



founded 1970

THE BULLSHEET



Official News Bulletin of the
Texas DX Society
An ARRL Affiliated Club

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Officers and Contributors

President:	W5ASP	Joe Staples	Repeater Chairman:	K5TU	Kim Carr
V. President:	N5JJ	Dave Busick	Bullsheat Editor:	K2TNO	Bill Schrader
Secretary:	KE5IV	K. Grabenstein	Legal Chairman:	KE5FI	Chuck Dietz
Treasurer:	KC5M	Frank Wyatt	Field Day Chairman:	W5SJS	Bob Burns
Contest Chairman:	KN5H	Steve Nace	Outgoing QSL's:	N5AF	Sam Neal
DX Chairman:	WA9VLI	Steve Smothers	Bullsheat Publisher:	NR5M	G. DeMontrond

Columns by: KN5H, WA9VLI, W5ASP, N5JJ, KE5FI, K2TNO, N5DC, K5YCP, K5TU

ANNOUNCEMENTS

MEETING NOTICE- The Texas DX Society meets the second Friday of each month except when changed by the Board of Directors. The next regular meeting will be on Friday, March 14th, at the Bellaire Hospital Professional Building, 6550 Maple Ridge at 7:30 p.m.

ANNUAL DUES- Annual dues are \$25.00 for full members, \$12.50 for associate members. If you did not pay by March 1, 1986 you have been DROPPED from membership. Pay dues to NR5M.

NEW MEMBERSHIP APPLICATIONS- Sponsors proposing new members must submit the application and APPEAR AT THE APRIL BOARD MEETING.

BULLSHEET MAILING LIST- It is the club's desire to provide the Bullsheet free to all amateurs in the area with an interest in DXing and/or contesting. If you would like to receive our newsletter, simply send your name, call, and mailing address to the Texas DX Society, P.O. Box 540291, Houston, Texas 77254-0291. Visitors at the regular club meeting can request the monthly newsletter by providing their mailing address on the sign-in sheet. Articles or other newsworthy items from club members and other interested amateurs are hereby solicited by your editor.

WEEKLY DX & CONTEST NET- Just a reminder that each Tuesday night at 9:00 p.m. the Club sponsors a net on 147.96/.36. Participation by non-members as well as members is welcomed. The purpose of the net is to facilitate the exchange of DX, contest, and Club information within the amateur community. Your active support of this activity is encouraged.

THE PRESIDENT'S CORNER
de Joe Staples, W5ASP

I hope all of you found the February TDXS meeting to your liking. Jack, KA5DNP, and Dave, K5GN, did an excellent job in handling their respective parts of the program. As I mentioned last month, we intend that the program be the major part of our monthly meetings this year...and both guys really got it going in great style!

No, it wasn't an "inside job"...our Contest Chairman, Steve KN5"HOSE", won the door prize fair and square (or was it cube?). Ken, K5YCP handled this very nicely. We've decided to keep him on awhile, especially after the neat badges he's designed.

Did you notice how quickly Brent, NT5D, our Curator of Libations, seems to have picked up the skills needed for his job? Is it possible that hanging around with Eric and Kenny up at Chuck's on contest weekends had anything to do with it?

Talk about "double duty"...did you notice Bob, AK5B, who must be a peddler at heart, running the TDXS boutique with one hand and doing his bit as Membership Chairman with the other? Wonder if he has a soft shoe act as well?

This brings up an important point. The next Board meeting for consideration for prospective members is scheduled for April 24th. Yes, it seems quite a long time off, now...but if you have anyone you would like to propose, better get busy now. If you need help with the details, get with AK5B or any Board member.

By the time you read this, opening day for Armadillo County will have come and gone. Keep in mind there is lots more activity ahead, and we're counting on every TDXS member to be a part of it. This means not only the special events and mobile contests, but also spreading the word to other hams and helping in the sale of all of the goodies we've stocked.

The next meeting of the Board of Directors will be held prior to the club meeting on Friday, March 14th, starting at 6:30 P.M. If anyone has a topic that needs attention, get it to a member of the Board before the meeting. Our program for March will be handled by Dale, KG5U, who promises a spellbinding encounter with extracts from NASA's collection of visual wonders!

Though I'm sure the "Editor" will already have displayed the news in banner headlines...the repeater is actually up and running, thanks to K5TU, N5WW, and K2TNO. In the words of K5GN, reporting from the depths of his familiar rf "black hole"...IT WORKS GREAT! Thanks guys...

