

# **B-VARC BULLETIN**

The Monthly Publication of the BRAZOS VALLEY AMATEUR RADIO CLUB Serving Fort Bend and Harris Counties

Editor in Chief:

Vincent Orlando, WA5ETS

774-7651 (0800-2100 hrs)

About the Brazos Valley Amateur Radio Club . . .

Organized in 1977, the club has been growing steadily. It is a gathering place for HAM radio operators in Fort Bend and Southwest Harris Counties, and surrounding communities. It is a general-purpose type of HAM club offering a variety of activities open to all interested persons. Membership is open, not only to licensed HAM operators, but also to anyone interested in the hobby. In addition to regularly-scheduled membership meetings, the club each year conducts classes leading to amateur radio licenses, and each month sponsors a volunteer-examiner team that offers examinations in all levels of HAM licenses.

To obtain information about the club and its various activities, please call the Houston Amateur Radio Helpline (713) 488-4HAM (488-4426). For information about joining the club, contact Randy Pollard AK5G at (713) Volume: 16

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## ADDRESS CORRECTION REQUESTED

From: Brazos Valley Amateur Radio Club, Inc.

P. O. Box 1630

Missouri City, Texas 77459



# YOUR B-VARC BULLETIN SUBSCRIPTION ENDS WITH THIS ISSUE UNLESS YOU RENEW YOUR MEMBERSHIP!

## B-VARC MEETING SCHEDULE

Thurs, Jan. 14 Annual Banquet and

Awards Ceremony at the

Marriott — West Loop

6:30 pm Cocktails

7:30 pm Dinner

8:30 pm Presentation of Awards

Thurs, Feb. 4 **Board Meeting** 

7:30 pm Sugar Land Community Center

Larry Levy WD5DRB 8901 Braesmont #250 Houston, TX 77096

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R-VARC Calendar of Events

SATURDAY	2 7:30am B-VARC Breakfast 9:00am Hou Emergency Mgmt Net 146.84 (9:30 on 3.905) 8:30pm C.W. 147.32	7:30am B-VARC Breakfast 9:00am Hou Emergency Mgmt Net 146.84 (9:30 on 3.905) 9:00am Training Session for Marathon 8:30pm C.W. 147.32	7:30am B-VARC Breakfast 8:00am Sidewalk Sale 9:00am Hou Emergency Mgmt Net 146.84 (9:30 on 3.905) 8:30pm C.W. 147.32	23 7:30am B-VARC Breakfast 9:00am Hou Emergency Mgmt Net 146.84 (9:30	8:30pm C.W. 147.32  30 7:30am B-VARC Breakfast 9:00am Hou Emergency Mgmt Net 146.84 (9:30 on 3.905) 8:30pm C.W. 147.32	
Events FRIDAY		6:30pm RACES AMTOR Net 7.080 7:30pm Board Meeting: Sugar Land Community Center	6:30pm ANNUAL AWARDS BANQUET	27 22	28	
O	WEDNESDAY	6 8:00pm B-VARC Rag-Chew 3.960 (Busy? +3 Khz)	13 8:00pm B-VARC Rag-Chew 3.960 (Busy? +3 Khz)	20 8:00pm E-VARC Rag-Chew 3.960 (Pagev) +3 Khz)	27 8:00pm B-VARC Rag-Chew 3.960 (Busy? +3 Khz)	
<b>B-VARC</b>	TUESDAY	5 8:00pm 10 X Shot 28.488 10:00pm AMSAT 147.10	7:00pm Amateur Exams (Strake Jesuit College Prep) 8:00pm 10 X Shot 28.488 10:00pm AMSAT 147.10		10:00pm AMSA1 147.10 26 8:00pm 10 X Shot 28.488 10:00pm AMSAT	147.10
	MONDAY		9:00pm B 7 22.7 47 & linked repeaters 11 7:30pm 34-94 Swap Net 146.94 8:00pm ARES 147.30 8:00pm Ft. Bend County	RACES Net 145.49 9:00pm B-VARC Net 145. 47 & linked repeaters 18 7:30pm 34-94 Swap Net 146.94	8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.49 9:00pm B-VARC Net 145. 47 & linked repeaters 47 & linked repeaters 7:30pm 34-94 Swap Net 146.94 8:00pm ARES 147.30	8:00pm Ft. Bend County RACES Net 145.49 9:00pm B-VARC Net 145. 47 & linked repeaters
	SUNDAY	30pm South Texas ARES Net 3.873 8	9 % S	Net 3.873 South Texas	ARES Net 3.873 24 6:30am Houston Marathon	1:30pm Texas State RACES Net 7.248 7:30pm South Texas ARES Net 3.873 31 7:30pm South Texas ARES Net 3.873

