

# Anchorage Amateur Radio Club



## Anchorage Amateur Radio Club

### General Meeting

**Carr-Gottstein Building  
Alaska Pacific University**

**April 3, 2015**

**7:00 PM**

**TJ Sheffield, KL7TS  
Grants and Gaming:  
Fact vs Fiction**



### Club Spending in the Modern Era

As the Alternate Gaming-Member-In-Charge, TJ Sheffield, KL7TS will discuss club spending in the "Modern Era" while addressing gaming rules, regulations and the statutes that authorize them.

Myths and Urban Legends will be explored, explained and expounded. History will be uncovered and brought to light, some of it for the first time! Slides, graphs and documentation will dazzle the eye and amaze the mind!

If you don't learn something new, the price of admission will be cheerfully refunded.

There will also be a discussion of upcoming public service events and Field Day status.

Dave Heimke, AL7LO, activities director, has said there will be a "lot of goodies", including an HT as door prizes.

### MARA Hamfest

ANNUAL HAMFEST, contact AL4I to reserve a table, \$10.00, Entry is \$3.00.

We will have a Barbeque, seminars, and Country Store. Talk-in on 147.33.

Location will same as last year, American Legion Post 35, just north of Wasilla. Map will up on KL7JFU Web site in May. Setup at 0900, open at 1000 to 1600. We will have the seminars firmed up next month.

### The AARC Has a New Communications Response Vehicle.

The club has taken delivery of a new Communications Response Vehicle (CRV). It is a 2001 Ford E350, extended-body van with the Quigley 4WD package and the Ford Ambulance package. This is a 1-ton, single-rear-wheel vehicle with the Ford Power Stroke<sup>®</sup> 7.3L Turbocharged Diesel engine. The ambulance has about 87,000 miles on it, with most of the miles from driving on the North Slope. Onboard accessories include siren, emergency flashing lights, rear heating system, rear exhaust fan, inverter, shore power connection, and the auxiliary idle control module. Those of us who've set up communications equipment in the dark will really appreciate the fact that the CRV has flood-lights for the left, right, and rear of vehicle – with the three directions individually switched. As is obvious from the first picture, we will have to remove the red flashing lights and the ambulance decals, and then replace the decals with AARC information. Obviously, the CRV will be a prime candidate for "Working Wednesdays." An independent mechanic referred to the CRV as an "immaculately maintained, solid vehicle."



The CRV is currently equipped with studded snow tires in very good condition. Obviously, we will have to get street-legal tires for the CRV before 1 May. Many of us saw the soon-to-be CRV when it was on display outside the regular monthly meeting on Friday, 6 March. At that time, the CRV still had the gurney [stretcher] in it. The gurney was not for sale and has since been removed. The next two pictures show the back of the CRV; the first looking aft and the second looking forward. As is obvious in the pictures, there is a lot of storage space in the CRV and there's plenty of room for workspaces where the gurney was located.

Kent Petty, KL5T, is the person who found this ambulance and the "Silver-Tongued Devil" got it for the AARC at substantially below its "Blue-Book" value, even without adding in the value of the ambulance package. We all owe a great deal of thanks to Kent for his acumen in finding this vehicle and for his work in getting all the pieces of the deal to fall into place. Thank you, sir!

# THE AARC ANTENNA



## THE AARC ANTENNA

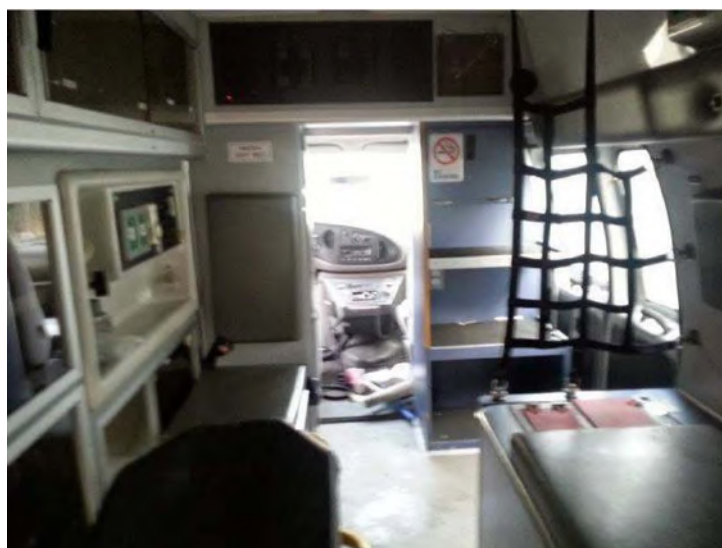
Initially, the plan is to put a table running fore-and-aft where the gurney was located. With that arrangement, two operators can sit very comfortably on the bench-seat located on the passenger's side in the back of the vehicle. The initial goal for the outfitting is to have the CRV usable for the Women's Triathlon on 17 May 2015. Longer term, the very-tentative plan is to set up four stations, three in the back and one at the passenger's side in the front. The passenger site would be a VHF/UHF station, while the three in back would be VHF/UHF, HF/VHF/UHF, and HF in some order. Ideally, all stations would be Winlink-capable, at least. However, the details will have to come out of the engineering design process.

At the general meeting, the question of GVWR (Gross Vehicle Weight Rating) came up and resulted in substantial discussion. The impetus for the discussion was the overweight condition of the existing CCV. Kent Petty, KL5T, weighed the vehicle on Monday, 23 March. The result of the exercise is that the CRV can carry a full tank of fuel and a total additional load of 1161 pounds, including the weight of the driver, all equipment, all passengers, and trailer-tongue weight.

In the long run, the plan is to make infrastructure changes to the CRV while removing non-mission-critical equipment from the CCV. This will allow the club to have at least one fully mission-capable mobile vehicle at all times. When this process is complete, radios will be transferred from the CCV to the CRV, and the CCV will be formally decommissioned. As of now, we plan to sell the CCV for a camper conversion, or other purpose.

All in all, the club has obtained a solid, agile vehicle that will be fully mission-capable in the near future. Thanks again Kent for all your hard work.

Lara Baker, AL2R  
President  
AARC



From TechRepublic (www.techrepublic.com)

(Editor Note: This is a long, but fascinating article, I recommend reading it.)

### About Nick Heath

Nick Heath is chief reporter for TechRepublic UK. He writes about the technology that IT-decision makers need to know about, and the latest happenings in the European tech scene.

## Hacking the Nazis: The secret story of the women who broke Hitler's codes

By [Nick Heath](#)

*Of the 10,000-plus staff at the Government Code and Cypher School during World War II, two-thirds were female. Three veteran servicewomen explain what life was like as part of the code-breaking operation during World War II.*

"I was given one sentence, 'We are breaking German codes, end of story'." It was Ruth Bourne's first job out of college, when, like thousands of other young British women during World War II, she was recruited to aid the Allied cipher-breaking efforts at Bletchley Park.

Today, the mansion in the heart of the southeast English countryside is famous for being where the brilliant mathematician Alan Turing cracked the Nazi's Enigma code.

Because Turing's individual achievements were so momentous, it's sometimes forgotten that more than 10,000 other people worked at the Government Code and Cypher School, of whom more than two-thirds were female. These servicewomen played a pivotal role in an operation that decrypted millions of German messages and which is credited with significantly shortening the war.

The vital importance of preempting German plans led to a huge push to create machines that could crack ciphers at superhuman speeds. These efforts produced Colossus, the world's first programmable electronic digital computer.

However, the reality of running these electromechanical machines, setting rotors and plugging boards day in day out, was often less than thrilling, with the 18-year-old Bourne envying the girls who test-piloted aircraft fresh off the production line. "That was exciting but standing in front of a machine for eight hours was not," she said.



Ruth Bourne, aged 18, wearing her Wrens uniform.

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As mundane as her daily routine was, it was vital in deciphering coded messages sent by the German army, navy and air force and helping the Allied forces turn the tide of war.

The problem facing Britain and its allies early in the war was that the Enigma machine used to encrypt Nazi military traffic could scramble a message in 158 million million million ways, and each day the settings used would be changed. On top of that, on an average day at Bletchley Park code-breakers were tasked with breaking between 2,000 and 6,000 messages of German, Italian, Japanese and Chinese origin. There were far too many to check by hand.

The code-breaking needed to be automated, and it fell to British mathematician and father of the computer Alan Turing, with the help of the British Tabulating Machine Company, to devise the machine for the job. His solution was the bombe, an electromechanical machine designed to emulate the workings of 36 Enigma machines.

Bourne was a member of the Women's Royal Naval Service, known as the Wrens, who were charged with preparing the machines each day, turning the drums on the front and plugging up the boards at the back according to settings laid out in a menu. These settings were derived from cribs, which were best guesses at fragments of plain text—for example, standard openings such as weather reports—from the enciphered messages. If correct, these cribs would reveal some of the Enigma settings used to encode the message and provide a starting point for devising the remaining settings. The bombe could check the possible ways the Enigma could have been set up incredibly rapidly, dismissing incorrect settings one at a time. If the crib and initial settings were good, then the bombe could return the information needed to crack the code within minutes.

