

# NEW! THE B-VARC BULLETIN

Volume 20 - February

Issue 2

## B-VARC SPRUCES UP FOR 1997!

- ⇒ **New Newsletter!**
- ⇒ **New Meetings!**
- ⇒ **New Activities!**
- ⇒ **New Programs!**

*"What we have come up with is the realization that people (even hams) support what meets their individual needs. So we want to try to expand the already great parts of BVARC that work and fix the ones that don't. Several plans are in place to address these ideas..."*  
(See Page 3)

### SPECIAL THANKS!

All of us at B-VARC would like to extend our gratitude to the management at KHTV, Channel 39, for the use of their equipment and facilities in order for this bulletin to be published.

We would also like to thank Claude Sessions, K5HFY, and all the other B-VARC members who volunteer their services in helping to put the bulletin together. It couldn't be done without you!

- ⇒ **New Technical Corner!**
- ⇒ **Products Corner!**
- ⇒ **More Fun!**

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Gailen Marshall - N4SKR

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(713) 460-1968

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Terry McCoy - W5TEM  
(713) 641-4595

**1-Year Board Member:**  
Bud King - N5UOG  
(713)-494-3741

**Past President:**  
Ron Grimes - WA5SCE

**PSN Check-Ins**  
By Jackie Burton -  
KC5OHJ

Here are the check-ins for  
the PSN for December  
1996:

12/2 - 25  
12/9 - 44  
12/16 - 44  
12/23 - 34  
12/30 - 32



## Upcoming Events:

**February 6 -**  
*First On-Air Board Meeting*  
7:30 PM...Everyone is invited  
to listen in.

**February 13 -**  
*General Meeting at Sugar-*  
*land Community Center*  
**7:30 PM**  
- HF, VHF, and UHF *Mobile*  
Antennas - by W5RH  
- Classic Microphones  
- Soldering PL-259s  
- Vasos BBQ before Meeting!

**Mondays and Wednesdays -**  
*BVARC CW Practice Net*  
8:30 PM  
146.470 Mhz FM simulcast  
28.14647 Mhz CW

**March 6 -**  
*On Air Board Meeting*  
7:30 P.M...Review Feb Meet-  
ing.

**March 13 -**  
*Houston Amateur Television*  
*Society (HATS) - How to get*  
on ATV cheap! Did you  
watch the Marathon? It was on  
ATV!

**March 23 -**  
*BlueBonnet Express BikeRide*

# BVARC meetings will be on 2nd Thursday for all of 1997!

Two hydrogen atoms were walking down the street. One said to the other, "I lost an electron." The other asked, "Are you sure?" The first answered, "I'm positive".

# Every Meeting

# A Hamfest!

*Starting in February, several new features  
will be added to the meetings:*

Surplus junk-box Swap: Bring your  
surplus junk for swapping and give  
away...

...one ham's junk is another ham's junk!  
(Sorry no selling of any type)

**Products Corner: 10 Minute meeting  
feature at all meetings**

FEB--Classic Microphones--W5RH  
MAR-- HF Tranceivers--N4SKR

**Technical Corner: Meeting Feature at  
all meetings, 10 Minutes  
( KC5QZD Organizer)**

Feb--Soldering PL-259 Connectors  
Mar--Simple VHF antenna building  
April--RF safety

- Why do they put Braille on the keypad of the drive up ATM?  
- Why do we drive on parkways and park on driveways?  
- Why is it when you transport something by car, it's called a shipment but something sent by ship is called cargo?



## Notes from the President

By Gailen Marshall, N4SKR

I want to start this month's column by thanking the 1996 Executive Board for their leadership and efforts on behalf of all BVARC members. Nowhere is this more evident than the annual banquet we attended last month. The location was great, the food was excellent but most of all, the fellowship was remarkable. Some of us brought our non-ham XYLs (or OMs) to hear and even experience what it is about BVARC that we all love. Perhaps the highlight of the evening was the awards ceremony where we acknowledge extraordinary effort of our members on behalf of our club. This year, two members deserve special recognition - Rick Hiller, W5RH, received the Line and Zepp award for his continuing contributions to enhance HF operation and education. And the Order of the Key, the highest service award offered by BVARC went to Jackie Burton, KC5OHJ for all of her many contributions to BVARC. Congratulations and a hearty "well deserved" to you both.

