B-VARC BULLETIN

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

Editor-in-Chief: Irv Smith, KB5EXM 437-4803
Production Manager: Roland Torres, KB5EQH 622-7810 (0700-1600 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.

For information about the club and any of its activities, please call Stu Lamkin, WB5IGG, (713) 777-3345.

Volume: 12 Issue: 8 August 1989

ADDRESS CORRECTION REQUESTED

From: Brazos Valley Amateur Radio Club, Inc.
P.O. Box 1630
Missouri City, TX 77459
Telephone: (713) 777-3345

B-VARC MEETING SCHEDULE

Thursday, August 10 General Meeting
7:30 pm Missouri City Fire Station
(Meet at Hitching Rail for BBQ @ 6:30)
Program: Lori Sturgeon, Beldon Cable
(Free Samples!)

Thursday, Sept. 7 Board Meeting
7:30 pm Missouri City Fire Station

Allen Mattis N5AFV
5314 Wigton
Houston, Tx 77096

B-VARC CALENDAR: AUGUST 1989

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
HOUSTON AREA V.E.EXAM INFO: STU (WB5IGG) 713-777-3345	FUTURE MEETINGS: SEPT 7: BOARD MEETING SEPT 14: GENERAL MEETING	FUTURE B-VARC & PUBLIC-SERVICE EVENTS: SEPT 11: NOVICE CLASS STARTS OCT. 14: ALA-200 BIKE RIDE TO SAN ANTONIO			NOTE: Nets meet weekly even if not shown	Please send info and corrections to Irv (KB5EXM) 437-4803
		1 10 X SHOT AMSAT 2000hrs 2200 hrs 28.488 145.45	2 B-VARC C.W. CODE RAG-CHEW PRACTICE 2030 hrs 2030 hrs 3.960 147.32 (Busy? +3 Khz)	3 BOARD MEETING 1950 hrs M.C. FIRE STATION #1 (KEY MAP S70-T)	4 LUNCH BUNCH 1130 hrs: LOCALE VARIES (CHECK IN: 442.5 OR 443.15)	5 C.W. B-VARC BREAKFAST 2030 hr 0730 hrs DENNY'S 147.32 SHARPSTOWN 10-10 Contest Greg K5LTW
6 W HOUSTON RACES 2000 hrs 146.66	7 ARES B-VARC NET 2000 hrs 2100 hrs 147.30 145.47	8 V.E. EXAMS 1900 hrs, STRAKE JESUIT STU (WB5IGG), 777-3345	9 B-VARC C.W. CODE RAG-CHEW PRACTICE 2030 hrs 2030 hrs 3.960 147.32 (Busy? +3 Khz)	10 GENERAL MEETING 1950 hrs @ MC FS #1 PROGRAM: LORI STURGEON OPTIONAL BBQ @ 1800 hrs HITCHING RAIL: STAFFORD	11 LUNCH BUNCH 1130 hrs: LOCALE VARIES (CHECK IN: 442.5 OR 443.15)	12 C.W. B-VARC BREAKFAST 2030 hr 0730 hrs DENNY'S 147.32 SHARPSTOWN
13 W HOUSTON RACES 2000 hrs 146.66	14 ARES B-VARC NET 2000 hrs 2100 hrs 147.30 145.47	15 10 X SHOT AMSAT 2000hrs 2200 hrs 28.488 145.45	16 B-VARC C.W. CODE RAG-CHEW PRACTICE 2030 hrs 2030 hrs 3.960 147.32 (Busy? +3 Khz)	17	18 LUNCH BUNCH 1130 hrs: LOCALE VARIES (CHECK IN: 442.5 OR 443.15)	19 C.W. B-VARC BREAKFAST 2030 hr 0730 hrs DENNY'S 147.32 SHARPSTOWN
20 W HOUSTON RACES 2000 hrs 146.66	21 ARES B-VARC NET 2000 hrs 2100 hrs 147.30 145.47	22 10 X SHOT AMSAT 2000hrs 2200 hrs 28.488 145.45	23 B-VARC C.W. CODE RAG-CHEW PRACTICE 2030 hrs 2030 hrs 3.960 147.32 (Busy? +3 Khz)	24	25 LUNCH BUNCH 1130 hrs: LOCALE VARIES (CHECK IN: 442.5 OR 443.15)	26 C.W. B-VARC BREAKFAST 2030 hr 0730 hrs DENNY'S 147.32 SHARPSTOWN
27 W HOUSTON RACES 2000 hrs 146.66	28 ARES B-VARC NET 2000 hrs 2100 hrs 147.30 145.47	29 10 X SHOT AMSAT 2000hrs 2200 hrs 28.488 145.45	30 B-VARC C.W. CODE RAG-CHEW PRACTICE 2030 hrs 2030 hrs 3.960 147.32 (Busy? +3 Khz)	31	DX SPECIAL! FORMER B-VARC MEMBER, TOM (KC5US) OPERATING FROM ST KITTS-NEVIS LISTEN AROUND 14.03 AND 21.03 SATURDAY, SEPTEMBER 2ND	

o not write above this line

Field Day

1. Field Day Call Used WJ5B 2. Club or group name Brazos Valley ARC

3. Field Day location Bear Creek Park War Memorial Dr. Houston

4. Check if you began set-up prior to 1800 UTC Saturday. ☑ 5. Number of people participating in this operation. 75 6. Number of transmitters in simultaneous operation. 6