### The World of 1Ø-1Ø International by Al Mattis, N5AFV

The Houston S.H.O.T. Chapter has received unofficial word that they have won the 1Ø-1Ø International Summer Phone QSO Party held August 1-2, 1992. Details are not yet known, and again, the word received was unofficial. Look for details in a future column when official results are released.

December is always an active month for 1Ø-1Ø paper chasers, with many chapters holding "specials" to promote their chapters. Chapters who held December specials included High Rollers in Nevada, Brooklyn Bridge in New York, Eagle Watch in Alabama, King Arthur's Court in Massachusetts and 59/62 in France. The Brooklyn Bridge and King Arthur's Court specials will continue into January; GB Ten in Great Britain, and Cornerstone in Maryland are also holding January specials. Look for paper chasers on 28.345 MHz in the novice band, and on 28.825 MHz in the general class portion of the band.

The 1993 1Ø-1Ø International Convention will be held in Wichita, Kansas at the Ramada Hotel on September 25-26, 1993, in conjunction with the ARRL Kansas State Convention. Details will be forth-coming in future issues of the 1Ø-1Ø International News.

At this year's Houston Ham Convention, I bought a Realistic HTX-100 10-meter mobile unit. I have been having a great deal of fun getting on the air at lunch time from downtown Houston. I operate from the top level of my parking garage, which is up eleven stories. I usually work at least three or four states every day, and sometimes a little DX. Mostly, I work paper chasers on the frequencies listed earlier. My antenna is an old CB % wave base-loaded magnetic mount antenna that I shortened to reduce the SWR. When 10 meters is open, it doesn't take much of an antenna to get out, and propagation lately has been fairly good.

Remember, the Houston S.H.O.T. net meets every Tuesday evening at 8 pm local time on 28.488 MHz. All amateurs are welcome to check in, even if they do not have a 10-10 number. If you are not a member of 10-10 International and wish to join the organization, please check in to the net. There are a lot of exciting activities in 10-10, and many friendly people can be found on the 10-meter band.

73 de N5AFV

#### **B-VARC RAG CHEW CHECK-INS**

3.960 MHz 8:00 pm Wednesdays Compiled by Melvin Thatcher, KB5ION

November 25, 1992

KB5LFU NCS, KB5USL, W5GHK, KI5SC, KG5KV

December 2, 1992

KE5SR NCS, K5DIY, KI5SC, KB5ION, KB5USL, W5GLD, KB5LFU, W5EFB, N5CPA, KG5KV, N5AFV, W5GHK, W5IHY, WN5A, WA9YNJ, WA5OEN, N5OAC, WD5DRB

December 9, 1992

KB5ION NCS, KI5SC, KG5KV, N5UNE, N5AFV, W5EFB, W5IHY, W5GHK, WB5SRN

December 16, 1992

KB5ION NCS, KI5SC, W5GHK, KG5KV, KB5USL, N5AFV, W5IHY, N5OAC, WA9YNJ, N5CPA, KB5QYF, KB5DNT

December 23, 1992

KB5ION NCS, W5IHY, KB5USL, N5CPA, KI5SC, N5OAC, W5GHK, N5JQH, N5WMB, N5XWB, KG5KV, W5ING, ND5F, W5KRN

December 30, 1992

KB5ION NCS, WN5A, KB5USL, W5EFB, KE5SR, W5IHY, KI5SC, W5GHK, N5AFV, WA5OEN, KI5CE, N5CPA, W5RNK, N5OAC, N5WMB, WD5DRB

## B-VARC Board of Directors Meeting Minutes, December 3, 1992

by Vincent Orlando, WA5ETS

A quorum of the B-VARC Board of Directors met at the Missouri City Fire Station on December 3rd. This was the last meeting of the year and also the last to be held at the fire station. Arrangements have been made to hold all board meetings as well as the monthly general membership meetings for the 1993 calendar year at the Sugar Land Community Center.

