GSC OPEN FILE REPORT

ATLANTIC GEOSCIENCE CENTRE

A 35mm MICROFILM COMPILATION OF COLLECTED ANALOG GEOPHYSICAL DATA FOR AGC CRUISE NO. 84030

Labrador Sea

GSC Project 303067

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GSC Open File No.1470

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ABSTRACT

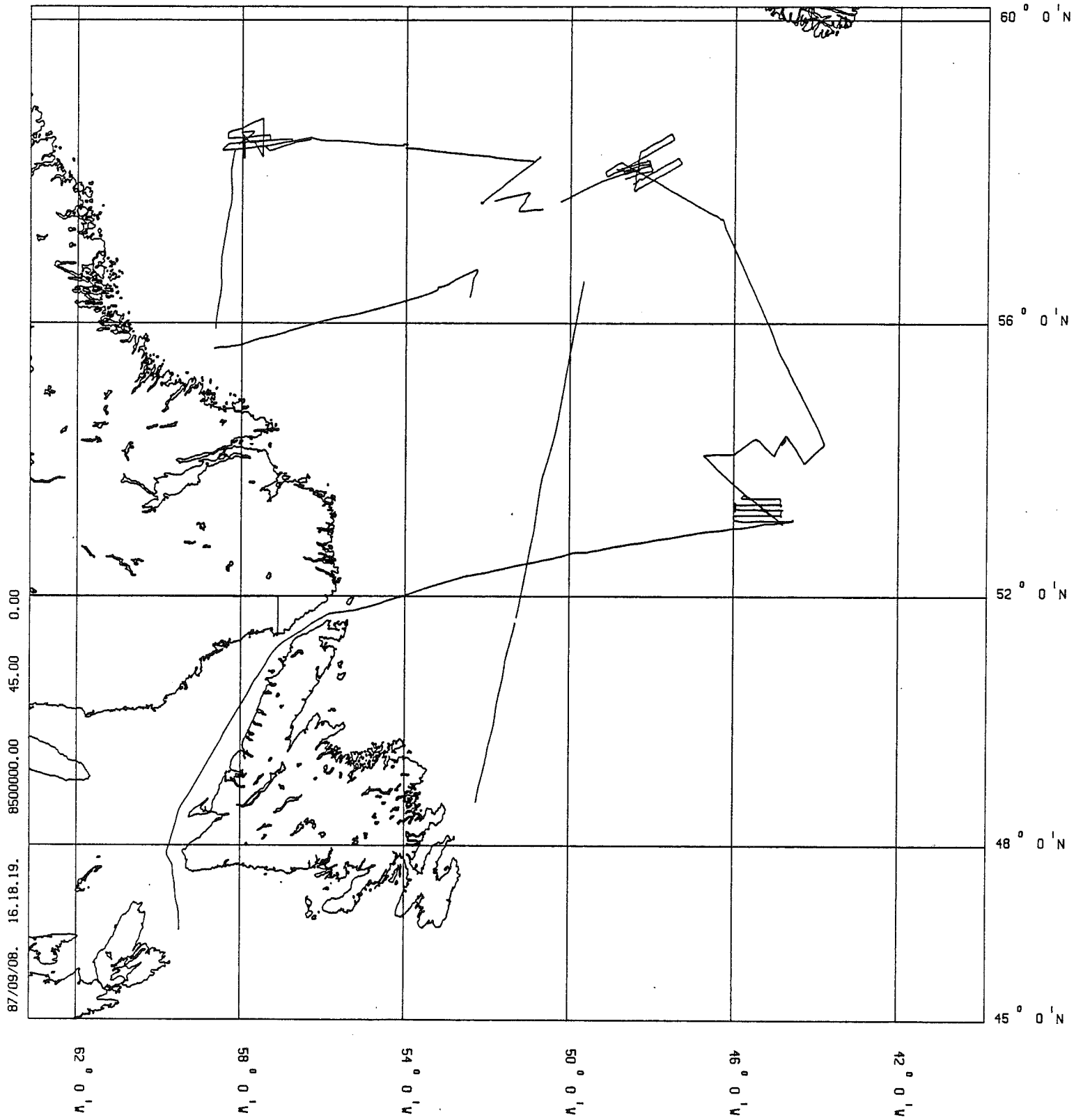
The Atlantic Geoscience Centre (AGC) at the Bedford Institute of Oceanography (BIO) has investigated several methods of releasing to the public sector its massive collection (of over 150,000 lineal metres) of underway geophysical records collected since 1963. The investigations and testing conducted 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 vast 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 let 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 cruises to 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 acquired during any given field season. This report provides an index to all geophysical records (12/3.5 kHz bathymetric and seismic) collected during cruise 84030 (Figure 1).

