

#### **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

7747651 (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: residence 729-6484 or work 224-3930.

Volume: 14

Issue: 7

July 1991

#### ADDRESS CORRECTION REQUESTED

From: Brazos Valley Amateur Radio Club, Inc.

P. O. Box 1630

Missouri City, Texas 77459 Telephone: (713) 777-3345



#### B-VARC MEETING SCHEDULE

Thurs, July 11 General Meeting

7:30 pm Sugar Land Community Center

226 Matlage Way Ice Cream Social and Videos of Field Day

Thurs, August 1 Board Meeting 7:30 pm Missouri City Fire Station Allen Mattis N5AFV 5314 Wigton Houston, TX 77096

# </28/1991

# July 1991 B-Varc Calendar of Activities

SATURDAY	6 7:30am B-VARC Breakfast 9:00am Houston Emergency Management Net 146. 84 8:30pm C.W. 147.32	7:30am B-VARC Breakfast 9:00am Houston Emergency Management Net 146. 84	20 7:30am B-VARC Breakfast 8:00am Sidewalk Sale 9:00am Houston Emergency Management Net 146.84 8:30pm C.W. 147.32	7.30am B-VARC Breakfast 9.00am Houston Emergency Management Net 146. 84	
FRIDAY	<b>5</b> Lunch Bunch — Talk-In 442.5/145.47	<b>12</b> Lunch Bunch – Talk-In 442.5/145.47	19 Lunch Bunch — Talk-In 442.5/145.47	<b>26</b> Lunch Bunch – Talk-In 442.5/145.47	
THURSDAY	Happy 4th!  6:30pm RACES  AMTOR Net 7.090	11 7:30pm General Meeting: Sugar Land Community Center	18	25 7:30pm West Side Social	
WEDNESDAY	3 8:00pm B-VARC RAG- CHEW 3.960 (Busy? +3 Khz)	10 8:00pm B-VARC RAG- CHEW 3.960 (Busy? +3 Khz)	17 8:00pm B-VARC RAG- CHEW 3.960 (Busy? +3 Khz)	24 8:00pm B-VARC RAG- CHEW 3.960 (Busy? + 3 Khz)	31 8:00pm B-VARC RAG- CHEW 3.960 (Busy? +3 Khz)
TUESDAY	2 8:00pm 10 X SHOT 28.488 9:00pm Experimenters Net 442.5 & 145.47 10:00pm AMSAT 146.	9 7:00pm Amateur Exams (Strake Jesuit College Prep) 8:00pm 10 X SHOT 28 488 9:00pm Experimenters Net 442.5 & 145.47 10:00pm AMSAT 146.82	16 8:00pm 10 X SHOT 28.488 9:00pm Experimenters Net 442.5 & 145.47 10:00pm AMSAT 146.	23 8:00pm 10 X SHOT 28.488 9:00pm Experimenters Net 442.5 & 145.47 10:00pm AMSAT 146.	30 8:00pm 10 X SHOT 28.488 9:00pm Experimenters Net 442.5 & 145.47 10:00pm AMSAT 146.
MONDAY	7:30pm 34-94 Swap Net 146,94 7:30pm Board Meeting: Missouri City Fire Sation #1 8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.47 9:00pm B-VARC Net 145.47	8 7:30pm 34-94 Swnp Net 146.94 8:00pm ARES 147.30 8:00pm Pt. Bend County RACES Net 145.47 9:00pm B-VARC Net 145.47	15 7:30pm 34-94 Swap Net 146.94 8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.47 9:00pm B-VARC Net 145.47	22 7:30pm 34-94 Swnp Net 146.94 8:00pm ARES 147.30 8:00pm Ft. Bend County RACES Net 145.47 9:00pm B-VARC Net 145.47	29 7:30pm 34-94 Swnp Net 146.94 8:00pm ARES 147.30 8:00pm R. Bend County RACES Net 145.47 9:00pm B-VARC Net 145.47
SUNDAY		7 1:30pm Texas State RACES Net 7.248 7:00pm Harris County RACES 146.94 7:30pm South Texas ARES Net 3.873	1:30pm Texas State RACES Net 7.248 7:00pm Harris County RACES 146.94 7:30pm South Texas ARES Net 3.873	21 1:30pm Texas State RACES Net 7.248 7:00pm Harris County RACES 146.94 7:30pm South Texas ARES Net 3.873	1:30pm Texas State RACES Net 7.248 7:00pm Harris County RACES 146.94 7:30pm South Texas ARES Net 3.873

#### Notes From The President . . .

by Al Mattis, N5AFV

Greetings to you again. This month there are many exciting B-VARC activities to discuss. Our dynamic club continues to surprise me with the great variety of activities available to our membership.