No minutes of the November Board of Directors meeting were available.

The club treasurer reported a balance of \$3,042.39 at the end of October and \$3,681.63 at the end of November, 1992.

Among other routine correspondence that was handled, the president announced that the annual club report was mailed to the ARRL.

EXCERPT OF A LETTER TO THE CLUB FROM IRV SMITH, KB5EXM

A letter from one of the members was read commending B-VARC members for outstanding service during the recent tornado relief efforts. It was decided to print excerpts of the letter in the next *Bulletin*.

Al Zermeno will be the main speaker at the December general membership meeting. His topic will be the status of nuclear fusion experiments.

A record of 1,751 runners was set at the recent 25K run held downtown in the cold. Numerous B-VARC members worked this race, and there were no incidents. A letter was sent to Bob White thanking him for the use of the City of Houston Office of Emergency Management repeater for handling talkins.

All nominations for B-VARC awards are due by the December 10th general membership meeting. These awards will be presented at the annual banquet in January. This year's banquet will again be \$17.00; it will be a coat and tie affair at the Marriott on the West Loop near the Galleria. Cocktails will begin at 6:30; dinner at 7:30 and awards at 8:30.

A minor revision of the B-VARC Membership Application Form was discussed and approved.

The process of the elections went well last month at the November meeting. Congratulations were extended to all new officers and board members.

The 30K warmup run will be on December 12th and will be chaired by Steve Dunkelberger, N5JBL. Everything seems to be well under control.

The MS-150 bicycle ride will be held April 17-18, 1993. Members of B-VARC attended the first planning meeting for this ride. Discussion as to whether this event should be sanctioned by B-VARC as one of its official activities was tabled until a future meeting when the new officers can discuss it.

The Tenneco Marathon will be in January, chaired by Carl Hacker, KB5LDY. A planning session was held already, and a meeting of those Hams who will be working this event will be organized sometime in early January (possibly January 9th) at Strake Jesuit.

The HF Rag Chew Net logged an all-time low of five check-in's on the Wednesday before Thanksgiving. The weekly average, however, has been consistently about sixteen to eighteen people.

The club has set another new record! There are 250 names on the B-VARC membership roster as of December 1, 1992.

All non-renewed memberships in the club expire on January 1, 1993.

November 24, 1992

Dear Randy:

Please consider this letter as ... a suggestion for special acknowledgment for some of our members.

As you probably know from monitoring 145.47 Mhz, a number of B-VARC members gave extraordinarily of themselves in tornado relief efforts...

Perhaps especially deserving are Mark (N5UOA) and Paul (N5JQH). Mark went out on his own and established the need for help for those along Fry Road, and then organized the setting up of a checkpoint and possible shelter location. Paul served as land-line communicator for much of this first day's work. Mark then lined up many items for the Channelview effort. ... Paul solicited volunteers and goods and then went out one day in his truck to help deliver items to the needy.

Not to be overlooked are AL (KK5W), Jack (KB5TMY) and Larry (N5YYP), all of whom I think spent two days at Channelview.

Sincerely,

Irv Smith (KB5EXM)

Outgoing President Randy Pollard expressed his thanks to his slate of officers for their hard work and support, and he stated that he enjoyed serving the club as president this year. He in turn was congratulated and thanked for a job well done by those present.

#### February Bulletin Deadline

Articles and other material destined to be printed in the February issue of the B-VARC *Bulletin* should be submitted by no later than January 28th. Please send the material to Vincent Orlando, WA5ETS; 8900 Bellaire Boulevard; Houston, TX 77036-4699 or FAX (713) 774-6427.

#### Results of the December Amateur Exams by Harold Parker, ND5F

B-VARC again sponsored and administered the ARRL's Amateur Radio Examinations that were held on Tuesday evening, December 8, 1992, at Strake Jesuit College Preparatory in Houston.