7. Entry Class (check one only):
- [1] A. Club or non-club group portable
- [ ] B. Non-club portable 1 op ___ 2 op ___ list operators ___
- [ ] C. Mobile
- [ ] D. Home station (commercial power)
- [ ] E. Home station (emergency power)

8. Power source
- ☑ Generator
- ☐ Battery
- ☐ Commercial mains
- ☐ Other

9. Call sign of Novice/Technician station N5GZW (class 2A and above)

10.

	CW			PHONE	
	QSOs	Power Output		QSOs	Power Output
160	—	—	160	—	—
80	8	4	80	5	4
40	—	—	40	37	100
20	~~343~~	100	20	~~280~~	100
15	15	50	15	98	100
10	—	—	10	10	25
6	—	—	6		—
2	43	25	2	-	—
Other	—	—	Other	~~17~~ 14	4, 25
Other	—	—	Other	—	—

11. Total CW QSOs ~~314~~ 309 × 2 = ~~628~~ 618

Total phone QSOs 638 × 1 = 638

Total QSO points ~~1266~~ 1256 = ~~1266~~ 1256

~~314~~ 309	CW QSOs	434	PHONE QSOs
0	Novice CW QSOs	204	Novice PHONE QSOs
~~314~~ 309	Total CW QSOs	638	Total PHONE QSOs

12. Total QSO points ~~1266~~ 1256 × Power Multiplier (5 W or less, ×5; 150 W or less, ×2; over 150 W, ×1) 2

equals Claimed Score (less bonus points) ~~2532~~ 2512

13. Bonus points

Attach proof required for all bonus points claimed. All bonus points will be added at ARRL HQ

- ☑ 100% Emergency power
- ☑ Media Publicity
- ☑ Location in Public Place
- ☐ Information Booth
- ☐ Message to SM
- ☐ W1AW Field Day message
- ☐ Messages Handled (no.) ___
- ☐ Satellite
- ☑ Natural Power
- ☑ Packet Radio
- ☐ Other ___

14. *This certifies that the station whose call appears above was operated in accordance with the current Field Day rules and that, to the best of my knowledge, the points and scores set forth in the above summary are correct and true. This station was operated in accordance with FCC rules and regulations. I agree to be bound by any decision of the ARRL Awards Committee.*

Date 7-12-89 Signed J. H. Manz Call N5GZW signature/call of club president

15. Full mailing address (please print):

Brazos Valley Amateur Radio Club
Name c/o Herb Manz
Address 903 Fenn
Rosharon, TX 77583