First of all, our new meeting location appears to have been very well received. Bill Todd-Brown, N5MPN, and I counted 73 persons in attendance at our June general membership meeting at the Sugar Land Community Center. We had 69 who actually signed the attendance sheet that was passed around. The only negative comments received to date were that acoustics were poor. Conversations among people located in the rear and along the side of the room could be heard throughout the room during the program. The solution is simple. The entryway and vestibule of the building are available to anyone who wishes to carry on lengthy discussions during the program. We want everyone to be able to hear the program, but we also want people to be able to socialize at our meetings. The Sugar Land Community Center offers space for both. The judicious use of a little courtesy will please everyone!

The most exciting event of the last month was ARRL Field Day. The club had a fantastic Field Day at Bear Creek Park. If you missed it, you may have missed one of the best Field Days in club history. We had 7 transmitters plus a novice station in operation. Thunderstorms forced us to shut down for 70 minutes, but we had fun, nevertheless. I counted 56 persons in the pavilion while we were waiting for the lightning to move past. Many other persons passed through our field day station, and it is possible that we had as many as 100 persons visit our station. The food that was served was terrific, and a special thank you is due to Randy Pollard, AK5G, and his crew for a fine field day effort.

Our club's membership continues to grow. At the time I write this, we have 188 members. The more activity we have, the more members we attract. We are almost certain to set a new membership record this year. Please make all of our new members welcome, and encourage them to participate in club activities. This fall we will have an active series of public service events, and we will need all the help we can get.

Last month's sidewalk sale is also worth mentioning. The heavy rain shut the sale down early, but as a

result, we had 33 persons at breakfast at Champ's. I was able to distribute copies of the new roster to B-VARC members who were in attendance. Copies of the roster were also available at Field Day, and we hope to have them available at the next membership meeting.

That's it for this month. Hope to see you at the July meeting when we reminisce about Field Day.

#### 73 de N5AFV

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

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

June 5, 1991

KB5ION NCS, AA5OA, WB5SRN, N5QCE, N5MPN, N5AFV, KB5JIZ, K5BDZ, N5KXU

June 12, 1991

KB5ION NCS, N5MPN, W5IHY, N5AFV, N5FNA, WB5SRN, W5EFB, WA5ETS, AK5G, W5GHK, N5QCE, KG5KV, KI5CE, WN5A, WT5E

June 19, 1991

KB5ION NCS, N5ECP, N5MPN, N5AFV, KB5DNT, W5GHK, N5QCE, W5IHY, WA5SCE, KF5ZL, WA5ETS, KG5KV

June 26, 1991

N5MPN NCS, WN5A, WB5IBT, KB5DNT, WB5SRN, W5EFB, W5IHY, W5GHK, WA5ETS, AK5G, WA5SCE, KB5ION, KC5HF (Ft. Worth), WB0??? (good copy listening, Wichita Falls, Kansas)

## Results of the June 11th Amateur Exams by Harold Parker, ND5F

B-VARC again sponsored and administered the ARRL's Amateur Radio Examinations that were held on Tuesday evening, June 11, 1991, at Strake Jesuit College Preparatory in Houston.

The V.E. Team
Carl Albrecht, AA5JW
Harold Parker, ND5F
Mike Strong, KT5H

Assistants Irene Gordon, K5AYX Ron Grimes, WA5SCE Stu Lamkin, WB5IGG A total of forty-one (41) exams were administered during the evening to twenty-two (22) applicants. Ten (10) unlicensed candidates received their new Technician licenses and four (4) others upgraded their licenses with a total of twenty-eight (28) elements passed. The overall "pass rate" for the evening was sixty-eight (68%) percent.