THE OTHER FELLOW'S SHACK (de K2TNO)

Here are some bits of gossip culled from other rags:

WSYI REPORT (Volume 8 - March 1, 1986).

The latest FCC figures on the ham population as of the end of 1985:

<u>AREA</u>	<u>EXTRA</u>	<u>ADV</u>	<u>GEN</u>	<u>TECH</u>	<u>NOV</u>	<u>TOTAL</u>
USA	38K	98K	117K	83K	78K	415K
Texas (#4)	2336	6240	7076	5090	3839	24,611
Calif. (#1)	4934	14K	15K	13K	10K	57K
Wyo. (#50)	85	185	303	143	230	946
Johnston I.	0	0	0	0	1	1

Last issued calls in Fifth District as of February 1:

Extra, WG5C; Advanced, KF5IO; Tec/General, N5IUL; Novice, KA5YWU.

QUOTE OF THE MONTH:

"There is probaby no nuttier and more aggressive DX group in the country!"

-W5YI report, February 15, 1986

ARRL BULLETINS

No. 11 - February 5:

ARRL Honorary Vice President Wayland M. Soupy Groves, W5NW, of Odessa, Texas, passed away February 5 at the age of 81. Soupy served as director of the West Gulf Division for 12 years and as first Vice President of ARRL and IARU for 20 years, retiring from the board in 1970. The key at W5NW is now silent, and the callsign, which was well known on the DX bands, will be missed.

No. 7 - January 23:

FCC has adopted a report and order in PR docket 85 104, allowing telephony operation at 7075 to 7100 KHz by amateurs (general class and above) south of 20 degrees North Latitude. (20° is just at the southern tip of Cuba; KP4, KP5, KV4 will get these privileges - W5DOZ). Effective date: February 28, 1986.

ARRL DIRECTORS MEETING MINUTES

- Field Day can use 24 MHz, but not 10 MHz band.
- 160 M band plan proposed:
CW, 1800-1840; SSB ABOVE 1840. DX QSO's only, 1830-1850.
- 1987 will be the 50th year of DXCC, and they plan a special certificate (not DXCC yet? Hold those cards for a year and get a special certif! - K2TNO).

SOUTHERN CALIFORNIA DX CLUB BULLETIN (Feb. 86)

CQ Mag is offering a special WAZ award in honor of the 50th anniversary of the WAZ program for QSO's in all 40 zones between January 1 and December 31, 1986.

HOW TO MAKE THE QSL MANAGER HAPPY

by N6CW

1. QSL Cards

Your QSL card should have the QSO information and your CALL SIGN on the same side. If they are not printed that way, write your call on the information side. It is very time consuming to turn cards over to find your callsign. Thirty five percent of cards received have this problem.

Have cheap cards available to send to managers of expeditions (they are usually thrown away). Save your nice cards for non expedition stations.

It is essential that you have the correct Date/Time/Band etc. on the card. Send separate cards for each band, and separate envelopes for each if you are in a hurry to get cards returned. Any card received that is not found in the log on the first try, or multiple cards which require extra time are put aside until all others are finished.

2. Envelopes

Always enclose the SASE. Use standard letter size envelopes, preferably the self sealing type. Legal size and 5 x 7 sizes are a problem to file.

3. How to put it all together

Fold your return envelope (SASE) in half, and insert in sending envelope with the fold at the bottom. This keeps your SASE from being cut in half with a letter opener. If you are enclosing a green stamp (dollar bill) with the card, place it in the fold of the SASE, not inside where it may not be found. Finally, place your QSL in the fold of the SASE. Following these instructions will result in a neat package with the card, green stamp or IRC's and SASE all coming out of the sending envelope in one motion.

4. Other hints

Don't write nasty notes to the manager about the expedition (he is fair game, however, if he was on it).

Do have patience. It takes time to have cards printed following an expedition, and this causes a huge backlog to answer. Following the above instructions will insure a quick response.

If your card is rejected as NOT IN LOG, wait several months until the manager is caught up and try again (sometimes we make mistakes).

TIME MAGAZINE:

The Royal Observatory in Greenwich will cease keeping Greenwich Mean Time in 1986, due to budgetary constraints. They will rely instead upon Coordinated Universal Time, a world-wide network of atomic clocks.

NATURE (London) Vol. 319, pp 401-402 (1986).

