

THE NEWFOUNDLAND 1991 MEDIUM WAVE DXPEDITION

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Editor's Introduction

Late in the summer of 1991, well known MW DXer Mark Connelly began to organize a DXpedition to commemorate Marconi's famous Trans-Atlantic experiments of almost a century ago. It was Mark's idea to travel to St. John's, Newfoundland with a few other experienced DXers to erect an array of Beverage antennas and to log as much Trans-Atlantic MW DX as possible. The expedition did occur and the results were far beyond the wildest fantasies of us all. Mark and his two compatriots happened to be at exactly the right place and time. Surely, in numbers of countries logged (65) and numbers of Trans-Atlantic stations logged, their DXpedition must have been the most productive MW DXpedition of all time. Their experiences have been covered in detail in the MW hobby press. However, we are rather sure that many *Proceedings* readers have not read of the Newfoundland '91 DXpedition. For that reason, we asked Mark to prepare the following narrative and compressed log of their DXpedition. Further information may be obtained from the article reprint services listed at the end of Mark's article.

NEWFOUNDLAND 1991

In November of 1991, just before the 90th anniversary of Marconi's first Trans-Atlantic communication from Signal Hill, St. John's, Newfoundland, a three-person DXpedition set out in the St. John's area with objectives not unlike those of Marconi. The DX team consisted of Jean Burnell, a chemistry professor at Memorial University in St. John's; Mark Connelly, an electrical engineer from the Boston area; and Neil Kazaross, a former engineer turned stock options trader. Neil was living near San Francisco at the time, so his trip to NF was by far the longest. Neil had previously lived in Maine and in Rhode Island; he still retained his superb knowledge of Trans-Atlantic and Brazilian DX. All three DXers specialize in hearing foreign DX on medium wave - the standard AM broadcast band thought by many to offer only local and regional reception. Mark has developed many "gadgets" to improve long-haul medium wave reception; these include regenerative preamplifiers, antenna phasing units, and remotely-tuned loops and whips. Some of these homebrew units were employed on the DXpedition.

Foreign DX on medium wave can be enhanced as much by location as by any of the other traditional factors such as receiver quality, antenna gain / directivity, and operator skill. While the best VHF location may be a mountain-top, the best medium wave location is next to the ocean. Salt water has a tremendously beneficial effect on reception. Also, being away from interference (local stations) and noise (power lines) helps a lot. With these considerations in mind, Jean did some scouting about and found two sites for Beverage aeriels - one near the lighthouse in Renew's, NF and one at the lodging place (Lawlor's), 5 miles down the coast in Cappahayden. The two sites are about 50 miles south of St. John's and are just outside the "overload zone" of local AM'ers like CJYQ-930. A long wire and three Beverages were erected with the goal of optimizing Trans-Atlantic and South American / Caribbean reception. The longest of these wires was 3000 feet long - this "RF gun" was pointed straight at Brazil. The main receivers were Icom's: R70 and R71R; a Sony 2010 did back-up duty.

The DX effort went into full swing from the 7th to the 10th of November 1991. The MW propagation during the DXpedition was heavily auroral, with reception conditions strongly favoring the southern routes to Africa instead of northern ones to Europe. As the countries list shows, a multitude of Africans and Brazilians were logged. The most remarkable of these were the many very-low-powered stations heard - including Angola and Ascension Island at 1 kW and Azores and Brazilian high-band "graveyarders" running a paltry 250 watts! Lesotho on 1197 grabbed the distance record: 7265 miles. Deep South Americans such as Uruguay and Argentina were good. Serious DX started way before local sunset and ran till after dawn. The DXpedition participants got very little sleep! DX at midday was even possible: ground waves from Azores - 693/626/836, Morocco - 1044, and Portugal - 1035 were heard. Also noted at noon were USA stations WHDH-850, WBZ-1030, and WSSH-1510 from Boston and WCBS-880 from New York. A technique that greatly assisted in the sorting out of the incoming tidal wave of Trans-Atlantic DX was the use of parallel frequencies, both on medium wave and on tropical-bands shortwave. Jean's tropical-bands expertise and multilingual abilities were indispensable.

As dawn arrived on the 10th of November, the three DXers set out for home, weary but satisfied with a DXpedition well done. Three overnight DX sessions had netted 65 countries between 520 and 1620 kHz.

More detailed reports of the DXpedition activities and loggings have appeared in the National Radio Club's "DX News" and in the International Radio Club of America's "DX Monitor". Also February 1992 "Monitoring Times" and the UK's "Medium Wave News" have featured articles on the trip. In subsequent months, Jean has continued DXing from seaside sites near his St. John's home. He's heard additional medium wave countries including exotic Middle Eastern and former Soviet republics that had been "aurora'ed out" during the November 1991 DX effort. He has also logged and verified St. Helena - 1548 (450 watts!). The success of the NF DXpedition is likely to spur future trips to the area, possible with longwave, shortwave, and two-way amateur DX goals in addition to continued medium wave work.

