

ZERO-BEAT

SOUTHEASTERN MASSACHUSETTS
AMATEUR RADIO ASSOCIATION, INC.
54 DONALD ST. SOUTH DARTMOUTH, MA. 02748

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Club Happenings

Well it's been a few months since we last had a paper. Believe me it has been a busy summer so far. So please forgive us for not having a paper out sooner. If you have not attended the club meetings the past two or three months you've missed some action!

By now however I'M sure most of you know that SEMARA will soon have a new repeater. More on that later for now let me fill you in on some other happenings. Thanks to a few people the club has been looking good this summer. No need to mention names you know who you are. Once again thanks

The beam is back up and in fine shape thanks to the help of many a few months ago. Also the vehicle is mounted on the old nut it also works well go down and try it some time! Pete Kocis N1EXA put that one up solo! The building and grounds are also looking good. You should soon see a new sign out front too!

NEW REPEATER

As mentioned before the club will soon have a new repeater. It was voted on and passed. Since then many donations have been coming in and will still be accepted, so please if you can help out with this big effort please send your donations to the po box or stop down the club! I think this is a big step for the club, we thank all those who have helped out so far.

Club Address

P.O. Box P-105
South Dartmouth, MA 02748

GENERAL COVERAGE CORNER

The US Coast Guard East Coast Net. If you are into monitoring the Coast Guard, there is more out there than Ch. 16 and 22 on your police scanner. Get out your HF receiver and turn on your police scanner and miss all the action.

If you have a programmable scanner you can get the Coast Guard Air Station at Odis and base on 164.550 and 166.2250 MHz. These two channels are for local air rescue operations also aircraft talk to the FAA tower at Odis on 120.5 MHz AM

The Coast Guard also uses VHF AM frequencies of 202.0, 204.0, 201.8 and 201.1 MHz not as much as the AM frequencies listed before however.

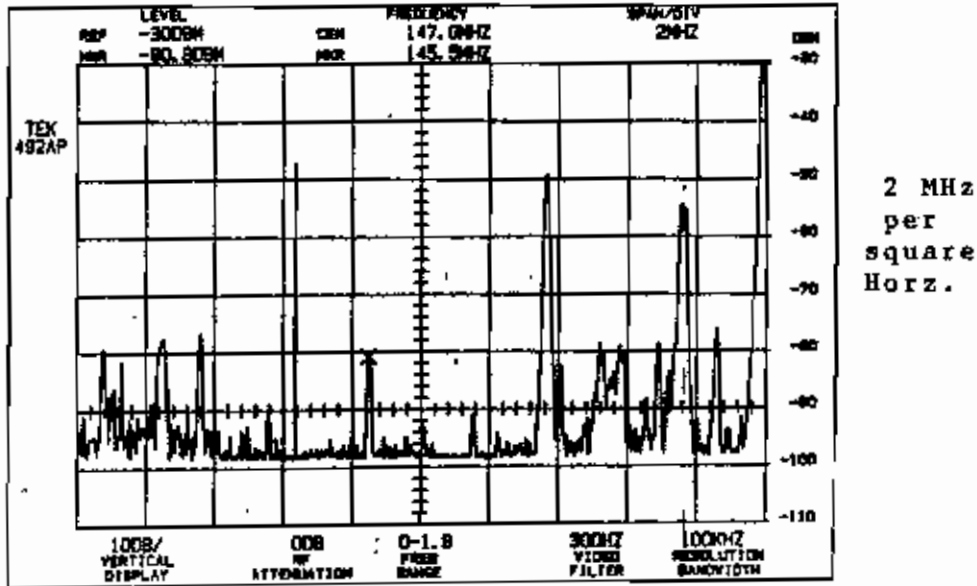
Your HF rig comes into use if you can get 7.070 MHz USB. This frequency is the East Coast Network. Anything happening from Puerto Rico to Maine is on this frequency. All the stations are called coast states and the main ones are in Boston, West Portsmouth VA and San Juan. If 7.076 is used try the 3.734 MHz USB back up frequency.