ATTENDANCE ROSTER

B-VARC GENERAL MEETINGS

* = NEW CALL

				M A Y	J U N	J U L
KF 5 VZ		BRENSON	ABBOTT	X	X	
AA 5 JW		CARL	ALBRECHT	X	X	X
KB 5 JMF		LOIS	ANDREWS		X	X
W 5 RNK		JIM	ARNOLD	X		
		SHIRLEY	ARNOLD	X		
N 5 OFD		TERRY	BAIRRINGTON		X	
KA 5 MCP		RUSSELL	BLACK		X	X
N 5 APW		GERRY	BORG	X	X	
		BETH	BROWN		X	
N 5 NTO		DON	BROWN		X	
WA 5 ACF		TOM	CASEY	X		
WD 5 L		RICK	COVERT	X		X
N 5 OUZ	*	LAWRENCE	COX	X	X	X
N 5 LYB		FRED	CREEL	X		
N 5 KXU		BILL	DESSENS	X	X	X
KG 5 JT		MARK	DESSENS	X	X	X
WA 5 F		RAY	DILLARD	X	X	
		ALICIA	DYER			X
AA 5 GA		DAVE	DYER		X	X
N 5 LGS		KARLA	DYER		X	X
WB 4 LZG		GLENN	EDWARDS		X	X
		MELANIE	EDWARDS		X	X
KB 5 ICO		SUSAN	EDWARDS		X	X
KB 5 IQP		GREG	FOSTER	X		
WA 5 OEN		STEVE	GOTTLIEB		X	X
WA 5 SCE		RAY	GRIMES			X
		SHARON	GRIMES			X
N 5 LXE		CINDY	HAMMER	X		
WJ 5 B		DAVE	HAMMER	X	X	
WD 5 JLT		MARK	HANZ			X
W 5 WVX		ED	HARWELL	X	X	
WA 5 TWL		JOHN	HOLLIMAN		X	
		JACK	JACKSON		X	
ND 5 E		GEORGE	JOLLY	X		
KA 5 WHK		KATHY	JOLLY	X	X	
N 5 OUT	*	DICK	KRUSE	X	X	X
N 5 NTP		JOHN	LAMBUTH		X	
WB 5 IGG		STU	LAMKIN	X	X	X
KB 5 EST		LEE	LANCE		X	
KB E GIM		LINDA	LANCE		X	
		MICHAEL	LANCE		X	
K 5 LTW		GREG	LEFEBVRE	X	X	X
		CINDY	LHAMON			X
? 5 ???		STEVEN	LHAMON			X
N 5 AFV		AL	MATTIS	X	X	X
	*	DOUG	McPHERSON		X	X
KA 5 YSL		RICK	MEYER			X
N 5 GZW		HERB	NANCE	X	X	X
		JORDAN	NOVELLI	X		
WA 5 ETS		VINCENT	ORLANDO	X	X	
KB 5 AKS		LARRY	OVERACKER	X	X	X
ND 5 F		HAROLD	PARKER	X	X	X
AK 5 G		RANDY	POLLARD	X	X	X
KG 5 KV		CHARLES	PROCHASKA	X	X	X
KG 5 UJ		RANDY	PUGH			X
N 5 JKD		ROBERT	RICKETTS	X	X	
		JOHN	ROWE		X	
N 5 ECP		JEFF	SALMONS	X		
KA 5 TUQ		DON	SCHEXNAIEDER	X		X
KB 5 EXM		IRV	SMITH	X	X	X
		KARI	SORENSEN			X
KA 5 SLG		DAVID	TAYLOR	X		X
KB 5 ION		MELVIN	THATCHER	X	X	
N 5 MPN		BILL	TODD-BROWN	X	X	X
KB 5 EQH		ROLAND	TORRES	X		X
N 5 OFE		GARY	TUCKER	X	X	X
WN 5 A		JACK	VAN DEMARK	X	X	X
WB 6 LSB		BOB	VERDON		X	
KF 5 XQ		D.C.	WEISS		X	
			TOTAL	39	47	39

BRAZOS VALLEY AMATEUR RADIO CLUB
1989 ACTIVITY ROSTER
compiled by Allen Mattis N5AFV

A.HOUSTON TENNECO MARATHON
B.CHALLENGER CUP 5K
C.FINE ARTS 5K
D.MOTHER HUBBARD 5K
E.CONOCO RODEO RUN 10K
F.WOMEN'S HOSPITAL 5K
G.AZALEA RUN 5K
H.HULL AIR SHOW
I.MS-150 BIKE TOUR
J.MAGIC CIRCLE 10K
K.ALA CLEAN AIR BIKE RIDE
L.DAD'S DASH 6K
M.ARRL FIELD DAY

Abbott, Brenson	KF5VZ	E,I
Albrecht, Carl	AA5JW	H,I
Black, Russell	KA5MCP	M
Borg, Gerry	N5APW	A,B,C,E,G,H,I,M
Cheek, Ralph	KB5DNT	A,C,D,E,G,H,I,J,K,L,M
Covert, Rick	WD5L	M
Cox, Lawrence	KB5JQS	M
Dessens, Bill	N5KXU	C,G,H
Dessens, Mark	KG5JT	M
Dilliard, Ray	WA5F	A,C,E,F,G,H,I,J,K,L,M
Dyer, Alicia		I,M
Dyer, Dave	AA5GA	A,C,E,F,I,M
Dyer, Debbie	KB5GUY	A,C,I,M
Dyer, Karla	N5LGS	A,C,E,F,I,M
Edwards, Glenn	WB4LZG	A,C,D,E,H,I,K,M
Edwards, Melanie		A,C,D,M
Edwards, Susan	KB5ICO	A,C,D,F,H,I,K,M
Eilers, Wade	WN5TEN	I
Foster, Greg	KB5IQP	H,M
Gottlieb, Steve	WA5OEN	H,M
Hanner, Cindy	N5LXE	I.M
Hanner, Dave	WJ5B	I.M
Harris, Ron	N5MKO	E,H
Hickox, Bill	K5BDZ	M
King, Suzanne	KB5BAY	A,C,D,E,F,G,H,I
Lamkin, Stu	WB5IGG	A.M
Lance, Dave	KB5EYK	C,E,H,I
Lance, Lee	KB5EST	H
Mattis, Allen	N5AFV	B,C,E,F,H,L,M
Morrison, Henry	W5RIY	A,C,D,E,I,M
Nance, Herb	N5GZW	H,I,M
Overacker, Lawrence	KB5AKS	M
Parker, Harold	ND5F	A,E,F,G,H,I,J,L
Pollard, Randy	AK5G	C,H,J,L,M
Prochaska, Charles	KG5KV	F,M
Ricketts, Robert	N5JKD	I,L,M
Smith, Irv	KB5EXM	E,I,M
Todd-Brown, Bill	N5MPN	M
Van Demark, Jack	WN5A	D,F,H,I,J,M
Warden, Mike	WB3HZP	A,E

