RECCO	01/18/73	U.S.	2	SAT	05/15/73		1
RECCO	01/21/73	U.S.	1	RECCO	05/19/73	U.S.	2
SAT	01/23/73		1	SAT	05/22/73		1
RECCO	01/24/73	U.S.	1	SAT	05/29/73		1
RECCO	01/26/73	U.S.	2	SAT	06/05/73		1
SAT	01/30/73		1	SAT	06/12/73		1
RECCO	02/01/73	U.S.	1	SAT	06/19/73		1
RECCO	02/04/73	U.S.	3	RECCO	06/20/73	U.S.	3
RECCO	02/05/73	U.S.	2	SAT	06/26/73		1
RECCO	02/06/73	U.S.	1	SAT	07/03/73		1
RECCO	02/06/73	U.S.	1	RECCO	07/06/73	U.S.	1
SAT	02/06/73		1	SAT	07/10/73		1
RECCO	02/09/73	U.S.	2	RECCO	07/16/73	U.S.	1
SAT	02/13/73		1	SAT	07/17/73		1
RECCO	02/14/73	U.S.	1	RECCO	07/18/73	U.S.	2
RECCO	02/20/73	U.S.	2	RECCO	07/19/73	U.S.	1
SAT	02/20/73		1	RECCO	07/23/73	U.S.	1
RECCO	02/26/73	U.S.	2	RECCO	07/23/73	U.S.	1
SAT	02/27/73		1	SAT	07/24/73		1
RECCO	02/28/73	U.S.	1	RECCO	07/26/73	U.S.	1
RECCO	03/05/73	U.S.	1	SAT	07/31/73		1
RECCO	03/06/73	U.S.	1	RECCO	08/04/73	U.S.	1
SAT	03/06/73		1	RECCO	08/04/73	U.S.	2
RECCO	03/10/73	U.S.	2	SAT	08/07/73		1
RECCO	03/11/73	U.S.	1	RECCO	08/11/73	U.S.	1
SAT	03/13/73		1	SAT	08/14/73		1
SAT	03/20/73		1	SAT	08/21/73		1
RECCO	03/22/73	U.S.	1	RECCO	08/23/73	U.S.	2
RECCO	03/25/73	U.S.	1	SAT	08/28/73		1
SAT	03/27/73		1	RECCO	09/01/73	U.S.	2
SAT	04/03/73		1	SAT	09/04/73		1
SAT	04/10/73		1	SAT	09/11/73		1

TABLE 2. MICROFILM, WESTERN ARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
SAT	09/18/73		1	RECCO	11/17/73	U.S.	2
SAT	09/25/73		1	RECCO	11/20/73	U.S.	1
SAT	10/02/73		1	SAT	11/20/73		1
RECCO	10/06/73	U.S.	2	RECCO	11/21/73	U.S.	1
SAT	10/09/73		1	SAT	11/27/73		1
SAT	10/16/73		1	RECCO	11/29/73	U.S.	1
RECCO	10/19/73	U.S.	3	RECCO	11/30/73	U.S.	1
SAT	10/23/73		1	RECCO	12/04/73	U.S.	1
SAT	10/30/73		1	SAT	12/04/73		1
SAT	11/06/73		1	RECCO	12/10/73		1
RECCO	11/07/73	U.S.	1	SAT	12/11/73		1
RECCO	11/09/73	U.S.	1	SAT	12/18/73		1
RECCO	11/13/73	U.S.	1	SAT	12/24/73		1
SAT	11/13/73		1	SAT	12/31/73		1
RECCO	11/15/73	U.S.	1				
SAT	01/08/74		1	RECCO	04/24/74	U.S.	1
RECCO	01/14/74	U.S.	1	RECCO	04/26/74	U.S.	1
SAT	01/15/74		1	SAT	04/30/74		1
RECCO	01/17/74	U.S.	1	RECCO	05/03/74	U.S.	2
SAT	01/22/74		1	SAT	05/07/74		1
RECCO	01/28/74	U.S.	3	RECCO	05/14/74	U.S.	1
SAT	01/29/74		1	SAT	05/14/74		1
SAT	02/05/74		1	SAT	05/21/74		1
SAT	02/12/74		1	SAT	05/28/74		1
SAT	02/19/74		1	RECCO	05/29/74	U.S.	1
SAT	02/26/74		1	RECCO	05/31/74	U.S.	2
RECCO	02/27/74	U.S.	2	SAT	06/04/74		1
SAT	03/05/74		1	SAT	06/11/74		1
SAT	03/12/74		1	SAT	06/18/74		1
SAT	03/19/74		1	SAT	06/25/74		1
RECCO	03/22/74	U.S.	1	SAT	07/02/74		1
RECCO	03/26/74	U.S.	1	RECCO	07/03/74	U.S.	2
SAT	03/26/74		1	SAT	07/09/74		1
RECCO	03/31/74	U.S.	2	RECCO	07/12/74	U.S.	1
SAT	04/02/74		1	SAT	07/16/74		1
SAT	04/09/74		1	RECCO	07/17/74	U.S.	1
SAT	04/16/74		1	RECCO	07/17/74	U.S.	2
RECCO	04/22/74	U.S.	2	RECCO	07/22/74	U.S.	1
SAT	04/23/74		1	SAT	07/23/74		1
				RECCO	07/26/74	U.S.	1

