# Anchorage Amateur Radio Club

Next Meeting MAY 1st 2009, 7:00 PM

# A Cyber-Attack on an American City

By Bruce Perens

Just after midnight on Thursday, April 9, unidentified attackers climbed down four manholes serving the Northern California city of Morgan Hill and cut eight fiber cables in what appears to have been an organized attack on the electronic infrastructure of an American city. Its implications, though startling, have gone almost un-reported.

That attack demonstrated a severe fault in American infrastructure: its centralization. The city of Morgan Hill and parts of three counties lost 911 service, cellular mobile telephone communications, land-line telephone, DSL internet and private networks, central station fire and burglar alarms, ATMs, credit card terminals, and monitoring of critical utilities. In addition, resources that should not have failed, like the local hospital's internal computer network, proved to be dependent on external resources, leaving the hospital with a "paper system" for the day.

Commerce was disrupted in a 100-mile swath around the community, from San Jose to Gilroy and Monterey. Cash was king for the day as ATMs and credit card systems were down, and many found they didn't have sufficient cash on hand.

Services employees dependent on communication were sent home. The many businesses providing just-in-time operations to agriculture could not communicate. In technical terms, the area was partitioned from the surrounding internet.

What was the attackers goal? Nothing has been revealed. Robbery? With wires cut, silent alarms were useless. Manipulation of the stock market? Companies, brokerages, and investors in the very wealthy community were cut off. Mayhem, murder, terrorism? But nothing like that seems to have happened. Some theorize unhappy communications workers, given the apparent knowledge of the community's infrastructure necessary for this attack. Or did the attackers simply want to teach us a lesson?

Although they are silent on the topic, I hope those responsible for

emergency services, be they in business or government, are learning the lessons of Morgan Hill. The first lesson is what stayed up: stand-alone radio systems and not much else. Cell phones failed. Cellular towers can not, in general, connect phone calls on their own, even if both phones are near the same tower.

They communicate with a central switching computer to operate, and when that system doesn't respond, they're useless. But police and fire authorities still had internal communications via two-way radio.

Realizing that they'd need more two-way radio, authorities dispatched police to wake up the emergency coordinator of the regional ham radio club, and escort him to the community hospital with his equipment. Area hams dispatched ambulances and doctors, arranged for essential supplies, and relayed emergency

communications out of the area to those with working telephones.

That the hospital's local network failed is evidence of over-dependence on centralized services. The development of the internet's communications protocols was sponsored by the U.S. Department of Defense, and they were designed to survive large failures. But it still takes local engineering skill to implement robust networking services. Most companies stop when something works, not considering whether or how it will work in an emergency.

Institutional networks, even those of emergency services providers, are rarely tested for operation while disconnected from the outside world. Many such networks depend on outside services to match host names to network addresses, and thus stop operating the moment they are disconnected from the internet.

Even when the internal network stays up, email is often hosted on some outside service, and thus becomes unavailable. Programs that depend on an internet connection for license verification will fail, and this feature is often found in server software. Commercial VoIP telephone systems will stay up for internal use if properly engineered to be independent of outside resources, but consumer VoIP equipment will fail.

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#### A cyber Attack on an American City cont.

This should lead managers of critical services to reconsider their dependence on software-as-a-service rather than local servers. Having your email live at Google means you don't have to manage it, but you can count on it being unavailable if your facility loses its internet connection. The same is true for any web service. And that's not acceptable if you work at a hospital or other emergency services provider, and really shouldn't be accepted at any company that expects to provide services during an infrastructure failure. Email from others in your office should continue to operate.

What to do? Local infrastructure is the key. The services that you depend on, all critical web applications and email, should be based at your site. They need to be able to operate without access to databases elsewhere, and to resynchronize with the rest of your operation when the network comes back up.

This takes professional IT engineering to implement, and will cost more to manage, but won't leave you sitting on your hands in an emergency.

Communications will be a problem during any emergency. Two-way radios have, to a great extent, been replaced by cellular "walkie-talkie" services that can not be relied upon to work during an infrastructure failure. Real two-way radios, stand-alone pager systems, and radio repeaters that enable regional communications are still available to the governments and businesses that endure the expense of planning, acquiring, maintaining, and testing them.

Corporate disaster planners should look into such facilities. Municipalities, regardless of their size, should not consider abandoning such resources in favor of the less-robust cellular services.

