

A GUIDE TO ENGINEERING AT WRPI

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ABSTRACT

WRPI (pronounced 'Werpie') is a ten-thousand watt, FM, noncommercial radio station owned and operated by the students of Rensselaer Polytechnic Institute. There are no paid personnel -- the station is run entirely by the students. From time to time, non-students are given shows on WRPI; these are generally either people with special talents (such as Jackie Alper of Mostly Folk) or summer-time people.

Know how is key to running a radio station. This is intended as an informative reference guide and tutorial in how to run a radio station from a technical standpoint. Covered in this document is how to:

1. Keep logs.
2. Perform transmitter operation.
3. Stay legal.
4. Become a helpful part of the WRPI community.
5. Have fun!!!

Courses, this document, buddy shifting, and a cool head are required. You also must have heart. You will probably learn that WRPI is people and YOU are WRPI. You make the station what it is. Be polite, courteous and above all, learn to get along by being helpful. If you do all this your sure to fit in.

1 INTRODUCTION

Learning to run a radio is not nearly as hard as teaching to run a radio station. The problem is that everyone knows a different amount of knowledge. Hopefully a well organized document will help to bring people to the point where they can operate the radio station with out messing up all the time.

Read this document carefully, if you follow its' instructions, you can't go wrong.

The following is an outline of what this document will cover:

Operator Endorsement

I. Logs (detail)

- a) program
- b) operating
- c) maintenance
- c) error correcting
- d) comments
- e) signing in
- f) changing pages
- g) dates+times
- h) ebs tests
 - 1. ours
 - 2. theirs
 - 3. UPI
- i) signing on/off
- j) meter readings

II. Remco (carrier) - ID's

- a) general operation
- b) meter reading
- c) tower lights
- d) signing on/off

III. STL

- a) operation
- b) ID's

IV. EBS

- a) ours
 - 1. test
 - 2. actual emergency
- b) theirs
- c) equipment operation

V. Modulation Monitor

- a) turning on/off
- b) functional description

VI. Program Switcher

- a) how to use it.

Basic Clearance

A) Board work - Pots -- Understand the functions of each of the five groups of pots (mics, tt, cart, remote & ampex), including expanders, and keyswitches.

- VU Meters -- Understand how to read VU meters and adjust the pot to set the level correctly. Also understand what the meter selection switch does.

- Cue -- Know what it is, and how to use it.

- Monitor Switcher -- Volume control (speakers and headphones), and selector switch.

B) Records

- Proper care and handling of records -- You must be able to demonstrate proper use of discwashers. (ie. not to use too much fluid, how to clean the discwasher, which ways up...)

- Turntable operation -- Understand what all the buttons do (speed control, start/stop, remote start). You must be able to cue up record proficiently. Also understand the terms slip cueing, and hot potting.

- Segues (cross-fades) -- Understand what they are, and how to do them.

- Playlists -- Why are playlists important. Who reviews them. Where are they kept. How to fill them out.

- Filing records -- Color codes for the different categories. Your ABC's. Last name first except... Pull out the record next to it.

C) Carts

- Cueing -- Understand how carts recue themselves, and what to do with un-recued carts.

- Machine operation -- How to insert a cart into the machine. Understand what all the buttons do (stop, start, remote starts). Also understand what the lights mean, and why they should be hot-potted.

- Cart labels -- What are do the different colors means. What is printed on the labels.

D) CD's

- Proper care and handling -- Although CD are very durable, when they get data errors from fingerprints or chicken grease they sound very bad, and usually cannot be repaired. So be gentle with them.

- Loading -- How to load a CD into the player. Always keep the door closed when not in use.

- Cueing -- How to cue up a CD to the proper cut, and pause it so it will start in the right place.

- The dreaded autostop button -- What does it do? When do you use it, and when not to.

- What buttons not to touch.

E) Cassette's

- Machine operation -- What all the buttons, lights, bells, and whistles do.

- Cueing -- How to cue up a cassette

- Recording -- How it differs from playing.

- Airckeck -- How to use the cassette to aircheck yourself.

F) Microphone technique (the basics)

- Where to point it -- Off axis from your mouth about 30-45 degrees to avoid popping your P's. Also out of the way so you can read the copy.

- Distance -- 8-10 inches from your mouth.

- Do's and Don'ts for announcing

G) Muting - General concept -- What is muting. Why do we have it.

- Warning lights -- What do they mean. Crying wolf.

- Heads -- What should you do when someone yells "HEADS". (shut up)

H) Phones

- How to answer the phones

- The hold button

- Secret phone -- How to answer it. Not for personal calls.

- PA -- Uses and abuses.

- Talk loop -- What is talk loop for. Try to use it rather than the PA

- Winking vs. blinking -- What are these terms.

- Taking messages -- Messages should be coherent. They should include the time, date and who took the message. They should be posted on the message

board. If you can't take messages while announcing or engineering you shouldn't be cleared.

- Flashing the hook if it says "enter"

I) Security

- Locking up -- All rooms in the station should be locked up if not in use.

- Searching records -- All records leaving the station should be checked for station records.

- Fire alarms -- What is the correct procedure during a fire alarm.

- Keys and keylists

- Strangers

J) Format

- Red book -- What is it? How to use it?

- Categories -- Musilogical vs. typalogical.

- Reviewing records -- How is WRPI format decided?

- Requirements -- Who's required to play what?

- Philosophy and reasons for the format.

K) WRPI policies

- Who's in charge

 - a) E-comm -- Who are they, and what do they do.

 - b) Engineer on duty -- What rights, and responsibilities does the engineer on duty have?

 - c) Sub-department heads

- Clearances -- What different types of clearances are there?

- Substance abuse

- Other policies -- Where are the policies posted.

L) FCC rules

- ID's -- What's a legal ID? When do we do ID's. What is program continuity?

- Licenses -- What are the different types of licenses, and what are they good for?

- Logs (briefly) -- What are the different types of logs? What is entered in them, and can make entries?

- Profanity -- Understand the different shades of grey in the profanity issue.

- Commercialism -- What makes something a commercial?

- FCC inspections -- What to do when the FCC visits?

2 GENERAL INFO

2.1 ATTITUDE

WRPI tries to maintain a mellow atmosphere. We try to be a voice of reason and good music in a world full of chaos, forces of darkness, top forty and Reaganomics. Many of the shows are of important social and/or cultural merit (such as Face The Music; a feminist radio show, or Shen Yeun; a Chinese music show). People who are members of the Nazi Party, the KKK, the Moral Majority or the House Un-American Activities Committee are generally un-welcome here.

2.2 RESPONSIBILITIES

10,000 Watts is a lot of power with which to broadcast and is a lot more than most college radio stations, and many commercial stations for that matter. This large broadcasting power means we have a large listening radius (75 miles north and south, 65 miles west, and 50 miles east with longer distances occassionally reported) and requires a certain amount of responsibility on the part of the announcer, detailed in the following paragraphs.

If any WRPI operation is interrupted due to your absence, indifference, or your incompetence, your broadcast privileges may be suspended. Your tardiness can also seriously inconvenience the DJ on the air before you and this will not be tolerated. A premature end to any show that inconveniences the next DJ is equally unacceptable. On the other hand, we know

emergencies come up, but just remember that we think we're pretty important also. If you must get a substitute, call some other DJ's on the fill-in list located on the programming bulletin board. If you find someone to substitute for you, the Program Director should then be notified of who is going to be filling in for your show. If you cannot locate or provide a substitute for a show you plan to miss, you must give the Program Director at least 24 hours advance notice (preferably more to stay in good graces) if you plan to keep you announce clearance.

Goofing off or other immature behavior has no place being broadcast over the air (this includes negative comments about any other area college radio station). While a certain amount of rowdiness is expected at the station, broadcasting that rowdiness sounds unprofessional. Anyone taking alcoholic beverages into the control room or who is under the influence of alcoholic beverages while signed into the logs or while announcing on air will have all clearances revoked immediately.

Format announcers should have all their required format cuts selected before their show. It is best to come into the station the day before your show to select them as this will give you ample time to make intelligent selections and do some listening if you desire.

It takes a lot of work to keep a 10,000 watt radio station running. Therefore, everyone who has a radio show is expected to help the station by doing a minimum of 7 1/2 hours of work each semester. There is plenty to do around the station, just ask around and you will have some work to do in no time.

Every person with a show and every member at WRPI should take on the responsibility of one Job. An E-Comm position, sub-department head, or clean-up detail are examples. One person is required for each room, for instance. The following page is designed for the President of WRPI. As the Manager's Manager it is the Presidents' job to make sure that all the E-Comm. members have filled the minimum Job list which follows. The President has the final responsibility in this Domain and the Subdepartment heads may help if they wish. Please approach your E-comm during and E-comm meeting or write a letter, if you wish, applying for a Job. An official record must be

made for your job application with a semester of fulfillment before you may obtain membership. Be sure to have the manager directly in control of your job to fill out a WRPI Merit Form or similar record of performance in order to PROVE you have done your job. Radio Shows will be awarded based on the number of hours you work for the station. If you don't take a job, don't expect a show! If you haven't taken a job and you haven't gotten a show, don't complain!

2.3 JOB LIST

Description	Name	Hours per day
Mondays' Mail	_____	.5
Tuesdays' Mail	_____	.5
Wednsdays' Mail	_____	.5
Thursdays' Mail	_____	.5
Fridays' Mail	_____	.5
Mondays' Record	_____	.5
Tuesdays' Recor	_____	.5
Wednsdays' Reco	_____	.5
Thursdays' Reco	_____	.5
Fridays' Record	_____	.5
Mondays' Format	_____	.5
Tuesdays' Forma	_____	.5
Wednsdays' Form	_____	.5
Thursdays' Form	_____	.5
Fridays' Format	_____	.5
The following People Are in charge of Cleaning One Room Each: Your name will be posted and if the room is messy you may be fired!		
Control A	_____	.5
Control B	_____	.5
Control C	_____	.5
Studio A	_____	.5
Studio B	_____	.5
Studio C	_____	.5
Announce A	_____	.5
Announce B	_____	.5
Announce C	_____	.5
Office	_____	.5
Lobby-Hallway	_____	.5
Tech Room	_____	.5
Telco Room	_____	.5
WRPI Mech Room An	_____	.5
News Room	_____	.5
WGOH	_____	.5
PSA's	_____	.5
After Dark	_____	.5
Program Guide	_____	.5
Course Ware Devel	_____	.5
Tech Work	_____	.5

Of course the above time estimates are subject to revision by authorized personnel.

2.4 BUDGET

WRPI's operating budget is usually in the range of \$35,000 -- which is cheap. Because of WRPI's low operating budget, things are run differently than at other radio stations. There are no paid personnel, technical work is done primarily by the students -- things are slow getting repaired, and slow getting built. For this reason, we ask you to be especially careful with equipment and records -- if anything breaks, it will probably stay broken for AWHILE. Please remember we are a non-commercial station.

2.5 STATION MANAGEMENT

WRPI is managed by the E-Comm (Executive Committee, an elected body of students). As of this date (18 July 1987), the E-comm consists of:

- Jim Litynski- President,
- David Bebb- Program Director,
- Tony Byno- Station Manager,
- R. Pfeiffer- business manager,
- Greg Warden- Member At Large,
- Rob Sandow- Public Relations and
- Douglas Lyon - Chief Engineer.

2.6 ANNOUNCE REQUIREMENTS

To become an announcer on WRPI, you go through approximately the following procedure:

First, you have an announce audition. This entails taking an announce test. This test consists of being given a few things to read into a mike. If the person giving you the test decides you can talk, congratulations -- you're an announcer.

The second thing you do is to sign up for a show. There will be a sign-up poster on the hallway bulletin board that you list your time preferences on; put down as many times as you can. Shortly thereafter, the powers that be will decide what the final schedule will look like. If you don't get the time slot you want (or if you don't get any time at all), that's life. Next time, sign up for more spaces on the sign-up sheet.

Once you know that you will be doing radio, program a show. Most recent records can be found in the racks in studio A, most older records are in the library (the key to which is inside the control room). The Program Director will lay out guidelines as to how WRPI's airsound should be. If he feels that your show does not reflect the spirit of the format (or if it just plain sucks), you will be hearing from him.

2.7 ENGINEERING REQUIREMENTS

As was mentioned before, WRPI is a ten-thousand watt radio station. This is not small potatoes; it is serious business. The first and foremost requirement for operating WRPI, is a commercial radio license. There are two kinds of licenses: the general permit and the restricted permit (which is the one you want). To get a restricted permit (if you do not already have one), you simply fill in a form which the D.S.E. (Director of Studio Engineering) can provide for you, and mail it to the FCC. One portion of the form is retained by you and given to the D.S.E. for the files. You cannot operate WRPI unless this form is in the file. Eventually, the FCC will return part of your application with some sort of stamp on it. This is your permanent permit. You must give this to the D.S.E. to go into the file -- remember, the temporary permit that you retained is only good for a short period.

If you are eligible to work in the U.S., you can also get a permit. If you are not eligible to work in the U.S., you have a problem. Your best bet is to ask around and see if anybody is willing to engineer for you. If you have a problem, see Douglas Lyon - Chief Engineer. Many people hold onto their permits thinking that it's a good idea to have them in their wallets in case they start to work at another station. This is not the case -- the chances that you lose your permit are much too great, and if you do, you cannot operate the station until you replace it. If you plan to do radio at more than one station, see the D.S.E. and he will give you a posting statement to fill in that lets you do so.

At any rate, the equipment you must show knowledge of in order to run the station is as follows:

The Gates board. This is the mixing board in CRA where everything happens. Of course you will need to be able to use this.

The turntables. You must be able to clean records properly, cue them up on the turntables, put them on the air, take them off again, put them away and file them properly. This means you must be able to do transitions from one record to another (this is called a 'segue' -- pronounced 'seg-way').

The Cart machines. These are the small cartridge tape players you use for ID's and PSA's. You must know how to run them.

The Microphone. You must know how to put yourself on the air, and control the level. Don't forget to turn the mike off when you're done.

The Emergency Broadcast System (EBS). The chances of your needing to use this piece of equipment is very slim -- only in the case of sending a test, receiving one, or in the event of an actual emergency will you have to do something. BUT if you do need to use it, and don't know how, the D.S.E. will personally kill you.

The logs. All radio stations maintain a written log of all technical and programming information. You must know how to fill these in.

The Studio-Transmitter Link (STL). In case you didn't know, There is a microwave link between WRPI and its transmitter in North Greenbush. The call letters of this small transmitter are 'KNM-45'. The STL must have an ID ('KNM-45, Troy') given whenever it is turned on in the morning or off at night. Also, if the STL is on, but the transmitter is off, the STL needs an ID every hour on the hour. The only control operations for the STL are turning it on and turning it off.

The transmitter. The transmitter in North Greenbush is a complicated piece of equipment. Since the transmitter is three miles from the station, there is a remote control unit (called the REMCO) in the back of the control room that monitors its operations. The REMCO is used to turn the main filaments on and off (they should always be left on), to turn the transmitter on and off, to adjust the transmitter's power, and to monitor the transmitter's operation. The transmitter needs an ID ('WRPI, Troy') when it is turned on in the morning, when it is turned off at night, and every hour on the hour. It is also necessary to measure the output power of the transmitter every hour or so and enter that value

into the logs. For more information, see the D.S.E..

The monitor system. The monitor speakers in the control room, announce booth and studio are a fairly elaborate affair. They can be selected to any one of a dozen channels in the station. They automatically become silent (mute) when the mikes are turned on. You must know how to use the monitors.

Legal Stuff

The FCC requires many things of us, both technical and in terms of program content. Some of these guidelines are listed below.

ID's. You must do an ID ('WRPI, Troy') every hour on the hour (within five minutes). The STL requires an ID ('KNM-45, Troy') whenever you turn it on or off.

Commercials. WRPI is a non-commercial station and may not do commercials. If we hear you do anything even remotely like a commercial, he will jump straight down your throat. If in doubt, ask.

2.8 EMERGENCY BROADCAST SYSTEM

If a national emergency occurs, we are required to participate in the emergency activation notification. You must be familiar with the instructions in the yellow book on the back wall of the station.

2.9 METER READINGS

You must take meter readings every hour. Pay attention to readings. If readings have been standard and yours seems different, ask a tech person. Not just a random. You or someone else may not be reading the meters correctly, power may be browned out at the transmitter site or an even greater fault may occur to cause a wildly varying reading so please be sensitive to your readings. You are in control of expensive equipment and therefore are responsible for the equipment. If in doubt, ask!!

2.10 STATION RULES

These are the rules of the station. If you don't like them, tough, appeal to the Station Manager.

The tech-room, control-B and control-C are generally off limits to random people. We're trying to get several major projects done, and cannot deal with equipment being handled or moved.

There is no smoking anywhere. We want to keep the station clean. If you must smoke, smoke in the hallway. It's bad for you and the equipment.

There may be no drugs (even pot) taken in the station or anywhere near enough to make security associate them with WRPI.

The engineer signed into the logs may not drink alcohol or take drugs or be drunk or be stoned. This is for the simple reason that we cannot allow impaired people to operate the transmitter.

Nobody may bring alcohol into the control room.

There is no rule six.

All empty coke bottles must come back to the station. These are deposit bottles and we lose about a dime on every one that gets lost.

Clean your records. Every record must be cleaned properly before it has a needle dropped on it -- even if you only intend to listen to a track or two for a moment. The records have to last a lot longer than personal records do, and they have to take a lot of abuse. If you don't know how to use a Disk-Washer, have an older brother or sister show you.

File your records. Every record you take from the library or studio racks must go back. If we find ourselves constantly cleaning up for you, we may just decide to save ourselves the trouble and take you off the air. An easy way to re-file records is to pull the adjacent record out a couple of inches when you pull a record out of the racks. Also, it is considered anti-social to pull the records for a show too far in advance -- this makes it hard for other DJ's to find records if they want them.

Station records must stay in the station. This is the most serious rule WRPI has. The station's record collection is its most precious possession. Many of the records are irreplaceable, and all of them are expensive. Anyone who steals records (or any other WRPI property) is in more trouble than they have ever been in their lives. First, you will lose your show forever. Second, you will be permanently banned from the station. Third, we will call every station in the Capitol District and warn them about you (thus effectively ending your radio career forever). Very likely, we will bring security into the matter and press charges. Remember, big brother is watching you.

If you think that the drug and alcohol rules are fascist, remember that more stations lose their licenses for these reasons than for all other reasons put together. Please understand that your personal philosophy on drugs is both requested and germane.

3 AIR SOUND

3.1 PHILOSOPHY

Over the years, WRPI's airsound has evolved into the progressive, mixed music format that exists today. WRPI has consistently been a quality college radio station, broadcasting music that is interesting, challenging and entertaining. Ratings for the station have been steadily rising over the past two years due to improvements in station airsound and quality of announcing. Curiously enough, the music has not become more commercial during this same time, but much more progressive oriented proving that there are people out there who want to hear an alternative to the Top-40 and album rock stations. This manual is intended to help you the announcer continue this trend by acquainting you with WRPI's operating procedures and helping you to sound professional on the air in as little time as possible.

College radio is intended to be a "significant alternative" (FCC quote) to commercial radio. While most college radio stations take this to mean that they should play all of tomorrows rock hits, WRPI's philosophy is a bit different. Our mixed music format means that announcers incorporate jazz, rock and other material into their shows without block programming their show (meaning that announcers should not play an hour of rock and then an hour of jazz). Mixing the different types of music like this requires a conscious effort and some experience on the part of the announcer, but with a little practice and listening it should be no problem for you. For format cuts, some letter combinations mix better than others, but we'll talk more about that later. If possible, classes teaching good segue techniques will be taught this semester. New announcers are also encouraged to listen to some of WRPI's nighttime announcers to see how they make their shows flow through proper segues and professional announcing.

3.2 FORMAT

WRPI's format is different from almost every other college radio station's format. Most college radio stations use a rotation system in which the music director takes a particular song off of each album and puts it into either Heavy, Medium, or Light rotation. The announcer is then required to play a certain amount of songs from each category per hour, say 3 Heavy, 2 Medium and 1 Light.

The way WRPI's format works is as follows. Music is reviewed by announcers and put into format by the Program Director. Songs in format are grouped by letter designation, with the letters corresponding to the types of music as follows:

- A - mellow familiar rock
- B - mellow unfamiliar rock
- C - upbeat familiar rock
- D - upbeat unfamiliar rock
- E - mellow familiar jazz
- F - mellow unfamiliar jazz
- G - upbeat familiar jazz
- H - upbeat unfamiliar jazz
- I - folk
- J - reggae and blues
- O - other

Because announcer involvement is so critical to the success and existence of WRPI's format, you are encouraged to get involved in the format process. Ask the Program Director how to review and comment on records.

It is important to know that an album put in format does not have every song off of it formatted. Only some songs are formatted. It is not important to try to understand all these different categories just yet. Be aware of their existence and in a couple weeks after playing songs from these categories on your show, you will have an intuitive feel for the type of music contained in them. Format will be discussed in more detail later.

4 ANNOUNCEMENTS

4.1 WRITTEN ANNOUNCEMENTS

In addition to your regular announcer duties, there are several different things that you will have to read over the air, such as Public Service Announcements, Station Promo's, After Dark, etc. Information pertaining to each of them is covered in the following sections.

4.2 PUBLIC SERVICE ANNOUNCEMENTS (PSA's)

Public Service Announcements are short, pre-written announcements that serve the public interest by either informing our listening audience of public services available, such as a battered wives hotline, or giving information on laws or procedures, such as the seat belt law or what to do if you see somebody choking, etc. On average, WRPI airs a PSA about once every one and a half hours. We do this because the FCC requires us to and because it is also good for community relations.

When PSA's arrive at the station, they are sorted and catalogued by the PSA Director. Each one is given a four digit tracking number which must be logged in the programming log whenever it is aired. Old PSA's (those which are past their "kill date") are not thrown out, rather they are placed in the public file in the office for a period of two years (the public file is a file in the office that any member of the public can look through during normal business hours). If you notice an expired PSA in the PSA book, take it out, and place it in the pocket at the back of the PSA book. The PSA director regularly removes the

dead PSA's from this pocket and files them in the public file.

you read a PSA on the air, it is important to pre-read it (preferably aloud) to make sure you understand the way it is written and the words contained in it. This will prevent you from stumbling while reading it on the air and/or mispronouncing words. (If there is a word you don't know how to pronounce when you pre-read it, ask someone nearby to help you out.) There is a book in the office with standard announcer pronunciations of all commonly used words. When you read a PSA on the air, do just that and only read it. Don't announce the fact that you are going to read a PSA to your audience. Write down the time the PSA was aired and the number of the PSA in the program log and put the PSA in the back of the PSA book. Always read the top PSA in the book.

