

DEVOTED SOLELY TO

AMATEUR RADIO

EDITED AND PUBLISHED BY: Bill McNatt, W 9 N F K, FRANKLIN PARK, ILLINOIS

(Copyrighted 1950 by William E. McNatt, Jr.)
W5 V Y - W8WXV, 1200 M/LES ON 144MC!

- \* WOFVJ WOERD FIRST ILLINOIS TO TEXAS CONTACT ON 2 METERS, JUNE 25. PAGE 6. \* WOFVJ WOML FIRST ILLINOIS TO LOUISIANA CONTACT ON TWO, JUNE 25. PAGE 6.
  - \* WHHK-W5HTZ FIRST TENNESSEE TO OKLAHOMA CONTACT ON TWO. JUNE 25. PAGE 7.
    \* W5JTI W5OBU/4 FIRST MISSISSIPPI TO ALABAMA CONTACT ON TWO! JUNE 19.
    - \* WJJTI W5MWW/5 FIRST MISSISSIPPI OKLAHOMA CONTACT ON TWO, JUNE 17. \* W9UIA - W5ERD FIRST INDIANA TO TEXAS CONTACT ON TWO METERS. JUNE 25.
    - \* WOONS, VICTORIA, TEX. HEARD BY W7LFX, TUCSON, ARIZ. JUNE 24. PAGE 6.

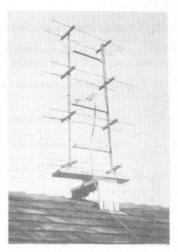
TWO METERS, LAST MONTH . .

1200 miles on Two! The exact distance, is being calculated, but it should be obvious that WSWXV and W5VY really wrapped up the record, nailed it in a box and put sealing wax on it for a time. The big event occurred on June 24, at about 11:10AM EST.

In Shiloh, Ohio, northwest of Mansfield, Al Burson was listening on 6 for WSCMS and NQD, whom he schedules crossband, occasionally. Finding 6 open, somewhat, Al tuned to W5VY, about whom he had been reading in our June issue as being active on 2. Pat, W5VY, was telling a W5 that he was going to 2, so WSWXV fired up the 2-meter rig. In the meantime, W5VY announced his 2-meter frequency, 144, 360, which is also WSWXV's frequency!

When first heard at WSWXV, W5YY's c.w. CQwas S7; WSWXV answered three times before W5VY came back with an S5 report, YY then being very weak. WSWXV replied with a report and his QTH, stood by and heard W5VY return S7 on fone. After signing, WSWXV listened on the frequency until 11:30, at which time W5VY was heard very loud, calling CQ three or four times.

WSWXV reports the 6 meter opening was poor, hearing only a few W5s, with no real short skip. It's a condition observed many times, but never before tied in with 2-meter propagation. All reports hearing solar static peaking S4 on two, beaming on the sun, the two weeks period prior to June 24. On June 23, WSWXV observed Aurora for 3½ hours, but worked only W7QKI and W9EHX.



THE 16-ELEMENT, 434 MC. ARRAY AT WOWGZ

W8WXV now has 14 states, 7 call areas, plus VE3, on Two. The station consists of an 829B final, 75 watts, a 45° corner reflector, 12 db gain antenna, 45 feet high. The receiver is a crystal-controlled converter using 2 bJ4 r.f. stages. "Looks OK on noise generator," says W8WXV.

Pat, W5VY, was running 1 kilowatt input to the final, and used a 4-over-4 element array. Pat confirmed the contact: W8WXV, 10:09AM CST, June 24th.

Congratulations on a fine job! This record will stand for some time, we believe, because of the odds against the occurrence of similar or better con-

(Continued on Page 6.)

## ATTENTION MOBILE HAMS

COMPLETE MOBILE PACKAGE - NOTHING ELSE TO BUY. OUTSTANDING MOBILE SIGNALS USE MOTORCIA BOQUIPMENT - BACKED BY YEARS OF COMMUNICATION EQUIPMENT EXPERIENCE - WORLD'S LARGEST PRODUCER OF 2-WAY MOBILE BOQUIPMENT.

TWO-METER SUPER-SPECIAL! Four, only, 2-KW.power amplifiers, less 4-125A tubes, used by police, cabs, phone company. Only \$50.00	
72Mc. Transmitter, less power supply, but with all tubes; 815 final; converted easily to Six Meters. Instruction manual and original circuit supplied. Limited quantity	
Power sumplies for above: a.c., \$12.00; 6 v.d.c., \$10.00	
A mobile transmitter with a double feature FM or AM at flip of the switch, the MOTOROLA FMT-30-DMS 27-30 MC	
P-7253 spring base rear-mount antenna \$22.50	
MOTOROLA P-69-13-ARS receiver with special noise limiter for use with any converter having 1500-3000 KC \$60.00	
3-30 famous Gon-set converter complete to connect to the P-69-13-ARS receiver	
P-327-E Fire-wall loud speaker	

The above comes complete with all necessary accessories and mounting hardware. Order direct or through the Motorola National Service Organization member in your area.

## WATCH "THE VHF NEWS"

FOR MORE EQUIPMENT AND PARTS TO BE OFFERED FOR SALE IN THE NEXT ISSUE

Write or Phone

## HARRY HARRISON W9LLX MOTOROLA INC.

1327 W. Washington Blvd. Phone: Taylor 9-2200, Ext. 161, Chicago, Ill.

W5CVW REPORTS FROM FORT WORTH, TEXAS (Dear Bill: I am indeed a sed sack, sickat heart and without friends. I have been ousted from my easy chair at the club, relieved as mayor of Monticello, my deputy's badge has been recalled, and I must now carry a Texas pessport. I shun the old beer joint, go home thru back alleys and wear a false nose with dark glasses. Do you know why? Because the June issue of "The VHF News" put me in Dallas! Oh, woe! What did I do to deserve that? Please put me back in good old Cowtown, will ya? Honestly, I can't afford Dallas taxes, dadgummit!