"I joined just around D-Day and at that time the traffic was tremendous. We were breaking thousands of messages," Bourne said. "We knew that every 24 hours the code was changed and that was why time and accuracy were of the absolute essence. You were really pressured."

Like Bourne, many of the Navy Wrens operating the bombes were teenagers not long out of school, who found themselves working a punishing schedule, with very little margin for error. Bourne said, "You didn't have to be rocket scientists but what you had to be was 125 percent accurate. You worked in pairs and you and your checker would plug up the back of your machine, which was extremely complicated. You had to brush out the wires on your drums so there wouldn't be short circuits, make sure the plugs at the back of the machine were pushed in and straight, and you had to be on the go for the eight-hour shift, as you were standing for the whole time."

There was little respite during a shift for the bombe operators, even during meal times. "You had half an hour off for a meal," said Bourne. "The bombes were in a building with high brick walls, barbed wire and sentries, you had to get out from there, run to your canteen, grab your meal and run back and then your checker, who'd been operating while you were away, you're your meal and run back and then your checker, who'd been operating while you were away, could go and get her meal. It was very intense and very concentrated. We were young and learned quickly."

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The manor house at Bletchley Park as it appears today.

The high-point of the day was getting a "Job Up" message, as it meant that their machine had broken a code, but she was always conscious one mistake could wreck their chances. Bourne said, "You were a link in the chain and you couldn't be the weakest link. If you made a mistake on your machine—you hadn't pushed a drum on properly or you'd put a plug in incorrectly—and the machine wouldn't work, you would get a reprimand. If you had been more accurate, we might have brought the job up'."

Adding to the stress were the working conditions. Bombe operators worked round the clock, with teams spending one week working 8am to 4pm, the next 4pm until midnight and then midnight to 8am after that.

Outside this serious work, however, Bourne and her fellow Wrens were pretty normal teenagers, with similar preoccupations to those of young people today. "We had two lives really," Bourne said. "One where you were in your workstation and you knew your bombe machine was ticking over and you brought a job up. But outside that it was being a normal girly in the Wrens. 'Who were you dating to-night? Where have you been? Are you going dancing in Covent Garden?' That kind of thing."

### **Inside the code-breaking factory**

If an Enigma code was broken early in the day, then the Allied forces would be able to decipher all messages sent by that arm of the military in the area until the Enigma settings were changed at midnight. But that didn't mean the bombes were switched off, there were always new intercepts and new messages to unscramble.

"The bombes never stopped. I think we broke two and a half million messages during the war," she said. The code-breaking operation was spread over teams working in various huts around the manor house at Bletchley, with the bombe machines situated in outstations nearby. There were about 8,000 people involved in the code-breaking—what was known as the factory—and 4,000 support staff. Each team generally knew no more than was necessary about what the other groups were doing.

Teams worked in different huts on breaking the Enigma codes, focusing on the army and air-force ciphers in one and the tougher naval encryption in another. Unscrambled messages were then sent on to linguists for translation and officials who would decide how the information should be used and, more importantly, whether it could be used without revealing that the Allies had cracked Enigma.

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Often, stopping the Germans from discovering Enigma was not secure meant contriving an alternative way the Allied forces could have discovered sensitive information, such as where in Germany petrol was being sent from to Erwin Rommel's tank divisions in North Africa. "We would send our reconnaissance planes up but in fact we knew where the petrol was because we'd decrypted messages about it," Bourne said. "But if we couldn't find another way, if there was no subterfuge, we couldn't use the information."

Given the significance of the work taking place at Bletchley, it's easy to think it would be a difficult secret to keep. But it is only later in life that Bourne learned how important a role she played.

"It may have been more difficult for other people than it was for me because I knew so little. I knew we were breaking German codes but other people would know we've just managed to win the Battle of [Cape] Matapan or we've just managed to sink the Scharnhorst," said Bourne. "However, everybody knew that everybody was doing the same thing in terms of breaking German codes, and that is why, when you signed the Official Secrets Act, you never told anybody. My parents died and never knew what I was doing."

At the end of the war the order came in from Winston Churchill to take apart the more than 200 bombes that had been built, and Bourne found herself destroying the machines she had spent so long working with. "We were told to dismantle all of these wonderful bombe machines. We had to unsolder contacts from wires and put them into separate boxes and they were sold off eventually as army surplus."

In the years that followed, the Enigma cipher was still used by certain countries and Britain probably wanted these countries to continue thinking their communications were secure. "It's thought that Churchill didn't want people to know we had that technology because he probably foretold the Cold War," she said. "I know for a fact that two of them were kept at Eastcote [one of Bletchley's outstations]. One of them was a three-wheel bombe and the other a four-wheel bombe for the naval codes."

### **Celebrating Bletchley's veterans**

All these years later, Bourne is still operating a bombe machine. The machine is the only working bombe in the world and used in demonstrations at Bletchley Park. It took about 13 years to rebuild and sits in the on-site centre that tells the story of the park's wartime activities.

Ruth Bourne at Hut 11 in 2013.



Bourne is grateful that the work of the World War II code-breakers has so much recognition today, after years of being overlooked. Millions of pounds in funding from the National Lottery has allowed the huts around Bletchley Park to be restored and a visitor centre created. In 2009 the government also presented Bourne and other surviving Bletchley veterans with a commemorative badge emblazoned with, "We also



served".

This support was a long time coming, with decades passing when the work done at Bletchley was shrouded in secrecy or ignored. "Even the minister for veterans had said we didn't deserve anything, not even a certificate or a little badge to put on our war medal. We were just nothing and nobody," said Bourne. "Now we have recognition in spades, we have a memorial and we've had visits from almost every member of the royal family. I've demoed the Enigma to the Queen and Prince Philip, which was very personally satisfying. You can't do more than that, can you?"

That interest in the code-breakers' story should only be heightened by the recent release of *The Imitation Game*, the Oscar-nominated movie telling the story of Alan Turing and his role in creating the bombe. For the 88-year-old Bourne, the days spent setting up the bombes and watching them whirl and click into life seem a far cry from the mundane work she felt it to be as a teenager. "Now, when I'm an old woman, it's exciting," she said. "Now I know how important it was."

### The listener

Patricia Davies spent World War II listening - spending hours at a time trying to pick voices from squealing static.



Patricia Davies served at various listening stations.

Even when Davies heard a person, the chances are they wouldn't be speaking anything resembling a human language but robotically reciting gobbledygook one letter at a time.

Davies was one of a room full of women scouring the radio waves and scribbling down these nonsensical monologues. From where she sat in a lonely, clifftop house overlooking the English Channel she could see the sun glinting off car windscreens in Nazi-occupied France. These messages weren't intended for Davies but were orders destined for German submarine bases on the west coast of France or ships in the Baltic Sea. The seemingly random jumble of letters were a code produced by the Enigma machine, which took the German messages and scrambled the letters in quintillions of different ways.

Davies was a member of the Wrens who were capturing these communications and sending them by teleprinter to the codebreakers at Bletchley Park, or Station-X as they called it. "We would sit at a bench with a row of radio receivers on it and we would twiddle the knob up and down the frequencies the German navy used," said Davies. "The hardest part was the frustration when you knew there was a ship sending out a message and you were trying to get it but it was distorted or fading."

"It obviously required good hearing and intense concentration. I was 19 when I started and at that sort of age your hearing is good and you're used to concentrating on things," Davies said. "It was an immensely satisfactory job, particularly when you were getting a clear message and you knew it was important."

While picking out a message was particularly rewarding, the four hour shifts could equally be fruitless. "You could often have a watch in which nothing would come up. You would sit there looking up and down [the radio frequency] and not get any traffic," she said. "The hardest part was the frustration when you knew there was a ship sending out a message and you were trying to get it but it was distorted or fading." Davies said, "It was very frustrating when you could only send a patchy message to Bletchley. We would get through anything we had but they weren't always complete." Even when messages were garbled, accuracy remained paramount. The German operators spoke four phonetic letters at a time and if you missed something you would never guess at what they said. "If you didn't hear some things, through interference or fading, you left a blank. Whatever you did, you didn't invent," Davies said. German orders weren't just spoken but also sent as Morse code, and the series of long and short beeps the Germans used to open these messages stay with the 91-year-old Davies to this day. "They had an administrative cue code that all ships used for heading and signing off," said Davies. "That always began with three letter groups, beginning with the letter cue dar-dar-de-dar-de-dar-de-dar."

### **Under fire**

From the listening station near Dover, Davies had a sometimes harrowing view of British convoys running the gauntlet of German artillery shells as they travelled along the English Channel. "The Germans used to shell quite a lot," she said. "It was called Hellfire Corner because they used to try to hit the convoys that slipped past on the coast going west." "They used to go past as a line of ships and, one time, one of the shells got a direct hit. We saw the ship explode and catch fire. Nobody got off it. It drifted out and the rest of the convoy just went on with a gap in it. We all felt very sad that day," she said.

Even though the shelling and V1 rockets damaged the nearby port of Dover, the Germans didn't think to attack the non-descript house on the clifftops where Davies worked. "We were lucky because even though we were in range the Germans didn't actually hit our building," Davies said. "The only shell that came into our watchroom didn't actually explode. It was the time of the V1s, the doodlebugs, which started about 10 days after D-Day, and used to come over our cliff in absolute shoals."

