Reclaiming the Airwaves

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MICROPOWER BROADCASTING THE FREE SPEECH MOVEMENT OF THE 90'S

One of the most defining threads of political. cultural and social history is freedom of expression. In almost any circumstance, the degree of overall freedom present is directly proportional to the degree of strictures placed upon freedom of expression and who controls or maintains the mediums of expression. Whether it was the underground resistance to the Star Chamber, the free speech fights of the Wobblies or the Berkeley Free Speech Movement, the desire to communicate one's feelings, ideas, thoughts, etc. has remained undiminished throughout history. Subject to licensure for the first 500 years of its existence, the printing press of Gutenberg's day has been transmuted into the micropower transmitters of the 1990's. With an agency, the FCC (Fostering Corporate Control), totally in the grip of media monopolies who number less than 30 but own over 50 percent of the media resources, we have reached an intolerable situation where the peoples' airwaves have been turned into an instrument of social control engendering crass consumerism, and obescient response to the crudest of political flimflammery.

An owner of a printing press could have had his or her hand chopped off, or worse, for printing material considered to be seditious or critical of the ruling elite. Although micropower broadcasters have not been subject to a similar fate, they are being threatened with huge fines ranging from \$10,000 to \$20,000 and, in some cases, their entire household has been ransacked by local FCC agents and police. Clearly, free speech and other constitutional rights are under a state of siege. With the current anti-crime hysteria and what passes for "public debate" in the hands of the corporate monopolies and their mouthpieces such as Rush Limbaugh, an aggressive campaign of taking back the airwaves is the only hope of creating democracy in this country. It is our intent and purpose to see thousands of transmitters taking to the air in an all out, no holds barred movement of electronic civil disobedience. When was the last you were refered to as a citizen and not a consumer by the media?

One has to ask the question, what is the underlying premise behind who has rights to the airwaves which, like so many other natural resources, have been plundered and raped by the corporate interests who desire to line their pockets to the extreme detriment of the planet and all who reside on it? Why should just a few be allowed to dominate what should be a resource of the many? It is just the further diminishment of public space and resources which are fenced off and declared private property of the corporate elite. If the power levels were brought down to some reasonably sane limit, like 100-1000 watts on FM for example, many more people and communities could have a voice. Consider the cancer cluster risks alone from having megawatts of RF radiating from vertical antenna farms such as Sutro Tower in San Francisco.

If we are a country founded on democratic principles, with a government created to ensure and guarantee to all the rights enumerated in the Bill of Rights along with life, liberty and the pursuit of happiness why have we reached such an intolerable situation where any reasonable analysis will show the total lack of any

democratic process. And why do we meet such fierce resistance when we have tried to exercise any of these rights, such the right to vote, to speak in public parks, or to receive a just and fair wage? The question is, should the airwaves be used as a primary means of fostering a democratic, pluralistic, and vibrantly diverse society through a free and open exchange of ideas, news, information, art and culture or should they be a concession stand for narrow, anti-democratic corporate interests working hand in hand with a government whose main goal is domestic pacification, control and the maximization of private profit? Who does the government really work for, the people or the plutocrats? Of, by and for the people does not seem be an operative principle at this time.

Spectrum scarcity is largely the fault of the FCC. Take a look at your TV tuner. Notice all those vacant UHF channels. In most areas the UHF band is wide open. Yet, even though low power TV has been created as a legitimate category, the FCC has flatly refused to grant licenses in the 50 major urban areas where there is plenty of room on the UHF band. In 1980 the FCC forced many low wattage (10 watt), class D FM stations to either increase their power to a minimum of 100 watts and adhere to tighter technical requirements or go off the air. This was done largely at the behest of the Corporation for Public Broadcasting (another contradiction in terms), the agent orange of grassroots radio, who had been lobbying the FCC since the early 1970's as part of their drive to "professionalize community radio. It was the combined hope of both the FCC and the CPB to drive a number of stations off the air. What happened was that everyone scraped their pennies together and increased their power and operating budgets with a net result of crowding the spectrum more than before and having to rely more and more on bringing professional fund-raisers and managers on board to meet the larger budgetary requirements - thus began the slow death of real community radio in this country. Why does the FCC grant 90 mile fringe protection to many giant operators? As stated above, bring down the power limit to a reasonable level, the broadcasters will scream. Let them, they have had 60 years to make an obscene amount of profit from the peoples' resource.

We are creating an alternative to the FCC, the Free Communications Coalition - the peoples' FCC. An umbrella organization which intends on helping ensure good technical standards and support for micropower broadcasting, basing itself on a community and grass roots volunteer model using mediation and open discussion to foster responsible micropower broadcasting. Further, it is working toward the full democratization of all means of communication whether it is electromagnetic space or cyberspace in conjunction with any & all groups or individuals who are working toward this common goal. We would like to see many of these issues addressed and resolved at the community level. We hope to create a talent and resource pool of individuals who can provide the necessary technical expertise whether it be legal, electronic, organizational, etc. to aid in establishing micropower broadcasting as a fully functioning entity whose purpose is to break the stranglehold on the free flow of information, ideas, news, culture and art.

"We own the public airwaves. That's federal law, approved by the Supreme Court of the United States. We are the owners, we are the landlords. The Federal Communications Commission is our real estate agent. It licenses portions of the spectrum to corporate broadcasting TV and radio stations—they are the tenants. They pay nothing for the rent of a TV station. Some of the greatest fortunes in American history have been made by television and other electronic communication company executives—tens of millions of dollars—using public property free of charge. The tenant pays the landlord nothing, decides who says what on radio and TV, and laughs all the way to the bank, and because we grow up corporate, we don't even *think* of challenging it because we never *heard* of it. We never reflected on it. Our courses never *talked* about it. We never majored in it. And therefore, we're anesthetized. It's a controlling process." - Ralph Nader

(see page ? for further comments by Ralph Nader on corporatism)

WE NEED TO HEAR FROM YOU!

Over the last few months the response to the whole issue of micropower broadcasting has taken off at an incredible level, the mailing list has doubled since the first of the year. Largely due to a number of rather good articles which have appeared in Mondo 2000, Option and Spin magazines. Micropower broadcasting has been invited to be part of the Lollapalooza tour this year. New designs are being worked to make it as easy as possible for people to reclaim the airwaves.