The V.E. Team George Jolly, ND5E Harold Parker, ND5F Joe Tarrant, K5DIY

#### **Assistants**

Carl Albrecht, AA5JW Cass Germany, KG5IT Michael Lay, N5PTN Don Schexnailder, AA5IV

A total of thirty-six exams were administered during the evening to twenty-five applicants. Six unlicensed candidates received their new licenses: one Technician w/HF and five "no-code" Technicians with a total of sixteen elements passed. The overall "pass rate" for the evening was forty-four percent.

Congratulations to all the following who upgraded and/or passed exams:

Jeffrey Beniretto, N5TGR — Technician
William Brown — Technician
Stephen Buckner — Technician
William Casimir — Technician
Richard Culver, KB5USL — Element 4B
Margaret Frost — Element 2
Robert Kline, KG5PR — Element 4B
Edwin Pate, N5RZQ — Advanced
Richard Plum — Technician
Byron Ratterree, KB5NQZ — General
Grover Stevens — Technician
David Waddell — Technician
William Wilkerson, W5DPL — Element 4B

Many thanks to all the Team Members and Assistants who volunteer their valuable time and effort each month.

All of us at B-VARC again thank Vincent, WA5ETS, and everyone at Strake Jesuit College Preparatory for making these excellent classroom facilities available to us for our exams each month.

73's ... ND5F

### 1992 Amateur Exam Program Summary

by Harold Parker, ND5F

B-VARC initiated the ARRL's Volunteer Testing Program on February 23, 1985, in the Training Room of the Missouri City Police Department, a short while after the FCC discontinued their amateur testing program. We continue to be the most active group of Volunteer Examiners in the South Texas Area. B-VARC's Exam Teams administered exams sessions every month during the year at Strake Jesuit College Preparatory, at both B-VARC Novice classes, and again at the Houston Ham Convention for the 5th consecutive year.

The FCC and the ARRL allow all their exam groups to recover the actual expenses associated with administering the V. E. Program by retaining up to \$4.00 of each test fee collected at each examination. B-VARC's Exam Teams have never had any significant expenses so we will continue to send one hundred percent of all fees collected directly to the ARRL every month. No B-VARC Examiner has ever retained any of the testing fees that have been collected.

B-VARC Teams examined only fifty candidates at the 1992 Houston Ham Convention, a slight reduction from last year's crowd. However, our regular Tuesday night sessions continue to be very popular, averaging almost nineteen candidates per session. Twenty-five candidates attended the January, May and December sessions.

A total of four hundred eighty-nine exams were administered during the year to two hundred seventy-six applicants. New licenses were issued to ninety-nine candidates: three Novice, nine Technicians with HF, and one General, but the "codeless" Technician License was again the most popular with eighty-six being issued! Forty-six others upgraded by passing a total of three hundred and one elements: eighteen Technician with HF, ten General, sixteen Advanced and two Extra's. The overall "pass rate" on all the exams taken during the year was nearly sixty-two percent.

Many thanks to all the V.E. Team Members and Assistants who volunteered their valuable time and effort each month during 1992. You all have made a significant contribution to B-VARC's great success this past year. We will be looking forward to another great year during 1993!

#### GAAC 30K Race Communications by Al Mattis, N5AFV

A total of thirty amateur radio operators provided communications for the GAAC First Colony 30K on December 12, 1992. It was a cool morning, and the race had a 7:15 am start. Approximately 1500 runners participated in the event. The cool temperatures minimized problems that had developed at two water stations, and our amateur radio communications helped solve these problems for race officials.

The race, which had a course in the Austin Parkway and Sweetwater Boulevard area of First Colony, has long been known for its dangerous conditions due to traffic and runners being on the same streets at the same time. The earlier start was an attempt to reduce the exposure of runners to heavy traffic conditions later in the morning. No serious medical problems were reported on the communications net. After the race, however, persons in the running community claimed that four runners had collided with a van on the course between the 7th and 8th mile markers. A woman runner allegedly injured her knee in the incident and dropped out of the race, while the other three runners were not hurt and continued in the race. As of my last conversation with the race director, he had not been contacted by anyone involved in the incident.

B-VARC extends a special thank you to Fort Bend County Emergency Management for use of the 145.49 MHz repeater for talk-in. On behalf of the race officials, thanks also to everyone who helped provide race communications.