Satellite telephones can be expected to keep operating, although they too depend on a land infrastructure. They are expensive, and they frequently fail in emergency situations simply because their users, administrative officials rather than technical staff, fail to keep them charged and have no back-up power resource once they are discharged.

A big plus for Morgan Hill was that emergency services had an well-practiced partnership with the local hams. Since you can never budget for all of the communications technicians you'll need in an emergency, using these volunteers is a must for any civil authority. They come with their own equipment, they run their own emergency drills and thus are ready to serve, and they are tinkerers able to improvise the communications system needed to meet a particular

emergency.

Which brings us to the issue of testing. No disaster system can be expected to work without regular testing, not only of the physical infrastructure provided for an emergency but of the people who are expected to use it, in its disaster mode. But such testing takes much time and work, and tends to trigger any lurking infrastructure problems, creating outages of its own. It's much better to work such things out as a result of testing than to meet them during a real disaster.

We should also consider whether it might be necessary to harden some of the local infrastructure of our communities. The old Bell System used to arrange cables in a ring around a city, so that a cut in any one location could be routed around. It's not clear how much modern telephone companies have continued that practice. It might not have helped in Morgan Hill, as the attackers apparently even disabled an unused cable that could have been used to recover from the broken connections.

Surprisingly, manholes don't usually have locks. They rely on the weight of the cover and general revulsion to keep people out. They are more likely to provide alarms for flooding than intrusion. Utility poles are similarly accessible. Much of our infrastructure isn't protected by anything so tough as a manhole cover. Underground cables are easily accessible in surface posts and "tombstones", boxes often located in residential neighborhoods. These can be wrecked with a screwdriver.

Most buried cable cuts are caused by operating a backhoe without first using one of the "call before digging" services to mark out the location of all of the buried utilities. What's done accidentally can also be done deliberately, and the same services that help diggers avoid utilities might point them out to an attacker.

The most surprising news from Morgan Hill is that they survived reasonably unscathed. That they did so is a result of emergency planning in place for California's four seasons: fire, floods, earthquakes, and riots. Most communities don't practice disaster plans as intensively.

Will there be another Morgan Hill? Definitely. And the next time it might happen to a denser community that won't be so astonishingly able to sustain the trouble using its two-way radios and hams. The next time, it might be connected with some other event, be it crime or terrorism. Company and government officers take notice: the only way you'll fare well is if you start planning now.  $\square$ 

#### ANCHORAGE AMATEUR RADIO CLUB MEMBERSHIP MEETING April 3, 2009

Carr Gottstein Building – APU Campus Anchorage, AK

#### Call to Order

The meeting was called to order at 7:14 PM by President Randy Vallee, KL7Z. 42 were in attendance.

#### **Presentation**

Lt. Col. Timothy Bolen, Commander of the Alaska Rescue Coordination Center gave a presentation of Search and Rescue in Alaska as performed by the 11<sup>th</sup> Air Force Rescue Coordination Center. The RCC was established in Alaska in 1994 and operates north of 58 degrees and West of 151 degrees. There are 12 active duty members staffing the RCC with 6 being officers and 6 being enlisted personnel, with up to 15 years of rescue experience in Alaska and is currently located at Elmendorf Air Force Base. The officers rotate out of this assignment and the enlisted personnel stay. The Alaska RCC owns no forces and are Department of Defense representatives for General Atkins. The RCC may request assistance from other military sources as well as private entities with a simple phone call. The funding for RCC is through the active duty pipeline now versus the earlier Army Guard setting. The RCC uses vhf, uhf, hf, los, as well as Alaska Land Mobile Radio, main communications are via 123.1 via ALMR to Mt. Susitna. The rescue Hercules aircraft also uses Iridium Satellite communications. Lt. Col. Bolen noted that long range radar sites installed in Alaska for air defense are also used for communication and that Satellite communication radio is a good tool but is more suited to combat situations with only 1 Satcom frequency being assigned for use in peacetime operations. Lt. Col. Bolen noted the main tool for getting to the plane crash sites are the emergency locator beacons which are picked up and then processed by SARmaster software which the mission control center in Virginia uses to determine the responsible RCC group. The old frequencies of 121.5 and 243 provided a 7 mile radius search area where the new GPS encoded 406 beacons can provide pinpoint location determination. This is an issue in Alaska where many owners and operators have not made the conversion to 406 and with no one other than fellow aviators monitoring 121.5, chances of the ELT's being heard are minimal. Recent incidents were detailed in which no locator beacons were received and it was only because of other notification that it was known that aircraft were down. Part 135 air taxi operators are not required to

