

ORC

NEWS

EDITOR AA9W

JULY 1981

Excellency Sez:

By the time you read this I will be under sunny skies and well into my vacation in the south-west. During my absence the Vice-President Ed Rate will be incharge. I expect that he will receive your co-operation and support, the same as I would. Ed Rate will be compiling the 'finished' reports from the various Field Day Tent Captains, and submitting them to ARRL, this is a big JOB and requires prompt processing, late entries will be excluded.

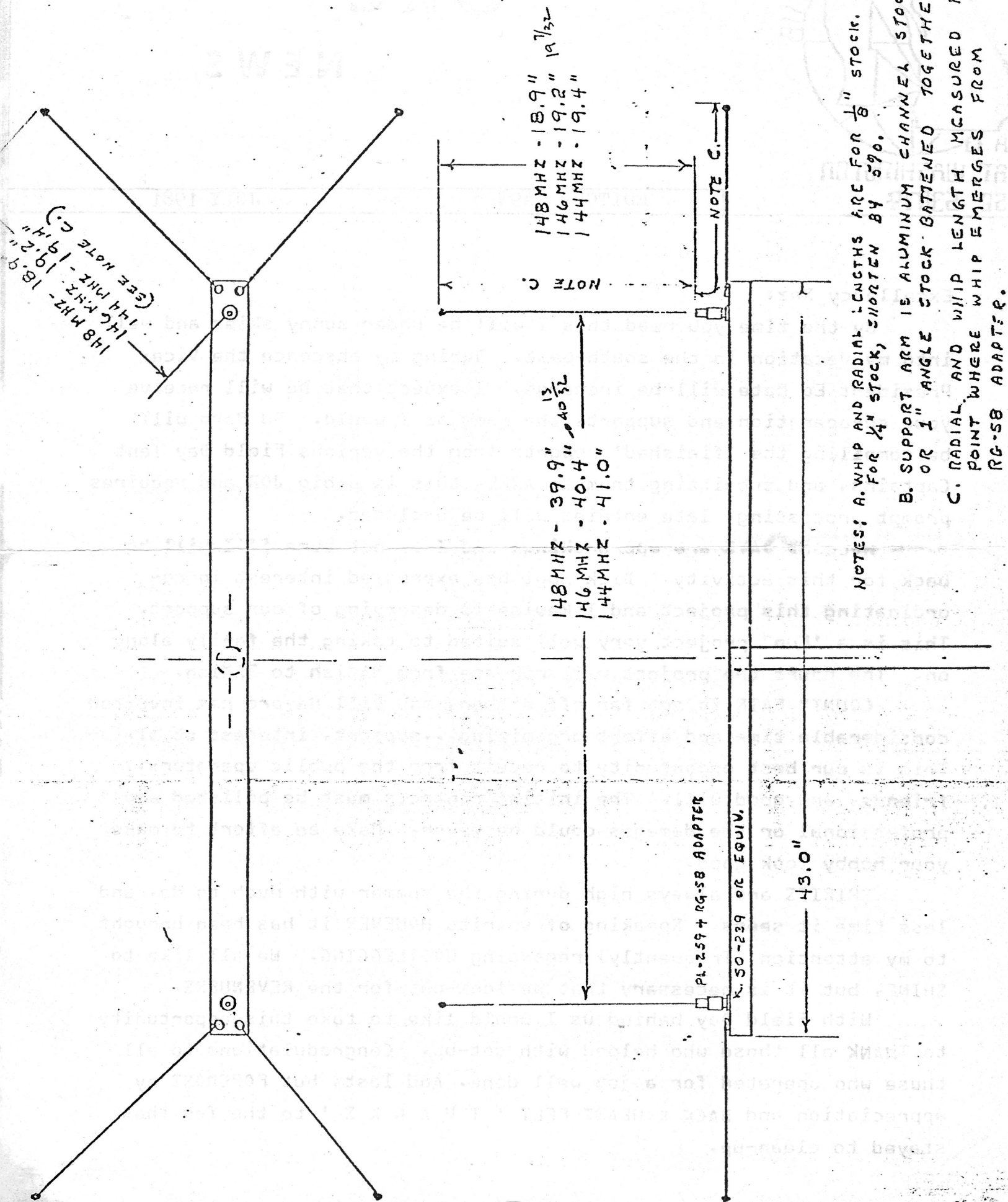
HOLLAND DAYS are approaching, and I am not sure if I will be back for this activity. Dick Hugi has expressed interest in coordinating this project and likewise is deserving of our support. This is a 'Fun' project very well suited to taking the family along on. The hours the project will run are from 9AMish to 3PMish.

