# NARS NEWS

The Northwest Amateur Radio Society

Houston, Texas

May 1990

### LOCAL RADIO PERSONALITY TALKS ABOUT RADIO FOR MAY 18 MEETING TOPIC

At one time or another we have all listened to local Houston commercial radio station KFMK, 98 on your FM dial. When you come to the meeting this month you can "hear" the station live. Chuck Shramek, on-air personality and Amateur Extra class licensed Ham WAOFTW, is going to tell us about Ham radio and commercial radio. Chuck has been a Ham since he was 11 years old. He has been on the Houston scene on commercial radio for about 10 years now.

He uses an all-band vertical antenna and operates on as many modes as he has time for these days (barefoot at 100 watts vs. 100,000 watts at the office). He is on satellites, HF and fast scan TV. Right now he has his FSTV camera mounted on a radio controlled model airplane which he uses to get a bird's eye view of things. He says it makes him an aeronautical mobile FSTV station.

He has many stories to tell. One of them is that when he was 14 years old he claims he was the only one in the world to operate a 40-meter station mounted on a bicycle and powered by grapefruits. I told you he has some stories. Apparently, the station was battery operated and the acid for the batteries came from the acid in the grapefruits.

There are more stories, but you will have to come to the meeting to find out what really goes on behind the mike at the workplace and behind the mike at the home of KFMK's Chuck Shramek.

Come early and enjoy some eyeball

Come early and enjoy some eyeball QSO's with other Hams at the meeting that starts at 8:00 p.m.

## NARS OPS WORK MARCH OF DIMES WALKAMERICA - FM 1960 AREA

Operators from The Northwest Amateur Radio Society provided communications for the March of Dimes (FM 1960 Area) WalkAmerica activity on Sunday morning, April 29. Coordinated by Bob Welch, KE5IC, the event was handled without incident. Working out of the big van provided by Bob Chmielewski, N5PJI, Ken Edinborgh, W5BKK, handled Net Control duties; Scott Byrd, N5KEU worked as liaison between N.C. and the main event co-chairmen. Communications at four Rest Stops were ably handled by Vince Hayes, KC0LM; Cippy Rodriguez, N5NPS; and Bob, KE5IC. Activities on the "rover" service vehicle were covered by Bob, N5PJI.

### FIELD DAY 90

Gary Johnson, N5GBR, N5GBR, Field Day Chairman, reports that plans are progressing smoothly for this year's activity. It will be held the weekend of June 23/24 at last year's location in Fritsche Cemetery Park off Grant Road in Northwest Harris County.

Gary advises that help is still needed, particularly for setup on Friday afternoon, June 22, as well as ops for the CW and phone stations. To volunteer, please call Gary at work: 550-5101, or at home: 682-3178.

Gary offers a special invitation to all the new Novice ops to come out and enjoy the real fun side of Ham radio. You'll see stations set up from scratch in an open field and operated on emergency power for a full 24-hour period. You will observe not only emergency conditions, but also the challenge of a contest in trying to make more contacts than others in the same 2A category. You all come on out for a great time!

### \* \* \* PROPAGATION \* \* \* by ROY HRADILEK, AD5Q

15 Meters: Even at the lowest portion of the sunspot cycle, late spring can bring the best out of certain bands. When fluxes are high, nighttime conditions on 15 are spectacular. Fluxes lately have been so so. The cycle is definitely heading down, and we can expect fluxes in the low to mid 100's for much of the time. 10 is out of season anyway, but 15 will be very good. It will also be sensitive to the variation in flux, since it takes a higher flux than 120 to keep the nighttime short paths open to Europe and over the pole. Daytime paths on 15 deteriorate somewhat due to summer absorption, so most of the best daytime openings will be into areas where it is night. This ability of 15 meters to span areas of both day and night enhance propagation to remote parts of the world and lengthen the duration of openings in any direction. Look for openings to remote points in southern Asia in late morning and through the afternoon. Europe will come through most of the day and often at night as well. As long as the flux is above 150 or so, long path will be open in the morning to the west and southwest for 3 hours East/west long path after sunrise. on 15 is actually open to a broader area of the world than the same paths on 20, with openings to most of Africa and Europe. North/south long path, such as to India and Russia, is rare on 15 and is deteriorating on 20. A great variety of paths are open on 15 at this time of the year, but watch the fluxes. When they are low, move down to 20.

