

GSC OPEN FILE REPORT

ATLANTIC GEOSCIENCE CENTRE

**A 35mm MICROFILM COMPILATION OF COLLECTED ANALOG
GEOPHYSICAL DATA FOR AGC/CHS CRUISE NO. 82034**

**Baffin Bay, Davis Strait, Cumberland Sound
and Hudson Bay**

GSC Project 303067

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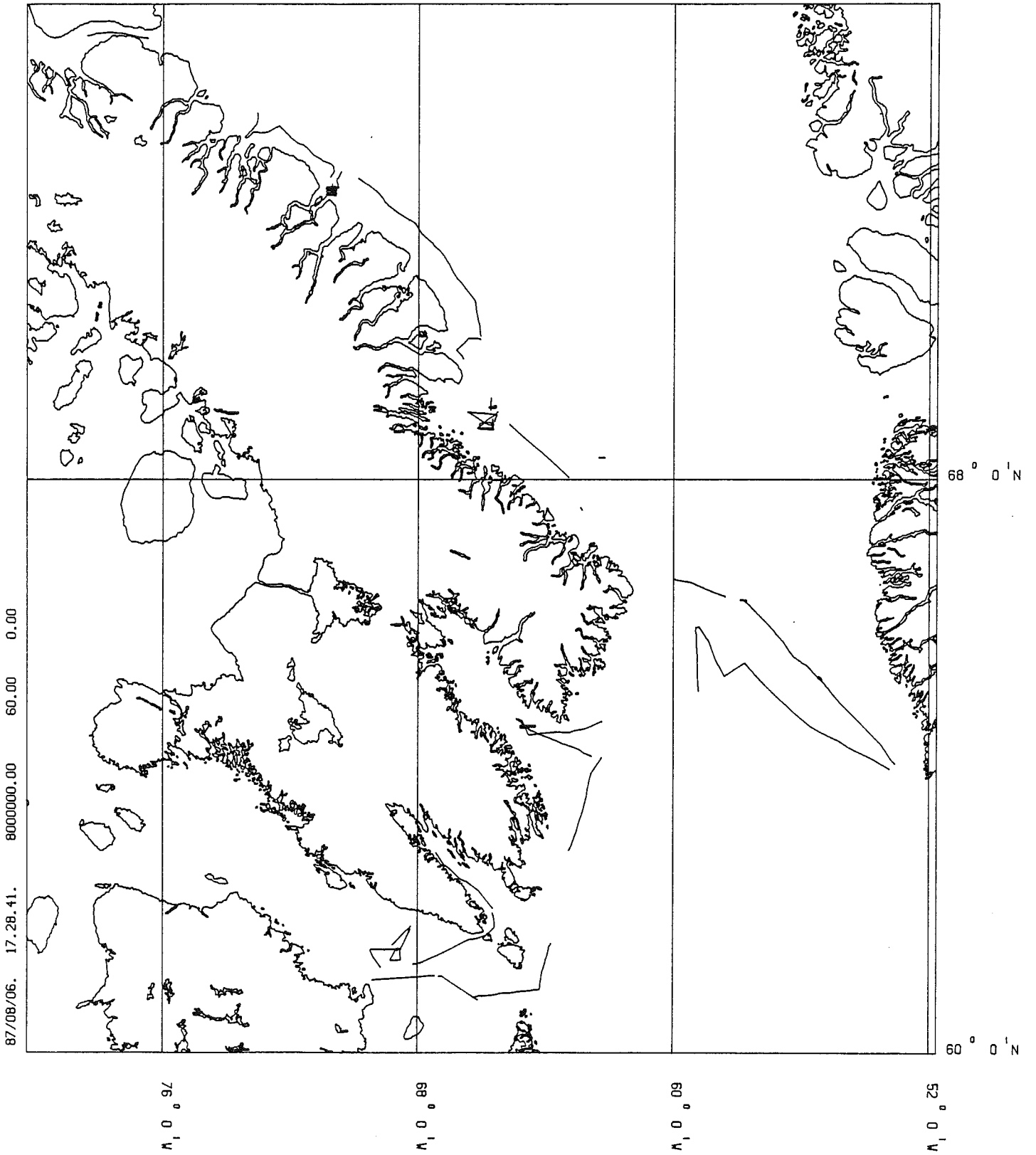
ABSTRACT