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

Richard Adams — Technician Roy Anders, N5RQN — Advanced Ronald Buchner — Technician Mike Chambers, N5QCE - Advanced Tony Cypert, Pending — Element 3B Charles DeBrandt - Technician Michael Fetter - Technician Michael Hardwick - Technician Jacques Huard, KB5LFF — Technician John Jackson — Technician Claudia Kozinetz — Technician Harvey Krieg — Technician Timothy Ladner, KB5OLE — Technician Mark Mapes, Pending — Element 3B Marc Newman, N5SLG - Element 4B Howard Russell - Technician Frank Sanders, N5SPZ - Element 4A Melvin Smith — Technician Amy Vaccaro — Element 2

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

# B-VARC Board of Directors Meeting Action & Comments, June 3, 1991

by Dick Kruse, N5OUT, Recording Secretary

The minutes of the May Board of Directors meeting were read and approved.

Cash on hand in the club treasury is \$2,816.08.

The club now has 175 members.

The next quarterly payment of \$25 to the Ham Radio Helpline was approved.

B-VARC will again present the V. E. sessions at Houston Hamvention in November.

A Thank You letter was received from Burns Clele for the donation to the balloon launch.

The Board was very sorry to hear that Stu Lamkin, WB5IGG, is no longer able to perform his function for the club due to a health challenge. Since Stu did so many things for the club it takes a number of people to replace him. Consequently, Harold Parker, ND5F, has agreed to receive phone calls for the V. E. sessions; Bill Hickox, K5BDZ, will receive information about the Sidewalk Sale; Randy Pollard AK5G, will dispense membership information about the club; Glenn Edwards, WB4LZG, will receive information about new Amateur Radio license classes; and Steve Dunkelberger, N5JBL, will be the ARRL liaison.

Since we are forced to move our general club meetings from the Missouri City Fire Station, on a trial basis the club meetings for June, July, and August will be held at the Sugar Land Community Center, 226 Matlage Way, Sugar Land.

The Award Rules Committee recommendation for change in the Dr. Bill award and the Loop and Zepp award was approved as presented.

Field Day will be June 22-23 at Bear Creek Pa , shelter three. Nine ham stations are planned to be in operation.

The Rag Chew Net reports twelve to seventeen checkins each week.

No public service events are scheduled during the summer months.

The program for the general membership meeting in June will feature Lou McFadden, W5DID, talking about SAREX. The July program will be an ice cream social with videos of Field Day.

A record forty-two V. E. exams were given at the last B-VARC test session. The next highest number of exams in one session was thirty-five.

#### August Bulletin Deadline

Articles and other material destined to be printed in the August issue of the B-VARC *Bulletin* should be submitted by no later than July 20th. Please consuch to Vincent Orlando WA5ETS; 8900 Belix Boulevard; Houston, Texas 77036-4699 or FAX (713) 774-6427.

