GSC OPEN FILE REPORT

ATLANTIC GEOSCIENCE CENTRE

A 35mm MICROFILM COMPILATION OF COLLECTED BATHYMETRY AND AIRGUN SEISMIC GEOPHYSICAL DATA FOR AGC CRUISE NO. 85025

Continental Margin South of Flemish Cap

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 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 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 85025 (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 85025	
Senior Scientist:	Ian Reid - RR, AGC	
Dates:	August 17 - September 18, 1985	
Areas:	Continental Margin south of Flemish Cap	
Scientific Staff:	I. Reid	Atlantic Geoscience Centre
	B. Chapman	Atlantic Geoscience Centre
	J. Etter	Engineering Services
	G. Fenn	Atlantic Geoscience Centre
	N. Hamilton	Dalhousie University
	D. Heffler	Atlantic Geoscience Centre
	L. Johnson	Atlantic Geoscience Centre
	A. Law	Atlantic Geoscience Centre
	W. Kay	Atlantic Geoscience Centre

P. Girouard	Atlantic Geoscience Centre
R. McKenna	Atlantic Geoscience Centre
S. Merchant	Atlantic Geoscience Centre
R. Murphy	Atlantic Geoscience Centre
J. Neilson	Atlantic Geoscience Centre
B. Nichols	Atlantic Geoscience Centre
S. Ojo	Atlantic Geoscience Centre
W. Prime	Atlantic Geoscience Centre
B. Todd	Dalhousie University
J. Wadsworth	Atlantic Geoscience Centre

CRUISE OBJECTIVES

The main objective of this cruise was to study the deep crustal structure across the transition zone between continental and oceanic crust. This was achieved by obtaining a closely-spaced set of seismic refraction lines within and on either side of the continental/oceanic boundary in an attempt to understand the processes of continental rifting, with its concomitant implications for the formation and evolution of offshore basins.

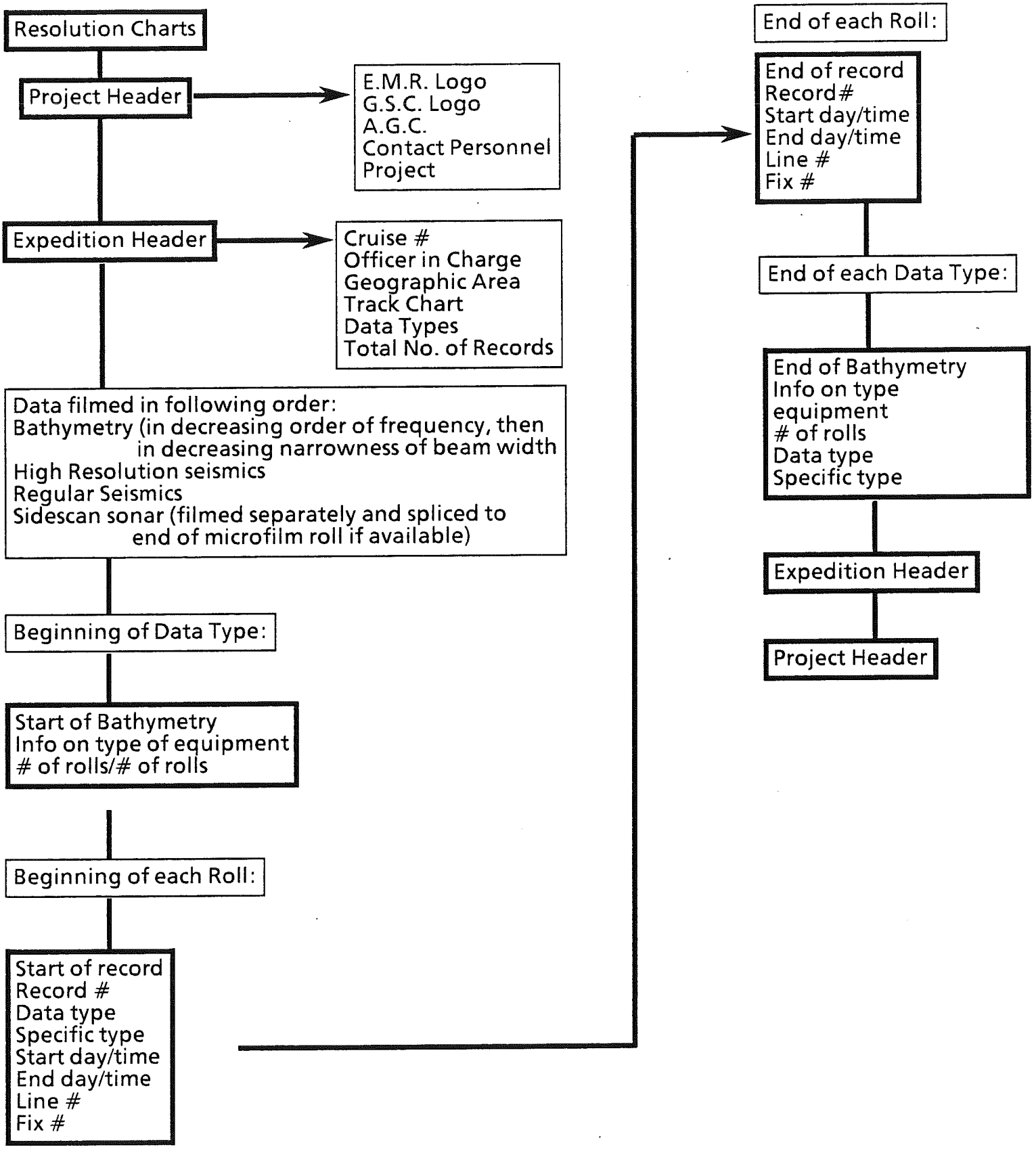
RECORD INVENTORY

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
CSS HUDSON 85025

BATHYMETRY

12 kHz Hull Mounted Raytheon Ptr.

SEISMICS

2000 cu. in. Airgun and SE (Seismic Engineering Company) Hydrophone, 25 ft. Streamer.
2000 cu. in. Airgun and SE (Seismic Engineering Company) Hydrophone, 100 ft. Streamer.

APPENDIX II (Continued)

85025

DATA TYPE	INSTRUMENT TYPE	ROLL #	START		STOP		LINE #	MICROFILM FOOTAGE INDEX
			DAY	TIME	DAY	TIME		
Bathymetry - 12 kHz		001	231	2231	237	0600	1-5	146
		002	237	0750	242	1810	6-18	172
Seismic - Airgun	100 ft. Eel	001	235	1318	237	2340	1-8	185
		002	239	2245	241	0335	9-14	186
		003	241	2024	242	1822	15-18	188
	25 ft. Eel	001	235	1318	237	2340	1-8	191
		002	239	2245	241	0355	9-14	192
		003	241	2034	242	1822	15-18	194