### **"The grimmest place"**

What sticks in Davies mind, more so than V1 rockets flying overhead, were the handful of days she spent at a station that was trying to pinpoint the location of German U-boats. The Nazis used the submarines to sink merchant ships traveling from the US to the UK in an attempt to starve Britain of supplies and equipment. "It was in the Spring of 1943, when there were a great many sinking of convoys in the Atlantic," Davies said.

On the rare occasion these U-boats came to the surface to communicate with their base they could be located using direction finding. The technique allows radio operators to determine where a signal was sent from by comparing differences in how that signal is received by antennas in varied locations.

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"There was a very large listening station under Scarborough race course where they were only listening for U-boats. They didn't often surface and speak and if they did then everybody had to hold their breath while direction finding stations around the country tried to get a fix on that U-boat," she said. "I think that was quite the grimmest place I ever was in the war. You were aware this U-boat had probably got its sights on ships in a convoy that might be sunk in the next few minutes. I felt the importance of the job there, even more than at Dover where there were shells and V1s coming over."

Besides feeding codebreakers intercepts, the station also eavesdropped on uncoded messages about German operations and tipped off British forces to give them the jump on the enemy. Davies said, "They used to send their torpedo boats over to the east coast to attack our convoys and lay mines. They would send messages 'There's an English destroyer at this many degrees', things like that. [There was] no way that was coded because they wouldn't have had time. Those messages didn't go to Bletchley, they went to the nearest naval base."

Similarly, indiscreet messages between lighthouse keepers off the French coast helped alert the British to the movements of the German navy. "One of my colleagues picked up a message from one lighthouse keeper to another saying 'Look out in an hour and you will see something interesting', which was actually the Scharnhorst and Gneisenau, which were two German battleships, that were going to go up the channel," she said.

During time serving at a different listening station, at Withernsea in Yorkshire, Davies even remembers stumbling across messages from a distant theatre of the world war, carried by radio waves that had bounced off the earth's ionosphere giving them intercontinental range. "We even accidentally picked up radio signals that didn't seem to fit into the German naval pattern," she said. "It turned out they were German tanks on the Russian front talking to each other. It was, of course, of no interest, but was rather eerie."

Amid the serious work there was time for fun. Davies still has a photo of her with her fellow Wrens practicing their tap dancing steps and has fond memories of bike rides and horse riding nearby, as well as the occasional party at the Royal Air Force fighter stations.

But it is the simple acts of kindness that stick in Davies mind, like the solace of being handed a mug of hot chocolate at the start of a 4am shift.



Today, Patricia Davies fondly remembers simple acts of kindness.

"Someone would come and wake you in your nice warm bunk at 3.30am to go on watch. That is an awful time to start work and it was a great comfort if they'd thought of making you a mug of cocoa when you got to the watchroom," she said.

Like the other veterans, Davies is delighted by the public recognition the Bletchley codebreakers have received, as reflected by the rising visitor numbers to the museum at the park. But she said the work done at the tens of Allied listening posts - [known as Y-stations](#) - to intercept the hundreds of thousands of confidential Nazi communications also deserves credit. "It wasn't just our coastal naval stations, there were a great many listening stations all sending their traffic to Bletchley. Very seldom does anybody ask what we did at the outstations. If they weren't getting our messages they wouldn't have had anything to decode."

### **The Colossus operator**

1944 was a landmark year for Irene Dixon. The east London teenager from a terraced house with an outside toilet not only found herself living in an 18-century mansion on a 3,000-acre estate but she had just landed a job working on one of the world's first computers.

The machine was the Colossus—the world's first programmable electronic computer—which, unknown to Dixon, would allow the Allied forces to read messages sent between Hitler and his military leaders - sometimes before the generals themselves had laid eyes on them.

Those early days working at Bletchley Park made an impression on the young Dixon, particularly her accommodation in the nearby stately home of Woburn Abbey. "To me it was incredible, I lived in East Ham in a little terraced house with no bathroom and a tiny garden," she said.



Irene Dixon was billeted at the stately Woburn Abbey.

"Our lives changed immediately, the whole of Woburn Abbey grounds were our garden as such." The work she would do was no less remarkable, particularly in its impact on the outcome of the World War II. The Colossus would lay bare the intentions of highest echelons of the Nazi command and was the culmination of years of work to crack the Lorenz cipher used by Hitler and his lieutenants.

Designed to supplant the unreliable Heath Robinson and replace unwieldy analogue components with digital equivalents, the Colossus was one of the world's most complicated pieces of calculating equipment at the time of its invention. It was data processing writ large, with information wrangled by 1,500 glowing hot valves spread over a machine that stood taller than most men.

Dixon was a member of the Women's Royal Naval Service and despite being posted inland, she and her comrades maintained the illusion of being at sea, referring to Woburn Abbey as a ship, the bedrooms as cabins and saying they were 'coming ashore' when they departed to work at Bletchley.

Soon after the Colossus' arrival at Bletchley in 1944, Dixon found herself working next to the men who helped create the field of computing. Sitting alongside her as she flipped switches on the Colossus and loaded reels of tape were the likes of British mathematician Max Newman—who helped produce the world's first stored program electronic computer—and Jack Good, the cryptanalyst who later worked alongside Alan Turing on another of the earliest computers, the Manchester Mark I.

"We took our orders from the cryptanalysts, who were incredibly intelligent people. They would sit by us, I can visualize them now. They had a little table, a chair and their slide rules and they would tell us what settings to use, based on probability theory," she said. As celebrated as those individuals are today for helping shorten the war, attitudes towards them at the time were a good deal harsher. "They were working at Bletchley and people would say 'It's alright for them, they've got themselves into a safe job straight from university', so life wasn't easy for them," Dixon said. "My husband that was out on the Normandy beaches got a medal but these people got nothing."

### **Hacking Hitler**

In the years before Colossus was built, Bletchley codebreakers manually broke Lorenz-enciphered messages used by Hitler and his inner circle. The breakthrough came when cryptanalysts realized the settings the Lorenz SZ machine used to encrypt messages weren't entirely random. By using complex statistical analysis they worked out they could calculate the starting point of each of the Lorenz machine's 12-pin wheels and in doing so decipher Lorenz codes.

Colossus performed this analysis at blistering speed compared to a human mathematician - able to decipher messages in hours rather than weeks - as it was able to read messages punched onto paper tape at a rate of 5,000 characters per second. The clanking of an automatic typewriter attached to the Colossus, which would type settings that had a high probability of being correct, was always a welcome sound for Dixon. "That was exciting, it was a happy noise when you heard that clonk, clonking away. You were on your way then to breaking the wheel settings."

As with Enigma-enciphered messages, once Colossus had determined the wheel settings every Lorenz-enciphered message from that region could be cracked.

With the development of the Mark II Colossus—deployed just in advance of the D-Day landings—messages could be read even faster, at a rate of 25,000 characters per second. The machine's speed was thanks to various innovations by inventor Tommy Flowers, including the addition of a logic circuit that we today would call [a shift register](#).

From the moment of the machine's introduction to the end of World War II the Colossi were engaged in round the clock codebreaking. "We worked in eight hour shifts testing different settings. There were always new messages. They were coming through thick, the people at Knockholt [listening station] were sending messages through all the time," Dixon said. "The machine never ever stopped working from that

day [it was turned on]."

### Hands-on with the first computer

To Dixon the room-sized machine was something of a mystery and she admits being oblivious that the contraption that towered over her was one of the world's first computers. "It was an enormous machine and we just accepted it I suppose. This was what we were going to work on," she said. "Nobody explained it had just been invented. We didn't know that they just said: 'This is what you're going to work on and this is what it does'."



Irene Dixon with The National Museum of Computing's Colossus.

Ten versions of the Colossus were built but by 1960, in order to keep the machine's existence secret, all had been dismantled and all drawings of the machine were burnt - so the machine didn't have a direct impact on the development of future computers.

However Turing was aware of the Colossus, and went on to draw up the plans for the Automatic Computing Engine or ACE, whose capabilities were a step beyond those of Colossus, in that it was a stored-program and general-purpose computer. Given Colossus' legacy, Dixon said its inventor, British Post Office engineer Tommy Flowers, should be a household name. "The concept of computing has changed the world. To me every school child should know of Tommy Flowers," said Dixon. "He came from nearby where I lived and came from an ordinary background, his father was a bricklayer. If only children knew that they too, if they worked, could be a Tommy Flowers."

Despite being there at year zero for computing, it is only decades later when she is in her 90s that Dixon has begun using computers. "I worked on the world's first computer and never looked at one since. My husband has got an iPad, so I'm learning a bit about that in my old age," she said.

When the war ended Dixon spent another year in the navy, helping take weather observations for the service in Scotland, before returning to her job with the consumer goods giant Unilever. "I went back to the same office, the same firm, the same house and nobody knew what I'd done in those three years," said Dixon. "You just forgot all about it actually, it's very strange. I wasn't until 1996 when I had been to Bletchley Park that it all came alive to me again."