PLEASE REPORT CORRECTIONS OR ADDITIONS TO N5AFV

B-VARC RAG CHEW NET CHECK-INS
3.960 MHZ 8:30PM WEDNESDAY
compiled by Allen Mattis N5AFV

JUNE 21, 1989
N5AFV NCS, N5MPN, N5ECP, W5RNK, N5NTP, KG6KV, WN5A, AK5G

JUNE 28, 1989
N5AFV NCS, KC5AC, KG5KV, N5MPN, WN5A, KG5UJ, N5NTP, AK5G, WD5CVQ

JULY 5, 1989
N5AFV NCS, KB5DNT, KG5KV, KG5UJ, N5MPN, N5ECP

JULY 12, 1989
N5AFV NCS, KB5DNT, KG5KV, N5MPN, N5NTP, AK5G

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RESULTS OF THE JULY 11TH EXAM:

by: Harold Parker, ND5F

B-VARC again sponsored and administered the ARRL's Amateur Radio Examinations that were held on Tuesday evening, July 11, 1989 at Strake Jesuit College Preparatory in Houston.

The V.E. Team and Assistants:

Ray Dillard, WA5F
George Jolly, ND5E
Stu Lamkin, WB5IGG
Irene Gordon, N5AYX
Hy Gordon, NC5A
Carl Albrecht, AA5JW
Cass Germany, KG5IT
Harold Parker, ND5F

A total of thirty-eight (38) exams were administered during the evening to fifteen (15) applicants. Two (2) unlicensed candidates received their new Technician License and four (4) candidates upgraded their licenses with a total of nineteen (19) elements passed. The overall "pass rate" for the evening was fifty (50%) percent.

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

Lois Andrews, KB5JMF - Technician
Miguel Chiusano, KB5JPX - General
Stephen Farlow - Technician
Michael Garay, KB5ISX - Technician
Godik Gyldenege - Elements 2 and 3A
Kevin Knox, KF5BW - Element 4B
Steven Lhamon - Element 3B
Larry Moore - Technician
George Reynolds - Elements 2 and 3A
Timothy Stanley - Element 2
Jennifer Waits - Element 1A
Hans Zorn - Technician and 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.

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VOLUNTEER EXAM SESSIONS FOR AUGUST & SEPTEMBER 1989

Stu Lamkin WB5IGG

Following are Amateur Radio license examination sessions scheduled to be held in this general area during the next two months, according to ARRL/VEC. In addition to the Houston Metro area, those scheduled within 200 miles are included because we have started receiving inquiries about such when none are scheduled to be held within the Houston vicinity. The listing information include A. Sponsoring group, B. Date and location of session, and C. Name & phone number of whom to call for details of the session.

1.A. Brazos Valley ARC
B. Aug. 8 & Sept 12 in Houston
C. Stu Lamkin, 713-777-3345

2.A. Houston Echo Society
B. Sept. 23 (or Sept. 30) in Houston
Irv Block , 713-497-8750

3.A. Sam Houston AR Klub
B. Aug. 12 in Cleveland TX
C. Sam Neal, 713-592-2157

4.A. San Antonio RC
B. Sept. 2 in San Antonio
C. William Davis, 512-735-1622

5.A. Unsponsored
B. Aug. 12 & Sept. 9 in Humble
C. Jim Shotwell, 713-443-2812

10-10 QSO PARTY

On the weekend of August 5th, the Houston SHOT 10-10 group will be joining in a QSO party. Last year they won the travelling trophy, and they hope to keep it this year.

Contact Stu (WB5IGG) at 777-3345 for information. Do it early enough to get your 10-10 number. You can contest with out it, but your points count more if y have it.

Note that the Novice band is used, so all hams can participate.

NEW FALL '89 NOVICE COURSE

Stu Lamkin WB5IGG

B-VARC's Fall '89 Novice course is scheduled to have its first class meeting on Monday, Spetember 12 in a classroom on the Strake Jesuit Ptep. School campus. There will be no tuition fee and students must obtain their own copies of the NEW 8th edition of the ARRL publication TUNE IN THE WORLD WITH HAM RADIO. It will be available in the ham radio stores or directly from ARRL after mid-August.

The 7th Edition will be obsolete because the Novice question pool has been from 301 to 372 questions and examinations given after October 31 must obtain questions from the new pool.

For more details or any question, call Stu Lamkin WB5IGG at 713-777-3345.

Reprinted from RADIO COMMUNICATIONS MONITORING ASSOCIATION BULLETIN

MONITORING & THE LAW

Send information or questions to:
Roger West, (MN-052) P. O. Box 52, Balsam Lake, WI 54810

Hello members! If you are a new member of RCMA, "WELCOME"!!! I recently monitored a distress signal on the marine emergency frequency of 156.800MHz. I wrote down what I had heard (which was very little) and called the Polk County Sheriff. He took down what little information I had and said that he would be contacting the United States Coast Guard. I feel this would be a good time to review what a person should do when they hear a distress transmission. These guidelines were writtten by William Mauldin, General Editor of RCMA.