The meeting ended with me providing what the 1997 Board of Directors sees as our goals for the club. First, we have a great club full of great people committed to a great hobby! We all subscribe to the "if it ain't broke, don't fix it" philosophy. So changes will not be made simply for changes sake. Yet, the simple facts are that paid memberships in BVARC has steadily declined over the past several years along with resulting decreases in meeting attendance. There are many possible reasons for this and neither I or any other Board member has any crystal ball to know the absolute reasons for this. But we have sought counsel from a variety of sources - past BVARC presidents, former members who still live here but don't participate anymore and, yes, even the loyal members who make both the meals and the meetings.

What we have come up with is the realization that people (even hams) support what meets their individual needs. So we want to try to expand the already great parts of BVARC that work and fix the ones that don't. Several plans are in place to address these ideas. First, we would like the membership to be even more informed about the decision-making aspects of what the Board does. Toward that end, we are going to try a "great experiment" in having a Board meeting on the air - first Thursdays at 7:30PM on the W5RPT 145.47 repeater. This is being graciously allowed by the MERA Board. We will appreciate input but will attempt to keep the meeting brief and on track. If this idea catches on, great. More people will know what BVARC does and, hopefully, will want to be a part of us. If it does not work for some reason (such as too much interference), we will try something else.

The meetings themselves will be designed the parts that members have come to enjoy while expanding the meetings to offer something to all those who attend. The theme for the club meeting (developed by VP W5RH) is "**EVERY MEETING A HAMFEST**". There will be a regular swapfest at each meeting with an opportunity for you to give away or trade your surplus junk (sorry, but Community Center rules forbid selling equipment on their premises). We will continue the spirit of hamfest by focusing the business meeting and announcements at the beginning and adding two new features - a **Technical Corner** aimed at teaching new hams (and perhaps reminding older ones) about various aspects of the hobby that will enhance enjoyment. It may be as "simple" as soldering PL-259 connectors (that's for the February meeting) to how to check and lower antenna SWR. We will also have a **Product Corner** where either classic equipment (like microphone collections - planned for the February meeting) or new products (like small HF rigs) will be displayed and/or demonstrated. The program will be as "hands on" as possible, demonstrating various aspects of our hobby. Rick, W5RH, is the program chairman this year but he will have a lot of help from other Board members. Also, we intend to have a variety of programs and focus on as many aspects of the hobby (i.e. HF, VHF/UHF, contesting, digital, etc.) as possible. By the way, if you have any requests or ideas, let Rick or me know and we will get you involved.

Other club activities - public service, nets, Field Day, even our newly reconstituted BVARC picnic (more about that later) will be designed to preserve and expand the precious spirit of fellowship that characterizes a BVARC get-together, centered around ham radio. We want to reach out to new and potential hams as well as recover older, more experienced hams. We want to match new and/or inexperienced hams with more senior amateurs with a com-

*(Continued on page 4)*

(Continued from page 3)

mon shared interest - an Elmer program. Finally, we want to offer opportunities to participate in ham-related events as a club: participation with specialty clubs (such as DX, ATV, Packet, etc.), public service events, mini DXpeditions and more.

In summary, the goal of the Board is to have a ham leave a club function (particularly regular meetings) saying..."I got something out of this meeting and I am **glad** I took the time and effort to attend. I invite you to join us in this effort.

**FCC EXTENDS TRANSITION PERIOD FOR DETERMINING COMPLIANCE WITH NEW REQUIREMENTS FOR EVALUATING THE ENVIRONMENTAL EFFECTS OF RF ELECTROMAGNETIC FIELDS FROM FCC-REGULATED TRANSMITTERS**  
(ET DOCKET NO. 93-62)

The Commission has amended its rules to extend the transition period for applicants and station licensees to determine compliance with the new requirements for evaluating the environmental effects of radiofrequency (RF) electromagnetic fields from FCC-regulated transmitters.

In 1985, the Commission adopted rules for evaluating the environmental effects of RF electromagnetic fields produced by FCC-regulated transmitters. In August 1996, the Commission amended those rules by provided for the use of new guidelines and methods, and established a transition period, until January 1, 1997, for applicants and stations to come into compliance with the new requirements.