COUNTY FAIR is not far off either, and Bill Hazard has invested considerable time and effort organizing...support, interest et al. This is our best opportunity to recruit from the public operators, friends, and good will. The initial contacts must be polished and professional or the damages could be sever. Make an effort to make your hobby look good.

SPIRITS are always high during the summer with much to do, and less time it seems. Speaking of spirits HOWEVER it has been brought to my attention {frequently} regarding BOOTLEGGING. We all like to SHINE, but it is necessary that we look-out for the REVENUERS.

With Field Day behind us I would like to take this opportunity to THANK all those who helped with set-up. Congradulations to all those who operated for a job well done. And last, but FOREMOST my appreciation and BACK & HEART FELT ' T H A N K S ' to the few that stayed to clean-up.

DIRECTIONAL ANTENNA FOR FOX HUNTS (FROM KB9UE)



CONSTRUCTION NOTES

Matching harness consists of two $3/4$ wave sections of 50 ohm coax cable, $3/4$ wave assuming a .66 velocity factor, will be 40 inches long.

Important

The 40 inches is measured from the point where the antenna whip emerges from the RG-58 adapter in the PL-259 connector, to the splice between the harness and the 50 ohm feedline. This means that the actual matching harness length to the solder connection on the SO-239 will be somewhat less than 40 inches. If the length is slightly off, performance will not be affected. However the two harness branches must be exactly the same, other wise nulls will not be sharp and deep, and they will not be exactly 180 degrees apart.

As the sketch shows, only two radials per antenna are used. The other two are not used because of excessive mutual coupling, which degrades performance.

The two RG-58U matching harness leads at the feeding junction can be combined in one PL-259 connector by leaving the braid outside the connector shell, and soldering the two center conductors in the pin. By wrapping #34 or #26 wire around the braids, they can be soldered to the connector shell. In this case however, the 40 inch length is measured to where the two center conductors enter the shell, not where they are soldered into the connector center pin.

The antenna whip and ground plane radials should be the lengths shown. If matching harness is fabricated properly, SWR will be between 1.4 and 1.2 to 1. Any attempt to bring it lower will degrade performance, although pruning can bring SWR to a negligible value, it is a false value and simply substitutes reactances for an impedance mismatch. Two $1/4$ wave antennas $1/2$ wave apart display mutual coupling, which lowers radiation resistance to between 75 and 80 ohms. Combining these two with the 50 ohm harness shows a conjugate impedance of about 41.5 ohms at the feedpoint, which is a fairly good match to a 50 ohm feedline.

Both elements of the system must be symmetrical, or nulls will not be 180 degrees apart. Antennas must be straight and parallel, and ground plane radials must be at 45 degrees to the axis of the support arm.

As a safety measure, install plastic leads on the Ground plane radials and the antenna tips. They can be installed easily by heating the ends and pushing the leads on. A drop of epoxy cement in the lead holes will hold them. A little more trouble, but ends can be threaded with a 6-32 die, heated, and the leads turned on while the heated ends form the threads.

W9NGT

1981 ILLINOIS STATE A.R.R.L. CONVENTION

SUNDAY — AUGUST 23, 1981

Kane County Fairgrounds Exhibition Hall
St. Charles, Illinois

8:00 A M — 4:00 P M

The Fox River Radio League is happy to announce that the 1981 Illinois State ARRL Convention will be held in conjunction with its annual hamfest.

CONVENTION PROGRAM

In addition to the previously announced hamfest activities, this year's convention will feature the following programs:

- ** FORUMS - DX, Antennas, and ARRL Operations & Policies.
- ** DEMONSTRATIONS - Special Communications Modes such as RTTY, SSTV, etc.
- ** CONTESTS - CW Copying, Antenna Wave-Length Estimates, and a "Black Box" (figure out the circuit inside) Contest.

Plan now to come out on the 4th Sunday in August - for one of the best State ARRL Conventions in recent years. All major activities are under roof and are not subject to the vagaries of the weather.

All of this is yours to enjoy for a donation of only \$1.50 in advance or \$2.00 at the gate.