Five researchers in DL and VK report finding that the duckbill platypus has an electro-reception organ in its bill. The animals "can locate and avoid objects on the basis of d.c. fields. High-frequency sensitivity to a.c. could allow detection of muscle activity of animals..." It seems the platypuses (-pi? -pussies? whatever! - ed.) could locate 1.5 V alkaline batteries in a tank at distances up to 20 CM, and could distinguish live batteries from dead cells. (Just the thing for sorting your dry cells - drop 'em in a bathtub and add a platypus - ed.)

Your editor will award one six-pack of 807's to the first respondent from TDXS offering a circuit using a platypus as a detector or amplifier.

CLASSIFIED ADS:

IBM PCjr FOR SALE

148K, Color Monitor, Parallel Printer Adapter, Basic Cartridge, Serial Output Connector, all Manuals, Word Processor and Data Base Programs, among others. Lee Norman 643-2784.

Contest Corral

Some folks might say the 1985 "contest season" formally and finally closed with a tremendous thud over the MAR. 1 weekend. WHOA...What's that you say? No more Vodka wars between George and C. Logan? No more fun filled ecstatic (or static) weekends at the LZ0 funny farm? No more GN's and Fruit Loops? Well you couldn't get that lucky. The WPX SSB test is at the end of the month for all of you who will be suffering from withdrawal pains. This one provides a lot of fun if the conditions are decent.

Otherwise now is the time to start on those big antenna farm projects. The summer contest schedule is almost designed as a way to work on those antennas and then try them out for that particular weekend. If it doesn't work, tear it down and try again. You have plenty of time before the big ones start again in October.

Our club has always been one to get together as a team. If your antenna project, big or small, requires any assistance, speak up. There are a lot of guys around who might not climb 150 foot towers, but put a 807 in one hand and a rope in the other and that tower of yours will get a lot bigger a lot faster.

Many thanks to all those who made the Sprint contests another success last month. Some preliminary scores are shown along with those SSB scores of last Sept. Kudos to Chuck on a second place finish and George on a number 8 ranking to help the club capture a substantial second place showing in the team competition.

Congratulations are in order for Dave, K5GN (op of K5RC) on his no. 1 W/VE finish in the 1985 Radiosport competition.

Chuck and the rest of the K5LZ0 group did an excellent job with a no. 3 W/VE finish in the Multi-op category.

Speaking of excellent jobs, NM5L and crew along with N05Q and crew did a fine job of representing the TDXS during last year's CQ WPX SSB contest. Those two Multi-Multi operations are sure to be repeated this month. Give Chuck LZ0 or Joe ASP a call for details about operating.

Be sure to check out the new contest coming up in April. The North American QSO Party will debut on April 12 for CW and the 19th for SSB. Condensed rules are enclosed.

SOME RESULTS...

1985 RADIOSPORT COMPETITION

K5RC (K5GN)	644K	CW only	Number 1 W/VE
K5DX	166K	CW only	
KN5H	71K	CW only	
K5LZ0	1.153M	Multi-op	Number 3 W/VE
NT5D	58K	Multi-op	

1985 WPX SSB CONTEST

NM5L	4.568M	Number 2 W/VE	Number 10 worldwide
(+K5LZ0, NM5M, NT5D, KA5SSBS, K2TNO, AK5B, KE5IV, WB5RUS, N5JJ)			

N05Q	1.203M		
(+K5RVK, W5ASP, W5SJS)			

K5NA	301K		
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SEPT 1985 SSB SPRINT

K5LZO	309	46	NR 2 overall
NR5M	275	43	NR 8 overall
N5DU	276	39	
K5WA	244	39	
KE5FI	224	37	
W5ASP	225	34	
KB5FU	212	36	
KG5U	202	36	
K5DX	193	35	
KE5IV	205	31	
NT5D	167	31	
NZ5I	143	27	
KN5H	101	28	
KA5SBS	87	21	
K5GN	49	18	

The TDXS team number 1 finished second with team number 2 coming in seventh.

SOME RUMORS...

CQ WW 160 METER CONTEST

N5DU	825	91	Single-op
N5JJ	500	80	Single-op
K5GN	178	61	Single-op
KN5H	131	44	Single-op
K5LZO	370	72	Multi-op

FEB 1986 CW SPRINT

N5JJ	255	41	10455
K5LZO	254	40	10160
K5GN	259	39	10101
K2TNO	239	36	8604
N5DU	230	36	8280
K5TU	215	35	7525
KG5U	211	33	6963
K5WA	200	33	6600
KN5H	174	32	5568
K5MA	142	34	4828
NT5D	141	?	???
NR5M	115	?	???

