

No.	Date	Item
1	12/11/98	Various Standard Paragraphs for AM Stations
2	6/24/98	www.fcc.gov AM BROADCAST STATION APPLICATIONS
3	6/19/98	Forfeiture Order, Polnet Communications, Evanston, IL
4	4/1998	CFCO Chatham, ON for FM
5	3/23/98	Austin Ring Transformers
6	1/26/98	NAB TechCheck, NAB Requests Technical Relief for AM Broadcasters

OFFICE MEMORANDUM

TO: All Engineers
FROM: Donald Everist
TOPIC: Various Standard Paragraphs for AM Stations
DATE: December 11, 1998

This was just received from the FCC staff and set forth standard conditions for AM stations.

THE AUTHORITY GRANTED IS SUBJECT TO THE FOLLOWING CONDITIONS:

A complete nondirectional proof of performance, in addition to a complete proof on the (day) and (night) directional antenna system, shall be submitted before program tests are authorized. The nondirectional and directional field strength measurements must be made under similar environmental conditions.

A partial proof of performance on the (day) and (night) directional antenna system made in accordance with section 73.154(a) of the Rules, shall be submitted before program tests are authorized.

Operation by remote control authorized.

If remote control authorization is desired, necessary to file complete FCC Form 301-A.

Painting and lighting of the proposed antenna tower(s) in accordance with paragraphs _____ of FCC Form 715.

Antenna obstruction markings not required.

Permittee shall install a type accepted transmitter, or submit application (FCC Form 301) along with data prescribed in Section 73.1660(b) should non-type accepted transmitter be proposed.

Before program tests are authorized, permittee shall submit a complete nondirectional proof of performance to establish that the efficiency is at least _____ mV/m/kW at one kilometer, as proposed. The proof shall include at least eight approximately equally-spaced radials with sufficient close-in points such that the inverse distance field can be clearly established. (See Section 73.186 FCC Rules).

The proposed antenna shall be excited with a symmetrical folded unipole feed, utilizing a minimum of three folds.

A request must be submitted in accordance with Section 73.99 of the Rules if a Pre-Sunrise (PSRA) and/or a Post-Sunset Authorization (PSSA) is desired using the facilities specified in this authorization.

The license application to cover this authorization may refer to and rely upon the technical data contained in the engineering report filed _____ to establish that the array is adjusted to within the pattern authorized herein.

Before program tests are authorized, permittee shall submit sufficient current distribution measurement data to establish clearly that the current distribution approximates that of an antenna with electrical height of _____, as proposed.

Before program tests are authorized, permittee shall submit sufficient data to establish that the inverse distance field at one kilometer is essentially _____ mV/m/kM/kW, as proposed.

This authorization is subject to the condition that the permittee shall accept overlap from grant of the proposal of _____
(_____)

An antenna monitor of sufficient accuracy and repeatability, and having a minimum resolution of 0.1 degrees phase and 0.1 percent sample current ratio deviation shall be installed and continuously available to indicate the relative phase and magnitude of the sample currents of each element in the array to insure maintenance of the radiated fields within the standard pattern values of radiation.

Upon receipt of operating specifications and before issuance of a license, permittee shall submit the results of observations made daily of the base currents and their ratios, relative phases, sample currents and their ratios and sample current ratio deviations for each element of the array along with the final amplifier plate voltage and current, the common point current, and the field strengths at each monitoring point for both the nondirectional and directional (both daytime and nighttime) operations for a period of at least thirty days, to demonstrate that the array can be maintained within the specified tolerances.

Prior to construction of the tower authorized herein, permittee shall notify AM Station _____ so that, if necessary that AM station: may determine operating power by a method described in Section 73.51(a) (1) or (d), and/or request temporary authority from the Commission in Washington, D.C. to operate with parameters at variance in order to maintain monitoring point field strengths within authorized limits. Permittee shall be responsible for installation and continued maintenance of detuning apparatus necessary to prevent adverse effects upon the radiation pattern of the AM station. Both prior to construction of the tower and subsequent to the installation of all appurtenances thereon, a partial proof of performance, as defined by Section 73.154(a) of the Commission's Rules, shall be conducted to establish that the AM array has not been adversely affected and, prior to or simultaneous with the filing of the application for license to cover this permit, the results submitted to the Commission.