TABLE 2. MICROFILM, WESTERN ARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
RECCO	07/28/74	U.S.	1	RECCO	10/14/74	U.S.	1
RECCO	07/30/74	U.S.	1	SAT	10/16/74		1
SAT	07/30/74		1	RECCO	10/17/74	U.S.	2
RECCO	08/01/74	U.S.	1	SAT	10/22/74		1
RECCO	08/02/74	U.S.	1	SAT	10/29/74		1
RECCO	08/05/74	U.S.	1	SAT	11/05/74		1
RECCO	08/06/74	U.S.	1	SAT	11/12/74		1
SAT	08/06/74		1	RECCO	11/14/74	U.S.	1
SAT	08/13/74		1	SAT	11/19/74		1
RECCO	08/15/74	U.S.	1	SAT	11/26/74		1
SAT	08/20/74		1	RECCO	11/29/74	U.S.	2
RECCO	08/26/74	U.S.	1	RECCO	12/01/74	U.S.	1
SAT	08/27/74		1	SAT	12/03/74		1
RECCO	08/28/74	U.S.	3	RECCO	12/06/74	U.S.	1
SAT	09/03/74		1	SAT	12/10/74		1
SAT	09/10/74		1	RECCO	12/11/74	U.S.	1
RECCO	09/11/74	U.S.	2	RECCO	12/13/74	U.S.	2
SAT	09/17/74		1	RECCO	12/15/74	U.S.	2
SAT	09/24/74		1	SAT	12/17/74		1
SAT	10/01/74		1	SAT	12/24/74		1
SAT	10/08/74		1	SAT	12/31/74		1
RECCO	01/03/75	U.S.	1	SAT	05/06/75		1
SAT	01/07/75		1	SAT	05/13/75		1
SAT	01/14/75		1	SAT	05/20/75		1
SAT	01/21/75		1	SAT	05/27/75		1
SAT	01/28/75		1	SAT	06/03/75		1
SAT	02/04/75		1	SAT	06/10/75		1
RECCO	02/06/75	U.S.	1	SAT	06/17/75		1
SAT	02/11/75		1	SAT	06/24/75		1
SAT	02/18/75		1	RECCO	06/30/75	U.S.	3
SAT	02/25/75		1	SAT	07/01/75		1
RECCO	02/28/75	U.S.	2	SAT	07/08/75		1
SAT	03/04/75		1	RECCO	07/11/75	U.S.	2
SAT	03/11/75		1	SAT	07/15/75		1
RECCO	03/14/75	U.S.	1	SAT	07/22/75		1
SAT	03/18/75		1	RECCO	07/26/75	U.S.	2
SAT	03/25/75		1	SAT	07/29/75		1
SAT	04/01/75		1	SAT	08/05/75		1
SAT	04/08/75		1	RECCO	08/06/75	U.S.	1
SAT	04/15/75		1	RECCO	08/06/75	U.S.	1
SAT	04/22/75		1	RECCO	08/09/75	U.S.	1
SAT	04/29/75		1	RECCO	08/10/75	U.S.	1