4.3 STATION PROMOTIONS

Station promo's (SP's) are either carts or written passages that promote another show or event on the station. WRPI airs about one SP every two hours on the average.

In the case of an SP on a cart, you simply insert the cart in the cart machine, pot it to the appropriate level (usually around 10) and hit the start button on the remote start board. It is important to know how the cart will end so you will be able to segue from it properly. To find this out, look on the cart label for the "q". Following the "q" will either be the last words read on the cart or a descriptor, such as "music fades". Use this information to make a proper segue from the cart.

When the cart is done playing (this goes for all carts, except for ones that say "q:continuous"), pot it down to 0 and let it continue to run until the cart machine stops itself. This way the cart will be cued up at its beginning and ready for another play. Under no circumstances should a cart be stopped by pressing the stop button,

unless it is labelled "q:continuous". For a written SP, many of the same things that apply to PSA's apply here. Always pre-read, don't ad-lib, log the time read and the number in the program logs, read the top SP and when done put it in the back of the SP binder, etc. Unlike PSA's, SP's are not kept after they expire; they are simply thrown away. However, most SP's will not have expiration dates.

4.4 WHAT'S GOING ON HERE (WGOH) AND AFTER DARK

WGOH and After Dark are two public services that WRPI provides to the listening community. WGOH consists primarily of listings of events and happenings occurring in our listening area, such as flea markets, public speakers, poetry readings, etc. After Dark is a listing of bands and performers performing in area clubs. The two are not supposed to overlap, although they sometimes do. WGOH and After Dark are read at specified times during the day, with After Dark being read at Noon, 6 pm, and 10:30 pm and WGOH being read at 11 am, 3 pm, and 8 pm.

Of the two, WGOH requires much more preparation to read because of the way it is made up. Individuals and organizations with events to be announced send typed, ready to read copies to the station where they are sorted by the WGOH director. The WGOH director edits the announcements if they are too long or contain non-airable information and writes a "kill date" at the end of the announcement. This "kill date" is the last date at which the announcement should be read and any announcements with "kill dates" older than the present date should be ripped out of the book and thrown away. After the WGOH director edits the announcements, they are put in the WGOH book and are ready to be read on the air. When you go to read WGOH, you should allow yourself ample time to select and pre-read announcements (take them from the front of the book and work your way to the back). Pre-reading is especially important for WGOH because no matter how well edited it is, the announcements can often be very fragmented and difficult to read the first

time through. Therefore, taking the time to read carefully through each announcement and think about how you want to read it over the air will do a lot towards improving your on air reading of WGOH. After selection and pre-reading of WGOH, you are ready to read WGOH on the air. Follow the procedures below when you do:

- 1) Start the WGOH bed cart (ask your engineer to show you how if you're not sure) and slowly fade it up.
- 2) Announce that it is time for "What's Going On Here", WRPI's calendar of events"
- 3) Read the selection clearly and concisely. Don't spend too much time on any one event.
- 4) The cart "bed" lasts about 5 minutes. WGOH should not last longer than this so when you hear the background music stop, finish up the last announcement and say "This has been What's Going On Here, WRPI's calendar of events. What's Going On Here is aired Monday through Friday at 11am, 3pm, and 8pm and is a public service of WRPI, Troy." or something similar.
- 5) Log start and end times in station logs (after you've gone off the air)

Some things you should be aware of that might pop up in WGOH occasionally that should be edited out are:

- 1) Ticket prices - no ticket prices should be read over the air.
- 2) Promotional Spots - Promo spots, such as "Best play of 1985" or "You simply must see this movie" or anything that encourages attendance should not be read over the air. This includes any announcements ad-libbed by the announcer such as "I saw this movie and I would recommend that you see it too." The only events that can be promoted on WRPI are events sponsored by non-profit organizations, but even this is rarely done.
- 3) A listing of multiple events on one announcement, some of which may have already occurred. Be aware of this so that you don't announce events that have already happened.

4.5 AFTER DARK

After Dark is a computer listing by date of bands and performers appearing in area clubs. Most of the rules that apply to WGOH also apply to After Dark, so they won't be repeated here (pre-reading, cart bed, etc.). When you are ready to read After Dark, follow the rules below:

- 1) Start an After Dark bed cart and slowly fade it up.
 - 2) Announce that it is time for "After Dark, WRPI's club and concert calendar".
 - 3) Read about 8 or 9 days worth of listings.
 - 4) End After Dark with an appropriate parting announcement.
 - 5) Fade the bed out.
 - 6) Log start and end times in the station logs.
- After Dark should not last more than 3 or 4 minutes, so be sure to keep track of the time while you are reading it. Nobody wants to hear 10 minutes of concert listings.

4 6 TICKET GIVEAWAYS

Several times a day WRPI gives a pair of tickets away to an event, such as a concert or a movie. These ticket giveaways will be written in the programming logs to be done at a certain time and one must simply scan the programming logs to determine if there are any tickets to be given away during your show. If there are (and there usually will be at least one) follow the instructions below to insure a smooth, professional sounding giveaway.

- 1) Begin by saying "I have a pair of tickets to give away" and then announce what the giveaway is for by detailing what, where and when the event is and how old you must be to win the tickets. Also give a phone number that a listener could call to obtain more information about the event. All this information is written right on the ticket giveaway form so you'll have no trouble finding it. BE SURE TO

ANNOUNCE THAT YOU HAVE A PAIR OF TICKETS TO GIVE AWAY BEFORE YOU ANNOUNCE WHAT THE EVENT IS OR ELSE THE FCC CONSIDERS IT A COMMERCIAL. Example: Saying "The Opposite will be playing at Club 288 on January 28th and I have a pair of tickets to give away to see them" is a commercial! DON'T DO IT!

2) Announce what caller you'll take (don't take higher than caller number 5) as the winner and give the phone number (276-6248).

3) People who have won tickets in the last 30 days are not eligible to win tickets from the station. Although we don't keep track of this, we do announce it over the air to prevent people from calling too often.

4) When you go off the air and start taking phone calls to determine a winner, pick up the phone and first ask if they are calling for the tickets before you tell them they have either won or lost. This prevents someone from being hung up on if they have accidentally called during a giveaway to talk to someone at the station.

5) When you have found a winner, write down their name, address, and phone number on the giveaway sheet and the back of the pre-programmed logs. Write legibly and do this immediately so you do not forget to do it later.

6) Log the time you did the giveaway in the preprogrammed logs after the giveaway is done.

Some tips to help your giveaway go a little smoother are printed below

1) If you have asked for the fifth caller and you see that the response on the phone lines is less than enthusiastic, take the second caller instead. The important thing is to give the tickets away to somebody.

2) If you fail to get any calls for a giveaway wait about a half an hour and repeat the giveaway procedure adding at the beginning that "We had such a good response to that last giveaway that I've been given another pair of tickets to give away." Yeah, it's sneaky but it will usually result in a few phone calls. If you still don't get a winner, write "No Winner" on the giveaway sheet.

3) Don't sound bored when you read the giveaway information. However, don't get so enthusiastic that you end up doing a commercial or a promotion for the event.

4) Often, the phones will continue to ring after you've found a winner. In this case, put the other two phone lines on hold until you're

done. That way other people calling for the tickets will get a busy signal and you won't have to constantly pick up the phone to tell them they didn't win. If another incoming call is important, they will call back.

5) Since things can get kind of hectic sometimes while you're doing a giveaway, it helps to play a long song (around 6 minutes or so) after you go off the air to allow plenty of time to answer phones and write down names.

6) Even though the giveaway is written down for a specific time in the programming logs, use this time as only a rough estimate. The important thing is to do the giveaway at an appropriate time in your show (for example, DON'T DO A HARDCORE SHOW GIVEAWAY AFTER A JAZZ SET).

7) For a giveaway at the Spectrum Movie Theatre, it is usually a good idea to read a short description of the movie that the tickets are for. Most movies that play there are lesser known or foreign films of which our listeners may have little knowledge.

8) Don't preannounce a ticket giveaway because the FCC considers that a commercial. (i.e. don't say "Coming up in a half an hour I'll have a pair of tickets to give away for...")

9) No friends or anyone remotely involved in the station can win tickets from the station. through frequently passes are available (except where there is a conflict of interest), see the promotions director.

4.7 FCC REGULATIONS AND REQUIREMENTS

The FCC has numerous regulations concerning announcements of a commercial nature, foreign language programming, obscenity, and the broadcast of telephone conversations. Since you are likely to encounter many, if not all, of these situations in your career at WRPI, general information on each topic is presented in the following sections. For further information, you are encouraged to read The Public Radio Legal Handbook published by the National Federation of Community Broadcasters as much of the following information was obtained from there.

4.8 COMMERCIALS AND ILLEGAL ANNOUNCEMENTS

Rather than detailing all of the FCC regulations on this matter, major points will be emphasized and a few examples will be furnished. The reader is encouraged to consult the Public Radio Legal Handbook for more information. Congress has specifically prohibited:

"any message or program which is broadcast...in exchange for any remuneration and which is intended:

- 1) To promote any service, facility or product offered by any person who is engaged in such offering for profit.
- 2) To express the views of any person with respect to any matter of public importance or interest; or
- 3) To support or oppose any candidate for political office." (Section 399B of the Communications Act of 1934 as amended.)

In summary, this means that a station may not take consideration (money free tickets, record albums, etc.) from a for-profit entity in exchange for broadcast of an announcement that promotes the goods, services or activities of that entity. This rule holds whether consideration has actually been received or has

only been promised. WRPI may however, take consideration from a non-profit entity in exchange for a promotional announcement. No announcer should ever make any promotional announcement without first making sure it has been cleared with the Program Director.

4.9 DONOR ANNOUNCEMENTS

WRPI may have specific programs underwritten by for-profit entities in exchange for a donor announcement that may include the following information:

- 1) Name
- 2) Location information
- 3) Audio logograms or slogans that identify and do not promote
- 4) Value-neutral descriptions of a product line or service
- 5) Brand and trade names and product or service listings that do not include qualitative or comparative language.

Donor announcements may not include the following information:

- 1) Price
- 2) A call to action ("Buy now and save". "Call this number now!". etc.)
- 3) Inducements to buy
- 4) Qualitative or Comparative language

Donor announcements are presently used to partially fund RPI hockey broadcasts. No announcer should ever take personal consideration in exchange for a donor announcement. All donor announcements should be cleared for content by the Program Director before airing.

The following examples are provided in order to give you an idea as to the application of the above rules.

1) May you mention a band's appearance at a local club in the context of your show? FCC policy dictates that no special consideration should be given to any particular announcement if remuneration is being received. Since we often receive free tickets to concerts at area clubs, all announcements are limited to "calendars" (After Dark, WGOH. etc.) to avoid the special consideration issue. An announcer is permitted to announce once per show the fact that the band is playing at a particular club provided that the announcement comes immediately before or after recorded material by the band in question. The announcement should be factual in nature only and should not encourage attendance to the show "You should go see this band". "This will be a good show. I suggest you go see it". or other similar announcements are illegal - DON'T SAY THEM!!!

2) May you pre-announce a ticket giveaway? Announcing "I have a pair of tickets to see Gang Green at the QE2 to give away in half an hour" is considered special consideration by the FCC, so don't do it. You may, however, announce the fact that you have a "ticket giveaway", just avoid specifics.

3) You have released your own record and the station is given a copy. May you play and promote the record on your airshift? Since you presumably are receiving profits from sales of the album, promotion by you or any other DJ would be illegal. Your playing of the record would not be illegal but could be seen as a conflict of interest. Mark Lo (ex-Program Director and WRPI DJ) released his own album (Expando Brain on Vacant Lot Records) and played it safe by not playing the record on his own show and also not encouraging other announcers to play it.

4) You are on a late night airshift and are very hungry. A pizza place agrees to deliver a pizza to you in exchange for an announcement on the air. When the pizza arrives, you go on the air and describe how quickly the pizza was delivered and how hot it is. Is this legal? No, I'm afraid it isn't. By describing the quickness of delivery and temperature of the pizza, you promoted the product on the air in exchange for the free pizza and that is illegal. Even if you did a non-descript donor announcement for the pizza place, it still

would be grounds for announce declearance because you received personal consideration and because you did not clear the announcement in advance with the Program Director. (This exact incident actually happened on WRPI.)

Since violation of the FCC regulations can result in a considerable fine (approximately \$10,000), any announcer who knowingly violates them will be announce decleared for an unspecified amount of time. However, a little common sense should keep you from ever having to worry about that happening.

4.10 OBSCENITY

The following material was arrived at from the Federal Register / Vol 52 No. 86 Tuesday, May 5, 1987 Rules and Regulations.

Violation of the Indecent Language ruling subjects the offending licensees to the full range of sanctions available to the FCC.

The new FCC policy regarding Indecency and Obscenity is summarized as follows:

Indecent Language :- Language or material that depicts or describes, in terms patently offensive as measured by contemporary community standards (ie. FCC whimsy) for the broadcast medium sexual or excretory activities or organs.

Broadcast of obscene material is prohibited at all times.

Obscene Language :- An average person, applying contemporary community standards, must find that the material, as a whole, appeals to the prurient interest AND the material must depict or describe, in a patently offensive way sexual conduct specifically defined by the applicable state law AND the material, taken as a whole, must lack serious literary, artistic, political

of scientific value. See Miller v. California, 413 US 15 (1973).

The FCC has ruled that to dwell on sexual and excretory matters in a pandering and titillating fashion is patently offensive as measured by contemporary community standards.

Current WRPI Policy:

According to WRPI station policy, no material considered obscene by contemporary community standards shall be broadcast between the hours of 5 AM and 11 PM. Between the hours of 11 PM and 5 AM material considered obscene may be broadcast but only if deemed to have significant artistic merit. In addition, no announcer may ever utter an obscenity on the air. (Obscenity may be defined as, but is not limited to, the words fuck, shit, cocksucker, cunt, tit and God damn.) The FCC has the power to punish anybody uttering an obscenity on air with a fine of as much as \$10,000 and/or two years imprisonment, or both.

While FCC rules on obscenity are very broad and open to a wide variety of interpretation, it is best to play it safe and avoid a confrontation with this regulatory body as FCC/WRPI relations are at the moment excellent.

4.11 BROADCAST OF TELEPHONE CONVERSATIONS

No announcer should broadcast a telephone conversation without the prior authorization of the Program Director, an exception being pre-arranged call-in shows.

Before a telephone conversation may be broadcast on the air (whether live or pre-recorded), all parties involved must be notified of the intent to broadcast the call. The FCC has ruled that a telephone conversation begins as soon as the party answers the phone, thus someone cannot be called and have consent arranged while they speak on the air. If you have seen a radio or TV show where this is not the case, it is because on-air consent has been pre-arranged. Exceptions to the above rule occur if:

- 1) The party is associated with the station and is aware or may be presumed to be aware of the likelihood of broadcast.
- 2) The other party originates the call and it is obvious that it is in conjunction with a program in which the station customarily broadcasts telephone conversations (i.e. a call-in show).

4.12 FOREIGN LANGUAGE PROGRAMMING

Any broadcast of a foreign language on WRPI must be followed immediately by the broadcast of the English translation, an exception being the name of a group or artist in a foreign language. This is required to avoid having to pay unnecessary off-air translation, paperwork and filing costs that would otherwise be required by the FCC. Since failure to adhere to the above rule can result in a hefty fine, any violators will be immediately announce declared.

4.13 THE 10 PROGRAMMING COMMANDMENTS

- 1) Say "WRPI.Troy" within 5 minutes of the top of each hour, as well as any time you speak on the air, which should not be more than once every twenty minutes.
- 2) Do not repeat material in adjacent shows. This means not playing the same artist or song if it was played in the show before you.
- 3) Air all PSA and SP spots as called for in the programming logs. Do not play or read an SP or PSA aired within the previous six hours.
- 4) Monitor yourself, especially during transitions. Use headphones, watch levels, and listen to balances between sources.
- 5) Do not use jargon (PSA, ID, segue, etc.) or "inside" references that the listeners cannot understand: i.e., never say anything irrelevant to the continuous flow of the program or discuss your personal bullshit on the air.
- 6) Keep play of requests within reason and avoid dedications or messages to friends. Do not make habitual judgements about your own life and tastes. Remember that WRPI continues long after your air time is over.
- 7) Do not demean the station, its members, or its program content on the air. Support WRPI as far as the listenership is aware, bringing any contrary opinions or issues before the Program Director off air. Do not discuss format on the air.
- 8) Always refile your records, including the previous DJ's last one, if necessary. Remove any trash that has accumulated during your show.
- 9) Always plug the next program/DJ, and others where possible. Facilitate transitions between shows by asking the next DJ how their show will begin so you can work your way into an appropriate segue.

10) Whenever possible, convey the feeling that something special is happening. Act involved, as if you had thousands of listeners. Make the equipment last so WRPI will

5 RECORD CARE

WRPI has many assets. The most important asset is the people. Second most important asset is the record collection. Caring for records means caring for air sound and is tantamount to caring for WRPI.

5 1 RECORD HANDLING

When handling records, you should never touch the grooves with your fingers. Always handle records by the edges only as oil on your fingers can accumulate on records, attracting dust that will increase surface noise. Always put it back in its sleeve when your done playing it. Before playing it, use the disc washer. File albums so that the open side of the album is pointing to the side, not down.

5.2 CLEANING RECORDS

It is important to take good care of the records the station owns. This means cleaning every record before you play it to get all the surface dirt off the record. This is accomplished with the Discwasher D-4 record cleaning system. Since most of you have used a discwasher before, its use will not be detailed here. Instructions can be obtained from your engineer or the instruction sheet on the control room window. The important things to remember when using a Discwasher is that the fluid should not be applied too heavily. 2 or 3 drops is all you need to clean a record as any more will result in too much fluid staying on the record surface after cleaning, resulting in an increase in surface noise.

5.3 THE RECORD CLEANING MACHINE

Extremely dirty records can be cleaned using the VPI record cleaning machine. To use this machine, follow the step by step instructions located next to the machine in Studio A. Note that the fluid used with the VPI machine is not Discwasher fluid. It is an alcohol based fluid that will destroy a record if used with a Discwasher pad. (Alcohol will destroy vinyl on long term contact. i.e. several minutes. The reason it can be used with the VPI machine is that it is vacuumed off within seconds of its application.)

5.4 CUEING RECORDS

Another cause of record damage is inadvertent scratching of records with the stylus while cueing up cuts. This can be a problem for new announcers since the turntables WRPI uses do not have cueing levers to safely raise and lower the tonearms. An easy way to avoid damaging scratches is to follow the instructions below

- 1) Position your right thumb underneath the protruding arm on the cartridge headshell.
- 2) Lift your thumb vertically to lift the headshell off the record.
- 3) Move your right forefinger to the protruding arm and grasp it firmly between your forefinger and thumb.
- 4) Move the headshell/tonearm combination to the desired track.
- 5) Reverse procedure to lower the headshell.

Mistakes announcers usually make include grasping the headshell arm horizontally with your forefinger and thumb causing all hand jitters to be transferred directly to the record surface.

When you are done with a record, return it to its sleeve with the open part of the sleeve pointing up as it is put in the jacket. This prevents any dust from entering into the record sleeve after it is filed. After all this is done, return the record to its proper location.

5.5 PUTTING AWAY RECORDS

Albums are stored in five different places in the station: the "new bins", the "has bins", the "format bins", the review pile, and the record library. If you get an album from any one of these places, make sure you put it back there as soon as your show is finished. Leaving records lying around the station for long periods of time is an annoyance to other announcers and misfiling a record may prevent another announcer or yourself from playing it in the future.

When albums first come into the station, they are sorted by the Music Director and placed into the new bin. The sorting process consists of placing a sticker on the top left hand side of the album which has written on it the group name, the day the album is received, and a three digit "tracking" number (the tracking number is used to keep track of the number of times a new record is played and stays on the record for three months). In the bottom left hand corner of the album are placed several blank stickers which should be used to write comments about the album. If you choose to write a comment (and you are encouraged to do so), please sign your name or initials so other announcers know who wrote it. Records stay in the new bins for two months, after which they are then moved into the has bins for an additional month or more (look for a sign on the new bin signifying the date that differentiates between new bin and has bin

material). If a record gets reviewed by an announcer while it is in the "has bins". it will be moved into format. If not, it is moved into the library.

Please file your records when your done playing them. so that others may find them. If you're doing a show. pull your records shortly before air time. and file them immediately after finishing your show Do not try to take records out of the station for any reason.

6 CARTS

Carts: These tapes contain short messages- public service announcements, station promotions, station id's, and so forth. You'll find them in a rack to the right of the Gates board in control A. Carts look very much like 8-track tapes, but they have three tracks. Two of the tracks are for stereo audio, while the third track is for the cue tone, used to start and stop the cart. When you play a cart, it will automatically play through it continuous loop until it hits the cue tone. At this point it will start, ready to be played again.

7 COMPACT DISKS

7.1 HANDLING AND CARE OF COMPACT DISCS

Handling of a compact disc is more convenient and trouble-free than the LP. However, it is still essential to observe certain precautions which make more sense if the mechanical design of the compact disc is understood.

A compact disc consists of three layers. A relatively strong transparent substrate is coated with an ultrathin aluminized layer on which the information is encoded. The label (content, artist, etc.) is printed on this sensitive layer. The varnish and ink applied during the printing process are the only protection of the aluminized layer. Although the laser pickup reads from the opposite side, which is the much better protected side, a scratch on the printed side of the aluminized layer can interfere with or even prevent playback of the compact disc.

On the read side (called the scintillating surface, in the biz), a scratch or fingerprint has little or no effect. This side is largely protected by the strong substrate. The laser pickup is not easily confused by scratches and contamination because of the strong focusing of the beam. However, please don't experiment with WRPI's discs to see how badly scratched a disc can be and still play correctly!

Despite this, compact discs should be handled carefully and be kept protected from dirt just as cautiously as a conventional LP record. Cleaning of a compact disc is not necessary if it is only touched along the edges and is immediately returned to the case after being played. Should a compact disc become excessively soiled by fingerprints, dust or

dirt, it can be wiped (always in a straight line from the center to the edge) with a clean and lint-free, soft, dry cloth. No solvent or abrasive cleaner should ever be used. In practice, we have never found a disc to become unplayable from fingerprints or dirt, so cleaning should rarely be necessary.