have 406 beacons installed in their aircraft, and many don't. Lt. Col. Bolen noted a big push by the military to convert all fighter aircraft to 406 beacons and that the change from 121.5/243 locators is moving slowly. It was noted that the rescue aircraft costs run approximately \$4,000.hr for the H60 helicopter and \$6,000/hr for the Herc. For future communications the RCC is trying to get the Alaska Command to assist with funding to allow for communications to RCC direct via ALMR. The ease in linking on site aircraft communication with incident commanders on the ground was exampled in instances where trying to secure a landing site, talking to personnel on the ground and also that radios within the RCC are moving to a Motorola system. Para jumpers use 150.5 as their primary frequency to talk to the helicopter.

Discussion noted that some of the 406 beacons and some of the Personal Locator Beacons are GPS encoded which allows for greater accuracy in determining the search location. Some pilots and operators are keeping their ELT's with the 121.5 frequency for a backup form of emergency notification. The 210<sup>th</sup> rescue squadron, formed in 1990, is based out of Kulis, has its Air Guardsmen attached to the RCC and due to the Base Closure and Realignment Commission, will relocate to Elmendorf in 2011. Senator Stevens was able to secure 4 rescue Hercules and helicopters for Alaska, Costs for the new 406 beacons were discussed, Close working relationship with the Canadian SAR, Canadian requirement for aircraft registered in Canada to have 406 beacons installed, registration of a newly installed 406 beacon is via a phone call or can be done online, Civil Air Patrol only has one aircraft equipped to receive 406 transmissions, transmission from an activated 406 beacon is the serial number and lat/long information and the national database has the information associated with that beacon, Personal Locator beacon signals, when received, appear as a ground based emergency and not that of an aircraft and the State Troopers are the responding agency, in a national park the plane crash and SAR are the Park agency's responsibility, RCC takes an incident from start to finish where in an Air Force SAR, the Air Force is only a clearing house operation.



#### KL7AA General Meeting Club Business

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#### **Business**

T.J. Sheffield provided a funding request presentation to the members. T.J provided information on the equipment purchase approved by the AARC Board at its February meeting. Equipment proposed is 4 laptop computers, 3 MicroKeyers, 2 Elecraft K3 transmitters, 1 SGC amplifier along with tower guying equipment and cabling for the equipment. Total cost proposed for this purchase is \$26,000.00. Motion made Fielder Dowding KL7FHX, seconded Bob Douglas KL3BD to approve the funding request as requested. Discussion prior to the vote included; why K3's?, Location of radios once purchased, project schedule and timeline, gaming revenue and rules regarding gaming income, current AARC balance sheet, possible IRS rules changes, and club future. Question was called by Richard Kotsch WL7CPX. Motion carried by a 27 to 7 vote.

#### **OTHER**

Randy Vallee KL7Z passed out certificates of appreciation to those who volunteered in the AUU/Red Cross exercise and thanked Heather Hasper KL7SP for organizing the event

Heather Hasper, KL7SP made the following announcements:

- ⇒50 students are currently enrolled in the next Technician training class which begins April 6<sup>th</sup>. Volunteer instructors are requested. Also demand is great for a General or Extra class and volunteers are being sought to teach those classes.
- ⇒June 6<sup>th</sup> is the date for the Airport disaster exercise. This event is a city wide joint exercise. The ALMR MOU has been signed and ALMP will be used for this exercise. Please contact KL7SP at ARRL.net to volunteer as up to 50 ham radio operators are needed for this event.
- ⇒Coordinator for the September 19<sup>th</sup> Anchorage hamfest is needed.

Bob Douglas KL3BD noted that the would be doing a Mount McKinley DXpedition beginning around June 1<sup>st</sup>. Bob noted he hopes to use APRS and is looking for support and hopes to have communication on an IRLP node.

Craig Bledsoe noted that a NASA consultant for the MARS Lander Rover would be the guest speaker at the Moose Lodge luncheon on April 10<sup>th</sup>. Cost is \$15.