The Atlantic Geoscience Centre (AGC) at the Bedford Institute of Oceanography (BIO) has investigated several methods of releasing to the public sector its massive collection (of over 150,000 lineal metres) of underway geophysical records collected since 1963. The investigations and testing conducted by the Program Support Subdivision, AGC in collaboration with the Public Archives of Canada indicated that the most cost-effective technique for distribution and for archiving such large volumes of irreplaceable data was to use microfilm. To maintain the continuous nature of these records which can be up to 30 metres in length, special equipment was required such as the Tameran 6000 continuous flow microfilm camera manufactured by Tameran Ltd. of Chagrin Falls, Ohio. All conversion of AGC's geophysical records using this camera was contracted to Manas Media Ltd. of Ottawa, in consortium with Precision Microfilming Services of Halifax and Archimed Ltd. of Montreal. Operational filming began at the end of March 1987.

A series of AGC cruise data will be released in 35 mm microfilm and distributed as Geological Survey of Canada Open File reports during 1988. Master microfilm is curated for each AGC cruise at the National Archives, Dartmouth, Nova Scotia with duplicates available for viewing at the Data Management Section (PSS), Atlantic Geoscience Centre and at the Geological Survey of Canada libraries in Ottawa, Calgary and Vancouver.

INTRODUCTION

Data Section is a part of the Program Support Subdivision (PSS) of the Atlantic Geoscience Centre. This group provides the safe archiving and cataloguing of the Atlantic Geoscience Centre's Data Collections and Holdings. This report provides an index to all analog geophysical records (bathymetric, Hunttec and airgun seismic) collected during cruise 82034 (Figure 1). Magnetic data will be released at a later date.



DATA SOURCES

The information gathered together for this geophysical record microfilming project have been mainly derived from cruise reports, Department of Fisheries and Oceans cruise summary documentation and external agencies. This information has then been checked and verified against record holdings e.g. collector and vessel, geographic area, Julian day together with start and end times of collection, line number, tape number and recorder type. The Record Inventory data base utilizing micro-computer based dBase III plus software contains all record/tape/log/navigation data for all analog tapes, catalogues/indices and records obtained on more than 375 cruises obtained by or for the Atlantic Geoscience Centre since 1963. All microfilmed records have been routinely filmed according to the flow chart in Appendix I.

CRUISE PARTICULARS

Cruise: CSS Hudson 82034

Senior Scientist: Brian MacLean - EMG, AGC

Dates: September 24 - October 18, 1982

Areas: Baffin Bay - Davis Strait, Cumberland Sound, Hudson Strait

Scientific Staff:

A. Atkinson	Atlantic Geoscience Centre
G. Bika	Huntec ('70) Ltd.
A. Boyce	Atlantic Geoscience Centre
B. Chapman	Atlantic Geoscience Centre
G. Dease	Institute Facilities
K. Drinkwater	Marine Ecology Laboratory
P. d'Entremont	Atlantic Oceanographic Laboratory
P. Girouard	Atlantic Geoscience Centre
L. Johnston	Atlantic Geoscience Centre

F. Learning	Geomarine Associates
B. MacLean	Atlantic Geoscience Centre
R. Murphy	Atlantic Geoscience Centre
J. Nielsen	Atlantic Geoscience Centre
C. Periera	C-CORE
D. Praeg	Atlantic Geoscience Centre
G. Rodger	Canadian Hydrographic Service
G. Taylor	Marine Ecology Laboratory
G. Williams	Atlantic Geoscience Centre
D. Wilson	Geomarine Associates

CRUISE OBJECTIVES

This cruise was primarily devoted to geological and geophysical investigations of the Baffin Island offshore area and recovery of current meters deployed in Hudson Strait earlier in the field season.