7.2 FUN FACTS TO KNOW AND TELL ABOUT COMPACT DISCS

- The resolution of the compact disc system is 16 bits/sample at a 44.1 kHz rate. - The maximum playing time of a CD is 75 minutes. - CD's are recorded at a constant linear velocity, rather than constant angular velocity like a record. They spin at between 300 and 500 rpm while playing. - CDs play from the inside out. - A single compact disc can hold 2 gigabytes of information. That's enough for 4 copies of the Encyclopedia Britannica. - Each one of the 5 billion pits that encode the information on a compact disc is 0.4 micrometers wide by 0.1 micrometers deep by about 2 micrometers long. - The usual figure quoted for the data capacity of a human brain is 1 terabit (10^{12} bits). The volume of a brain is typically 1250 cc., yielding a density of 800 megabits/cc. The data capacity of a compact disc is 16 gigabits in a volume of 13.5 cc., yielding about 1100 megabits/cc.

7.3 HOW TO PLAY A COMPACT DISC

- Press LOAD (If the power is off, this will also turn the power on.), the drive door should open. The laser and it's servo can be seen; they should not be touched.
- Remove the disc from it's case by grasping at the top and bottom edges with your thumb and second and pressing in the center with your thumb.
- Carefully load the disc on to the spindle in the drawer with the printed side up. Press LOAD again to close the drawer. The player is now in stop mode. The drawer can also be closed by pressing PLAY/NEXT. This reads in the table of contents of the disc and starts playing the disc.
- Each time PLAY/NEXT is pressed the player cues to the next track on the disc and starts playing it. The track number is displayed on the readout along with the running time in to the current track. In addition the total number of tracks on the disc is indicated by the rightmost segment in the bar at the bottom of the display and the currently playing tracks by the leftmost.
- To randomly access the tracks on a disc, enter the track number on the numeric pad on the top left of the player and press PLAY/NEXT.
- Pressing REPEAT cues to the start of the current track and plays it again.
- Pressing STOP terminates play mode and returns to the start of the disc.
- Pressing PAUSE suspends play mode and leaves the player cued to the current point on the disc. In addition, any cueing commands will be immediately carried out, however playback will not start again until the player is un-paused by pressing PAUSE again. This feature will be used for instant starts. The player can be "hot-potted" since there is no start-up noise.

- Pressing AUTOSTOP automatically puts the player into pause mode at the end of the currently playing track. This is useful to keep from playing into the next track on the disc.

- When done playing a disc, press LOAD and the drawer will open. Remove the disc and press LOAD again to close the drawer. Since the drawer protrudes from the front of the player, the amount of time it is in the open position should be minimized so it will not accidentally be hit by the chair or dropped objects. Replace the disc in its case.

- If the player is not going to be used for a while, turn it off by pressing POWER. A red light in the lower right hand corner should come on to indicate that the player is turned off (clever Swiss engineering).

7.4 EXAMPLES

Play track 11 on a disc with an instant start-up.

Press LOAD and load the disc into the player.

Press PLAY/NEXT -- the drawer closes and playback commences.

Press PAUSE, 1, 1, PLAY/NEXT -- the player cues to track 11.

Press PAUSE -- track 11 starts playing instantly.

Audition a few tracks (say 9, 3, 4, and 13) cue the last and play it with an instant start-up.

Press LOAD and load the disc into the player.

Press PLAY/NEXT -- the drawer closed and playback commences.

Press 9. PLAY/NEXT -- track 9 is cued and played.

Press 3. PLAY/NEXT -- playback of track 9 is interrupted,

track 3 is cued and played.

Press PLAY/NEXT -- playback of track 3 is interrupted, track

4 is cued and played.

Press 1. 3. PLAY/NEXT -- playback of track 4 is interrupted,

track 13 is cued and played.

We decide on track 13.

Press PAUSE. REPEAT -- playback of track 13 is interrupted,

and track 13 cued to the beginning.

Press PAUSE -- track 13 starts playing instantly

7.5 FURTHER READING

As you have probably noticed the Revox B225 player has many other buttons on it. These are used to program it to play what is on the disc in some other order than it is recorded. The Revox B225 is probably the most versatile machine on the market and consequently one of the more complicated ones to program. If you are interested, we can provide you with a copy of the manual for the machine.

8 MICROPHONES

8 1 Using a microphone:

Have the microphone about ten inches away from you, pointing at your mouth, but off at an angle, so that you're not pointed at it. Speak in a normal tone of voice, trying to announce clearly. You should be wearing headphones, with the volume adjusted so that you speak with the appropriate volume. If they're too loud, you'll start to whisper, and you'll be too quiet. Ask your engineer for more advice about using the microphone.

MICROPHONE TECHNIQUE AND ANNOUNCE TIPS

Experienced announcers sound good on the air because they have good microphone technique. Therefore, one of the best ways to improve your own microphone technique is to listen to some of the most experienced WRPI announcers and try to emulate what makes them sound good. Also, use the guidelines below as you listen and notice how our nighttime announcers tend to follow most of them.

1) Avoid saying "before that", "and-uh", or other annoying, oft repeated words or phrases. Often, you may not be aware that you're saying these words too much, in which case listening to the aircheck tape can be of great help. The aircheck machine is located in the tech room and it makes the aircheck tapes, which are recordings of everything said over WRPI's air. Ask your engineer or someone else to help you locate your aircheck tape. An alternative method is to use the Control A tape deck as an aircheck machine. To do this, place a cassette in the cassette deck, set the proper recording levels, flip the switch labelled "N" (located on the top left of the equipment rack that contains the cassette deck) to the up position to pause the deck and flip the switch labelled "CR" to the up position. Now whenever you flip the Control A microphone into program ("p"), the tape deck will begin recording. Thus

whenever you talk on the air your voice will be recorded on the cassette. If you happen to be speaking from Announce A, flip the switch labelled "AN" to the up position instead of the "CR" switch. When done airchecking, flip all switches back to the down position. You can also make a patch from "DA9" to "CASSETTE REC L IN" and "DA10" to "CASSETTE REC R IN" on the patch bay or pick up spare chain (ask your engineer what this is) in order to record signals from the air. Listening to your aircheck on a regular basis is highly recommended.

2) Popping of p's is a problem many people have when speaking into a microphone. To avoid doing this, try licking your lips before you go on the air or apply some lip balm to keep them wet. With a little conscious effort, you shouldn't have much of a "p-popping" problem. Another condition that some people suffer from is a dry mouth. To alleviate this, drink some water or seltzer water just before you go on the air. Avoid soft drinks or other beverages that contain a lot of sugar as they will only cause a gummy feeling in your mouth. Remember also that no alcoholic beverages are allowed in the control room.

3) If you don't know how to pronounce a word, ask someone nearby to help you out or call over the P.A. for help. Foreign words can often be a problem so look for phonetic spellings on the album comment labels or tracking sticker. If there are none, ask around until you find someone who speaks the language or can make an educated guess. Never spell out a word over the air.

4) Try to know something about artists or performers that you play on your show and sound interested in what you play. Inserting an occasional comment or tidbit of information when you read back songs will give your listeners the impression that you are familiar with and interested in the music you play. You can get information about current artists by reading the music bulletin board in studio A. Older information is stored in the bio file located in the office. Suggested things to comment about include where the artist is from-past history, other performers collaborations have occurred with, what label they are on. etc.

5) Instead of trying to get a particular song on the air, look for a song that goes well with what you are presently playing or makes a good transition from one type of music to another. A good announcer will pre-listen to material and make mental notes of songs that they feel will make a good transition from one type of music to another.

6) When speaking through the microphone. keep your mouth about six inches away from the mike and don't vary the distance as you talk. Keep the microphone about 45 degrees off-axis from the direction you are speaking to avoid p-popping. Watch your levels so you are neither too loud or too soft in comparison with the recorded material you have been playing. If the microphone intimidates you and causes you to be nervous, imagine that you are just having a casual conversation with a friend. A little nervousness at first is normal. so don't let it bother you.

7) It is important to make full use of the dynamic range of an FM signal. therefore announcers should modulate their signal as much as possible while avoiding overmodulation and excessive amounts of compression. Percent modulation may be determined by looking at the peak meter on the FM modulation monitor model 734 located in the back equipment racks. Compression can be determined by looking at the compression meter on the Optimod-FM (also located in the back equipment racks). Announcers should modulate as high as possible without compressing past 3 or 4 dB or overmodulating (overmodulation is signalled by the red LED lights located on the mod monitor and above the VU meters on the Gates board. Overmodulation is defined by the FCC as six peak flashes in any one minute period). Rock will tend to have higher average modulation levels than jazz or other forms of music and music containing lots of high frequency components will be more compressed than music containing many low frequency components (average modulation levels being the same). With some practice, you will be able to optimally set levels for all recorded material that you play.

8) Try not to refer to other people who may be in the studio with you or carry on extended conversations with them while you are announcing. An occasional hello or bit of small talk is o.k.. but anything beyond that tends to sound dumb and/or unprofessional. Announcers should also avoid trying to be a comedian on the air and should definitely not editorialize.

9) Be aware of what other announcers are playing and/or overplaying. If you hear other announcers playing only one song from a new album, try to give some of the other cuts some airplay. Try to also play different songs from the new bins from week to week.

9 TELEPHONES

Be Polite Be Polite Be Polite Be Polite Be Polite Be
Polite Be Polite Be Polite Be Polite Be Polite Be
Polite Be Polite Be Polite Be Polite Be Polite Be
Polite Be Polite Be Polite

The phones at WRPI have a normal handset and set of buttons for dialing as well as a row of push-buttons across the top. The buttons are used to select which of several phone lines you want to talk on. If you want to use the 276-6248 line, push the button marked 6248 and pick up the phone.

The first three phone lines- 6248- 6249 and 6271 are set up

so that if someone calls 6248 and 6248 is busy. the call will come in on 6249, or even 6271. Thus there is no need to call 6249 or 6271, and we can tell our listeners that the phone number is 276-6248.

You should always answer these lines with something like,

"Hello, WRPI". Be prepared to take a message, and always be polite, because you are representing WRPI to the public.

The next phone line is called secret phone, because its

number is secret. This line is for station business- calls from the transmitter site and so forth. If you answer it, just say "Hello", not "Hello, WRPI!", so that people won't figure out that this is one of WRPI's numbers. Try not to use this line for outgoing calls.

The next button is labeled PA. If you talk on this line, it

will be heard all over the station. Typically it is used to tell someone that they have a call. For example, "Bob, you have a call on 48 " Be careful to hang up PA when your done, because it stops the music that normally comes out of the PA speakers.

The last useful button is labeled talk loop. If you and a

friend pick up talk loop, you can talk without bothering the rest of the station on PA. For example, you could go on PA and say- "Bob Talk loop please.", and then push talk loop. Bob would join you on talk loop, and you could have a conversation.

When you push a button, it will automatically drop the previous

call. If you want to go back to a call later, push the red HOLD button, then pick another line. For example, if someone calls for Bob, do the following:

"Is Bob there?"

"If you'll hold on, I'll page him."

"OK"

push the hold button.

push PA.

"Bob, you have a call on 6248."

You push the HOLD button to get off PA.

Bob pushes the button for 6248 and talks.

If Bob doesn't answer, push 6248 and say.

"Bob's not answering, may I take a message?"

All of the above may sound fairly silly, but it is important

to take care of phone calls. Calls from record companies and clubs that we are working with are particularly important.

The importance of taking phone messages cannot be overemphasized. WHENEVER someone calls for somebody at the station, the caller should be put on hold and the announcer should page the receiver of the call. If the line is not picked up, you should take a message containing the caller's name, phone number, time called, your name (in case there is a question concerning the message) and any other pertinent information. You should then post it immediately on

the message board, making sure that the addressee's name is showing. If you are pressed for time during your show (as we all are sometimes), ask someone nearby to help you out.

One additional note, a constant light on a phone line means it is being used, a quick blinking light means that the line is on hold and a slow blinking light (plus a ring in Control A) means that someone is calling on that line.

NAME	SELECT	APPLICATION	ACTION	RESPONSE
TONE GENERATOR	FROM ANY PHONE	Press 4 = 2	Hear Zip Tone.	
		Press 08	Hear Silence.	
		Press 01	Hear Needs Dial Tone.	
		Press 02	Hear Outdial Busy Tone.	
		Press 03	Hear Message Answer Tone.	
		Press 04	Hear Midcall Tone.	
		Press 05	Hear Busy Tone.	
		Press 06	Hear Reorder Tone.	
		Press 07	Hear Parkback Tone.	
		Press 08	Hear Call Wait Response Tone.	
		Press 09	Hear Zip Tone.	
		Press 10	Hear Zip Zip Tone.	
		Press 11	Hear Inhibit Call Wait Tone.	
		Press 12	Hear Outdial Call Wait Tone.	
		Press 13	Hear Override Warning Tone.	
		Press 14	Hear "HELP".	
		Press 15	Hear "ENTER".	
		Press 16	Hear "PRIVATE".	
		Press 17	Hear "FORWARD".	
		Press 18	Hear "MESSAGE".	
		Press 19	Hear "INVALID".	
LOCAL CALL	ALL	Place hand on to number	Call completed.	
		Indicated by		
		Communication		
		Engineer		
		in charge.		

ALL tones from old tone. On STEs, go off hook. On ITEs, with PL, proceed, go off hook. On ITEs without PL, proceed, press one-second button. On A/DIC, press OFF, and then L/CRP 1 tone.



TELEPHONE SELF-TEST INSTRUCTIONS

NAME OF TEST	APPLICATION	ACTION	RESPONSE	
CLASS OF SERVICE	ALL	Press # or 116	Hear CLASS OF SERVICE Number.	
BUTTON TEMPLATE	ATDC, ITE	Press # or 111	Hear BUTTON TEMPLATE Number.	
BUTTON LAMPS	ATDC, ITE	Press # or 112	All lamps off. Press each button 5 times. 1st Tone 2nd Tone 3rd Tone 4th Tone 5th Tone	Yellow Lamp (ITE Only) Red Lamp On On On On On On On On
		Press Keypads 1 thru 9, *, #	Hear 1-9 Tones.	
		Press any bypass control 1.	Hear ringer tone.	
		Go on-hook (ATDC - remove and insert handset).	Telephone rings.	
		Go off-hook (ATDC - remove and insert handset).	Ringing stops.	
DIRECTORY NUMBER	ALL	Press # or 113	Hear DIRECTORY NUMBER.	
PORT NUMBER	ALL	Press # or 114	Hear PORT NUMBER. Check on PORT MAP.	
DTMF PORTS	FROM STE ONLY	Press # or 5	Hear PORT NUMBER of a DTMF Generator Port. Check on Port Map. Press, in order, 1 thru 6, *, #	Hear DTMF Tones. (If ringer is heard, DTMF part is bad.)

REPEAT TEST FOR ALL DTMF PORTS LISTED ON PORT MAP.

*All tests begin from idle tone. On STEs, go off hook. On ITEs, with A, press #, go off hook. On ITEs without A, press #, go off hook. On ATDC, press OFF, then press LOOP 1 key.
300-01-12-001-00

10 STATION SECURITY

11 STATION SECURITY

WRPI has a lot of expensive equipment that should not be left lying around. If you need to leave the station, and there is nobody else there, lock up. If you don't have keys, lock as many doors as you can, and make sure that the front door is locked behind you.

Finally and most important, the station's record collection needs to be protected. WRPI gets its records as loans from the record companies. If a record gets stolen or broken, we can't afford a replacement. For this reason, you must do two things. One, always know who's in the record library and make sure the library key is always on its chain in the control room. If a stranger is in the library (or looking through the records in the studio), ask them who they are. If they are not station people, don't let them go shopping through our library. Often, people poking through the records are people interested in seeing the station, but nobody is talking to them so they're bored. In this case, you should offer to show them around. Two, if anyone tries to leave the station with records in their hand, search them. It is not sufficient to verify that some of the records they have belong to them -- you must make sure that all of the records they have belong to them. Also, don't get upset if someone you don't know (or even someone you do know) searches you. It's all done in the interest of security -- if you don't like it, don't bring your own records to the station.

We've had very few problems with security in recent years, and we hope to continue this trend. If you see anything suspicious going on, check it out. If you're in the station late at night, and no one else is around, close the front door. If you're the last one to leave the station, lock up after yourself. If you're leaving the station with some of your own albums, please have someone else check to make sure that none of the station's albums have gotten mixed

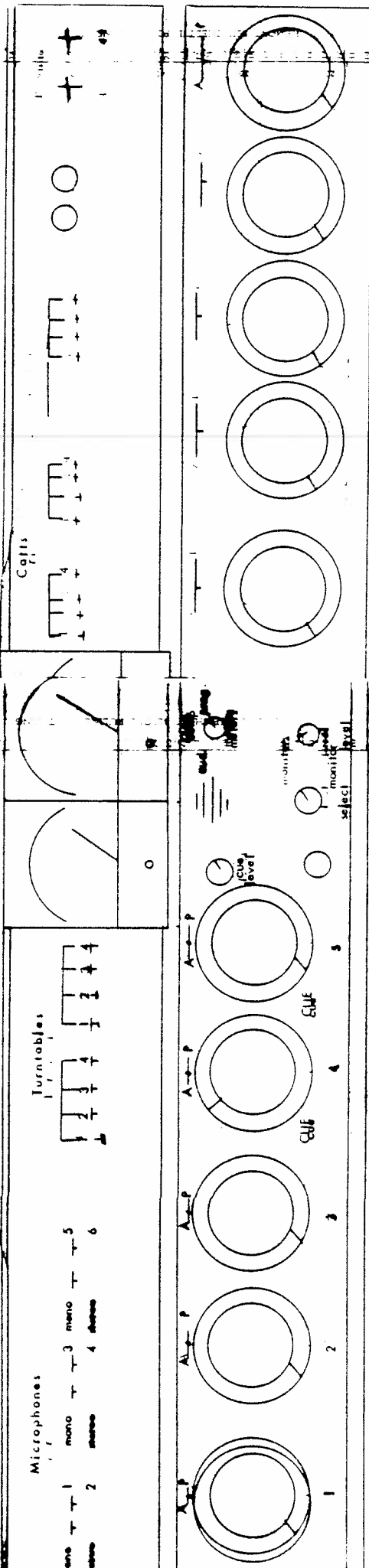
in with yours. If the fire alarm goes off, leave the station immediately, unless you're the engineer on duty. If you're the engineer, call security and ask if it's a fire drill. If it isn't, sign the station off and get out.

WRPI Gates Board in Control A

Gates Board in Control A

Left end of the board

Right end of the board



(Control room milk) (11111) (1122)

()

(Cet 2)

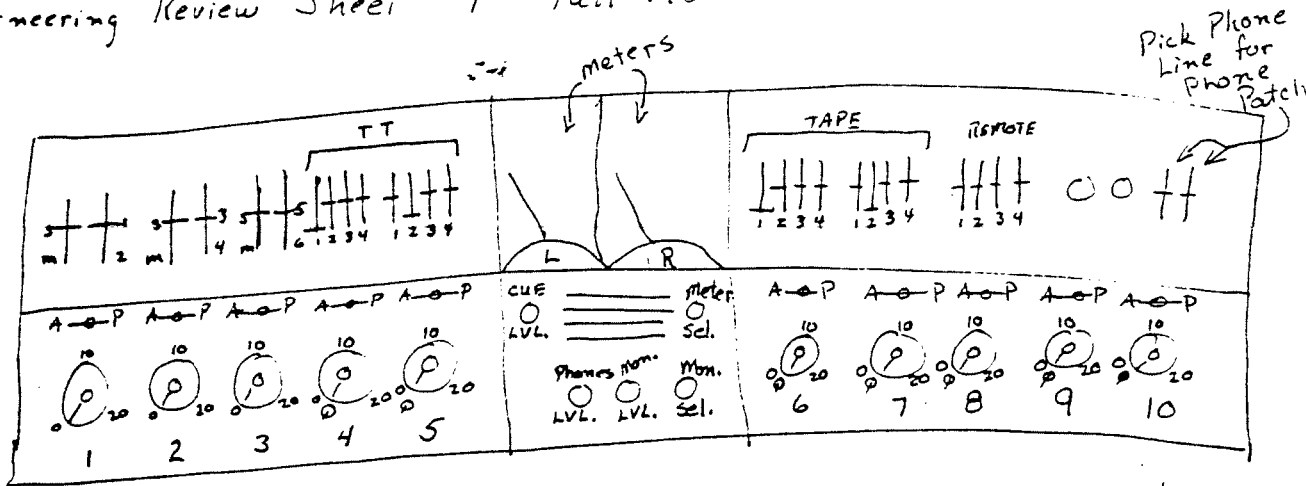
(Remote)

(Ampex 1)

(Ampex 2)

AMV/HP

Engineering Review Sheet #1 Fall 1983 → Gates (Harris) Board



INPUT CHANNEL # (POT #)	COLOUR	EXPANDER#	what is? (level)	NOTES
1	Lt. Gold	1	ST 1 Mic. (-55)	} can be Stereo or Mono (if Mono use L)
		2	AN 2 Mic. (-55)	
2	Lt. Gold	3	AN 1 Mic. (-55)	
		4	ST 2 Mic. (-55)	
3	Dk. Gold	5	CR Mic. (-55)	
		6	ST 3 Mic. (-55)	
4	Green	1	TT 1 (-20)	} Stereo
5		2	TT 2 (-20)	
		3	FM (chain) (-20)	
		4	N.C. (-20)	
6	Red	1	Cart. 1 (-20)	} Stereo
7		2	Cart. 2 (-20)	
		3	Sp. chain (-20)	
		4	Cassette (-20)	

CK4d

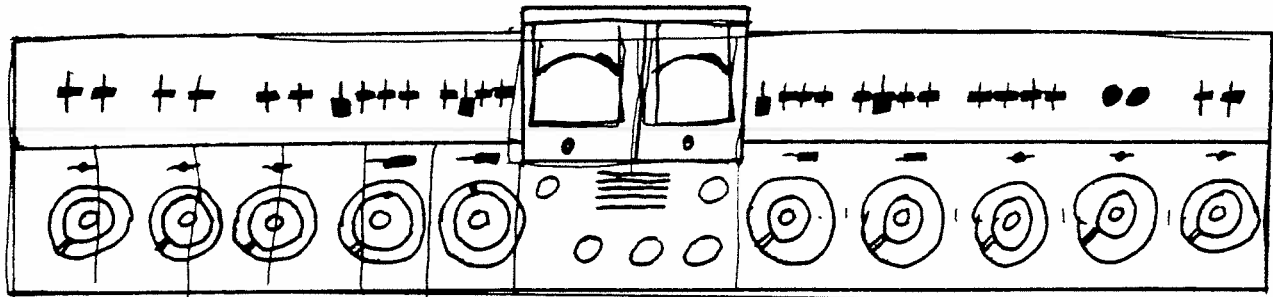
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HOW-TO-DO-IT LESSONS, #2

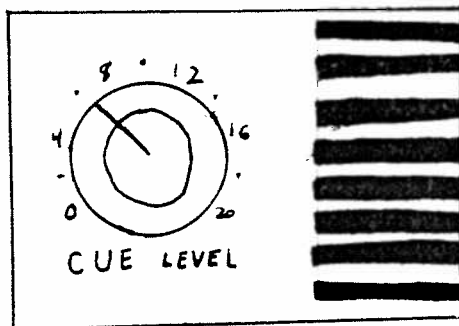
THE GATES BOARD



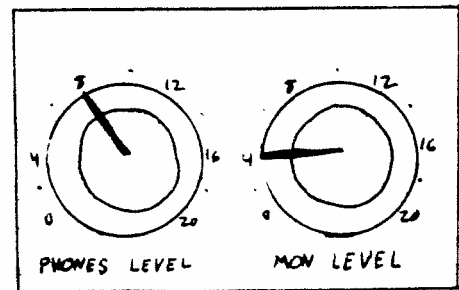
The Gates Board is a ten-input, two-output stereo mixing board. This means that ten input signals can be fed into the board and each can be directed to one of two outputs (named Audition and Program). Each input channel has a pot to control the amount of signal to be fed into its output. The switch above the pot directs the signal to the Audition or Program output of the board. If the switch is in the center position, the signal will not be mixed into either output.

