



ACORN

January 2010

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 16th of the month to David WE1U we1u.david@gmail.com

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Coming up ...

2010 Kid's Day January 3rd 1800-2400UTC

Extra-Class License Preparation Course at Edward Little High School

General Class Radio Operators go to the top. Smith Charts, time constants, and phased arrays oh my!
 Text must be purchased before class:

"The ARRL Extra Class License Manual 9th Edition" (ISBN: 0-87259-135-2)

Web page: <http://www.w1npp.org/pages/license.html>

Please register before January 14, 2010.

Contact: David Lowe WE1U Phone: 207-783-1759 (or better e-mail: we1u.david@gmail.com).

Registration Online:

http://auburn.maineadulted.org/courses/course/amateur_extra_class_radio_license_preparation_cour

North America QSO Party CW January 9 1pm to January 10 1am <http://www.ncjweb.com/naqprules.php>

North America QSO Party SSB January 16 1pm to January 17 1am <http://www.hornucopia.com/contestcal/>

2010 ARRL January VHF Sweepstakes January 23 2pm to January 24 11pm

<http://www.arrl.org/contests/rules/2010/jan-vhf-ss.html>

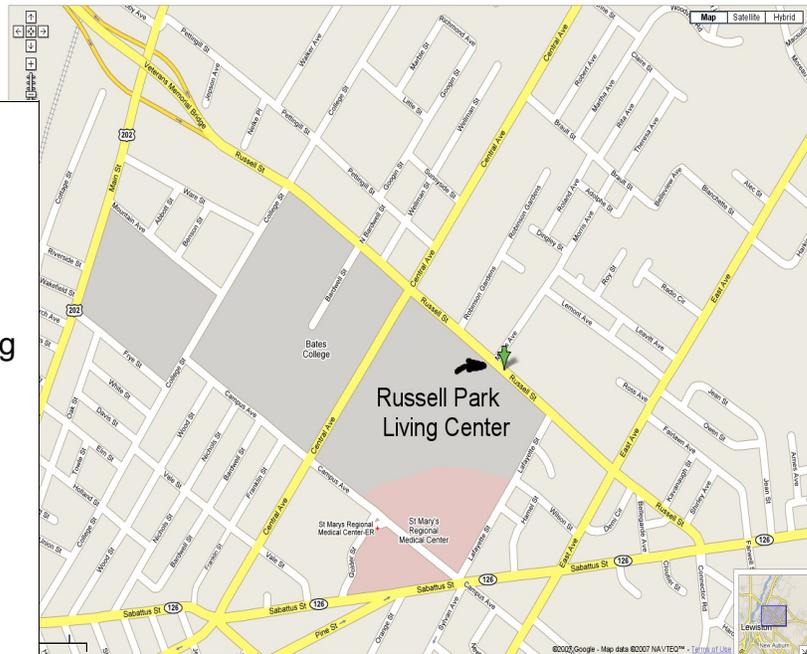
2010 Winter Field Day January 30 and 31

Andy Club Meetings

Wednesday January 6th 1900EST
 Andy Club Meeting
 Russel Park Living Center
 158 Russell Street, Lewiston, ME

Wednesday January 20 1800EST
 Androscoggin ARES/RACES Meeting
 Androscoggin Unified EMA Office
 Basement of Central Fire Station
 2 College Street Lewiston

Wednesday January 27th 0730EST
 Monthly Andy Breakfast
 Ramada Inn, Pleasant Street
 Lewiston, ME



Wednesday January 27th 1900EST
 Andy Club On-air Meeting and Net
 on the Auburn Repeater
 146.610MHz no pl. tone

ARES/RACES Comments by Ivan N1OXA Androscoggin EC

Just a reminder that the ARES/RACES meeting will be on Jan 20, at 1800 (6pm) at the EMA Office in the basement of the Lewiston Central Fire Station, 2 College St. If you are not a member, than come in and become part of the ARES/RACES group in Androscoggin.

One, of the items we will discuss is which night to do the ARES/RACES Net. Also, what type of training should we do as far as emergency is concern. So come with ideas and suggestions.

Looking forward to seeing some of you at the meeting.

Secretary's Report by Dick N1NYW

The Androscoggin County Amateur Radio Club held a meeting Wednesday December 2, 2009 at Russell Park. In attendance: N1LLU, N1OXA, N1JD, KB1RSD, W1SAB, N1NYW, W1SCM and son Charles, KB1DOI, WA1EOJ, N1WFO and son Andrew, N1AVJ, N1KAT, W1LTX, KB1QHR, K1WTX, and WB1HFY.

The meeting was called to order at 7 PM by President Bill Woodhead. Earle N1SVB made a motion to approve the Secretary's report as printed in the ACORN, seconded by Harold N1LLU. Vote: approved.

While Bill waited for Ivan to get the Treasurers report ready he showed us the official correspondence from Senator Collins office. She has signed on to an emergency communication bill in Congress that makes ham radio a part of the emergency plan for the country.

Ivan gave the Treasurers report, Andy KB1DOI moved to accept the report and Bob W1LTX seconded the motion. Vote: approved.