Unfortunately, this work can not continue without a response of support from you. We hope that you consider micropower broadcasting to be a vital and critical tool to restore some sort of democratic process to the world and break the stranglehold on the free flow of information, news, ideas, art and culture. Several of us have basically put a good portion of our lives on hold to make this happen. If this work is to continue we need not only financial donations but volunteer help as well. Whatever you can do would be most appreciated. Please see the coupon on the other side of this page

TAKE BACK THE AIRWAVES

Spring a Micropower Summer Offensive to Bring About the Corporate Fall & Prevent a Nuclear Winter

First, we would like to thank everyone for their support of micro power liberation broadcasting and their extreme degree of patience as we get our act together on ramping up for full scale production of kits.FRB and the Peoples' FCC invite you to take part in reclaiming the airwaves. This can be done in many ways, it is not necessary for you and your community to put a station on the air if you feel that is too great of a risk. A lot of public education needs to happen around this issue so folks understand that is a matter of free speech, constituitional and human rights. We urge you to consider conducting public forums and presentations on this in your community. Printed materials, videos, etc. can be provided for this type of activity. Further, if you are technically inclined and would like to provide assistance as a mentor to those whose technical abilities are vastly exceeded by their enthusiasm, we would like to hear from so we can refer folks needing assistance to someone in their area. If your are good at teaching and presenting technical matters in an understable manner, please consider leading a workhoop in your community. We can supply materials for this including a how to video that is in production. Let us know what happening in your community as it regards micro power broadcasting, especially regarding any actions taken by the FCC.

Micro power broadcasting will be part of the Lollapalooza tour this summer. A transmitter will accompying some foks who are part of the tour and we have been invited to have a table at each concert site. If you live anywhere close to the concert sites (most major urban areas) and can volunteer to run an info table, pleaes contact us. We will see that passes are arranged and send you the materials to be distributed along with materials you might wish to add. That would be a good time to organize a local meeting/public forum or workshop on micro power broadcasting and reclaiming the airwaves. All in all, the Lolapalooza tour was attended by 2 million people last year, a great opportunity for outreach.Let us know if there is any way we can help you, many of us here are rather experienced community activists and organizers.

We have legal support available through the National Lawyers Guild and can send legal info to supportive attorneys in your area to bring them up to speed on this issue. If you can, come to the Bay Area for the weekend of April 30 and May 1 and the following week. On Saturday, April 30 Food Not Bombs is putting on Soupstock 94 with lots of good bands including MDC, Mudwimmin, Clan Dyken, etc. It will be held at the Golden Gate Park Bandshell near the DeYoung Museum and starts at 12 noon. San Francisco Liberation Radio will be broadcasting it live at 93.7 FM with a possible higher power AM simulcast. On Sunday, May 1 the 25th anniversary of Peoples' Park will be celebrated with a big party and concert at Peoples' Park in Berkeley. This event will be broadcast live by Free Radio Berkeley at 88.1 FM.

A whole series of workshops on media, computers, broadcasting, etc. will be held that week in both SF and Berkeley. A public forum on micro power broadcasting and radical art will be held on Thursday evening, May 5 at the Capp Street Gallery in SF. A micropower broadcasting workshop will held on Wednesday, May 4 in Berkeley and on Saturday, May 6 at the Capp Street Gallery in SF.

More articles are coming out on mirco power broadcasting. The most recent issue of Option had a very good article. The May issue of Spin featured an article as well. It is possible that Rolling Stone might be interested in this issue. Hopefully, you can get the local media in your area to do the same. Richard Edmondson with San Francisco Liberation Radio and Food Not Bombs Radio Network is now producing a weekly show for Radio For Peace International, a shortwave station operating from Costa Rica. It is a half hour show on the best of micro power broadcasting in the US with segments from air tapes of various stations that are currently on the air. If you are on the air send us air tapes so they can be incorporated into the show.

We are setting up to record program materials onto hard disk with a DSP card in one our PCs. These will be compressed with a program from Xing and loaded into our FTP site for distribution. This will begin on May 1. If you are interested in this project, let us know.

We have decided to make a major push for the next 6 months to create a national movement to take back the airwaves and break the coporate/government stranglehold on the free flow and exchange of ideas, information, news, music, culture and artistic expression. If we do this in an organized, concerted way we can take back the airwaves and show what real democracy is all about. It involves taking risks and a lot of hard work but if worth the effort if one values free speech, human rights, liberty and self determination.

Thanks again.

Stephen Dunifer, Doug Forbes, Richard Edmondson, Keith McHenry, Captain Fred, and many others who wish to remain unknown at this time

San Francisco Liberation Radio Free Speech on the Line

San Francisco Liberation Radio, in a bold move placing free speech on the line, will begin on May 2 broadcasting five nights per week from a fixed location. "It's risky," admittede SFLR's Richard Edmondson. "If the FCC wants to find us they will be able to do so fairly easily." He added, however, that the problems inherent in constantly moving the station from place to place, broadcasting in concealment, setting up and breaking down by flashlight—all were considerations driving him and other SFLR members to make the decision they did. "At the new location we'll be powered by an AC power supply rather than batteries, giving our broadcasts more regularity, reliability, and, with the expanded hours, greater listnership," he said. The new broadcast schedule, the commencement of which will coincide with SFLR's first anniversary, will be Mon-Fri from 8-10 pm—if the station survives. "Our lawyers tell us it's a very real possibility that we'll be arrested and that our equipment will be seized," he said, adding that in such an eveutuality SFLR will call for a demonstration at 5 pm the following day in front of the San Francisco federal building. "We're encouraging everyone who values free speech to come out and support us when and if the clampdown comes," Edmondson said. The government's assault on San Francisco Liberation Radio began last year when Edmondson received notice from the FCC that he was being fined \$10,000 for an alleged illegal broadcast on the night of Sept. 22. Since then the station has been on the air two nights a week unhindered. But what begins on May 2 will be a strong departure from the clandestine guerilla broadcasts of before. "Beginning on May 2 we'll be more above ground. We'll even have a live phone line for listners to call into—so that's how easy it will be for the government to track us down should they want to," Edmondson said. "I can't say enough about how important it is for people to come out in the streets and support us should the government shut down the station. If they're paying workers in Haiti fourteen cents an hour, how much longer do you think it will be before that's what they're paying workers in this country? We have to make a stand now—or we may as well resign ourselves to watching our situation grow more and more desperate with each year that goes by." The path being taken by SFLR is actually one that has already been blazed by two Black Liberation stations in the state of Illinois. "Mbanna Kantako and Napoleon Williams are the real precedent setters here, and we are very inspired by what they have been able to do," Edmondson said.