FEB 1986 SSB SPRINT

K5LZO	272	36	9792
NR5M	234	39	9126
KG5U	239	31	7409
K5GN	210	31	6510
N5IVF	201	31	6231
K5DX	210	27	5670
NZ5I	121	30	3930
N5JJ	69	15	
W5ASP	59	15	
K5RVK	203	??	
NT5D	185	??	
K5DX	201	??	

ARRL DX CW CONTEST

KN5H	480	207	Single op A/B
K5WA	219	116	Single op A/B
N5JJ	300	?	Single op A/B
K5DX	400	???	Single op A/B
W5ASP	740	205	Multi-op 1 xmtr
K5LZO	1400	???	Multi-op 2 xmtr

ARRL DX SSC CONTEST

NR5M	1200	255	Single op A/B
N5DU	600	???	Single op A/B
K5DX	400	???	Single op A/B
K5GN	209	111	Single op A/B
K5LZO(N5M)	400	86	Single Band 15
KT5D	429	82	Single Band 20
NZ5I	200	44	Single Band 40
K5RVK	600	???	Multi-op

COMING ATTRACTIONS....

MAR. 15-16	Bermuda Contest
MAR. 15-16	Iowa QSO Party
MAR. 22-23	Tenn. QSO Party
MAR. 29-30	CQ WW WPX SSB CONTEST
APR. 05-06	Conn. QSO Party
APR. 12-13	NCJ NORTH AMERICAN CW QSO PARTY
APR. 14	ARRL VHF/UHF Spring Sprints
APR. 19-20	NCJ NORTH AMERICAN SSB QSO PARTY

DEADLINES. . .

ARRL DX CW logs must be postmarked by April 1

CQ WW 160 METER SSB Logs must be postmarked MAR. 31

ARRL DX SSB Logs must be postmarked by April 1

FINALLY . . .

After a small amount of deliberation, the decision was made to slip the first running of the TDXS sponsored Texas QSO Party until 1987. This is because the club is currently involved in making the Armadillo Run another big success.

73 KN5Hose

THE NORTH AMERICAN QSO PARTIES

1. OBJECT: To work with as many North American stations and multipliers as possible during the contest period.
2. ENTRY CLASSIFICATION: Single operator and Multi-Multi. No Multi-single category.
3. CONTEST PERIODS:

CW Contest:	April 12, 1986	1800Z through 0600Z
SSB Contest:	April 19, 1986	1800Z through 0600Z

Single ops may operate 10 of 12 hours with 30 minute minimum off times.

Multi-Multis may operate entire 12 hours.
4. BANDS: 160, 80, 40, 20, 15 and 10.
 You may work the same station on all 6 bands.
 CW freqs. 35 khz up from bottom
 SSB freqs. 1865, 3850, 7225, 14250, 21300 and 28600 khz.
5. EXCHANGE: Operator name and QTH (state, province or country).

6. SCORING: Multiply total valid QSO's by the sum of the number of multipliers worked on all bands.

Multipliers are States (including KL7 and KH6),
VE call areas (VE1 through VE8, V01, V02 and VY1)
and North American Countries.

7. REPORTING: You must submit the following to be considered as an official entry:

- 1) A summary sheet showing QSO's and multipliers per band, total QSO's, total multipliers, total score, name, callsign and address of operator, plus station call and location.

Postmark logs within 30 days and mail to:

Dave Pruett K8CC
2727 N. Harris Rd.
Ypsilanti MI 48198

- 2) Complete log of all QSO's with dupes marked and multipliers sequentially numbered.
- 3) Dupe sheet for each band

Please check the NCJ for complete rules for this contest.

DX REPORT DE WA9VLI

- Tromelin Island - FR5AI/T has been reported on 15 meter SSB and 20 meter CW. Apparently there has been considerable storm damage on the Island and his operating time is extremely limited.
- Equatorial Guinea - 3C1MB, 40 Meter SSB daily around 2200-0100 GMT. QSL to EA7KF.
- South Sandwich Islands - VP8BFC may be active sometime within the next few weeks. VP8WTW has a permit to operate within this time frame using the call VP8BFC. Keep your fingers crossed!
- Tonga - - A35EA and A35WZ, both were very active during the ARRL DX phone contest March 1-2. If you need a card the managers are: A35EA cards to ZL1AMO, and A35WZ cards to NE7W.
- Comoros Island - D68WS was worked on 21.248 SSB during the ARRL DX contest. This is a new call not previously heard. Does anyone have an address or QSL route?
- Gambia - C58GD, also worked during the contest, on 15 meter SSB. Most Gambian prefixes are C53, and a few now are C56. This is a new issue not reported before. If anyone has QSL routing, let me know.