TABLE 2. MICROFILM, WESTERN ARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
RECCO	08/12/75	U.S.	1	RECCO	09/14/75	U.S.	1
SAT	08/12/75		1	SAT	09/16/75		1
RECCO	08/13/75	U.S.	2	RECCO	09/17/75	U.S.	1
RECCO	08/16/75	U.S.	1	RECCO	09/18/75	U.S.	1
RECCO	08/17/75	U.S.	1	RECCO	09/20/75	U.S.	1
SAT	08/19/75		1	RECCO	09/21/75	U.S.	1
RECCO	08/23/75	U.S.	1	RECCO	09/22/75	U.S.	2
RECCO	08/23/75	U.S.	1	SAT	09/23/75		1
RECCO	08/24/75	U.S.	1	RECCO	09/24/75	U.S.	1
RECCO	08/25/75	U.S.	1	RECCO	09/25/75	U.S.	1
RECCO	08/25/75	U.S.	1	RECCO	09/26/75	U.S.	1
SAT	08/26/75		1	SAT	09/30/75		1
RECCO	08/27/75	U.S.	1	SAT	10/07/75		1
RECCO	08/28/75	U.S.	1	RECCO	10/08/75	U.S.	1
RECCO	08/28/75	U.S.	1	RECCO	10/14/75	U.S.	1
RECCO	09/01/75	U.S.	1	SAT	10/14/75		1
SAT	09/02/75		1	SAT	10/21/75		1
RECCO	09/03/75	U.S.	1	SAT	10/28/75		1
RECCO	09/04/75	U.S.	1	SAT	11/04/75		1
RECCO	09/05/75	U.S.	1	SAT	11/11/75		1
RECCO	09/06/75	U.S.	2	SAT	11/18/75		1
RECCO	09/08/75	U.S.	1	SAT	11/25/75		1
RECCO	09/09/75	U.S.	1	SAT	12/02/75		1
SAT	09/09/75		1	SAT	12/09/75		1
RECCO	09/10/75	U.S.	1	SAT	12/16/75		1
RECCO	09/11/75	U.S.	1	SAT	12/23/75		1
RECCO	09/12/75	U.S.	1	SAT	12/30/75		1

TABLE 3. MICROFILM, ANTARCTIC

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
RECCO	11/21/70	U.S.	2	RECCO	12/21/70	U.S.	1
RECCO	11/21/70	U.S.	1	RECCO	12/24/70	U.S.	1
RECCO	11/24/70	U.S.	2	RECCO	12/24/70	U.S.	1
RECCO	11/25/70	U.S.	2	RECCO	12/27/70	U.S.	1
RECCO	12/13/70	U.S.	2	RECCO	12/27/70	U.S.	1
RECCO	12/13/70	U.S.	2	RECCO	12/27/70	U.S.	1
RECCO	12/14/70	U.S.	2	RECCO	12/27/70	U.S.	1
RECCO	12/19/70	U.S.	2	RECCO	12/28/70	U.S.	1
RECCO	12/19/70	U.S.	2	RECCO	12/28/70	U.S.	1
RECCO	12/19/70	U.S.	2				
SAT	10/26/71		1	RECCO	11/25/71	U.S.	2
RECCO	10/30/71	U.S.	1	SAT	11/30/71		1
SAT	11/02/71		1	RECCO	12/01/71	U.S.	1
SAT	11/09/71		1	SAT	12/07/71		1
RECCO	11/12/71	U.S.	1	RECCO	12/14/71	U.S.	1
RECCO	11/14/71	U.S.	1	RECCO	12/17/71	U.S.	1
SAT	11/16/71		1	RECCO	12/19/71	U.S.	1
RECCO	11/18/71	U.S.	2	SAT	12/28/71		1
SAT	11/23/71		1	RECCO	12/29/71	U.S.	1
SAT	01/04/72		1	RECCO	11/21/72	U.S.	2
RECCO	01/06/72	U.S.	1	RECCO	11/23/72	U.S.	1
SAT	01/18/72		1	RECCO	11/24/72	U.S.	1
RECCO	01/24/72	U.S.	1	RECCO	11/24/72	U.S.	3
SAT	02/01/72		1	RECCO	11/26/72	U.S.	2
SAT	02/08/72		1	RECCO	11/29/72	U.S.	2
RECCO	09/09/72	U.S.	1	RECCO	12/01/72	U.S.	3
RECCO	10/09/72	U.S.	1	SAT	12/01/72		1
SAT	10/12/72		1	RECCO	12/02/72	U.S.	2
RECCO	10/24/72	U.S.	1	RECCO	12/05/72	U.S.	2
RECCO	10/31/72	U.S.	3	RECCO	12/08/72	U.S.	2
RECCO	11/02/72	U.S.	1	SAT	12/08/72		1
RECCO	11/04/72	U.S.	1	RECCO	12/13/72	U.S.	2
RECCO	11/10/72	U.S.	2	SAT	12/15/72		1
RECCO	11/13/72	U.S.	1	SAT	12/22/72		1
RECCO	11/20/72	U.S.	1	SAT	12/29/72		1