Ed. Note: Pressure of too many things to think about at once did it! There is one thing about our boners: when we make 'em, they're really made! Inasmuch as my parents were Cowtown folks for years, and I still have an aunt and uncle there, I well realize the ostracism brought upon you, your family, your ancestors and your offspring by our unintentional slip. Guess the only thing left for me to do is to just stay out of Texas!)

Two meters hit a new high in June! The band was open, nightly, into Louisiana, Arkansas, Oklahoma and south Texas. W5CVW, Ft. Worth, enjoyed FB QSOs with ERD FSC JEW ZS, Shreveport, La., just on; NXM JTR IRP MWW LAN DFU LGW ML MJC HXK. More stations coming on, nightly. W5CVW, Ft. Worth, added a Wallman to the receiver, doing wonders for it.

When the Big Opening came, I missed, as usual. Field Day on 7 Mc., no less! Old Hound Nose W5AJG, Dallas - eastern "Texas", that is - was on, though. But, how that rascal knows when openings will appear is beyond me. (Six meter men who also work 2 always look on 2 when 6 is open. - Ed.) Leroy got Tenn., and Alabama. Says he. "Starting at 9PM CST, 6/24, the band opened and remained so until 9AM, 6/25. for 12 hours of excellent signals on 2. 01' W4HHK was \$9 for 12 hours! I got 7 states, WHHK, Tenn., WHEYY. Miss., WHKUX and W50BU/4, Alabama. W5HTZ, Okla., and the regulars in Arkansas, Louisiana and south Texas. Missed the Ohio contact, and don't know if anyone besides W5VY made it ornot. Worked: W5FSC FEK FBT JNK BDT NU HTZ VY DCV W4HHK W5QNL EYY W4KUX W5OBU/4 W5JTR. Most were on all night! Brother, who wouldn't be?"

TV skip reception was unusual during the week 6/23-29, also; channels 2, 3 and 4 showed eastern pictures. W5CZZ, Terrell, reported a picture on channel 9 from the east coast. Maybe we will have 2-meter contacts between Texas and the east coast!

We're campaigning for "The VHF News" to live, and hope the whole v.h.f. gang will subscribe; we just can't lose "The VHF News"! (No? You should see our books! - Ed.)

W70WZ REPORTS FROM CHEYENNE, WYOMING Seems to be the time that the v.h.f. gang should hear from Cheyenne, again. We have a peculiar situation between Denver and Cheyenne: WOELL copies my signals on 2 nearly every night, but his signals have been heard at Cheyenne only once, 2055, June 8. Contact was made on c.w. for 2 transmissions apiece - about 5 minutes. The DX is only 100 miles, but it seems to be a 1-way path. Even Denver FM at 96 Mc., 10KW, is heard only occasionally. The topography: Denver, 5280 ft., Cheyenne 6150 ft., with a 6400 ft. hill about 6 miles south of Cheyenne. Anyone have any ideas?

6/11: WØELL and W7CBE (W7MVK op) at Laramie, worked across the Rockies, S7 signals. W7CWZ worked CBE by reflection from my hill, same date, at about S5. WØFRQ, Ft. Collins, Co.o., just barely heard W7CBE.

WMELL and OWZ have been keeping schedules with W70BE, nightly. Cheyenne and Laramie are only 50 miles apart, but separated by the Rockies! W70BE and OWZ run S5, solid, with little variation. W70BE seems to do the job with a fairly high-gain beam 60 to 80 feet high, atop the engineering building at the University. Next project here is to get the beam up to 40 or 45 feet; the 16-element is only 20 ft. up, now. W70WZ is on, every day, from 15 minutes to an hour.

Visiting back home in Waterville, Kensas, in June, had very fine QSOs with WO DSR DDX CMQ ONQ and DVV, 125 to 130 miles with my 3-watt mobile! INDIANAPOLIS EAVESIRIPPINGS By: Marge Bowman, XYL-W9GLW

Happy Birthday to "The VHF News"! June really busted out all over: QSO party; hamfests; field day and a new 2-meter DX record made June

an outstanding month.

6/3-4: QSO Party. FVJ worked HKQ EWO ASM LWN AFT GLW; ASM worked LLA FPD DOK NSF VKN VXR EWO MBL GYX AQQ and called WEBFQ LPD ZUR WRN W4JDN PCT. K9NAM got DOK W4PCT and OXC. EWO to KQG EQC NW W4MKJ and others. GZQ NSF (at least 27 plus Ky. on 6) WZZUR/9 HFX (newly on in Richmond) JMS and ZHL all populatin the band. GLW; 14 contacts in 4 sections.

6/5: ILA reports that he and FPD were missionaries for 2 at Starved Rock; Les won a 10 meter coil, of all things!