The American Radio Relay League, Inc., Ameritech Mobile Communications, Inc., AT&T Wireless Services, Inc., BellSouth Corporation, Paging Network, Inc., the Personal Communications Industry Association and U S West filed petitions asking the Commission to extend the transition period beyond January 1, 1997, arguing that the existing transition period failed to provide adequate time for affected parties to achieve compliance with the new rules.

The Commission stated that, based on the petitions and comments, it is clear that most station applicants will need additional time to determine that they comply with the new requirements. The Commission noted that an extension of the transition period would: 1) eliminate the need for the filing and granting of individual waiver requests; 2) allow time for applicants and licensees to review the results of the decisions that will be taken in the near future addressing other issues raised in petitions; and 3) permit applicants to review a revised information bulletin and make the necessary measurements or calculations to determine that they are in compliance.

The Commission indicated that it did not concur with petitioners who suggest that granting any extension of the

transition period will have significant adverse effects on public health.

Therefore, the Commission has extended the transition period to September 1, 1997, for most radio services. For the Amateur Radio Service, the transition period has been extended to January 1, 1998. Additionally, the Commission will allow changes to amateur radio operator license examinations to be made as the examinations are routinely revised between now and July 1, 1998. The Commission believes that these extensions are necessary so that applicants and licensees will have adequate time to understand the new requirements and to ensure that their facilities are in compliance with them.

Action by the Commission December 23, 1996, by First Memorandum Opinion and Order (FCC 96-487). Chairman Hundt, Commissioners Quello, Ness, and Chong.  
-FCC-

News Media contact: Patricia A. Chew at (202) 418-0500. Office of Engineering and Technology contact: Rick Engelman at (202) 418-2445 and Robert Cleveland (202) 418-2422.

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*- If a cow laughed, would milk come out its nose?*

*- If nothing sticks to Teflon, how does Teflon stick to the pan?*

## ALL YOU WANT TO KNOW ABOUT THE INTERNET AND MORE -

by John Moore, KK5NU

All the news that's fit to read

With in excess of some 21,000 news groups worldwide and over 17,000 of them in the English language, there is no shortage of topical discussions available on the 'net. Of course if all else fails, and you do not find exactly what you want in any of those existing newsgroups; feel free to start your very own topical area.

In the field of rec. alone there are some 600+ groups carried on many of the local news providers. Listed under the rec.radio hierarchy 16 sub-groups to include the always popular rec.radio.swap can be found. And there are 9 groups listed under rec.radio.amateur ranging from antenna to space. So, point the newsreader portion of your browser or enable one of the client applications devoted to newsreading in the flavor of 'Free Agent' and get involved in the lively discussion.

By word of advice to the newby, take some time to scan the newsgroup of your interest area \*before\* jumping in to post; make your post 'on topic' and to the point; avoid the use of excessive 'quoting' in your post, but by all means use enough to convey the real meaning of what you have to offer; and last, be aware that the text and tenor of your message will be posted not only world wide, but will be kept, saved and retained at various archive sites. In addition, some of the 'search engines' out there on the 'net will index your material by key word, subject and author; so be prepared to defend your position.

And by all means, retain your sense of humor; while your material may appear to you to be the most relevant and on topic of all; some one, out there, will more likely than not, take affront and reply in terms of less than nice endearment. To see just what others have had to say on the subject; point your www browser at the marvelous index facility maintained at [www.dejanews.com](http://www.dejanews.com) - where you can literally search the world by area, subject, author and date. With the use of their filter mechanisms, you can refine your search to pinpoint what you are looking for. So once more, feel free to jump in; the waters just fine...

More to come - .... John Moore, KK5NU

## HOUSTON SHOT NEWS by Al Mattis-N5AFV

Ten Ten International has announced that a new CW award program has been instituted. Contacts for the new CW award must be made after January 1, 1997. The CW award manager is Lee Zalaznik, KI6OY.

Ten Ten International has also announced that beginning January 1, 1997, all applications for new Ten Ten numbers and all renewals for U.S. stations should be sent to the Ten Ten International office at:

10-10 International Net, Inc.  
643 North 98th Street  
Omaha, NE 68114-2332

Carol Hugentober, K8DHK, will continue to be the DX membership manager.

