



# ACORN

## November 2009

### ANDY Club Officers

President: Bill Woodhead N1KAT  
 Vice President: Earle Gilmore N1SVB  
 Treasurer: Ivan Lazure N1OXA  
 Secretary: Dick Knight N1NYW  
 Trustee: Norm L'Heureux W1SCM

Androscoggin Amateur Radio Club (AARC)  
 P.O. Box 1, Auburn ME 04212-0001  
<http://www.w1npp.org/>  
**Repeater 146.610MHz – No pl tone**  
**Goff Hill, Auburn Maine**

Please submit articles, corrections and suggestions by the 16<sup>th</sup> of the month to David WE1U [we1u.david@gmail.com](mailto:we1u.david@gmail.com)

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### Coming up ...

Daylight Savings Time ENDS! Sunday 1 November at 0200EDT becomes **0100EST**  
<http://www.webexhibits.org/daylightsaving/b2.html>

Monday November 16<sup>th</sup> 2009 **CERT Training Begins** at the Auburn Police Department  
 On-line CERT overview(not complete) course at: <http://www.citizencorps.gov/cert/IS317/>

Preview Course Materials(may not be current):  
[http://www.citizencorps.gov/cert/training\\_downloads.shtm](http://www.citizencorps.gov/cert/training_downloads.shtm)

2009 ARRL November Sweepstakes 2100 UTC Saturday 21<sup>st</sup> to 0300 UTC Monday 23<sup>rd</sup>  
 2009 Andy Christmas Party at Wednesday December 2<sup>nd</sup> 7:00pm (Andy Club Meeting)

January 2010 Winter Field Day <http://www.spar-hams.org/>

February 2010 Crystal Falls Hamfest <http://www.w1tlc.com/>

March 2010 ARRL Maine State Convention and Andyfest

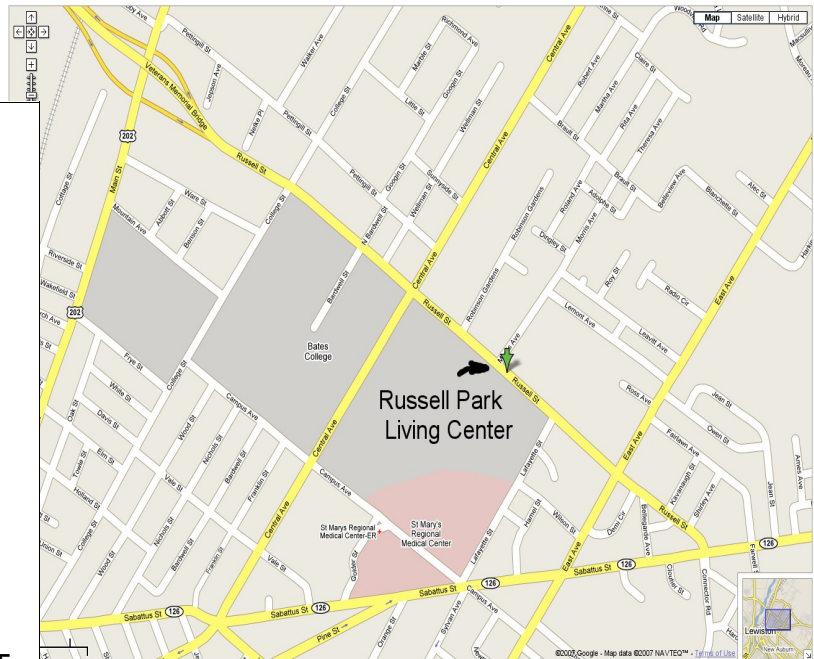
## Andy Club Meetings

Wednesday November 4<sup>th</sup> 1830EST  
 Androscoggin ARES Meeting  
 Russel Park Living Center  
 158 Russell Street, Lewiston, ME

Wednesday November 4<sup>th</sup> 1900EST  
 Andy Club Meeting  
 Russel Park Living Center  
 158 Russell Street, Lewiston, ME

Wednesdays 1900EST  
 Androscoggin ARES/RACES Net  
 on the Auburn Repeater  
 146.610MHz no pl. tone