Pots one through three are used for microphones. Pots four through seven are used for turntables and carts. These and other interesting controls are described in more detail later.

Use of the minor controls

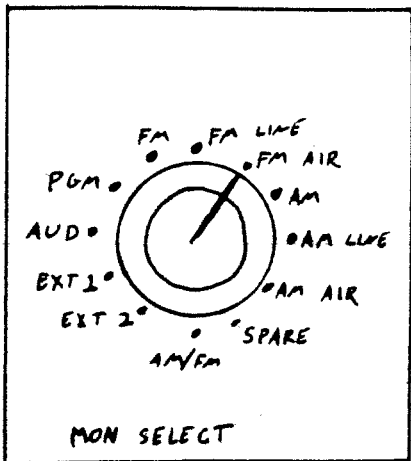


The cue speaker is a little speaker built into the center of the gates board. When you prepare a record to be played, you hear it over the cue speaker. CUE LEVEL is the volume control for this speaker.



Under the counter, can be found two headphone jacks. PHONES LEVEL controls their volume. Over your head, can be found a pair of speakers (monitors). MON LEVEL controls their volume.

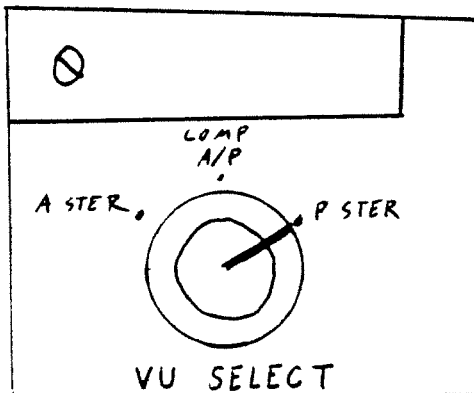
TL



The monitors and headphones have the ability to play any one of twelve channels. MON SELECT is the channel selector for this purpose.

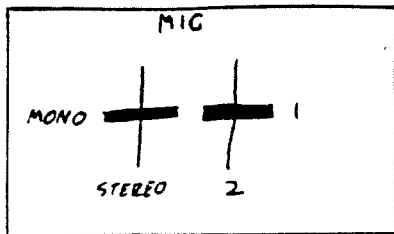
- AUD is the audition output of the board.
- PGM is the program output of the board.
- FM is the FM signal in the station.
- FM LINE is FM just before it leaves the station.
- FM AIR is FM after it is transmitted and recieved back here.
- AM is the AM signal in the station.
- AM LINE is AM just before it leaves the station.
- AM AIR is AM after it is transmitted and recieved back here.

- SPARE is the spare chain signal.
- AM/FM puts AM in one channel and FM in the other for comparison.
- EXT 1 is an extra channel, acessable via the patch-bay
- EXT 2 same as above.

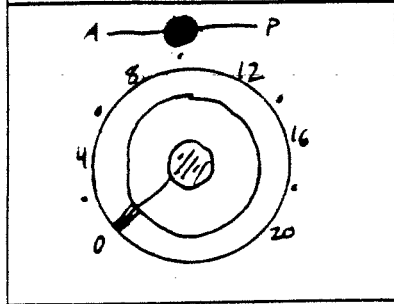


There are two meters above the cue speaker. They are used to monitor the outputs of the board. VU SELECT is used to choose which output the meters watch.

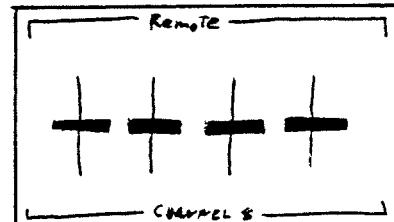
- AUD The meters watch audition.
- PGM The meters watch program.
- A/P The left meter watches audition (in mono) and the right meter watches program (in mono).



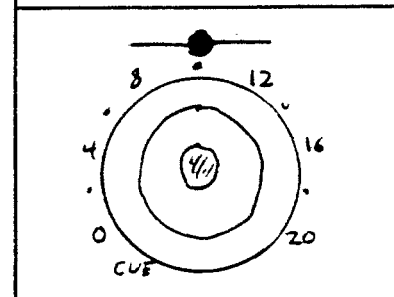
Pot #1 is normally the #1 mike in the studio. The two switches above it should be in the position shown. The middle switch should be pushed over to either A or P when you want to use this mike (depending on which channel of the board is in use). The reason this switch is left in the middle when not in use, is that when it is pushed to either side, the room becomes "Muted". "Muted" means that the monitors in the room are turned off and red lights are on.



Pot #2 is normally the #1 mike in the announce booth. The two switches above it should be in the position shown. Pots 1 and 2 have gold centers.

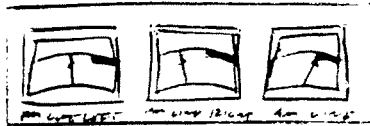


Pot #3 is normally the mike in the control room. the two switches above it should be in the position shown. All three mike pots function exactly the same. All mikes are normally mono, and have -55dbm inputs. Pot #3 has a dark gold center.

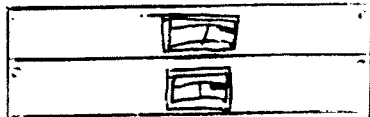


Pot #8 is the remote pot (silver center). This is the only pot on the board which is always mono. It is used for remote inputs to the station. Such inputs would include hockey games coming over phone lines, campus events coming from the remote pickup link (RPL), network news and telephone calls. The expanders are normally not selected on this pot and its A/P switch is left in the center. The remote pot is mono, has a silver disk in its center, and is a -20dbm input.

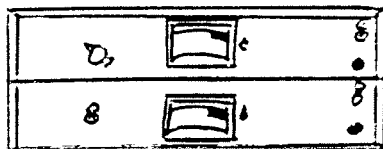
Pots 9 and 10 are for the big Ampex tape machines on stands. Pot 9 is for Ampex #1 (the left) and pot 10 is for Ampex #2 (the right). There are no expanders for these pots and the controls above them should be ignored. Both tape pots have blue disks in their centers and are +8dbm inputs.



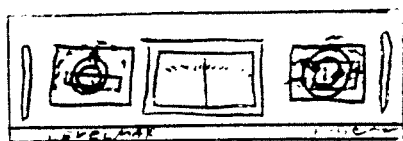
The line meters watch the FM and AM signals at the point where they leave the station to be broadcast. The only thing you do with these is to look at them.



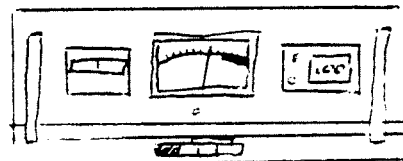
The AM Audimax is an audio compressor in the AM chain. The Volumax is a peak limiter that follows the Audimax in the AM chain. The only thing you do with these is make sure they're on.



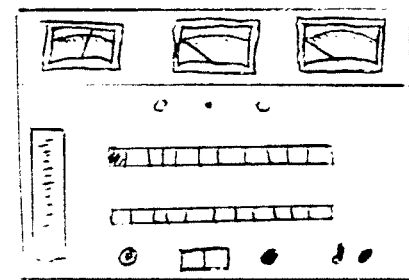
The stereo Audimax (shown with cover open) is simply a pair of interconnected audimaxes. Both halves must be turned on, and the rotary switch set to STEREO (MONO makes it into two mono audimaxes). The unlabeled switches next to the meters control how fast the device responds to changes in volume level -- up means fast and down means slow. The stereo Audimax appears in the patch bay, but otherwise is not connected to anything in particular.



The levelmaxes are remnants of bygone days. Designed and built here at WRPI, they were a simpler version of the audimaxes. In fact, we sold a pair to WROW many years ago. Now they are not used and do not work. These should always be left in BYPASS mode.



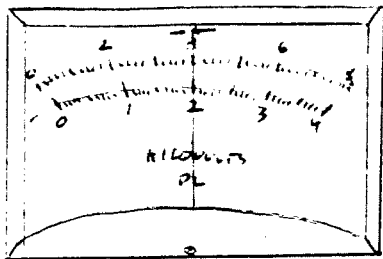
The Mod Monitor is the other half of the stereo monitor. This is the box that makes the peak flashers (the two LED's on the gates board) light up. The peak flashers light whenever our modulation exceeds the number dialed on the Mod Monitor (should be 100%). Legally, our modulation must not exceed 100% more than six times per minute on the average; if the flashers flash more than that, you should turn something down. The power should be turned off after signoff and on before signon. Modulation should be either + or -, not CAL.



The Remco is our link to the transmitter in North Greenbush. When you push a button at this end, a stepping relay at the other end hooks you up to the function you selected. The red light lights up while the stepping relay is turning and the green light lights when ready. Once you have selected a function, the appropriate meter lights up and you can read it. The raise/lower switch allows you to change whatever function you have selected. Common sense will tell you not to touch this switch while the red light is on.

To calibrate: (you should do this before taking readings). Press CAL and wait for the green light. Press RAISE and hold it. The meter will drop to about zero. Use the CALIB SET to make sure the meter is at exactly zero. Release RAISE. The meter will go up to about four. Use the slope knob (you can think of them as slope and intercept) to make use the meter says exactly four.

These are some of the



These are some of the functions the REMCO controls:

Gates Filaments. This is the warm-up power for the main tubes, and should always be on. If off, turn them on (via RAISE) and allow ten or fifteen minutes to warm up before turning the transmitter on. For this reason, sign-on engineers should always check this

position the minute they walk into the station. If the transmitter is already on, then obviously the filaments are on too. Generally there is no reason to ever turn them off.

* Plate Voltage. This is the voltage the transmitter is putting out. This is measured in kilovolts (typical value: 4200 volts). RAISE/LOWER turns the transmitter on and off in this position. For this reason, you should not leave this function selected-- as an accidental button-pushing would be a pain in the ass.

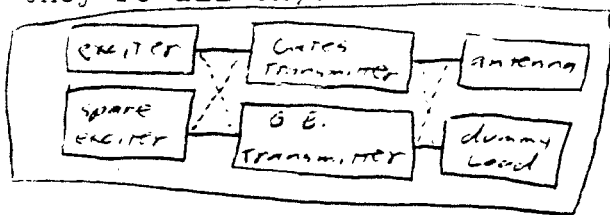
* Plate Current. This is the current the transmitter is putting out. This is measured in amps (typical value: 1.96). RAISE/LOWER adjusts the power in this position.

Power Output. This is the power output of the transmitter in percent of 5000 watts (typical value: 100). As of this writing, this function is not accurate--use the indirect method (the chart). RAISE/LOWER adjusts the power in this position.

* Obstr Lamps. These are the nine lights on the tower. 100% means that all are on, each 11% lower represents one burned out lamp. If two or more are burned out, you must call the FAA in Albany and tell them about it (unless someone else already has). Chances are that the FAA will be more confused about this than you--be gentle with them. RAISE/LOWER turns the lights on and off (except at night when they're on regardless).

* Beacon Lamps. These are the four flashing lights on the tower. 100% means that all are on, each 25% lower than that represents one burned out bulb. The meter flashes in time with the lamps, so don't get upset by this. If any bulbs are burned out at all, you must call the FAA. RAISE/LOWER controls these as well.

* Deicers. These are the five heaters for the antenna. 100% means that all are on, each 20% lower than that represents one that doesn't work. There is never any need to bother with these. RAISE/LOWER turns them on and off (except when it's cold out, when they're all on).



Antenna change. There are two exciters, two transmitters and two antennas at the tower. These may be connected in any arrangement. This remco position controls the state of the antenna changeover. 100% is normal, 0% is switched.

Never switch them while either transmitter is turned on.

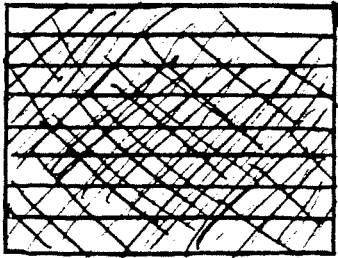
Exciter Changeover. This position of the remco controls the exciter changeover. 100% is normal, 0% is switched.

G.E. Filament Voltage. These four positions control the G.E. transmitter in the same way the Gates transmitter is controlled.

Exciter Ok. Means the main exciter is working. RAISE/LOWER does nothing in this position.



The remote meters watch the remote chains. Since there are five remote chains and only two meters, there are expander switches next to the meters -- giving the station five 'virtual' meters. These meters are available in the patch bay.

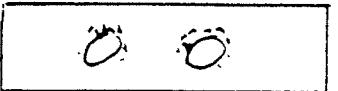


The patch bay is eight rows of jacks which can be connected in almost any combination. All the equipment in the station comes in and out of the patch bay.

This is described in more detail in the patch bay and station diagram manual.



The RCA jacks are suitable for connecting to consumer tape decks. They appear in the patchbay through transformers that match their impedences to station impedance.



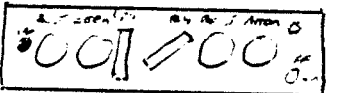
The variable equalizers appear in the patch bay. Nobody knows how to use them and they don't work anyway, so you can ignore them.



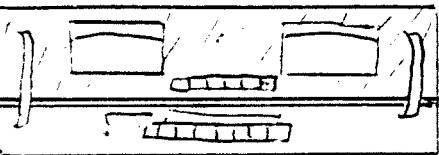
The V-pads are level controls for the remote chains (explained in more detail in the patchbay manual).



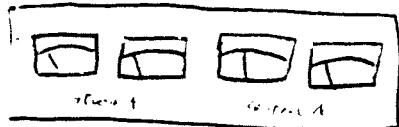
There are two 48-volt power supplies in WRPI. This panel monitors their output in voltage and current. The switch in the middle chooses which supply is monitored.



The Pultec equalizers are parts of remote chains four and five. They are not normally used on air, but in case you're interested, here is a summary of their operation: The 'IN' switch must be up for the equalizer to have any effect. With this switch down, audio goes through it without change. The equalizer must be turned on for sound to go through, even if the IN switch is down. The low frequency and the high frequency controls are independant of each other. If you're interested, the frequency charts are posted just below the pultecs; but in general you just adjust things until they sound good.



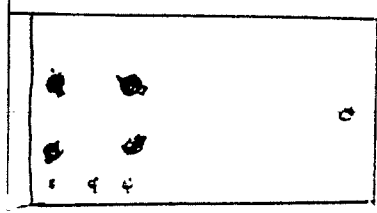
The Stereo Monitor is a part of the Mod Monitor (below). This is little more than a fancy FM radio. This is the box that feeds the FM AIR monitors. The left-hand meter watches the left channel and the right-hand meter watches whatever it's told (normally the right channel). Normally, the only thing you ever have to do with this is to make sure it's set to RIGHT and 100%-db.



This is an amplifier that drives the speakers in the studio and control room. There is never any need to fiddle with it.



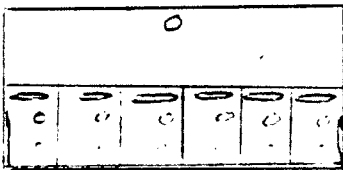
This is the Program Switcher. As you can see, it has no controls or indicators. The control panels for this are in each control room.



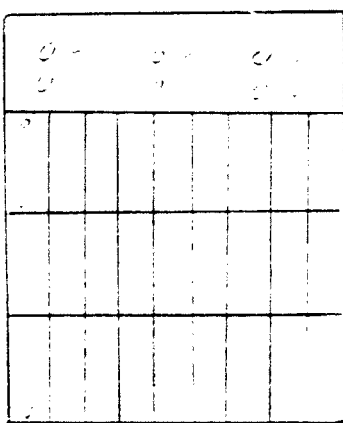
The monitor switcher is controlled by control boxes in studio, announce and control rooms. The monitor switcher also controls the muting for these three rooms. Switch #1 selects the room that is muted by mike pot #1 on the gates board. If you change

the mike feeding into pot 1 (via expanders or patch bay), then you should also change the muting with this switch. Switches 2 and 3 function similarly for pots 2 and 3. Switch #4 is an anachranism and has no current function.

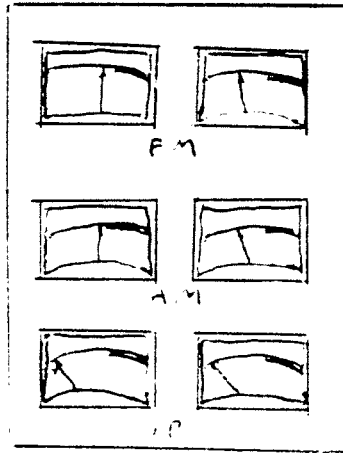
You can also mute rooms manually with the three switches at the bottom.



The line amps are twelve amplifiers that amplify various signals in the station. (for instance, LA1 and LA2 are FM chain). These never need your attention.

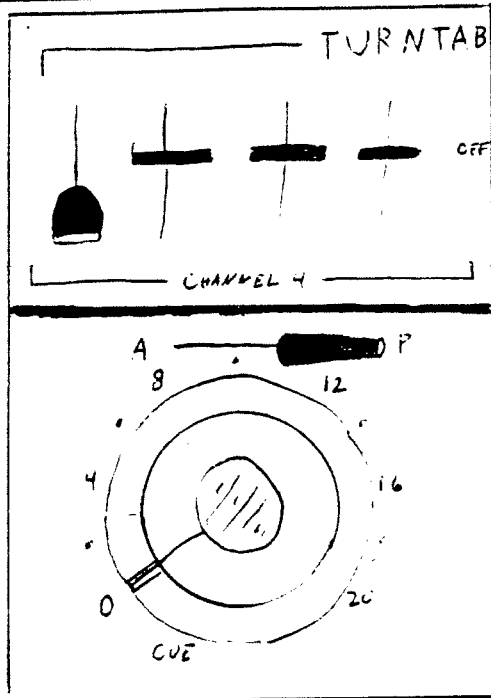


The DA's are Distribution Amps. They distribute signals around the station. The three pairs of fuses are the power supply fuses. The green LED's indicate that power is ok. Normally, these never need your attention.

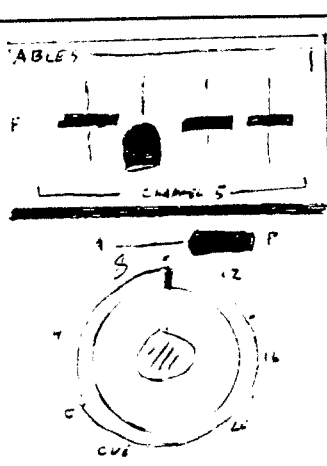


The meters in the second rack watch the levels in the three chains. They measure the levels just as they come out of the line amps. Looking at them will tell you exactly what is going down each chain.

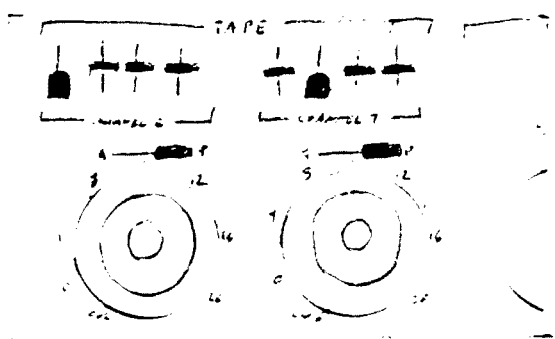
Use of the main controls (in no particular order)



Pot #4 is normally the left-hand turntable (TT1). The four switches above it are called **expanders** (more about that later) and should be in the position shown. The switch in the middle is always pushed to one side or the other to route the output of the pot down the Audition or Program channel. When the pot is turned up (typically to level 10), the turntable goes on the air. If you turn it down lower than zero, it will click into **CUE**. This means the record will be playing through the cue speaker (see above).



Pot #5 is normally the right-hand turntable (TT2). The four expanders should be in the position shown. This pot works exactly the same as pot #4. Both turntables pots are stereo, have green disks in their centers, and are -20dbm inputs.



Pot #6 is normally cart 1 (carts are the small players that play cartridges -- tapes that look like 8-track tapes). The four expanders over the pot should be as shown. Pot #7 is normally cart 2. The four expanders over it should be as shown. The cart pots are identical to the turntable pots in use. Both cart pots are stereo, have red disks in their centers, and are -20dbm inputs.

Use of the Expanders

Up to now, we have glossed over the use of the switches that appear over the turntable and cart pots. Well, here we go...

Although the Gates board only has two turntable pots, it can actually accept four turntable inputs. Any one of these inputs can be fed into either turntable pot. Normally we feed input number 1 into the lefthand pot and input number 2 into the righthand pot. In this way, we expand the capabilities of the mixing board. You should avoid putting more than one input into a pot or putting an input into more than one pot.

The turntable inputs are as follows:

- TT1 - turntable 1 (left-hand turntable).
- TT2 - turntable 2 (right-hand turntable).
- TT3 - FM chain. This is a special-purpose input which common sense should tell you not to pot up on FM.
- TT4 - nothing.

The same thing also applies to the cart pots, which also have four inputs:

- CART1 - cart 1 (top cart machine)
- CART2 - cart 2 (bottom cart machine)
- CART3 - Spare chain. Common sense should tell you not to pot this up on spare.
- CART4 - The cassette deck.

