CROSSTALK

Published By and For The GLOUCESTER COUNTY AMATEUR RADIO CLUB, W2MMD

G.C.A.R.C. OFFICERS

President Vice President Recording Secretary Corresponding Secretary Treasurer

Tom Gordon, KB2GI Chick Naylor, WA2USI Steve Sosson, KR1M John Fisher, K2JF Bill Kardas, N2BK

DIRECTORS

Contests: Hamfest:

Tom Brant, N2BPN Chris Kelly, KC2PC Tony Starr, WA2FZB Harry Jackson, WB2GSF Chuck Colabrese, WA2TML Darryl Gibson, N2DIY

TRUSTEES Bill O'Donnell, WA2VRY

Tom Widener, KE2M Bill Frambes, WB2FJE Rich Netherby, WB20CR

COMMITTEE CHAIRMAN

Chick Naylor, WA2USI Program: Awards: Jack Zaruba, K2ZA Training: Chick Naylor, WA2USI Jim Clark, KA2OSV Membership:

Dennis Sandole, WB2GES Harry Jackson, Wb2GSF

Jim Clark, KA2OSV Field Day: A.R.E.S.: Harry McCormick, WA2SEA VHF: Legislative: Steve Sosson, KRLM

Data Processing: Charlie Sketchley, K2PQD Demonstrations: Walt Ashton, WB2OYQ

Technical: Chuck Colabrese, WA2TML D.X.:

Barry Ford, NC2V Tom Owen, WA200S Jim Bray, N2AKI House:

Historian: Della Parker, W2AFZ Club

L.R.P.: Repeater:

License: Rose Ellen Bills, N2RE Ray Martin, WB2LNR Chick Naylor, WA2USI

Joe DiNovi, WA2GFK Business Mgr.

John Fisher. K2JF V.E. Team: Publicity: Jim McDonald, WB2AOL

* * * * * * * * *

CROSSTALK STAFF

Tony Starr, WA2FZB, Editor Pinky Wilson, Typist John Sutocky, KB2GL, Printer

Ed Sumek, W2GSN, Printer Al Trueblood, KA2KGD, Circulation Charlie Sketchley, K2PQD, Milt Goldman, K3WIL, Publishe-

* * * * * * * * *

AREA NETS

ARES Net:

Sunday, 8:00 PM 147.78/18 rptr

Del. Valley Regional Emer. Net Sunday, 8:30 PM 224.66 rptr Club Repeaters: 147.78 - .18, 223.06 - 224.66 447.1 - 442.1

The Gloucester County Amateur Radio Club Meets the first Wednesday of each month at the VFW hall in Woodbury Heights. Meetings begin promptly at 8 PM.

Please send any contributions for CROSSTALK to Tony Starr, WA2FZB,

Deadline for submissions is 10 days before Club Meetings.

PRESIDENTS MESSAGE - FEBRUARY 1985

Well, our first regular meeting of 1985 is now history. I hope that everyone enjoyed themselves and found the meeting informative. The projects we discussed need to be put into motion and I need your participation in order to reach our goals. We need prices on a trailer. How about everyone making inquiries on this. Concerning the club house, we need people to get information on land or a vacant building. If everyone would pitch in, we could make 1985 a fruitful year for GCARC. Please get out and help, come to the meetings, and remember, THIS IS YOUR CLUB!!!

TNX
Tom Gordon, KB2GI

FEBRUARY PROGRAM

Program chairman and Vice President Chick Naylor, WA2USI, revealed at the Board of Directors meeting that the program for this month will be on the subject of Packet Radio. This area of technology is a new frontier for Amateur Radio and promises to bring better communications to those of us who decide to utilize this new mode. It used to be that Hams were on the leading edge of technology. Unfortunately, the state-of-the-art in electronics has been changing faster than most Hams could keep up with, lately. Don't miss this program; it will clue you in on one area where Hams can catch up with the newest technology.

HIGHLIGHTS - BOARD OF DIRECTORS MEETING

The monthly meeting of the Board was held at the home of John Fisher, K2JF. Present were: Tom, KB2GI; Chick, WA2USI; Chuck, WA2TML; Chris, KC2PC; Tom, N2BPN; Darryl, N2DIY; Steve, KRlM; John, K2JF; and Bill N2BK.

John, K2JF announced that he had written a personal letter to his State Legislators on behalf of the amendment to the scanner bill currently before the legislature which would exempt Technician and higher class Amateurs. John is willing to write on behalf of the club.

COMMITTEE REPORTS

Program: February's program will be on Packet Radio.

Demonstrations: A demonstration will be held on the first weekend in February at the Deptford Mall. The Demonstration will feature operating HF and VHF stations and a video tape. Another demonstration will be given in March at Gloucester County College. Everyone is to be reminded that neatness counts! We are trying to make a good impression on the public.

Legislative: The FCC was due to hand down its decision on PRB-1 on 1-15-85. We are awaiting word. It is essential to write in support of the scanner bill.

Membership and Field: Jim Clark, KA2OSV, will continue to head up these committees.

Awards: Steve, KRlM, suggested a "lid of the month" award for the funniest/silliest tidbit in DA's & DIT's.

House: Jim Bray, N2AKI, will continue with his fine efforts on this committee.

Contests: There was a discussion as to whether Dennis, WB2GES, would like to continue with this committee. Bill, N2EWY, offered his assistance.

DX: Bud, N2ATD, and Bill, N2EWY, have volunteered to assist the DX Committee.

VEC: Arrangements will be made for those who can't make Saturday testing sessions.