WHAT TO DO WHEN YOU MONITOR A CALL FOR HELP

Here are a few items you should note at your monitoring post in the event you monitor a radio call for help. Many times with todays frequency conjestion and interference, only a radio monitoring buff will hear the call for assistance. Take note and know exactly what to listen for - and who to call.

1. Get the identification of the unit or person calling for help. Have a pencil and paper close by your monitor, and write down what you hear.
2. When relaying the information, give the official call signs and unit numbers that you heard on the air. If you are uncertain, say so. Don't give anything that is not totally correct without saying so.
3. Relay the exact nature of the distress, emergency or danger.
4. If you are monitoring and a description is given, repeat it exactly without adding comments or additional information.
5. Get as much information as possible on the number of people involved.
6. Pay special attention to information on injuries or deaths involved.
7. Relay exact information about the location involved. If you are uncertain about the location, by all means say so. This is very important, as help can not be dispatched without good, clear directions. Be exact and give details.
8. Note the frequency used in the distress call. Was it strong or weak signal? Note other things which might be of help in identification of the transmitting unit.
9. In your relay, mention anything unusual about the signal, unit numbers or other information which might be helpful. Do not state that you think it was a false call in your report. let the authorities work on this in their investigation.
10. Note exactly what kind of help is needed, and how quick.
11. Give additional information of the weather or site conditions which might be helpful to rescue teams as they arrive.
12. If you have the name of the officer, department, aircraft, or person making the call, note it in your report.
13. If in doubt, call someone and relay your information. Give your name and telephone number for future reference. It is always better to let the authorities check out any distress situation then to not say anything at all.
14. Don't give any uncertain information without saying clearly that you "are not certain about this part", and give the reason why you are uncertain.

here are some telephone numbers to note. Although these are mostly for short wave radio distress reports, they should be noted for possible emergencies:

Scott Air Force Base (nationwide emergencies) 1-800-851-3051

For reporting EMERGENCIES ONLY: U.S. COAST GUARD

ATLANTIC		PACIFIC	
Boston	617-223-3644	Central Pacific	808-546-7109
Cleveland	216-293-3984	Eastern Pacific	415-556-5500
Miami	305-350-5611	Long Beach, CA	213-590-2223
New Orleans	504-682-6255	San Francisco	415-556-5500
New York	212-668-7055	Seattle	206-299-5886
Norfolk	804-398-3231	Northern Pacific	907-586-7340
St. Louis	314-425-4614		

In addition to these numbers, you need to note the numbers for your state police/highway patrol, the local police and sheriff, local EMS and fire. Don't forget to note the number for the closest FAA Flight Service Station and airport control tower. You should have these numbers available, as they are difficult to find when you are excited and trying to remember the facts during an actual emergency.

Editor's note: This is an excellent article and I agree with Bill Mauldin 100%.

(D.) Monitoring ceelular and mobile telephone conversations is illegal.

(E.) It is a federal crime, with severe punishment and/or fines to:

1. Divulge what you hear on a monitor.
2. To make use of information you hear.

Meteor Burst Communications

Tracking Trucks Without Satellites
Reprinted from May 1989 High Technology Business
Sent in by Ronald B. of Portland Oregon

If Transtrack Inc. is successful, the nation's truckers won't depend on expensive, finite satellites to keep track of their long-haul vehicles. The Marion, Mass.- based startup bounces its tracking signals off a medium that never needs replacement: the ion trails left by billions of dust-sized meteors between 53 miles and 72 miles up.

By bouncing VHF signals off this "meteor scatter," as it's called, Transtrack believes it has the low-cost answer to keeping track of long-haul trucks. Each meteor trail lasts from a fraction of a second to several seconds, but that's long enough to transmit vehicle-tracking data on a high-speed data network. For longer messages, Transtrack must use a sequence of meteor trails and piece the resulting signals together at its network control center.

The great advantage with Transtrack's system is cost: No need to launch or lease expensive satellites that eventually need replacements. A 1986 study commissioned by Transtrack indicates that an investment in a 1,400-vehicle fleet equipped with the Transtrack system will result in an eight-month payback. The ROI calculation included the telephone cost normally incurred by drivers when they check in with a dispatcher. The national trucking company that authored the study also helped Transtrack fund its research and testing and worked with Transtrack to develop prototypes and system specifications. Transtrack has been using the prototype system and is currently negotiating with a radio manufacturer that will produce the needed hardware.

Transtrack says it designed the system so that its transmissions would not interfere with television reception or other motor carrier licensees; under its FCC license, the company is responsible for alleviating any interference problems.