Jolly Roger Comedy Troupe Skewers the Political Elite

Political satire is the weapon of the day—or at least the weapon of choice of the Jolly Roger Comedy Troupe, whose skits can now be heard on Free Radio Berkeley and San Francisco Liberation Radio. And who are the Troupe's victims? Anyone from Frank Jordan to the International Olympic Committee. Imagine Frank Jordan and Jordan top advisor Jim Wunderman clad as hunters and standing on San Francisco city hall balcony taking pot shots at the homeless people on the streets below; or two mundane CBS sportscasters named Hank Hasbeen and Kathy Vapid broadcasting the "Immigrant Bashing Finals" at the winter olympics in Lillehammer. With the Jolly Roger Comedy Troupe it's anything goes; no target is sacred. And what happened when members of the University of California-Berkeley Police Department got caught by video camera watching movies in the campus film library when they were supposed to be out on patrol? Yep, you guessed it. The Troupe's skit writers got busy and produced "At the Movies with the U.C. Police," featuring two barely literate cops "reviewing" various current movies, including Geronimo ("another crybaby indian movie from Hollywood") a la Siskel and Ebert. And who will be the next target of the Jolly Roger Comedy Troupe? Tune into San Francisco Liberation Radio and Free Radio Berkeley to find

I see in the near future a crisis approaching that unnerves me and causes me to tremble for the safety of my country. . . . Corporations have been enthroned, an era of corruption in high places will follow, and the moneypower of the country will endeavor to prolong its reign by working upon the prejudices of the people until the wealth is aggregated in a few hands and the Republic is destroyed.

— **Abraham Lincoln** (quoted in Jack London's "The Iron Heel").

FCC PULLS PLUG ON BOOTLEG RADIO STATION IN BROADVIEW

(Associated Press) 4/4/94 Chicago Sun TimesThe message on the answering machine said, "Power Radio isoff the air today because of an occurence of technical difficulties." The technical dirriculty that shut down the bootleg FM stationin Broadview was a raid by the Federal Communications Commission. Power Radio was operated by a 15-year-old boy with assistance from his father. Friday's raid in the Chicago suburb was confirmed by Paul Gromoll, theelectronics technician of the FCC's Midwest enforcement divisionoffice. Pete Sinadinos had shared deejay duty with his dad for 2 1/2 years. Sindinos and his father, jim, played oldies, dance, country and some heavymetal andfeatured a popular "stupid hour". The station was "just for kids, to keep them off the streets, to keepthem off drugs," Jinm Sinadinos said. They say they did not know their broadcast, using a 5-watt transmitter boughtthrough a flea market, was illegal. The Riverside-Brookfield High School freshman said he made no attempt to evade authorities; he broadcast a phone number and post office box over the air. Gomoll said the FCC shuts down three or four unlicensed radio stations aroundChicago each year. He said no charges have been filed against the Sinadinos.

Radio KAOS in Des Moines

Well, I finally got up enough courage to post an advertisement for our station. We are by no means a _new_ station, we have been operating every weekend when possible all winter. New spring hours will be much moresporadic. If you are in the Des Moines area, "west-ish on the freeway" on a weekend night, and happen to like alternative music, listen to: Radio KAOS, Des Moines _ONLY_ Pirate radio station! 95.9Mhz, just one click above KGGO because we are just one click better! 96 KAOS, All NAKED, all the time.

Radio KAOS, if you can hear us, you are TOO DAMN CLOSE!(this is of course an experiment to find out if the FCC actually investigates alleged pirate radio broadcasts, or if they monitor or have agents monitor this newsgroup. If anything happens to our lovely little 12,000mw StereO transmitter, you can be assured that I will let everyone who reads this newsgroup know. Later this summer we will be changing our setup, adding a 200 watt amplifier, 80 ft. tower, and a yagi beam pointing back to DSM!)—Necron@Pirate-Radio.DSM.IA.US. All opinions expressed reflect those of Pirate-Radio.DSM and MicroPower FM Broadcasting /all the people of Des Moines!

5...4...3...2...1...ANARCHY! by Captain Fred

We came on the air with a "plut plut plut" sound. It was not what I expected to hear. I started to notice things were not functioning properly. For starters, my CD player was spinning in the wrong direction...How could this be happening? The cassette deck kept turning itself off for no apparent reason, and I was starting to get a little panicky. Ralph had the good judgment to grab the marantz PMD 420. It saved the show for us. Finally, there was some music playing in my air monitor. The broadcast microphone was a small dictation tape deck set in "record" mode. The sound was rather tinny but audible. Our broadcast console was a small steel box with a four channel mixer inside. Some of the cables seemed sensitive to touch and would emit a low hum if touched in the wrong way. I found out later that shielding is very important for the audio connections. The control room was the passenger seat in my car and the antenna was a simple "j-pole" attached to an aluminum tripod stand. We played some music, a short interview with Norman Solomon, and a tribute to Orson Welles, with selections from his famous "War of the Worlds" broadcast. There were also shameless plugs for micro-power radio and Free Radio Berkeley. Keeping control of the audio level was a full time job for me, and Ralph fine-tuned the transmitter frequency with a tiny plastic screwdriver. I'm not sure how many people actually heard us that night, since there was no publicity announcing the broadcast. Considering it was a trial run, we were pleased. The sound coming from my walkman was clear and clean! On the next occasion we were better prepared, better cables, we had learned that arranging the equipment the wrong positioning could cause the TX to get a weird hum. Captain Fred had some great headphones and I was very impressed with the sound quality.

FCC Still Pursuing \$17,500 Penalty Against Andrew Yoder

From the mouth of the FCC:

The Commission has denied Andrew R. Yoder's Application for Review of the \$17,500 forfeiture penalty issued by the Field Operations Bureau against him for repeatedly operating a broadcast station without an authorization in violation of Section 301 of the Communications Act.Commission investigators monitored transmissions from the station which operated under the call sign "Radio USA" from various locations, eventually tracing the transmissions to the home of Mr. Yoder's parents in Springs, Pennsylvania. Mr. Yoder refused to allow the FCC investigators to inspect his radio station, another violation of Commission Rules. The station and operator were positively identified by voice and close-in direction-finding techniques. The Commission rejected Mr. Yoder's arguments that the evidence

was insufficent to establish that he was the operator of the station, and that he was not obligated to allow the FCC investigators to inspect his radio station. Action by the Commission March 10, 1994, by Memorandum Opinion and Order (FCC 94-66). Chairman Hundt, Commissioners Quello and Barrett.

FCC-News Media contact: Audrey Spivack at (202) 632-5050;

Pamera Hairston, Chief, Legal Branch, Field Operations Bureau, at (202) 632-7059.