Repeater: Reverse autopatch is operational. Autodialer numbers have not been entered. Gene, WB2UVB, has requested that a severe weather announcement be available, a tape-loop was suggested.

Long-range Planning: This committee is being reactivated by Chick, WA2USI.

Publicity: Our new chairman is Jim, WB2AOL.

Other Business: Chick, WA2USI, moved that we rent a safe deposit box for club documents. Motion carried.

Chick also moved that those members who choose to may pick-up their copy of Crosstalk at the meeting and be removed from the mailing list in the interest of saving postage. Motion carried.

Chris, KC2PC, moved that all future Board votes be accurately recorded by number in the minutes. Carried unanimously.

Chris also suggested that the minutes of the General Membership meeting be printed in Crosstalk and not read at the meetings. This would require a constitutional amendment.

Tom, N2BPN, suggested we start the Board meetings earlier. The February meeting will commence at 7:00 PM.

There being no further business, meeting adjourned 11:55 PM (!).

TNX to Steve, KRlM, for his transcript.

FIELD DAY 1985

It is not too early to start planning for our annual event. Chairman Jim Clark, KA2OSV, informs us that some bands are already taken. Now is the time to sign up. This is an outing that really offers an opportunity for a good time. It isn't truly a contest, although the competitive element is in evidence. It is actually an important emergency preparedness test which shouldn't be overlooked as part of the overall emergency communications service which Amateur Radio provides. The most important aspect of Field Day for us is FUN!

One thing which needs to be noted here is that the overall participation in the club has been dropping slowly in recent years. We still have approximately the same number of people out to the site as we did 10 or so years ago, but the total membership of the club is more than double what it was then! Let's make a good showing this year. Remember, the news media provides coverage of us. Contact Jim and sign up! If you don't have a good time, you don't have to come out again, but at least you gave it a try and helped the club, too.

A MATTER OF IMPORTANCE

All members of our club, who are also ARRL members, have received a copy of SOUTHERN NEW JERSEY from our SCM. Included in that letter is a very important piece of proposed legislation pertaining to mobile equipment in your vehicle. To prevent yourself from possible litigation because you have electronic equipment in your vehicle, you should write to your local Assemblyman and ask him to vote "YES" for ASSEMBLY, No. 2393, especially to make sure sentences 11,12, and 13 are included. Here is a list of officials serving our county.

Officials serving our county

The following is a list of local, state -848-5649; Camden County, 1 Colby Gloucester County.

U.S. LEGISLATORS

Sen. Bill Bradley: 731 Hart Senate Office Building, Washington, D.C. 20510 — (202) 224-3224; Black Horse Pike and Whitman Drive, Washington Township (P.O. Box 1031, Turnersville 08012) — (609) 228-2815.

Sen. Frank R. Lautenberg: 717 Hart Senate Office Building, Washington, D.C. 20510 — (202) 224-4744; Suite 225 Parkade 4th District Building, 518 Market St., Camden 08101 — (609) 757-5353.

Rayburn Office Building, Washington D.C. 20515 — (202) 225-6501; Gloucester County, 152 N.

and federal officials elected to serve Ave., Suite 1617, Stratford 08084 -(609) 627-8222.

STATE LEGISLATORS 3rd District

Sen, Raymond J. Zane: 44 Cooper St., Room 209, Woodbury 08096 -(609) 848-1102.

Assemblyman Martin A. Herman: 59 N. Broad St., Woodbury 08096 -(609) 845-0480.

Assemblyman Thomas Pankok: 2 S. Hook Road, Pennsville 08070 -(609) 678-2121.

Sen. Daniel J. Dalton: Black Horse Pike, Greentree Road, Rep. James J. Florio: 2162 Washington Township (P.O. Box 39, Blackwood 08012) — (609) 227-1407.

Assemblyman Anthony S. Marsella: 427 Ganttown Road, Gant-Broad St., Woodbury 08096 - (609) town Professional Plaza,

Washington Township (RD 3, Sewell 08080) - (609) 589-2333.

Assemblyman Dennis L. Riley: 45 S. Black Horse Pike, Blackwood 08012 — (609) 228-8080. 5th District

Sen. Walter Rand: 514 Cooper St., Camden 08102 — (609) 541-1251.

Assemblyman Wayne Bryant: 309 Markert St., Suite 302, Camden 08102 — (609) 757-0052.

Assemblyman Francis J. Gorman: 105 N. Broadway, Gloucester City 08030 -- (609) 456-5230. COUNTY OFFICERS John R. Maler, Director, Board of Chosen Freeholders Donald H. Wagner, Surrogate Joseph J. Hoffman, County Clerk

Gloucester County Courthouse, 1 Broad St., Woodbury 08096 — (609) 853-3200.

George Small, Sheriff

A REPRESENTATIVE LETTER

Assemblyman Anthony S. Marsella 427 Ganttown Road Ganttown Professional Plaza Washington Township RD 3 Sewell, NJ 08080

Dear Assemblyman:

Date

In reference to assembly bill ASSEMBLY, No. 2393, introduced by Assemblymen Zimmer, Haines and Weidel, it is requested you vote YES for passage of this bill.

It is important that sentences: 11, 12 and 13 are included in the Bill, since they directly affect Amateur Radio Operators.

There are namy Amateur Radio operators in your county and area that are affected by this bill and will appreciate your YES vote.

Sincerely,

VEC TESTING

Date: Feb. 23, 1985

Time: 0930 to 1300 hours. CW tests will be given at

0930 and 1100 hours only.

Place: Glassboro State College, Westby Hall.