Prior to construction of the tower(s) authorized herein, permittee shall notify AM Station _____ so that station may determine operating power by a method described in Section 73.51(a)(1) or (d). Permittee shall be responsible for the installation and continued maintenance of detuning apparatus necessary to prevent adverse effects upon the radiation pattern of that station. Both prior to construction of the tower and subsequent to the installation of all appurtenances thereon, antenna impedance measurements of the AM station shall be made and sufficient field strength measurements, taken at a minimum of 10 locations along each of eight equally spaced radials, shall be made to establish that the radiation pattern is essentially omnidirectional. Prior to, or simultaneous with, the filing of the application for license to cover this permit, the results of the field strength measurements and the impedance measurements shall be submitted to the Commission in an application on FCC Form 302 notifying of the AM station's return to the direct method of power determination. (See Section 73.45(c), FCC Rules).

Before program tests are authorized, sufficient data shall be submitted to show that adequate filters, traps and other equipment has been installed and adjusted to prevent interaction, intermodulation and/or generation of spurious radiation products which may be caused by common usage of the same antenna system by Stations _____, and there shall be filed with the license application copies of a firm agreement entered into by the _____ stations involved clearly fixing the responsibility of each with regard to the installation and maintenance of such equipment. In addition, field observations shall be made to determine whether spurious emissions exist and any objectionable problems resulting therefrom shall be eliminated. Following construction, and prior to authorization of program test under this grant, Stations _____ shall each remeasure antenna resistance and submit FCC Form 302 as application notifying the return to direct measurement of power.

Before program tests are authorized, permittee shall dismantle the unused antenna tower, or in lieu thereof, submit a proof of performance to establish that the proposed radiation pattern is essentially omnidirectional. The proof shall include at least eight approximately equally-spaced radials with sufficient close-in points that the inverse distance fields can be clearly established.

Operation with the facilities specified herein is subject to modification, suspension or termination without right to hearing, as may be necessary to carry out the applicable provisions of the ITU Radio Regulations, the Final Acts of the ITU Administrative Conference on Medium Frequency Broadcasting in Region 2 (Rio de Janeiro, 1981), or any bilateral or multilateral agreement(s) of the United States.

REPORT NO. 24268

B R O A D C A S T A P P L I C A T I O N S

June 23, 1998

N A T U R E O F A P P L I C A T I O N

STATE FILE NUMBER CALL LETTERS APPLICANT AND LOCATION

AM BROADCAST STATION APPLICATIONS FOR RENEWAL LICENSE CANCELLED

IL BR -960719YQ DWGLC MENDOTA BROADCASTING, INC.
MENDOTA, IL
RENEWAL OF LICENSE
PER 3/24/98 SURRENDER, LICENSE CANCELLED BY 1800B3-6/18/98

IL BR -960724YV DWPOK LIVINGSTON COUNTY BCSTERS, INC.
PONTIAC, IL
RENEWAL OF LICENSE
PER 3/24/98 SURRENDER, LICENSE CANCELLED BY 1800B3-6/18/98

AM BROADCAST STATION APPLICATIONS FOR RENEWAL ACCEPTED FOR FILING

AL BR -971210K1 WABF JUBILEE BROADCASTING CO., INC.
FAIRHOPE, AL

AM BROADCAST STATION APPLICATIONS FOR RENEWAL PLEADING

NY BR -980202E6 WGR SINCLAIR RADIO OF BUFFALO LIC., INC.
BUFFALO, NY
RENEWAL OF LICENSE.
INFORMAL OBJECTION FILED 4/20/98

NY BR -980202Q9 WADO WADO-AM LICENSE CORP.
NEW YORK, NY
RENEWAL OF LICENSE
*INFORMAL OBJECTION FILED 6/18/98

AM BROADCAST STATION APPLICATIONS FOR RENEWAL PETITION FOR RECONSIDERATION FILED

AR BR -960131WW KJBN JOSHUA MINISTRIES & COMM.DEVELOP COR
LITTLE ROCK, AR
RENEWAL OF LICENSE
*APPLICATION DISMISSED AND AUTHORITY TO OPERATE TERMIN
PER LTR DATED 5/15/98 REF 1800B3-GDG.
*PETITION FOR RECONSIDERATION FILED 6/15/98