This program was aimed at investigations of the bedrock as well as the collection of additional samples of the unconsolidated sediments that overlie the bedrock of the southeastern Baffin Shelf.

Bedrock samples were collected from the Northeastern Baffin Island continental Shelf, notably offshore from Buchan Gulf, Scott Inlet, Home Bay, and Padloping Island; mid-Davis Strait; and in outer Cumberland Sound and Hudson Strait using the BIO underwater electric drill (an extended 10 m version).

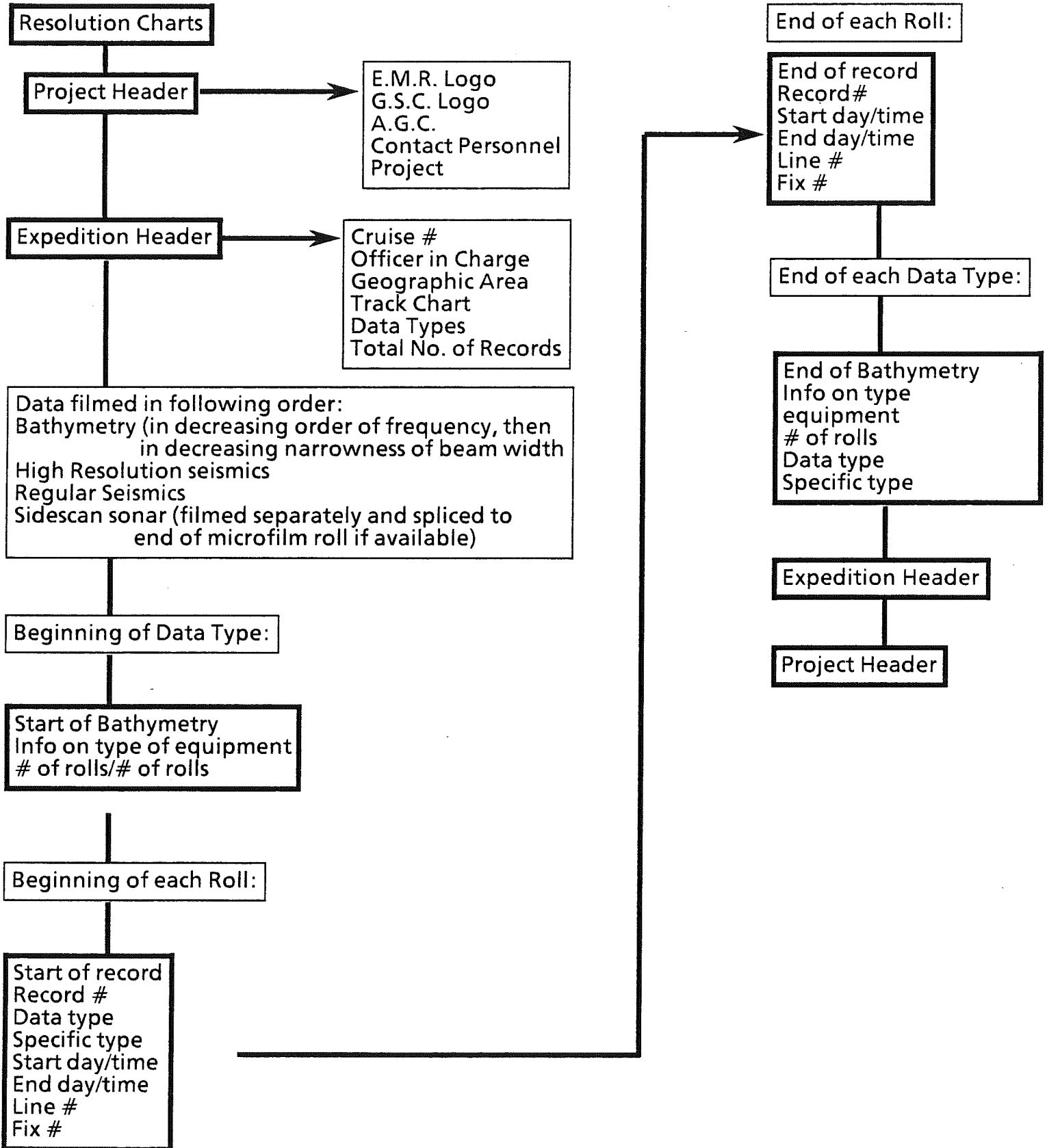
RECORD INVENTORY

Appendix II tabulates all geophysical records acquired during this cruise. They are listed in the same sequence as they appear on the microfilm. Corresponding footages are also given in centimetres per tape. Note that no sidescan sonar shallow or deep water records were acquired.

MICROFILM REQUESTS

Requests for permission to examine original records should be directed to the Director, Atlantic Geoscience Centre, Bedford Institute of Oceanography, P.O. Box 1006, Dartmouth, Nova Scotia, Canada, B2Y 4A2. Microfilm duplication requests can be directed to the Data Management (PSS), Atlantic Geoscience Centre, at the above address or phone (902) 426-3410.

APPENDIX I FLOW CHART



APPENDIX II
HUDSON 82034

BATHYMETRY

12 kHz Hull Mounted Transducer
26B

SEISMICS

40 cu. in. Airgun with 100 foot SE (Seismic Engineering) and NSRF (Nova Scotia Research Foundation) Hydrophone Arrays.