Cost: \$4.00 in cash, money order, or certified check.

Exams: Novice thru Extra

No pre-registration required. Talk in on 147.18 rptr. For information contact K2JF at (609) 589 - 2318.

REPEATER UPDATE

The repeater committee reminds us that the autopatch on the two-meter machine is operable <u>only</u> when a control operator is on duty. A short "beep" can be heard at the end of the squelch tail when the patch is up. FCC regulation requires a control operator for autopatch operation.

CLUB NETS NEEDED

One look at the title page this month will tell you that we don't have even a single club net on the air. There was some talk at the last General Membership meeting of reactivating the club CW net. Participants are needed, but most importantly, the net must be formed and control operators assigned before it can go on the air. If anyone is interested in forming a net, contact your Crosstalk Editor and an announcement will be published. There seems to be enough interest within the club to support several nets, but someone must take the bull by the horns and coordinate the times, frequencies, and net control stations. Now is the time to put our club nets back on the air.

CLUB TRIVIA

The great trivia oracle is out of town on business this month -sorry, no question. If anyone would like to send in a question (with
answer) please feel free to. The address of the Editor is on the title
page.

Answer to last month's question: Bob Grimmer, KN2QWO.

CONTEST CORNER

Hope everybody jumped into the VHF Sweepstakes. Bring a summary of your score to the meeting for publication next month. Don't forget to submit your log score, and to identify GCARC in the appropriate spot.

CQ lists 18 seperate February contests but these appear to be the major events:

Jan 26 - Feb 3 ARRL Novice Round-up February 2 - 3 RSGB 7 MHZ SSB

' 16 -17 ARRL DX Contest -CW

" 22 -24 CQ WW 160 SSB

Contest:

February 23 "73" RTTY

" 23 - 24 RSGB 7 MHz CW, and for

the ladies:

February 23 - 24 YL - ISSB QSO Party

The Novice Round-up is for Novices/Technician anybody is welcome to jump in and give out a few points. Try it and give the less experienced a few points.

Of all the contest noted above, the "big" one is ARRL's DX Contest. This is it, one of the worlds major events. Whether your a contest fan, DX hog or casual operator, this event has something for you. Look at the DX calls in last years contest results, operating this event is a good way to pick up a few new ones. The big question is who will dethrone WA200S as the owner of the W2SUCA trophy, given each year to the club member garnering the highest combined score in the ARRL DX contests CW and SSB.

February's CQ magazine contained specific details regarding their new World - Wide VHF Prefix (WPX) contest. Take note of these high points.

- No mode limits
- 48 hour duration
- 50 thru 1296 MHz only
- Simplified Contest Exchange
- 8 classes and mucho awards
- International Competition

The contest will be the weekend of July 20th. I'll have some copies of the announcement article and rules at the meeting. ARRL DX Contest Rules and logs will also be available at the meeting.

73, DÉ WB2GES

SWAP & SHOP

For Sale:

Drake L4B 80 thru 10 Amplifier.
Pair of 3 - 500Z's, Never used. \$910.00
KA3HMA, Hatboro, PA

For Sale:

- 1) IC-290H All-mode 2 meter XCVR with desk mike and hand mike; Astron 10A power supply; Mirage MP2 VHF wattmeter. Asking \$525.00 for package
- 2) IC-4AT 440 MHz hand-held XCVR and Tokyo Hi-Power 20 watt amplifier. Mint cond. \$270.00 for both.
- 3) FT-708R 440 MHz hand-held XCVR and Tokyo Hi-Power 20 watt amp. Also mint. \$270.00 for both.

Contact Alex Calabrese, WA2ADS, Buena, NJ
- No reasonable offer refused.

LES BELLES

Worked any DX YL's recently? Know most of you can get on 20 meters and are interested in awards. Here's another area for you to think about:

BRYLA "BRAZILIAN YL AWARD"

Radio Amateurs are eliqible to this award after two-way OSO's with:

DX - 12 YL stations from different countries (3 continents)

8 YL stations from Brazil

PY - 20 YL stations from Brazil

5 YL stations from different countries (3 continents) Contacts must have been made from the same QTH, in any band or any mode and in accordance with international regulations on Amateur Radio. QSO July 1975 on.

Applicants must send a standard log certified by a recognized Amateur Radio Association mentioning stations worked, date, time, mode, report and band.

This Award may also be earned by SWL's.

PY-YL-DX NET: Wednesday 19.00 to 21.00 UTC on 14.248 MHz.

When applying for the BRYLA, please send a OSL for BRYLA's files and 10 IRC's for return postage addressed to:

> PY-YL-DX NET A/C PT2LS ziza PO Box 07/0004 70,000 BRASILIA, DF BRASIL

Just in case any of you do get into the above net and happen to have QSO with PY2JY-Inge, tell her where you got the information to join in as she is most active down that way.

HAPPY VALENTINE'S DAY TO ALL!

Gose Ellen Rose Ellen Bills - N2RE

DA'S & DIT'S

W2MMD Repeater - Stats show that the average age of a ham operator is forty years.

The innovated TV Net is on this repeater - 7:00 to 8:00 PM - subject: transmitting, receiving and parts.

The VEC Test February 23rd.

Plumbing is not for WA2TML after repairing fixtures and spigots at his Taj Mahal.

Someone would like to know if KB2GL participated in the yearly jogging event held on New Year's Eve in Hammonton.

N2AEP claims to be the best baby sitter in Oak Valley. Question: - What kind of babies?

W2HVW hopes to become proficient in typing - then RTTY would become more interesting.