6/6-10: East and west best: EWOLLA LWN FVJ JMS KQG DOK VGD LNX and IFX. 6/11: 'Tis stretchin' out: EGH GZQ HFX FVJ EHX W4JDN W8CYE. EWO looking for Carolinas: W4DCQ, 144.65; W4CVQ and DLX! Norm also says W4FBJ ready to re-burn a path betwixt here and Glasgow, Ky. For our Sunday trip, we trekked to Muncie, home of Nash Sr. and Jr., W9NSF and FZK. Swell layout in ham and business activities. Need a sound truck? Call the Nash femily. 6/13: KQG, methinks, has the mobile rig to outdo all mobiles: station wagon with 1½, 2,6, 10 and 75! Maybe I

missed a couple. Sounds good, too. 6/17: Farther and farther: W9FVJ lookit him go! - W3RUE PGV ØIHD KYF WSWXV RWW EP DUL CYE WGUCH W4JDN and W30MY. W9EHX (did Red hear Nebraske?) W9EGH JSC? DOK GLW VXR W4JDN W8VIB and FQK. W9SUV- NSFGLW W8BFQ BLN ZPH WXV. W8BFQ- WØBJL W9LLA LWN. W8WRN-W9HNM LLA ASM LWN W8ZOA ZPH WØKYF W8ZUR-W9NZ. W9EGH- W4JDN (unusual) WØBJL. W9UIA (have yet to hear him) and WELPD. W4JDN and W9JDD (whereat is Cordova, Ill., at? (Ed. Note -On your map, look almost due west of Chicago to the Mississippi, and north of Davenport; that's the home of "Jack Dog Dog".) Pardon us while we brag: GLW worked ZHB, who "didn't believe it"! We were surely pleased!

6/21-22: Chicago and n.w. from here. RTY EHX RHL NW NFK (now in the book!) JBH ALU EPV CAW TKL DXX (a beautiful signal from "Our Lady of Two) DLI HDB and EQC. Come again, soon!

6/24: Very bad thunderstorms! Damp basement makes rubber gloves necessary! 6/25:A.M.- W9ANH/9 W8CYE W9HKQ EWO and K9NR/9. Later, visited super Field Day location of ASM FKX and AQQ; Al had a full week. Life began, 1st F. Day, and he was introduced to 6 meters. All nearly drowned in rains Saturday night, but were busy working W6 on 6. Guess all W5s will be on 2 now that W5VY and W8WXV have shown them! Horizontal, huh?! 6/25P.M.: W9FVJ is top man with WHHK 144.5, 4KUX, Alabama, 144.178, W5JTI, 144.35, W5ERD, Texerkana, Texas, 144.27, W5QNL, 144. 09 and W5ML, Oil City, La.! Sam also gets out east to WSBFQ and WSWXV, who knew all the time "it" could be done! Fellers in the middle were HKQ EWO GSY UCH LLA HEX LWN EGH EHX (who added ØHXY 6/23) W4PCT W8WRNBLN ZUR DLU VIB and NSF.

6/28: The motto of 2 should be "more cold fronts, pliz!" Lookee: FVJ and ZHL, better than locals; UCH LLA EWO VXR KQG GHZ (making signs for Turkey Run), SUV - now has 14 states, Louisiana and Texas, latest; GSY NSF HXF FPD JMS WHAMLJ OXC WELPD ZPH PTF BLN WXV and WOKYF. Mac, GHZ, listens for K2AZ at EPMCST, each night.

SEE YOU AT TURKEY HUN, INDIANA, ON JULY 30! It's located southeast of Danville, Ill., and northwest of Indianapolis, Ind., just east of US 41 and northof US 36. So far, indications are that Indiana v.h.f. men will be hosts to v.h.f. men from Illinois, Wisconsin, Michigan, Ohio, Kentucky, Missouri, Tennessee and Mississippi, if WHHK can persuade W5JTI! Maybe others will show. There is no charge; bring your picnic lunch and your family. Strictly informal get-together.

BUCKEYE PICNIC!

The Fourth Annual Picnic of the Buckeye Shortwave Radio Ass'n. will be held on August 27 at Happy Days Camp, Virginia Kendall Park, just north of Akron, O., on route 303, 1 mile west of route 8. Picniclunch at 5PM, Registrationat 2PM. \$1 per family. Contests, prizes, auctions, swimming and fun for all! See you there!—W8ODJ.

1200-MILES ON TWO! TROPOSPHERIC OR SPORADIC-E REFRACTION? By: Jim Switzer, WØMNQ

So, we have a new Two Meter DX Record! What is this, has Texas taken over Two?

We investigated the propagation situation for June 24, and came across

some interesting facts.

Referring, now, to last year's reports of extreme range on Two Meters, namely the W4HHK-W7FFG heard report, and the W5JTI to W7KOP heard report. as well as the W5JLY-W4QN heard report, I believe that most everyone accepted Sporadic-E as the factor responsible for the unusual propagation. At the Omaha v.h.f. meeting, Perry Ferrell was doubtful that Sporadic E was responsible for the Arizona-Tennessee transmission because a sounding station in Louisiana did not report a high MUF at that time. Ferrell thought, then, that my theory, as printed in "The VHF News", might be the answer. As stated in my report at that time, I only advanced the theory as a possible explanation since such a situation seemed justified by tropospheric logic.

Now, on June 24, 1950, 6 meters was definitely open, so, again, Sporadic E first seems to be that answer. However, "M" gradient curves for tropospheric propagation show that the entire gulf coast, especially the southern end, should have been pretty good. Fort Worth, however, didn't show up too well. The principal signal path appears to have been parallel to a trough-line between a "high" centered over the eastern gulf region and a "low" centered over western Kansas- eastern Colorado. Normally, such a weather situation would produce completely unstable conditions. In this case, the advection of Gulf air, which was somewhat cooler than the air overlaying the land mass, upset the normal routine, and look what happened in the way of inversions!