Mobile units are tracked by at least one base station. Each of the five base stations scattered about the nation monitors vehicles within a 500-to-700 mile radius and can handle several thousand vehicles. Network use is restricted to necessary communications to avoid potential interference with other users of the frequency in the area. In operation, the base station constantly transmits on one frequency (43.92 megahertz) and trucks respond on another (44.42 megahertz).

The base station's probe signal reaches a mobile unit when a meteor creates a suitable trail of ions. When the mobile unit receives a signal, it responds with its own short burst signal, indicating position data and, if necessary, a communication text message. Position data, based on Loran-C, is picked up by the radio transceiver, which transmits it to the nearest base station. Receipt of the message is acknowledged in both directions.

Communications and position-location information are carried between base stations and the network control center via phone lines. The 2,000 watts of base station power is expected to overcome any mobile unit interference problems. Weather conditions aren't expected to have any effect on the system.

As far as the FCC is concerned, Transtrack is ready to roll. Last year the FCC authorized construction and operation of a nationwide network. The approval permits up to 64,000 mobile units, the maximum that can be covered by the five base stations, which overlap each other and provide system redundancy.

But the system is still on trial. Transtrack has completed initial testing with North American Van Lines and will equip its tractor-trailers with the first production units in March. North American Van Lines will at first use the system for high-value shipments. According to Transtrack, three to four other truckers will soon test its system.

Another company, Pegasus Message Corp., Herndon, Va., has an experimental license from the FCC to operate its proprietary meteor-burst tracking system and hopes to inaugurate nationwide coverage this year.

Some additional details from USSN

Transtrack wasn't the first company to be granted a waiver of the FCC rules to allow meteor burst communications systems in the continental United States. The FCC first amended its rules in 1983 to permit such systems in the state of Alaska (where meteor trails occur with much greater frequency, and also the need is much greater). Four frequencies were allocated, two for use by Common Carriers for use on a for-profit basis (42.40 and 44.10 MHz) and two for use in the Private Land Mobile services (44.20 and 45.90). The rate of dispersion and the time required for practical burst techniques makes the 40 to 50 MHz frequency range the most effective. The State of Alaska had indicated that they intended to set up their own system to transmit telemetry from remote locations within the state. Since then a number of concerns have applied for and received waivers to operate systems in the lower 48.

Transtrack has operated their system for a few years in Massachusetts under an Experimental license and subsequently received permission to operate a trial system in Florida also. Their permanent waiver is typical of those being issued. Their base stations, which transmit the interrogation of the remote units, utilize high power (for which a waiver of the FCC rules is required) but are located in remote areas where the likelihood of interference is small. We're talking about real metropolises here: Sawmill, Arizona, Tipton, Mississippi, Haysville, North Carolina, Diana, West Virginia and Park Valley, Utah. Transtrack stated that there are no more than nine, and as few as three, structures within a mile of any base station. The mobile units reply on frequencies that are regularly used by trucks (the Motor Carrier Radio Service) and utilize 300 watts, which is permitted under FCC rules. Their transmission duration is only 50 to 100 milliseconds long, so the likelihood of interference is, again, very small.

Similar waivers have been issued for a variety of innovative services. Enron Corporation received a waiver for the operation of a system by its Northern Natural Gas subsidiary. They were allowed to operate on a frequency offset half-way between two Petroleum Radio Service channels (48.65 MHz) to further reduce interference, using 500 watts. Their system interrogates solar-powered remote telemetry transmitters that monitor the status of its 37,000 mile-long pipeline system, in particular in remote areas where conventional radio telemetry links are not feasible and no other forms of communication are available.

Media Data, Inc. operates a system utilizing 500 watts on 42.40 and 44.10 MHz. And even the U.S. Government has their own meteor burst communications system. For years, the Department of Agriculture has operated the SNOTEL system on 40.53 and 41.53 MHz. Its remote units monitor water management resources in eleven Western states.

-USSN-

Special thanks to Bill Walker Royalton District Manager of Warner Cable, for donating the use of their copier and supplies for printing the newsletter.

Reprinted from WORLD RADIO (Submitted by Susan, KB5ICO)

Your life story on repeaters

'chard Rhodes, KH6IO

At a backyard ham picnic, a man reminded me that we had met before. "You gave the talk at the Dallas ARC a couple of years ago about security ... about not talking so much on the repeaters concerning our personal lives. I still remember the things you said."

Goodness. The talk was two years ago and this fellow remembered what I said. That's better than a lot of preachers, whose sermons may not linger past the final hymn. "Maybe you ought to write an article for *QST*," he continued. Not a bad idea.

I have spent a major portion of my adult life as a U.S. Treasury agent, a CIA agent, and a writer and lecturer to citizen and police groups on the subject of security. I am more sensitive than most about locking my car and my house, and watching what I say concerning my personal comings and goings. While you may never share my total outlook, some of my observations should cause you to stop and think about some of the things you say on your local repeater.