REMINDER

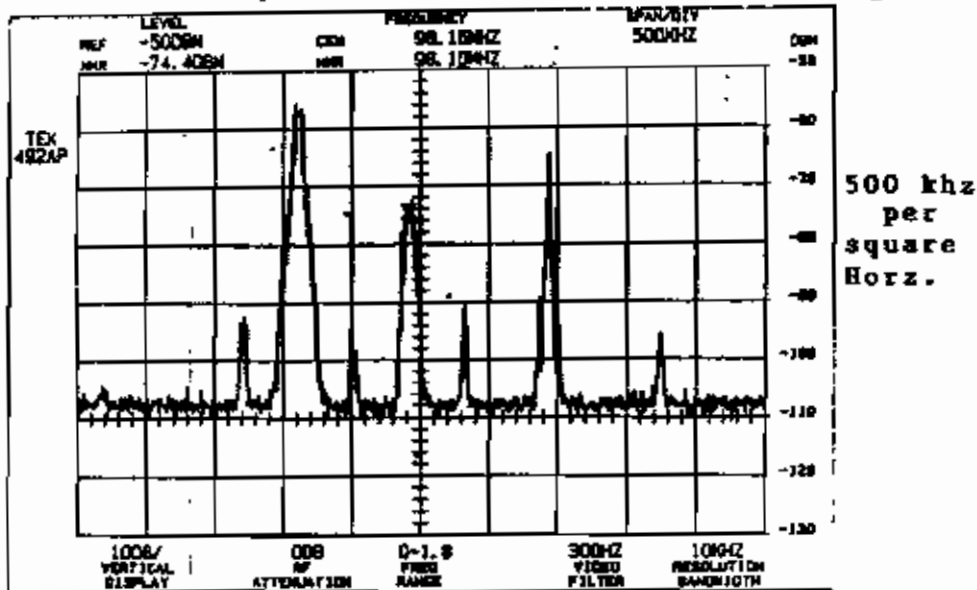
Next Club meeting is August 6th Thursday at 7:30 please plan on attending.

Spectrum Analyzers
Radio With Pictures By Pete Kodis

Spectrum Analyzers are used to check the output of radio transmitters and other devices. Below are some pictures made by a Hewlett Packard Analyzer they are broadband measurements using a scanner antenna. The analyzer can measure one frequency or many depending on the setting.



This is a wide measurement of the whole VHF-HI radio band the center is fixed on 147.0 the marker "X" is on 145.50 which is measuring the WBDBX repeater, also note the 2M Amateur band is very quiet compared to the aircraft band to the left and the police and marine band to the right.



Looking at the FM Broadcast Band the marker "X" is on 98.1 Mhz WMYS to the left is WJFD and to the right is WROR. The smaller spikes between the transmitting stations is the harmonic radiation emitting from the powerful transmitters.

COMMENTS ON EMERGENCY COMMUNICATIONS WITH PHONE PATCHS

The FCC regulations DO NOT PROHIBIT calling for assistance.

I included the following excerpt from the REGS in my communications plan for a recent bicycle century, specifically because several volunteers wanted to know if what we were doing was legal.

Here goes:

In case you have questions: FCC regulations specifically encourage this type of public service work. This is a public event cosponsored by the City of Palo Alto Recreation Department; we are here to assist the public.

Here are the pertinent sections of the FCC regulations:

97.1 Basis and Purpose

The rules and regulations in this part are designed to provide an amateur radio service having a fundamental purpose as expressed in the following principles:

a) Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communications service, particularly with respect to providing emergency communications.

b) ... e) international good will, trained techs, etc

97.114 Third Party Traffic

The transmission or delivery of the following amateur radiocommunication is prohibited.

a) --- International third party stuff ---

b) Third-party traffic involving material compensation, either tangible or intangible, direct or indirect, to a third party, a station licensee, a control operator or any other station;

c) EXCEPT FOR AN EMERGENCY COMMUNICATION as defined in this part, third-party traffic consisting of business communications on behalf of any party. For the purpose of this section, BUSINESS COMMUNICATION SHALL MEAN ANY TRANSMISSION OR COMMUNICATION THE PURPOSE OF WHICH IS TO FACILITATE THE REGULAR BUSINESS OR COMMERCIAL AFFAIRS OF ANY PARTY.