For information regarding classes for Novice, Tech and General Licenses - contact WA2VRY. Classes to be held at Bellmawr.

WB2VOH, recently home from overseas, talked to the GCARC Repeater and thought he was talking to N2AKL. What a surprise to find the voice on the other end was a recording.

With a little more coaxing, maybe $\mbox{K2OWE}$ will stretch the rubber bands and buy himself an $\mbox{H.T.}$

Already WA2VWT is attending meeting covering the July Bik-a-thon. It is possible the race will now end at Smithfield Village instead of Atlantic City.

73 de "The Eavesdropper"

CONGRATULATIONS TO:

Ray Martin, WB2LNR, for working Frank Perdue, W2DSV, on 80 meters.

TNX to Al, KA2KGD

John Fisher, K2JF, for obtaining his five Band Worked All Continents (5BWAC) Award.

DX REPORT FOR FEBUARUY BY NC2V

BY NOW I THINK THAT MOST ALL OF US HAVE NOTICED THAT 10, 15 AND 20 METERS ARE NOT WHAT THEY USE TO BE A YEAR OR SO AGO.

DX ON 10 METERS IS ABOUT ZIP WITH A VERY FEW OPENINGS INTO SOUTH AMERICA. 15 METERS IS NOT MUCH BETTER. THERE HAVE BEEN A FEW OPENINGS TO AFRICA AND EUROPE BUT THE SIGNALS, FOR THE MOST PART ARE DOWN. 20 METERS HAS NOT BEEN TOO BAD WITH OPENINGS TO EUROPE, AFRICA AND AISA.

THE BEST BANDS FOR DX NOW, AND FOR THE NEXT 5 OR 4 YEARS WILL BE 40, 80 AND 160 METERS. IF YOU DO NOT HAVE AN ANTENNA UP FOR THE LOW BANDS NOW IS THE TIME TO DO IT IF YOU WANT TO CHASE DX.

THERE ARE MANY GOOD ARTICLES AROUND ON VERTICALS, DELTA LOOPS AND OTHER GOOD DX TYPE ANTENNAS.

ALSO I SHOULD MENTION THAT THE MOST IMPORTANT ANTENNA FOR 80 AND 160 METER DX IS THE BEVERAGE. IF YOU HAVE THE ROOM (300 + FEET), PUT ONE UP YOU WILL BE SUPRISED WHAT YOU CAN HEAR.

MOST EVERY NIGHT EUROPE CAN BE FOUND ON 40 AND 80 METERS. LOOK FOR THE PACIFIC IN THE AM ALONG WITH AISA.

AS WE NEAR THE MIDDLE OF FEBURARY WE SHOULD ALSO SEE MORE LONG PATH ACTIVITY ON THESE BANDS DUE TO THE SHORTER HOURS OF SUN LIGHT IN THE SOUTHERN HEMISPHERE.

MOUNT ATHOS --- THERE HAVE BEEN SEVERAL STORIES ABOUT A GROUP OF ITALIAN OPERATORS RECEIVING ALL THE NECESSARY PAPERS TO OPERATE FROM THIS LOCATION. THE OPERATION IS SCHEDULED TO TAKE PLACE IN THE NEAR FURTURE. THE CALL SIGN WILL BE IOSNY/SV/A.

3Y BOUVET ISLAND --- DUE TO TRANSPORTATION PROBLEMS THE OPERATION FOR EARLY 1985 HAS BEEN SCRUBBED.

A9 BAHRAIN -- A92EB HAS BEEN ACTIVE ON 80M. LOOK FOR HIM AROUND 2200 UTC ON OR ABOUT 3790 KHZ.

XF4 REVILLA GIGEDO --- A DXPEDITION TO THE ISLAND BY A GROUP OF XE OPERATORS SHOULD BE ON THE AIR FOR A WEEK IN LATE FEBRUARY OR EARLY MARCH.

ZS2 MARION ISLAND --- ZS2MI WILL HAVE AN OPERATOR THIS YEAR. ZR6AOJ SHOULD BE ON THE ISLAND LATE THIS MONTH FOR A 14 MONTH STAY.

FR REUNION ISLAND --- FROFLO "NO CARD" HERIK IS ACTIVE AGAIN (HE MUST NEED A FEW BUCKS). IF YOU WORK HIM AND GET A CARD LET ME KNOW, I BEEN TRYING FOR TWO YEARS.

VKO MACQUARIE ISLAND -- VKOGC HAS BEEN ACTIVE ON 80 METERS IN THE AM. QSL VIA P29JS

XU KAMPUCHEA -- SAD NEWS. THE STATION HAS BEEN OVERRUN BY THE VIETNAMESE. AND FOR NOW IS OFF THE AIR.

YA AFGHANISTAN -- A STATION USING THE CALL UA900/YA6 HAS BEEN REPORTED ON 20M AROUND 14140 KHZ.

TI9 COCOS ISLAND -- TI2SK AND TI2FPE FLAN TO OPERATE FROM COCOS ISLAND FEBUARY 11-15TH USING THE CALL TI9TTY ON RTTY ONLY. QSL VIA WB4UBD.

VK9X CHRISTMAS ISLAND -- VK9XW HAS BEEN ACTIVE FROM CHRISTMAS ISLAND AND WILL BE ATTEMPTING TO WORK NORTH AMERICA ON SO METER IN THE AM AROUND 1100 UTC.