Wednesday November 25<sup>th</sup> 0730EST  
 Monthly Andy Breakfast  
 Ramada Inn, Pleasant Street  
 Lewiston, ME



Wednesday November 25<sup>th</sup> 1900EST  
 Andy Club On-air Meeting and Net  
 on the Auburn Repeater  
 146.610MHz no pl. tone

## ARES Report by Ivan N1OXA

Dempsey Challenge was great success. After several months of planning and meetings Sunday Oct 4, 2009 arrived. With the help of over two dozens Amateurs Radio Operators, the event was a success from start to finish. But, there were a few problems, such as most Hams did not get a lunch or T-Shirt. I submitted a list to them of the sizes for the Hams. And today I picked up most of the T-Shirts, the 2XL, 3XL, and 4XL have been reordered. I will be contacting people to get the T-Shirt to them. Again, I want to thank all the volunteers for there hard work. Hope to see all of you next year.

On Thursday Oct 22, 2009, I met with Tim Bubier, AA1UT about restarting the RACES group with the EMA. Tim invited us to attend the CERT training that is starting on Nov. 16 at the EMA office. Any amateur is welcome to attend the training. I will talk about the CERT training at our Nov. 4, 2009 meeting

## Secretary's Report by Dick N1NYW

The Androscoggin Amateur Radio club held its monthly meeting Wednesday October 7, 2009 at Russell Park in Lewiston Maine. In attendance, N1LLU, N1SVB, KB1DOI, WA1EOJ, N1KAT, N1JD, WB1HFY, W1LTX, N1OXE, K1WTX, KB1QHR and N1NYW.

The meeting was called to order at 7:00 PM by President Bill Woodhead N1KAT. Earle N1SVB made a motion to accept the Secretary's report as printed in the ACORN, seconded by Andy KB1DOI. Vote: approved.

Ivan, the Treasurer was absent so Bill gave the report. Earle N1SVB moved to accept the report and seconded by Harold N1LLU. Vote: approved.

The scholarship fund was discussed next and Bill said that Cory N1URA was trying to do recruiting of boy scouts to become ham operators and club members and apply for the scholarship. Bob W1LTX made a motion to transfer 5000 dollars from the clubs scholarship fund to the ARRL scholarship program next April. The motion was seconded by Harold N1LLU and Andy KB1DOI. Vote: approved.

Bill reported the Dempsey Challenge went well and that the hams should pat themselves on the back for a job well done.

A reminder that the SET or Simulated Emergency Test will be conducted Saturday October 24th at 8 AM. The scenario will be a bad earthquake hits the state. Every ham is encouraged to participate.

Bill reminds us that the Christmas party is coming up at the December meeting and it is not too soon to start thinking of the Convention in March.

Bill had a wireless headset to show off. You can listen without the headset connected by wire.

Andy KB1DOI gave a report on the Dempsey Challenge special event station. There were QSOs with stations in California, New York, and even Poland the country. There was a total of about 130 contacts on CW and phone.

Bob W1LTX made a motion to adjourn that was seconded by Andy KB1DOI. Vote: approved at 7:17 PM.

## Circuits of the month: NAND and NOR-gates by David WE1U

I will start coverage of the various types of flip-flops in later articles. I need to will cover the NAND, NOR, and Exclusive-OR (XOR) gates first. The AND-gate, OR-gate, non-inverting buffer, and the active-low bubble form the fundamental logic gates with which other logic gates are made. The NOT-gates (October 2009 ACORN) are non-inverting buffers with an active-low bubble on the output.

Figure 10-1. Symbol for a Noninverting Buffer

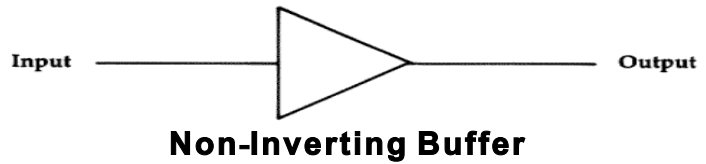
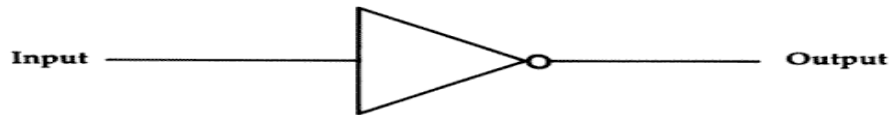