The remote pot (pot 8) also has expanders:

- REM1 - 1PT2. This is a line to Ma Bell for hockey games and other frivolities.
- REM2 - 1PT4. This is another one
- REM3 - Is the telephone.
- REM4 - Is the remote pickup link (RPL) receiver.

Microphone pots also have expanders.

Over each mike pot is a switch labeled MONO/STEREO. When in Stereo mode, one mike feeds the left channel and another feeds the right. When in Mono mode (the norm), the left mike feeds both channels and the right mike is ignored.

Each mike pot can accept one of two inputs. This gives a total of six inputs, any three of which can be in use at once. The inputs are wired in the following order:

- POT1 - mike 1 - studio #1
 mike 2 - announce #2
- POT2 - mike 3 - announce #1
 mike 4 - studio #2
- POT3 - mike 5 - control room
 mike 6 - studio #3

In this fashion, it is possible to have three studio mikes on at once. The normal settings for these expanders is 1,3,5. This allows all three rooms to be connected at once.

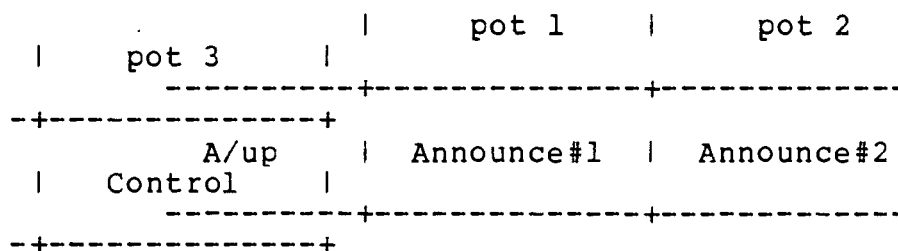
12 GATES BOARD

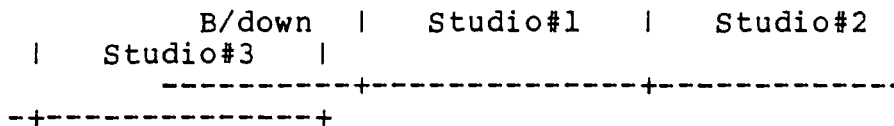
12.1 INTRODUCTION TO THE GATES BOARD

The Gates board is a ten-input two-output stereo mixing board. This means that ten input signals can be fed into the board, and that each of them can be fed to one of two outputs, called Program and Audition. Each input channel has a potentiometer, "pot" for short (actually they are stepped). This works just like a normal volume control, with the loudest volume when the pot is turned all the way clockwise.

The switches above each pot are called the "keyswitches". They control where the signal from that pot goes. If the switch points left, the signal will go to Audition. If it points right, then the signal will go to Program. If the switch is in the center, the signal won't go anywhere. The action of engaging the keyswitch into Program or Audition is the verb "to key" (ie. "Please key the mic pot").

The first 3 channels on the Gates board are for microphones (color coded gold). Above each mic pot there are two expanders. The left one selects mono or stereo. It should always be set to mono except when using a stereo mic pair. If the selector is set to stereo when you are using a single mic, the right channel will be dead. The right expander switch selects which microphone is to be used as follows





Usually all the microphone expander switches are left in the up position, so the first two pots are the announce booth microphones, and the third is the control room mic, and all 3 of them are in mono.

The keyswitch, besides directing the audio down Audition or Program, also mutes the room (See muting) the microphone is in when the the keyswitch is put in the A or P position. Therefore, the keyswitches on the mic pots should always be left in the center position when not in use.

Also note that the mic pots do not have a cue position.

The next two channels (4 & 5) on the Gates Board are color coded green. They are the turntable pots. There are four expanders above each pot. The expanders select which input goes to the pot. The first expander connects to turntable #1, the second to turntable #2, and the third and fourth are not normally used. Important note Only one expander should be selected (in the down position) at any time. Also the same expander should not be selected on different pots at the same time. (ie. Don't have turntable #1 & #2 selected on channel 4 at the same time, or don't have turntable #1 selected on channel 4 and 5 at the same time).

Normally turntable #1 (expander #1) is selected on channel 4, and turntable #2

Channels 6 & 7 are color coded red, and are called the cart pots, although they are also used for the CD and cassette players. The four expander switches above each pot operate the same as the turntable pot expanders. They are assigned as follows 1- Cart #1

- 2- Cart #2
- 3- Compact Disc (CD)
- 4- Cassette

12-2 CARTS

Normally cart #1 (exp #1) is selected on channel 6, and cart #2 (exp #2) on channel 7. Also note that all the equipment associated with the cart pots is in the short rack on the left side of the Gates board.

12.3 REMOTE POTS

The remote pot, channel 8 (the silver one) is a mono channel. It also has a set of four expanders above it. They are assigned as follows

- 1- Remote Line #1
- 2- Remote Line #2
- 3- Phone Patch
- 4- Remote Pickup Link (RPL)

This channel is used for coverage of sports games (home & away), phone in shows, and other special events.

12 4 AMPEX REEL-TO-REEL

The last two channels on the Gates board (color coded blue) are the Ampex (plural of Ampex) pots. The expanders above these two pots have nothing to do with their operation. It is very simple channel 9 is connected to Ampex #1, and channel 10 to Ampex #2. The ampex machines are used to record and play 1/4" reel-to-reel tapes.

12.5 VU METERS

The VU meters above the control section can monitor the Program or Audition outputs of the board. The center position of the VU select switch will put Audition on the left meter, with Program on the right meter.

12.6 MONITORS

At the center of the board there are a number of controls for the monitor system. Mon level controls the volume of the speakers in the control room. Phones level controls the headphone volume. The speakers are automatically turned off when you go on the air, so you'll be using the headphones. Mon Select controls what you hear on the monitors. Some of the options are AUD: audition output.

PGM: program output.

FM: the FM signal within the station.

FM Line: FM just before it leaves the station.

FM Air: FM received back from the transmitter.

The other options won't be very useful to you at the moment. You should normally monitor FM air, to make sure that the transmitter is working properly.

There are similar controls in studio A and announce A for the monitors in those rooms.

12.7 EXPANDERS

Above the turn table pots, you will find four switches. These select which turntable (up to four possible) will actually go to the pot. Normally, the first expander on pot 4 and the second expander on pot 5 are pulled down to select turntable 1 for pot 4 and turntable 2 for pot 5. The cart pots have a similar set of expanders, set in the same way. so that cart machine 1 is attached to pot 6 and machine 2 is attached to pot 7.

The microphone pots have expander like switches, but these are normally left up. Similarly, the expanders on pot 7 should be left alone. The turntable pots have no expanders.

12.8 REMOTE STARTS

There are four buttons near the right side of the board. They are labeled TT1, TT2, Cart 1, and Cart 2. These buttons are used to *start* a turntable or cart machine. They do not stop the turntable or cart machine though.

12.9 CUE

Each of the pots has a special position called cue. When the pot is in cue, the signal will come out of the cue speaker on the board instead of going to audition or program. There is a volume control for the cue speaker beside the cue speaker. Don't turn this past 10. or cue will go out on the air. To prepare a record to go on air, do the following.

12.10 PLAYING A RECORD

put the turntable pot in cue.
put the record on the turntable.
start the turntable.
disc wash the record.
put the needle down before the cut you want to play
listen until you hear the start of the cut.
stop the turntable.
spin the turntable back half a turn from the start of the cut.

You're now ready to start the record.

Normally, only one of the pots on the board will be turned up. This means that only one source- record, cart, or microphone, is being fed to the output. As a record ends, you start the other turntable. pot it up, then pot the first turntable down. This process is a "segue-way", and it can be difficult to do a good one. If you're in doubt, take it easy and leave a bit of a gap between the records. This is better than messing up the segue-way and putting one above the other. To start a cart, pot it up and press the start button when you're ready instead of potting it up after the cart starts.

13 LOGS

You must keep logs up to date and filled in correctly. Remember to sign in and out. Announcers do not keep engineering logs but engineers may keep both program logs and engineering logs.

The station keeps three sets of logs: a Program Log, an Operating Log and a Maintenance Log. You, the Operator on Duty, need only concern yourself with the first two. If you are cleared in any sense of the word, you already know (supposedly) how to keep logs, but here are some reminders anyway

13.1 TIMES.

All our logs are kept in 24-hour ("military") time. This is so there won't be any confusion as to what time was meant. It is written in the form of four digits, with no colons or anything in the middle. Thus nine in the morning is 0900, noon is 1200, quarter past five in the afternoon is 1715. A common source of confusion is what to do about midnight, as it can be either 2400 or 0000, depending on the circumstances. The only thing that happens right at the stroke of midnight is that the day changes.

For example, if you are doing a show from 11 p.m. Tuesday night to 2 a.m. Wednesday morning, the changing of logs would go like this: In Tuesday's Program Log, you would log the current program OFF at 2400, and sign out at 2400. In Tuesday's Operating Log, just sign out at 2400. don't log the carrier or the STL off.

Put Tuesday's logs in the appropriate places in the brown binder, and get new log forms from other, equally appropriate places in the brown binder. Fill in the date (18 July 1987) the day and whether we are on EST or EDST (cross out the one we're not using with a single line) on both sheets. Sign into both logs at 0000. In the Program Log, log the same program back ON at 0000. Sometime soon, check the tower lights and log that fact in the Operating Log.

13.2 ABBREVIATIONS

The only abbreviations we are allowed to use are the ones listed in the front of the brown binder. When in doubt, write it out fully.

13.3 SIGNING INTO AND OUT OF THE LOGS.

The only people who may do so are WRPI cleared (or provisionally cleared) engineers. There is a list of such people posted about the station. The person signed into the logs is legally responsible for the proper operation of WRPI and is the only person who may write in the logs.

To sign in (or out), sign your name in the appropriate column and put the time (in 24-hour format) in the proper column thang.

If there is no more room for you to put your name down, there are two things you could do: 1- start a new page. 2- on the first blank line in the log (this usually happens in the operating log) put down the time and "OPERATOR ON: (your signature)". You would also sign out this way

13.4 STARTING A NEW PAGE.

If you run out of room (or you are the first person signed in that day), you must start a new page of the logs.

The first thing you do is put your initials in the OPERATOR OFF column (where you would normally have signed out) on the log sheet. Next, get a blank page from the (by now familiar) brown book. On this new sheet, write down the date, the page number, and whether we are on EST or EDST. Put your initials in the OPERATOR ON column. If this is the program log, also put "PROGRESSIVE SOUNDS CONT " (or whatever you are calling your show) as the first entry in the log.

13.5 BEGINNER'S GUIDE TO THE PROGRAM LOGS

DATE, PAGE, EST/EDST, OPERATOR ON, AND OPERATOR OFF entries

You already know what these are.

13.6 SCHEDULED ENTRY

The pre-programmed logs contain scheduled times for PSA's, Sp's giveaways etcc. With the exception of givaways, please try to do all events at the scheduled time. Giveaways should be done at a time which fits in with the music you are playing.

13.7 ACTUAL ON ENTRY

In this column, you write down the time that anything starts, be it PSA, station promo, show or whatever.

13.8 ACTUAL OFF ENTRY

Any program that lasts more than one minute must have its off time logged here. If a show lasts a very long time (especially if it is continued onto the next page) you may also log it off by writing something like "PROGRESSIVE SOUNDS OFF" in the logs and writing down only the off time.

13.9 PROGRAM ENTRY

This is where you put the name of the program down. A typical entry might be "PROGRESSIVE FRUITBATS" or "SP/ID 0039L". Note that PSA's and SP's are logged by their number, not by their subject.

It is a good idea to log everything down that might be of interest to the FCC or to the station management. This includes interviews, specials etc. Don't be afraid to use more than one line to explain what the show is.

If any of this confuses you, you should take some time and look through some old logs to see how other people do it.

13.10 TYPE

This is where you put down the abbreviation for the type of the show. The most commonly used abbreviations are PSA (public service announcement), SP (station promo), ID (station identification), LE (light entertainment), and NS (news). The brown book has a list of all the abbreviations we use. For example "A" is for Arts.

13.11 SOURCE

This is where you write down the source of the programming. This can be either 'R' (recorded), 'L' (local) or 'NET' (network).

The source of any PSA or SP can be found as the letter appended to its number.

13.12 BEGINNER'S GUIDE TO THE OPERATING LOGS

13.13 DATE. PAGE. EST/EDST. OPERATOR ON.
OPERATOR OFF

You know what these are.

13.14 KNM45

If you didn't already know. WRPI has a microwave link (called the STL) to the main transmitter in North Greenbush. and this microwave link is itself a transmitter that requires some attention. Whenever you turn the STL on or off, you log that time down in this column (don't confuse ON times with OFF times). Every time you turn the microwave link on or off, you must also give an id for it. This id is "KNM-45. Troy". You also must give an STL id every hour on the hour if it's on and the main carrier is off. You don't need to log the STL id when you turn it on or off because the FCC assumes you did this when you turned it on or off.

You do, however, need to log an id done on the hour (see below).

13 15 CARRIER

Whenever you turn the main transmitter on or off, you log that time down in this column (again, don't confuse ON times with OFF times). You do need to log the main transmitter ID, but you do it in the program logs.

13.16 PILOT FREQUENCY

Don't bother with this. the chief engineer takes care of it.

13.17 TOWER LIGHTS

The first engineer of the day must always check the tower lights. They can be checked with positions 5 and 6 on the REMCO.

When a meter reads 100%, all lights are ok. If not, the formula for figuring out how many are out is as follows: For the obstruction lamps, each burned out bulb lowers the reading by 11%. For the beacon lamps, each burned out bulb lowers the reading by 25%. Warning, the order that the entries for obstruction lamps and beacon lamps are written down in the logs is backwards from the way they appear on the remco; don't get confused.

If two or more obstruction lamps or beacon lamps are burned out, you must also call FAA Flight Services to tell them so (you wouldn't want any airplanes hitting the tower now, would you?). The FAA will be at least as confused by all this as you are, so be kind to them.

Note: before calling the FAA, check yesterday's logs to see if the bulbs were burned out then too. If so, chances are that the FAA already knows, and you would be wasting your time to call them as well as adding to their confusion.

13.18 REMOTE CONTROL CALIBRATION.

About once a week, somebody will call you on the phone from the transmitter in North Greenbush and want to calibrate the remco. Don't panic, they are very kind and patient and have lots of experience doing this and I promise that they'll be kind to you. They will tell you exactly what to do and what to write in the logs.

13 19 EBS TESTS

One of the things in the station you must be familiar with is the EBS system. I will get very upset at people who don't know how it works.

13.20 WROW

Someday, when you least expect it, the EBS receiver will start to squawk and startle you and make you soil yourself. If this happens, one of three things could be the cause.

1. somebody could be playing a trick on you (look for somebody in the room giggling). If this is the case, hit the left-hand RESET switch and the right-hand RESET switch on the EBS receiver and forget the whole incident.

2. WROW (or whoever we are monitoring) is doing an EBS test. If this is the case, they will say so on the air as soon as the tones stop. In this case, write down the time and your initials in this space. Then hit the right-hand RESET switch and go back to work. You don't have to announce anything on the air.

If we are monitoring some station other than WROW, you should also put a single line through the letters 'WROW' and write in the station we are monitoring.

3. The world is ending. If this is the case, don't panic (at least not yet). If someone more experienced than you is available, turn the station over to that person. If not, you're in charge.

There is a yellow book on the back wall of the control room that will tell you what to do. You should be familiar with its contents. Most of all, don't panic -- we want an orderly nuclear holocaust.

Actually, it is not uncommon for the EBS system to be used from time to time, but these are always state or local emergencies (thunderstorm warnings etc.). This kind of emergency does not require the magic code words in the red envelope and we don't have to participate if we don't want to.

13 21 WRPI

About once a week, the station manager will come in with the EBS cart that s/he wants you to play. S/he should be able to tell you what to do, but just in case, I'll tell you here.

First, play the cart. The voice will say the same old words you're used to hearing and finish with "This is only a test". While the voice is talking, go to the EBS machine and when the voice finishes, push the COMMAND switches in opposite directions. While the tones play over the air, go back to your seat and wait for them to stop. The cart (which you left playing) will finish its message and you go on with your show. This test is logged in the appropriate fashion (time and initials) and in the program log as "EBS TEST". type O, source L.

13-22 HOW TO LOG EVENTS NOT COVERED SO FAR.

From time to time, something will happen that does not fit into the logs. (most commonly: power adjustments on the transmitter or mysterious 'dumps'). The way you log such an event is to write down the time (in whatever log you think fits best) and write out what happened. Follow this with your initials.

Some typical log entries might be:

'Plate current raised to 2.05 amps <initials>'.

'Transmitter failed, reason unknown <initials>'. When this happens, you do not need to write any times in the CARRIER OFF space.

'STL id <initials>' The only time you would ever log an STL id is if the transmitter is off for a long time (such as a dump) and you haven't bothered to turn the STL off. In this case, you would do an id ('KNM-45. Troy') every hour and log it in the operating log.

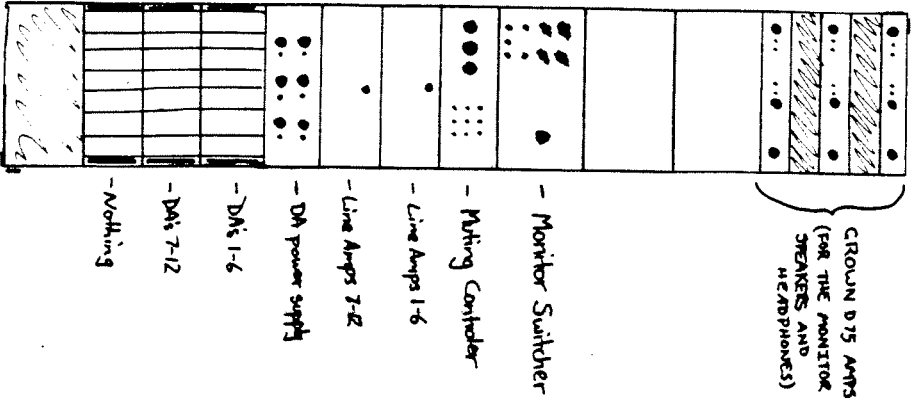
'Station invaded by armed terrorists, I am no longer responsible for what goes over the air <initials>' In this case, you would probably put this entry in both log sheets. Alternately you could sign out and invite the armed terrorists to sign in and continue with the show (of course you would first make sure that they possessed a valid FCC license). You might also explain how dangerous their guns are to them and see if they would like to go out to the stairwell and smoke some drugs while someone else signs in and plays a side of the HMS Pinafore (The port or starboard side?). If that doesn't work tell them that SUNYA has a much nicer radio station and that they will probably get a warmer reception there anyway since SUNYA is actually a university and RPI is only a technical school.

In general, normal operation of the carrier is logged in the appropriate place and exceptional conditions are logged in the column normally used for meter readings along with the time and the operators initials.

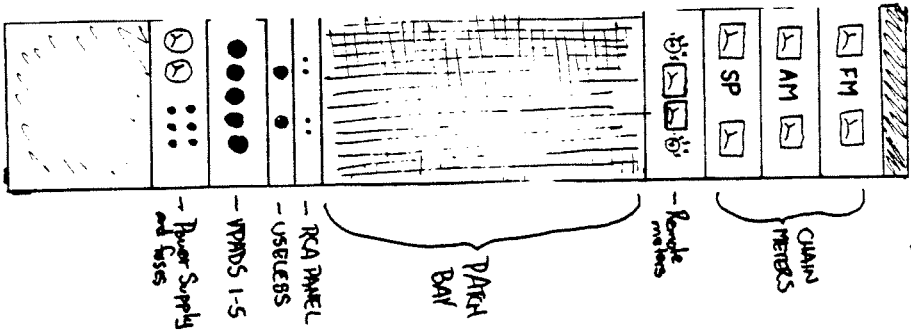
13.23 ALIENS

Occasionally UFO or other signs of extra-terrestrial life are spotted in the control room or other parts of the station (they seem to be especially attracted to the COKE machine). If this happens stay calm. Avoid eye contact. If there are no eyes avoid all contact. Try to communicate with them. Ask then if they are from the FCC (the skinny ties are a give away for this one). If they seem dangerous ask them to leave. You may have to tell them that they better move their flying saucer or it will get towed away by campus security. This sort of thing is logged in the operating log as ' ALIENS LANDED - LEFT QUIETLY <initials> . '

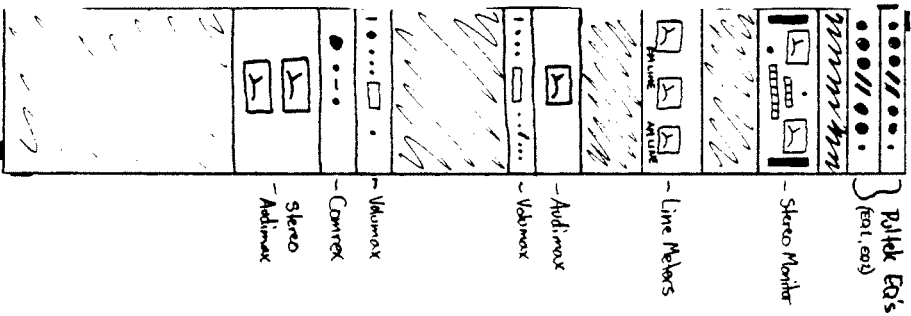
Rack 1



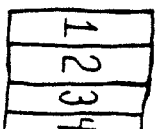
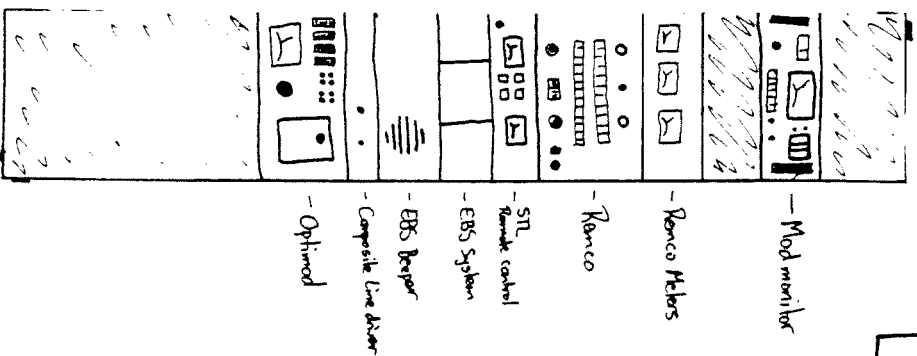
Rack 2