Like her fellow veterans Dixon kept her wartime activities secret for decades and says her silence was made easier by how little she knew about what she did. "If I'd known that I'd been working on messages from Hitler's high command I would have found it very difficult not to have told my parents," she said. "In fact, I'm glad my father didn't know, he would have probably have told people I won the war."

## 2015 Events:

Even though it is still winter, the increasing daylight hints at the coming summer months. With that is our series of community events where a group of amateurs practice their skills while supporting communications for various bicycle rides and medium and long distance runs. Start thinking about which ones you may enjoy assisting with. And contact the event coordinator to volunteer.

This year the club will also have Field Day events, the weekend of June 27 and 28. More information on that will be coming soon.

Lots to look forward to in 2015!

## Upcoming Events

### Walk/Ride for Hope

May 2, 2015

Coordinator, Keith Clark, KL7MM

### MS—Walk around Lake Hood

May 9, 2015

Coordinator, Allen Abbott KB1QCE

### Gold Nugget Triathlon

Sunday, May 17th

Coordinator, Alice Baker KL2GD

### MS-150

May 30, 2015

Coordinator, Allen Abbott KB1QCE

### American Diabetes Association — Tour de Cure

June 14, 2015

Coordinator, Alice Baker KL2GD

### Dog Jog

Date undetermined — Usually the third Saturday in July.

### Big Wild Life Marathon

August 16th, 2015

Coordinator, Keith Clark, KL7MM



**ANCHORAGE AMATEUR RADIO CLUB  
BOARD MEETING MINUTES  
January 20, 2015**



**Approved Minutes**

**Board Members Present:** Lara Baker, AL2R; Ron Keech, KL7YK; Alice Baker, KL2GD; David Heimke, AL7LO; Kent Petty, KL5T; Rich Gillin, AL4S; Paul Spatzek, KL7PS; George Wilkinson, KL1JJ; TJ Sheffield, KL7TS; Richard Tweet, KL2AZ.

**Visitors Present:** Keith Clark, KL7MM.

**Board Members Present by Teleconference:** Jim Wiley, KL7CC.

**Visitors Present by Teleconference:** none

**Board Members Excused:** none

**Board Members Unexcused:** Lil Marvin, KL7YF; Eric Thompson, N6SPP.

The January 20, 2015 monthly AARC Board meeting was called to order by President Lara Baker, AL2R at 7:00PM. A quorum was established.

Lara Baker, AL2R, asked for additions to the agenda.

**Reports:**

Secretary: The Board meeting minutes for December 2014 were read. One correction was made regarding the spelling of Lil Marvin's name. The December General meeting minutes were read with no corrections made. The minutes to both meetings were approved and accepted.

Treasurer: Alice Baker, KL2GD, reported that she had received a check from Boniface Bingo in the amount of \$9257.00, which brought 2014's gaming income up to \$55,890.00. She also received a restitution check in the amount of \$500.00. The Boniface Bingo check is believed to be the final check of 4<sup>th</sup> quarter 2014.

Finance Committee: Keith Clark, KL7MM, commented that the finance committee was looking into old Boniface Bingo reports to determine how they report expenses. Lara was going to check on several questions concerning the Boniface Bingo practices. This will take time since there are many reports to sort through. We are still awaiting the final payment of the \$5000.00 loan to Boniface bingo. \$2500.00 of that amount has been paid. Keith also stated that the club insurance policies need to be reviewed.

Grants Committee: Lara Baker, AL2R, reported that there had been no requests for grants.

Gaming: Keith Clark, KL7MM, reports that the gaming committee has a far better understanding on



the restaurant income, for which taxes must be paid.

Projects Committee: TJ Sheffield, KL7TS, reported that the 2014 books are not yet closed, but will be soon once all pertinent information is in and complete.

TJ continued that we had a strong 2014 fourth quarter income. He also showed the gaming history. Last year was a record low – and this year was another record low. AFN was in town for 2014 – should have helped with income.

Last year's gaming + restitution money is the target for expenditures for 2015.

Two events -- Field Day and Sweepstakes -- are in the forecast. Hamfest is no longer in the forecast.

Three projects are on hold – to carry over into 2015. Adding these items bring the total to the expenditures required.

TJ Sheffield, KL7TS, further commented that in the baseline budget, known maintenance items are included. Unknown or unplanned maintenance is not included.

VE Program: Jim Wiley, KL7CC, commented that there was nothing unusual going on in the VE program. The first ever non-teleconference volunteer exam session will be given in Cordova – to take place later in January. The session will be run by Joan Barons and will probably use the suffix "C".

Trustee Report: Keith Clark, KL7MM, reported that on Working Wednesday we have been working on HF antennas.

Membership: Fred Erickson, KL7FE, reported that membership is apparently cut in half. Fred reported that there are 82 dues-paying members and 190 Life members. Some dues paying members pre-pay their membership by 3-5 years so there can be a fluctuation in dues. Some of the Life members have become silent keys – Fred will update the Life membership lists. Any member who wants to know the status of his or her membership can contact Fred via e-mail or in person.

Dave Heimke, AL7LO, Activities Chairman asked about door prizes. He has used up last year's budget. He has several items in his cabinet, including several high cost items. He is also concerned about some of these prizes going to non-members or non-hams. Several suggestions were made to resolve this issue: 1) a membership sign-in sheet; 2) showing proof of call sign; 3) having the newsletter editor announce big prizes in the newsletter a few days ahead of time. The club also discussed ways to ensure that all members have an equal chance to win the big prize. This discussion was tabled – to be taken up at February's board meeting.

By-laws: Lara Baker, AL2R, gave a by-laws report. In response to an e-mail from the Alaska Gaming regulatory organization, he had added a statement to the by-laws. TJ Sheffield, KL7TS,

## THE AARC ANTENNA

reviewed the document and found some errors. These errors were discussed and corrected. The by-laws will be presented to the general membership at a general meeting and will be voted on by the general membership at a subsequent general meeting.

The question was asked about what happens to club assets should the club dissolve. The club does have a dissolution procedure under the Articles of Incorporation. The question was asked if it would be acceptable to include this procedure in the corporate by-laws. The club could add a reference that the club's assets would be liquidated as per instructions listed under the Articles of Incorporation.

Lara Baker, AL2R, moved to approve the by-laws provided that the wording was acceptable to everyone -- this would be done by telephone conference. He suggested that if there were objections, we can again review the objections. Alice Baker, KL2GD, moved to approve the by-laws. George Wilkinson, seconded, adding section 15.2 referencing the Articles of Incorporation. The motion passed without further discussion.

ARES: Kent Petty, KL5T, announced that there is an upcoming statewide exercise – on March 7 – involving a simulated cyberattack on communications in Alaska statewide. There are no planned deployments to various locations to initiate traffic. This will be discussed with Emergency Coordinators to see what they want to do.

The HF in the motor home is almost ready to be back online. There is still work being done on the Senior Center project and a VHF packet is still being put together for the EOC.

### **Old Business:**

General meeting change: -- The board members discussed changing the meeting venue and date. Some club members feel that the Friday night attendance is low because the meeting is on Friday night. TJ Sheffield, KL7TS, suggested we consider the BP Energy Center meeting rooms. He does not believe there would be a charge – they have three different rooms that can accommodate different numbers of people. These rooms can be booked up to a year in advance and can accommodate technology. Lara tabled the motion for further discussion at a later date.

Status of 220 MHz repeater: The RF preamp system was changed and fixed up but the repeater still has problems.

### **New Business:**

Contributions and Donations: Jim Wiley, KL7CC, initiated a discussion on contributions and donations to APU and Hope. As confirmed by a spreadsheet that Alice sent out, no contributions or APU have been made for the last 3 years. Jim recommends, that since we still use their facilities, we give each institution an annual \$2000.00 donation -- without their having to go through the grants procedure. The APU contribution would be used toward a scholarship fund.

## THE AARC ANTENNA

If the organizations require more, the additional amounts could be requested through the grants committee. Another suggestion was that the amount be \$500.00 to \$1000.per annum per institution. With a possible change of venue, this issue may be re-addressed.

Keith Clark, KL7MM, suggested that this issue be taken up by the grants/finance committee. If the club decides to pay the money, these committees can decide where the money will come from. Interested persons can attend this meeting. If teleconferencing is not possible, the meeting can be attended in person.

TJ Sheffield, KL7TS, reported that \$4000.00 for the above mentioned institutions would constitute 70% of our 2015 available gaming income. He expresses some concerns with APU's compliance with the club's original endowment and felt that these concerns should be raised at the meeting. George Wilkinson suggested the matter be turned over to the committees, and have reviews at the end of the year and if we have the resources to contribute, then we should contribute. If not then we should not contribute. It is a matter which could be visited annually, with a membership consensus. Lara Baker AL2R, suggested this issue could also be addressed in the rules of procedure and visited annually.

David Heimke, AL7LO, activities chairman, announced that February's general meeting's program will feature Mike Melum, KL6M -- talking about his dish recovery and the steps he took to restore it and make it stronger.

The ARRL Section Manager, Jim Larsen, AL7FS, will present the March program. David is still working on topics for April, May and June.