WI BR -960801R5 WMBE MASZJA-PACER RADIO, INC.
CHILTON, WI
RENEWAL OF LICENSE
*APPLICATION DISMISSED AND AUTHORITY TO OPERATE TERMIN
PER LTR DATED 5/15/98 REF. 1800B3-GDG
*PETITION FOR RECONSIDERATION FILED 6/15/98

REPORT NO. 24268

B R O A D C A S T A P P L I C A T I O N S

June 23, 1998

AM BROADCAST STATION APPLICATIONS FOR RENEWAL APPLICATION COMMENT

AL BR -881123UI WABF JUBILEE BROADCASTING CO., INC.
FAIRHOPE, AL

RENEWAL OF LICENSE
LICENSE CANCELLED BY LETTER OF NOVEMBER 6, 1997
PETITION FOR RECONSIDERATION GRANTED. CALL SIGN REINS
AND SPECIAL TEMPORARY AUTHORITY GRANTED BY 1800B3-JWR.
6/18/98.

FM BROADCAST STATION APPLICATIONS FOR RENEWAL PETITION FOR RECONSIDERATION FILED

MI BRH -960531ZH WQHH MID MICHIGAN FM, INC.
DEWITT, MI
RENEWAL OF LICENSE
*APPLICATION DISMISSED AND AUTHORITY TO OPERATE TERMIN
PER 5/12/98 LTR REF 1800B3-GDG
*PETITION FOR RECONSIDERATION FILED 6/11/98

UHF TRANSLATOR STATION APPLICATIONS FOR RENEWAL ACCEPTED FOR FILING

¹ Requests for payment under installment plans should be mailed to: Chief, Billings and Collections, mail Stop 1110A2, 1919 M Street, N.W., Washington, D.C. 20554. Payment of the forfeiture in installments may be considered as a separate matter in accordance with Section 1.1914 of the Commission's Rules. Contact Chief, Billings and Collections at (202) 418-1995 for more information on payments by credit card.

Post Office Box 73482
Chicago, IL 60673-7482

Petitions for Reconsideration pursuant to Section 1.106, 47 C.F.R. §1.106 of the Rules, or Applications for Review pursuant to Section 1.115, 47 C.F.R. §1.115, should be sent to:

Federal Communications Commission
Chief, Compliance Division
Compliance and Information Bureau
1919 M Street, N.W.
Washington, D.C. 20554
ATTN: Mail Stop 1500E3-AJC

Forfeiture penalties not paid within 30 days will be referred to the U.S. Attorney for recovery in a civil suit. 47 U.S.C. § 504(a).

5. **IT IS FURTHER ORDERED** that a copy of this Order shall be sent certified mail, return receipt requested, to Polnet Communications, Ltd.

FEDERAL COMMUNICATIONS COMMISSION

Pamera D. Hairston
Chief, Compliance Division
Compliance and Information Bureau

Ottawa Watch, continued from page 4

themselves dogged by teasers such as "how do you operate seven studio-to-transmitter links on a single tower?" By the sounds of things, U.S. radio broadcasters are wheeling and dealing stations the way kids trade baseball cards; you never know who's going to own what by week's end. In playing this game, they're throwing the resulting mess onto the heads of engineers, who have neither the time, resources, nor the ability to violate the laws of physics required to make all of these combinations work.

A head's up to Canadian stations, eagerly awaiting their own shot at consolidation: don't be so sure that it's always a good idea. From what I've heard here, it isn't: not only is there the cost of renovating to take into account, but you just can't shove a group of stations together and assume that the technical arrangements will fall into place. Before you leap, look: figure out with your engineer if you can make such a consolidation work -- and whether it's really cost-effective -- before actually doing it. As one engineer noted, often the result of such grandiose maneuvers is a reduction in receptionist costs, and nothing more.

Incentives for Engineers Needed: Speaking of engineers, it's clear that nothing is really being done stateside to address the lack of new blood. The reason for the shortage is simple: engineers tend to be smart people, smart enough to know that they can make more money, work less hours, and have better facilities by taking jobs in Information Technology or wireless communications. The days where the industry can abuse engineers by making them work seven days a week for lousy pay had better be numbered, folks. Otherwise we're going to end

up with none, or, worse yet, with the drags that the computer industry won't touch.