Ivan explained that he will be out of the country next March when the convention is held. Cory N1URA will be the Chairman and Bill N1KAT will put together the schedule of talks.

Earle N1SVB made a motion to donate \$100 to the Residence Council Fund at Russell Park to thank them for hosting our meetings and providing the coffee and refreshments. Jerry K1WTX seconded the motion. Vote: approved.

Rick N1WFO told of the CERT training he and David WE1U are taking with the Auburn Police department. There are nine different classes to take. All of them will be repeated in the future if you would like to take them.

Ivan reports that the ARES / RACES meetings will be moved back to the EMA office at the Lewiston fire station starting the third Wednesday in January. Steve Waymouth will be scheduling quarterly hospital drills.

Bill reports that the League has published a new book on basic ham radio. He has ordered two and is sending one of them "up north" for evaluation so he can decide if he wants to order more.

Bob W1LTX made a motion to eat and Andy KB1DOI seconded the motion. Vote: eating began at 7:21 PM

The SPAR Winter Field Day Notes by David WE1U

Society for the Preservation of Amateur Radio 2010 Winter Field Day, to encourage emergency operating preparedness in the winter, will be held January 30 and 31 (Noon to Noon EST). Station set up may begin no earlier than 1300 UCT (8:00 AM EST) on January 30, 2010. Any mode and band (except 12, 17, 30 and 60 meters) can be used.

The categories are: number of operators/site type: 1, 2, M(ulti)/H(ome location), I(ndoors at temp site) or O(utdoor)

The exchange is Callsign, True RS/T, Category, local outside temperature (with F or C).

The web page for the event is:

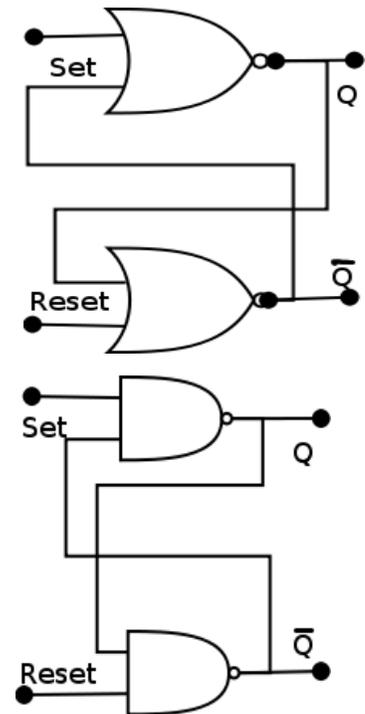
<http://www.spar-hams.org/contests/winterfd/index.php?pg=2>

Circuits of the Month-RS Flip-Flops by David WE1U

Reset-Set Flip-Flops(RS-FF) not political. RS-FF are a very basic memory logic circuit, holding a output state after the inputs have changed as opposed to changing state with the inputs.

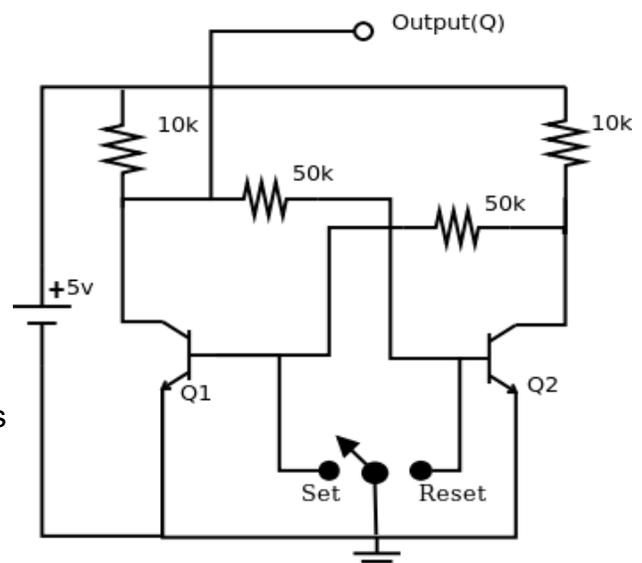
Truth Table for NOR-Gate RS Flip-Flops		
Set	Reset	Output Q
Lo	Lo	Holds Previous State
Hi	Lo	Hi
Lo	Hi	Lo
Hi	Hi	Race Condition

Truth Table for NAND-Gate RS Flip-Flops		
Set	Reset	Output Q
Lo	Lo	Race Condition
Hi	Lo	Lo
Lo	Hi	Hi
Hi	Hi	Holds Previous State



A “race condition” is a conflict where outputs cause unstable input values. Switches tend to make and break contact(chatter) when first toggled. This is not usually noticable when used for a power switch. Digital circuits need the change in the inputs to be clean(on or off) When programming a microwave 1:00(one minute) and 10:00(ten minutes) are needs to be kept clear for the control circuit.