#### "Natural Radio" on the Long Wave Band by Al Mattis, N5AFV

Much of the current long wave interest centers on the lowest portion of that band. Besides the sferics discussed last month, lightning also causes various pops, tweeks, and even whistlers, most of which occur below 10 KHz. With my current interest in long wave, it was just a matter of time until I turned my attention to these so-called "natural radio" sounds.

Conversion Research in Descanso, California sells a Model WR-3 VLF (0.1-10 KHz) "Natural Radio" receiver for \$58. This appeared to be a good place to start, so I ordered a WR-3, and also a "30 minute demo tape of VLF emissions" for an additional \$8. The demo tape is a nice way to learn about the various natural radio sounds.

Lightning causes sferics, which are a form of QRN most radio amateurs love to hate. In addition to the sferics, there are various pops and tweeks which are also caused by lightning. The tweeks have been described as a pinging or dripping sound and are caused by lightning impulses which take a path to the radio receiver that is influenced by the thickness between the Earth's surface and the D or E layers of the ionosphere acting as a wave guide. When the lightning impulse passes through this wave guide, a "dispersion" effect causes the higher fre-

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quencies to arrive slightly before the lower ones and results in the tweek effect. Many times this effect is most prominent in the early morning, and it is sometimes enhanced by geomagnetic storms. When spectacular propagation exists, the result is a series of bird-like chirping sounds that has been termed "dawn chorus".

As the "dispersion" effect increases, lightning produces natural sounds called whistlers. The whistlers are downward falling musical notes usually ranging in length from ½ to 4 seconds. A one-hop whistler results from lightning in the opposite hemisphere, and lasts from ½ to 1 second. Two-hop whistlers result when lightning in your hemisphere creates an impulse that travels to the opposite hemisphere and returns. Multiple hops result in "echo trains" that have been known to last over 100 echoes or bounces between hemispheres. Realize that the 100th echo has travelled millions of miles!

To date, my WR-3 has only seen limited use. One problem in a metropolitan area is the effect of AC powerline "hum". The first harmonic of 60 cycles is 120, and it falls within the frequency range of "natural radio." It is necessary to be at least ¼ mile from AC powerlines to hear tweeks and whistlers without a strong AC "hum" in the background. I have found a place neary my house that is several hundred feet from powerlines, and I have heard stronger pops, tweeks, and even a few whistlers over the AC "hum." I am looking forward to my next trip to the country to hear what the WR-3 can do.