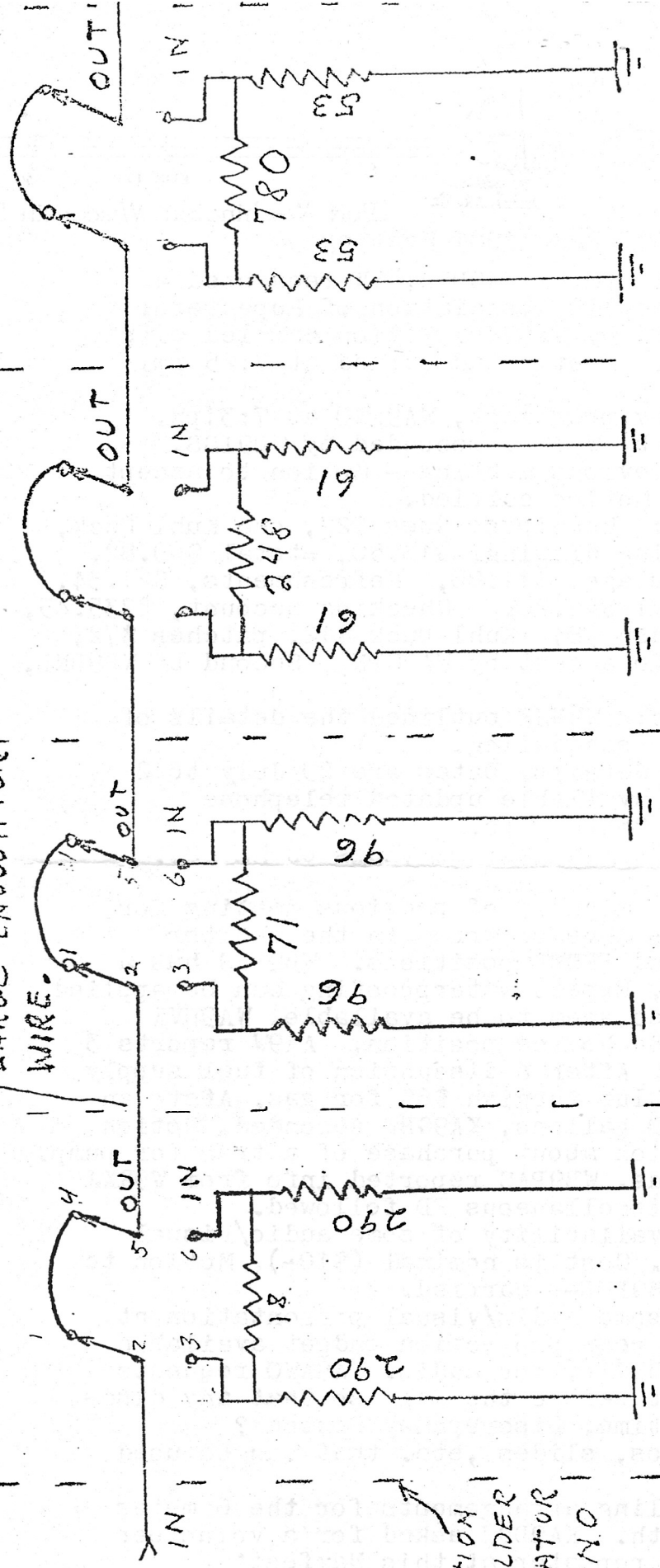
For Advanced Tickets: Send a SASE to Jerry Frieders, W9ZGP
1501 Molitor Road - Aurora, IL 60505

Flea Market Space: Call Mike Pittard, KA9EVT
(312) 896-7383 after 6:00 PM CDT

Commercial Exhibits: Call Bob McKnight, N9BTF
(312) 896-5287 after 6:00 PM CDT

** TALK-IN FREQUENCY -- 146.94 MHZ Simplex -- 7:30 AM to 2:30 PM

DRILL HOLE JUST
LARGE ENOUGH FOR
WIRE.



30 DB

20 DB

10 DB

3 DB

SWITCHES ARE DPDT ALL RESISTORS IN OHMS
 SIGNAL ATTENUATOR FOR FOXHUNT " 1/2 WATT
 BILL KRUEGER PARALLEL STANDARD VALUES
 TO GET LISTED VALUES
 AB9K



Minutes of the 10 June 1981 Meeting

Repeater meeting opened at 7:15 pm by KA9DDN, W10 requested a motion to pay \$20 to the Wisconsin Association of Repeaters. So moved by WA9CPN and seconded by WA9UVK. Motion carried with with one dissenting vote(AWO). Meeting adjourned at 7:25 pm.