- Angola - D2BCW, reported near 14187 from 2100 GMT. QSL to "Manuel" Box 66, Luanda, Angola.
- Willis Island - Look for VK9ZG on 3795 about 0945 UTC, and 14195 at 1330 UTC. QSL to VK6YL.
- Andorra - C30LCK should be active March 12-19
- Guinea Bissau - J52UAC & J52UAH. W6CNA reports that he will attempt to bring these stations up each Saturday at 1800 UTC on 14236.
- Pacific Islands - ZLIAMO plans the following itinerary after departing Tonga:
 - March 12-15 Western Samoa - 5W1CW
 - March 17-April 20 Tokelau Is. - ZK3RW
 - April 22-26 Western Samoa - Again as 5W1CW
 - April 27-31 South Cook Islands - ZK1CQ

All cards go to ZLIAMO, callbook address. ZL1BQD also hopes to join Ron in Tokelau Is. signing ZK3RR. ZK3RR cards go to ZL1BQD.
- United Nations - If you worked 4U1UN during the ARRL contest, and need a card, QSL to W2MZV.

A hearty congratulations to Mike, KC5CP who now has the last cards to complete 5BDXCC! (We won't tell your XYL that all the postage would have paid for a two week all expense paid vacation in Tahiti! Oh well, we have our priorities!).

PROPAGATION FORECAST BY N4XX:

MARCH 11	Low Normal	MARCH 14	High/Above Normal
MARCH 12	High Normal	MARCH 15-16	High Normal
MARCH 13	High/Low Normal	MARCH 17	Low Normal

PROPAGATION FORECAST - KE5FI

February saw some really good conditions. The solar flux peaked at 103 on the 5th and conditions were tremendous on the 3rd through the 6th. The 7th, 8th, and 9th however, were incredibly bad. The magnetic "A" index rose to 208 on the 8th, the highest I have observed since I started collecting data in June of 1985. This rise was in response to flares on February 3rd and 4th. There should be average conditions through the 9th of March. Watch for 10 meter openings on the 5th through 10th. Magnetic activity may cause weak and noisy 80 and 40 meter signals between the 11th and 13th. March 14 through 18 should be average on 40 and 80 with little chance of 10 or 15 meter openings. The 19th and 20th should be good days on 40 and 80, average on 20. Expect generally poor conditions on the 21st through the 23rd and average conditions the rest of the month.

TEXAS GOVERNOR WHITE PAYS SURPRISE
VISIT TO ARMADILLO COUNTY.

Washington-on-the Brazos, March 2, 1986 (TDXS).

The TDXS Armadillo County Activation crew put K5DX/A on 80-20M last weekend from the State Park ground at Washington-on-the-Brazos. (For you out-of-towners, that's about 75 miles northwest of Houston). We set up your typical little portable operation: two RV's, TS930/Alpha combos feeding 4 el 20M yagis at 35

ft. and assorted dipoles. We arrived at the site on Saturday about noon, and found a bunch of the guys from the Brenham RC had been jealously guarding a space about 100 feet square for us. We were QRV by nightfall, and the troops gathered to await creation of the county at 0600Z. We played warm up on the 75M County Hunters Net, and at 0600 worked KB5FU/M on 75 SSB and 40 CW for QSO's number 1 both modes. Then it was off the the races, except that not too many stations were there! The overnight team (K2TNO, K5LZO, N5DC, KD5SP and KE5IV) kept at it until 0730 Z, then QRT until the morning. Only a few Euro's and not any real pile ups (at least on CW). The rigs did FB; provided that we kept SSB up about 14330 and CW around 14025, we could run both modes on 20.

Sunday was the official Texas Independence Day, and there were big crowds of people all day. One bunch of frontier-soldier re-enactment types swaggered around in costumes carrying cap-and-ball rifles which they fired off at random (Hence our signal report on 14336: "rifle shots" was apt). This parade of characters caused one TDXSer to remark that the day was truly historic because we were for once in the company of people crazier than ourselves!