84 030 HUDSON



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 84030	
Senior Scientist:	Dr. S.P. Srivastava - RR, AGC	
Dates:	July 27 - August 26, 1984	
Areas:	Labrador Sea	
Scientific Staff:	L. Boone	C-CORE, Memorial University
	B. Chapman	Atlantic Geoscience Centre
	S. Chough	Seoul University, McGill University
	J. Clarke	Memorial University
	P. Devanney	Memorial University
	A. deVernal	Quebec University
	D. Eisener	Atlantic Oceanographic Laboratory
	C. Fang	Memorial University
	P. Girouard	Atlantic Geoscience Centre

L. Johnston	Atlantic Geoscience Centre
D. LeBlanc	Geomarine Associates
G. Leger	Dalhousie University
B.D. Loncarevic	Atlantic Geoscience Centre
K. Louden	Dalhousie University
D. Mosher	Atlantic Geoscience Centre
P. Mudie	Atlantic Geoscience Centre
B. Murphy	Atlantic Geoscience Centre
J. Nielson	Atlantic Geoscience Centre
G. Oakey	Atlantic Geoscience Centre
T. Parsons	Dalhousie University
W. Prime	Atlantic Geoscience Centre
A. Rakofsky	McGill University
F. Thomas	Atlantic Geoscience Centre

CRUISE OBJECTIVES

(1) To carry out geological and geophysical surveys of the three sites in the Labrador Sea; (2) to collect continuous geological and geophysical data between sites for correlation purposes;(3) to collect sediment cores at each site for sedimentological, paleoenvironment (Peta Mudie, Anne de Vernal) and sediment dynamics (Lorne Boone) studies; (4) to make heat flow measurements at each ODP site and in Hopedale Saddle (Keith Louden); and (5) to carry out a reconnaissance survey across NAMOC and to collect sediment cores on its levees (S. Chough, A. Rakofsky).

