

GSC OPEN FILE REPORT

ATLANTIC GEOSCIENCE CENTRE

**A 35mm MICROFILM COMPILATION OF COLLECTED BATHYMETRY,
HUNTEC, AND AIRGUN DATA FOR AGC CRUISE NO. 85044**

Flemish Pass, Grand Banks of Newfoundland

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 Group, 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. 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 all 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 geophysical records collected during cruise 85044 (Figure 1).

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 85044	
Senior Scientist:	K.S. Manchester - PSS, AGC	
Dates:	November 14 - 21, 1985	
Areas:	Flemish Pass	
Scientific Staff:	M. Gorveatt	Atlantic Geoscience Centre
	R. Sparkes	Atlantic Geoscience Centre
	D. Locke	Atlantic Geoscience Centre
	J. Neilsen	Atlantic Geoscience Centre
	J. Capps	Nordco Ltd.
	J. Coombs	Nordco Ltd.
	A. Fagan	Nordco Ltd.
	B. Henderson	Nordco Ltd.
	D. Millan	Nordco Ltd.

G. Standen	Huntec ('70) Ltd.
O. Nadeau	Huntec ('70) Ltd.
J. McCallum	Huntec ('70) Ltd.
F. LaLonde	Huntec ('70) Ltd.

CRUISE OBJECTIVES

The primary objectives of this cruise in a joint project with Nordco Ltd. of St. John's, Newfoundland were as follows: (a) the primary purpose of the cruise was to sample bedrock underlying a bathymetry spur like feature referred to as "Hudson's Prong" located on the west side of Flemish Pass at approximately 46°23.0'N latitude, 46°50.0'W longitude. Sampling was obtained using the Nordco Auger Rockcore Drill; (b) to obtain two or three piston cores in the area 47°00'N to 47°20'N latitude, 47°00'W longitude. To aid in the interpretation of the 1984 Sea Marc sidescan sonar data collected by CSS Hudson; and (c) to obtain Huntec DTS and 625 cu. cm. airgun seismic reflection data in the general areas of both (a) and (b).

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.

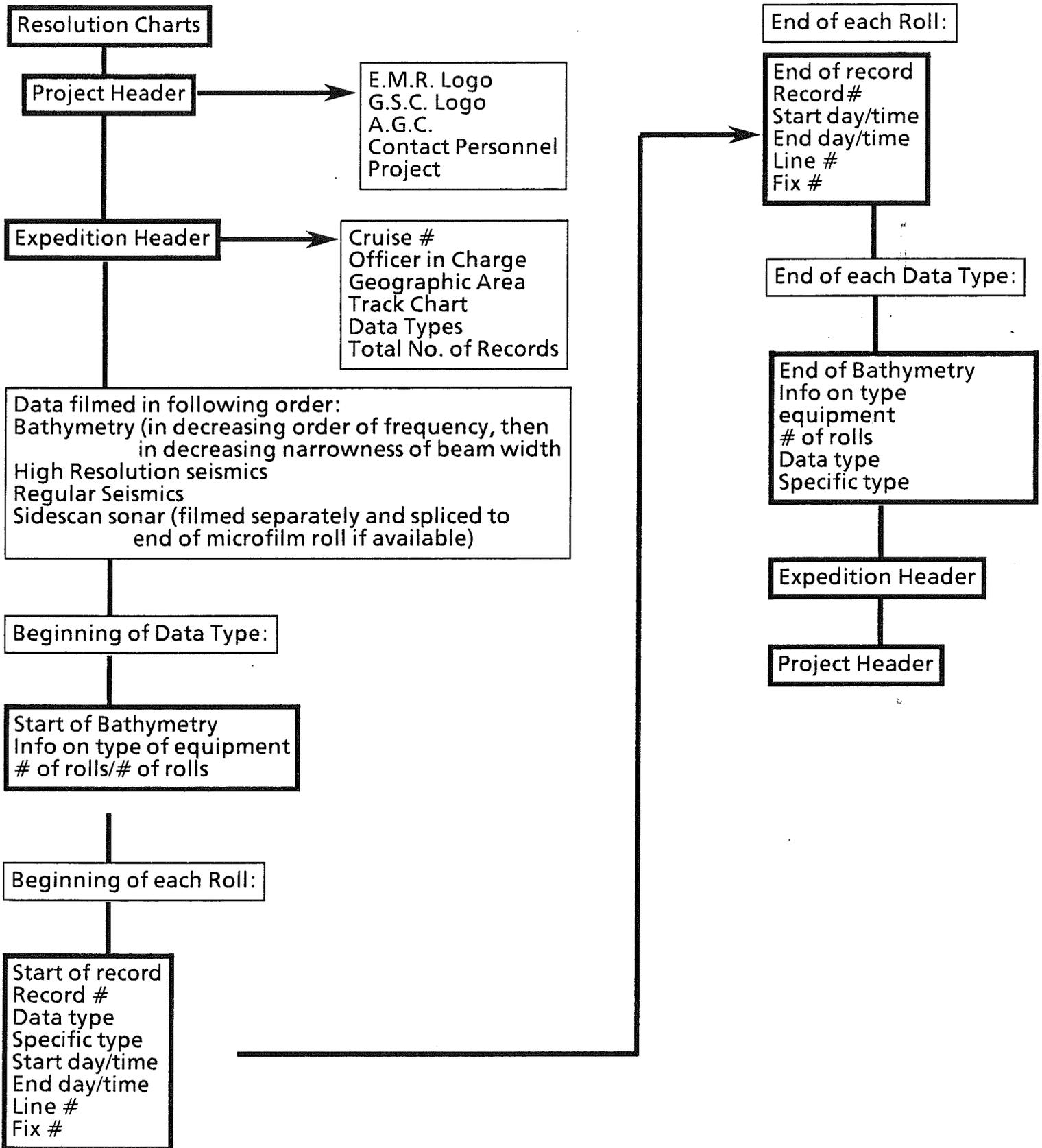
MICROFILM REQUESTS

Requests for access to 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
CSS HUDSON 85044

BATHYMETRY

12 kHz Hull Mounted Raytheon Ptr.

SEISMICS

40 cu. in. Airgun and NSRF (Nova Scotia Research Foundation) Hydrophone.

40 cu. in. airgun and SE (Scientific Engineering Limited) Hydrophone with a 100 ft. Streamer.

Huntec DTS (Deep Tow Subsurface Boomer) with Internal and External Hydrophone.

APPENDIX II (Continued)

85044

DATA TYPE	INSTRUMENT TYPE	ROLL #	START		STOP		MICROFILM FOOTAGE INDEX
			DAY	TIME	DAY	TIME	
Bathymetry - 12 kHz		001	318	1500	322	1655	415
Seismic - Hunttec		001	319	1515	322	0835	427
		002	319	1520	322	0650	442
		003	322	0845	322	1650	454
		004	322	0700	322	1650	463
Seismic - Airgun	40 ft. NSRF Eel	001	319	1530	322	1630	370
	100 SE Eel	002	319	1530	322	1630	479