The output of the Debounced Switch circuit goes **HI** when the SPDT switch “Set” contact is grounded(**LO**) and remains until the “Reset” contact is grounded(**LO**) changing the output to **LO**(again until the “Set” is made **LO** again)



Q1 and Q2 2N3904 or other general purpose NPN

Source URL:

http://www.radio-electronics.com/info/circuits/logic_r-s_flip_flop/r-s_flip_flop.php

http://www.hobbyprojects.com/flip_flop/a_transistor_RS_flip_Flop.html

<http://www.world-class-programme.com/RS-FlipFlop.asp>

A December Weather Summary by Jerry K1WTX

As of writing this article on Dec. 29th, we are just cleaning up from the latest snowfall. 4.5" fell in a brief but intense little dumper, bringing the month's total to 20.3". This is 3.2" above the long term normal for Turner. Total Dec. precip was 6.05", about 163% of normal. The month is closing out on a cold and blustery note which will leave the avg. Dec. temp. at about 25.8 deg. or 0.7 deg. above normal. The lowest temp. for the month, which may change by month's end, was (-)1 deg. on the 17th and the highest was 63 on the 3rd. Peak wind for the month was a gust of 46 mph on the 12th and the avg. hourly wind speed for Dec was a bit above normal at 7.6 mph. Fog was noted on three days and icing was recorded on two days. In summary, a rather sunless and wet month, with near normal temps.

The year in total is best characterized as much wetter and a little cooler than the long term normal. Annual total precip was 58.52" which is 141% of the 1975 through 1999 normal. Annual snowfall for 2009 was 83.4" which is just 0.6" below normal. The average hourly wind speed for the year was about 10% below normal at 5.8 mph with the peak wind for 2009 being a gust of 50 mph, set in both April and November. The year closes out with an avg. temp. of 44.5 deg. which is 0.7 deg. below normal. The lowest temp. for the year was (-)14 deg. on Jan the 3rd and the highest was 90 deg. set on three occasions in April, May and again in August. These three dates of 90 deg. or above are in contrast with the long term normal of five days per year. This has been the trend during much of the past decade, despite milder autumns; the tendency towards less extremes of heat and slightly cooler summer months. This may well be a result of more cloudiness and precip. over the past several years. Climate CHANGE may be the best way to replace the fading term global warming, because the actual numbers from our part of the world, despite what any international consensus of experts may say, do not show warming here. What they do show is a shifting of temperature patterns, reflected in cooler springs and summers and a later onset of autumn. The avg. annual temperature here in Turner over the past decade is only 0.3 deg. above the 1974 through 1999 normals, which is within the realm of measurement error. And despite the perception that winter snowfall has diminished in past years, the numbers show that we still have averaged the same winter snowfall since 1999 as we did in the 25 years before. Again, what has changed is the distribution of snowfall, with it coming on later in the season and continuing later into the following spring, evidenced by Feb. and March snowfall now averaging higher than those during the old period.

In my memory, the best month of 2009 was without doubt, September. For the first time in almost a decade, it came across as a classic New England fall month with crisp nites and endless warm and dry days. It was such a relief, following the wet summer pattern that began in June and didn't break until mid August. In fact, the first 32 deg. freeze here on the Hill on 9/26 broke a record as the earliest in the ten years of record. As for the winter remaining, an elNino pattern is holding which would usually leave us milder and drier but so far, the winter forecast from NOAA and AccuWeather for heavy snows in the mid Atlantic corridor is extending into northern New England as well. See you in February.

DX News by Earle N1SVB

Another month of terrible atmospheric conditions. I am impatiently waiting for the next cycle to come to fruition. During the past month we made 36 DX contacts representing 24 different countries. Countries worked in November were:

KP4, Puerto Rico; EB5, Spain; EW8, Belarus; YO9, Romania; VA6, Canada; OZ0, Denmark; PE1, Netherlands; YU1, Serbia; SB6, Sweden; VP2, Montserrat; XR0, Easter Is.; ZL1, New Zealand; LX1, Luxembourg; ZW5, Brazil; KP2, U.S. Virgin Is.; V51, Namibia; ZS6, So. Africa; FM5, Martinique; LU8, Argentina; CE4, Chile; YS1, El Salvatore; DJ3, Germany; IZ2, Italy; M1, England

We did have a couple of Pacific contacts this month The first one was we contacted ZR0Y the Easter Island DXpedition and we also contacted ZL1BD in New Zealand.

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

Jan. 05 to Jan. 26 P40CG Aruba

Jan. 08 to Jan. 11 CE0/ Easter Is.

Jan. 08 to Feb. 08 A6/ United Arabic Emeritus.

Jan. 08 to Feb. 12 J8/ St. Vincent Is.

Jan. 10 to Jan. 14 XR9JA So. Shetland Is.

Jan. 15 to Mar. 31 J5UAP Guinea Bissau

Jan. 15 to Mar. 31 6W2SC Senegal

Jan. 18 to Feb. 05 FO/ Austral Is.

Jan. 19 to Feb. 02 CE0Z Juan Fernandez Is.

Jan. 21 to Jan. 28 YJ/ Vanuatu Is.

Jan. 21 to Mar. 21 5X1NH Uganda

Jan. 20 to Jan. 28 ST26ASC Sudan

Jan. 26 to Feb. 09 6W/ Senegal

Jan. 27 to Feb. 10 6w/ Senegal

CQ 160 – Meter Contest, CW Jan. 29 – 31, 2010

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/>