Figure 10-2. Symbol for a NOT Gate

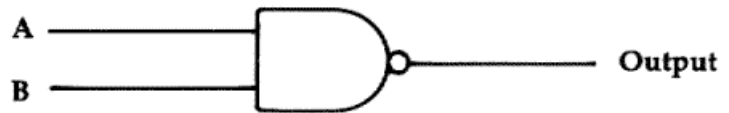


**NOT-gate = Non-inverting Buffer + active-low bubble**

The NAND-gate is a AND-gate with an active-low output. The output is LO (Logic 0) when all inputs are HI (Logic 1). The logic table compares the AND and NAND gates.

A	B	Output of AND-gate	Output of NAND-gate
0	0	0	1
0	1	0	1
1	0	0	1
1	1	1	0

Figure 10-4. Symbol for a NAND Gate

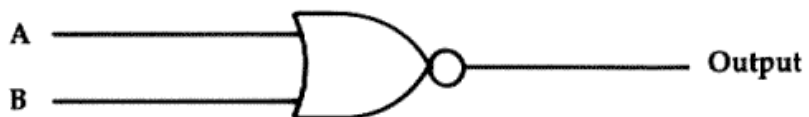


**NAND-gate = AND-gate with active-low output  
Output is Lo when all inputs are High**

NOR-gate is a OR-gate with an active-low output, the output is compared in the logic table.

A	B	Output of OR-gate	Output of NOR-gate
0	0	0	1
0	1	1	0
1	0	1	0
1	1	1	0

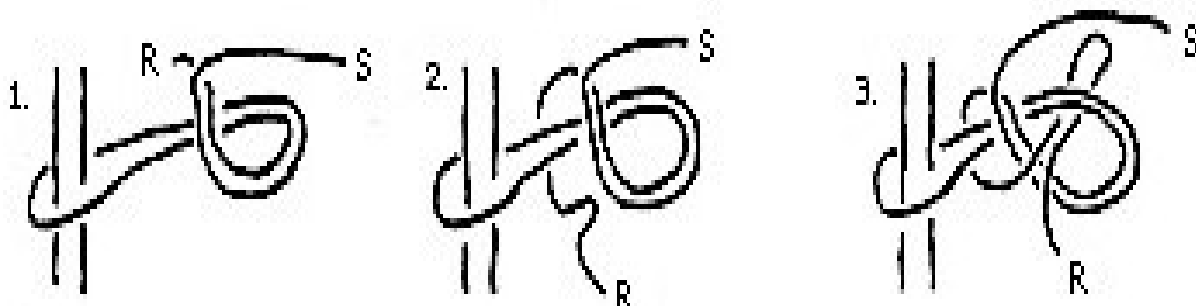
Figure 10-6. Symbol for a NOR Gate



**NOR-gate = OR-gate with active-low output  
Output is Lo when any input is High**

Source URL: [http://www.atariarchives.org/ecp/chapter\\_10.php](http://www.atariarchives.org/ecp/chapter_10.php)

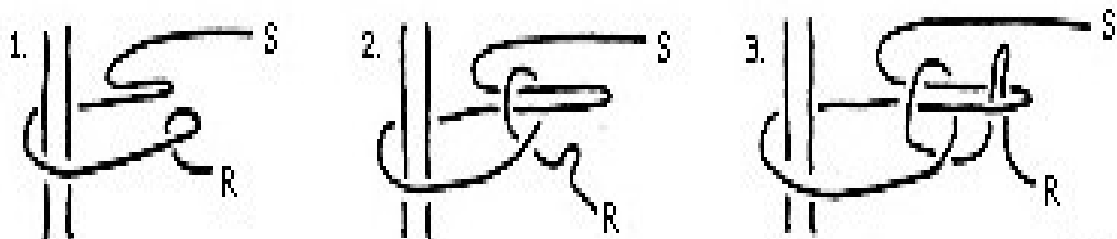
## Knotty Thoughts: Sliding Butterfly and Mooring Hitch edited by David WE1U