The following I am adding for the USENET posting:

Further, in the discussion of RACES operations, the following types of communications are specifically listed:

a) Communications concerning impending or actual conditions

jeopardizing the public safety [EXAMPLE: STRANDED MOTORIST
ON EDGE OF HIGHWAY WITH 65 MPH PROJECTILES

, or affecting the national defense or security during periods of local, regional or national civil emergencies: 1. Communications directly concerning the immediate safety of life of individuals, the immediate protection of property, maintenance of law and order, alleviation of human suffering and need, and the combating of armed attack or sabotage;

These rules are amazingly straight forward and understandable. Rather than bickering amongst ourselves - READ THEM!

Contrary to the Boston FCC office, the San Francisco office, in regards to a similar question, made it clear that they have much better things to worry about than whether or not a particular phone patch was legal or fuzzy.

Now, for those of you who think that volunteering for a public service event may be illegal - or pointless - here is the summary of the bike ride that I produced for the local emergency coordinator:

ARES/Southern Peninsula Emergency Communications System provided communications support for the 14th annual Sequoia Century Bicycle Tour, sponsored by the Western Wheelers Bicycle Club and the City of Palo Alto Recreation Dept. 2,530 bicyclists rode routes of 25, 63, 100 or 125 miles in length. Radio operators were provided for the 2 lunch stops, 13 sag wagons, 3 shadows, and the Gunn High School base of operations. Over 300 messages were logged; I estimate 200 more were not logged. During the ride ARES provided assistance at 7 major injury accidents requiring paramedic or helicopter air ambulance support, 1 major injury motorcycle accident not involving the ride, and 1 accident involving vehicle damage. 2 other bicyclists were seriously injured but were transported from the route before any sags passed the accident scene. Numerous bicyclists suffering from bicycle breakdowns, fatigue, or minor injuries were assisted by the radio dispatched sag wagons.

Over all, the ham operators acted in a professional, team oriented manner providing communications on over 200 miles of roadways, in an extremely mountainous and canyon pocked terrain.

Two of the bicyclists NEARLY DIED (one was in a COMA FOR 3 DAYS). As far as we are concerned in the South Bay, in A THREAT TO LIFE OR PROPERTY anything goes AND THE REGS MAKE THAT PRETTY CLEAR.

Rendering assistance may also save lives or bodily injury: Only a few weeks ago, a woman and her daughter were KILLED when their stalled vehicle ALL THE WAY OFF THE ROAD AND WELL ON TO THE SHOULDER was rear ended by a drunk driver in broad daylight. A seemingly non-emergency situation may indeed be a grave emergency.

Now suppose that some ham had driven by, and wondered, "Do you suppose it is legal for me to call for help?" . . .

Post script:

Also, for those who think ham radio not useful for local emergencies - I differ: the linked ham radio repeater system used for the bicycling event is THE ONLY system in existence that covered the extremely mountainous terrain this route covered in the SF Bay Area. In this same area, ARES has provided coverage for government agencies during forest fires and floods. This system was not simple (multiple repeaters; 146, 220 and 440 MHz) - would your average CB radio operator or cellular radio user have known which of the 6 frequencies to use to gain access to the system? And what if an accident occurred in a dead spot? Would this person know how to find a repeater that might work here and ask for help?

As for cellular, somewhere I read that roughly 2 out of 3 accidents or stalled motorists called in via cellular radio involved the OWNER OF THE CELLULAR RADIO!

("cellular radio" is the proper term for "cellular phone").

NOTE: This was a article on one of the computer bbs's I look in on ... I thought it might be of interest to some the members.
KEN HOWLAND N1AVA]