The 1997 Ten Ten International Convention will be held in Council Bluffs, Iowa on July 10-13, 1997. If you can't make it to the convention, consider attending the 9th annual Texas Hill Country Ten Ten Gathering which will be held on June 1, 1997, at the residence of Jack Moore, K5CC (ex-K4NF), near San Antonio. This gathering provides an opportunity for Houston area Ten Ten members to meet a number of active Ten Ten paper chasers from outside the Houston area.

If you surf the Internet, remember to check out the Ten Ten International web page at <http://www.lehigh.edu/lists/tenten-1/>. This web page has information about Ten Ten International, as well as many of the Ten Ten chapters throughout the world. The web page contains links to pages maintained by several chapters as well as by individual members.

The Houston SHOT chapter now has a home page on the Internet. Check it out at <http://www.clarc.org/shot/>. The SHOT chapter thanks Bruce Paige, KK5DO, for constructing and maintaining the page, and the Clear Lake Amateur Radio Club (CLARC) for providing space on their server for the page.

Paper chasers continue to be active on 28.345 MHz and 28.375 MHz when the band is open. Chapters with specials this month include GB Ten (DX), Eagle Watch (AL), Fort McHenry (MD), and Cornerstone (MD). Ten Ten members were saddened to learn that Don Cramer, AA3CA, former certificate manager of the Fort McHenry chapter, and Bill

(Continued on page 6)

# 10-10

Olson, WD0AEI, one of the founders of the Air Capital chapter, have become silent keys. Word has also been received that Roy Bain, chapter head of the Arizona Thunderbird chapter, has been hospitalized.

Several new Ten Ten chapters have formed. Phil Harich, N3UNF, is chapter head of the new Chesapeake Bay (MD) chapter. Larry Roth, KA9ADD, is the certificate manager of the new Route 66 (IN) chapter. The Channel Islands chapter has also been formed in California, but details are not yet available. It is wonderful to see these new chapters become active, and the Houston SHOT chapter is pleased to welcome them to Ten Ten International.

Propagation on ten meters this past month continued to be sporadic. There were a number of good domestic openings, however, the signals had very marked QSB, and the openings did not last long. DX openings to Latin America also occurred. We all look forward to propagation on ten meters continuing to improve in the coming months as we head into the next solar cycle.

Remember, the Houston SHOT (Space Houston On Ten) 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 Ten Ten number. If you are not a member of Ten International and wish to join the organization, please check into the net. There are a lot of exciting activities in Ten, and many friendly people can be found on the ten meter band.

## PUBLIC SERVICE EVENTS

By Scott Pederson  
ki5dr

First off, I want to say **THANK YOU!!!!!!!** to all the great people who have volunteered during 1996. Your help and support was absolutely invaluable to all of the non-profit organizations who benefited from our skills. Without hams, many of these fund-raising events would be fund losers.

This year proves to be a great year for Ham volunteers and PSEs! 1996 was an amazing year, with one of the largest turnouts for the MS-150, Good publicity during the Warm-Up Series, Crazy weather for the Houston Marathon, as well as a



good turnout for the Alamo Challenge.

In 1997 we're hoping to elmer many new hams into volunteering for PSEs. This last year we've noticed the same group of people putting forth their efforts for each of the events, but with a club full of 177+ members, we ought to have more.

One of the directives from our illustrious president, Gailen, N4SKR, was to coordinate with the VE team and help recruit some of the new hams being licensed. Since they often are unfamiliar with the procedures of how to operate during PSEs, we will be providing a training class this year to help people practice. Another idea suggested that we're going to implement is a "Buddy System" during events where a newer ham can ride along and help out under direction of one of the Veterans.

Providing Public Service and Emergency Communications is one of the **fundamental** reasons why Amateur Radio exists. So let's put our collective heads together and participate more. There will be plenty of opportunities in 1997 to chip in and do our part.

I am working on some really neat **awards** for participating this year. Stay tuned for further details!

## The Space Houston On Ten (SHOT) Chapter

of 10-X International now has a home page on the world wide web. The URL is

<http://www.clarc.org/shot>

Information about joining the chapter and how the awards are issued may be found on the page.

## The BVARC CW Practice Net meets every Monday &

Wednesday at 8:30pm on

146.47 simplex and 28.14647. Code is sent at 5, 8, 13 and 20 WPM and

all text comes from QST. No code is sent the last Monday of the month.