BY CHINA -- THE WEST COAST BOYS HAVE BEEN REPORTING THAT BY4AA HAS BEEN ACTIVE ON BOTH 40 AND 80 METERS AROUND 1300 TO 1400 UTC WHICH IS PASS OUR SUNRISE. KEEP AN EYE OUT, SOONER OR LATER THEY WILL REALIZE THAT THEY CAN WORK THE EAST COAST IF THEY START UP AN HOUR OR TWO EARLIER.

EW USSR -- EM, EW, EV, AND EO ARE SPECIAL EVENT SOVIET CALLS.

ZA ALBANIA -- DL7FT HAS PLANS FOR AM OPERATION FOR ZA LAND DURING LATE 1985.

CEO SAN FELIX -- CARDS WERE DUE TO BE MAILED DURING LATE JANUARY OR EARLY FEBURARY.

WA FRANZ JOSEF LAND -- UA1OT HAS BEEN ACTIVE ON BOTH 40 METER AND 80 METER CW. LOOK FOR HIM AROUND 1030 UTC ON THE LOW END OF 80 METERS AND ANY TIME AFTER SUNSET ON THE LOW END OF 40 METERS.

LOOK...UP IN THE SKY...IS IT A BIRD?

More or less; and mostly less, our air-time and communication distance is controlled by the propagation conditions, station output power, and antenna design. The introduction of OSCAR increased the Amateur's communication capabilities, but OSCAR's RF output power is limited by it's electrical input power; namely the use of solar arrys(photovoltaic dells) and batteries. How do we get more electrical power "high-in-the-sky"?

Thanks to the U.S. government, the Office of Aeronautics and Space Technology of the National Aeronautics and Space Administration (NASA) together with the Office of Nuclear Energy of the Department of Energy (DOE), a joint program called SP-100 has been formed to develop the technology required to build nuclear-reactor space power plants in the range of 100 to 1000 kilowatts electric (kWe). The military has concerns, because as some of you including myself have experenced during lightning storms, highly energy-efficient microcircuits used to conserve power in satellites are vulnerable to radiation and electromagnetic pulses from hostile nuclear explosions. With more energy available, medium-scale intergrated circuits could be used and would be inherently more rugged.

Have no worry, we already had a 500-watt reactor up there in 1965, but due to a voltage regulator malfunction in the host spacecraft, the reactor functioned for only 43 days. In the meantime, the chief power sources used today in space are solar arrays, fuel cells, and radioisotope generators.

There are various applications for high-powered satellites that would appear to benefit from a nuclear-reactor space power plant, not to mention our OSCAR. For example, an advanced, high power direct-broadcast satellite instead of numerous geosynchronous earth orbit satellites cluttering up space(HBO eat your heart out); for air traffic control, high-power radar can be used to track commercial aircraft over a large area and would provide high-resolution for those pilots like WA2JCT who like to fly "wingtip-to wingtip"; space-station missions for materials-processing such as crystal-growth, biological-processing, and optical-fiber production...and the list goes on.

Space-based nuclear power has been around for some 20 years between the mid-1950s to the mid-1970s. As early as the late 1940s, the U.S. Air Force started to develop a nuclear-powered, supersonic, longe-range bomber to be used to deliver nuclear weapons. The Atomic Energy Commission (AEC)...known today as the Nuclear Regulatory Commission (NRC) and the Air Force tried to develop a nuclear-powered jet engine throughout the 1950s. There was only one little problem...the shielding (lead) required around the reactor to protect the crew made the aircraft too large and heavy. Therefore, the switch was made to develop ICBMs to deliver the nuclear warheads. I guess you all heard of the line... "it dropped like a lead balloon!!!".

The main consideration is reactor system design safety, especially since the Soviet satellites Cosmos 954 and 1402 prematurely decided to reenter the earth's atmosphere and scattered radioactive debris over a

wide area of Canada. The U.S. SP-100 program specifies that reactors be launched "cold", or unactivated, and be turned on when they have reached stable orbits that will be degraded only by atmospheric drag for at least 300 years, by which time the radioactivity will have significantly decayed.

Well, until the early 1990s, we Amateur will have to do with what we got (100 watts or ?) to "get-out". While we wait, let's put our heads together and figure a way to run a long extension cord into space. 73s and HAPPY NEW YEAR-1985...

[Thanks to IEEE Spectrum, December 1984]

WB2THM

WOODY FRANTZ, K2AQL

Some of you may remember Woody, who, having moved to Florida some years ago, received a new call, which we do not remember at the moment. We were informed recently that while working on his car this past summer, the jack slipped and he was fatally injured. Because of this tragic accident, Woody has been added to our club's Silent Key fraternity.

Woody was a Charter Member of GCARC, its first Vice President, and its second President. He was our first Field Day Chairman and an avid FD participant, editor of Crosstalk for several years, a club Director, and Recording Secretary. Woody left RCA in the late sixties and took a job teaching in W4 land. A more friendly, helpful person could hardly be found. Woody probably is best remembered for his belief in TWIN-LEAD over coaxial cable transmission lines. The club extends our sympathy to his wife and family and mourns the loss of a valued member of the Ham fraternity.

TNX to Doug, WA2NPD

DE K2JF

Murphy Says: if you worked the DXpedition it was a good operation. If you didn't work it, and needed it the operators were lids, listening at the wrong time on the wrong frequencies, over the wrong path, and favoring the wrong districts or parts of the world. Isn't it wonderful to be a DXcer? Work them first call, right? Tnx NCFDX/K2JF

Here are a few highlights of the major amateur radio stories of 1984.

(1) FCC gave their final amateur radio examinations during the month on November 1984. VEC's were appointed to act as coordinators for the FCC and amateur radio operator testing was turned over too the amateur community ... For your information your V.E. Team has given over 250 amateur examinations in 1984 with a 48% Pass rate.