Up north, a cold front was laying right through the Chicago and lakes area; there were plenty of thunderstorms up there, too. Joliet was no good. (That's why even W9ZHB could not hear anything south.) Toledo

was weak, and Pittsburghwas very unfavorable. Toledo conditions bear out W8WXV's report, from Shiloh, only 50 miles southeast, that W5VY's signals were very erratic and not too strong

on peaks.

Upon further study, after extending the "M" curves to the higher elevations, I found indications very similar to those of last year, when W4HHK heard W7FFG. So. I'm now wondering if the WSWXV-W5VY contact was the result of tropospheric refraction, only, instead of Sporadic E. The Little Rock, Ark., curve shows three discontinuities: at the surface, at 5000 and 13. 500 ft., although the refractive index of the atmosphere, between 5 and 13 thousand feet, was less than that of standard atmosphere. Yet, I think there is a possibility that atmospheric bending was responsible.

It would be interesting if Schulkin of CRPL would investigate and comment upon the circumstances. There's another possibility: could a Sporadic E disturbance affect the atmosphere below it, and so produce a discontinuity that would result in a change in the refractive index. Is it also possible that tropospheric refraction put signals within range of a Sporadic E

cloud, which passed it on?

IN THE MAIL . . Thanks to the following for your letters and cards; when subscriptions and advertising permit more pages, we'll be able to publish such interesting material. - Editor. W9NYY W/KTJ W4CXC W5FBT W2HUC W9GHZ W5IRP W8DOG W9s JPK EWO FVD ALU W2CXY W3QKI W9MBL Dr. Alfred N. Goldsmith VE3BEC W4ALP W3RUE. Also, thanks to you fellows who sent in renewals and new subscriptions. Both are needed, badly, so please keep up the good work!

"LITTLE" THINGS THAT HELP ALL OF US! If you move, please send us your new QTH; if you don't leave forwarding postage with your Postmaster for "The VHF News", please do not expect us to send a replacement copy; it's your responsibility, and 25¢ a copy plus time on records and stencils to us. Subscriptions are cash, only.

TWO METERS, LAST MONTH. . . (Cont'd) ditions at a time when two v.h.f. operators, located at greater distances, will be on their toes. Now that this has been written, we 'spose a new record will be made, soon! Hi!

W50NS HEARD IN TUCSON, ARIZONA! W7FGG reports that W7LFX-W7NVN, father and son, report hearing a station on June 24, approximately 720PM, on about 144.3 Mc., stating "I would like to have the location of your town, again." Having heard W50NS, Victoria, Texas, on 6 all afternoon, it was easy for W7LFX-NVN to recognize that same voice on 2. At 8:12PM, W50NS was heard calling CQ on 2; nothing, afterward. The DX, Victoria to Tucson, approximately 870 miles:

At W7FGG, TV reception from the east was good, Houston solid from LPM to 8 PM on channel 2; two stations came in on channel 4, one showing a baseball game, with Dallas as one team. KPHO-TV, Phoenix, normally ground-wave to Tucson, was QRMd by an unidentified station. Sundaynight, June 25, gave a repeat; Oklahoma and Tulsa had good pictures on channels 4 and 6. Activity on 2 in Tucson, but no DX heard.

W5MWW, W5MJC, W5LAN and others trekked into Oklahoma on the weekend of June 17-18 and set-up near Adabel, Oklahoma, for the purpose of giving the boys an Oklahoma contact; they did, and W5JTI did, to the tune of state #12, and the first Mississippi-Oklahoma contact on 2. Quite a number of northern Louisiana stations were also worked.

On June 20, W5JTI picked off another first: W5OBU/4, Tuscaloosa, Alabama, for the first Mississippi-Alabama QSO on two! W5OBU/4 used an 829B final; a 6J6-6AK5-6AK5-6AK5-9002 converter; the antenna is a 5-over-5. W4KUX, Tuscaloosa, heard W5JTI on a TV receiver! And, W5JTI heard W4KUX's 9003 with .75 watt input. "Almost unbelievable" says Tim, who states that conditions did not appear to be abnormally good.

W5JTI wants schedules with Kansas, Georgia, Florida and the Carolinas, so drop Tim a card. An interesting point: in a note dated June 20, W5JTI wrote, "Expect W5VY to crack the record!" Is that "calling your shot"? Hi! Tim reports southern activity W5FM OQW MXJ

CZ, New Orleans; DEJ DNS, Meridian, Miss; GIX MKP HEZ, Baton Rouge, La.; W5MMZ JTI, Vicksburg, Miss.; W5ML KKI DXB JTR ZS, Shreveport and vicinity, La.; W5MJC LANMWW ERD, Texarkana, Tex; W5QDL RCI BEV JJA JZK, Miss.; W4KUX W5QDL/4, Tuscaloosa, Ala.; W5RDA RY PFC FFF ITL, Jackson, Miss. [Ed. Note: Sure wish they'd all subscribe!)