Lara Baker, AL2R, will take about 5 minutes in February and 10 minutes in March to discuss the by-law changes.

Meeting adjourned at 8:30 PM.

Respectfully submitted by  
Lillian Marvin, KL7YF  
AARC Secretary

**Membership update** from Fred Erickson, KL7FE, membership chairman (25 March 2015)

The AARC has 190 Life Members, 55 of those I have good reason to believe are silent keys. I suspect there are others. We also have 2 lifetime honorary members, 1 of which is a silent key.

As of today, we have 66 dues paying members. The 82 number I used was an 'end of year figure' which is higher of course.

As of today, we have 194 members that have a FCC call sign. As of today, we have 132 voting members. As of today, we have 219 total members.



**ANCHORAGE AMATEUR RADIO CLUB  
BOARD MEETING MINUTES  
February 17, 2015**



**Approved Minutes**

**Board Members Present:** Kent Petty, KL5T; Rich Gillin, AL4S; Lil Marvin, KL7YF; Paul Spatzek, KL7PS; Lara Baker, AL2R; George Wilkinson, KL1JJ; Alice Baker, KL2GD; TJ Sheffield, KL7TS.

**Visitors Present:** Keith Clark, KL7MM; Fred Erickson, KL7FE.

**Board Members Present by Teleconference:** Jim Wiley, KL7CC.

**Visitors Present by Teleconference:** Kathy O'Keefe, KL7KO; Mike O'Keefe, KL7MD.

**Board Members Excused:** Dave Heimke, AL7LO; Ron Keech, KL7YK.

**Board Members Unexcused:** Eric Thompson, N6SPP; Richard Tweet, KL2AZ.

Meeting was opened at 7:04PM by President Lara Baker, AL2R.

A quorum was established.

Lara Baker, AL2R, asked for additions to the agenda. Kent Petty, KL5T asked for a discussion on Inventory and Maintenance.

The agenda was approved.

**Reports:**

Secretary: The President announced that due to an equipment glitch, there are no minutes from last Board meeting. Lil Marvin, KL7YF, explained that she couldn't get her computer to work.

Rich Gillin, AL4S, volunteered to assist the Secretary with computer problems.

Alice Baker, KL2GD, mentioned that the secretary is using a very old computer – Rich Gillin AL4S, suggested that the club acquire an upgraded computer.

Paul Spatzek, KL7PS, offered to provide copies of the minutes to anyone. Paul was requested to provide the President a copy of the minutes – and of January's – since there was a vote on the by-laws during that meeting.

Treasurer: Alice Baker, KL2GD, mentioned that another restitution payment has been received. The restitution payments are paid up and on schedule.

## THE AARC ANTENNA

Finance Committee: Keith Clark, KL7MM, commented that the finance committee was looking into old Boniface Bingo reports to determine how they report expenses. Lara was going to check on several questions concerning the Boniface Bingo practices.

Grants Committee: Lara Baker, AL2R, reported that there had been no requests for grants. Jim Wiley, KL7CC, is writing letters of thanks to APU and Hope for use of their facilities.

Gaming: Lara Baker, AL2R, reported on the loan to Boniface Bingo. Boniface was robbed of ~\$19,000 at gunpoint. Insurance will pay all but \$1,000.00 deductible; however, in the meantime, Boniface requested a loan of \$5000 to cover expenses. Boniface has paid back \$2500. And they fully expect to pay back the remaining \$2500.

Projects Committee: TJ Sheffield, KL7TS, reported that we have come within \$400.00 of the target spending for the year.

(The president offered to include non-board call-ins on the distribution of reports.)

TJ continued that we had a strong 2014 fourth quarter income. He also showed the gaming history. Last year was a record low – and this year was another record low. AFN was in town for 2014 – should have helped with income.

Last year's gaming + restitution money is the target for expenditures for 2015.

Two events -- Field Day and Sweepstakes -- are in the forecast. Hamfest is no longer in the forecast.

Three projects are on hold – to carry over into 2015. Adding these items bring the total to the expenditures required.

The ECCP program is being tracked – some expenditures still pending.

TJ Sheffield, KL7TS, asked about the Arcticom helicopter trip to Grubstake. Alice Baker, KL2GD, suggested that, given the time elapsed, we not question the vendor about the expenditure.

Keith Clark, KL7MM, still has a big project to complete. And there are several small ECCP projects that are not complete.

TJ Sheffield, KL7TS, further commented that in the baseline budget, known maintenance items are included. Unknown or unplanned maintenance is not included. During the Working Wednesday session last week, the power blinked. Only one computer was backed up by a UPS system. TJ showed pictures of standard UPS systems that may be useful to provide UPS systems for 4 of the Ham shack computers. This is not a project yet.

## THE AARC ANTENNA

Jim Wiley, KL7CC, commented that most UPSs of the \$100.00 class do not power the computer for more than a few minutes. Kent Petty, KL5T, added that most of the UPS's put the computer to sleep – shutting down in a graceful way.

VE Program: Jim Wiley (KL7CC) commented that there was nothing unusual going on in the VE program. There had been a problem with unlocking the door to get into Hope for meetings and testing. It appears that this problem has been fixed.

Kathy O'Keefe commented that in the past, AARC has have written letters to Hope and APU to let them know our schedule. Lara commented that this item should be in the Rules of Procedure. Keith Clark, KL7MM, said that this should also be in Kent's maintenance schedule.

Jim Wiley, KL7CC, does not know yet whether the VE trip to the "East" will be an actual trip or a teleconference.

Trustee Report: Keith Clark, KL7MM, reported that on Working Wednesday we have been working on HF antennas. It appears that the AARC signal is strong.

Rich Gillin, AL4E, added that there are Sky Command tests that will need to use the KL7AA call sign.

Membership: Fred Erickson, KL7FE, reported that there has been no basic change in membership since last meeting.

Lara Baker, AL2R, mentioned that for the next general meeting we will need a quorum of membership to be able to vote on by-laws.

Kent Petty, KL5T, mentioned that we have acquired a couple of student members. (Student membership is free – so there is no income from these.)

By-Laws Committee: Committee is working on Rules of Procedure.

ARES: Kent Petty, KL5T, announced that there is an upcoming statewide exercise – on March 7<sup>th</sup>. Alice requested information on statewide exercise for newsletter.

Kent also said that high-level leadership at the "Guard" is interested in getting the State EOC up to speed. Kent and other members are putting together a wish-list for this effort.

### **Old Business:**

General meeting change: -- Lara Baker, AL2R, asked if we should discuss this at this time. Alice Baker, KL2GD, mentioned that TJ Sheffield, KL7TS, has investigated the possibility of meeting at the BP Energy Center. TJ report that it is a nice facility – they have good technical gear.

They can handle meetings of all sizes.

The issue seems to be that Friday nights are not good for many people. Should we move the meeting night?

A comment was made that there was lots of commotion at last meeting – kids running in and out along with the piano out in the lobby.

Several members mentioned that Thursday night is ARES night; Wednesday night often has church conflicts.

Kent Petty, KL5T, suggested a survey to the “e-mailing” list. Kent volunteered to “honcho” such a survey.

Rich Gillin, AL4E, suggested that it would be nice to have better communication for meetings. Keith Clark, KL7MM, mentioned that he had been at a meeting at BP where the remote display capability was used. Lara Baker, AL2R, discussed “Google Hangout”.

Alice Baker, KL2GD, suggested two surveys – one for only the meeting change question– then other topics on another. George Wilkinson, KL1JJ, suggested the survey should go to old members as well as current ones. Jim Wiley, KL7CC, pointed out that there are over 3000 licensed operators in the Anchorage area. Alice said that the newsletter mailing list has expired memberships in the list.

Kent Petty, KL5T, will put something together.

Status of 220 MHz repeater: Keith Clark, KL7MM, reported that Dave Heimke, AL7LO, is working on it.

Capital Equipment in the Accounting package: Lara Baker, AL2R, reported on “capital equipment.” The finance committee along with TJ Sheffield, KL7TS, and Lara went over list of capital items and marked for removal all items with a book value of zero or items that shouldn’t have been on the list to start with. This list will be sent to our accountant for reconciliation.

Inventory and Maintenance Discussion: Kent Petty, KL5T, led a discussion of the Inventory and Maintenance Program – and where it stands. Kent handed out inventory lists which came directly from the Maintenance Management System.

AARC Property Inventory includes things that we own. Kent has added hundreds of items. We need to have this information this to get proper level of insurance coverage. For many items in the list we need to fill out their current value.

Kent mentioned that he is constantly finding items not on this list – he needs help in fleshing out this inventory.

## THE AARC ANTENNA

The maintenance package also includes an open work order list. This work order list includes items that have been checked out. It can also schedule maintenance.

TJ Sheffield, KL7TS, commented that the inventory is a lot of work – Kent needs help.

Alice Baker, KL2GD, suggested that the asset list in the accounting package should be cross-referenced to inventory list.

Other topics: Alice Baker, KL2GD, said that the club had received a letter from Alaska Science Engineering Fair, asking for donations. This topic was referred to the finance committee.