- (2) Amateur radio showed NO growth during 1984 with fewer new amateurs being licensed and substantially fewer upgrades. (See Graph)
- (3) The FCC began mailing TEN YEAR Term amateur radio operator licenses during early 1984. Grace Period for expired station and operator licenses now is two years.
- (4) First amateur radio operator to be sentenced to jail for an amateur radio violation is imprisoned...Richard A. Burton (ex-WB6JAC) of Reseda, CA, was cited for repeatedly operating his amateur station after license revocation. He has now been released from jail.
- (5) The FCC released a NPRM looking toward implementing new Amateur Radio Service Privileges authorized five years earlier by WARC at 30, 17, 12 meters and 902-928 MHz. 1985 will see FCC action on this proposed rule making.
- (6) Rules were changed to allow full maximum (1500 watts output) Power in the 160 meter ham band since protection to Canadian LORAN is no longer needed.
- (7) The sharing of the 220 MHz ham band with Land Mobile: Amateurs became very concerned when it appeared that a portion of the $1\frac{1}{4}$ meter band might be lost to business and/or public safety interests.
- (8) The "flavor" of FCC communications rule making continued to be "Regulation" by Market-place. The Commission generally refused to take positions and adopt standards (Q.E.D. PRB-1)

	Total N	umber of Amateurs
	1983	1984
Novice	80,461	86,781
Technician	79, 950	76,433
General	116,804	118,263
Advanced	97,084	95,381
Extra	35,624	88,909

The Commission has issued updated instructions to Volunteer-Examiner Coordinators. The new guidelines have an effective date of January 1, 1985. The GCARC V.E. Team will institute the new examinations in the February 23 testing session. W5YI/K2JF

HAMVENTION SPECIAL AIR FARE

Want to save more than a third of your air fare to the 1985 Dayton Hamvention? Piedmont Airlines has a special deal for ham operators attending Hamvention - '85. The Hamvention to be held April 26, 27, and 28, 1985 at Dayton's Hara Arena. Piedmont system services Philadelphia and many other cities.

A special toll-free telephone number (1-800-334-8644) has been established for Hamventioneers to call in their reservations. This special fare is also available through travel agents. Piedmont will take your air line reservation and quote you 35% off the regular coach fare price.

The name of the Convention Sales Representative at this Winston-Salem, NC toll free number (1-800-334-8644) is Ellie Goforth. Contact her if you have any problems. Be sure to ask for the "W5YI Ham Vention Special" air fare (\$228.00 Round Trip Phila. to Dayton)

HERE IS A GOOD THING FELLOWS - MAYBE THE CLUB CAN GET TOGETHER AND HAVE A GROUP GO OUT. W5YI/K2JF

*** NO NO COUNTRIES ***

The following countries forbid radio communication with amateurs in their jurisdictions: Burma, Iraq, Libya, Pakistan, Somali, Turkey, Yamen and Zaire.

W5YI/K2JF

POSTAGE RATES GOING UP IN FEBRUARY

From the information we have received, it appears that the postage rates will increase and the first-class stamp will increase to 22 cents. This sure is going to put a dent in those S.A.S.E.'s that will be needed for that W.A.S. award.

SOCIETY OF WIRELESS PIONEERS (SOWP)

Are any of you people eligible? Membership requirements & classifications:

Membership requirements to join the Society are the same for all classifications shown. To qualify applicant must have earned his or her livelihood as a professional radio-telegrapher in a bona fide position at a station or on a circuit using other than landline or cable telegraph codes.

Contact the following members if you would like an application: AE2L, N2ATD, N2RE, KB2GL, K2JF, WA2SEA, WB2LNR, W2UNI, WA2VRY,

Come and join us and have some real good times and get to talk to some of the fellows who used to work the old stuff.

3RD PARTY AND RECIPROCAL OPERATIONS

COUNTRY	3RD PARTY	RECIPROCAL TRAFFIC
Antigua & Barbuda	x	х
Argentina	. X	x
Australia	X	x
The Bahamas		x
Barbados		x
Belgium		X
Belize	X	X
Bolivia	X	X

	3RD Party		Reciprocal
Rep. of Botswana			x
Brazil	X		X
Canada * Automatic	Reciprosity	(No Permit	Required)
Chile	X		X
Columbia	X		X
Costa Rica	X		X
Cuba	X		
Dominica	X		
Dominican Republic	X		X
Denmark			X
Ecuador	X		X
El Salvador	X		X .
FIJI			X
Finland			X
France			X
The Gambia	X		
Ghana	\mathbf{X}_{\cdot}		
Greece			X
Grenada	X	46	X
Guatemala	X		X
Gu <u>y</u> ana	X		X
Fed. Rep./Germany			X
Haiti	X		X
Honduras	X		X
Iceland			X
India	•		x
Indonesia			x
Rep. of Ireland			x
Israel	X		X
Italy			X
Jamaica	X		X
Jordan	X		X
Kiribati			X
Kuwait			X
Liberia	X		X
Luxembourg			X
Rep. of Malta			
Mexico	х		
Monaco			X
Netherlands Antille	S		X
Netherlands			X
New Zealand			X
Nicaragua	X		X
Northern Ireland			X
Norway			X
Rep. of Panama	X		X
Papua New Guiner			
Paraguay	X		Х
Peru	х		x
Philippines	A		x
Eurrabhmes			31