Rack 3

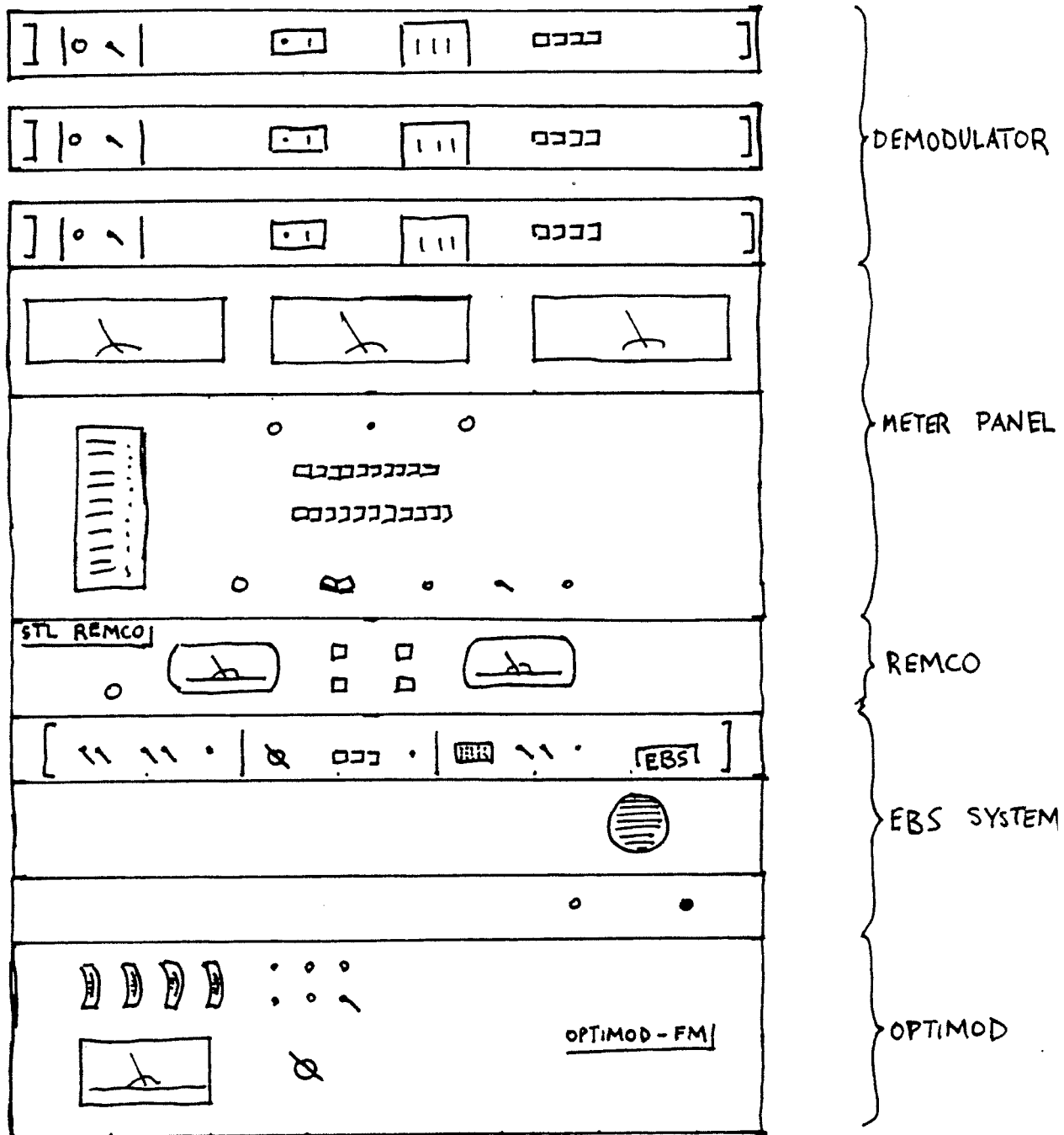


Rack 4



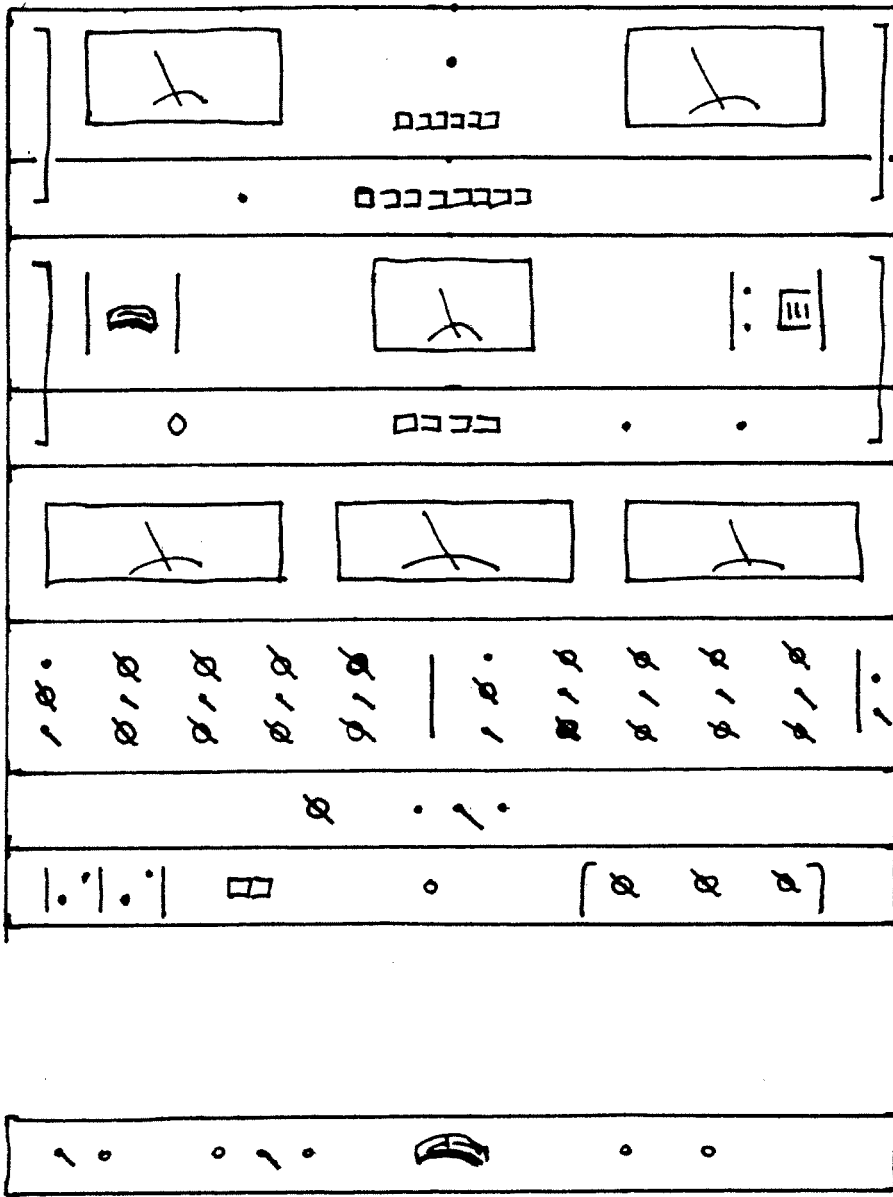
Kaigs

RACK 1



Doug: here are the diagrams. i've drawn each of them to the same scale (23 units wide) so that you can shrink them, if you choose to, and place them side by side on a wall diagram corresponding to studio A. The labels on the right are for your convenience; feel free to

RACK 2



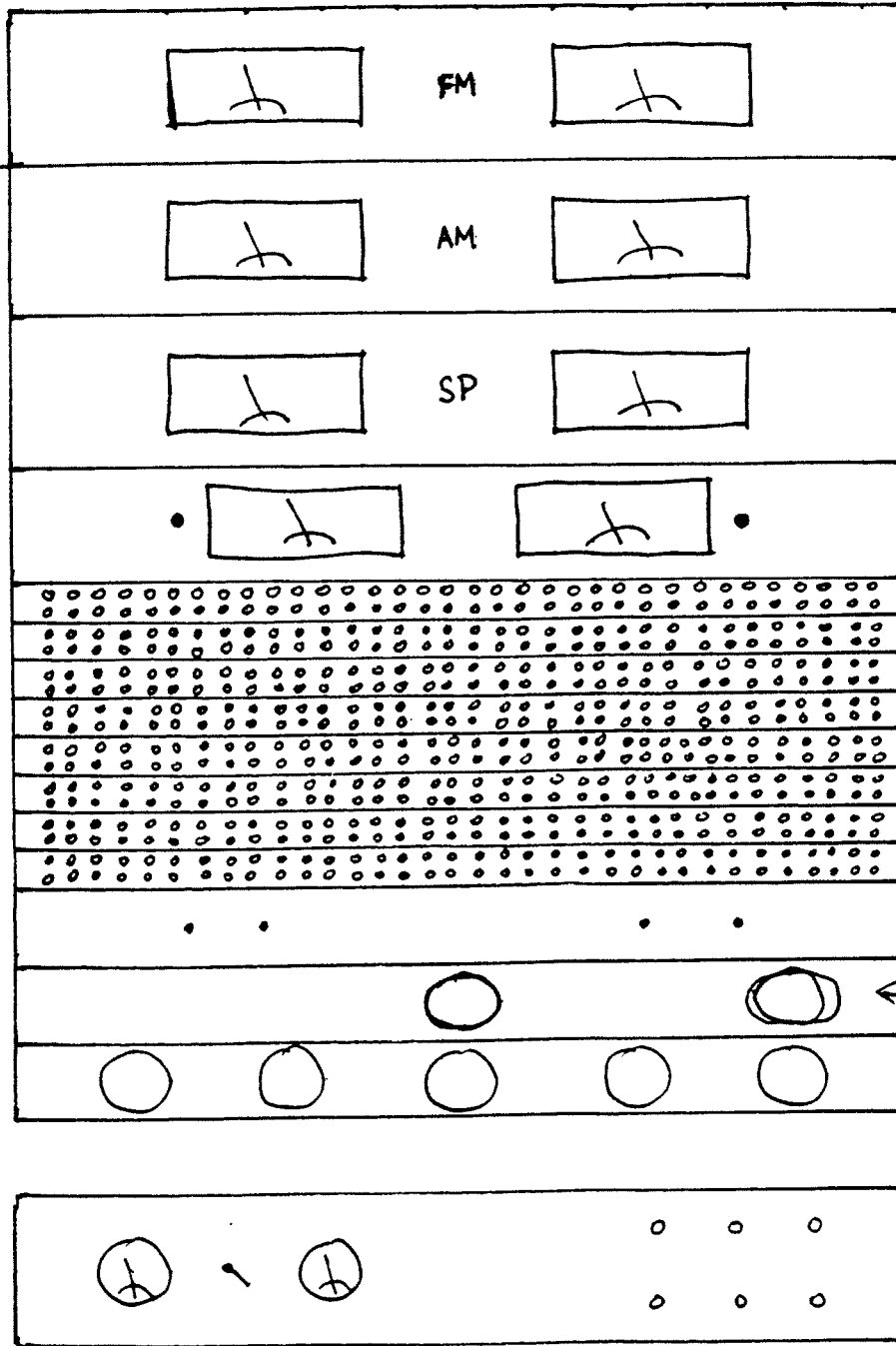
MOBULATION
MONITOR

PARAMETRIC
EQUALIZER

FREQUENCY
EXTENDER

FM VOLU MAX

RACK 3

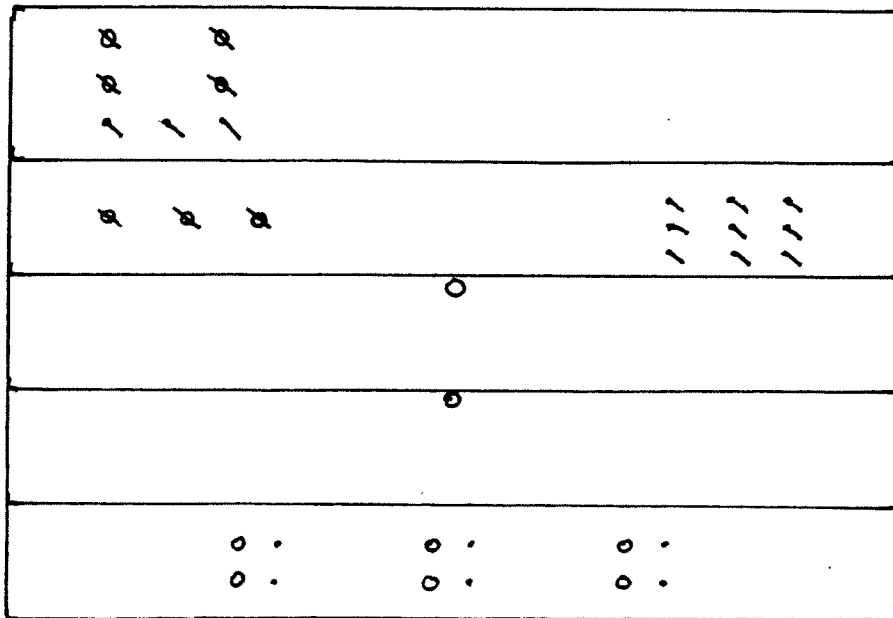
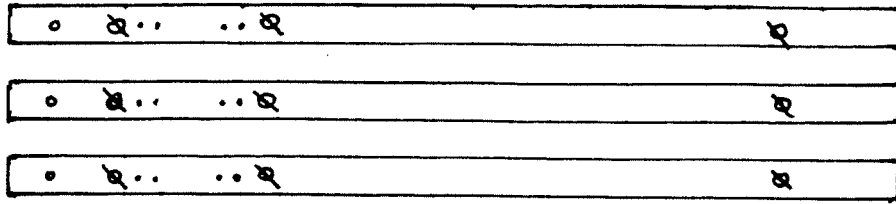


PATCH BAY

VOID THIS PANEL

FUSES

RACK 4



MUTING/
MIKING
(STUDIO)

MUTING
SWITCHES
(STUDIO A)

AMPLIFIERS
(HIDDEN
PANELS)

FUSES

14 METERS

14.1 EFFECTIVE RADIATED POWER

Meter readings, much like station ID's, must be done once an hour. The objective of meter readings is to check our output power. Our Effective Radiated Power (ERP) must be within FCC limits 90% to 105% of 10,000 watts (our licensed power rating).

14.2 CALIBRATE THE REMCO

First, press the red button at the upper left. Wait for the 'ready' light to come back on. Press the rocker switch into the raise position and hold it there. The needle in the left-most meter will drop to about zero. Your job is to use the black 'calib set' knob to make sure that the needle is EXACTLY at zero. Be patient, this is a sensitive adjustment. Once you have done this, release the raise switch and watch the needle go to about four. Use the silver slope knob to put the needle EXACTLY at four. You can think of these as slope and intercept adjustments. Now write down the time of day in the appropriate column of the operating log.

14.3 READ VOLTAGE

Push button number 2 on the remco and wait for the green READ light again. Now the voltage meter is reading the transmitter output in thousands of volts. In this position, every mark represents two hundred volts (five of them make a thousand volts). Naturally, this means that halfway between two marks is one hundred volts. We at WRPI expect you to figure out the voltage to the nearest 25 volts (25 volts represents one eighth of the distance from one mark to another). Your first few meter readings should be supervised by someone who knows what a volt looks like. Once you have figured out (guessed) what the plate voltage is, write this little gem down in the operating log.

14.4 READ CURRENT

Push button number 3 on the remco and wait (once again) for the green light. Now the current meter will become active and tell you the plate current in amps. On this scale, one mark represents one tenth of an amp (typical reading: 1.96 amps). We at WRPI expect you to figure out the current to the nearest hundredth of an amp (.01 amps represents one tenth of the distance from one mark to another). You generally have to close one eye and squint at the meter to figure this out. Once you think you know what the current is, write it down too.

14 5 CALCULATE POWER

Somewhere near the remco (usually taped to the pillar) there is a chart listing voltage and current. Look up your two numbers on it and see what your power output is. Write this down in the operating logs too. If this number is not between 90% and 105%, you must adjust the output power (see below). If for some reason, the power output goes beyond one edge of the chart, or if there is no chart, you must calculate this figure manually. Get a pencil and paper or a calculator and figure out this formula:

$$\begin{array}{l} \text{<output>} \\ - \text{ x } 100\% \end{array} = \frac{\text{<voltage> x <current> x <efficiency>}}{5000}$$

Efficiency is a number (typically around 59) that can be found written somewhere in the header of the chart.

14 6 ADJUSTING POWER

If the output power is between 90% and 105% no adjustment is necessary, and you may skip to step 6. If you are going to adjust the output power; Go to the power chart and look at the column containing plate voltage. Somewhere in this column is 100% (if you can't find 100% in this column, hang it up and find someone to help you). Look at the left-hand edge to see what current gives you 100%. This is the current you want to adjust the transmitter to. Push button 3 (plate current) and start fiddling with the RAISE/LOWER switch until the plate current reads this number. Note: The RAISE/LOWER switch doesn't work immediately, it takes a few seconds to start changing the current, and a second to stop again. If you keep this in mind, it will make transmitter

adjustments easier. Write into the operating log: "<time> Plate current lowered (or raised) to <new value amps> <initials>"

If an adjustment is made you must go back to step 1 to take a second set of meter readings within 5 minutes. This is a double check just in case you calibrated the remco incorrectly or if you read the meter wrong or if the plate voltage changed when you changed the current

14.7 RETURN REMCO TO CALIBRATE

Before you are walk away from the Remco you must return it to calibrate. If the Remco is not left in calibrate there is a good chance the transmitter will be shut off (or on if its off already) by noise on the telephone line the Remco uses.

14.8 OTHER MEASUREMENTS

There are other positions on the remco you should know about:

14 9 POSITION 1

tells you if the filaments are on. If they're not, you can't go on the air until they've been turned on and given 15 minutes to warm up. WARNING Equipment damage may result if this procedure not followed!!

14 10 POSITION 5

measures the obstruction lamps. If all lamps are on, it will read 100%. If any are burned out, each one burned out reduces the reading by approximately 11%.

14.11 POSITION 6

measures the beacon lamps. If all lamps are on, it will read 100%. If any are burned out, each one burned out reduces the reading by 25%.

14 12 POSITIONS 8 THROUGH 10

tell you the line voltage at the transmitter building. This value is typically around 120 volts, all three readings must be within a few volts of each other, or the transmitter will shut itself off.

14 13 POSITION 20

tells you if the exciter is OK. It will read about 100% if it is.

14 14 POSITION 21

tells you that the STL is being received. If you press this position before turning the STL on, you will see this meter go on when you push the 'ON' button on the STL control.

15 SIGNING ON AND OFF

15.1 TURNING THE STATION ON.

Sign into both logs (Program and Operating) as described in the accompanying blurb on "Logs."

Punch position 1 (Gates filaments) on the remco, wait for the green light, and read the lighted meter. It should indicate about half-scale, meaning that the filaments are ON. If it does not, then turn them on by pressing RAISE. If you do have to turn on the filaments, you should wait at least 15 minutes before turning on the main transmitter.

Now you do what is known as 'setting up the board'. This means that you should set the expanders over the turntable and cart pots. push program/audition switches to 'P' and so on. You also pick up FM Chain by pressing PRESET on the Program Switcher control panel. ON AIR should light up. To make sure you have it, you might want to play a record and make sure you can hear it with the monitors on FM LINE. Possible reasons for not hearing it are: turntable not selected on expanders. pot turned down, pot not keyed into a channel (A or P). wrong channel selected on program switcher. FM chain not picked up, etc.

Cue up your first record, and generally be ready to go on the air.

Now you will turn on the STL transmitter. On the panel just below the REMCO. turn the RADIATE/OFF switch to RADIATE. The left-hand meter should now indicate some non-zero reading -- this signifies that the STL is now on the air.

Go to the microphone, key it into the appropriate channel, pot it up and say "KNM-45, Troy," then pot it down and de-key it. This is the legally required signon ID for the STL transmitter. Note the time, and write it down in the operating log under "KNM-45 On" (Remember to use 24-hour time).

The next thing to turn on is the Mod-Monitor. You want this on so that you will be able to hear FM AIR when the transmitter is on. Many people forget to turn the Mod-Monitor on and then become totally confused when they can't hear anything on the air. To turn the Mod-Monitor on, simply press the red 'POWER' button. The button clicks like a ball-point pen, and when it is pushed in it is in the on position. Pushing the button a second time causes it to pop out again and turn the Mod-Monitor off. Also while you are at it, make sure either the '+' or '-' button is pushed.

Assuming all is cool up to this point, you are now ready to sign on. To do so, press position 2 (Gates plate voltage) on the RemCo, wait for the green light, and press RAISE. There should be about a half-scale reading on the left-hand meter. If not, press RECYCLE and try again. Assuming you get it, WRPI is now on the air. Striding confidently over to the control board, you turn on the microphone, do an ID for WRPI ("WRPI, Troy") and either continue talking or else start your first record. Bear in mind that by law, a station identification ("WRPI, Troy") has to be the first thing on the air when we first sign on.

Write down in the operating log what time you turned on the main transmitter (under "Carrier On"), using 24 hour time. Also write that time down in the programming log as the time "Progressive Sounds" started and write down the time you did your signon id. As long as you've got the logs handy, you might as well take a set of readings (See "Meters"). In any event, you are required to take a set of readings within five minutes of turning on the transmitter, and approximately once per hour thereafter. If the first reading looks a little on the high side, not to worry (as long as it's in the legal area, 90% to 105%). It will mellow out in an hour or two.

15.2 SIGNING OFF

The first thing to do, is to make sure you really want to go off the air. Pick up the PA and call around to see if anybody wants to take over. If nobody answers, then you can go ahead and sign off.

Get your programming wound down, to the point where your last thing (be it a record or whatever) is playing.

Less than five minutes before you plan to turn it off, take a set of readings.

The last thing the station "says" has to be an ID ("WRPI, Troy"). This can be from your mouth or on tape or whatever tickles your fancy.

Go to the RemCo, press position 2 if it wasn't already. wait for the green light, and press LOWER. The meter should go down to zero or so, and you should hear a satisfying THUMP in the speakers.

Turn off the mod monitor (right above the RemCo) by pressing the red POWER switch (another thump). Write down in the operating log what time you turned off the transmitter, under CARRIER OFF, in 24-hour time.