Down in Toledo, Illinois, Sam Miller, W9FVJ, enjoyed a good month. On June 18. WEEP WXV W3PGV WERWW VOZ NNF WØ BJLW3CMYW4JDN W9LIRW3RUEW8DULW9 HKQW8ZPH W9UCH W8BLN W8LPD and W8WRN were worked. Sunday morning, June 18. W8CYE was worked as usual on the 18month old schedule at 7AM, plus W4 JDN. On June 19, W9GLW ASM and EWO represented Indiana at 8:30PM. June 20, W9ZHL GHZ HKQ held forth; EQC, in Aurora, Ill., was heard. On June 21. EQC was the only contact. All quiet until June 2): WSCYE on sked at 7AM; W4JDN at 7:10AM; W9ANH/9, W9EH/9, on Field Day: W9HKQ EWO ZHB DUK/9 ZHL ALU DLI and SUV in the a.m. No activity heard in the afternoon, hot, 950 and humid. In the evening, Sem worked W9 KH and BOV, both of West Frankfort, Ill., and while tuning from W9BOV to KH, he heard W5ERD, Texarkana, sign with W9UIA, Evansville, Ind. Quickly, Sam signed with KH and BOV and called W5ERD, who replied, S9, at 8:33PM. This made the first Illinois-Texas QSO on 2! After signing with W5ERD. W9FVJ heard W5QNL calling, and then worked Mac for about 10 minutes, during which time he advised Sam to look for W5ML, Oil City, La. W4HHK was worked for a few minutes, and then W9FVJ called W5ML and worked him for the first Illinois-Louisiana 2-meter QSO. Another 5, sounding like W5DFU, was heard weakly in the noise, but W9FVJ was not too sure of the call. Following this, W5JTI was worked: W9 LIRwas OSOd and told to look for W4 HHK, so Frank got his Tennessee contact. W9FVJ, beaming northeast, worked WSWXV WRN; later, W4HEK re north and northeastern activity; HHK S9! WSVIB W3RUE heard, but not worked at. W9FVJ, but W8BFQ came thru fine at 11:17PM. On June 26, EWO EHX HKQ and FKI. June 27: W9GHZ. June 28: 3-way to W9UCH and ZHL. Band opened to Ohio

and the following stations were heard working furiously: WSLPD W4JDN W4OXC WYMKJ WSWXV WSZPH W9EWO HKQKH GHZ MGA W8BFQW9NSF BOV WØKYF W9HFX GSY; the strongest signal at W9FVJ was W9GLW, all evening. June 29: Slight Aurora noticed; W8WXV heard briefly at 7:50. W5IRP, Bob Kurth, Lufkin, Texas, now has b states. The W5MWW expedition to Oklahoma giving him and many other Texas stations an Oklahoma contact 6/17 and 18. Bob says to watch for the W5s in southern Texas in the a.m., 6-8, as they find conditions very good at that time. (Shades of W2DOG! - Ed.) In the p. m. of June 24, Bob picked off W4HHK for state no. 6! FB!

W3RUE, Pittsburgh, added W3ASD, Smyrna, Del., on June 1, for state #16! On June 4, Ted worked VE3AIB W2FUU; 6/8, W2ZUW; 6/17-18W4JDN WØKYF W9NSF FVJUIA; 6/17-18, heard W9BGH TKL EQC RHL EHX JEH ZHB WØBJL; 6/18, worked W4JFV, Roanoke, Va., and again, 6/19.

On June 19, W4HHK worked W5OBU/4 for his first Alabama contact, and state #12 for Paul, who missed out on the Oklahoma expedition by W5MWW. But. it was squared away, later. W5ERD has been so consistent that W4HHK considers him a local, almost! On June 26, Paul wrote that he was recovering from an opening the like of which he never before experienced. June 24: 0630-0815 W5QIO FBT QME ML: 1845 to 2359: W5DXB IRP ONS JBW BDT VY ML DSB AQSJLY DCV. June 25, 0001-0221 W5QNL AJG FEK FSC ABN JTR EYY; 0604-0910-W5MWW ZS NU HTZ JNK HXK. The W5HTZ contact made state #13, and the first Oklahoma-Tennessee contact on Two. San Antonio, 650 miles, was the best DX.

In the p.m. of the 25th, conditions had changed and WHHK was in the middle, working W9FVJUIAKH JMS BOV LIR SUV HKQ EHX, using c.w. and phone. The best DX was W9HKQ, about 500 miles, but nothing heard from Chicago.

W9MBL, Ken Evans, New Castle, Indiana, reports 10 states, 5 call areas and 470 miles DX. Ken says his activity has been limited since last November because of various circumstances. W9CQH, Vern Schlarb, is now in Port Arthur, Texas, at radio school, but doesn't plan to be active on 2 in Texas. (Lotsa 2-meter men, there, Vern!)



"Audi alteram partem"
(Hear the other party; hear both sides.)

EDITED AND PUBLISHED BY: BILL MC NATT, W9NFK FRANKLIN PARK, IIL.

Subscription Rates: In U.S.A., Possessions and Canada, \$2.00 per year. Flsewhere, \$3.00. Single copies of current Volume, 35¢ each. Please do not send stamps.

All editorial contributions will be appreciated, and should be mailed on or before the 25th day of the month for publication in the next issue.

CORNER REFLECTIONS . . .

Very little space to tell you that we still need subscribers and advertisers to keep going! Otherwise, GN!

IN AND AROUND CHICAGO . . .

W9BBU is alive and kicking: windstorm took his antennas down and Blackie has been playing golf, since. But, he's about ready to fire up, again. W9NW, still the Old Faithful, Sr. GDM busy with house, but works on 2. SVF, back on after 2 years, now in Westmont. Of all things, WOK, Bensenville, back on after 22 years! TGI- wha! hoppen? KFK on 2 and 420; OBW, 6, 2 and 420; VX fusses with TVI, 6, 2 and 420. NFK QRL work, home and "News" plus 147.5 FM Net. LLX replaced RG-8 coax with Gonset Line; 6 db improvement, still no TVI! IWE KCW UMD KJU sparkplug NE side activity. CT on, again, in new QTH. FB! CGR coming to life. DRN, 2, 420 and ???. JBH usually on before 8 and after 10; MMG BBR and TKL steady customers.RTY/9, Wauconda, on weekends and vacation. BAD, BVM heard at times. HXS ?? ZNJ: now'n then; WIO, same. 147.5Mc. FM Net (Vertical) has brought new stations. Now active: W9 ZVV SAK SXJ LLX NFK, all mobile; W9 LLZ CEW LLX NFK QM ZYF, fixed. Coming on, W9RAY CEW HPJ LLZ, mobile; W9JBH HPJ SAK LQP fixed. MDO interested. W9CAW DLI DHJ RHL keep NW Indiana alive. W9EQC: vacation.