Main meeting called to order by president, WA9AWO at 7:31pm. Agenda acceptance motion made by W9VQD, seconded by WD9ISS. Motion Carried. Minutes of previous meeting-- Motion to accept by W9VQD, second by WD9JHP. Motion carried. Treasurer's Report; by WD9FQW: Receipts; Dues #27, one Kuhl Duck, \$12, Kitty \$17.32, May meeting drawing, \$13.50, =total \$69.82. Dsbursements; News letter postage, \$11.80, Refreshments, \$21.34, Rappold Florist, \$16.12, =total \$49.26. Checking account, \$235.45, savings account, \$2312.27, Cash \$8, Kuhl Duck \$12, patches \$72, NET WORTH= \$2639.72. Motion to accept by WA9CPN, Second by WB9LNL, motion carried.

LOMBARDI memorial golf classic: W9NHE outlined the details of parking, feeding, and operator scheduling.

County FAIR: WD9GDG reported details. Dates are 29 July to 2 August inclusive. WD9GDG has available updated telephone "directories" for sticking on 2meter HTs.

NOVICE and ADVANCEMENT CLASSES held last meetings on May 27.

FOX HUNT: AA9W- No Report.

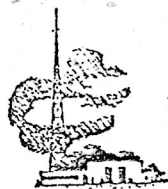
FIELD DAY: Reference made to minutes of previous meeting for the Job assignments. Setbacks ahve occurred in the shelter arrangements for the NOVICE and LFSSB positions. WB9PAS has a non-waterproof tent available, Expect waterproofing can be applied at lazy days. Other tents also seem to be available. WA9UVK has line on mobile home for the Novice position. AA9W reports 3 generators have been promised. After a discussion of fuel supply sources, AA9W moved that the Club furnish \$65 for gas. Afetr an amendment to change this to 50 gallons, KA9GBE seconded. Motion carried. KA9DDN raised question about purchase of a transfer pump. WA9CPN volunteered to bring one. WB9PAS reported info from W9RXJ re field day. Discussion of miscellaneous FD followed.

NEW BUSINESS: AA9W mentione availability of some audio/visual presentations about ham radio. Cost is nominal (\$10+). Motion to acquire by WB9RQR second by WB9LNL-- carried.

WA9AWO raised question about some audio/visual presentation at the County Fair. WA9CPN has a rear projection gadget available but is uncertain about adaptability for audio. WA9AWO requests that the details be worked out before the Fair so that any disc-repancies can becorrected in time. Discrepancy Deutsch?

WA9AWO solicited loan of photos, slides ,etc. that can be used fo the Fair Booth.

WA9BMA inquired about car pooling arrangements for the 6 meter Hamfest at Santa Fe on the 14th. KA9DDN asked for a volunteer to pick up some parts for the repeater at this Hamfest.



10 June '81 Meeting Minutes Continued

WA9CPN introduced two visitors, KA9GBG and KA9FYQ, father and son. JACKETS; WD9JHP has reworked the Club Logo and WA9CPN? has a source for the Jackets. Description of styles and prices followed. No printing charge if there are six or more jackets in the order. T Shirts also available. Also name badges.

CORN ROAST: Will be held in Lime Kiln park in Grafton. date is 22 August. after a brief discussion, WA9CPN moved for adjournment. Second by WD9JHP. Motion carried, adjourned at 8:26PM.

E. J. Bauer
E. J. Bauer, W9WQ
Secretary

VACATION TIME

This is the time of the year we have all been waiting for! All too often, however, we are tempted to announce our vacation plans to our friends during casual conversations via the repeater. Also listening to the repeater in this day and age of scanners may be someone who is tempted too! Tempted to the point of ripping you off while you are off vacationing. It is only good judgement not to announce the specifics of when your home will be empty on the repeater. Enjoy a good vacation...

AA9W

JULY 8, 1981 7:30 PM AGENDA

- X INTRODUCTION
- X ADOPTION OF AGENDA
- X SECRETARY'S REPORT
- X TREASURER'S REPORT
- X OLD BUSINESS
- X WD9GDG- COUNTY FAIR
- X LOMBARDI OPEN REPORT
- X FIELD DAY WRAP UP
- X FILM STRIPS
- X NEW BUSINESS
- X HOLLAND DAZE
- X OPEN TO FLOOR
- X ADJOURNMENT AT 9:00 PM
- X REFRESHMENTS COURTESY W9DQS, BOB WILLIAMS