Tower Space: DTV vs FM? Which leads us, in this rambling NAB report, to the question of DTV transmission. It appears likely that many DTV antennas will be placed on existing TV towers. Unfortunately, this could result in the eviction of radio stations from these towers, especially those who lease space. The fear expressed here is that this will result in a radio tower-building boom, which could lead to more accidents, not to mention chaos on the airwaves. My suggestion: the CAB Technical Committee may want to look at the situation in Canada. FM stations that have their antennas on TV towers should be aware of this potential problem.

These are just a few NAB impressions, taken from the fevered mind of a reporter who's been digitized to death. If there's a message in them, it's that much of the change happening in U.S. broadcasting appears to be outpacing the industry's ability to cope with it. The pressure on engineers, the mad push to DTV -- spurred by a money-hungry Congress that wants to raise \$20 billion from selling the old analog spectrum -- and the general sense that 'lots of stuff is happening, but no one's quite sure why', underlies my experience at this year's NAB. One gets the sense that everyone's so busy trying to get to the shiny digital future, that they haven't given much thought to what will happen when they get there.

In mulling all of this over, the immortal words of Han Solo keep coming back to me: "I got a bad feeling about this."

James Careless welcomes your comments and may be reached at (613) 247-7141 or by fax at (613) 247-0304.

Industry News, continued from page 4

jock" Howard Stern, continues to draw the kind of condemnation that has marked his years on U.S. radio. The Canadian Broadcast Standards Council says the show on Q-107 Toronto violated its code of ethics four times in December and January. After the show was introduced into Canada last fall by CHUM-owned CHOM-FM Montreal and WIC-owned Q-107, the Council received more than a thousand formal complaints and on Nov. 11 ruled that Stern had breached its code of ethics and sex-role portrayal code. Both stations use a delay system to bleep offensive material, and Q-107 has changed its system to give more time for deletions. The first ratings last fall gave Stern 363,000 listeners in Montreal and 753,000 in Toronto.

NETWORKS + STATIONS

A strike that lasted nearly five months has been settled at Pelmorex Radio's **Mix 105, CHNO, CHYC Sudbury**. Of 14 eligible union members, 11 voted in favor of a new 3-year contract which met demands for job security... At **CFRN-TV Edmonton** 60% of unionized staff voted to reject a contract offer. Workers there have been without a contract since March 31/97... In Halifax, the merger of five stations into **Metro Radio Group** resulted in the loss of 13 jobs... In the U.S., an unusual addition to the array of cable channels: **BBC America** is the result of a \$600 million partnership between the BBC and Discovery Communications. The two companies will produce documentaries and plan to start cable chan-

nels all over the world. Discovery founder John Hendricks says the partners "are rewriting the rules of television"... One rule of television that needs to be rewritten is the absence of a Canadian presence in the U.S. While Canadians are inundated with American networks and cable channels, few Americans have the opportunity to see a Canadian channel -- and remain sadly uninformed about their all-but invisible neighbors to the north...

CRTC ACTIONS: A Public Hearing is scheduled for May 25 at the CRTC headquarters in Hull, Quebec. On the agenda will be applications for new cable, radio and television facilities and ownership changes, including inter-corporate transfers by Videotron's Alberta cable operations.

Applications: **CFCO Chatham (ON)** for FM, 50 kw on 94.3, to replace 630 AM... **CHCH-TV Hamilton**, for a channel change and reduction of power at its London transmitter... **CHKG-FM Vancouver**, for SCMO to carry full service in the Korean language... Native Communication Inc. (**CINC-FM Thompson**) for FM transmitters at Churchill, Moose Lake and Oxford House (MB)... CWP Partnership plans to delay the launch of its **Allegro** pay audio service to Dec. 20, 1998.

