

HAPPY  
HOLIDAYS!



December 2001



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Special points of interest:

- Ideas solicited for future direction of TARS.
- Your articles wanted for the newsletter.
- Leonid meteor shower creates great DX on VHF bands Sunday morning, Nov. 18.
- Dues are due next month, be sure to bring your check-book—\$25 individual membership, \$35 family/household membership.

## Scientists Build Transistor Made of One Molecule

*Submitted by Rick Ainsworth*

In a small step on the way to making microscopic computer chips, scientists have observed single molecules acting as transistors, the tiny electric switches that form the brains of computers. In an article published on Thursday in the journal *Science*, researchers from Bell Labs said they had built layers made up of thousands of organic molecules with just one or two "electrically active" components.

The process is an enhancement to a process announced by the same

researchers a month ago. At that time, the team described a chemical process that makes layers of organic material only one molecule thick that can be used to form simple electric circuits.

On Thursday, the scientists said they had tweaked that chemical process to create the same kind of molecular layer but with precisely one or two active molecules, called thiols, that serve as the basis for a transistor.

Jan Hendrik Schon, the lead researcher, said the team can identify the

thiols amid the thousands of inactive molecules, but cannot yet pick them out and put them together.

"At the moment, it's just a proof of principle that a single molecule can do the job," he said. "We don't have the tool ... to precisely put a molecule in a certain space."

Bell Labs, a research facility of Lucent Technologies Inc. (LU.N), was the original inventor of the transistor and has generated more than 28,000 patents since 1925.

*-Reuters, 11/8/2001*

## President's QSO

I really don't have much to say this month. With all the household projects I've been involved with since my house got flooded in June,

I really haven't been on the air that much. November has been a very busy month for me, as some of the flooring in the house was

finally replaced, and the rest will get done this month.

Don't forget about our Holiday Dinner

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## VP's Corner

Let me begin by thanking Ken, AC4TO, for a wonderful presentation at the last meeting. Two people have specifically come up to me to mention that they were going to try something new because of what he said that evening. That's fantastic!

I had never heard of meteor scatter, and now, thanks to Ken, have not only heard of it but was anxiously awaiting the Leonids just as so many others in our hobby.

Personally, every month seems to bring something new and

exciting to the table concerning amateur radio. Having passed my 5wpm CW test in September, I am now enjoying some of the incredible things HF has to offer. The best part isn't that I have talked to other operators from Mexico to

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Volunteers needed to help with repeater maintenance. Contact Randy Pierce, KC4YWP.

## Meeting Minutes—November 2001

President David Heupel, KG4ACF, called meeting to order at 7:34 p.m. There were 27 members and 2 guests in attendance.

### Program

Ken Reecy, AC4TO, discussed the variety of ways to get involved with different aspects of ham radio. Ken strongly advocates that ham enthusiasts get at least proficient with 5 wpm code; this will help you to get through weak signals on HF. For those interested in emergency communications, Ken recom-

mends getting on the bands because if you don't know propagation characteristics, you may not be able to get through when needed. For this reason and other benefits, every ham should work contests. All factors that affect communications occur during contests—interference, exchanges, field set-up, etc. (Note: the ARRL Sweepstakes are coming up.)

Generally, it's good to just try new things. For example, try to contact the Interna-

tional Space Station (ISS at [www.nasa.gov](http://www.nasa.gov)). Lastly, try setting a radio goal such as working all counties in the U.S. or something more modest like working all zones on one band. These suggestions will help to keep the hobby interesting and varied.

### Treasurer's Report

Kent Hutchinson, KC4TOC, reported the following for year to date:

Most expensive item

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## Meeting Minutes—November 2001

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 was \$339 for insurance. Also had to buy controller for station which was \$301.69; Field Day was \$300, rope \$226.29; gas for van \$184.50; office expenses \$180.20 and newsletter \$150.13. There were 79 paid members for 2001,

Beginning Balance	1,714.69
Expenses	1,805.69
Deposits	1,681.81
<b>Ending Balance</b>	<b>1,838.57</b>

which was pretty typical for the year.

Amended October Minutes were approved.

### Repeater Report

Randy Pierce, KC4YWP, reported that the 147.03 repeater has had preventive maintenance completed and is putting out 275 watts. Digital recorder was installed so Ric can do announcements. Randy requested help to do some work on the remote tower site

on Sunday (Nov. 4) at 9:00 a.m. The 442.1 machine is up and running. The sensitivity is off a bit but he has another tube for it, which he'll try to get to soon. The .91 machine is up. Randy would like work with a school to make contacts with the ISS; David offered to help. The 442.85 machine will probably remain offline. Also, need to get controller from Doug Ferrell. Will get to 52.525 when time is available.

### Testing

Alan Terrell, N4KGT, noted the next testing session November 6 at 7:00 at 2631 Municipal Way.

### ARES Presentation

Dave Davis, WA4WES, is the Leon County Emergency Coordinator. He provided a list of equipment that all operators should bring with them in the field including: an antenna, connectors/adaptors, manual for radio,

power source such as cigarette lighter connector or alligator clips for battery, map, repeater directory, Field Resources manual from ARRL (Kent will try to get some for TARS members), canteen, a variety of fuses, flashlight, and earphones. Next month, Dave will provide another presentation. Contact him at dave.davis1@att.net and let him know if you'd like to participate.

### Announcements

Mary Jane Thurston still has equipment available. Please contact her at 385-1637 to find out more.