1991	<b>ATTENDAN</b>	CE ROSTER
B-VAF	RC GENERAL	MEETINGS

М

		P R	A Y	Ŭ
	Bill Clemmons			1
	Tony Cypert	,		1
	Kathy Edwards Susanna Friedman	1	1	
	Paula Holcombe	•	•	1
	Clifton King	/	1	1
	Jakub Miketta	1		
	Terri McRae	✓.		1
	Tory Onda	✓		,
	Eric Owens	,		•
	Matthew Pollard Gene Russell	•		1
	Ray Sells		1	1
	Jim Wilkinson			1
WN5A	Jack Van Demark			1
N5AFV	Al Mattis	•	1	1
N5APW	Gerry Borg		11	
KB5AWM N5BZZ	Jim Heil Emmett Jackson		1	
KG5CB	Bill Kemp		•	1
WB1CCH	Earle Herbert	1		1
KI5CE	Glenn Lewis		1	
N5CPA	Sam Wilson	✓	1	1
W5DID	Lou McFadin			1
KA5DKS	Ken McAninch	,	,	11
KB5DNT W5EFB	Ralph Cheek Jim Jeffries	•	•	1
K5ERP	David Stevens			/
WASETS	Vincent Orlando	/	1	1
KB5EXM	Irv Smith	1	1	
WA5F	Ray Dillard		1	1
ND5F	Harold Parker		•	1
WB5FFD	Ron McDonald	,		•
KI5FO WB5FFD	Terry Onda Ron McDonald	1		•
N5FVM	Damian Schumacher	•		1
AK5G	Randy Pollard	/		1
KA5GHI	William Wilson		1	
N5GZW	Herb Nance	_	1	
WB5IBT	Don Wade		1	•
WB5IGG	Stu Lamkin	,	•	
W5IHY KB5ION	Lou Kronberg Melvin Thatcher	<i>'</i>	1	/
N5JBL	Stephen Dunkelberger	7	1	•
N5JKD	Robert Ricketts	/		1
AA5JW	Carl Albrecht			1
KB5KLH	Melanie Edwards	✓		
KB5KLY	Don Brown, Sr.	,	1	1
KB5KNC	Alicia Dyer	•		,
K5KV KG5KV	Benny Owens Charles Prochaska	1	1	/
N5KXU	Bill Dessens	1	1	/
WD5L	Rick Covert	_		1
KB5LDJ	Dawn Sinibaldi	1	1	
AA5LF	Steve Moynihan	1	1	1
KB5LFU	Roger Pokladnik	✓.	1	•
WB4LZG	Glenn Edwards Bill Todd-Brown	1	,	-
N5MPN N5NAS	Vic Richard	1	•	Ž
KB5NUS	Joe Bly	•	1	•
KB5NZK	Brian Stevens		-	/
WASOEN	Steve Gottlieb	1	1	J
KISOT	Lawrence Whitehead			1
N5OUT	Dick Kruse	1	1	•
N5OUZ	Lawrence Cox		1	•
K85PAJ	Marion Chambers Tim Stanley	,	•	•
N5PHM KB5PMF	Harry Levine	1	1	
WA3PMT	Steven Deaktor	•	•	Ţ
				•

N5PNX KB5OBB N5POH NL7PQ N5PRC N5PRP N5PTN KB5PVE N5QCE/AA N5QQJ N5QVI N5RNM N5RQO N5RYZ WA5SCE N5SJC N5SJR N4SKR WB5SRN N5STD N5TBG N5TBI	Eddie Runner Edward Runner, Jr. Frank Berner Ian George Steve Skelton Nick Hardy Michael Lay Cy Schaadt Michael Chambers Jim Gilmore Jordan Kossack Doug Vandevere Sharon Grimes Richard Bearden Ron Grimes Stephen Shirk Paul Flesher Bob Brigham Garlen Marshall Dick Hagerman Doug Barrett John Brzovskis Max North	* * * * * * * * * * * * * * * * * * * *		11111 111 111 11 11 1 1 1
N4SKR	Garlen Marshall	✓.	•	٠,
		•	1	1
– –			,	1
N5TM	Dan Bales		-	1
N5TRM N5TRQ	Ed Newman Susanna Friedman			1
WB5YDD K5YFL	Bill Clarke Gene Chapline		1	/
KA5YSL KF5ZL	Rick Meyer Bob White	✓		
KF94L	TOTAL:	45	42	69

#### **Meeting Recaps**

Last month's B-VARC meeting was a very interesting and informative program presented by Lou McFadden W5ID on the SAREX experiments. He brought along a good many slides and video tape footage of the recent Space Shuttle flights. We would like to thank Lou for coming out and for sharing his enthusiasm in this project with our club.

The July program comes at the perfect time! As the summer temperatures more consistently top out in the mid-nineties, a dish of smooth, delicious homemade ice cream really would hit the spot. Well now's your chance to sample some of our club's favorite flavors and recipes. Come to the July meeting and socialize with your ham buddies and treat your tastebuds to some good ole' fashioned ice cream. But that's not all! There will be video highlights of the antics and fun had at this year's Field Day. So come on out and re-live some of the good times of the week-end (or see what you missed if you did not participate in it).

#### **B-VARC Charter Member Recovering**

by Harold Parker, ND5F

Stu Lamkin, WB5IGG, has been a member of the Brazos Valley Amateur Radio Club since it was first organized in 1977 and has been very active in it over the years as our Liaison to the ARRL, a past editor of the newsletter, and B-VARC's contact for membership, VE examinations, and novice classes.