	3RD party	Reciprocal
Rep. of Poland		
Portugal		Х
St. Lucia	X	Х
Senegal		
Seychelles	X	Х
Sierra Leone	X	Х
Solomon Islands		Х
Spain		X
St. Vincent/Grenadines	X	X
Suriname		X
Swaziland	X	
Sweden		X
Switzerland		X
Trinidad & Togago	X	X
Tuvalu		X
United Kingdom		X
Uraguay	X	X
Venezuela	X	X
Yugoslavia		X
4UlITU/Geneva	X	X

Tnx K2JF

Second area Amateur Radio Call Signs issued as of the first December are as follows:

EXTRA	ADV.	TECH/GEN.	NOVICE
NG2Y	KD2JU	N2FFB	KA2WFJ

During November 1984 8,630 licenses were handled by the FCC in Gettysburg with an average processing time of 14 working days. The above information TNX W5YI/K2JF

EXCERPTS FROM "THE ARRL LETTER"

TWO-NEW DXCC COUNTRIES?

The ARRL DX Advisory Committee has voted to recommend separate DXCC country status for the British military base areas on the Mediterranean island of Cyprus. The case for country status is based on the following: when the Republic of Cyprus (formerly a British possession) was established by treaty in 1960, the United Kingdom retained sovereignty over both the Akrotiri military base and the Dhekelia military base, which continues to the present. The area of these two British bases total approximately 100 square miles on the 3572-square-mile island. Amateur Radio operations from the bases use ZC4 callsigns issued by British authorities, while all other amateur operations from Cyprus sign 5B4 calls issued by the government of Cyprus. Under the DXAC recommendation, the two bases would together count as one new DXCC country in accordance with DXCC Criterion Three --

separation (from Great Britain) by foreign land. Note that the bases would be considered as one DXCC country because they are about 50 miles apart. Under Rule Three, the two bases have to be separated by at least 75 miles to be considered as two new ones. The DXAC recommendation now goes to the ARRL Awards Committee for action. ARRL Letter readers might remember that the last DXAC new-country recommendation -- separate country status for the Baker and Howland Islands in the Pacific -- was emphatically rejected by the Awards Committee. So stay tuned!

In other DXCC news, Minute 68 of the October 1984 Board Meeting instructed the DX Advisory Committee to reconsider DXCC country status for the Vienna International Center, 4UlVIC, in light of a briefing paper to be prepared by ARRL staff. A comprehensive briefing paper has now been completed and distributed to the DXAC. The Committee has been asked to respond by January 20, 1985 (the deadline called for in Minute 68), so work can be completed on the issue prior to the 1985 Annual Meeting of the ARRL Board, January 24-25.

GOLDWATER TELLS FCC: "HANDS OFF 220"

In a November 17 letter to Mark Fowler, Chairman of the FCC, Senator Barry Goldwater, K7UGA, asked the Commission to "keep hands off 220". Goldwater says "more and more, I am getting word that the Commission might be considering a rulemaking aimed at reducing the 220 MHz allocation used by amateurs on a shared basis with the government. Now, this isn't going to set well and I think the Commission would be wrong in doing this.

"There is an increasing demand for more services to the public which use the radiowaves, and most importantly, some new technologies being developed through experimentation permit more signals to coexist within the present bands. I think we especially need to encourage these. But, let's not knock down amateur radio once again in our efforts. The 220 MHz band is where we amateurs can do a lot of experimentation with these new technologies that will benefit all spectrum users. Removing these frequencies from amateur use is unnecessary and would be shortsighted.

"So, I ask you to keep hands off 220. It's needed for continued amateur experimentation, like the hams always have done."

Tnx to the ARRL Letter

EXCERPTS FROM "WESTLINK REPORT"

Tnx to K3WIL

HIDDEN DESIRES - A Guest Editorial by John Hackman, WB4VVA

"A major force in the press for new repeaters is never mentioned in print. That is this: what every 2 meter operator wants on a day-in, day-out basis is a quiet channel where he never hears anything but traffic he is interested in, where he can always find those he wishes to communicate with and where he can always be found by them, and where the communications quality is always crystal clear and full quieting.

The public repeaters in metro areas do not provide this, so there is a constant pressure to develop "private channels" where one is not dis-

couraged from monitoring by uninteresting (to him) chatter, spurious key-ups, etc.

There has been no use of technology or innovation in response to this desire, only more and more repeaters, and the results have often been only temporarily satisfactory.

Once 2 meter rigs became synthesized and capable of channel scanning, there were no further real developments. Touch-tone pads were added for use with autopatches, but there have been no real efforts made to duplicate or improve upon the systems used by commercial users to maximize spectrum - trunking, multi-PL (community) repeaters, tone signalling, etc. Particularly in metro areas, there should be some attempts made to find solutions other than merely cramming in more repeaters."

Reprinted with permission from the <u>North American Frequency</u> Coordinators Newsletter, December, 1984.

* * * * * * * *

HAMS WIN BIG IN BURBANK, ILLINOIS. A consent decree, signed before Judge Nicholas J. Bua in the US District Court for the Northern District of Illinois, means total victory for the hams and CB operators who challenged the city's highly restrictive tower and antenna ordinance. The consent decree was the result of a two year court battle waged by Chicago attorney James C. O'Connell, W9WU.

On September 10, 1982, O'Connell filed a class action suit against Burbank, Illinois on behalf of Roger Borowski, WA9EKA, Dan Burba, AF9C; Rita Burba, KB9ZL; Paul Giffey, KA9MNL; Jim Katocs, KC9U; Dennis Misner, KD9A; Rev. Les Van Essen, N8DRN/9; Dan Weber, WA9MMQ; and Robert O'Keefe and Chick Seaton, both CB operators.