WOMING REPORTS FROM KANSAS CITY, MO. Finally, activity improved in June for the Kanses City area; not many locals are really active, but the outlying stations are back on, and

things are looking up!

June began with a very disappointing turnout for the v.h.f. QSO party. Only about 10 local stations showed up. With the help of out-of-town contacts, together with 220 Mc. operation, WODDX made 72 points for top score in Kansas City. WOMNQ second with 64. The highlight of the weekend was the activity of W70WZ/Ø. operating fixed-mobile, Waterville, Kansas. Neil, DSR, Ben's old friend, put the KC boys on to W70WZ, and many of the local gang worked Ben. He operated with only 3 watts input, a 12element portable beam 8 ft. high and a superregen receiver. Now, we all hope to workhim from his home location in Cheyenne!

In Kansas, WODSR, is on almost nightly; WOJFE, Abilene, gets into Kansas City regularly. From them we learn of two new stations: WOHEC, Independence, Kans., and WOLIC, Ft. Scott, Kans, Neither has been heard in KC. yet. WAJFE has 7 states, including Nebraska and So. Dakota. Understand WOZKF is the only active station in Wichita, at present. In Iowa, WOBIP and WHZ are active again, but Roger, WHZ, has receiver troubles. Yet, he puts in a good signal in KC, but has trouble hearing even the higher powered stations. His new transmitter. p.p. 826s final; also, a new twin-5 beam a'la W2PAU's "CQ" article. W0 BIP says he hasn't heard from WOFMS since last January, but the June issue of the "News" explained Frank's

Three Kansas City stations finally added Nebraska to their list. On the 16th of June, WØDDX CNQ and ZJB worked WØEPY, Grand Island, Nebr. Just like last year, though, WØMNQ was at work! WØEPY reportedly runs a 522 into a corner reflector on 144.2 Mcs., although another report states that he has a 400 watt final and a VHF-152A with a cascode. A 70' tower is used for the antenna. He listens to the east at 2100CST, nightly.

On June 11, the band appeared to be nearly open. For sometime, we list-ened to WGEHX working WØHHD on c.w., but couldn't raise either one after they signed. Several phone signals in the east were heard, but the modulation was too weak to identify calls. Perhaps their beams were not pointed to the west.

Locally, two new stations are active. WØGZI, Parkville, Mo., and WØUHB, Kansas City. Sim, UHB, started on c.w., but now has a modulator. His r.f. section uses 6J6s straight through, the final being a pair in push-pull parallel. Harry, WØINI, is moving to a new QTH, so he won't be heard from for some time. Bet he missed all those

good 6 meter openings, too!

WØZJB has most of his troubles whipped, and a beam is up, so Vince will be heard whenever he is in town. WØ MNQ hedmoisture—in—the—basement trouble again this summer. In the process of clearing up difficulties in both the transmitter and receiver, we finally put parallel lines in the plate circuit of the 829B final. Efficiency is up several percent, and wonder of wonders, the unbalance we've always had, finally disappeared! One 829B was broken in aligning the new lines, but no other troubles.

The Faithful Few On Two: WØDVV finally tumbled - he was out of town, 5 days! Firsthe has missed this year! (A most reasonable excuse, we feel! - Ed.) WØDDX well deserves a listing since Roscoe is Mister Two in Kansas City; the original station, and usually the first to greet a new

station on the band!

Re Marge Bowman's column, June issue: we, here, all wonder who that station, was, on the Missouri-Kansas border, that W9HKQ worked, it being our local area. We seem to have missued out, somehow; first we knew of it was in the "News", hi!

DO WE, OR DON'T WE CONTINUE? By: Bill McNatt, W9NFK

For the past four years, this little paper has been published because we always had faith in the support of v.h.f. men. Lately, finances aren't good. Do we quit, or do you help?

BADGER MILK RUN By: Vic Tresidder, W9TQ

A new job for TQ ruins our chances to enjoy frequent contacts with our many 144 Mc. friends. We have to be on the job from 1715 to 0000 and later, CST, miles from the rig, and will be free only every second Sunday.

Thus, it will be very difficult to give a good activity report on Wisconsin unlesswe get some assistance, which will be most welcome and appreciated!

From W9FPE, Willard, we have some very heartening dope; we hope the subscriptions are on the way to NFK, direct, Ed, and thanks very much! FPE has been monitoring 50 and 144 to discover what happens on either when the other is open. Path to WOJHS and HXY has clicked enough so that it is deemed reliable. FPE works ZHB daily on 144 (all other bands were closed by QRN) for two weeks, except for 3 days when FPE was off, for 2, and ZHB was on 50 Mc., for one. FPE's daily sked with WOTKL continues with good reports, although Ed notices that when TKL's signals are down, ZHB's are strong, despite the longer path. We'll leave it to the experts to figure out; but, we don't believe it's because of power difference, alone.