Approved: **Telelobe Inc.** and seven partners, for an MDS undertaking in the Montreal, Quebec City, Saguenay-Lac St-Jean and National Capital areas, to be known as "LOOK TELE"; competing bids by DigiTVcom, AirComm and

continued on page 20

1390

Selectview Cable Services were denied. Transfer of effective control of Riding Mountain Broadcasting (**CKLQ Brandon**) and of Maitland (ON) Cable TV; Monarch Broadcasting, for acquisition of **CJCY Medicine Hat** with move to FM; Radio Sept-Iles Inc. for FM at Sept-Iles -- a competing application for a community station was denied; Radio Nord for FM at Val d'Or, Quebec; Cariboo Central Interior Radio Inc., new FM facilities at Vanderhoof, Quesnel and Williams Lake, (BC) to replace four existing FMs and CKWL AM; Valley Broadcasters Ltd., new FM at Castlegar (BC); Power increases at Global TV's **CKMI-TV-1 Montreal** from 4.85 kw to 33 kw, Radio Bishop's Inc. **CJMQ-FM Lennoxville** from 25 to 500w, and Rogers' **CHFM-1 Banff**, from 91 to 210 watts; Decrease in power at CBC's **CBJE-FM Chicoutimi**, from 50 kw on 107.9 to 30 kw on 102.7; Connelly Communications, for a new FM at New Liskeard (ON); **The Comedy Network**, second satellite uplink to delay its Western Canada feed by three hours; CBC **Newsworld**, for an increase in ad content from 8 to 12 minutes/hour; and **L'Alliance des radios communautaires du Canada inc.**, for a national radio network of its member stations.

Denied: Monarch Broadcasting's plan to replace the 1570 kHz **CKTA Taber** (AB) transmitting facilities with those of 1090 kHz **CKRX Lethbridge**, adding a low-power transmitter at Taber; Reductions in local news at three **Radio Nord** TV stations.

NAB 98 BREAKS RECORDS -- AGAIN

They came from some 135 countries and chalked up a new record for NAB, 104,805 attendees, up 4.5% from the 100,245 who attended in 1997. The total has doubled since 1992, and international attendance was also at an all-time high of 22,654. A record 1,307 companies exhibited at NAB 98, and news media attendance reached 1,750. The 1999 show will be April 17-22, again in Las Vegas.

VIDEO SOLUTIONS SYMPOSIUM

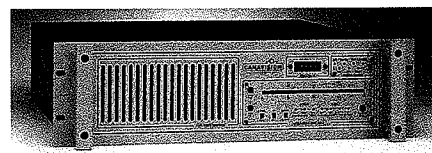
Silicon Graphics Canada is presenting a free 1-day symposium on digital video solutions. It will be held in Montreal on May 6, Toronto on May 19, and Vancouver on May 21. Space is limited. To register, call 1-888-755-4744, ext. 8956, or e-mail: register@toronto.sgi.com

In memoriam

Jack Craine, a 44-year veteran of the CBC, died at his home in London, England, on March 16 at the age of 69. Born in Lethbridge, he began in radio as a part-time announcer in Calgary while attending university. In 1955 he moved to Germany to establish the Canadian Forces Network; three years later he returned to Canada and helped to set up radio stations across the Arctic. During the next 25 years he played a major role in developing both radio and television programming for the CBC, retiring in 1995.

Sev Sabourin, program director at Alberta's public radio network has died at age 59 following a heart attack. After joining CKUA in 1968 he spent 24 years with the station, and was known for his appreciation and knowledge of many forms of music.

FM BROADCAST TRANSMITTERS



The Canavision CVN 12-/300 series of FM transmitters are designed and built for virtually any low power broadcast application. These units provide excellent signal quality, compactness, high reliability, and modularity for ease of operation. With the addition of optional features, such as the audio processor, these transmitters become one of the most versatile units available to the broadcast industry today. Automatic electronic protection circuitry with alarms, diagnostic displays and front panel adjustments are all standard features designed for worldwide utilization.

Circle Reader Service #118

INCOSPEC COMMUNICATIONS INC.

Tel: (514) 686-0033 Fax: (514) 688-7709

E-mail: info@incospec.com

THE BEST IN THE BUSINESS

For further information on products and services advertised in BTMP, mail or fax the Reader Service card.

Page	Advertiser	Reader Service #
8a-b	Audio Services Corp	185-213
23	Broadcast News	121
22	Cinequip	134
8	Clearcom	106
16	Coaxial Dynamics	107
17	Commercial Electronics	165
11	Davis, S.W.	143
12	Impact Cases	103
20, 21	Incospec	113, 118
5	JVC Canada Inc.	105
13	LANATECH	126
OBC	Maxell Canada	215-220
25	Miller Professional	252-254
7	Sennheiser	102
27	Sonotechnique	131
2	Sony Canada	181

AM
5

COHEN, DIPPELL AND EVERIST, P.C.