Open the microphone, identify the STL ("KNM-45-Troy"), walk over and turn the RADIATE-OFF switch to the OFF position. Write down in the operating logs what time you turned off the STL (24-hour time) under STL OFF.

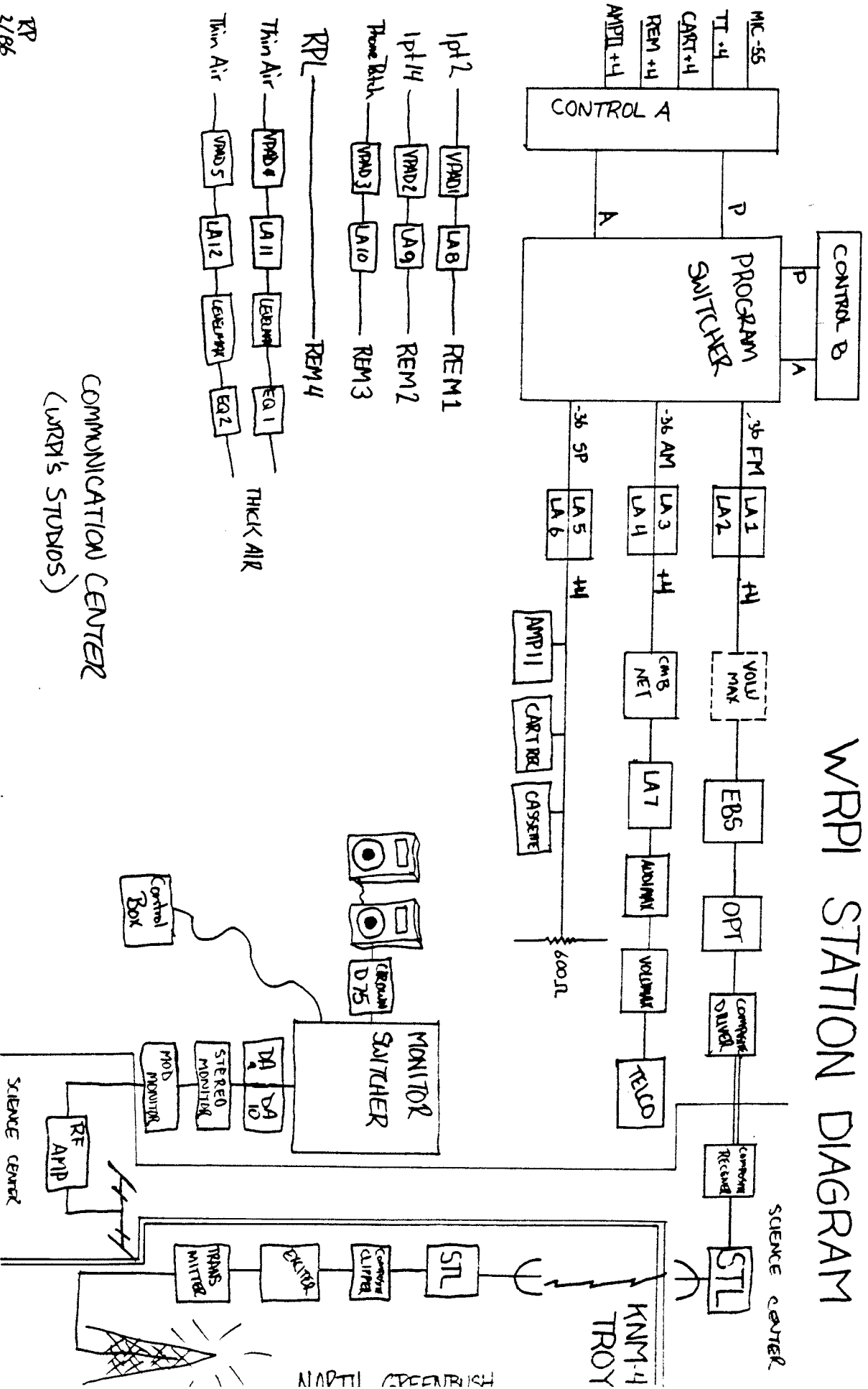
Sign out of both logs.

PUT AWAY YOUR RECORDS. PUT AWAY YOUR RECORDS.
PUT AWAY YOUR RECORDS. PUT AWAY YOUR RECORDS.
PUT AWAY YOUR RECORDS. PUT AWAY YOUR RECORDS.

MAKE SURE THE PLACE IS LOCKED UP. If you don't have a key, and there's no one around who does, do the best you can. Make sure the Record Library is locked and that there is no one in it. Search the station for people who don't realize you're leaving, and kick them out (nicely) if they don't have a key. Make sure the record Library key is in the control room.

If you discover the key is locked into the library, don't worry. just leave it there. Lock as many doors as you can, pack up your stuff and leave. Make sure that the front door locks behind you. Finally, on your way out, make sure that the piano doors to Control-B are locked. If not, call security at x-6611 and ask them to come and lock it. ONLY call security if this door is open.

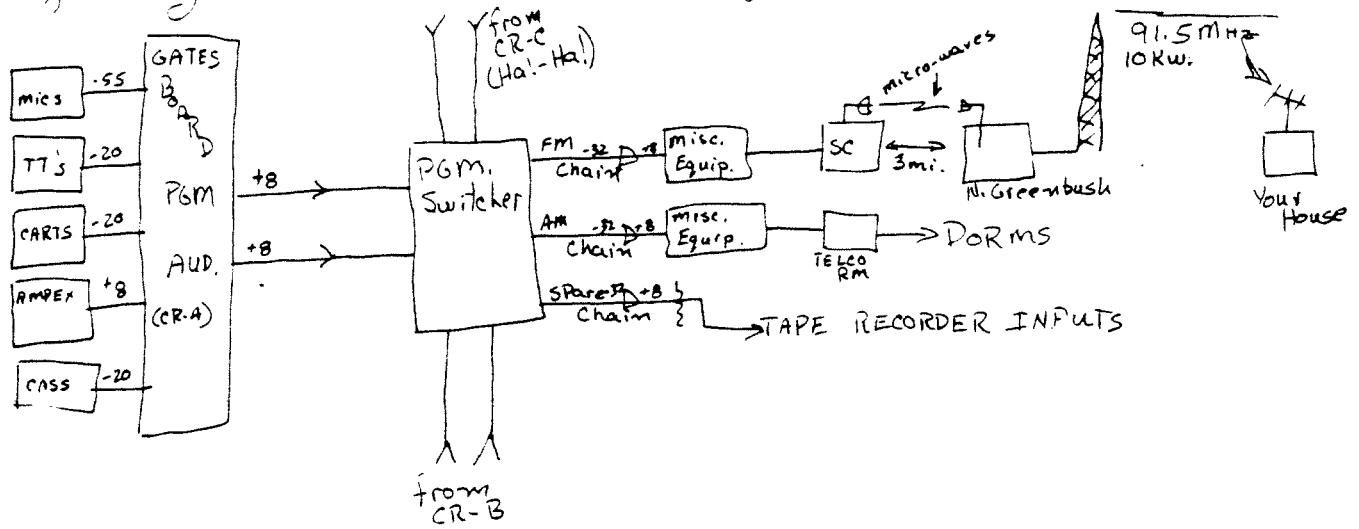
WRPI STATION DIAGRAM



COMMUNICATION CENTER
(WRPI'S STUDIOS)

RP
2/86

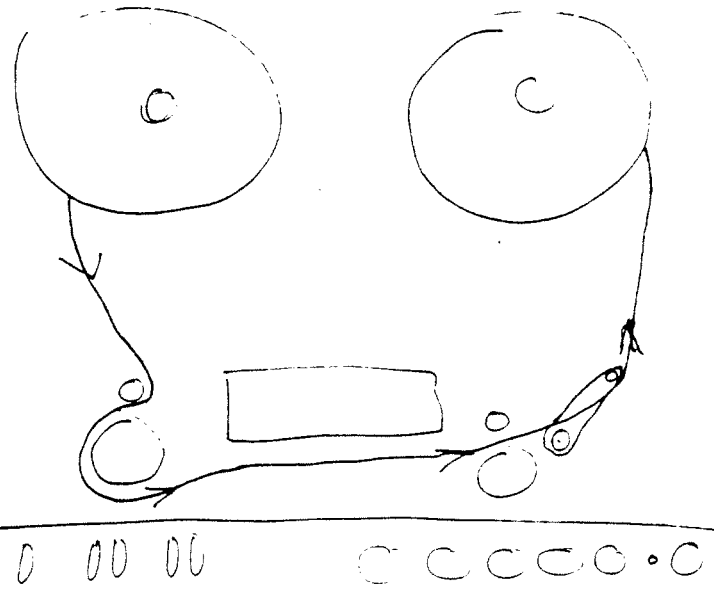
Engineering Review



Switch Positions for Cassette deck

- ① Tape - Source - Do NOT USE
CCAL PLAY RECORD
- ② Dolby - NONE - Do NOT USE
- ③ Mic - Mic - Line
ATT
- ④ STOP - OFF - PLAY
AUTO-REVERSE
- ⑤ NORMAL - FeCr - CrO₂ Bias
- ⑥ NORMAL - FeCr - CrO₂ Eq.

Ampex Tape Threading



Equipment	Level	Terminate?
Microphone	-55	N/A
AmpeX		
out	+8	N/A
in	+8	YES No
CART		
out	-20	N/A
in	+8	No
CASS.		
out	-20	N/A
in	+8	No
TT out	-20	N/A

Gates ch.	Level	Terminate?
1	-55	No
2		
3		
4	-20	YES
5		
6		
7	-20	YES
8		
9		
10	+8	YES

16 FORMAT SYSTEM

As explained earlier, every song in format has a letter designation that gives a fairly good description of the song. All the format songs are contained in a master book called the format book which can be found fairly easily in the station (Note: if a song is not in the format book, it is not in format!). If you have trouble locating the format book, ask someone to help you out. Each daytime announcer is required to play a certain number of format songs per show. More experienced announcers are required to play less format songs per show than newer announcers. New announcers are required to play 30 cuts per 3 hour show while more experienced announcers are required to play 20 cuts per 3 hour show. In both cases, announcers play cuts from eleven different categories that encompass a wide variety of music. The number of cuts from each individual category that each announcer must play to fulfill their format requirement is a direct reflection of that particular categories total contribution to the format. If, for example, "A" cuts make up 5 total number of cuts in format, then "A" cuts will comprise 5 requirement. Of course, in practice this doesn't work out exactly because of round off errors, but the general idea that an announcer's format requirement reflects the composition of the format is retained. The exact number of each category of songs that must be played per show is posted on a bulletin board in the broadcast control room. Note the "skewing" to make the morning more mellow than the afternoon. At first, format may seem to be a real burden. However, the reasons behind it are important in that it gives the station a consistent airsound throughout the daytime and it also helps new announcers become familiar with many different artists and types of music that they might not be familiar with.

While format songs might comprise almost all of your show when you are on a 30 cut format, you will have the opportunity to play some non-format songs during your show. About half of these should come from the new bins and half can come from anywhere, although overuse of the library is highly discouraged until you become a more experienced announcer.

16.1 RESTRICTIONS ON AIRPLAY- New Bins

While flipping through the new bins, you might occasionally notice an album with a strip of yellow or red tape on the left front side. These stickers signify that the album has received a significant amount of "overplay", meaning a particular song on an album is being played more often than necessary. A yellow sticker serves as a caution sticker to let announcers know that the album is being overplayed and that they should select some alternate new bin material. Usually, a yellow sticker is preceded by a note on the album's comment sticker that a particular song is being overplayed. If the album continues to be overplayed after the yellow sticker is placed on it, it will be removed from the new bins for one week and then put back with a red "warning" sticker. If, after all this, the album still continues to be overplayed, it will be removed permanently. This system is not meant to unduly restrict what announcers play on their show. Rather, it is meant to encourage announcers to play a wide variety of songs from each album instead of just concentrating all airplay on one song. It is also helpful to new announcers who do not have time to listen to many other WRPI radio shows and may not be aware of what is receiving too much airplay. Announcers should take note that an album that receives very diverse airplay will rarely receive a yellow sticker and that no album has ever received a red sticker.

16.2 RESTRICTIONS ON AIRPLAY - Format Bins

Every five weeks or so a new updated format book will be released. This updated format book contains some newer releases (about 3 months old or so) added since the previous format book with some of the older releases in format (1 1/2 - 2 years old) deleted. Constantly rotating the format like this helps to keep it current. The format book is also skewed so that the most recent additions receive more airplay than older format cuts. The way this is accomplished is by allowing the most recent format additions 3 plays for the 5 week period that the format book is out. Less recent additions receive at most 2 plays per 5 week period and the oldest additions are restricted to only one play. Note that this system requires that the format book be kept up to date by crossing out any cut that has received the maximum number of plays for that 5 week period, whether it be one, two, or three. Therefore, an announcer should avoid playing any format cut that has been crossed out if it is to be part of their format requirement. (This does not mean that you cannot play the song at all. it just means that it cannot count towards your format requirement). The main reasons for crossing out the format cuts are that it results in a diversity of songs played on WRPI and it also eliminates the possibility of an announcer playing the same songs week after week.

17 PLAYLISTS

RECORDS IN THE STATION

FORMAT SYSTEM

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MICROPHONE TECHNIQUE AND ANNOUNCE TIPS

Experienced announcers sound good on the air because they have good microphone technique. Therefore, one of the best ways to improve your own microphone technique is to listen to some of the most experienced WRPI announcers and try to emulate what makes them sound good. Also, use the guidelines below as you listen and notice how our nighttime announcers tend to follow most of them.

1) Avoid saying "before that", "and-uh", or other annoying, oft repeated words or phrases. Often, you may not be aware that you're saying these words too much, in which case listening to the aircheck tape can be of great help. The aircheck machine is located in the tech room and it makes the aircheck tapes, which are recordings of everything said over WRPI's air. Ask your engineer or someone else to help you locate your aircheck tape. An alternative method is to use the Control A tape deck as an aircheck machine. To do this, place a cassette in the cassette deck, set the proper recording levels, flip the switch labelled "N" (located on the top left of the equipment rack that contains the cassette deck) to the up position to pause the deck and flip the switch labelled "CR" to the up position. Now whenever you flip the Control A microphone into program ("p"), the tape deck will begin recording. Thus whenever you talk on the air your voice will be recorded on the cassette. If you happen to be speaking from Announce A, flip the switch labelled "AN" to the up position instead of the "CR" switch. When done airchecking, flip all switches back to the down position. You must also make a patch from "DA9" to "CASSETTE REC L IN" and "DA10" to "CASSETTE REC R IN" on the patch bay or pick up spare chain (ask your engineer what this is)

in order to record signals from the air. Listening to your aircheck on a regular basis is highly recommended.

2) Popping of p's is a problem many people have when speaking into a microphone. To avoid doing this, try licking your lips before you go on the air or apply some lip balm to keep them wet. With a little conscious effort, you shouldn't have much of a "p-popping" problem. Another condition that some people suffer from is a dry mouth. To alleviate this, drink some water or seltzer water just before you go on the air. Avoid soft drinks or other beverages that contain a lot of sugar as they will only cause a gummy feeling in your mouth. Remember also that no alcoholic beverages are allowed in the control room.

3) If you don't know how to pronounce a word, ask someone nearby to help you out or call over the P.A. for help. Foreign words can often be a problem, so look for phonetic spellings on the album comment labels or tracking sticker. If there are none, ask around until you find someone who speaks the language or can make an educated guess. Never spell out a word over the air.

4) Try to know something about artists or performers that you play on your show and sound interested in what you play. Inserting an occasional comment or tidbit of information when you read back songs will give your listeners the impression that you are familiar with and interested in the music you play. You can get information about current artists by reading the music bulletin board in studio A. Older information is stored in the bio file located in the office. Suggested things to comment about include where the artist is from, past history, other performers collaborations have occurred with, what label they are on, etc.

5) Instead of trying to get a particular song on the air, look for a song that goes well with what you are presently playing or makes a good transition from one type of music to another. A good announcer will pre-listen to material and make mental notes of songs that they feel will make a good transition from one type of music to another.

6) When speaking through the microphone, keep your mouth about six inches away from the mike and don't vary the distance as you talk. Keep the microphone about 45 degrees off-axis from the direction you are speaking to avoid p-popping. Watch your levels so you are neither too loud or too soft in comparison with the recorded material you have been playing. If the microphone intimidates you and causes you to be nervous, imagine that you are just having a casual conversation with a friend. A little nervousness at first is normal, so don't let it bother you.

7) It is important to make full use of the dynamic range of an FM signal, therefore announcers should modulate their signal as much as possible while avoiding overmodulation and excessive amounts of compression. Percent modulation may be determined by looking at the peak meter on the FM modulation monitor model 734 located in the back equipment racks. Compression can be determined by looking at the compression meter on the Optimod-FM (also located in the back equipment racks). Announcers should modulate as high as possible without compressing past 3 or 4 dB or overmodulating (overmodulation is signalled by the red LED lights located on the mod monitor and above the VU meters on the Gates board. Overmodulation is defined by the FCC as six peak flashes in any one minute period). Rock will tend to have higher average modulation levels than jazz or other forms of music and music containing lots of high frequency components will be more compressed than music containing many low frequency components (average modulation levels being the same). With some practice, you will be able to optimally set levels for all recorded material that you play.

8) Try not to refer to other people who may be in the studio with you or carry on extended conversations with them while you are announcing. An occasional hello or bit of small talk is o.k., but anything beyond that tends to sound dumb and/or unprofessional. Announcers should also avoid trying to be a comedian on the air and should definitely not editorialize.

9) Be aware of what other announcers are playing and/or overplaying. If you hear other announcers playing only one song from a new album, try to give some of the other cuts some airplay. Try to also play different songs from the new bins from week to week.

PHONES

The phones at WRPI have a normal handset and a set of buttons for dialing as well as two rows of push buttons across the top. You will only need to concern yourself with the bottom row of push buttons for normal everyday use as the top row is used for phone patches only (to broadcast away hockey games, put callers on the air during call in shows, etc.). The buttons are used to select which of several phone lines you want to talk on. If you want to use the 266-6248 line, push the button marked 6248 and pick up the phone.

The first three phone lines (6248, 6249 and 6271) are set up so that if someone calls 6248 and that line is busy, the call will "roll over" to 6249 or 6271 and we can tell listeners that our phone number is 266-6248. You should always answer these three phone lines with something like "Hello, WRPI." Be prepared to take a message and always be polite, even if the caller is rude or abrasive. Remember, you are representing WRPI to the public.

The next phone line is called either stono phone, bat phone, or secret phone because its phone number is secret. This line is strictly for station business and emergencies only (calls from the transmitter site and so forth). If you answer it, just say "Hello", not "Hello, WRPI", so that people won't figure out that this is one of WRPI's numbers. Do not use this line for outgoing calls.

The next button is labelled PA. If you talk on this line, you will be heard all over the station. Typically, it is used to tell someone that they have a call, for example "Bob, you have a call on 48." Be sure to hang up PA when you are done because it stops the music that normally comes out of the PA speakers. Never carry on extended conversations over the PA; use talk loop instead.

The last button is labelled talk loop. If you and someone else pick up talk loop, you can talk without bothering the rest of the station on PA. For example, you could go on PA and say "Bob, talk loop please" and then push talk loop. Bob could join you on talk loop and you could have a conversation.

When you push a button, it will automatically drop the previous call. If you want to go back to a call later, push the red HOLD button, then pick up another line. Do not ever leave a person on hold for more than about 20 or 30 seconds without going back to them, even if it is only to tell them that someone will be helping them soon.

A sample conversation might proceed as follows.

Caller: "Is Bob there?"
You: "If you'll hold on, I'll page him."
Caller: "O.K."
Push the hold button, then push PA.
You: "Bob, you have a call on 48."
You hang up the phone
Bob pushes the button for 6248 and talks.
If Bob doesn't answer, push 48 and say "Bob's not answering, may I take a message?"

The importance of taking phone messages cannot be overemphasized. WHENEVER someone calls for somebody at the station, the caller should be put on hold and the announcer should page the receiver of the call. If the line is not picked up, you should take a message containing the caller's name, phone number, time called, your name (in case there is a question concerning the message) and any other pertinent information. You should then post it immediately on the message board, making sure that the addressee's name is showing. If you are pressed for time during your show (as we all are sometimes), ask someone nearby to help you out.

One additional note, a constant light on a phone line means it is being used, a quick blinking light means that the line is on hold and a slow blinking light (plus a ring in Control A) means that someone is calling on that line.

RESPONSIBILITIES

10,000 Watts is a lot of power with which to broadcast and is a lot more than most college radio stations, and many commercial stations for that matter. This large broadcasting power means we have a large listening radius (75 miles north and south, 65 miles west, and 50 miles east with longer distances occasionally reported) and requires a certain amount of responsibility on the part of the announcer, detailed in the following paragraphs.

If any WRPI operation is interrupted due to your absence, indifference, or your incompetence, your broadcast privileges may be suspended. Your tardiness can also seriously inconvenience the DJ on the air before you and this will not be tolerated. A premature end to any show that inconveniences the next DJ is equally unacceptable. On the other hand, we know emergencies come up, but just remember that we think we're pretty important also. If you must get a substitute, call some other DJ's on the fill-in list located on the programming bulletin board. If you find someone to substitute for you, the Program Director should then be notified of who is going to be filling in for your show. If you cannot locate or provide a substitute for a show you plan to miss, you must give the Program Director at least 24 hours advance notice (preferably more to stay in good graces) if you plan to keep you announce clearance.

Goofing off or other immature behavior has no place being broadcast over the air (this includes negative comments about any other area college radio station). While a certain amount of rowdiness is expected at the station, broadcasting that rowdiness sounds unprofessional. Anyone taking alcoholic beverages into the control room or who is under the influence of alcoholic beverages while signed into the logs or while announcing on air will have all clearances revoked immediately.

Format announcers should have all their required format cuts selected before their show. It is best to come into the station the day before your show to select them as this will give you ample time to make intelligent selections and do some listening if you desire. There is no excuse for an unprepared format show as it will sound sloppy and thrown together.

It takes a lot of work to keep a 10,000 watt radio station running. Therefore, everyone who has a radio show is expected to help the station by doing 7 1/2 hours of work each semester, if not more. There is plenty to do around the station, just ask around and you will have some work to do in no time.

WRITTEN ANNOUNCEMENTS

In addition to your regular announcer duties, there are several different things that you will have to read over the air, such as Public Service Announcements, Station Promo's, After Dark, etc. Information pertaining to each of them is covered in the following sections.