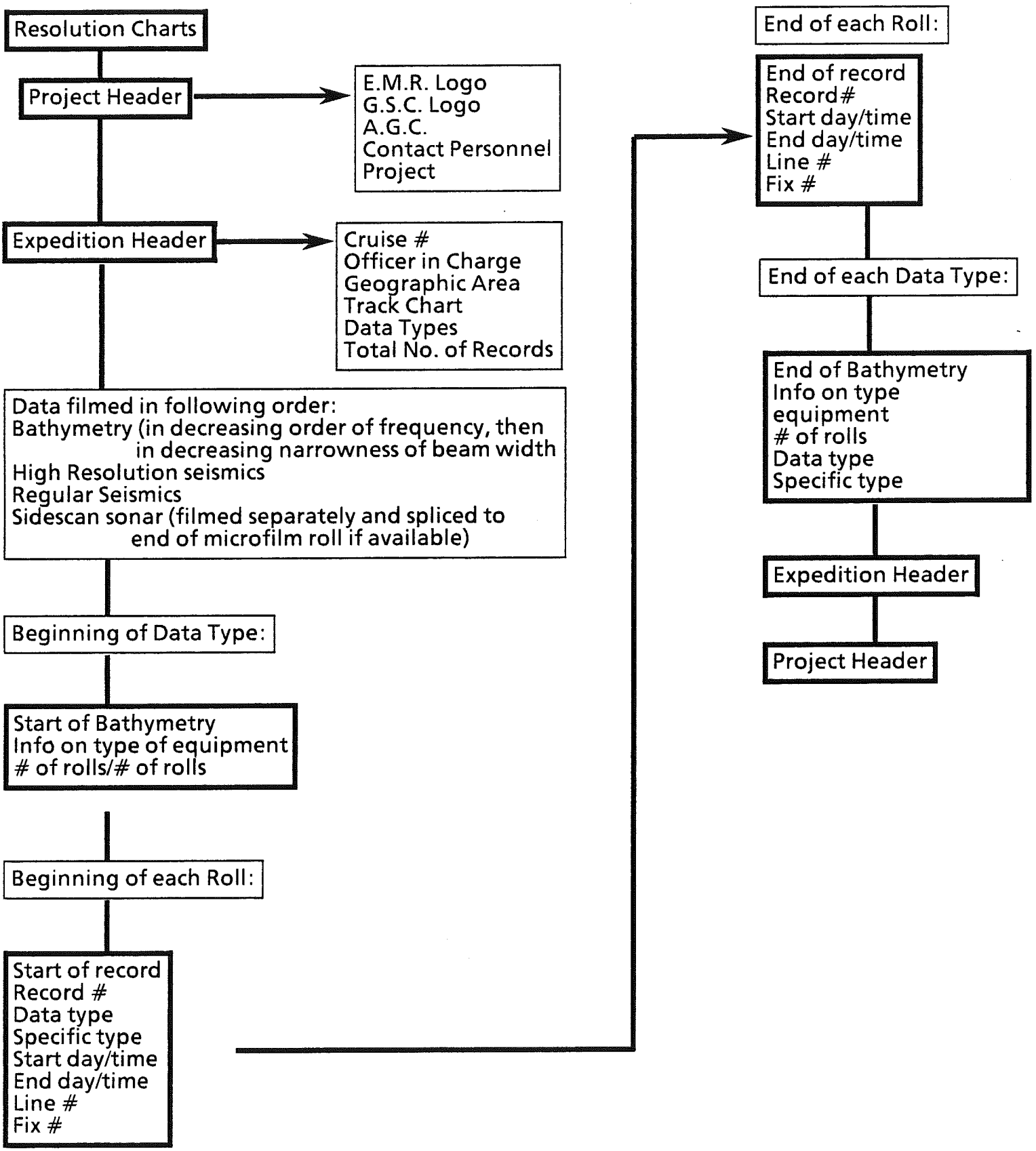
RECORD INVENTORY

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 in centimetres are also given. Note that no sidescan sonar shallow or deep water records were acquired.

MICROFILM REQUESTS

Requests for AGC record availability 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 84030

BATHYMETRY

12 kHz Transducer Mounted on Retractable Ram.
3.5 ORE Towed Midship on Portside.

SEISMICS

40, 80, 160, 1000, 2000 cu. in. Airgun and 160 cu. in. Dalhousie Airgun.
100 ft. SE (Scientific Engineering Company) Teledyne Streamer.

APPENDIX II (Continued)