Kent Petty, KL5T, raised the question about having kids (who have formed a club at their school) work on refurbishing kits.

He also asked what is the process for determining equipment disposition? TJ Sheffield, KL7TS, suggested that members can determine when equipment should be disposed of. Keith Clark, KL7MM, suggested that this topic should be addressed in the Rules of Procedure.

Meeting adjourned at 8:30 PM.

Respectfully submitted by  
Alice Baker, KL2GD  
Acting Secretary.



### ANCHORAGE AMATEUR RADIO CLUB TELEPHONIC BOARD MEETING MINUTES March 2, 2015



#### Approved Minutes

**Board Members Present by Teleconference:** Paul Spatzek, KL7PS; Lara Baker, AL2R; Alice Baker, KL2GD; Kent Petty, KL5T; TJ Sheffield, KL7TS; Richard Tweet, KL2AZ; Dave Heimke, AL7LO; Jim Wiley, KL7CC.

**Visitors Present by Teleconference:** Keith Clark, KL7MM; Kathy O'Keefe, KL7KO; Mike O'Keefe, KL7MD.

**Board Members Excused:** George Wilkinson, KL1JJ; Rich Gillin, AL4S; Lil Marvin, KL7YF; Ron Keech, KL7YK; Eric Thompson, N6SPP

**Board Members Unexcused:** None.



## THE AARC ANTENNA

Meeting was opened at 7:04PM by President Lara Baker, AL2R.

A quorum was established.

This being an extraordinary, telephonic Board meeting, there was only one item on the agenda: potential purchase of a vehicle as a replacement of the CCV

Lara Baker, AL2R, presented information on the CCV-replacement situation. He also told the Board that Kent Petty, KL5T, had obtained an offer to sell the club a Ford E350 diesel ambulance that had approximately 87,000 miles on it for \$8,000.00. The details of the vehicle, pictures of the vehicle, and the report of a mechanic's examination of the vehicle, had been sent to the Board prior to the meeting. There was substantial discussion of the issues involved in replacing the CCV with a smaller, but significantly stronger and tougher vehicle.

Jim Wiley, KL7CC, moved that the club expend \$8,000 to the purchase of the E350 ambulance and expend up to \$5,000 to decommission the CCV and fit out the ambulance. Alice Baker, KL2GD, seconded the motion and it was passed unanimously. Per the by-laws, such expenditures must be approved at a general meeting of the club.

President's note: I wish to note for the record that club members at the general meeting on 6 March 2015 did approve these expenditures. The vote at the general meeting was 20 in favor, 2 opposed.

The meeting was adjourned at 7:28PM.

Respectfully submitted by  
Lara Baker, AL2R  
President.



**ANCHORAGE AMATEUR RADIO CLUB  
GENERAL MEETING MINUTES  
March 6, 2015**



**Approved Minutes**

The President of the AARC, Lara Baker, AL2R, called the meeting to order at 7:05 PM. The usual introductions were made.

Because there had been a request for members to attend the meeting – to vote on the small revision to the by-laws – there was a good attendance.

The first topic for vote was the acquisition of a replacement vehicle for the CCV. TJ Sheffield, KL7TS, -- in the absence of Kent Petty, KL5T, -- explained the options for the acquisition. The replacement vehicle would be a surplus ambulance. The company selling it is asking \$8000.00 for the ambulance as it stands. The vehicle is a 2001 Ford E350 diesel with a 1 ton chassis and ambulance package.

The ambulance was available for viewing in the parking lot.

Ken Perry, AL7GA, asked when the club had last sent a contribution/donation to Hope and to APU. A spirited discussion followed. It was decided that this topic should be considered for addition to the Rules and Procedures.

Mike O'Keefe, KL7MD, asked if the vehicle had been weighed to determine what could be added (like heavy batteries) without going over the GVWR.

Lara Baker, AL2R, guaranteed that the vehicle would be weighed to make this determination before it was purchased.

Rich Gillin suggested that the CCV could be sold "bare bones" to someone who wanted to customize it.

Bob Douglas, KL3BD, moved that AARC purchase the vehicle. Rich Gillin, AL4E, seconded the motion.

The motion was: that the Board of Directors of the Anchorage Amateur Radio Club hereby be authorized to spend up to \$13,000.00 for the purchase of an E350 ambulance as a replacement for the CCV, for the outfitting of the ambulance, and for any expenses involved in decommissioning the CCV and selling the CCV.

There were 22 AARC members present and that made up a quorum.

## THE AARC ANTENNA

Twenty voting members were in favor of making this purchase and 2 were opposed.

Lara Baker, AL2R, presented the by-laws change. A representative from the State gaming commission had requested that the by-laws contain a particular paragraph concerning distribution of funds should the AARC cease to exist. This paragraph has been added to the by-laws.

A motion was made to accept this change, seconded by George Wilkinson, KI1JJ, and passed unanimously.

Jim Larsen, AL7FS, then gave a very informative talk about the functions and duties of the ARRL (Amateur Radio Relay League). He also collected questions to be answered at a later date about interactions with the ARRL.

The drawing for door prizes was held.

The meeting adjourned at 8:40 PM.

Respectfully submitted by  
Alice Baker, KL2GD  
Acting Secretary



## THE AARC ANTENNA

### People to Help You!! — 2015 Officers.

#### Officers

President	Lara Baker	AL2R	president@kl7aa.net
Vice President	Ron Keech	KL7YK	vicepresident@kl7aa.net
Secretary	Lillian Marvin	KL7YF	secretary@kl7aa.net
Treasurer	Alice Baker	KL2GD	treasurer@kl7aa.net

#### Board of Directors

##### 3 year term— ends 2017

George Wilkinson	KL1JJ	gdwilkinson2@yahoo.com
Jim Wiley	KL7CC	jwiley@gci.net
Dave Heimke	AL7LO	david.heimke@gmail.com

##### 2 Year term— ends 2016

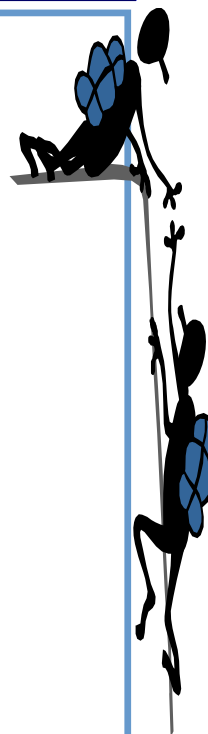
Eric Thompson	N6SPP	n6spp@arrl.net
Richard Tweet	KL2AZ	aktweeter@gmail.net
Rich Gillin	AL4S	rich@gillin.us

##### 1 Year term— ends 2015

Paul Spatzek	KL7PS	pspatzek@alaskapublic.org
TJ Sheffield	KL7TS	kl7ts@arrl.net
Kent Petty	KL5T	pettyak@gmail.com

#### Other Contacts

Trustee	Keith Clark	KL7MM	trustee1@kl7aa.net
Membership	Fred Erickson	KL7FE	membership@kl7aa.net
Newsletter Editor	Alice Baker	KL2GD	editor@kl7aa.net
Web Master	Ron Keech	KL7YK	webmaster@kl7aa.net
Activities Director	Dave Heimke	AL7LO	david.heimke@gmail.com



## Regular Committee Meetings:

**By-Laws Committee:** Contact Lara Baker, AL2R

**Finance Committee:** Monday of week before Board meeting, 7:00PM at Hamshack.  
Contact Keith Clark, KL7MM, trustee@KL7aa.net for info.  
(Members: Chair, Keith Clark, KL7MM, and Alice Baker, KL2GD.)

**Projects Committee:** Tuesday of week before Board meeting, 7:00PM at HamShack.  
Contact TJ Sheffield, KL7TS, kl7ts@arrl.net for info.  
(Members: Chair, TJ Sheffield, KL7TS, Rich Gillin, AI4S, and George Wilkinson, KL1JJ)

**VEC Testing:** Testing on 1st Tuesday and 2nd Saturday each month.  
Contact Jim Wiley, KL7CC, jwiley@gci.net for info.

**VHF:** As needed (usually with a repeater in trouble and needing "aid").  
Contact Doug Dickinson, KL7IKX, kl7ikx@yahoo.com.

### Who Do I Contact to Join AARC?

Fred Erickson KL7FE  
12531 Alpine Dr  
Anchorage, AK 99516-3121  
E-mail: membership@kl7aa.net  
Phone Number: 345-2181  
Annual Dues are \$12 (prorated as appropriate)  
Additional Member in same household is \$6.  
Full Time Student is no charge.



Have you considered a Life Membership?

Life	\$250.00
Senior >65	\$200.00
>70	\$150.00
>75	\$100.00
>80	\$50.00
>85	\$1.00

# For Sale



If you have equipment that you want to have listed for sale, please notify the editor at [editor@KL7AA.net](mailto:editor@KL7AA.net) before the 20th of the month. Thanks for your help.

Items advertised will have a "date of first appearance" added — and they will be deleted after two months appearance on the newsletter unless we are otherwise notified.

Please check [KL7AA.net](http://KL7AA.net) website for updates on availability of these items.