THE 1991 NEWFOUNDLAND DXPEDITION: COUNTRIES LOGGED

November 7-10, 1991

[Jean Burnell, Mark Connelly, Neil Kazaross]

1)	Algeria	549, 666, 891, 981, 1422
2)	Angola	945, 1088, 1115, 1188, 1232, 1313, 1367, 1502a
3)	Anguilla	690, 1610
4)	Antigua	620, 1100, 1165
5)	Argentina	680, 870, 1030
6)	Ascension Island	1485, 1602
7)	Azores	693, 828, 836 (now 837), 1259, 1503, 1566
8)	Balearic Islands	909
9)	Barbados	900
10)	Benin	1475
11)	Bermuda	1160
12)	Brazil	600, 620, 640, 680, 690, 700, 720, 730, 740, 760, 780, 810, 820, 860, 870,
	"	880, 890, 900, 950, 960, 980, 990, 1000, 1010, 1030, 1040, 1050, 1060,
	"	1080, 1090, 1100, 1110, 1120, 1130, 1150, 1160, 1190, 1200, 1220, 1240,
	"	1260, 1280, 1290, 1300, 1300.6, 1320, 1330, 1360, 1370, 1380, 1390, 1400,
	"	1430, 1440, 1450, 1460, 1468.8, 1470, 1480, 1490, 1500, 1510, 1520, 1530,
	"	1540, 1550, 1560, 1570, 1590
13)	Burkina Faso	747
14)	Cameroon	1152, 1286
15)	Canada	540, 560, 590, 640, 690, 710, 720, 740, 780, 800, 810, 920, 930, 960, 970,
	"	1070, 1090, 1230 (now 1210), 1270, 1320, et al
16)	Canary Islands	621, 720, 747, 837, 882, 1008, 1215?, 1269, 1341
17)	Central African R.	1440
18)	Colombia	840
19)	Cuba	810, 860, 900
20)	Egypt	819, 1107
21)	England	882, 909, 1548
22)	France	675, 945, 1071, 1161, 1206, 1242, 1377, 1467, 1557
23)	French Guiana	1070
24)	Gabon	1554
25)	Gambia	909.8
26)	Germany	1593
27)	Grenada	535
28)	Guadeloupe	640
29)	Guinea	1386, 1404
30)	Guyana	760
31)	Italy	846, 900
32)	Ivory Coast	1493a
33)	Jamaica	700, 850
34)	Lesotho	1197
35)	Libya	648, 828, 1053, 1208.5, 1251
36)	Luxembourg	1440
37)	Madeira Islands	531, 1530
38)	Martinique	1090
39)	Mauritania	1349
40)	Melilla	1359
41)	Morocco	612, 657, 702, 711, 774, 819, 936, 999, 1026, 1044, 1080, 1188, 1197, 1233,
	"	1325

42)	Mozambique	872
43)	Nevis	895
44)	Niger	1125
45)	Nigeria	909, 918, 1170, 1395
46)	Portugal	594, 630, 666, 720, 783, 828, 963, 981, 1035, 1062, 1170, 1251, 1332, 1377
47)	Puerto Rico	1480
48)	Saudi Arabia	1440, 1521
49)	Senegal	765, 1222.4, 1287, 1335.8
50)	Spain	531, 576, 585, 603, 639, 657, 684, 702, 729, 747, 774, 792, 801, 810, 837, 855, 900, 918, 954, 972, 990, 1008, 1017, 1026, 1044, 1053, 1107, 1116, 1134, 1152, 1179a, 1224, 1260, 1296, 1305, 1314, 1395, 1413, 1458, 1484.9, 1521, 1538.8, 1575, 1584, 1602
	"	
	"	
51)	Spanish Morocco	990, 1355
52)	St. Kitts	825
53)	St. Lucia	660
54)	St. Pierre & Miq.	1375
55)	St. Vincent	705
56)	Sudan	1296
57)	Togo	1394
58)	Trinidad	610, 730
59)	Turks & Caicos	1570
60)	Uruguay	850
61)	USA	660, 680, 770, 850, 880, 1010, 1030, 1050, 1130, 1260, 1280, 1510, 1560, 1600
	"	1386
62)	USSR (Kal.)	1530
63)	Vatican	640, 750, 860, 880, 970, 1020, 1170, 1200, 1210, 1290, 1470, 1490, 1520, 1540
64)	Venezuela	818
	"	
65)	Zambia	

unID TA: 558, 567, 656, 657, 746, 756, 782, 801, 818, 909, 990, 1106, 1125, 1160, 1169, 1170, 1232, 1286, 1295, 1305, 1331, 1422, 1458.2, 1602
unID South Americans: 720, 850, 1030

NOTE: Many northern Europeans that are normally heard well were blanked by auroral conditions. These include stations from Belgium (1512), Czechoslovakia (1521), Holland (747), Ireland (567/612), Norway (1314), Poland (1503), Sweden (1179), Switzerland (1566), and Yugoslavia (1125/1134/1143). If an opening had materialized in that direction, the country count could have easily gone beyond 80.

A catalogue of article reprints covering this DXpedition and other international MW DX may be obtained for \$1.00 from either of the following:

NRC Publications
P.O. Box 164
Mannsville, NY
13661-0164

and/or

IRCA Reprints
c/o Steve Ratzlaff
295 Pettis
Mountain View, CA
94041

AT RIGHT: DXers Jean Burnell, Neil Kazaross and Mark Connelly, from left to right.