TABLE 3. MICROFILM, ANTARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
SAT	01/04/73		1	SAT	08/30/73		1
SAT	01/11/73		1	SAT	09/06/73		1
SAT	01/18/73		1	SAT	09/13/73		1
SAT	01/25/73		1	SAT	09/20/73		1
SAT	02/01/73		1	SAT	09/27/73		1
SAT	02/09/73		1	SAT	10/04/73		1
SAT	02/15/73		1	SAT	10/11/73		1
SAT	02/22/73		1	SAT	10/18/73		1
SAT	03/01/73		1	RECCO	10/25/73	U.S.	3
SAT	03/15/73		1	SAT	10/25/73		1
SAT	03/22/73		1	RECCO	10/31/73	U.S.	3
SAT	03/29/73		1	RECCO	10/31/73	U.S.	1
SAT	04/05/73		1	SAT	11/01/73		1
SAT	04/12/73		1	RECCO	11/02/73	U.S.	2
SAT	04/19/73		1	RECCO	11/05/73	U.S.	3
SAT	04/26/73		1	RECCO	11/06/73	U.S.	2
SAT	05/03/73		1	SAT	11/08/73		1
SAT	05/10/73		1	RECCO	11/10/73	U.S.	3
SAT	05/17/73		1	RECCO	11/11/73	U.S.	4
SAT	05/24/73		1	SAT	11/15/73		1
SAT	05/31/73		1	SAT	11/22/73		1
SAT	06/07/73		1	RECCO	11/24/73	U.S.	3
SAT	06/14/73		1	SAT	11/29/73		1
SAT	06/21/73		1	RECCO	12/01/73	U.S.	2
SAT	06/28/73		1	RECCO	12/03/73	U.S.	3
SAT	07/05/73		1	RECCO	12/05/73	U.S.	2
SAT	07/12/73		1	SAT	12/06/73		1
SAT	07/19/73		1	RECCO	12/10/73	U.S.	2
SAT	07/26/73		1	SAT	12/13/73		1
SAT	08/02/73		1	SAT	12/19/73		1
SAT	08/09/73		1	SAT	12/27/73		1
SAT	08/16/73		1	RECCO	12/30/73	U.S.	1
SAT	08/23/73		1				
SAT	01/03/74		1	SAT	03/07/74		1
SAT	01/10/74		1	SAT	03/14/74		1
SAT	01/17/74		1	SAT	03/21/74		1
SAT	01/24/74		1	SAT	03/28/74		1
SAT	01/31/74		1	SAT	04/04/74		1
SAT	02/07/74		1	SAT	04/11/74		1
SAT	02/14/74		1	SAT	04/18/74		1
SAT	02/21/74		1	SAT	04/25/74		1
SAT	02/28/74		1	SAT	05/02/74		1