Suber

**Peter Suber's Sliding "Butterfly" Knot**

Start the **Sliding Butterfly Knot** by wrapping the running part around a tree or post, lay it alongside the standing part. Grab the two lines as if they were one, and make a loop by twisting counterclockwise. Take the running part alone now, without the standing part, and wrap it over the doubled lines and stick a bight of it through the doubled loop. Tighten by pulling the standing part. Tightening this knot proceeds in two stages. First, the slack is taken up, then the knot capsizes. "Capsize" is the nautical term for the sudden twist or transformation that takes place in some knots when they are tightened. For example, sailors start a bowline by capsizing a half-hitch. Lock by holding the knot and pulling on the non-sliding line. Unlock by putting your thumbs on the butterfly's "wings" and bending up and down, or by pulling the sliding ends apart hard, or by flattening the knot.



Suber

**Mooring Hitch**

Start the **Mooring Hitch** by making a bight in the standing part between the spar and your load. Grab the running part (already wrapped around the spar) and make a loop in it by twisting counterclockwise. Slide the original bight through this loop, making a new loop on the other side. (With practice, this step can be done in the same counterclockwise twist that created the loop.) Stick a bight of the running part through this new loop, and tighten by pulling on the standing part. Lock by holding the knot and pulling on the non-sliding line. Unlock by pulling the two sliding ends apart hard, or by flattening the knot.

Source URL: <http://www.earlham.edu/~peters/writing/explode.htm>

## DX News by Earle N1SVB

The past month the DX was scarce to nonexistent. Perhaps with all of the work around the house, my play radio time wasn't when the DX was best. The past month we made 28 DX contacts representing 20 different countries. Countries worked in September were:

TI8, Costa Rica; OZ3, Denmark; OE6, Peru; HK1, Columbia; FS, St. Martins; DL3, Germany; PJ4, Bonaire Is.; UR5, Ukraine; P41, Aruba; YT5, Serbia; PY2, Brazil; ZP8, Paraguay; OH8, Finland, SJ2, Sweden; JW5, Svalbard; VK4, Australia; LZ1, Bulgaria; 9A3, Croatia; ZS4, So. Africa; PJ5, St. Eustatius.

We did have one interesting contacts this month. We contacted VK4SY/PK2. He was operating remote control from Australia to PK4 land. We also had no Pacific contacts.

There are several DXpeditions to various parts of the world coming up in November. Some haven't been assigned a call as yet or the operators will use the country prefix and their home call.

Nov. 02 to Nov. 09	P29NI	Papua New Guinea
Nov. 03 to Nov. 15	VP2M	Montserrat
Nov. 04 to Nov. 11	KP2/	Virgin Is.
Nov. 04 to Nov. 17	XV4/	Vietnam
Nov. 04 to Nov. 18	VP9KF	Bermuda
Nov. 07 to Nov. 16	6W/	Senegal
Nov. 11 to Nov. 16	P29VCX	Papua New Guinea
Nov. 11 to Nov. 13	P29VLR	Papua New Guinea
Nov. 11 to Nov. 18	5W0MR	Samoa
Nov. 13 to Nov. 23	D68F	Comoros
Nov. 13 to Nov. 27	9G5TT	Ghana
Nov. 17 to Dec. 05	5R8IC	Madagascar
Nov. 18 to Nov. 30	5W0KH	Western Samoa
Nov. 19 to Nov. 23	FK/	New Caledonia
Nov. 19 to Dec. 01	A31A	Tonga
Nov. 20 to Nov. 26	VY1RST	Canada
Nov. 21 to Dec. 05	VK9XX	Christmas Is.
Nov. 23 to Dec. 01	A25NW	Botswana
Nov. 23 to Dec. 06	TX3A	Chesterfield Is.
Nov. 24 to Dec. 06	V331PT	Belize
Nov. 26 to Dec. 01	V26K	Antigua

CQWW DX Contest, CW (Nov. 28 – 29, 2009)

The above DXpeditions are correct to the 10th of the month prior to printing The A.C.O.R.N. For additions after that date, go to my web page and click On the link "Reported DXpeditions by NG3K". I invite any club members that have a computer to visit my web page. The address is:

<http://www.qsl.net/n1svb/>