TO: All Engineers
FROM: Warren
TOPIC: Austin Ring Transformers
DATE: March 23, 1998

Art Rose of WTOP called to advise that one of the Austin Ring transformers had been damaged by lightning at the WTOP-1500 kHz site in a recent thunderstorm. He advised that the Austin Ring transformers are now available from Litton Marine Systems, 7510 Airport Road, Mississauga, Ontario L4T 2H5, Canada Telephone Number (905) 405-1144, Contact: Pat Moore.



Radio TechCheck



The weekly newsfax for **Radio** broadcast engineers

January 26, 1998

NAB REQUESTS TECHNICAL RELIEF FOR AM BROADCASTERS

On January 20, 1998, NAB sent a letter to the FCC asking it to address several AM broadcasting technical issues during its biennial review of mass media regulations. NAB urged the Commission to initiate a rule making proceeding aimed at reducing the regulatory burdens on those AM broadcasters who operate, and would like to operate, directional antenna systems.

Congress required the FCC to conduct a biennial review of its broadcast ownership rules when it passed the Telecommunications Act of 1996. The Commission, on its own initiative, has taken the opportunity presented by this congressional mandate to conduct a top-to-bottom review of all FCC regulations.

In the letter, NAB asked the Commission to investigate possible methods of reducing the time and expense involved in conducting AM directional antenna proof-of-performance measurements. It noted that these measurements often cost up to \$40,000 and are very time consuming. It cited the comments received by the Commission in response to its Notice of Inquiry in MM Docket No. 93-177 as justification for considering the relaxation of these burdensome requirements.

In its 1994 reply comments in MM Docket 93-177, NAB urged the Commission to relax its AM directional proof requirements for AM arrays whose performance can be accurately modeled by modern computer software. NAB argued that computer models, such as MININEC, can be used to accurately predict the coverage of certain AM arrays, and that these models can be used in place of comprehensive measurement programs for these arrays.

NAB stated that arrays with series fed elements of uniform cross-section can be easily modeled, as can many other "textbook" array designs that use similar radiating elements. However, it said that the discussions of an ad hoc committee it formed in 1993 to study the issues involved in AM directional proof-of-performance measurements led NAB to conclude that certain types of AM arrays could not be accurately

modeled at that time. Those included folded unipole antennas, non-uniform cross-section towers, shunt fed antenna elements, towers heavily loaded with other antennas (FM, land mobile, etc.), and skirted towers. NAB also suggested that AM arrays situated on non-uniform terrain could present problems for computer models.

Also in its Docket 93-177 reply comments, NAB emphasized that although the time and monetary benefits of relaxed field measurement requirements would be considerable for AM broadcasters, it continues to maintain its long-standing position of only supporting rule changes that will, if not reduce interference in the AM band, at least not increase it. NAB asked the Commission to ensure that AM broadcasters have array monitoring systems that are accurate indicators of array performance before permitting these broadcasters to replace certain field measurements with computer model predictions.

In addition to asking for the relaxation of measurement burdens on directional AM stations, NAB's letter to the FCC last week also asked the Commission to investigate the possibility of allowing certain non-conventional types of AM directional antenna systems to be deployed. NAB suggested that alternative antenna systems, such as those employing slant-wire radiators (like guy wires), might allow AM broadcasters to provide directional service in areas where they currently cannot due to limited availability of real estate for new tower structures. NAB cited a petition filed by Milstar Broadcasting Corporation in 1994 (RM 8883) as a sound basis for initiating a rule making proceeding on this subject.

Another issue cited by NAB in its letter last week is the tremendous amount of electromagnetic noise generated by the millions of electronic devices in use today such as computers, light dimmers, and appliances. NAB asked the Commission to investigate the need to set RF emission limits on certain devices that are currently exempt from such restrictions, and to consider tightening the limits on other devices where necessary to prevent interference to licensed radio services.

Courtenay S. Brown, Editor

Tel: +1 (202) 429-5341

Fax: +1 (202) 775-4981

Copyright 1997, National Association of Broadcasters, Washington, D.C.

Radio TechCheck is an NAB Member service and may not be reproduced or retransmitted without permission.