20 Meters: East/west LP openings on 20 are mostly confined to the Indian Ocean and the southern part of Africa. These paths will be very reliable for 2 hours after sunrise. The other 20 meter LP routes are out of season, except for the NW path to the South Indian Ocean. The regular short path circuits, will be excellent across any nighttime or grey line path. Don't forget to watch for Africa in the late afternoon and Asia in the morning.

With 10 active satellites involving Amateur Radio things are busy, but there is more to come! RS-14 is now scheduled for launch in June from the Plesetsk facility in Russia. This will be a LEO (Low Earth Orbit) satellite in a circular orbit at 1000 KM (620 miles) with a period of 105 minutes and an inclination of 83°. There will be two mode B linear inverting transponders. These should provide strong 2M signals while requiring modest 435 MHz uplink power.

The German RUDAK (Regenerative Transponder for Digital Amateur Radio Communications) system on Oscar 13 has never functioned correctly so through an historic cooperation between the German and Russian amateur communities, RUDAK 2 was put together by the Germans and has been integrated into the RS-14 package. So Amateurs equipped for digital communications via the Microsats should be able to connect to and through RUDAK 2 on RS-14. All in all, RS-14 promises to be an interesting and unique addition to the expanding fleet of Amateur Radio Satellites.

DOVE, the MicroSat that was supposed to "talk" to us on 2M, is reported to be in good health but controllers and programers have placed higher priorities on fully activating and experimenting with the Digital Microsats. They promise to get around to "reprogramming" and then activating DOVE 2M output capabilities soon. I hope they are true to their word and some interesting transmissions on 145.825 will be forthcoming shortly!

Looking ahead to FIELD DAY, the plans for Satellite Operations are coming together well. We are optimistic that we will have capabilities for contacts on OSCAR 13, OSCAR 10 if it is still active, and RS-10. It is possible that we will be able to operate on FO-20 as well. Thus we might actually make contacts on four different satellites! Whether we make it or not, the fun is in the trying!

#### MICROSATS

#### By Jack Douglas, KA5DNP

In his article "ANTENNAS FOR MICROSAT GROUND STATIONS" published in The Amsat Journal (Vol. 13 No.1) Dick Jansson (WD4FAB) presents strong evidence that vertical antennas with 1 ow angles of radiation should work well for the MICROSATS now in orbit. Dick goes on the give a detailed description of a dual band J-Pole he built for MICROSAT use. He used Aluminum tubing, flat Al stock, and bolts and screws to make up the antenna.

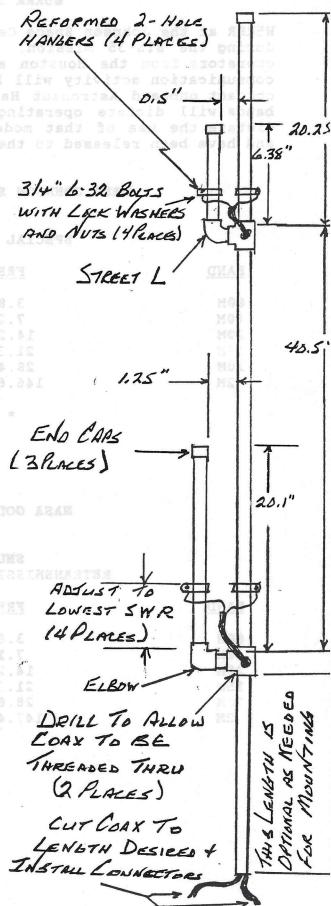
assemble about Just as I was to the recommended materials WASPJB, Jay Johnson, told me about a 2M J-Pole he had just made of copper water pipe parts.