Editor's note: why not call these fine folks and let them know what you think about this. Autodial attack anyone ?

PO Box 109, Blue Ridge Summit, PA 17214 (717) 263-6109

Yoder Responds to the FCC

Howdy! Have you ever been harassed by the government? I have been accused by our Federal Communications Commission (FCC) of operating an unlicensed (pirate) radio station. I am contesting their fine. I believe that Imight have been singled out as a result of my notoriety in the piratelistening scene. In fact, the FCC agent who came to my parents' housetold me he read my column every month in one of the newsletters! I have been fined \$17,500— nearly half of which was for notletting an agent in my parents' house at 3:00 AM who didn;t have asearch warrant! More troubling aspects of the fine are that (1) theyhave no evidence, (2) the fine is 175 times greater than when the pirateWKND was caught in 1990 (WKND was caught a second time and hadapproximately \$100 in equipment confiscated), (3) pirate radio is nonprofitand public service oriented. This fine is on par with being fined \$17,500for being within two blocks of a jaywalking incident. To start my case, the FCC sent press releases to all of the mediaoutlets in this area and to all of the radiohobby publications. Thesepress releases announced that I DID (without question) operate a pirateradio station and that these broadcasts could interfere with emergencycommunications (again, not true).

Without a court case, these pressreleases were slanderous and they also damaged my right to a fair trial(an perhaps even prove myself to be not guilty) because I had already beenpronounced guilty by the FCC and by the mass media. In addition to being fined \$7,500 for not letting someone who didn'thave a search warrent into a house that wasn't mine, I was fined \$10,000 for unlicensed operation. The trouble is that this fine is based on commercial rado stations who make thousands of dollars per day. Also, this new fin structure was instituted in April 1992—thus, I was fined under a structure that didn't exist when my incident occurred! When my incident occurred, the minimum enforcement was a warning or loss of license, the maximum was a \$2,500 fine (for a commercial station). Although the FCC has allowed me to question the legalities of theiractions in my case, they have not answerd any of my questions or loweredthe fine (in spite of the obvious conflicts with our legal system).

Yesterday, I received a bill from the FCC stating that I had 30 days to paythem \$17,500 or it would be taken up by a debt collection agency. They did not even notify me of my right to a trial or court case! This is not lawful because they have not notified me of my right to due process (and attempted to mislead me) and because they do not have the power to collect fines. At this point I'm getting desperate. The ACLU won't represent me because there is a discoepancy as to whether I am guilty or not. After months of playing telephone tag with the National Lawyer's Guild, I haven't come up with any assistance. In the meantime, the FCC is behaving much like an agency from some little totalitarian government. They only need to drag me off to a jail and beat me for a few days to complete the process. At the pace with whitch they are breaking laws, that might just be next.

This case does have an affect on other aspects of radio operations. Ofcourse beating the FCC in this case will cause more pirate radio stationsto go on the air (both on FM and shortwave) because the FCC will nolonger appear invincible. This could improve the quality of radio programming in communities across the United States. If I lose, on theother hand, it will be a strong case for the FCC to continue to destroy any sort of alternative broadcasting. The FCC's policy over the past10 years has been to allow 1 corporation to own more stations than ever (making the mainstream bigger and driving small stations out of buisness) and to raise the minimum power levels of stations (to keepsmall organizations out of broadcasting). The next step for the FCC might be a major assault on college radio, which has already been damaged. The FCC will only stop when someone else stops them. What can you do to stop the FCC? Please publicize this case in zines or wherever you can, support radio stations that air programming that you like, and support pirate radio stations. So, if you would like to contact pirate stations for interviews or if you have further questionsfor me, do not hesitate to write or call!73fr,Andrew YoderMicro Power Broadcasting Technology for the People

What does it take to put a micro power broadcasting operation on the air? First off, less than \$500. A basic 5 watt FM transmitter, output filter (very necessary to reduce output harmonics), 50 ohm coax cable (25-100 ft RG58, Mini8, RG8), antenna and power supply (battery or 12 volt regulated and filtered unit) is going to cost about \$150-\$175. This is assuming assembly of kit and antenna. Next, a VHF power meter (\$30-\$40), a dummy load (make from resistors or \$19 at Radio Shack) and a frequency counter (\$50-150) are needed for tuning and keeping things optimized. Beyond those requirements, one sort of audio source (line level -10 dbm, .3 volts) or another is needed to feed the transmitter. This source can be a walkman type cassette unit, a mixing board, tape deck, etc. Any "line level" source. e.g.. mixer out, tape recorder output, CD output, or a preamp out or tape output from a receiver. In short, any preamplified source. (1 volt peak to peak). A mixer might be good since you can and fade back and forth between a variety of audio inputs. Others opt to record shows ahead of time and use a tape player for the audio source. They can start and stop the recorder so dead air is eliminated. One person has a tape player that has a mike input that will broadcast the mike when it's in the pause/record mode. So he runs a pre recorded tape and pauses the tape to talk. Not all machines will let the sound go through in this mode though. Radio Shack has a very reliable portable mixer which runs on 4 AA cells for \$79.00. Granted, this is not a professional studio but for low budget community operations, it does not take top end gear. Creativity and determination as shown by many community stations can certainly make up the difference. In total, a fully functional station can be put on the air for \$500 or

Transmitter kits can be obtained from Free Radio Berkeley, See the list of the kits and accessories on the next page. You need to have some experience in soldering and electronic assembly to do this properly. If you do not have this experience try to find someone who does. A 5 watt transmitter can be assembled in about 4-5 hours. If you follow the diagrams and instructions carefully you should not have a great deal of difficulty. It is important to work slowly and not to make guesses or assumptions. We are hoping to have volunteer technical mentors available in as many areas as possible to aid folks in getting their operations on the air. An instructional video tape is in the works. If you really get stuck send us an email note - frbspd@crl.com - or call the voice mail # (510) 464-3041.

After assembling the transmitter and/or amplifier you will need two things, a power supply to provide the necessary DC operating voltage of 12-14 volts and a dummy load for testing and tuning. Further, a power meter and frequency counter (a digitally tuned radio will work) will be required as well. A 12 volt lead acid battery (auto, lawn and garden or large motorcycle type) can serve as the voltage source. An AC operated DC power supply will work as well, we have several different types available. If you have your own DC power supply be sure that it is well regulated and can handle the current requirements.