W9EHX, McLean, Ill., reports hearing W9FPE on several occasions. W9IQW, Pt. Edwards, Wisc., is almost ready to go; beam needed.QIX, Merrill, almost ready with high-power final. He has been hearing Illinois and Minnesota signals with a souped-up VHF-152. EYN is active every night with a temporary 4-element beam 25' high. Tower is almost ready; he's using a 522 and a home brew 2-stage converter. He's worked WOJHS and W9AFT; has heard TKL and TQ. FBU, Greenwood, is on, year-round, but works only EYN and FPE because of his 300-ohm line foldeddipole. JBFimproved receiver; has stacked 4s, rotatable, and is heard in Champlain and St. Cloud, Minn. HEE, Schofield, working on tower so he can get out of attic. All stations watch, nightly, for signals from the south. WOTI, Milbank, South Dakota, is on from 2120 to 2130CST every evening with the beam to the east-southeast during that time, looking for Wisconsin and Illinois gang. Thanks to FPE for the news.

Now for local items: Note to Ye Ed: Hear that PZS may return soon. PM - beam down; TV7 ESE, non-commital.BDQ, 14 Mc.c.w. (AFT has tried re-sale; no go so far. BDQ works nites, as we do; is off on alternate Sundays.) DKU, once in 60 days; because of EEU? Maybe they chaw it out on 40. (BBU not on any band, presently. - Editor.)

Contest activity included KQMBTI LJV GJE AFT FES HDE DSL AFV WTL EFM DYZ CXW UJM BTQ PYM DYF LPF NVQ YFT.

Heard or worked at W9TQ: ZHB EXH (AFT assist) EQC NFK QJO PENGYZ ZNJ PK HMM TYA HKQ W4EYR/9 (HKQ told us he heard Frank, too! - via AFT) BER TGI IWE FPE EYN EVL W8MRK & RLJ W9JEH MFR CAW HDB MMG CGR NW DPY DXX QKM NJZ OEW KJU TKL KFK RHL and DEJ (A2). Contestincluded.

KOM gets results with a V beam; maybe he got the contest in Wisconsin, too, with 50 and 144 Mc. His first contact in years. BTI has W3GV beam. LJV passed out dope on coaxial converter and enjoyeda long one with W9FPE. GJE has a new modulator; 829 to follow. AFT surprised quite a few with p.p. 4-65A final; control on modulator appreciated. FES 2130 to 2300, usually. AVF has troubles with TV: 50 and 144 Mc. beams inattic. WTL, emergency net. EFM surprised us; BCL troubles. DYZ and 829 don't agree. CXW heard more often. UJM relocating in attic; beam still inside. BTQ working on new rotating mast for beams, PYM, contest; nuf sed! DYF LPF NVQ, contest; twisted-pair, handy item, eh, Harley? Although it must be admitted NVQ is there for emergency net, always! YFT repaired power supply, but not in time for contest. YYY busyon new location by orders of -- you guess! Hope he gets it done, soon. Then, maybe - we hope!

Q N O CLUB

The last meeting was held at Helen McNatt's residence (WONFK). The girls miss Lorraine Stanton, unable to continue because of other matters. Future plans include a late-summer picnic for the families. No meeting is scheduled for July. The QNO starts a new year; any XYL is welcome to join.

THE UHF WORLD

By: Arnold Bucksbaum, WOWGZ In Iowa, it certainly feels like the DX season has arrived for the v.h.f.

and the u.h.f. man. Every day is hot and humid, which should result in some long range communications.

Activity seems very slow in the u.h.f. world, for I have received one letter to date. W4HHK, Collierville, Tenn., appears to head the activity on 220 Mc. with his recent 137-mile contacts with W5NYH, now recovered from his illness. Both stations use 16-element beam. WOWGZ, Grinnell, Ia., has a 220 Mc. rig on the shelf for over a year, but lacks ambition to build an antenna. The rig uses an 832A tripler capacitively coupled to an 829B final. The final tube and parallel-line tank are completely shielded, improving the efficiency of the final by reducing its radiation losses. In laboratory tests, the power output was measured as high as 30 watts on a Bird wattmeter. Afurther increase in the efficiency was obtained by cooling the final tube with a small blower. Our particular blower consisted of a small battery-operated motor in a plastic case, sold in hobby shops, and a small fan blade.

W4HHK is extremely interested in receivers for 420 Mc. The best tube available for the r.f. amplifier and converter stages is the RCA 5675, advertised in the April issues of "CQ" and "QST". This tube, called the pencil triode, is designed especially ° for u.h.f. applications. It has a double-ended, coaxial-electrode structure which produces low lead inductance and interelectrode capacitances. The grid appears as a discplane and provides complete isolation between the grid and plate circuits in grounded-grid amplifiers.

It is very difficult to recommend various tubes and circuits for amateur use because, in so many instances, laboratory and machine shop facilities are necessary to construct some components. However, in some cases, it's surprising to see what can be done without necessary facilities. In simplifying the construction of coaxial circuits, the inner and outer conductors may be

aluminum sheet, shaped rectangular in cross-section. Surface edges may be sanded, and screws and nuts used to hold the sides and corners together. In tests of a 4X150A tripler-amplifier, no practical difference in operation was noticed when aluminum circuit elements replaced those made of brass. Over a period of months, corrosion may develop on the surfaces which are bolted together and cause circuit losses; however, periodic cleaning of these surfaces will maintain proper operation.

Have you ever wondered how much power may be radiated from a non-resonant transmission line? It's common sense to expect more line radiation at 500 Mc. from 300-ohm twin lead than at 144 or even 30 Mc. A formula from Terman's "Radio Engineers' Handbook", p. 193, helps to explain the

situation:

Radiated Power = 160(77 D/A)2

if: a. Line length is 20 times the spacing between wires.

b. Spacing is not greater than A/10.

c. Line is non-resonant. I is r.m.s. line current. D/A is spa-

cing of line in wavelengths.