On May 26th Stu suffered a fairly serious stroke but is back home now after spending several weeks in the hospital.

Stu's wife Beth requests that we all send cards and notes and that we come by and visit with Stu frequently. He is unable to continue any involvement in the club's activities, but she feels that he needs to maintain his contacts with his many ham-radio friends.

Physically Stu seems fine, but the stroke left him without much memory of B-VARC and the activities that he used to love so much. So when you go by to visit, please be patient with him and perhaps he will eventually be able to recall some of the great times we all have had through the years. Latest reports are that Stu's condition has improved a great deal, and visitors are helping him regain some of his memory loss.

#### Field Day 1991

by Randy Pollard, AK5G

Thanks to everyone for helping with Field Day 1991. This turned into the biggest B-VARC Fleld Day ever! Over 75 people showed up including about 20 visitors at Bear Creek Park to participate in this grand event. Fun was had by all. We had some exciting times when the cold front blew in Saturday afternoon along with the rain and lightning. However, no spirits were dampened, and everyone enjoyed the fellowship, food, and the fun. Special thanks to Jack Van Demark (WN5A) for being in charge of all the food; to Steve Skelton (N5PRC) for being in charge of the radio equipment; and to Ron Grimes (WA5SCE) for being in charge of all the support equipment. Thanks also go to Dick Kruse (N5OUT) and Randy Pollard (AK5G) whose calls were used

but not abused. Finally, thanks to all for bringing your "stuff" to use and for just attending our club's Field Day.

### 1991 B-VARC PUBLIC SERVICE HONOR ROLL

Compiled by Stephen Dunkelberger N5JBL

- A. Houston Tenneco Marathon
- B. Woman's Hospital 5K Classic
- C. M.D. Anderson 5K Run/Walk
- D. American Lung Bike Ride

Borg, Gerry	N5APW	A,C
Chambers, Marion	KB5PAJ	B,D
Chambers, Michael	N5QCE	A,B,D
Cheek, Ralph	KB5DNT	
Deaktor, Steve	WA3PMT	
Dessens, Bill	N5KXU	C,D
Dunkleberger, Steve	N5JBL	A,C,D
Dyer, Alicia	KB5KNC	С
Dyer, David	AA5GA	С
Dyer, Debra	KB5GUY	С
Dyer, Karla	N5LGS	С
Edwards, Glenn	WB4LZG	Α
Edwards, Susan	KB5ICO	Α
Freedenberg, Henry	N5HF	Α
Garland, Trey	KB50EE	Α
Gordon, Hy	NC5A	Α
Gordon, Irene	N5AYX	Α
Grimes, Ron	WA5SCE	С
Grimes, Sharon	N5RQO	С
Hagerman, Dick	WB5SRN	A,D
Harris, Ron	N5MKO	D
Lance, David	KB5EYK	С
Mattis, Allen	N5AFV	B,C
Morrison, Henry	W5RIY	A,B,D
Nance, Herb	N5GZW	Α
Orlando, Vincent	WA5ETS	Α
Parker, Harold	ND5F	Α
Pokladnik, Roger	KB5LFU	B,D
Shirk, Steven	KB5OLF	A,C,D
Smith, Irv	KB5EXM	C
Stanley, Tim	N5PHM	Ā
Van Demark, Jack	WN5A	A
Wade, Don	WB5IBT	A,B
Warden, Mike	WB3HZP	
White, Bob	KF5ZL	A
Winford, Clem	WB5SHU	
	***************************************	

Please report corrections or additions to N5JBL



Lou Kronberg
Chairman of the Board
W5IHY

7106 Mapleridge • Houston, Texas 77081 • (713) 666-2371

Beltone\*

BELTONE
HEARING AIDS
AND AUDIOMETERS

Better Hearing Through Professional Care

LAWRENCE COX, BC, NBC-HIS CERTIFIED AUDIOPROSTHOLOGIST N50UZ

BELTONE HEARING AID CENTER

2410 AVENUE H ROSENBERG, TEXAS 77471 713/342-1205 5706 FONDREN HOUSTON, TEXAS 77036 713/977-8781



We stock Larsen & Hustler antennas, MFJ tuners & keyers, Ramsey kits, toroids, and much more!