I am looking for someone to take over the code practice net for 1997 as Louis, KD5GM, did it for 1995, and I have done it for 1996. If you can help, please call me at 933-8385 x201 or email me at [kk5do@amsat.org](mailto:kk5do@amsat.org)

- *Why isn't phonetic spelled that way?*
- *Why are there interstate highways in Hawaii and Alaska?*

**RESULTS OF THE JANUARY 14TH AMATEUR EXAMS** by: Harold Parker, ND5F

B-VARC again sponsored and administered the ARRL's Amateur Radio Examinations that were held on Tuesday evening, January 14, 1997 at Strake Jesuit College Preparatory in Houston.

**V. E. TEAM:**

- Harold Parker, ND5F
- George Pavlik, N5MCK
- Don Schexnailder, AB5IV

**ASSISTANTS:**

- Cass Germany, KG5IT

A total of 23 exams were administered during the evening to 10 applicants. Seven (7) unlicensed candidates received their new licenses: 1 Technician Plus and 6 Technician with a total of 19 elements passed. The overall "pass rate" for the evening was 83%.

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

- **Christie Barclay - Technician**
- **Anthony Bradford - Technician**
- **Kyle Cowen - Technician**
- **Juan Lozano - Technician Plus**
- **James Paul, KA9QHR - Elements 3B,4A,4B**
- **Tom Ross - Technician**
- **Betty Russell - Technician**
- **John Sheffield - Technician**
- **Nancy Tipton, KC5WMV - Element 3B**

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.

**B-VARC Rag Chew Net Check-Ins**

by Sam Wilson, N5CPA

3.960 Mhz +/- 3Khz...Wed@ 8:00 P.M. Local

12/4/96 - N5CPA, WD5CJL, KK5DO, KG5KV, AA5JW, AB5OK, WB8SVR, WB4KTF/5, WB5NES, K5LJ, W5IHY, W5TEM

12/11/96 - N5CPA, W5EFB, KG5KV, W5GHK, KM5DG, KI5SC, KB5PAJ, WD5CJL, KK5DO, W5IHY, K5LJ, W5RH, W5TEM, AK5G

12/18/96 - N5CPA, W5EFB, W5IHY, KK5DO, KG5KV, KM5DG, N5ECP, K5LJ, W5GLD, KK5JJ

**New Communications products**

By Scott Pederson, KI5DR

Has anyone seen or heard about a new product called "V-Link?"

Wal-Mart is selling a product called V-Link, and it's touted as a cell phone that talks to other V-Links without airtime charges, monthly billing or fees, etc. Retail price is \$69.95. Accessories include leather case, NiCad batteries, etc. Other features include built-in Voicemail, Paging, and Vibrate mode.

It looks like a full-duplex 900Mhz digital transceiver which uses DTMF paging to call other V-Links. Estimated range is 3,000 feet. These would be nice to have for Public Service events for short range comms, or even shopping at the mall??

How about the new family band suggested by Tandy? These radios operate on the Splinter frequencies of the UHF GMRS band, and are limited to 200mW and fixed duckie antenna. Anyone tried them yet?

**Nautical Smile**

*The following transcript of a radio conversation between a U.S. Navy ship and a Canadian source off the coast of Newfoundland was released by the Chief of Naval Operations on Oct. 10:*

**U.S. Ship:** Please divert your course 15 degrees to the north to avoid a collision.

**Canadian:** Recommend you divert YOUR course 15 degrees.

**U.S.:** This is the captain of a U.S.Navy ship. I say again, divert your course.

**Can.:** No. I say again, divert YOUR course.

**U.S.:** This is an aircraft carrier of the U.S. Navy. We are a large warship. Divert your course now!

**Can.:** This is a lighthouse. Your call...

**Scanner Jack's Corner**

by Jack Roberts, KB5TMY

(This month Jack has four recommendations for hand-held scanners which are Triple Conversion. In case you did not know, most scanners are double-conversion, while the more expensive ones are triple-conversion. Triple Conversion helps eliminate birdies, and dead carriers caused by noise and spurious emissions inside and outside te receiver.....Ed)

The four recommendations are -

- AR-8000
- Icom R-1
- Radio Shack PRO-26
- Uniden Bearcat 3000XLT

Next Month he'll review some of the mobile scanners on the market.