The formula shows that the radiated power is proportional to  $(D/\lambda)^2$ . With a transmission-line wire spacing of 1 inch, the ratio of the power radiated at 500 Mc. to that radiated at 30 Mc. is 282 for the same transmitter power output at each frequency; also, the ratio between 500 Mc. and 144 Mc. is 12, or 10.8 db radiation loss. performance we can expect from an open wire transmissionline in the 2/3 meter band is very poor when the line

dielectric-type line, is considered. One method of reducing radiation loss is to shield such lines as 300-ohm twin lead. Recently, WOWGZ obtained some 3 cm. waveguide. This could be avery effective shield for the 300ohm line, mounted in the waveguide on polystyrene spacers.

radiation, plus the attenuation of a

Please write to us and tell us what you're doing on 220, 420 Mc., or higher. Address: Arnold Bucksbaum, 1551 Bever Ave., Cedar Rapids, Iowa.

TWO METER TOPICS IN TEXAS By: John N. Neff

Although 2 meter activity seemed to slowdown towards the latter part of the month, early morning DX has been fairly good. The only contacts with Dallas have been made in the morning, but W5JTI has been worked quite a few times in the night-time by W5QIO, too. QIO, as of June 22, was a 4-state man, having Louisiana, Mississippi, Arkansas and Texas, of coh'se.

On June 4, W5QME worked W5JTI, using a 522 xmtr and recvrat QME, with a 5 over 5 beam, which seems to work very well. W5QIO worked W5NLP, Jackson, on June 11. W5JEW and W5AOA have been

very consistent.

W5QIO recently completed six months of service as net control station for the Sabine area of the Gulf Coast Emergency Net without one miss! W5DSB has been active, but has had troubles. W5SM's activity has been reduced by pressure of rush-season in his business. W6EVK/5 has been a visitor in the area.

Our decrease in 2-meter activity may in part be caused by our increase in 6-meter activity. Good 6-meter openings were observed on May 24, 28, June 11, 13, 16, 18 and 19. On June 18 and 19, 6 was wide open from 50 to 108 Mc. FM and TV DX stations were rolling in. FM and TV from Milwaukee were heard! The major part of the opening seemed to be from the northwest around to the northeast and east. W5FTM heard a W6, but no contact. W5QIOQME DSB and FFM were active during the openings and worked several new states. W5JEW and IYG were also active.

Although the 2-meter DX record was renewed, again, no unusual DX was worked from this area on June 24, except that W5QIO, as of June 24, became a 5-state man by working W4HHK, Tenn., in the morning. W5QME followed; W5DSB tried, but had beam trouble. But, that night, DSB worked W4HHK after overhauling his - DSB's - beam. Now, it has the old zip! Although 6 was open only a little while, on the 23, 24 and 25th, 2 was wide open on the 24th. On the 25th, 6 went to the "dogs" - K9, that is. The most consistent 6-meter signal on 6 was a K9!

WEDFU REPORTS FROM TULSA, OKLAHOMA. On Saturday night, June 24, the 2meter band opened wide. W5NU, Savoy, Texas, and W5IOW, Ada, Oklahoma, were unusual signals heard. But. at 0800. W5HTZ, Cromwell, Okla., called W5DFU on landline to announce that WHHK. reported "everything" in the southcentral U.S. had been coming in solid at Collierville, Tenn., since 0600! Merlin, W5HTZ, worked W4HHK, W5JTI, Houston, Dallas, and many other areas for new Oklahoma state records! W5DFU called for 2 hours but could hear or work nothing! During this time, W5HXK, Waronga, Okla., 145 miles west of Tulsa, worked W4HHK, about 480 miles! At W5DFU, nothing could be heard of W4-HHK, even with the b.f.o. on! We called each other for over an hour; no results. Yet, he was booming into W5 HTZ, just 65 miles south of W5DFU!

Such an experience makes one think manyill thoughts about equipment and 2 meters! (Editor's Note: We're hardened to it, after missing openings by a matter of 25 to 40 miles south of Chicago, last year and this year!)

On Sunday, June 25, W5ML, Oil City, La., and W5ERD, Texarkana, Texas, came throughin fine shape at about 2015. After much calling, contact was made with W5ML at 2228, with W5ML; then, W5ERD. W5ML was state #5 for DFU, and the best DX, although only 260 miles. An odd thing: during all this, W5HXK was in the same "boat" that W5DFU had been early in the day; he heard nothing! Signals between W5HXK and DFU, 145 miles, were very erratic, S-O to S-9, with the most rapid QSB ever observed during this period by W5DFU. Normally, W5HXK is a 100% day-afterday contact! Clyde runs 300 w. input to p.p. 4-65As, and will be one of the leading 2-meter DX men in Okla. W5LGW, Drumright, runs 300 watts into p.p. 826s; power really helps!

EXTRA! On the night of June 14, W5 DFU and W5CVW finally made it, after 2 years of trying! Bill whooped so loud on his come-back that he blew his modulator and had to finish on c.w.! Next morning, he was back on phone and worked W5HXK, W5LGW and W5HLD, so he has now swamped Oklahoma! Sure FB that the South is now horizontal!

## THE VHF NEWS

Bill McNatt, W9NFK 2433 ELDER LANE FRANKLIN PARK, ILL.

FIRST CLASS MAIL



WEWEN MYERS
2623 BELLEN RD.
COLUMBUS

POSTMASTER: If addressee has moved, notify sender on Form 3547, postage for which is guaranteed.