TABLE 3. MICROFILM, ANTARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
SAT	05/09/74		1	SAT	10/03/74		1
SAT	05/16/74		1	SAT	10/10/74		1
SAT	05/23/74		1	SAT	10/17/74		1
SAT	05/30/74		1	SAT	10/24/74		1
SAT	06/06/74		1	RECCO	10/25/74	U.S.	2
SAT	06/13/74		1	RECCO	10/27/74	U.S.	2
SAT	06/20/74		1	RECCO	10/29/74	U.S.	2
SAT	06/27/74		1	SAT	10/31/74		1
SAT	07/04/74		1	SAT	11/07/74		1
SAT	07/11/74		1	RECCO	11/09/74	U.S.	1
SAT	07/18/74		1	RECCO	11/11/74	U.S.	1
SAT	07/25/74		1	RECCO	11/13/74	U.S.	2
SAT	08/01/74		1	SAT	11/14/74		1
SAT	08/08/74		1	RECCO	11/15/74	U.S.	1
SAT	08/15/74		1	SAT	11/29/74		1
SAT	08/22/74		1	SAT	12/05/74		1
SAT	08/29/74		1	SAT	12/12/74		1
SAT	09/05/74		1	RECCO	12/15/74	U.S.	1
SAT	09/12/74		1	RECCO	12/17/74	U.S.	2
SAT	09/19/74		1	SAT	12/19/74		1
SAT	09/26/74		1	SAT	12/26/74		1
SAT	01/02/75		1	SAT	05/08/75		1
SAT	01/09/75		1	SAT	05/15/75		1
SAT	01/16/75		1	SAT	05/22/75		1
SAT	01/23/75		1	SAT	05/29/75		1
SAT	01/30/75		1	SAT	06/05/75		1
SAT	02/06/75		1	SAT	06/12/75		1
SAT	02/13/75		1	SAT	06/19/75		1
SAT	02/20/75		1	SAT	06/26/75		1
SAT	02/27/75		1	SAT	07/03/75		1
SAT	03/06/75		1	SAT	07/10/75		1
SAT	03/13/75		1	SAT	07/17/75		1
SAT	03/20/75		1	SAT	07/24/75		1
SAT	03/27/75		1	SAT	07/31/75		1
SAT	04/03/75		1	SAT	08/07/75		1
SAT	04/10/75		1	SAT	07/14/75		1
SAT	04/17/75		1	SAT	08/21/75		1
SAT	04/24/75		1	SAT	08/28/75		1
SAT	05/01/75		1	SAT	09/04/75		1

TABLE 3. MICROFILM, ANTARCTIC (CON.)

<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>	<u>TYPE</u>	<u>DATE</u>	<u>OBSERVING NATION</u>	<u>NO. OF IMAGES</u>
SAT	09/11/75		1	SAT	11/13/75		1
SAT	09/18/75		1	SAT	11/20/75		1
SAT	09/25/75		1	SAT	11/26/75		1
SAT	10/02/75		1	SAT	12/04/75		1
SAT	10/09/75		1	SAT	12/11/75		1
SAT	10/16/75		1	SAT	12/18/75		1
SAT	10/23/75		1	SAT	12/24/75		1
SAT	10/30/75		1	SAT	12/31/75		1
SAT	11/06/75		1				

DISTRIBUTION

NAVY

CNO (NOP-06C)
COMNAVAIRLANT
COMNAVSURFLANT
COMSC
COMSCLANT
COMSCPAC (2)
COMNAVSUPFORANTARCTICA
FLENUMWEACEN
FLEWEACEN GUAM
FLTWEACEN ROTA
FLTWEAFAC
FLETRACEN
DIRNAVOCEANMET
COMNAVSEASYSKOM
DTNSRDC
NUSC NPT
NRL
NAVWPNCEN
NISC
COMNAVFACENGCOM
NAVPGSCOL (2)
NAVARCLAB
USNA ANNA
NATTC
NAVSUBSCOL
USDAO OTTAWA