Another cadre of clubbies blew into town on Sunday, including the Judge (K5RC) and the I-wanna-be-a-judge-so-bad-I-can-taste-it (KE5FI) among others. 'RC had made an Armadillo County Court House sign "where the Old West meets Ohm's Law" which totally confused the crowd.

The rates were moderate, and the 2-lane road out of town convinced us to QRT around 1900Z. Ever try taking down a 204BA + portable crank up tower in a field while thousands of people watched? I'd love to know their thoughts! We were gone by 3:30 p.m. local time. Total QSO's was about 350, so hardly a big day at the rigs but fun for all.

Jim, N5DC ramrodded the effort which included K2TNO, KB5FU, K5LZO, KE5IV, KD5SP, KE5FI, K5RC, WA5NQG, N5RP, W5ASP, W5SJS, AK5B, KE5TF among others. Incidentally, AK5B did land-office business selling artifacts from Armadillo County.

Special kudo's to superintendant Skaggs and his people from the Park: they were unbelievably nice and helpful. It seems Skaggs' mom, dad, and brother are all hams.

Next up will be San Jacinto Day, April 20-21. Probably that will be a simpler effort: one RV, a KW to an all-band Butternut spearheaded by KB5FU. After that you're on your own - any QTH on the Texas Independence Trail is now Armadillo County.

PUT YER HANDS ON THE HOOD OF THE CAR, SPREAD YOUR LEGS AND KEEP CALLING CQ!

(de Ken Martin, K5YCP)*

The TDXS-sponsored Armadillo County Deputy Sheriff's badges are lots of fun, but due to their authentic look THEY COULD LAND YOU IN BIG TROUBLE IF YOU EVER TRY TO PASS YOURSELF OFF AS A PEACE OFFICER! Keep in mind that law enforcement officers take their jobs very seriously, and won't find anything funny about the situation if you try to beat a ticket or anything else. Neither will the judge. (The gang on 36/96 will, however, laugh a lot --- if you live to tell about it - ed.)

* Titles by K2TNO, film at eleven.

NO WONDER YOU UPGRADED, WITH A CALL LIKE THAT!
(de-KE5IV)

Here's a quiz to see how well you remember the good old days. On the left is a list of TDXS members' previous calls. On the right are their present calls. How many can you match? Answers in next month's 'sheet.

<u>OLD CALL</u>	<u>NEW CALL</u>	<u>OLD NUMBER</u>
1. WA3OVC	A. K2TNO	
2. K5RLW	B. K5DX	
3. WB5QDW	C. N5DU	
4. WA5ZNY	D. W5UN	
5. W5NMA	E. N5WW	
6. WA5NGH	F. N5JJ	
7. WA5LES	G. KN5H	
8. WB5IFY	H. K5RC	
9. W5WZQ	I. AA5Y	
10. K2TNO	J. K5ZD	

MODIFYING THE TELEX PRO COMM 250 FOR STEREO EARPHONES FUNCTION
(de Bill Schrader, K2TNO)

Frequently it is convenient to keep track of two different receivers at the same time by using stereo earphones and an audio switching box of some sort. The popular Pro Comm 250 boom mic/headset can be modified for stereo headphone use as described below. I have found it convenient to remount the battery/mic amp box in a small metal minibox while doing the changes. I left the small PC board intact, but substituted a type "AA" battery which is much easier to obtain than the type "N" original.

The suprising finding was that the multi-conductor cable between the headset and the battery box contains two unused wires, so the original cable can be used. There is a spare yellow wire and a spare green wire. Only one wire is required.

Access to the earphone box containing the boom mic assembly:

1. Remove the cloth earcover, and gently pry off the soft rubber pad. (The foam oval around the speaker holes can be left in place.)
2. Remove the two Phillips-head screws holding the plastic face plate. (Caution! The hardware seems to be JA sizes, so don't misplace any.) Lift up the face plate from the cord end (away from the head strap). Lift out the foam rubber pad inside to expose the wiring.