(713) 978-6575

#### CITY ELECTRONIC SUPPLY

7015 Atwell Houston, Texas 77081 (713) 663-6066 Alex — WA5UHT

Serving the Electronic Community with a wide variety of small parts: plugs, connectors, wire, boxes, chassis, toroids, RF chokes, etc.

Now stocking Larsen antennas!

#### Alfred Vail, Telegraphy's Unsung Hero

reprinted from the newsletter of The Houston Echo Society

A ministerial student, a professor of fine arts, and a prominent industrialist...this trio proved 150 years ago at Morristown, that something they called the "telegraph" could actually be made to work.

Alfred Vail was the student in September, 1837, who while visiting New York University his alma mater, came upon Professor Samuel F. B. Morse. Morse, an artist-inventor, was demonstrating his "Electro-Magnetic Telegraph", an apparatus that could send coded messages through a copper wire using electrical impulses from an electromagnet. Young Vail, skilled in mechanics, immediately saw the crude machine's great potential for communications and offered to assist Morse in his experiments for a share in the invention's profits.

Morse, at the time an unpaid professor at the university, needed financial support and a place to work. He was delighted when Vail persuaded his father, Stephen Vail, a well-to-do industrialist and a county judge, to advance \$2,000 cash to underwrite the cost of perfecting the machine. He allowed them room in his Speedwell Iron Works at Morristown for their experiments. Then, while Morse continued to teach in New York, Alfred went to work eliminating "bugs" from the telegraph equipment.

Alfred Vail had a written agreement with Morse to produce a working, practical telegraph, at Vail's expense, by January 1, 1838. While his father fussed and fumed over what he began to think was a waste of time and money, the younger Vail and his assistant, William Baxter, worked feverishly behind locked doors to meet the deadline. Morse, an infrequent visitor, kept track of their progress, mostly by mail.

January 1, 1838 came without a completed, working model. Morse, now on hand, became insistent. The Judge became impatient. Alfred knew if success didn't come soon his father would cut off his financial support, and the experiments would end. At last, on January 6, 1838, after what must have been frantic effort, the telegraph was ready to be demonstrated. Alfred and Morse invited the Judge to "come down and see the telegraph machine work."

It was an exciting moment. Stephen Vail jotted a sentence on a slip of paper and handed it to his son. Alfred sat at the telegraph machine, manipulated metal knobs and transmitted, by a code of numbers, the Judge's message. (Each number corresponded to a word in a dictionay Morse had developed.) As the electrical impulses surged through the three miles of wire looped around the building, Morse, at the distant end away from the Vails, scribbled down what he received. Decoding the numbers, he triumphantly called out "A patient waiter is no loser." The telegraph worked! The long-patient Judge, now a winner, invited his skeptical neighbors in to see a demonstration (the first public one), and gloated while they applauded.

Accounts differ as to Alfred's share in the telegraph's final triumph. However, manuscripts and notes written by Vail are evidence supporting claims that he was the one who made the important improvements in Morse's invention. What's more, it was Vail who changed Morse's cumbersome code into simple dots and dashes — the same dots and dashes that were later used, in 1833, to send that historic first public message between Wahington and Baltimore... "What hath God wrought?"

Samuel Morse received fame and fortune for his invention. Alfred Vail died in 1859, broke and unacclaimed. He never received recognition or royalties from Morse. His monuments are the still-standing Morristown workshop (today a part of Historic Speedwell, a National Historic Site) — and the basic code, which ironically everyone still refers to as "Morse."

(713) 587-1064

#### HAMMER COMMUNICATIONS

DAVE & CINDY HAMMER 2407 QUIVER DR. HOUSTON, TX 77087 WJ5B & N5LXE

RADIO CONSTRUCTION, REPAIR, INSTALLATION BROADCAST & TOWER SERVICES

## **EPO**

#### ELECTRONIC PARTS OUTLET INC.

2815 FONDREN, HOUSTON, TEXAS 77063 @ (713) 784-0140 FAX (713) 784-9740

Components, test equipment, computers, cable, meters, surplus bought and sold.

Mon-Fri 9-6, Saturday 9-5

#### **RUN YOUR BUSINESS CARD AD HERE!**

Contact: Steve Gottlieb, WA50EN 777-2673