After checking your work for accuracy and fully assembling the transmitter and/or amplifier you will need to connect the dummy load to the output connector before applying any power. It is very good practice to check critical leads for shorts to ground with a multimeter set for continuity or low range resistance checks. Make sure the positive voltage supply lead and output to the RF connector do not exhibit any shorts to ground, or, additionally, the RF input lead in the case of amplifiers. You then apply the operating voltage and make sure the ground lead goes to the negative terminal and the 12 volt lead goes to the positive terminal. Further on in this publication we show how to protect your hard work from accidental reversal of these leads. Attach the ground lead first, then do what is called a "tap test", briefly touch the 12 volt lead to the positive terminal on the power supply or battery. If you get a large arc of current you may have short somewhere.

If it passes the tap test, proceed to fully power up the unit and begin the tune up procedures indicated in the instructions. If you purchased a transmitter and amplifier combination, always build up the transmitter and get it working first prior to starting on the amplifier. In the case of the transmitters it is necessary to bring the oscillator section into the frequency range you roughly wish to be in, a frequency counter or digitally tuned radio is needed to accomplish this task. Then one can proceed with the appropriate tuning procedure to bring the unit up to full power. A dummy load is essential for this process to prevent putting a lot of spurious RF into the air. Most transmitters are designed to operate into a load impedance of 50 ohms, similar in concept to stereo speakers which exhibit an impedance of 4-8 ohms. Warning: if the transmitter is operated into a short, an open or wrong impedance, the output transistor can be destroyed.

Amplifiers are a little easier to assemble and tune due only one active component (RF transistor) being present. Once your trasmitter is assembled its output is connected to the input of the amplifier. you can wire it directly with the coax cable supplied or use the connectors supplied as well so you would use a short 50 ohm cable with PL259 plugs on both ends to connect between the transmitter output and amplifier input. In that manner you could add a switch to disconnect the voltage from the amplifier and only run the transmitter when you did not need the extra power from the amplifier. After tuning the transmitter and/or amplifier to the frequency of choice, (pick a vacant channel) you will be ready to connect the unit(s) to an antenna. A number of antenna designs are provided with the kit, most can be built rather easily with

copper tubing and other parts obtainable from your local hardware store. Partial kits without the copper pipe are available from Free Radio Berkeley. Further you will need a length of 50 ohm coaxial cable to connect the antenna to the transmitter, it needs to have PL259 connectors on both ends, these connect to SO239 sockets - one on the transmitter and the other on the antenna. If you are planning on running mobile, a magnetic mount 1/4 wave whip antenna will work very well. After connecting the antenna to the transmitter, it will need to be tuned. It is best to use as low a power as possbile to do this. This is covered in the instructions that come with the antenna designs. Once this has been done, you will need to choose a location for the antenna, the higher the better.

If you are working from a fixed location, apartment building or whatever, it is best to disguise the antenna somewhat to throw off the FCC. Several of the antenna designs can be slipped down inside a piece of 6" or so black plastic pipe so it will look like a stand pipe on the roof. A single occupancy dwelling is the least safe since it is pretty obvious what is going on, an apartment building is better since their are a number of possible locations for the transmitter. Most of the antenna designs are portable enough to be carried to a high site. Lengths of 1 1/2" electrical conduit securely joined together will get the antenna 20 feet or so into the air. Many of the antenna designs need to be isolated from the metal mast . The antenna can attached first to a piece of 1 1/2" plastic pipe which is then clamped to the metal mast with radiator hose clamps of the proper diameter. A four foot piece of 3/4" pipe driven into the ground with the 1 1/2" mast slipped over it will anchor things rather well. Once your are ready to go on the air, the really hard part starts - creating a programming mix that will attract and build a listening audience. This involves a lot of work, doing street interviews, taping programs, gathering information, etc. Also, you have to avoid the FCC. If you are lucky enough to live several hundred miles or more from the nearest field office, then the likelihood of them showing up is somewhat is minimized as long as you do not step on other folk's frequencies. Be on the lookout for a car or Chevy Suburban type vehicle driving around the neighborhood rather slowly. They have an antenna array buried in a false plastic roof of the vehicle and a whole rack of gear to go with it. Triangulation is a thing of the past.

We would like to find other engineers and technically inclined people to help increase these efforts since we are a rather small design and development operation. Further, we need such technically inclined people to act as advisors and facilitators in the process of helping people build, test, tune, and setup their transmitters and antennas. That way, we can create a pool of people across the country and world who will be available to lend a technical hand to those who wish put micro power broadcasting operations on the air.

Free Radio Berkeley has a lot of information available, please contact us if you would like to receive our newsletter or have any particular needs. The newsletter contains a list of the kits we have currently available. A legal guide on dealing with the FCC is provided as well.

Let a thousand transmitters bloom!

Stephen Dunifer Free Radio Berkeley / Free Communications Coalition - the People's FCC 1404 A Walnut St. #406 Berkeley, CA 94709 voice mail: (510) 464-3041 email: frbspd@crl.com

KITS & ACCESSORIES FROM FREE RADIO BERKELEY

First, a word from our legal department:

For educational purposes only. These kits are offered for the furtherance of one's knowledge regarding radio frequency design and principles. At all times during operation the assembled unit must be connected to a dummy load. Part 15 of the FCC rules prohibits an antenna being used with these units. All responsibilities for the ultimate use of these kits are born solely by the builder and/or operator.

KITS AVAILABLE NOW!

All kits are complete and come with professionally manufactured, drilled and tinned PC boards. All coils are pre-wound. Each unit, unless specified, requires 12 volts for proper operation. Full instructions and diagrams included. Required tools include a 25-30 watt soldering iron with a fine tip, diagonal cutters, needle nose pliers, assorted screwdrivers and other small hand tools. Full assembly diagrams and instructions are included with each kit. Antenna construction diagrams are provided with each transmitter or amplifier order.

Certain kits are designed to work with each other. For those whose wish to boost the output of their Ramsey FM-10 the 1/2-1 watt amp will work very well for this purpose. The 30 watt amp is designed to be driven by 3-5 watts and works extremely well with the 5 watt transmitter. The 15 watt amplifier is designed to be driven to full power with about 1/2 watt of input power, hence it works very well with the 1/2 watt stereo transmitter. If you wish to only boost a 1/2 watt signal to 5-7 watts then choose the 6 watt amplifier kit. An amplifier only increases the output power of a given input signal, it can not produce an FM signal whereas a transmitter or an exciter creates the FM signal at a suitable power level for possible further amplification by an RF amplifier.