#### **Door Prize Drawing**

KL2GY, Brian Lederhos, KL7LL, KL2AZ and KL1UL

The meeting adjourned at 9:25pm.

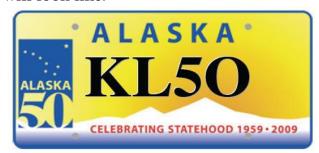
Submitted as recorded on April 3, 2009 By:

Richard Tweet, KL2AZ Secretary

#### AMATEUR KADIC

The Alaska DX Club (KL7DX and ★ KL7CQ) has been granted a third call sign ★ which we will be using for a yearlong spe- ★ cial event (2009) in honor of the 50th An- ★ niversary of Alaska's Statehood. The call ★ sign is KL5O.

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## MARA HAMFEST

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#### **From ANCHORAGE:**

- 1. Take the Glenn Highway to the Parks Interchange
- 2. North on the Parks Highway
- 3. Turn Left on Knik Goose Bay Road
- 4. Turn Right on Centaur Avenue
- 5. Just past Weld Air.
- 6.Look for KL7JFU signs

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# Saturday MAY 16, 2009



Doors open at 09:00 AM for Sellers and 10:00 AM for Buyers:

Admission...\$2.00

Tables... \$20.00

Country Store table... 10%



9:00 AM - 4:00PM



# Matanuska Amateur

Radio Glub



#### KL7AA Club Business

ANCHORAGE AMATEUR RADIO CLUB
BOARD MEETING
April 21, 2009
540 WEST INTERNATIONAL ROAD
Anchorage, AK
(UNAPPROVED at Printing)

The meeting was called to order at 7:00 PM by President Randy Vallee KL7Z.

#### **BOARD MEMBERS PRESENT:**

President Randy Vallee KL7Z, Vice President Heather Hasper KL7SP, Secretary Richard Tweet KL2AZ, Treasurer Calex Gonzalez KL2BT, Activities Manager Pat Wilke WL7JA, Past President Kathleen O'Keefe KL7KO, Eric McIntosh KL2FM, Susan Woods NL7NN, Bruce McCormick KL7BM, T.J Sheffield KL7TS, Tom Rutigliano NL7TZ, Michael O'Keefe KL7MD, Sean Jensen KL2CO,

NON-VOTING MEMBERS PRESENT

Keith Clark KL7MM, Fred Erickson KL7FE

**EXCUSED** 

John Orella KL7LL, Hugh McLaughlin KL7HM, Craig Severson KL2FN

**UNEXCUSED** 

None

REQUEST FOR AGENDA ITEMS

None

**GUESTS** 

Randy Lissey KL2LO

#### SECRETARY REPORT

Previous Board meeting minutes for the March Board meeting were presented as well as the membership meeting minutes from the April membership meeting. Motion made Michael O'Keefe KL7MD, seconded Kathleen O'Keefe KL7KO to accept the minutes as presented. The motion carried unanimously.

#### TREASURER'S REPORT

Calex Gonzalez KL2BT gave the financial report for month ending March 2009. Calex noted the treasury is healthy, taxes are complete, one grant request has been received and Field Day purchases have not been made yet. Motion made Heather Hasper KL7SP, seconded Michael O'Keefe KL7MD to accept the Treasurers report as given. The motion carried unanimously

#### **VE REPORT**

Eric McIntosh KL2FM reported that there has been record turnout at the last 2 testing sessions mostly in part due to the Technician class being held at present. Eric reported there are 30 new hams in the last 2 testing sessions. Discussion noted that the Anchorage Police Department is installing a station in their dispatch center as some new technicians are dispatchers as well as numerous APD officers.

#### TRUSTEE REPORT

Keith Clark KL7MM reported that Logbook of the World has recorded 8664 QSO's with 1771 confirmed to date for the KL7AA call. Heather Hasper noted the Technician training class was utilizing the KL7AA call for the EchoLink demonstration for the class.

#### MEMBERSHIP REPORT

Fred Erickson KL7FE reported that there are currently 304 hams with AARC memberships. PayPal has been working fine for the renewals and new signups.

#### ARES TRAINING

Heather Hasper KL7SP reported that the Coax training this month was very well attended and presented. John Lynn KL7CY and Corny Eastman KL0FK held the class which consisted of connector installation and testing of cables with test gear. Coax training, Knots and Ropes training and Winlink training will be offered as annual ARES training as they are frequently requested classes. Heather noted the club has installed a Winlink VHF RMS station at R1 North and that a HF RMS station location in Anchorage is being researched. The VHF station is using the call of WL7CVG-10 on 144.900 via the Airmail software. The Winlink station consists of an AARC radio and TNC and is currently using an EARS computer for the RMS.