1992	2 ATTENDANCE ROSTER				N5AFV	Al Mattis				
B-VA	RC GENERAL MEETINGS				KA5DKS	Ken McAninch	v	/		1
		0	N	D	N5UGG	Excem McCasland		/		
		С	0	E	N7ZBV	Mike McCasland		/		
		Т	V	С		Ian McNeill	v	/		
AA5JW	Carl Albrecht	1	1		WB5UTM	Scott Merryman	J			
W4FBG	Dick Atkinson	1	•		N5WLY	Robert Meyers		/		1
N5KXA	Richard Baker	/	./		N5GZW	Herb Nance			/	Ť
WA2EJO	Robert Berger	1	•		N5RBT	Art Neumeyer				1
AA5ZK	Bob Brigham	•		./	<b>WA5ETS</b>	Vincent Orlando	J	,	/	1
KB5KLY	Don Brown, Sr.			1	-	Sandra Owen	Ī		/	-
KB5RLT KB5DNT	Ralph Cheek		1	•	ND5F	Harold Parker	J	,	/	1
KI5ZD	George Clark		•	,	KI5DR	Scott Pederson	_		1	
N5XWT	Bill Clemmons			1	AK5G	Randy Pollard	J	,	1	1
N5AW1	Lawrence Cox	,	,	1	KB5VTB	Lanny Poteet	•		_	1
N5OOZ N5TGN	Alan Crawford	4	•	,	KB5RZM	Blake Present			1	1
N5YKY	Barbara Creel	•	,	•	KG5KV	Charles Prochaska	J		•	1
	Fred Creel		•		N5YKR	Michael Ricco	_	/	/	1
N5LYB			٧,		N5NAS	Vic Richard	-	,		1
KB5USL	Craig Culver		,		N5JKD	Robert Ricketts	•		/	•
N5UNE	Tony Cypert	,	1		KB5USY	Eric Ritzie			•	1
WA3PMT	Steven Deaktor	<b>,</b>	1		KB5TMY	Jack Roberts			/	1
N5KXU	Bill Dessens	✓	1		AA5BD	Joe Ross				•
WA5F	Ray Dillard		1		N5XGT	Gene Russell			/	1
	Stephen Dunkelberger		1		AA5IV	Don Schexnailder			•	./
WB4LZG	Glenn Edwards	<b>/</b>			WA5G	Steve Schuster			/	•
KB5KLH	Melanie Edwards				KB5VSY	Frank Secor			/	
KB5ICO	Susan Edwards		1	_	K5HFY	Claude Sessions			/	1
W5LK	Ed Evans		•	•	N5SDL	Steve Shirk			٠,	•
N5XVZ	Rich Fitch	<b>/</b>			N55DL N5PRC	Steve Skelton		,	•	
WA50EN	Steve Gottlieb	•	/	1		Irv Smith	•		,	
KB5LDY	Carl Hacker		✓		KB5EXM	Jane Smith			•	
N5VRR	Don Hadley	1		✓	N5WMA			,	1	,
WB5SRN	Dick Hagerman		/			Oraida Starr	•	,	✓	✓
N5VCX	Mike Hardwick		1		N5XWD	Don Stevenson	•	,	,	
N5JQH	Paul Holcombe		1		KB5URT	Esther Stiver	•	,		
N5ULY	Paula Holcombe		1		N5TGM	Frank Stiver	•	•	,	,
KE5SR	Doug Holley		✓		K5DIY	Joe Tarrant			<b>,</b>	/
WA5TWL	John Holliman			1	KB5ION	Melvin Thatcher	•	,	/	,
N5RZN	Emmett Jackson		1		DL/WX5S	Matt Thomas				<b>V</b>
N5YKV	Marc James	✓			KB5UEI	Tom Tiemann	₩	-		<b>✓</b>
ND5E	George Jolly	/	1	1	KB5UWI	Don Tipton	•	•		<b>/</b>
KG5CB	Bill Kemp		1		KD5JC	Ed Truitt			_	/
N5XGW	Charles Keng			✓	WN5A	Jack Van Demark			/	
N5UOG	Bud King	1	1	1	WB5IBT	Don Wade	•	,	_	_
N5VCZ	Claudia Kozinetz		1		N5XWB	Donn Washburn		_	<b>/</b>	/
W5IHY	Lou Kronberg	1		1	N5ZUE	Gerald Webb	•		1	/
N5OUT	Dick Kruse		1	1	KF5ZL	Bob White	•		✓	
KJ5BG	Bob Kunesh		1	1	N5UOA	Mark Widerstorm			/	
N5PTN	Michael Lay		1	1	KAØTEN	Betty Wilcox	•		/	✓
-	Patricia Layton	1	1		N5YYP	Larry Wilson	•	/	/	1
KB5TIB	Thomas Layton	1	1		N5CPA	Sam Wilson	•		/	1
WD5DRB	Larry Levy	-	1		W5GLD	Frank Wood			✓	
N5VXU	David Litchford		•	1	KK5W	Al Zermeno	•	/	✓	✓
KB5UEE	Leonardo Magallon	ſ		1		TOTAL	4	_	c =	40
	200/larao maganon	•		•		TOTAL:	4	<b>ბ</b>	<b>0</b> /	48

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#### FINAL 1992 B-VARC **PUBLIC SERVICE HONOR ROLL**