## Silent Key estate sale, most all is in near mint condition:

Kenwood TS-940S/AT HF transceiver (150 KHz – 30 MHz) with all band transmit mod, and service manual. Last used in 2007, needs internal batteries replaced. Includes Heil BM-10 boom headset mic with HC-4 DX element. \$700

24-hour clock by Seth Thomas, \$20

Sennheiser HD-485 open-air, over-the-ear 32-ohm headphones \$45

Sennheiser HD-600 open dynamic hi-fi professional 300-ohm headphones \$250

Kenwood TH-21AT 2M synthesized HT \$40

HyGain 674-PR CB 23-channel AM/SSB radio \$15

Solder gun Weller D550PK 200/260W professional heavy duty, \$30

Mike AL7KC [460-0242](tel:460-0242) (text or call)  
or email [AL7KC@yahoo.com](mailto:AL7KC@yahoo.com)





## Upcoming Events

**Plan ahead:**

**It is time to set aside the dates for the Community Service events.**

**May will be busy.**

### 2015 Events:

**Walk/Ride for Hope**

**May 2nd**

**Coordinator, Keith Clark, KL7MM**

**MS—Walk around Lake Hood**

**May 9, 2015**

**Coordinator, Allen Abbott KB1QCE**

**Gold Nugget Triathlon**

**Sunday, May 17th**

**Coordinator, Alice Baker KL2GD**

**MS-150**

**May 30, 2015**

**Coordinator, Allen Abbott KB1QCE**

**American Diabetes Assoc. — Tour de Cure** **Note — this is a new effort!!**

**June 14, 2015**

**Coordinator, Alice Baker KL2GD**



**THE AARC ANTENNA**

**Anchorage Amateur Radio Club**  
**PO BOX 101987**  
**Anchorage, AK 99510-1987**  
**www.KL7AA.net**



# April 2015

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3 AARC General Meeting 7:00PM	4
5	6	7 VE Testing	8	9	10	11 VE Testing
12	13 Finance Com.7:00	14 Projects Com. 7PM Ears Genl. Mtg	15	16	17	18
19	20	21 AARC Board Meeting 7 PM	22	23	24 Mara Meeting 7:00 PM	25
26	27	28	29	30		

**ARES NETS:**

1st Thursday: HT / Portable  
 2nd Thursday: Mobile Madness  
 3rd Thursday: RED CROSS  
 4th Thursday: Emergency Power

**ARES Net: Thursday Nights 8:00 PM**

147.33+ PL:103.5  
 443.900+ PL:103.5



## MONTHLY EVENTS

**1<sup>st</sup> Friday each month: AARC general meeting - 7:00 PM** in the Carr-Gottstein Building, on the APU Campus. Talk in will be on 147.33+ repeater.

**1<sup>st</sup> Tuesday each month (except for holidays):**

**VE License Exam 6:30 PM**, at the Hope Cottage offices, 540 W International. Bring photo ID, copy of license (if any) and any certificates of completion. Contact: Jim Wiley, KL7CC 688-0660.

**1<sup>st</sup> Thursday each month: Moosehorn Amateur Radio Club General meeting - 7:00 PM**

Location changes monthly so call on 146.88-repeater for info. Moosehorn ARC also holds a weekly luncheon every Thursday, locations and times change — contact George Van Lone, KL7AN: donnav@acsalaska.net

**2<sup>nd</sup> Saturday each month: PARKA (Polar Amateur Radio Klub of Alaska) Meeting at 11:00**

**AM.** Polar Amateur Radio Klub of Alaska. All amateurs welcome. Denny's on Denali Street in Anchorage. Some business is discussed. Originally established as an all woman organization, membership now includes spouses or significant others. Talk in on 147.30+.

**2<sup>nd</sup> Saturday each month (except for holidays):**

**VE License Exams at 2:00 PM.** at Hope Cottage 540 W. International. Be sure to bring photo ID, copy of license (if any) and any certificates of completion. Contact: Jim Wiley, KL7CC 688-0660.

**3<sup>rd</sup> Tuesday each month: AARC Board Meeting at 7:00 PM at Hope Cottage 540 W. International. All hams are invited and encouraged to attend.**

**2nd Tuesday of each month: EARS general meeting at 5:00 PM.** EARS meetings are held at

the EARS shack location. Contact info - Doug Myers, KL1DJ or Ron Keech, KL7YK for information. EARS: 552-2664 (recording); Talk in on 146.67-. Email: [club@KL7air.us](mailto:club@KL7air.us) or [kl7yk@arrl.net](mailto:kl7yk@arrl.net)

**4<sup>th</sup> Saturday of each month: Valley VE Testing at 7:00 PM.** Sessions will be held at Fire Station 61, at 7 pm on the fourth Saturday of each month unless it is a major holiday weekend. Contact Ken Slauson, KL7VE, Ken.Slauson@gmail.com or 907-376-8698.

**The last Friday each month: MARA meeting at 7:00 PM,** Wasilla Fire Station 61. Talk-in help for the meeting can be acquired on the 146.850 repeater. Further details can be found by contacting Don Bush, KL7JFT, [dbush@gci.net](mailto:dbush@gci.net).

**Every Monday at 11:00 AM:** Meeting of interested Amateur Radio Operators — and lunch at Denny's on DeBarr — across from Costco. Many code and HF operators attend this function. Come talk radio. For information, contact Kathy O'Keefe, KL7KO, [kokalaska@gmail.com](mailto:kokalaska@gmail.com)

**Every Saturday at 7:00 AM:** Meeting of a group of Amateur Radio Operators at Denny's on Denali for breakfast. Topics? Radio, photography, and upcoming events For information, contact Kathy O'Keefe, KL7KO, [kokalaska@gmail.com](mailto:kokalaska@gmail.com)

## THE AARC ANTENNA

### AARC web page & Email contact addresses:

Homepage: <http://www.KL7AA.net/>

Webmaster: [webmaster at kl7aa.net](mailto:webmaster@kl7aa.net)

Membership: [membership at kl7aa.net](mailto:membership@kl7aa.net)

Newsletter: [editor at kl7aa.net](mailto:editor@kl7aa.net)

### Internet Links, the favorites from our readers:

AARC <http://www.KL7AA.net>

EARS <http://www.kl7air.us>

MARA <http://www.kl7jfu.com>

Moose Horn ARC <http://www.moosehornarc.com>

PARKA <http://www.parka-kl7ion.com>

South Central Alaska ARES <http://www.kl7aa.net/ares.htm>

Practice Exams : <http://www.AA9PW.com>

Fairbanks AARC: <http://www.kl7kc.com/>

Alaska Navy/Marine Corps MARS: <http://www.navymars.org/pacific/reg10/AK>

Alaska VHF-Up Group: <http://www.gsl.net/ak-vhf/>

Yukon Amateur Radio Association: <http://www.yara.ca/>

Links for Propagation: <http://www.haarp.alaska.edu/> (not operational)

ORP and Homebrew Links : <http://www.AL7FS.us>

Solar Terrestrial Activity: <http://www.spaceweather.com>

<http://www.swpc.noaa.gov/>

ARRL <http://www.arrl.org/>

Propagation Report Recording 566-1819

Please let us know if there are other clubs pages or good starting points that should appear here.

Report dead links or bad info to [editor@kl7aa.net](mailto:editor@kl7aa.net)

### Winlink RMS's

- Anchorage VHF ARES RMS WL7CVG-10 144.9 (Elmendorf Moraine)
- Anchorage HF ARES RMS WL7CVG (multi-band scanning see [WWW.WINLINK.ORG](http://WWW.WINLINK.ORG) for frequencies)
- Palmer (MATSU) VHF RMS KL7JFT-10 145.19
- Fairbanks VHF RMS KL7EDK-10 147.96
- Fairbanks HF RMS KL7EDK (multi-band scanning see [WWW.WINLINK.ORG](http://WWW.WINLINK.ORG) for frequencies)
- South Central Digipeater WL7CVG-4 144.9 (Knik)
- Anchorage AARC VHF RMS KL7AA-10 144.98 (AARC Club Station, Hughesnet Satellite Connection)

### NETS in ALASKA:

The following nets are active in Alaska:

#### VHF

The local VHF Nets have a Packet side as well. Look for 2 meter Packet at 145.01 (Eagle) and 147.96 (Valley).

The Eagle and Valley Packet Nodes provide a "talk" or chat function. Also if you are unable to connect directly to ontof the nodes, try digipeating through "EARS" on either frequency. Do this by typing "c eagle v ears" or "c vally v ears" on the appropriate frequency. Dee KL7AIR.US for more info on the digipeaters.

**ARES Net:** 147.33 103.5Hz - Thursdays at 8:00 PM local

**No Name Net:** 146.43 simplex Sundays 8:00 PM

**South Central Simplex Net:** 146.52 FM, 144.2 USB, 446.0 FM, 432.2 USB, 223.5 FM, 927.5 FM, 1294.5 FM, 52.525 FM, 50,125 USB, 29.6 FDM, 28.4 USB, 145.01 packet (Eagle node) and 147.96 packet (Valley node).