Because repeater activity is usually confined to talking to the same friends to the point that we recognize each ıer's voices — we tend to forget how many eavesdroppers there are. With all the scanners, portable radios that tune the VHF bands, ham rigs sold at flea markets, etc., there is a vast audience out there for your casual remarks. Couple that with the fact that you are listed in the Callbook, and possibly in a local ham directory, and you are inviting problems if you talk indiscriminately.

I let my ham license expire while I was in the CIA. Getting on the air and talking about my work was not part of their master plan for me. When I returned to civilian life in Dallas, I started studying for my ticket and bought a 2-meter rig. This was my first exposure to modern ham repeaters. I couldn't believe what I heard.

I made some profiles of people and families I heard on the repeaters and phone patches. I learned the names, addresses and phone numbers of the husbands' and wives' employers, their home addresses and phone numbers, the names and ages and the schools attended by their children. Also divulged were long lists of personal possessions, their vacation plans (with dates and places), the nights they would be out for dinner ... a show, and even when they would urn home. Some folks told who was ıeft at home (elderly parent, child, babysitter), and where they left the spare key to the house. On and on it went.

Also heard discussions of what kind of medications people were taking, the kind of booze they drank, and the general status of marriages. "Love you a bunch," or the irate XYL who answered the phone patch call with, "You've been talking to Mary Jane!"

"How'd you know?"

"Never mind how I know."

"Can't we talk about this later?"

Is any of this the business of a stranger? Would you go on the local AM radio station and talk about these personal matters? It's little wonder that you hear so many hams remark, "Well, I don't talk on the repeater much, but I listen a lot." I should think so. It's incredible what you hear.

"Well, I'm just about to get on the plane. See you all in a week, KH6IO clear." Each time I hear something like that coming into a repeater from the airport, I cringe. Anyone listening now knows you have gone on a trip and won't be back for a week. I don't have to draw a picture for you to understand the implications of the wrong person having that information.

I make it a practice never to talk about a trip as I leave town. Anyone who really needs to know that you are leaving already knows. Don't tell the

Every city seems to have a bachelor who asks directions over the phone patch for every new YL he is dating. "It's apartment 212, upstairs on the right. My blue 280Z is parked just under my bedroom window." Most likely, W5LOVER is trying to impress everyone on the repeater that he has a new girlfriend (any girlfriend). I'm sure she would be upset if she realized he had just broadcast her location to all those listening. And now that touch tone decoders are common, it's easy to get the phone number, too. Bad news.

Some things overheard recently on a local phone patch were: "If I go out before you get here, I'll leave the house open." And a guy talking on the patch to his YL around midnight, both agreeing that she will spend the night alone at her place. The next day the same guy was talking with her again on the patch, whole world. Wait until you've returned, and then get on the air to announce your triumphant return. Never mind that the first response may be, "Oh. You have been out of town?" Your dog probably missed you.

Then there's the phone patch. Wonderful gadget. Lots of fun. But don't turn it into a daytime soap opera with revelations of your personal life. arranging for her to spend the night at his place. Wouldn't she be surprised to come home the next morning and find her apartment ransacked. I wouldn't.

Many times we use a repeater when direct communications would do the job. I make it a practice to use a portable transceiver on low-power simplex whenever I am giving final directions to my place. If you must talk about your personal life, at least limit the audience as much as you can. And don't do your fellow hams a disservice by talking to third parties about your friends' plans for evening outings or vacations.

Earlier, I mentioned Callbook listings and local ham directories. Think about listing a "mailing address" with the Callbook and the FCC that is different from your home address. It's not easy for some to do this, but it seems worthwhile.

You may think I'm being unrealistic and there is little left for you to talk about. Not really. Simply use common sense. Ask yourself, "Is this something I want a complete stranger to hear?"

The concept of security is harder to sell than a 75-meter rhombic to an aeronautical mobile operator. A majority of customers for security products has already been victimized. Don't assume that it always happens to other people, or wait until something happens to you before you become conscious of your own security. Remember ... our broadcasts don't have commercials. You'd be surprised what a crowd that can draw. Think before you punch that mike button. Someone may just be waiting for you to supply that last piece of the puzzle.

— *ARNS Bulletin* □

ELMER PROGRAM

B-VARC's Elmer Program is now underway. We have a list of volunteers willing to help new Hams with various aspects of the hobby.

People wanting such help are urged to call Stu (WB5IGG), 777-3345. He will match up needs and geographic locations.

There is still room for more Elmers. Call Susan (KB5ICO), 498-7425 to be added to the list.

ANSWERS TO THE QUIZ FROM LAST MONTH (Susan, KB5ICO)

FILL IN THE BLANKS TEST

This is not a test of your mathematical ability. It will however, give you some gauge of your mental flexibility and creativity. Since the test was developed it has been found that few people can solve more than half of the problems on the first try.

Instructions: Each problem below contains the initials of the words that will make it a correct statement. Find the missing words. Remember, these represent statements, not mathematical equations.