PUBLIC SERVICE ANNOUNCEMENTS (PSA's)

Public Service Announcements are short, pre-written announcements that serve the public interest by either informing our listening audience of public services available, such as a battered wives hotline, or giving information on laws or procedures, such as the seat belt law or what to do if you see somebody choking, etc. On average, WRPI airs a PSA about once every one and a half hours. We do this because the FCC requires us to and because it is also good for community relations.

When PSA's arrive at the station, they are sorted and catalogued by the PSA Director. Each one is given a four digit tracking number which must be logged in the programming log whenever it is aired. Old PSA's (those which are past their "kill date") are not thrown out, rather they are placed in the public file in the office for a period of two years (the public file is a file in the office that any member of the public can look through during normal business hours). If you notice an expired PSA in the PSA book, take it out and put it in the PSA Director's mailbox in the office.

Before you read a PSA on the air, it is important to pre-read it (preferably aloud) to make sure you understand the way it is written and the words contained in it. This will prevent you from stumbling while reading it on the air and/or mispronouncing words. (If there is a word you don't know how to pronounce when you pre-read it, ask someone nearby to help you out.) When you read a PSA on the air, do just that and only read it. Don't announce the fact that you are going to read a public service announcement or a PSA to your audience. When you are done reading it, write down the time it was aired and the number of the PSA in the program log (do this after you have gone off the air, of course), and put the PSA in the back of the PSA book. Always read the top PSA in the binder.

STATION PROMOTIONS

Station promo's (SP's) are either carts or written passages that promote another show or event on the station. WRPI airs about one SP every two hours on the average.

In the case of an SP on a cart, you simply insert the cart in the cart machine, pot it to the appropriate level (usually around 10) and hit the start button on the remote start board. It is important to know how the cart will end so you will be able to segue from it properly. To find this out, look on the cart label for the "q". Following the "q" will either be the last words read on the cart or a descriptor, such as "music fades". Use this information to make a proper segue from the cart.

When the cart is done playing (this goes for all carts, except for ones that say "q:continuous"), pot it down to 0 and let it continue to run until the cart machine stops itself. This way the cart will be cued up at its beginning and ready for another play. Under no circumstances should a cart be stopped by pressing the stop button, unless it is labelled "q:continuous". For a written SP, many of the same things that apply to PSA's apply here. Always pre-read, don't ad-lib, log the time read and the number in the program logs, read the top SP and when done put it in the back of the SP binder, etc. Unlike PSA's, SP's are not kept after they expire; they are simply thrown away. However, most SP's will not have expiration dates.

WHAT'S GOING ON HERE (WGOH) AND AFTER DARK

WGOH and After Dark are two public services that WRPI provides to the listening community. WGOH consists primarily of listings of events and happenings occurring in our listening area, such as flea markets, public speakers, poetry readings, etc. After Dark is a listing of bands and performers performing in area clubs. The two are not supposed to overlap, although they sometimes do. WGOH and After Dark are read at specified times during the day, with After Dark being read at Noon, 6 pm, and 10:30 pm and WGOH being read at 11 am, 3 pm, and 8 pm.

Of the two, WGOH requires much more preparation to read because of the way it is made up. Individuals and organizations with events to be announced send typed, ready to read copies to the station where they are sorted by the WGOH director. The WGOH director edits the announcements if they are too long or contain non-airable information and writes a "kill date" at the end of the announcement. This "kill date" is the last date at which the announcement should be read and any announcements with "kill dates" older than the present date should be ripped out of the book and thrown away. After the WGOH director edits the announcements, they are put in the WGOH book and are ready to be read on the air. When you go to read WGOH, you should allow yourself ample time to select and pre-read announcements (take them from the front of the book and work your way to the back). Pre-reading is especially important for WGOH because no matter how well edited it is, the announcements can often be very fragmented and difficult to read the first time through. Therefore, taking the time to read carefully through each announcement and think about how you want to read it over the air will do a lot towards improving your on air reading of WGOH. After selection and pre-reading of WGOH, you are ready to read WGOH on the air. Follow the procedures below when you do:

- 1) Start the WGOH bed cart (ask your engineer to show you how if you're not sure) and slowly fade it up.
- 2) Announce that it is time for "What's Going On Here", WRPI's calendar of events"
- 3) Read the selection clearly and concisely. Don't spend too much time on any one event.
- 4) The cart "bed" lasts about 5 minutes. WGOH should not last much longer, so when you hear the background music stop, finish up the last announcement and say "This has been What's Going On Here, WRPI's calendar of events. What's Going On Here is aired Monday through Friday at 11am, 3pm, and 8pm and is a public service of WRPI, Troy." or something similar.
- 5) Log start and end times in station logs (after you've gone off the air)

Some things you should be aware of that might pop up in WGOH occasionally that should be edited out are:

1) Ticket prices - no ticket prices should be read over the air.

2) Promotional Spots - Promo spots, such as "Best play of 1985" or "You simply must see this movie" or anything that encourages attendance should not be read over the air. This includes any announcements ad-libbed by the announcer such as "I saw this movie and I would recommend that you see it too." The only events that can be promoted on WRPI are events sponsored by non-profit organizations, but even this is rarely done.

3) A listing of multiple events on one announcement, some of which may have already occurred. Be aware of this so that you don't announce events that have already happened.

AFTER DARK

After Dark is a computer listing by date of bands and performers appearing in area clubs. Most of the rules that apply to WGOH also apply to After Dark, so they won't be repeated here (pre-reading, cart bed, etc.). When you are ready to read After Dark, follow the rules below:

1) Start an After Dark bed cart and slowly fade it up.

2) Announce that it is time for "After Dark, WRPI's club and concert calendar".

3) Read about 8 or 9 days worth of listings.

4) End After Dark with an appropriate parting announcement.

5) Fade the bed out.

6) Log start and end times in the station logs.

After Dark should not last more than 3 or 4 minutes, so be sure to keep track of the time while you are reading it. Nobody wants to hear 10 minutes of concert listings.

TICKET GIVEAWAYS

Several times a day WRPI gives a pair of tickets away to an event, such as a concert or a movie. These ticket giveaways will be written in the programming logs to be done at a certain time and one must simply scan the programming logs to determine if there are any tickets to be given away during your show. If there are (and there usually will be at least one) follow the instructions below to insure a smooth, professional sounding giveaway.

- 1) Begin by saying "I have a pair of tickets to give away" and then announce what the giveaway is for by detailing what, where and when the event is and how old you must be to win the tickets. Also give a phone number that a listener could call to obtain more information about the event. All this information is written right on the ticket giveaway form so you'll have no trouble finding it. Be sure to announce that you have a pair of tickets to give away before you announce what the event is or else the FCC considers it a commercial. Example: Saying "The Opposite will be playing at Club 288 on January 28th and I have a pair of tickets to give away to see them" is a commercial! DON'T DO IT!
 - 2) Announce what caller you'll take (don't take higher than caller number 5) as the winner and give the phone number (266-6248).
 - 3) People who have won tickets in the last 30 days are not eligible to win tickets from the station. Although we don't keep track of this, we do announce it over the air to prevent people from calling too often.
 - 4) When you go off the air and start taking phone calls to determine a winner, pick up the phone and first ask if they are calling for the tickets before you tell them they have either won or lost. This prevents someone from being hung up on if they have accidentally called during a giveaway to talk to someone at the station.
 - 5) When you have found a winner, write down their name, address, and phone number on the giveaway sheet and the back of the pre-programmed logs. Write legibly and do this immediately so you do not forget to do it later.
 - 6) Log the time you did the giveaway in the preprogrammed logs after the giveaway is done.
- Some tips to help your giveaway go a little smoother are printed below.
- 1) If you have asked for the fifth caller and you see that the response on the phone lines is less than enthusiastic, take the second caller instead. The important thing is to give the tickets away to somebody.
 - 2) If you fail to get any calls for a giveaway, wait about a half an hour and repeat the giveaway procedure adding at the beginning that "We had such a good response to that last giveaway that I've been given another pair of tickets to give away." Yeah, it's sneaky but it will usually result in a few phone calls. If you still don't get a winner, write "No Winner" on the giveaway sheet.
 - 3) Don't sound bored when you read the giveaway information. However, don't get so enthusiastic

that you end up doing a commercial or a promotion for the event.

4) Often, the phones will continue to ring after you've found a winner. In this case, put the other two phone lines on hold until you're done. That way, other people calling for the tickets will get a busy signal and you won't have to constantly pick up the phone to tell them they didn't win. If another incoming call is important, they will call back.

5) Since things can get kind of hectic sometimes while you're doing a giveaway, it helps to play a long song (around 6 minutes or so) after you go off the air to allow plenty of time to answer phones and write down names.

6) Even though the giveaway is written down for a specific time in the programming logs, use this time as only a rough estimate. The important thing is to do the giveaway at an appropriate time in your show (for example, don't do a hardcore show giveaway after a jazz set).

7) For a giveaway at the Spectrum Movie Theatre, it is usually a good idea to read a short description of the movie that the tickets are for. Most movies that play there are lesser known or foreign films of which our listeners may have little knowledge.

8) Don't preannounce a ticket giveaway because the FCC considers that a commercial. (i.e. don't say "Coming up in a half an hour I'll have a pair of tickets to give away for...")

9) No friends or anyone remotely involved in the station can win tickets from the station.

FCC REGULATIONS AND REQUIREMENTS

The FCC has numerous regulations concerning announcements of a commercial nature, foreign language programming, obscenity, and the broadcast of telephone conversations. Since you are likely to encounter many, if not all, of these situations in your career at WRPI, general information on each topic is presented in the following sections. For further information, you are encouraged to read The Public Radio Legal Handbook published by the National Federation of Community Broadcasters as much of the following information was obtained from there.

Commercials and Illegal Announcements

Rather than detailing all of the FCC regulations on this matter, major points will be emphasized and a few examples will be furnished. The reader is encouraged to consult the Public Radio Legal Handbook for more information. Congress has specifically prohibited:

"any message or program which is broadcast...in exchange for any remuneration and which is intended:

- 1) To promote any service, facility or product offered by any person who is engaged in such offering for profit.
- 2) To express the views of any person with respect to any matter of public importance or interest; or
- 3) To support or oppose any candidate for political office." (Section 399B of the Communications Act of 1934, as amended.)

In summary, this means that a station may not take consideration (money, free tickets, record albums, etc.) from a for-profit entity in exchange for broadcast of an announcement that promotes the goods, services or activities of that entity. This rule holds whether consideration has actually been received or has only been promised. WRPI may, however, take consideration from a non-profit entity in exchange for a promotional announcement. No announcer should ever make any promotional announcement without first making sure it has been cleared with the Program Director.

Donor Announcements

WRPI may have specific programs underwritten by for-profit entities in exchange for a donor announcement that may include the following information:

- 1) Name
- 2) Location information
- 3) Audio logograms or slogans that identify and do not promote
- 4) Value-neutral descriptions of a product line or service
- 5) Brand and trade names and product or service listings that do not include qualitative or comparative language.

Donor announcements may not include the following information: 1) Price

- 2) A call to action ("Buy now and save", "Call this number now!", etc.)
- 3) Inducements to buy
- 4) Qualitative or Comparative language

Donor announcements are presently used to partially fund RPI hockey broadcasts. No announcer should ever take personal consideration in exchange for a donor announcement. All donor announcements should be cleared for content by the Program Director before airing.

The following examples are provided in order to give you an idea as to the application of the above rules.

1) May you mention a band's appearance at a local club in the context of your show? FCC policy dictates that no special consideration should be given to any particular announcement if remuneration is being received. Since we often receive free tickets to concerts at area clubs, all announcements are limited to "calendars" (After Dark, WGOH, etc.) to avoid the special consideration issue. An announcer is permitted to announce once per show the fact that the band is playing at a particular club provided that the announcement comes immediately before or after recorded material by the band in question. The announcement should be factual in nature only and should not encourage attendance to the show. "You should go see this band", "This will be a good show, I suggest you go see it", or other similar announcements are illegal - DON'T SAY THEM!!!

2) May you pre-announce a ticket giveaway? Announcing "I have a pair of tickets to see Gang Green at the QE2 to give away in half an hour" is considered special consideration by the FCC, so don't do it. You may, however, announce the fact that you have a "ticket giveaway", just avoid specifics.

3) You have released your own record and the station is given a copy. May you play and promote the record on your airshift? Since you presumably are receiving profits from sales of the album, promotion by you or any other DJ would be illegal. Your playing of the record would not be illegal, but could be seen as a conflict of interest. Mark Lo (ex-Program Director and WRPI

DJ) released his own album (Expando Brain on Vacant Lot Records) and played it safe by not playing the record on his own show and also not encouraging other announcers to play it.

4) You are on a late night airshift and are very hungry. A pizza place agrees to deliver a pizza to you in exchange for an announcement on the air. When the pizza arrives, you go on the air and describe how quickly the pizza was delivered and how hot it is. Is this legal? No, I'm afraid it isn't. By describing the quickness of delivery and temperature of the pizza, you promoted the product on the air in exchange for the free pizza and that is illegal. Even if you did a non-descript donor announcement for the pizza place, it still would be grounds for announce declearance because you received personal consideration and because you did not clear the announcement in advance with the Program Director. (This exact incident actually happened on WRPI.)

Since violation of the FCC regulations can result in a considerable fine (approximately \$10,000), any announcer who knowingly violates them will be announce declearred for an unspecified amount of time. However, a little common sense should keep you from ever having to worry about that happening.

Obscenity

According to WRPI station policy, no material considered obscene by contemporary community standards shall be broadcast between the hours of 5 AM and 11 PM. Between the hours of 11 PM and 5 AM material considered obscene may be broadcast but only if deemed to have significant artistic merit. In addition, no announcer may ever utter an obscenity on the air. (Obscenity may be defined as, but is not limited to, the words fuck, shit, cocksucker, cunt, tit and God damn.) The FCC has the power to punish anybody uttering an obscenity on air with a fine of as much as \$10,000 and/or two years imprisonment, or both.

While FCC rules on obscenity are very broad and open to a wide variety of interpretation, it is best to play it safe and avoid a confrontation with this regulatory body as FCC/WRPI relations are at the moment excellent.

Broadcast of Telephone Conversations

No announcer should broadcast a telephone conversation without the prior authorization of the Program Director, an exception being pre-arranged call-in shows.

Before a telephone conversation may be broadcast on the air (whether live or pre-recorded), all parties involved must be notified of the intent to broadcast the call. The FCC has ruled that a telephone conversation begins as soon as the party answers the phone, thus someone cannot be called and have consent arranged while they speak on the air. If you have seen a radio or TV show where this is not the case, it is because on-air consent has been pre-arranged. Exceptions to the above rule occur if:

- 1) The party is associated with the station and is aware or may be presumed to be aware of the likelihood of broadcast.
- 2) The other party originates the call and it is obvious that it is in conjunction with a program in which the station customarily broadcasts telephone conversations (i.e. a call-in show).

Foreign Language Programming

Any broadcast of a foreign language on WRPI must be followed immediately by the broadcast of the English translation, an exception being the name of a group or artist in a foreign language. This is required to avoid having to pay unnecessary off-air translation, paperwork and filing costs that would otherwise be required by the FCC.

Since failure to adhere to the above rule can result in a hefty fine, any violators will be immediately announce deleared.

DEFINITIONS

Bed - subdued musical material to be played at a low level while an announcer has several minutes worth of announcements to read. A bed should be used while reading WGOH, After Dark, etc.

Kill Date - the last date on which an announcement is to be read, often the date of the event the particular announcement concerns. All PSA's have a kill date.

Segue - The transition between different sources; mixing songs.

Cart - continuous loop tape cartridge. These tapes contain short messages (public service announcements, station promotions, station id's and so forth). You'll find them in a rack to the right of the Gates board in Control A. Carts look very much like 8-track tapes, but they have three tracks. Two of the tracks are used for stereo audio while the third track is for the cue tone, used to start and stop the cart. When you play a cart, it will automatically play through its continuous loop until it hits the cue tone. At this point it will stop, ready to be played again.

Set - a series of songs played one after another. The beginning or end of a set is demarcated by announcing the songs and/or a ticket giveaway, SP, PSA,...

Bin - One of the wooden record cabinets in studio A. There are three bins: new bins, has

bins, and format bins.

Clearance - the permission one receives to operate specific equipment or perform specific duties after completing the required training.

THE 10 PROGRAMMING COMMANDMENTS

1) Say "WRPI,Troy" within 5 minutes of the top of each hour, as well as any time you speak on the air, which should not be more than once every twenty minutes.

2) Do not repeat material in adjacent shows. This means not playing the same artist or song if it was played in the show before you.

3) Air all PSA and SP spots as called for in the programming logs. Do not play or read an SP or PSA aired within the previous six hours.

4) Monitor yourself, especially during transitions. Use headphones, watch levels, and listen to balances between sources.

5) Do not use jargon (PSA, ID, segue, etc.) or "inside" references that the listeners cannot understand: i.e., never say anything impertinent to the continuous flow of the program or discuss your personal bullshit on the air.

6) Keep play of requests within reason and avoid dedications or messages to friends. Do not make habitual judgements about your own life and tastes. Remember that WRPI continues long after your air time is over.

7) Do not demean the station, its members, or its program content on the air. Support WRPI as far as the listenership is aware, bringing any contrary opinions or issues before the Program Director off air. Do not discuss format on the air.

8) Always refile your records, including

the previous DJ's last one, if necessary. Remove any trash that has accumulated during your show.

9) Always plug the next program/DJ, and others where possible. Facilitate transitions between shows by asking the next DJ how their show will begin so you can work your way into an appropriate segue.

10) Whenever possible, convey the feeling that something special is happening. Act involved, as if you had thousands of listeners. Make the equipment last so WRPI will.

18 PROMOTIONS

Promotions of "transitory events" - Concerts, plays, movies, etc.

Announcements for transitory events must fall under one (or more) of the

following categories to be aired on WRPI:

- An announcement read within the context of a community bulletin board

such as WGOH, After Dark, Mostly Folk Calendar, etc.. Provided that

these announcements follow the guide lines of the respective bulletin

board.

- As a Donor Announcement or Promotional Consideration Announcement. The

actual copy of the announcement should follow the guide lines set by

the FCC for these types of announcements. Record and ticket giveaways

fall under this category.

- Any announcement on the behalf of a non-profit organization is

permitted. Even if compensation is received.

- Announcements for commercial sponsored events which the station or any

of its personnel receive no compensation (funds, goods, and/or

services of any kind). This includes tickets
(complementary or

giveaway), records, food, drink, etc. Use and
only use of a facility

necessary for the broadcast of an event (remote),
is not considered

compensation.

19 HOCKEY

INITIALIZATION:

Flip both of the auto-start switches up. (This is very important.) Find the hockey cart for breaks and put it into cart machine 1. Make sure both carts are potted up. >TO DO ONE 60 SECOND PSA OR SP:

Put your cart (WHICH HAS A CUE TONE ON IT!) into cart 2. When the announcer says the return to station cue, press start on cart 1. Make sure you put the remote pot in cue! (Just in case the outboard engineer wants to tell you something or they are trying to talk about you behind your back.) The carts will be done in 1 minute and 5 seconds. Continue below with "WHEN THE MUSIC COMES BACK." TO DO TWO 30 SECOND PSA's or SP's OR ANY PERMUTATION THEREOF:

Put the 1st PSA in cart 2. Press start for cart 1 when the announcer finishes rambling about hockey and gives the cue to return to the station. Make sure you put the remote pot in cue! (see above) When the first cart reques, put the other 30 second cart in cart 1. When cart 2 finishes, it will start cart 1. While cart one is rambling about dental floss, watch cart 2. When it reques, put the hockey cart in there. The first cart will start the hockey cart when it finishes. Proceed with "WHEN THE MUSIC COMES BACK."

WHEN THE MUSIC COMES BACK:

Pot the remote back up (unless the outboard people obviously aren't ready.) When they start talking, fade the theme out. If they do donor announcements, leave the theme in at 2 or 3 as a bed. When the DA's are finished, pot out the music. Let the hockey cart recue. If the hockey is in the bottom machine, put it back in cart 1. Log the PSA's, SP's, and/or DA's in the appropriate place and you are all set for the next break.

20 WRPI Procedures

The following information is for internal office use only. I have tried to include as much information as possible about procedures which concern WRPI personel who try to run WRPI on a day to day basis.

20.1 SHIPPING

In order to send a package out via UPS or US mail use the following procedure:

Draft a MEMO addressed to Colin Young (X5098) at Receiving with the following information: Who To

Who From

How to ship it

Value if over \$100

Account #

Where should it be picked up from (usually the WRPI office).

Send the memo via inter-campus mail. To be extra sure leave a copy attached with Colin Youngs' name on it, this will make the chance of the paper work and thus the parcel being lost somewhat smaller.

20.1.1 Business Manager

The following section consists of procedures for the Business Manager.

20.1.2 New Year

At the start of the new fiscal year (July 1) the Business manager has the following responsibilities:

Get a copy of the budget as approved by the E-Board.

Prepare the ledgers so that each goal in the budget gets its own page.

Initiate Purchases of the capital items in the budget. The earlier you make the purchases the better off you are.

20.1.3 checks

If you get a bill for a debt incurred and you want a check you make out a WRPI Riembursement request form and attach the receipt and give to the business manager.

The business manager then fills a Rensselaer Union Check Request Form.

Circle Mailed and then write on
the bottom:

Please enclose attached invoice
with check.

This must be hand carried to the
Union by the Buisness Manager to
the Union.

Monday mornings are good for a
buisness manager to do Union
Buisness.

20.2 GLOSSARY

Bed - subdued musical material to be played at a low level while an announcer has several minutes worth of announcements to read. A bed should be used while reading WGOH, After Dark, etc.

Kill Date - the last date on which an announcement is to be read, often the date of the event the particular announcement concerns. All PSA's have a kill date.

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Bin - One of the wooden record cabinets in studio A. There are three bins: new bins, has

bins, and format bins.

Clearance - the permission one receives to operate specific equipment or perform specific duties after completing the required training.

E-Comm -- Short for executive committee. The seven elected officers of Radio Rensselaer

President -- job is to run meetings and deal with authoritarian outsiders.

Station manager -- The Station is in charge of keeping us up to date on FCC rulings, and maintaining station appearance.

Chief Eng. -- The cheese is in charge of the tech dept.

Program director -- The PD is in charge of programming.

Business manager -- Takes care of budgets.

Public Relations director -- Puts out a program guide and solicits donors.

Member at Large -- The interface between the E-Comm and the Members, performs ascertainment to obtain FACTS about station FEELING.