### Business

Dave Pienta, KG4DVW, provided an update on tropical storm Michelle. To get model projections on these storms, go to kauai.nrlmry.navy.mil.

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"Please submit your articles/information to the newsletter editor by the 15th of the month...info on back."

## VP's Corner

*(Continued from page 2)*

Europe on 10 meters side band, but instead that I did it on an antenna I built. I was determined to save a few dollars, but more importantly learn by experience. I realized that an antenna purchased from HRO or AES might have better gain, last longer, and be better quality, but the point was to see if I could do it. With my ARRL antenna book in hand and a few articles printed from the internet, I went to work on my first dipole. I didn't have it in the air for 2 hours before I made my first HF contact, a special event station out of El Paso. Next thing I knew I was having a QSO with S53EO out of Slovenia! What a thrill!

The hobby of amateur radio has too many facets for every one of them to be explored by every operator. That's what is so neat about having the opportunity to share our experiences at club meetings. Both Ken and Steve Welsh, AD4E, have done a great job recently of sharing their knowledge and experiences over the past few meetings. I encourage every member to stand up at a meeting in the coming year and tell us about an experience you have had recently, or sometime in the past, a moment in the hobby that you learned a great deal from and wish to convey that knowledge on to the rest of us. If it weren't for the stories and encouragement of others, like Ed Palagyi, KN4Y, I never

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"The hobby of amateur radio has too many facets for every one of them to be explored..."

## President's QSO

*(Continued from page 1)*

meeting at the Western Sizzlin' on North Monroe Street, December 6 at 6:30. I sure would like to see a large turn out. I also hope that (your operating privileges permitting) I get to work you for a QSO point during the 10-meter contest the weekend of Dec. 15 –

16. I probably should be moving furniture and getting ready for the carpet to go down, but I have such fun during the contest, I've been looking forward to it all year, and I'm not going to let some carpet dash my plans to operate.

Being the Holiday season, I would just like

to wish a joyous and safe Holiday Season to all of you and your families. Be on the lookout for TOSRV 2002 information and planning tasks coming up next month, and in February.

Until next month, 73!

## VP's Corner

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would have spoken to that operator on another continent with an antenna that I built with my own hands. It makes me excited about the other things that I will discover about this hobby through the years.

Brett Wellman – KG4KLR

kg4klr@arrl.net

Work: 574-5872

Home: 926-9662

## Meeting Minutes—November 2001

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Kent is still working on the maintenance for the van.

Tallahassee Tailgate is November 10 at 8:00 a.m. behind the BP station at the corner of Apalachee Parkway and Capital Circle SE.

The Tampa Ham Fest will be December 1-2.

David Heupel got in touch with the owner of the 325 feet of commercial radio tower, which TARS can take for free if we also move the tower on the site that has fallen over. David would like to get a

crew together sometime early in January.

New Business – Need a new web master for the club's website. Dave Pienta and Shawn Wilson, KG4GXU, offered to see what is needed.

**Special event committee** – David Heupel requested help in forming a committee to address events that benefit from our assistance. Dave Pienta, Jackie Gray, KG4CZX, Alan Terrell, and Carlaine Johnson, KG4CJT, offered to form the committee. Since David is meeting with TOSRV officials

Tuesday, November 6 for lunch, the committee is welcome to attend.

The annual Holiday Dinner meeting will be December 6, 7:30 p.m. at Western Sizzlin' on North Monroe St. Seating begins at 6:30 and orders will be taken from the menu.



Come to the  
Annual Holiday  
Dinner,  
December 6 at  
Western  
Sizzlin'



Amateur Radio  
Around the  
World

We're on the Web!  
<http://www.k4tlh.org>



<http://groups.yahoo.com/group/tars>

## Your Officers

**President:**

David A. Heupel, KG4ACF  
kg4acf@arrl.net  
(850) 321.3217

**Vice-President:**

F. Brett Wellman,  
KG4KLR  
kg4klr@arrl.net

**Treasurer:**

Kent B. Hutchinson,  
KC4TOC  
kc4toc@earthlink.net  
(850) 576-4200

**Secretary:**

Carliane Johnson,  
KG4CJT  
carliane@msn.com

## Upcoming Events

**Testing Session:**

7:00 p. m. EDT on November 6, 2001, at the regular testing session location on Dupree St in Tallahassee. For more information, a map and directions, visit <http://www.k4tlh.org/testing.html>.

**TARS Meetings:**

Every first Thursday of the month at 7:30 p. m. EDT.

**Friday Lunch:** Every Friday, 11:30 a. m. EDT at Golden Corral on North Monroe St.

**Saturday Breakfasts:**

Every Saturday, 8:00 a. m. EDT at Golden Corral on N Monroe St.

**Capital District ARES**

**Net:** Every Sunday, 8:00 p. m. Eastern on the AE4S repeater (146.655).

**North Florida ARES**

**Net:** Every morning, except Sunday on 3950 KHz at 9:30 a. m. Eastern.

**North Florida Phone**

**Net:** Every evening, on 3950 KHz at 2330 UTC.

## Editorial Policy

Submitted material received by the editor from dues-paying members in good standing, on or before the 15th of the month will appear in the following month's newsletter as space permits. Articles published in *The Printed Circuit* are not representative of the views or opinions of the whole organization, and such views and opinions are of the individual author(s). Currently, the editor is KG4ACF, David A. Heupel.