5 Watt FM Transmitter - \$55

An improved version of the Panaxis 5 watt design with a much more rugged output transistor capable of producing 5-6 watts. This is a very good basic unit that is very compact, fits into a 4 x 6 inch enclosure (available punched and drilled). Frequency stability is maintained by a well designed oscillator section. It is a mono unit that accepts line level input (i.e. an audio signal from a tape deck, mixer, etc.). A fine frequency adjustment control allows for easy adjustment of operating frequency. To increase power of this transmitter use the 30 watt amplifier. Both will fit into a 7 x 7 inch enclosure (available punched and drilled). Requires 12 to 14 volts DC at 3/4 to 1 amp for operation.

6 watt RF Amplifier - \$30

Uses the same output transistor as above. It is designed to boost low wattage transmitters to a bit higher output power and will produce up to 8 watts of output power. A very small and compact circuit measuring 3 x 1 1/2 inches for 1/2 watt input drive. Easy, quick assembly. Requires 12-14 volts DC at 3/4 to 1 amp for operation.

15 watt RF Amplifier - \$50

Uses a very high gain (14dB, power gain of at least 25X) RF transistor to boost a 1/2 watt input to 15 watts. Perfect for boosting the 1/2 stereo transmitter to 15 watts. Measures 21/2 by 5 inches and fits into a 4 x 6 enclosure (available punched and drilled). Includes heat sink. Easy, point to point surface mount assembly. Requires 12-14 volts at 2 amps for operation.

20 -24 watt RF amplifier - \$95

\$95 might sound a bit steep, but for those who do not wish to do an extensive amount of soldering and tuning, this is kit is for you. It uses a broad band high gain, RF power module which will put out a 20-24 watt signal for only a 100 to 200 miliwatt input. Kit requires less than 20 solder connections to complete, including a 5 element filter. Since the module is broad band from 88 to 108 MHz no tuning is required, plug and play as they say. Requires 12-14 volts at 3 to 4 amps.

25-30 watt RF Amplifier - \$60

Will produce full power with an input drive of 3-5 watts. This unit works very well with the 5 watt transmitter kit. In fact, next to the 5 watt kit, it is our most popular item. Fits a 4 x 6 inch enclosure (available punched and drilled). Easy point to point surface mount assembly. Includes heat sink. Requires 12-14 volts DC at 4-5 amps for operation.

1/2 to 1 watt Amplifier - \$25

1/2 to 1 watt output for an input power of 10 mw. Great for boosting lower power VFOs and low power Ramsey FM-10 type kits. Very compact size, 3 1/2 X 1 1/2 inches. An optional transistor can be substituted to take the power up to 1 1/2 watts, add \$5 for this option.

Output Filter Kit - \$8.00

A seven element low pass filter, composed of 4 coils and 3 capacitors, to flatten those harmonics. Specify cutoff frequency desired, 94 MHz, 100 MHz, 104 MHz, 108 MHz. The cutoff should be about 2 to 4 MHz above the frequency the transmitter is set for. Please use a filter on any transmitter you to use to avoid possible interference with other services.

15 Watt Dummy Load Kit - \$10.00

Essential for tuning up and testing transmitters and amplifiers. Will handle 15 watts without any strain, higher powers for a briefer period of time (i.e. shut down when it gets rather hot). Presents a uniform 50 ohm impedance to the transmitter. 25 Watt Dummy Load Kit - \$20

As above, use this with the 30 watt kit for testing and loading purposes. Uses a single, film non-inductive resistor

50 Watt Dummy Load Kit - \$35

Same design as the 25 watt unit, use this if you plan on running the 30 watt unit for an extended period of time with a dummy load.

100 Watt Dummy Load Kit - \$50

Same design as the 25 & 50 watt units. Uses 2 film resistors.

1/2 - 1 watt Stereo Broadcast Transmitter - \$50

A vast improvement over the Ramsey FM-10. It uses the BA1404 IC as a stereo modulator only to modulate a FET vfo, buffer and amp chain. Better audio input filtering and bypassing. IC voltage regulation for the 2.5 volt supply for the BA1404. A very rugged output stage and collector voltage bypassing make this unit stand out from all other transmitter designs using the BA1404 chip. Requires 12 volts DC

Stereo Generator Only - \$30

Actually 1/2 of the above the stereo transmitter, will allow one to broadcast in stereo using the 5 watt transmitter with a very minor modification.

HIGH POWER AMPS - USE WITH CAUTION

75 Watt Amplifier - \$165

Requires 28 volts DC (two car batteries in series or 28 volt DC power supply). Point to point surface mount construction. Easy assembly, includes heat sink. Amplifier measures $6\ 3/4\ x\ 3\ 3/4$ inches. Only 5 watts input power needed to drive to full power.

125 Watt Amplifier - \$200 Requires 28 volts DC (two car batteries in series or 28 volt DC power supply). Point to point surface mount construction. Easy assembly, includes heat sink. Amplifier measures 6 3/4 x 3 3/4 inches. Use a power FET RF transistor that requires only 3-5 watts of input power for 125 watts output.

ANTENNA KITS

These are partial kits, just go to your local plumbing supply or hardware store for the copper pipe and/or wire needed for completion. Full construction diagrams and instructions included.

J-Pole - \$20

Metal box drilled with SO239 connector, tuning cap and tubing clamps. This one is know as the "electricians special" since it uses mostly electric hardware in its construction. Works very well for urban areas. No soldering of copper pipe required for assembly. Can be adjusted for operation over the entire FM band. Slim Jim - \$15

SO239 connector and clamps. Works very well for urban areas where a powerful horizontal pattern is needed. If used at too great of height, an area surrounding the antenna will be skipped over due to its low angle of radiation. Even at a height of only about 12 feet mounted on a traffic sign pole this antenna was able send a 5 watt signal 2-3 miles. Requires soldering of copper pipe. Can be placed inside a 6" piece of black plastic pipe for concealment. Provides a gain of 2-3.

Dipole - \$20

Plastic box, SO239 and clamps. Easy and quick design. Can be concealed by placing inside a 4" piece of black plastic pipe.

5/8 Ground Plane - \$30

All necessary parts except copper element and ground radials. This is a great design and works extremely well. It is very portable and will boost the power by a factor of 2 to 4.

POWER SUPPLIES

Unless you are planning on operating from a 12 volt lead acid battery or from the lighter socket in a vehicle you will need an AC operated DC power supply. Wall adapter units can not used. We have the following units available.

2.5 Amp 13.8 V DC power supply - \$29

Use this to power either the 1/2 watt transmitter or 5 watt transmitter or the 1/2 watt stereo unit in combination with the 6 watt amplifier.

4.5 Amp 13.8 V DC power - \$39

Use this to power the stereo transmitter in combination with the 15 watt amplifier.