3. Lift out the end of the gray multi-conductor cable and inspect the end where the insulation has been cut off. You should see the ends of both the yellow and green wires.
4. Carefully slice lengthwise down the gray jacket of the cable until you can pry the green wire out about $\frac{1}{2}$ inch. Use a sharp razor blade or knife and be careful not to damage any of the other wires. There is some fine nylon fiber insulation inside the jacket which must be pulled out before the green wire will come free. Pull it out with pliers and snip off. The green wire is fairly stiff; fold it out of the jacket about $\frac{3}{8}$ ", enough to strip the insulation away about $\frac{1}{8}$ ". Then tin the exposed end. (Note: if you damage the green wire, the yellow one is still available).
5. Solder a short insulated wire to the green wire, and slip a piece of insulating spaghetti over the joint.
6. Locate the terminal on the earphone that has a red wire from the cable and white shielded wire soldered to it. The white shielded lead is the ungrounded side of the other earphone. Unsolder this lead, leaving the red wire connected. Hint: I find it easier to remove both the white lead and its shield, strip back the black cable covering a bit and then strip the white lead. There is some slack in this cable. If you unsolder all the leads from the earphone, observe phasing when re-connecting. With the phone terminals facing up, the left-hand terminal is ground (black cable lead plus shield of the white wire). The right-hand terminal is the ungrounded side (red cable lead). The white lead consists of special flexible wire wrapped around threads. It is somewhat difficult to tin neatly. Slip a piece of spaghetti over the new lead coming from the green cable wire, and solder this wire to the white lead.
7. This completes alterations inside the headset. For reference, the boom mic wires are as follows: red, mic audio; yellow, mic bias; black, ground. Reposition the gray cable end, re-insert the foam padding and re-attach the earphone face plate.

RE-MOUNTING THE MIC AMP/BATTERY BOX CONTENTS.

I made numerous attempts to do the modification and retain the small black plastic box containing the battery. It is really tough to fish out the wires, so I gave up and used a small aluminum box about $2 \frac{1}{4} \times 3 \frac{1}{8} \times 1 \frac{1}{8}$ inches.

1. Remove the two screws from the front of the black box, and remove the back and the battery. Then remove the single screw holding the PC board in place. Snip the red wire and black wire connected to the battery clip. Then lift out the PC board with both cables attached by pulling up gently on the black rubber feedthrough grommets. Slide the two grommets back on the cable about $\frac{3}{4}$ ".
2. Modify the PC board as follows. A desoldering tool is very helpful for this purpose.

On the PC board, unsolder the red and black leads from the headphone cable. Remove the SPDT slide switch (battery on/off) from the board. Snip the green and yellow leads going to the phone plug. This cable has only two wires, and will need to be replaced by a 3-wire cable (preferably a pair of wires in a shield). Remove the short black wire which used to go to the battery negative. Also remove the dark red wire (formerly battery positive) by snipping the wire flush with the PC board. At this step, the gray cable should still be wired to the PC board through three wires: shield, blue mic plus, and white. The mic output cable to the rig should also be still connected.

3. Strip back the gray headphone cable about 3/4" and expose the spare green wire as you did inside the earphone. This time, cut off the gray plastic all the way around the trim away the white fibers.
4. Prepare the small minibox to accept the grommets on the two cables by notching opposite ends of the box. Make the slots only just big enough to seat the grommets, so the other portion of the box will squeeze the grommets and provide strain relief.
5. Mount the PC board using a small standoff bushing and 3-48 machine screw. Be sure the bushing is of small diameter so it doesn't contact any of the foils on the underside of the PC board. I fashioned a standoff from a short piece of brass hobby tubing.
6. Mount a SPST miniature toggle switch.
7. Mount a size "AA" battery holder.
8. Mount a 3-lug terminal strip near the rig cable hole for the earphone wiring.

WIRING THE MIC/BATTERY BOX:

1. Refer to the pictorial and schematic on pages 6 & 7 of the Pro Comm 250 manual. Wire the battery negative lead to the hole on the PC board where the black battery wire had been before. Tack-solder the battery positive lead to the exposed end wire of R2 (470 ohm) where it connects to the foil leading to the white cable wire. Connect the two switch wires to the holes on the PC board where the slide switch had been; only the two holes outermost on the thin portion of the board are used. The third switch hole is not wired to anything. Use the terminal strip to ground the black wire from the headset cable. Connect the red headset cable lead to one ungrounded lug of the strip. Connect a wire from the green headset cable to the remaining lug on the strip.
2. Now wire in a short length of shielded two wire cable for the rig earphone output. I used a red/black pair plus shield wire. Connect the red wire to the terminal lug having the red wire. This red lead will be the earphone to which the boom mic is attached. Connect the black audio cable lead to the lug having the jumper to the green headset cable wire. This is the other earphone lead. Finally, ground the shield lead to the terminal strip ground lug.