The two ideas came together in my garage and I MHz, 145 MHz) now have a dual band (435 J-Pole on which I have made SSB (Mode contacts on FO-20 (I do not have the (Mode JA) modems required for mode JD). Of course, AMSAT and LUSAT Microsats use mode JD so a success on FO-20 JA should mean the antenna will work on Mode JD both on FO-20 and the The materials needed for this MICROSATS. antenna are:

- Ten foot joint of medium weight 1/2" copper water pipe
- 2 1/2" copper "Tees"
- 1 1/2" copper elbow
- 1 1/2" copper "Street L"
- 3 1/2" copper end caps
- 6 two-hole copper hangers for hanging 1/2"copper pipe to studs, etc.
- 10' (or more) of RG-8X coax (or RG-142U for the purist)
- 2 Coax connectors (PL 259's with bushings or "type N" as you desire.)
- 4 3/4" 6-32 bolts with nuts and lock washers

A small torch and solder to sweat the copper parts together.

Four of the 6 hangers should be straightened out with pliers then reformed around a piece of the copper pipe to make clamps for other attaching the coax to the antenna. The two hangers can be used to mount the antenna as you see fit remembering that below the the antenna can be grounded or not and no raidals or other counterpoise is required. I hope the figure to the right provides enough detail to get you going on the copper dual-bander.



By Jack Dougles, KASDNP

### W5RRR SPECIAL EVENT STATION BANGETMAN STATION

W5RRR at the Johnson Space Center will operate as a Special Event Station during the STS-35 mission. The station will be manned with volunteer operators from the Houston area. Besides making QSO contacts, a major communication activity will be providing information on how and when to contact onboard Astronaut Ham Ron Parise, WA4SIR. Condition of the HF bands will dictate operating frequencies. Oscar 13 availability will dictate the use of that mode. The following frequencies are suggested and have been released to the general public:

## NASA JOHNSON SPACE CENTER AMATEUR RADIO CLUB W5RRR \*

#### SPECIAL EVENT STATION OPERATION

BAND	FREQUENCY	TIMES OF OPERATION
80M	2 OEG MU-	During Band Openings
40M	7.227 MHz	modems required for mode JD). Of
20M	14.280 MHz	AMSAT and LUSAT microsats use m
15M	21.350 MHz	
10M	28.400 MHz	and the All Market on Vener I fine
2M	146.640 MHz	Whenever on Air*

<sup>\*</sup> Retransmission of Shuttle Air to Ground

Yen fact joint of medium weight 1/2"

copper water pipe

2 - 1/2" copper "Tees"

## NASA GODDARD AMATEUR RADIO CLUB WA3NAN

[ BRALES]

## SHUTTLE MISSION STS-35 RETRANSMISSION OF SHUTTLE AIR TO GROUND

BAND	TAWE TEDWOL FI	EQUENCY	Y TIMES OF OPERATION (CDT)
8ØM	1 ( Carring S) 3.	860 MHz	z Nights: 4p.m7a.m.*
40M	7.	185 MHz	
20M	14.	295 MHz	Z Whenever on Air
15M	21.	395 MHz	z During Band Openings
10M	28.	650 MHz	z During Band Openings
2M	1624 To ALLO 147.	450 MHz	z Whenever on Air

<sup>\*</sup> Usually kept on until 12 noon

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I hope the figure to the right provides enough detail to get you going on the copper

Most of you are familiar with the upcoming Houston Economic Summit at Rice University, July 9 to 11. Some, however, may not have heard of the part that Ham radio is to play.

Dr. Al Zermeno, KK5W, a research physicist with the M. D. Anderson Cancer Center, who spoke to us at our February meeting, is heading the organization of a Special Event Station in observance of the Summit. The Station will be in operation from July 6 at 2300 UTC to July 11 at 2400 UTC with at least four operating positions, one each for SSB, CW, Packet, and 2M phone.

The Art Department at M. D. Anderson has designed a beautiful certificate to be awarded to all those who contact the station. If possible, the certificates will display the signatures of all attending dignitaries including that of President Bush.

ICOM, Kenwood, Yaesu, and other manufacturers have been asked to equip the station. Application has been made to the FCC for the special call sign, W90ES, with a supporting written request by Sen. Barry Goldwater, K7UGA. We hope to man the station 24 hours a day; a little arithmetic will show that at two hours per volunteer, 242 volunteer operators will be required. However, enthusiasm is running high and we may have more volunteers than we can accommodate, so get your name in early.