12 Amp 13.8 V DC power supply - \$65

Use this to power the 5 watt transmitter in combination with the 30 watt amplifier

METERS

Power & SWR Meters

These are essential to the proper tuning and setting up of both transmitters and antennas. An antenna has to be fine tuned so that it accepts the full power of the transmitter and reflects the lowest amount possible back, that ratio of forward power to reflected power is know as the standing wave ratio (SWR). The various stages of both transmitters and amplifiers have adjustable capacitors which are used to tune the unit to the frequency of operation. A power meter allows you to see the effect of these adjustments on the power level and to set everything at an optimum level.

Economy Power/SWR meter - \$35

A compact in-line unit that works up to a frequency range of 150 MHz.

High Quality Daiwa Meter - \$100

A dual cross needle meter that shows both forward and reflected power on the same meter face. Makes tuning up very easy, no need to switch back and forth between these two functions. Compact design with 12 volt connection for lighting the meter face.

FREQUENCY COUNTER

To accurately maintain your operating frequency a digital frequency counter is highly recommended. A digital tuner with signal strength indication can be used as a substitute. We have a frequency counter available for \$80.00 COAXIAL CABLES

A coaxial cable is a special type of wiring that has an inner conductor surrounded by an insulating plastic sheath which is covered by a braid of copper wire that is then covered by a plastic jacket. The 75 ohm video cable used in home TV applications is one type of coaxial cable. For most RF purposes, 50 ohm cable is used. Quite a number of 50 ohm coaxial cables are available ranging from the rather small to cables over 1" in diameter. Regardless of the type, all such cables exhibit a loss that increases with frequency of operation and the length of the cable. For most purposes we will concern ourselves with RG8 and RG8x (mini version of RG8). In very short runs RG58 can be used, but we prefer RG8x due to its lower loss and ability to stand a bit more abuse. RG8 has the lowest loss of the group. Under no circumstances should the cables be twisted, kinked or crushed, this will cause major problems. We supply both RG8X and RG8 in the following lengths. Each end is terminated with a PL259 plug.

RG8X: 25 feet - \$15, 50 feet - \$25, 75 feet- \$35, 100 feet - \$40

RG8: 50 feet - \$32, 75 feet - \$42, 100 feet - \$52

ENCLOSURES

4 x 6 aluminum chassis punched and drilled for 5 watt xmtr, 15 watt amplifier or 30 watt amplifier - \$18

7 x 7 aluminum chassis punched and drilled for 1/2 watt stereo xmtr or 5 & 30 combo. - \$25

VARIOUS & SUNDRY ITEMS

Tweak stick - \$2.50

Essential to tuning transmitters and amplifiers. Non-conductive body with tiny metal blade at end. In tuning these transmitters and amplifiers a metal screwdriver will cause false tuning to happen due to the interactive effects of the metal with the circuit. A plastic TV tuning tool kit can be found at Radio Shack as well.

NEW ITEMS TO BE INTRODUCED BY JUNE-JULY

Phase Lock Loop Controller for 1/2 watt stereo transmitter and 5 watt transmitter Phase Lock 1 watt exciter/transmitter

Stereo Audio Processor & Mixer

A combined stereo generator, limiter and audio mixer 2-4 Watt AM & SW Transmitter kit with companion 25-50 watt amplifier kit 2-3 watt UHF TV transmitter kit with 15 & 50 watt amplifier kits

If you have any other particular requirements please let us know. Custom design and fabrication services are available including PC layout and production. Full CAD services as well.

Proceeds from the sales of these kits go to the furtherance of micro power broadcasting, bringing a voice of empowerment to every community.

Please add \$3.00 for handling and shipping for each kit. \$5.00 for the 2.5 & 4.5 amp power supply and \$10.00 for the 12 amp power supply. Add \$2.00 for 2nd day mail service for each kit.

Payment to be made out to Free Radio Berkeley

Free Radio Berkeley 1442 A Walnut St., #406 Berkeley, CA 94709

Voice mail: (510) 464-3041 Net mail: frbspd@crl.com

Modification to 5 Watt Transmitter Adds Stability & Power

Featured Antenna - 5/8 Groundplane

Micropower Broadcasters Now Being Heard Internationally

Micropower broadcasters now have the chance to have their programs heard by an international audience via the airwaves of Radio for Peace International, a shortwave station in Costa Rica whose signal is received in more than sixty countries worldwide. In March RFPI began airing a weekly half hour program entitled "Micro-power Radio in the U.S." "We originally conceived of it as a sort of 'best-of' program, taking material from different micropower stations from around the country," said Richard Edmondson, of San Francisco Liberation Radio, the show's producer. "The only requirement we had was that the station had to be unlicensed by the FCC." So far the program has featured broadcast excerpts from Free Radio Berkeley, Anarchy Radio, Radio Free Detroit, and San Francisco Liberation Radio. "We are constantly in search of new material and would encourage micropower broadcasters from around the U.S. to send us tapes of their best shows," Edmondson said. He added that RFPI's range was illustrated recently by correspondence received by a listener in Japan. "We got a letter from a guy in Japan who not only wrote to say he had heard our program, but actually sent us a tape showing us what it sounded like on an actual short wave set in Japan—very scratchy but you could definately tell it was us." In the last week, several other responses came in from listeners in the United States.

Ralp Nader on Corporatism & Plutocracy

... "plutocratic power" ... is really the singular index of what has been going on, decade after decade, in this country. . . . those people who have civic power accorded them—freedom to vote, freedom to speech—if they do not *use* the authority that they are empowered to use in a constant, daily, diverse manner, power tends to concentrate itself and before you know it, you have a plutocracy that uses the symbols of government, and the symbols of democracy, to regale itself and to achieve legitimacy. Now, the avaricious triumph and spreading tragedy of corporatism *should* be the singular, most important issue in the presidential campaign.