Tuesdays 8:00 PM local

**Alaska VHF Up Net:** 144.200 USB Saturdays 9:00 AM local

**Statewide LINK Net:** 145.15(-) PL 123.0Hz; Sundays 8:30PM local

**Alaska Morning Net:** The Alaska Morning net is held Monday through Saturday from 9am- 11am on the IRLP Reflector 9109. This net can be reached via several hosting nodes in the area. Please visit <http://status.irlp.net/index.php?PSTART=2&mode=3> to find the closest node. Also, the net can be reached via Echo Link on 9191 (WL7LP-R) and Allstar nodes 27133 and 29332.

The Alaska Statewide ARES net is held Thursday evenings at 8:30pm (following the Anchorage ARES net) on IRLP 9109, Echolink WL7LP-R and Allstar 27133 or 29332 as well as the Sunday evening Alaska Statewide Radio Link net at 8:30pm.

#### HF

- **Alaska Sniper's Net:** 3.920 MHz 6:00 PM daily
- **Alaska Bush Net:** 7.093 MHz 8:00 PM daily
- **Alaska Motley Net:** 3.933 MHz 9:00 PM daily
- **ACWN (Alaska CW Net):** 3540 kHz, 7042 kHz, 14050 kHz Non-directed, CW calling and traffic watch for relaying NTS of other written traffic. AL7N monitors continuously. Receivers always on WL2K. (RMS connection available (AL7N@winlick.org))
- **Alaska Pacific Net:** 14.292 MHz 8:30 AM M-F
- **ERC HF Net:** 3.880 MHz—Sunday 8:30PM

# THE AARC ANTENNA



## Data You Can Use:

Frequency	Tone	Call Sign	Features	Area
147.18 -	88.5	ADES		Ft. Richardson
146.88 -	no tone	AL7LE	Phone patch	Kenai Soldotna
146.82-	103.5	WL7CWE	IRLP	Anchorage
146.76 -	123.0	KL3K	IRLP	Seward
146.94 -	103.5	KL7AA	Phone patch	Anchorage to Wasilla
224.94 -	no tone	KL7AA		Anchorage
444.70 +	103.5	KL7AA	Phone Patch	Anchorage
146.67 -	103.5	KL7AIR	MARS Station	Anchorage & Highway North
147.30 +	141.3	KL7ION		Very Wide Area
146.85 -	no tone	KL7JFU		Mat Valley
146.91 -	no tone	KL7JL		Homer
147.15 +	107.2	KL5E	Phone patch	Eagle River & Chugiak
147.84 -	103.5	WL7CWE		Wasilla Repeater
<b>147.33 +</b>	<b>103.5</b>	<b>WL7CVF</b>	Cross linked to 443.900	Very Wide Area **
<b>443.900 +</b>	<b>103.5</b>	<b>WL7CVF</b>	Cross linked to	Very Wide Area **

South Central Area Simplex Frequencies	
146.52 MHz	National Calling and Emergency frequency
147.57 MHz	DX Spotting frequency
146.49 MHz	Anchorage area simplex chat
146.43 MHz	Mat-Su Valley simplex chat
147.42 MHz	Peninsula simplex chat

WINLINK	Callsign	Frequen- cy
Anchorage ARES RMS	WL7CVG-10	144.9
Palmer (MATSU) RMS	KL7JFT-10	145.19
FAIRBANKS RMS	KL7EDK-10	147.96
South Central Digipeater	WL7CVG-4	144.9
Anchorage AARC RMS	KL7AA-10	144.98

## THE AARC ANTENNA



The Anchorage Amateur Radio Club has been an ARRL Affiliated Club for more than 50 years



Are you an  
ARRL Member...  
Life Member?

[www.arrl.org/benefits](http://www.arrl.org/benefits)

### Are you a member of ARRL?

ARRL is the American Radio Relay League. This is the national organization that advocates on behalf of amateur radio operators to the FCC and the communications industry. Consider becoming a member of ARRL today. [www.arrl.org](http://www.arrl.org)

For more information about the ARRL DX Century Club Program check out: <http://www.arrl.org/awards/dxcc/>



## KL7AA Mail Reflector

If you like to **stay in touch on KL7AA news** and other posts of local interest.

Step #1: First point your browser to: <http://mailman.qth.net/mailman/listinfo/kl7aa>

Step #2: On the web page you will see a section titled "Subscribing to KL7AA". Enter your e-mail address in the "Your email address" entry box.

Step #3: Pick a password for your account and enter it in the box marked "Pick a password" and then enter the same password in the box marked "Reenter password to confirm". This password will be used to change your settings on the list such as digest mode, etc.

Step #4: If you would like the e-mails in daily digest form click yes on the line marked "Would you like to receive list mail batched in a daily digest?"

Step #5: Click on the "Subscribe" button below the information that you just entered.

Step #6: Follow the directions.

### ANNOUNCEMENT:

AL7N is the Alaska Section Traffic Manager. Ed is looking for Code operators for passing formal NTS traffic throughout Alaska on the AK CW Net. For more information please contact: [AL7N@arrl.net](mailto:AL7N@arrl.net).

## THE AARC ANTENNA

### **ARES - Section 7, District 7 (Anchorage, ALASKA)**

**Mission statement:**

Dedicated to amateur radio as it pertains to disaster services. The history of amateur radio operators' involvement in sending life-saving information in and out of disaster areas [and] providing help during and after earthquakes, floods, hurricanes and tornadoes. "HAM's have been there to assist local, state, and federal agencies and relief organizations such as the American Red Cross and Salvation Army." When All Else Fails, Amateur Radio.

[www.ares.org](http://www.ares.org)

Emergency  
Management  
Institute



FEMA

<http://training.fema.gov/>

**ARES NETS:**

**Thursday Nights 8:00 PM**

**147.33+ PL:103.5**

**1st Thursday: HT / Portable**

**2nd Thursday: Mobile Madness**

**3rd Thursday: RED CROSS**

**4th Thursday: Emergency Power**

**ARES Anchorage District  
Contact Information**

**Kent Petty, KL5T@arri.net**

**ARES Matanuska-Susitna Valley Dis-  
trict**

**Contact Information**

**Don Bush, KL7JFT@arri.net**

"**Alaska ARES and the Alaska Native Medical Center** have in joint effort stood up a HF Remote Messaging System (HF RMS) in Anchorage. This system provides HF Radio Email Service to the area. In an emergency this system will provide digital email capabilities if we lose the Internet. It is designed to accept connections from Amateur Operators who are using either PaLink or Airmail software and a Pactor 1-3 capable Terminal Mode Controller (TNC). If the Internet is lost to the area the RMS will forward messages to another RMS over HF Radio. Being HF Radio based, the coverage area is quite large. While it is intended for intra-Alaska use we have stations from as far away as Arizona using the HF RMS to pass email traffic to the internet on occasions.

ARES and the AARC also host two VHF RMSs which provide Radio to Email service on VHF Radio in the Anchorage area. One of those RMSs is linked to the Internet via the AARC's Hughesnet Satellite Internet Service.

The WL7CVG and KL7AA RMS's frequency listings, etc. can be found on [www.Winlink.org](http://www.Winlink.org).

## THE AARC ANTENNA

### KL7AA HAMSHACK

The KL7AA station is available for training in HF operations. Learn from an experienced HF operator about propagation, voice and Morse code modes as well as best practices and legal operation. The station is fully integrated with a PC and soundcard to operate in many digital modes.

Take advantage of this unique benefit! Arrange a session by contacting the club trustee, Keith Clark, KL7MM, ([aksunlite@aol.com](mailto:aksunlite@aol.com)) to meet at the KL7AA station at 5923 Rowan Street.

Notice: Any AARC sponsored repeater, with or without an auto-patch, will always be open to all licensed amateur radio operators in the area who are authorized to operate on those frequencies. **IRLP is not authorized on KL7AA repeaters except for special events as approved by the board and trustee.**

THE AARC ANTENNA is the monthly newsletter of the Anchorage Amateur Radio Club, published by and for its members. The entire contents of this newsletter are copyrighted 2011 by the Anchorage Amateur Radio Club.

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#### **Newsletter Submissions, Information or Corrections:**

All articles from members and interested persons are very welcome. If you wish to submit any articles, jokes, cartoons, please have it typed or neatly handwritten. It can be submitted by mail, computer disk or E-mail to the newsletter editor at the address listed below. Submissions must be in the hands of the editor **no later than the 10 days prior** to the general meeting. Email: [editor at kl7aa.net](mailto:editor@kl7aa.net)

Since THE AARC ANTENNA is no longer being sent out by US MAIL, we need some help from all the AARC members. We have gotten a large percentage of the e-mailed newsletters returned as undeliverable. Also we have no e-mail addresses for many of you.

Would you please e-mail "[membership@KL7AA.net](mailto:membership@KL7AA.net)" with a current e-mail address and current mailing address and phone numbers (home, work, and cell — as you choose).

If you have special needs or concerns please send your comments to [editor@kl7aa.net](mailto:editor@kl7aa.net) to bring to the attention of the board of AARC. Current and newsletters from years past can be found on the club website at [www.KL7AA.net](http://www.KL7AA.net).

Thanks for your help in this.