#### ACTIVITIES MANAGER REPORT

Pat Wilke WL7JA reported that the guest speaker at the May membership meeting will be T.J. Tombleson KB8JXX and that a speaker has been lined up for the June meeting.



#### KL7AA Club Business

#### **OLD BUSINESS**

#### REAL ESTATE

Keith Clark KL7MM reported that there was low turnout for the recent site visit of the available property at 6727 Greenwood. This property is part of a 3 unit 0 lot line type property. Keith noted this property has potential and that the owner is willing to provide 30 year owner financing at an affordable interest rate. Another visit of the property will be arranged in early May for review of the property.

#### USE OF CLUB TEST EQUIPMENT

Heather Hasper KL7SP reported that the policy for use of club assets was still in draft format and was still being developed.

#### CCV GARAGE SECURITY

Bruce McCormick KL7BM reported that the project is not complete and is ongoing.

#### CCV LEVELING JACK REPAIRS

Michael O'Keefe KL7MD noted the repairs have not been completed yet and that he has a facility willing to repair the unit. Discussion noted the estimate for repairs to be less than \$1000.00 and to proceed with them.

#### CCV INTERCOM

T.J. Sheffield noted the Project Manager for this project has been out of country and would be at the Project meeting at the CCV facility on April 22nd.

#### MT. SU REPEATER REPAIR STATUS

Heather Hasper KL7SP noted a trip to the site to perform repairs is in the planning stage, but scheduled for July 19th. Heather noted the crew and helicopter are on standby for the trip, weather permitting. Randy Vallee noted he may be able to combine repairs to AARC equipment while on site to repair the generators at the facility. Discussion noted that the UHF Grubstake repeater which had been sent out for repair had been received and ready for installation.

#### AARC TEST GEAR

The test gear recently purchased from Jim Wiley KL7CC has been obtained and is at the CCV facility.

#### D-STAR REPEATER AVAILABILITY

Tom Rutigliano NL7TZ reported that he will present the system and cost to the Capital Project committee on April 22nd. Cost is estimated to be approximately \$7000.00 for the system that includes 3 repeaters and associated equipment.

#### MEMBERSHIP SURVEY

Heather Hasper reported that the membership survey is drafted and ready for implementation. Discussion noted the survey will be mentioned in the May newsletter and also announced at the May membership meeting. The survey is scheduled to run from May 1st to May 31st.

#### BOARD POLICY ON USE OF PERSONAL CREDIT CARDS

This was noted to have been addressed at the March Board meeting and will be removed from the agenda.

#### **NEW BUSINESS**

#### STATE FAIR

Heather Hasper KL7SP noted the fees have been paid for the State fair. Discussion noted the need for a coordinator for this event. Pat Wilke WL7JA has offered to begin the initial process.

#### **GRANT REQUESTS**

Heather Hasper KL7SP noted that a Grant Request has been received for the Moosehorn Amateur Radio Club and that the grant Committee has not met to discuss the request yet.

#### **HAMFEST**

Discussion noted the need for a coordinator and that possible locations are being researched.

#### **GOVERNORS PICNIC**

Heather Hasper asked for Board input as to whether the Board felt the AARC should participate in the annual Governors Picnic with a booth. Heather noted that the event usually has booths from Public Service agencies. Consensus of the Board is to pursue participating in the

event and to determine the associated costs and ability to display the CCV at the event.



#### KL7AA Club Business cont.

#### AARC VOLUNTEER PARTICIPATION

Randy Lissey KL2LO noted his planned participation in the Girl Scouts Emergency Preparedness Field event and the opportunity for volunteers. Motion made Michael O'Keefe KL7MD, seconded Calex Gonzalez KL2BT to provide AARC support and participate in this event.

#### AARC BOARD MEMBERS ATTENDANCE

Discussion was held on the non-attendance by AARC Board member due to work related issues. Richard Tweet KL2AZ will contact the individual to determine if this is a permanent situation and will report to the Board at the May meeting.