OTHER GOVT

CG COMDT
CG ACADEMY/PSD
CG TRACEN/MSS
CG OCEANO
USCGC WESTWIND
USCGC NORTHWIND
USCGC POLAR STAR
USCGC GLACIER
USCGC BURTON ISLAND
INT ICE PAT
NOAA, NWS/WSSO-SSD
NOAA, NWS/W13
NOAA/NESS
NOAA/TPB
NMFS/ABFL
USA CRRSE LAB
USAFCLR/LG Hanscom Field
HQAWS-AWVAS/TF

OTHER GOVT (con)

DA/LIB
NRC/CPR
NAS/CPR
DMATC
CIA/CRS/STD DIST
NSF/OAP
DLC/EG
GPO/PDD
DDC (12 copies)

UNIVERSITIES

Lamont-Doherty
Ohio State Univ./IPS
Chesapeake Bay Institute
Univ. of Wisconsin/GPRC
Univ. of Rhode Island/PMSL
New York Univ./DM&O
Tufts
Polytechnic Inst. of New York
Univ. of Alaska/GIFS
Humboldt State College
Univ. of Texas/MSI
Scripps
Univ. of Wash.

PRIVATE

Arctic Inst. of No. America
Ocean-Atmosphere Research Inst.
United Kingdom Scientific Mission

FOREIGN

Scott Polar Research Inst. England
Environment Canada/MSE/IFC Canada
Meteorological Office England
Dalhousie Univ./IO Canada
Canadian Forces Hdqtrs/DM&O Canada
Bedford Inst. Canada
Inst. of Oceanographic Sciences England
Min. of Ag., Fisheries & Food England
Univ. of Bergen/GI Norway
Maritime Courseward Hdqtrs. Canada
Arctic Inst. of No. America Canada
McGill Univ. Canada
Defense Research Board Canada
Fisheries Research Board Canada
Meteorological Branch Canada

FOREIGN (con.)

Danish Meteorological Inst. Denmark
Meteorological Office England
CINCEASTLANT/OFS England
German Soc. for Polar Research W. Germany
Hakodate Marine Observatory Japan
Hokkaido Univ./ILTS Japan
Univ. of Tokyo/ORI Japan
National Science Museum/PRC Japan
Chilean Antarctic Inst. Chile
Univ. of Canterbury New Zealand
Univ. of Saskatchewan Canada

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER NOO-RP17 ✓	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Aerial Ice Reconnaissance and Satellite Ice Information Microfilm File ✓		5. TYPE OF REPORT & PERIOD COVERED Reference Publication
7. AUTHOR(s) Peter A. Mitchell		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Oceanographic Office Washington, D.C. 20373 ✓		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE August 1976
		13. NUMBER OF PAGES 33
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release, distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Annual ice reports Western Arctic area U.S. Navy polar operations Microfilm file 35-mm aperture card U.S. Coast Guard polar Eastern Arctic Danish polar operations operations Satellite imagery Satellite ice information Antarctic area Aerial ice reconnaissance		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The Aerial Ice Reconnaissance and Satellite Ice Information Microfilm File of the Naval Oceanographic Office contains 35-mm microfilm copies of ice information gathered subsequent to 1969 in the Antarctic and 1971 in the Arctic during U.S. Navy, U.S. Coast Guard, and Danish polar operations, and from visual, infrared, and microwave satellite imagery. This file, which consists of all unclassified chart analyses of aerial ice reconnaissance and satellite ice information compiled by Fleet		

DD FORM 1473
1 JAN 73

EDITION OF 1 NOV 68 IS OBSOLETE
S/N 0102-014-6601

UNCLASSIFIED 250 450
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

Weather Facility, Suitland, Maryland, was established in 1975 to preserve ice data after the termination of the Oceanographic Office annual reports of the arctic and antarctic ice observing and forecasting programs. Listings of available microfilm through calendar year 1975 for the eastern Arctic, western Arctic, and the Antarctic, along with procedures for ordering copies, are given.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)