<u>In their pleadings</u>, the plaintiffs argued that Burbank, Illinois Ordinance 9-4-82 violated their rights under the Supremacy Clause and the First and Fourteenth Amendments of the United States Constitution.

The ordinance had imposed a one year moratorium on the issuance of permits for amateur radio and CB antennas, required applicants for the permits to furnish evidence of insurance and post a \$50,000 bond. In addition, the law limited radio antennas to a height of no more than 35 feet and imposed annual inspection fees that were unrelated to the cost of doing inspections of the antenna. In an area obviously in conflict with federal supremacy, the city tried to control on-air activities of the operators by imposing fines as high as \$1,000 for the transmission of a signal that was even "alleged" to clause interference to any home entertainment equipment. (A\$1,000 levy could also be laid for the violation of any term of the ordinance.) Deciding that this ordinance was totally unacceptable, the personal radio operators of Burbank chose to fight back and retained W9WU as their counsel.

Jim O'Connell told Westlink that it was a long, uphill fight: one that was only made possible by the combined work of the hams who were willing to lend their names to the suit, and by the generosity of the ARRL and various other individuals, clubs and other groups that financially supported the legal effort. In his suit, O'Connell named the city of Burbank, its mayor, aldermen and city administrator as co-defendants. During the process, the defendants filed a Motion to Dismiss which alleged that the federal government had no jurisdiction in the matter and that the

plaintiffs failed to state a claim upon which relief could be granted. That motion was dismissed on June 2, 1983. On February 16 of this year, the plaintiff's Motion for Class Action Certification was granted. Rather, than continue defending against the suit, the city agreed to enter into the negotiations which eventually led to the November 30th consent decree.

Under the terms of the settlement, the city of Burbank, has agreed to replace Ordinance 9-4-82 and subsequent revisions with one that not only grandfathers all existing installations, regardless of their height, but also allows new antennas to be installed up to a height of 65 feet upon receipt of a permit from the city. Antennas less than 12 feet above a buildling used as a support structure require no permit.

In regard to applying for and obtaining a permit, the new ordinance is very specific. The city will provide the necessary forms which the amateur will fill out and attach to a location plan for the proposed antenna, a copy of the manufacturer's technical specifications for the support structure, a copy of the applicant's home-owner or renter's insurance policy and a permit fee not to exceed \$15 for ground mounted or \$10 for roof mounted antennas.

Like most other cities' regulations, the new Burbank ordinance will be specific regarding construction requirements in the interest of public safety; the specifications, however, are well within ghe specs of most, if not all, commercially available antennas and towers and within the cost capability of those who choose to construct their own. Proper grounding is essential, and covered in the new ordinance.

In addition to the preceding, the city of Burbank is under court order to repeal the original and amended ordinances, along with any and all other ordinances or city codes which may be in conflict with the provisions of the new ordinance as outlined above. In addition, the city must promptly process applications within 10 working days of their receipt. Any applications denied must be turned down in writing along with a specific list of reasons for the denial. Copies of written denials must also be sent to attorney O'Connell for the next two months. The city must also furnish W9WU with 60 days written pre-notification of any proposed ordinance, amendment or proposed building or electrical code which might be in conflict with the new ordinance as set forth in the consent decree.

In essence, Jim O'Connell and the clients he represented in what has become known as the "Burbank Tower Case," have won a more than livable model ordinance under which all hams and CB operators can erect antennas and operate, without fear of being hauled into court for being the source of a public nuisance, or having to worry that the city can stop them from putting up new and better antennas systems within the terms of the signed consent decree. This is the biggest single victory on the "amateur antenna ordinance front" to occur in years, and will hopefully become a model for other cities to emulate.

Westlink Report will make copies of the complete documentation available to any amateur or club involved in a community dispute over towers and antennas, or to their counsel on request. All requests must be accompanied by an $8\frac{1}{2}$ x ll envelope with \$1.40 postage affixed, and \$2 to offset duplication costs. (Please do NOT use postage meters; the post office gets very upset when dates on the printed cancellation are not accurate.) Mail your request for copies to the editorial office at

Westlink Report, 28197 Robin Ave., Saugus, CA 91350.

(Ed. note: Westlink wants to publicly congratulate the hams and CB operators of Burbank, Illinois for their big win. It took a lot of courage to allow their names to be joined in this action against their city; we salute them. Special credit must be given to their counsel, attorney Jim C. O'Connell, W9WU. Without his legal expertise and tenacity, it is doubtful that this matter would have been settled as favorably for the Amateur Radio Service as it was. In my book, Jim deserves to be nominated for the 1985 Specific Achievement Award, or something akin to it. It isn't often that a ham pulls off a legal miracle, but Jim did. Thank you - DE WA6ITF)

(<u>Pub. note</u>: The costs involved in fighting this kind of a fight are not small. An estimate of \$25,000 has been made, plus lots of donated time from Jim O'Connell. If we are going to ever get to a point where these battles are no longer necessary, the adoption of PRB-1 by the FCC or some equivalent action is required. Isn't it time that this country officially acknowledges that the Amateur Radio Service has demonstrated its value in saving lives and protecting property? Haven't Radio hams been there to provide government with vital lines of communication in times of disaster or public need? All that is needed is the adoption of a simple statement by the FCC that it is public policy for licensed amateur radio operators to be free from unnecessary and counter-productive local regulations which, in effect, make the Supremacy Clause of the US Constitution void. Westlink believes they should.)

Above Items TNX to Westlink Report and K3WIL