#### MISC. DISCUSSION

Tom Rutigliano NL7TZ noted he would be traveling and unavailable for the next 2 Board meetings and asked to be excused. Heather Hasper KL7SP noted that the Anchorage Police officers who have obtained their Technicians licenses are having amateur band radios installed in their vehicles.

#### **ADJOURNMENT**

Motion made Eric McIntosh KL2FM, seconded Michael O'Keefe KL7MD to adjourn. Motion carried. The meeting adjourned at 7:53pm.

Respectfully submitted as recorded on 04/21/09 by: Richard Tweet, KL2AZ

Secretary



CORNEY EASTMAN, KLOFK is offering a great Electronics Class on Friday evenings at the KL7AA HAMSHACK.

The classes are open for anyone wanting to learn more about electronics or test equipment used in radio applications, anyone who wants to test or troubleshoot radio or antennas.

This informal fun class discusses design and equipment options that might be used to build a radio. RADIO KITS are available to purchase and build. Bring your questions and projects to the KL7AA Radio shop on Friday Evenings at 530PM. The class is currently scheduled to meet on the following nights:

# Logging from the Club Perspective OR

#### The Trustee is Gonna Cry

Logging is an aspect of Ham radio that experienced hams (notice, I didn't say older) take for granted. Historically, it was an FCC requirement that a station log be kept. These days, the FCC doesn't require it, and many of us "new guys" haven't had the practice drilled into our Little Lid heads.

I was really hoping to write the best article ever written about logging, but the Feb. 2009 Issue of QST did just that. I could stop here, but of course, I won't.

Believe it or not, people around the world still want to verify their QSO with an Alaskan station. And now that that we're using Club Stations, both in the CCV and at the CCV garage, that are multi-band / multi-mode, the responsibility for verifying those contacts falls to me, the Club Trustee. I can't do it without your help.

Our preferred method of logging is computer based logging software, tied to the radio. It does a good job. We have used Write-Log in the past, but because we are now building multi-band / multi-mode stations, we are utilizing *N1MM* and *HAM RADIO DELUXE*.

The minimum amount of information that I need to upload our files to Logbook of the World is the call sign of the operator at the Club Station, frequency, RST report, time in UTC, and maybe the QTH of the station worked. And it's really pretty easy. The computers are tied to the internet, and when a call sign is typed in, all the information appears in the required fields. The Club operator's call sign should be loaded in at the beginning of each session and will be automatically added to the QSO.

So, as the title of this article says, the Trustee is gonna cry if you don't take care of the logging protocols.

Thanks for your help in making my job as Trustee easier, and in making our Club Station a success!

Keith Clark, KL7MM

Trustee, KL7AA (<u>trustee@kl7aa.net</u>)

#### 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 operations. The station is fully integrated with a PC and soundcard to operate in many digital modes. There are weekly contests to participate in even if just helping Hams all over the world gain points and multipliers to win awards.

Your club station is quite capable and has great ears. Club operators have made many QSO's with all modes on all continents. Recent activities have seen SSTV QSO with New Zealand, hearing a Fallujah Iraq operator on PSK, a 15 meter contact to Peru during the CQ WW Phone contest. Common contacts are made with the lower 48 states and Caribbean, Canada, Japan, Korea, Taiwan, China, Russia and islands in the Pacific.

Take advantage of this unique benefit! Arrange a session by contacting the club trustee, Keith Clark, KL7MM to meet at the KL7AA station on Rowan Street.





### ML7AA 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.gth.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.



#### Are you a member of ARRL?



ARRL is the American Radio Relay League. This is the national or-Amateur Radio ganization that advocates on behalf of amateur radio operators to

the FCC and the communications industry. **KL7AA** is an ARRL affiliated club with more than 50 years. Consider becoming a member of ARRL today.

Fore more information about the ARRL DXCC Program check out: http://www.arrl.org/awards/dxcc/

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News Letter Submissions, Information or correc**tions:** Submissions must be received 2 weeks before meeting Email: editor@kl7aa.net

Mail: PO BOX 101987, Anchorage, AK 99510-1987

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**NEWSLETTER ARTICLES**: 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 above. Submissions must be in the hands of the editor no later than the 10 days prior to the meeting or it may not be included.

**The MODULATION TIMES** is the monthly newsletter of the Anchorage Amateur Radio Club, published by and for its members. The entire contents of this newsletter are copyright 2008 by the Anchorage Amateur Radio Club.