3. Be sure the PC board foil does not touch the case. Install a type "AA" battery and screw on the case. Check to see that the case is tight enough to compress the grommets on the cables to hold them tightly. Add the bottom cover of the box.

FINAL CABLING

1. Connect a stereo 1/4" phone plug to the rig end of the new audio cable. Ground the shield, and wire the two earphone leads to the tip and ring according to your preference in placing the auxiliary rig at the operating position. If you normally have the boom mic on the left side of your face, wire the red lead to the left-hand rig's audio source.
2. A size "AA" battery was chosen because they are available in virtually every retail establishment on earth.
3. A TS930, for example, has a stereo phone jack - so the modified Pro Comms will work just fine when plugged in.

SQUELCH TALES (de N5JJ)

In and about the club it is rumored that...W5JQ has taken up flying recently. Jay gave N5DU a ride around town to photograph some of the big stations. Except for throwing up in the cockpit Bob had a lot of fun...K5KG is about to QSY from Saudi to Buenos Aires...KE5FI is running for judge of a criminal court...Who is the Able Able Dumbo Station heard on 75?...K5GA is still living in Baytown and working on South Post Oak. Bill has already warned us that he is going back to W5WMU for SS CW. Now if the Alpha doesn't catch fire this year...K5IY is now working for the same company as NM5L. Bob is the warehouse manager...K5LZO is soon to give a class on Hygain 20 vs. Cushcraft 15 YAGI identification...K5RC has been seeing too many Rocky films. He is now a member of the Pearland gym...Well, the KLM 4 element 40 is up at the W5SJS' lumber yard at 130 feet. N5EA reports it "Plays like a hose." However, the new Hygain rotor purchased locally (Madison's name won't be mentioned here) came apart. Ball bearings went everywhere...K5TU will soon be giving a program on the new repeater...The last meeting featured an excellent program by KA5DNP on the Oscar Satellite Program. Of course, the Animals gathered around the beer in the back kept the meeting sufficiently disturbed...K5VWW and N5DU both took advantage of the \$198 round trip fare to London. Bob has some interesting tales of operating in Europe. One of the more interesting involves asking N5EA during the ARRL CW test who else from the club was on. Tom's response was "Dupe, 73." ... In case you live outside of repeater range or off the planet, you haven't heard that NR5M has a new house...AK5B and KE5TF somehow convinced KE5IV to go up in a 100 foot bucket to fix his 40M beam. They ought to be car salespersons...Congrats to WD5CBA, our newest extra class...K5LZO is whipping his station back into shape after the lightning strike. New feedlines here and rotors there. Still lacking is the last director on his 6 element 20. Any volunteers? Chuck has decided the next major project is to raise his 40 to 140 feet. "When the lumber yard can beat you out, it's time to go higher."...The March definition of "intestinal fortitude" is KZ5M being able to call his insurance agent and explain why he is able to go to the West Pacific on vacation one month after his business burned to the ground. I'm sure KZ5 Molotov will have some interesting stories at the next meeting...K5WA's New Year's resolution was to be more active this year. Rich was on for CW Sprint but with his 500Hz shift everytime he keyed you had to keep your VBT wide and stay on your toes to get him...KF4VS is recovering from a recent mauling. Seems Pete walked into a Burger King in his interview suit. Simply a case of mistaken identity...

Thats the dirt for now
73 Dave

ARMADILLO RUN NEWS:
(by a correspondent)

The first organizational conflagration to divide up the State of Texas among the mobiles took place last week. Most of the area has been assigned to primary stations except for the Panhandle and the Trans-Pecos area. Any takers? Call Steve, KN5H to get on the list.

You can go out either phone (May 2-3) or CW (July 26-27) or both.

P.S.: The TDXS Petrodollar Control Board has been active. This ultra-secret group has succeeded in forcing OPEC and the rest to lower their prices for crude oil. The plan is to force gasoline prices down for the CW Armadillo Run, so that the mobiles will have a cheaper weekend. A spokesman for the Control Board said the group was pleased that they had accomplished their task while only having to topple one foreign government (DU) and flare up one border war (EE/YI). He categorically denied rumors that any undue pressure was applied to JY1 or HZ1HZ to help with this operation. "Recent visits by KSTU to the North Sea and K5KG's imminent departure from HZ are purely a coincidence," said the spokesman.

Be sure to attend the March TDXS meeting, where the world price for petroleum will be fixed for the 'Run.

WHIMSY

THE WIZARD OF ID

by Parker and Hart



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