When we're talking about plutocracy, what are we talking about? Here's an example of plutocracy: corporate socialism. That is, corporations who get in trouble if they're important enough or big enough, do not go bankrupt, they go to Washington. They are then subject to a process known as corporate welfare entitlements—where their bankruptcy, mismanagement, speculation or corporate crime generates losses which are socialized on the backs of the taxpayer. This corporate socialism and corporate welfare is booming. In fact most of what Washington does is conduct a bazaar of "Accounts Receivables" for corporate requestors. There are dozens and dozens of corporate welfare projects that we can conveniently call "aid to dependent corporations." Now look what this does. First of all it reduces corporations incentive to work, productively. Because they know they're going to be bailed out. They know that there are a certain number of banks in this country which are too big to fail and the federal reserve had them on the list: Citicorp, Bank of America, Chase Manhattan, Morgan Guarantee, Chemical, etc. In other words, they were too critical to avoiding a domino affect and they would be bailed out. . . . I mentioned plutocratic power versus democratic power . . . plutocratic power exercises its will on us everyday. . . . The plutocracy takes control of what we own. . . . Look at what we own: we own, as a commonwealth, the public airwaves, the public lands, three trillion dollars of public and private pension money, a trillion dollars of savings, a half a trillion dollars at least of mutual insurance monies—all these we technically, legally own. Some as a commonwealth, some as *pooled* assets. Can you imagine how our political economy would be different, how our standards of living would be different, if we *controlled* what we legally owned? And that is *never* discussed in any political campaign that I have been aware of in the last several decades. Can you imagine anything more fundamental to discuss than the incidence of popular and commonwealth ownership of assets? Here's how it goes: we grow up corporate. By growing up corporate, we never even *think* of what we own. We never even *think* of what is the commonwealth. We are told to "go for it" individually and make a pile of money. And because we're growing up corporate, our minds are anesthetized so they can be controlled by the corporate ethos. . . .

The plutocracy takes control of what we own. This must be a hot topic and the Kennedy school. Look at what we own: we own, as a commonwealth, the public airwaves, the public lands, three trillion dollars of public and private pension money, a trillion dollars of savings, a half a trillion dollars at least of mutual insurance monies—all these we technically, legally own. Some as a commonwealth, some as *pooled* assets. Can you imagine how our political economy would be different, how our standards of living would be different, if we *controlled* what we legally owned? And that is *never* discussed in any political campaign that I have been aware of in the last several decades. Can you imagine anything more fundamental to discuss than the incidence of popular and commonwealth ownership of assets? Here's how it goes: we grow up corporate. By growing up corporate, we never even *think* of what we own. We never even *think* of what is the commonwealth. We are told to "go for it" individually and make a pile of money. And because we're growing up corporate, our minds are anesthetized so they can be controlled by the corporate ethos. Such a thesis is so easily proven that it's not worth spending much time on other than to give one example: who is raising our children today? Ask parents who's raising the children. Children are raised by those environments in which they spend most of their time. Children today spend less time with adults, including their parents, than any children in *history*. They are spending, pre-teen, thirty-five hours a week on the average, watching TV, video games, and in between, walkman audios. So for thirty-five hours a week they are Pavlovian specimens. They are not engaging in human conversation. They are not interacting with their siblings and their parents, except modest squabbles during ad time perhaps. They are watching programs that convey basically three themes relentlessly. Look at Saturday and Sunday morning TV if you doubt that.

Now when you grow up corporate like that do you develop a critical mind? Do you develop a civic spirit? Do you understand what community is? Do you ever thirst for *feedback*? For talking *back* to the TV set, in front of you. Never occurs to people to even ask for an electronic Letters-to-the-Editor time on TV. And what is TV? It's ninety percent entertainment—including ads—, ten percent redundant news, zero percent mobilization. But it is our property. We own the public airwaves. That's federal law, approved by the Supreme Court of the United States. We are the owners, we are the landlords. The Federal Communications Commission is our real estate agent. It licenses portions of the spectrum to corporate broadcasting TV and radio stations—they are the

Ship of Dreams

It was a ship full of dreams. Dreams of broadcasting on international shortwave. Dreams of sending hopeful messages from many people transmitted over the air. The Voyager Broadcast project was the hope and dream of many. Financed by a man of God, Brother Stair of the Overcomer Ministry, the station was to be an outlet for religious programming and the right of free speech. The Voyager ship was a converted fishing trawler 140 feet long by 30 feet wide. She was planned to be fitted out with four shortwave transmitters, and was in the process of repair and restoration in Charleston harbor South Carolina. The ship was to set sail in early February for southern waters where she was to broadcast from a safe anchorage in Belize territory. (The Country of Belize is located on the Yucatan peninsula in central america about 600 miles south of the United States.) It was not to be so. On January 19, 1994 at 8:30 AM EST, The Federal Communications Commission aided by U.S. Federal marshals and the U.S. Coast Guard, sized the M.V. FURY and almost immediately began to debowel her of all her radio equipment. One day later it was all gone. Transmitters, tubes, parts, test equipment, personal stereos, transformers, cable, insulators, tape recorders, CD's, antennas, towers, cassette machines, all the stuff that make up a radio station—gone! No arrests, no hearings, nothing! The reason? The FCC claims to have identified transmissions from 12:10 AM EST to 3:21 AM EST on January 14, 1994 which they claim were pinpointed to the location of the ship. I was on board the vessel at the time an I observed no such transmissions between those times and none were technically possible with the existing equipment. I built the radio station on board the FURY for the Overcomer Ministry. As the engineer, I advised the owners of the ship to secure all legal registry and ships radio licenses. This was done; I insured everything was to be done by the book. The FURY was issued a ship registration and radio station license that would make it entirely legal to broadcast once the vessel arrived in Belize territory. At Charleston harbor no broadcasts came out of the FURY while I was on duty. In fact only two of her four transmitters were partially restored. Of these two only one could be applied primary filiment power. None of the transmitters were ready to broadcast period! Furthermore there was no available source of transmitter power. Both transmitter generators were down for final installation and repairs. The main generator was inoperative due to a fuel leak and the backup generator had a burned out regulator. So the question remains, why was an entirely legal radio station destroyed without a hearing and due process? What is going on here? Does the FCC possess such fear that they will disregard all assemblage of personal rights, international law, and due process? As a radio engineer it pains me to see such wanton destruction of personal property for no reason. The Overcomer Ministry had invested large sums of money and time to make this floating radio ship of GOD and freedom a reality. All to be destroyed because someone in Washington D.C. apparently doesn't like Brother Stair or me. Dear reader, I think now is the time to take a "hard look" at the Federal Communications Commission and their policies of total disregard of law and due process; especially the so called seizure laws in which they legally "steal" personal property. Is this a nation of laws or government brytes? I thought a fair hearing and trial is guaranteed all. The ship owners plan to seek restitution from the government. Many questions remain. A radio station, a printing press of the air, has been smashed. Please protest this illegal action by the FCC to your Congressperson. Only Congress can stop the madness. Allan H. Weiner Radio Engineer 507

Violet Avenue Hyde Park, NY 12538

Free Radio Berkeley Free Communications Coalition 1404 A Walnut St. #406 Berkeley, CA 94709