Here's a list of frequencies containing all HCSO Constables, HCDA, HCME, HCHD, HC Animal Control, Alief VFD, Tollway Authority, and West University Lifeflight.

Match across and down	860.x	859.x	858.x	857.x	856.x
x.7125					
x.4875					
x.4625					
x.2375					
x.2125					
MISC	868. 7625	868. 4875	868. 2375	867. 9125	867. 6625

**Wireless Lariat Country**

A Report on Laramie, Wyoming's Wireless Net

David R Hughes

Principal Investigator

NSF Wireless Field Test Project.

It may be in an improbable state - Wyoming - where Internet telecommunications has faced a very mixed reception, but there is a project in Laramie involving advanced wireless data communications that has been evolving into an interesting wireless-community model.

Five high speed - 2Mbs Persoft radios - carrying TCP/IP protocol traffic links a University, a non-profit community Internet Service Provider, and three high tech businesses in town, as well as modem dial up customers, while the local school district prepares to link to the same wireless net to connect its 11 sites.

Laramie is the 'college' town of Wyoming. 35 miles from Cheyenne, the city of 26,000 houses the University of Wyoming with roughly 10,000 students. With a unique mix of typical young college students, and highly educated faculty, in a town proud of its conser-

vative cowboy state reputation, it represents quite a cultural and economic spread, from the Union Pacific railroad whose tracks run right past the yuppie Overland Restaurant to modern art galleries right across the street, and a cement plant.

Since the cost for a T-1 Internet backbone feed from the nearest commercial point of presence, in Cheyenne, is \$3,000 a month - from MCI - no local commercial ISP had emerged up through 1995. There is an extension of a service with the domain wyoming.com but it has been so slow and uncertain as a business, that it had an inconsequential practical impact on connectivity in the town. The University, housing a node of Westnet, the academically-rooted regional NSFNET provider, has been providing Internet access for all its students and faculty. But, as typical in such university 'free' connectivity situations, even though 50 dial in modem lines are supported, busy signals have greeted those affiliated with the university trying to get online nights and weekends.

Enter Wireless Lariat.

Several years ago, a dynamic electrical engineer, with Silicon Valley computer skills, moved to Laramie and put down roots there. Brett Glass, persistently overcoming skepticism, bureaucracy, political maneuvering, has managed to organize a non-profit Internet Service - Lariat - which derives its Internet feed from the University, paying the University for it, via a pair of Persoft 2Mbs spread spectrum 'Intersect' radio bridges, thus linking Lariat's server to Westnet and beyond to the Internet.

The system at the University is 4 floors above the computer center, linked to an omni antenna on the roof, which pretty much can reach across the city - from its center. The distance to the edge of the city is less than 3 miles. So the Intersect radios, using WaveLAN technology, can support the 2Mbs E-1 speeds across the city. The radios operate in the 902 to 928 MHz FCC Part 15 no-license bands.

Lariat, operating a BSD UNIX server, on a DX4 100 MHz Pentium 486, is housed in a building owned by Glass in a residential area. Its Persoft Intersect radio - costing approximately \$4,000 - is linked to a small Yagi connected to the chimney of the house. The antenna is so placed that heat from the furnace will keep the critical parts of the antenna ice-free in the Wyoming winters.

Lariat had, at the time I investigated it, 6 outside-line 28.8 modems, for dial up service, at a public cost of only \$4.25 a month, with 1 hour usage limitations per day. Its growth already will necessitate more dial up lines.

The economy of using the Wireless T-1 link to the University site and Westnet permits passing on the savings to public subscribers. Even though all university students and faculty have free access to the net at the college, and by dial in, the cost to the college - approximately \$55 per modem telephone line (charge back cost for internal accounting) - inhibits them from simply adding lines to meet demand, with no offsetting revenue. So even faculty and students subscribe to Lariat, and are thus able to reach the university resources, and the net, through Lariat, at very low cost, in part made possible by wireless at such data rates that it can grow substantially in number of simultaneous users.