Six committees have been formed to accomplish this rather monumental task. NARS is represented by Bob Welch, KE5IC, who is a member of the Liaison Committee and Ken Edinborgh, W5BKK, who is co-chairman of the Operations Committee. Each of ten clubs have a member on the Liaison Committee. One of their functions is to enlist volunteers to operate the station. These names will then be turned over to the Operations Committee for scheduling.

A net has been formed for the commit-

- CONGRATULATIONS are in order for Jerry Reimer, KA5QAP, who received an Associate of Applied Science degree, With Honors, from North Harris County College on May 11th!! Jerry's major is Electronics Technology, Computer Specialization.
- UPGRADES: Congratulations to Dave Bauer, KB5GER, to General Class and Jay Rubens, KB5MKU, to Technician Class.
- NEW NOVICE CALL SIGNS received: BT Burk, KB5MKM; Jim Hamilton, KB5MKN; Matthew Haws, KB5MKO; Jon Littmann, KB5MKP; Jim Meisner, KB5MKQ; Jim Miller, KB5MKR; Ed Patterson, KB5MKS; Susan Reed, KB5MKT; and Jay Rubens, KB5MKU. Good Luck to all!!
- PLEASE WELCOME new NARS members:

Susan Reed, KB5MKT
David Hanus, New Novice

- ANNUAL NARS PICNIC is scheduled for the fall. The board needs a volunteer to head it up this year.
- FLASH!! Carol Busbee passed the code and is awaiting her Novice call sign. O.M. Ken, KB5ESQ, says he's even; ask him for details.
- THE EMPORIUM WILL BE HISTORY after this month. Madison Electronics is really shutting the doors on its retail business and will go mail order only. Our thanks go to the Busick family for their many kindnesses over the years along with our best wishes for great success in their new endeavor.

tee members to report on their activities; it meets on Wednesdays at 9:00 p.m. on 147.60/00 MHz. All Hams in the area are encouraged to listen to this net and monitor the progress of this major Ham activity.

Those of you who would like to operate the station for two or more hours call Bob Welch, KE5IC, at 376-4814.

de Ken Edinborgh, W5BKK

The Northwest Amateur Radio Society is an ARRL Special Service Club \* \* ARRL Club No. 2120 \* \*

#### NARS BULLETIN BOARD

NARS MEETS the third Friday of each month at the Cypress Creek EMS Bldg. 16650 Sugar Pine Lane (beneath the water tower) which is one block east of Kuykendahl and two blocks south of FM 1960. Meeting time: 8 p.m. Eyeball QSO's: about 7:30 p.m.

NARS BREAKFAST every Saturday 8 a.m. Strack Farms Restaurant, located at 5707 Louetta Rd. - Informal ragchew.

Susan Reed, RBSMAT; and Jay Rulens

NARS NEWS is published monthly by Northwest Amateur Radio Society Send news to Jim Clarke, N5FIX Editor, 1842 Knoll, Houston 77080 Tel: 984-9028

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BOB WELCH, KE5IC

7811 Theisswood Rd. Spring TX 77379 at bus stop

2482 22484 488 488 488 488 889

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NARS NETS

NARS RAGCHEW - MONDAY 8 p.m. 28.444 MHz (Ed, KB5AEL)

NARS INFO - WEDNESDAY 8 p.m. 146.06/66 MHz (Ken, KA5AKG)

Some

end down a Emergency nets

Northwest Harris County ARES
TUESDAY 8 p.m.
146.06/66 MHz (Scott, N5KEU)

Harris County OEM RACES
SUNDAY 7 p.m.
146.34/94 MHz (Bob, K5HUT)

FOR INFORMATION ABOUT NARS, PLEASE CALL KEN EDINBORGH, W5BKK, 376-7660

NARS REPEATER FREQUENCIES
146.06/66 MHz 449.375/444.375 MHz

NARS DIGIPEATER
Freq.(145.07 MHz) Alias (NARS)
Call (W5BKK-1)

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