Compiled by Stephen Dunkelberger, N5JBL

A. Houston Marathon

D. B-VARC Special Event Station G. 25K Warmup Run

B. MS 150 Bike Ride

E. 20K Warmup Run

H. 30K Warmup Run

C. Clean Air Challenge Bike Ride F. Alamo Challenge

Albrecht, Carl Baker, Richard Borg, Gerry Brigham, Bob Chambers, Marion Chambers, Mike Cheek, Ralph Clemmons, Bill Cox, Lawrence Creel, Fred Culver, Craig Cypert, Tony Deaktor, Steve Dessens, Bill Dillard, Ray Dunkelberger, Steve Edwards, Glenn Edwards, Melanie Edwards, Susan Eilers, Wade Estrella, Jesse Fitch, Rick Freedenberg, Henry Gordon, Irene Hacker, Carl Hadley, Don Hagerman, Dick Hammer, Dave Hardwick, Mike Harris, Ron Herbert, Earl Hughes, Kelly	AA5JW N5KXA N5APW AA5ZK KB5PAJ KI5SC KB5DNT N5XWT N5OUZ N5LYB KB5USL N5UNE WA3PMT N5KXU WA5F N5JBL WB4LZG KB5KLH KB5ICO WN5TEN N5XWO N5XVZ N5HF N5AYX KB5LDY N5VRR WB5SRN WJ5B N5VCX N5MKO WB1CCH N5ULZ	A,C,D,E,H A,B,C D,E,G A,B,E,G B A,B B B D A A,C,D,E,G,H D A,B,C,D B A,B,C,F,G E,H A,E	Lewis, Glenn Mattis, Allen Micnhimer, Terry Morrison, Henry North, Max Onda, Terry Orlando, Vincent Parker, Harold Pederson, Scott Pokladnik, Roger Pollard, Randy Prochaska, Charlie Richard, Vic Ricketts, Robert Roberts, Jack Rogers, Dennis Ross, Joe Shechter, Guy Shirk, Stephen Shorthose, Ron Skelton, Steve Smith, Irv Snitkin, Richard Stanley, Tim Starr, Oraida Stiver, Esther Stiver, Frank Thatcher, Mel Van Demark, Jack Wade, Don Webb, Gerald White, Bob	KI5CE N5AFV N5YKS W5RIY N5TBI KI5FO WA5ETS ND5F KI5DR KB5LFU AK5G KG5KV N5NAS N5JKD KB5TMY N5VRP AA5BD N5URI N5SDL N5PHL N5PRC KB5EXM N5VTV N5PHM N5WMA KB5URT N5TGM KB5ION WN5A WB5IBT N5ZUE KF5ZL	D A, B, G, H, B, E, E, G, H, B, E,
Hadley, Don	N5VRR	D	Stiver, Esther	KB5URT	E,F,G,H
Hammer, Dave	WJ5B	В	Thatcher, Mel	KB5ION	D
•					•
Jackson, Emmet	N5OLZ N5RZN	A,E A,H	Whitehead, Lawrence		C
Kemp, Bill	KG5CB	B,D	Williams, Tony	J73TW	D
King, Bud	N5UOG	A,B,C,D,E,G,H	Wilcox, Betty	KAØTEN	D
Kozinetz, Claudia	N5VCZ	A,C,D,E,G,H	Wilson, Bill	KA5GHI	B,C,F,H
Kytle, Elton	NO5C	D	Wilson, Larry	N5YYP	E,G
Lay, Michael	N5PTN	A,B,F	Winford, Clem	WB5SHU	A,D
Levy, Larry	WD5DRB		···erep erer		•
		• 4-			

### GADGETEER'S ELECTRONIC SUPPLY

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# Brazos Valley Amateur Radio Club

## Membership Application

Bring to a Club meeting, or mail with check to:

B-VARC
P. O. Box 1630
Missouri City, TX 77459

Check if this application is for: New Membership_	Renewa	l Roster Update Only
Name	_ Callsign	License Class
Address		
City, St, Zip	_ Work Phone _	
Are you a member of the ARRL? Each year members of the ARRL on our annual club status repclub will benefit if you do so through our treasurer. current ARRL dues in your remittance.	ir we report the	percentage of our membership who are
Regular membership dues are \$12.00/year.  Additional family members may join B-V additional copy of the monthly newsletter. If you w their information below:	ARC for only \$2 ish to enroll add	2.00/year each. They do not receive an ditional family members, please fill out
Name	Callsign	License Class
Home PhoneWork Phone		ARRL MEMBER?
Name		
Home Phone Work Phone		
Remittance Calculation:		
Regular Membership + Family Members	ships=	Amount
ARRL Memberships (\$30.00/year)		
Worldradio Subscription (\$13.00/year)		
		TOTAL
I agree to observe the By-Laws of the Club and the Commission.	e rules and reg	ulations of the Federal Communicatio
Signature		Data