The installation of the data radios - always a matter of significant factors affecting communications, from potential interference to line-of-sight conditions - was aided by the presence in town of many highly skilled Ham radio operators. They were able to use Spectrum Analyzers and scanners which are part of the equipment of the local Public Radio station - KUWR - to assist in antenna sighting and

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Flight School • Hangerage • Tie Downs

(Continued from page 8)

determination of interfering signals, as well as periodically help Glass test the throughput of the radios. (He reports that they have been operating, since installed at the beginning of 1996, at optimum efficiency across Laramie. And there is no reported interference from other types of electromagnetic emissions)

From the time Brett Glass of Lariat contacted Persoft, a Wisconsin wireless company, - after getting nowhere with a competitor wireless company - it cooperated generously with him, and his community networking ideas. It provided technical advice, and initial wireless site-survey assistance, and discounted the radios. But one of the most interesting developments beyond the above has occurred, as three independent Laramie companies have signed up with Lariat, purchased their own Persoft Intersect Bridgeradios for \$4,000, integrated them into their own local computer systems or network, and used their wireless links to Lariat, and the radio at the University, to be connected to the Internet. Since the 5 radios 'peer' at this time - all radios communicating with and through all others, rather than have forced routing, no extra routing systems have been attached to the radios at the company sites. Each business pays Lariat \$450 a month for their T-1 connection. Lariat is obligated to pay the University \$150 for each such connection, thus is able to keep \$300 a month from each company connected, together with the community \$4.25 individual accounts, to operate the non-profit service, do billing, technical installation and support, and keep the net operating. The economic model works, using the avoidance of local loop recurring US West charges by using wireless for the high speed connections. And spread sheet analyses of a local 'commercial' ISP, given the large influence of the 'free' university connections, would not work. Nor would a wired solution work, given the per month cost for local T-1 loop from the phone company.

The alternative for each company would be \$3,000 each per month for a traditional T-1 connection, plus the cost of a T-1 capable CSU/DSU and router. Which would also include the US West local loop charges to the company premises. Or \$9,000 a month. A very substantial savings. While the connected companies get T-1 speeds at one-fifth the traditional fiber connection cost.

But in adding Internet accessible, Web based interviewing for greater cost-effectiveness, it required T-1 data net access, not just voice, also, which Lariat and the wireless Persoft radios have offered.

And at its core are 5 non-recurring cost, high speed, spread spectrum radios, casting their overlapping loops across the city - creating a true Wireless Lariat.

www.lariat.org brett@lariat.org  
dave@oldcolo.com http://wireless.oldcolo.com

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# THE B-VARC BULLETIN - FEBRUARY 1997



The Monthly Publication of the  
 Brazos Valley Amateur Radio Club.  
 Serving the Greater Houston Area.  
 Club Callsign - W5RPT

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The Brazos Valley Amateur Radio Club (B-VARC) was originally organized in 1978, primarily as an emergency communications group available to assist the communities of Missouri City and Stafford, when required. Since that time, B-VARC has grown and expanded its activities to become the most active HAM radio club in the Southwest Houston area.

Today, B-VARC is truly a general-interest club with an impressive record of Public Service. The Commitment to service has been recognized by the Amateur Radio Relay League (ARRL) with the coveted status of Special Service Club. We are proud of our members who represent the finest in Amateur Radio. Membership is not limited to licensed operators, but is open to anyone with an interest in Amateur Radio. Meetings are held at 7:30 p.m. on the second Thursday of each month, at the Sugar Land Community Center. Talk-in assistance is available in the 145.470, 444.550, and 442.50 MHz repeaters.

To obtain information about the club, its activities, or about joining B-VARC, contact Betty Wilcox, KA0TEN, at (713) 859-6512

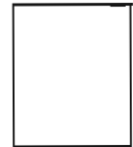
B-VARC Meeting Schedule	B-VARC Eating Schedule
Thursday, December 5th Board of Dir. Meeting 7:30 p.m. Sugar Land Comm. Center Open to all B-VARC Members	Saturdays-7:00 a.m. to 8:30 a.m. Location: New York Coffee Shop, 9720 Hillcroft @ S. Braeswood
Thursday, December 12th B-VARC Regular Meeting 7:30 p.m. Sugar Land Comm. Center Program:	3rd Friday dinners - 6:30 p.m. SHARP! Location TBA
	Last Sunday Lunches - 2:30 p.m. Location TBA

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