Example: 16 = O in a P.....Answer: Ounces in a Pound

1. 26 = L of the A..... Letters of the alphabet
2. 7 = W of the A W..... Wonders of the Ancient World
3. 1001 = A N..... Arabian Nights
4. 12 = S of the Z..... Signs of the Zodiac
5. 54 = C in a D (with the J)..... Cards in a deck with the Jokers
6. 9 = P in the S S..... planets in the solar system
7. 88 = P K..... piano keys
8. 13 = S on the A F..... stars on the American flag
9. 32 = D F at which W F..... degrees far. at which water freezes
10. 18 = H on a G C..... holes on a golf course
11. 90 = D in a R A..... degrees in a radian arc
12. 200 = D for P G in M..... dollars for passing go in Monopoly
13. 8 = S on a S S..... sides on a stop sign
14. 3 = B M (S H T R)..... Blind mice (see how they run)
15. 4 = Q in a G..... quarts in a gallon
16. 24 = H in a D..... hours in a day
17. 1 = W on a U..... wheel on a unicycle
18. 4 = D in a P C..... Doors in a passenger car?
19. 57 = H V..... Heinz Variety
20. 11 = P on a C T..... players on a Cricket team
21. 1000 = W that a P is W..... words that a picture is worth
22. 29 = D in F in a L Y..... days in February in a leap year
23. 64 = S on a C B..... Squares on a checker board
24. 40 = D and N of the G F..... Days & Nights of the great flood.

THE WEATHER SPOTTER'S GUIDE by Allen Mattis, N5AFV

SAFETY TIPS FOR WEATHER SPOTTERS

Weather spotters may be exposed to a number of hazardous situations while observing severe weather. The number and extent of these potentially dangerous situations can be greatly minimized by following a few safety rules, and by basically using common sense.

- Always have a safe place nearby to protect yourself from wind or hail.

- If you use your vehicle for weather spotting, avoid parking in flood prone areas. Don't get cut off from an escape route. Similarly, do not park where it may become muddy, and your vehicle will get stuck.

- Moving water is very powerful. It only takes a slight current to push a car off a road.

- Do not stand outside during periods of excessive lightning. Remain inside a building or your vehicle for protection from lightning.

- A vehicle may provide a safe haven from lightning, but it offers no protection from a tornado. It may be difficult to drive away from a tornado that is moving toward you at a speed of 30 to 70 miles per hour. If a tornado is sighted, and you can not escape from its path, leave your vehicle and seek protective shelter elsewhere, perhaps in an interior first floor room of a well constructed building if one is nearby. Even if only a drainage ditch is available for you to take shelter in, it is safer than your vehicle in a tornado.

- Watch for downed power lines. Do not drive or walk over them.

- One final safety tip that you may or may not want to try is used by an experienced weather spotter in Tulsa. This spotter sprays the spark plug wires and distributor cap of his vehicle with plastic ignition spray to prevent wind blown water from getting into his vehicle's ignition system and causing the engine to die. Another spotter who tried this method was not happy with the sticky mess that eventually accumulated on his vehicle's spark plug wires.

This installment will conclude the excellent series by Allen. We appreciate him making it available for us.

CONCLUSION

The material presented in this guidebook was prepared to be of practical use in weather spotting activities. Many different aspects of severe weather and weather spotting are discussed. This guidebook emphasizes the practical side of weather spotting rather than the meteorological aspects of severe weather. All weather spotters are urged to attend the various seminars on severe weather sponsored by the National Weather Service in their area.

Spotters should also be familiar with the procedures of their local weather net and spotting organization. The suggested procedures contained in this guidebook may not apply to all local circumstances, and the procedures set by each local net or spotter organization should take precedence over those in this guidebook.

Finally, weather spotters should not take any unnecessary risks. Safety is a very important aspect of weather spotting. The information provided by weather spotting activities often saves lives and minimizes injuries to the public, but no one expects weather spotters to risk their lives in the performance of their spotting duties.

ESTIMATING WIND SPEED

MPH	BEAUFORT WIND SPEED EVALUATION CHART
0	Smoke rises vertically
1-3	Direction of wind shown by smoke drift but not by wind vanes
4-7	Wind felt on face, leaves rustle, ordinary wind vane moved by wind
8-12	Leaves and small twigs in motion, light flags extended
13-18	Dust raised, loose paper raised, small branches move
19-24	Small leafy trees sway, crested wavelets form on lakes or ponds
25-31	Large branches in motion, whistling in telephone wires or link fences
32-38	Whole trees in motion, inconvenience felt walking against the wind
39-46	Twigs break off trees, impedes progress walking
47-54	Slight structural damage (chimneys, shingles)
55-63	Trees uprooted, widespread structural damage, mainly roofs
64-72	Damage to structures major and widespread, many roofs and windows damaged

ESTIMATING HAIL SIZE

Pea size.....1/4 inch

Marble size.....1/2 inch

Dime size.....3/4 inch

Quarter Size....1 inch

Golfball size...1 3/4 inches

Baseball Size...2 3/4 inches