84030

DATA TYPE	INSTRUMENT TYPE	ROLL #	START		STOP		LINE #	MICROFILM FOOTAGE INDEX
			DAY	TIME	DAY	TIME		
Bathymetry - 12 kHz		001	210	1105	211	0745		001
		002	211	0815	212	0250		018
		003	212	0325	212	1325		035
		004	212	1337	214	2150		043
		005	214	2335	216	1110		067
		006	216	1119	219	1105		079
		007	219	1148	221	1925		102
		008	221	1930	221	2320		127
		009	222	0020	222	0145		130
		010	222	0218	223	0600		131
		011	223	0615	223	1115		143
		012	224	1143	226	1025		146
		013	226	1040	228	1135		159
		014	228	1145	231	1045		169
		015	231	1235	233	1900		192
		016	234	0220	235	1135		207
		017	235	1142	235	1515		220
		018	236	1320	237	1540		223
		019	237	1545	237	1700		235
		020	238	0010	238	2020		236
		021	238	2030	239	1410		245
Bathymetry - 3.5 kHz		001	210	1330	210	1700		261
		002	210	1700	213	1140		264
		003	213	1200	214	0300		281
		004	214	0300	215	0555		290
		005	215	0557	215	1550		301
		006	215	1557	217	1200		304
		007	218	0600	219	1310		318
		008	219	1400	220	1900		325
		009	220	2110	222	1300		330
		010	222	1320	223	1000		342

APPENDIX II (Continued)

84030

DATA TYPE	INSTRUMENT TYPE	ROLL #	START		STOP		LINE #	MICROFILM FOOTAGE INDEX
			DAY	TIME	DAY	TIME		
Bathymetry - 3.5 kHz		011	224	1200	224	1530		348
		012	225	1228	226	1046		349
		013	226	0521	226	1100		365
		014	226	1047	229	1010		368
		015	229	1940	230	0833		377
		016	230	1630	231	0700		383
		017	231	0720	233	1547		386
		018	234	0500	234	1700		395
		019	237	0501	237	1040		400
		020	237	1047	237	1640		403
Seismics	EPC	001	212	2030	215	0159	1,2	407
		002	216	1150	217	1145	6,8	410
		003	220	1312	221	0815	10	412
		004	221	0826	221	1213	11	413
		005	221	1214	222	0900	12	415
		006	222	0932	223	0400	14	416
		007	223	0405	223	1000	16	418
		008	224	1203	224	1520	16	419
		009	225	1245	226	1100	18-21	421
		010	228	0115	228	1230	24-24C	423
		011	228	2350	229	1010	25	432
		012	229	2000	230	1350	26	434
		013	231	0230	231	1000	27	436
		014	232	0730	232	2145	28-30	437
		015	233	0700	233	1547	27-28	439
		016	234	0526	234	1130	33-34	440
		017	237	0500	237	1700	37-38	442
	Raytheon	001	212	1300	214	0200	1	443
		002	214	0300	214	1800	1	446
		003	214	1900	215	0230	2	448
		004	215	0325	215	1100	3	449

APPENDIX II (Continued)

84030

DATA TYPE	INSTRUMENT TYPE	ROLL #	START		STOP		LINE #	MICROFILM FOOTAGE INDEX
			DAY	TIME	DAY	TIME		
Seismics	Raytheon	005	215	1200	215	1615	4	450
		006	215	0126	216	0700	4	451
		007	216	0740	216	1904	5	452
		008	216	2000	217	1145	6,8	453
		009	218	0548	218	1521	8	454
		010	218	1813	219	2000	9	455
		011	220	1305	221	0820	10	458
		012	221	0826	221	1213	11W	460
		013	221	1214	222	0230	12	462
		014	222	0230	222	0930	11E	463
		015	222	0932	223	0400	14,15E	465
		016	223	0405	223	1100	16E	466
		017	224	1203	224	1530	16	468
		018	225	1804	226	2230	19	469
		019	225	2342	226	0500	20	470
		020	226	0517	226	1100	21	471
		021	228	0020	229	1246	24ABC	472
		022	228	2350	229	1010	25	474
		023	229	1930	231	1330	26	475
		024	231	0230	231	0955	27	477
		025	232	0719	232	1000	28-29	480
		026	232	1001	232	1645	29	482
		027	232	1644	232	2145	30	483
		028	232	2238	233	0309	31	485
		029	233	0330	233	0530	32	486
		030	233	0600	233	1047	28	487
		031	233	1048	233	1548	27B	488
		032	234	0500	234	0730	33	489
		033	234	0732	234	1700	34	490
		034	237	0500	237	1710	37,38	491