Huntec DTS (Deep Tow Subsurface Boomer) with internal and external hydrophone

APPENDIX II (Continued)

82034

DATA TYPE	INSTRUMENT TYPE	ROLL NUMBER	START		STOP		MICROFILM FOOTAGE INDEX
			DAY	TIME	DAY	TIME	
Bathymetry 12 kHz		001	267	2135	268	2155	75
		002	268	2155	270	1145	84
		003	270	1610	273	1525	96
		004	273	2349	277	2228	114
		005	277	2252	283	1350	139
		006	284	0333	286	1740	162
		007	287	0210	289	1200	178
		008	289	2315	290	1450	195
Bathymetry-ELAC Echo Sounder		001	268	1642	272	1235	201
		002	272	1103	277	1020	212
		003	268	0101	268	1640	217
		004	286	1630	288	0830	223
		005	282	1009	286	1610	228
		006	282	1315	288	1900	232
Seismic - Hunttec		001	267	2150	269	0331	237
		002	269	0335	269	0736	251
		003	269	1112	271	1147	256
		004	272	1410	275	1027	268
		005	276	0840	277	1014	286
		006	283	0800	286	1248	289
		007	286	1540	288	0833	302
		008	289	0334	289	1150	316
Seismic - Airgun/NSRF	EPC	001	268	0058	274	0430	324
		002	274	0615	277	1015	339
		003	283	0800	286	0450	345
		004	286	0500	288	0830	350
		005	289	0330	289	1150	358
	Raytheon	001	268	0050	270	0248	361
		002	270	2250	272	2249	370

APPENDIX II (Continued)

82034

DATA TYPE	INSTRUMENT TYPE	ROLL NUMBER	START		STOP		MICROFILM FOOTAGE INDEX
			DAY	TIME	DAY	TIME	
Seismic - Airgun/NSRF	Raytheon	003	273	1130	274	0920	375
		004	274	0927	274	1205	380
		005	274	2355	275	1028	382
		006	276	0840	277	1015	384
		007	283	0800	283	1338	387
		008	284	0328	284	0945	389
		009	284	0950	288	0830	391
		010	289	0340	289	1150	399