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# **May 2009**

ARES NET: Thursday Nights 8:00 PM 147.27+ PL:103.5

or 443.30+ PL 103.5

# Anchorage, AK 99510-1987 www.KL7AA.net

# **ARES DISTRICT 7 & 5** KL7AA & KL7JFU







Sat

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Thu

Wed

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Meeting

7PM

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Contact: Ron Keech: KL7YK@arrl.net

AARC











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HAMFEST

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**AARC Board** 

Meeting

7PM

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meeting 7PM

MARA

MARA

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Meeting 7PM **MARA Board** 

meeting PARKA

11 AM

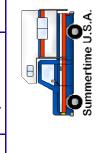
# 5/16 MARA HAMFEST

sean.jensen@qmail.com

# www.aresalsaska.org

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

### TRIATHLON NUGGET *0709* 24 31 Contact: Sean Jensen, KL2CO 5/17 GOLD NUGGET TRIATH-Contact kl7sp@arrl.net or ARES NETS:





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#### **PUBLIC SERVICE ACTIVITIES**

#### Public Service

Listed below are events that local radio clubs and event coordinators are looking for communication volunteers to support these upcoming public service events. Your participation is appreciated.



While April is a quite month for public service activities, Spring is just around the corner and Summer events will soon be here. Here are some of the dates and events in May that we will be looking for volunteers.

5/2 Walk for Hope

Contact: John Lynn, KL7CY, johnlynn@gci.net

5/17 cold nuccet triathlon

Contact: Heather Hasper, KL7SP, kl7sp@arrl.net

3/20 mayors marathon

6/28 field day



# VE UPDATE

Congratulations to the 45 new ham radio operators who recently completed the AARC/OEM Ham radio course. Thanks to all the instructors and participants who Many of the came out to assist. participants law enforcement were officers and we appreciate the support of the Anchorage Police Department to help better prepare our city for Emergency **Operations** ensuring emergency by communications through the use of HAM RADIO.

ARES District 7 Contact Information
Michael O'Keefe, KL7MD
DEC7 at kl7aa.net



# 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.

### ARES EXERCISE

#### **EMERGENCY EXERCISES**

This spring will bring many opportunities to practice emergency communication scenarios with multiple agencies.

On <u>Saturday</u>, <u>June 6</u>, <u>2009</u>, <u>Anchorage International</u> Airport will be practicing a disaster operations exercise. Due to the size of ANC International, the airport is required to complete this exercise every 3 years as part of the recertification of the airport under Federal Aviation Regulations Part 139. This training exercise will involve a <u>simulated aircraft crash</u> on or near airport property. This training exercise will help the airport prepare for it's response to an aircraft accident.

This is a multi-agency exercise. Many will be participating including client agencies Anchorage Office of Emergency Management, AFD, APD, State Troopers, Providence Hospital, Regional Hospital, Kulis Air National Guard, USFW, USCG, Port of Anchorage as well as many other Non Government Organizations. More details about volunteer opportunities in future newsletters. There are plenty of opportunities for operators who enjoy all modes of amateur radio to get involved in your club activities.



#### Data You Can Use:



#### 2009 Board of Directors

**President**: Randy Vallee, KL7Z president at kl7aa.net

Vice Pres: Heather Hasper, KL7SP vicepresident at kl7aa.net

Secretary: Richard Tweet, KL2AZ secretary at kl7aa.net Treasurer: Calex Gonzalez, KL2BT treasurer at kl7aa.net

Activities Chairman: Pat Wilke, WL7JA activities at kl7aa.net

**Trustee:** Keith Clark, KL7MM trustee at kl7aa.net

**Membership Chairman:** 

Fred Erickson, KL7FE membership at kl7aa.net

News Letter Editor: Heather Hasper, KL7SP editor at kl7aa.net

#### **Three Year Board Members**

Michael O'Keefe, KL7MD mok at gci.net (3rd Year) Eric McIntosh - KL2FM, kl2fm at arrl.net (2nf Year) Bruce McCormick, KL7BM kl7bm at arrl.net (1st year)

#### **One Year Board Members**

TJ Sheffield - KL7TS, kl7ts at arrl.net

Craig Severson - KL2FN, chipman at clearwire.net

John Orella: KL7LL, kl7ll at arrl.net

Susan Woods: NL7NN, NL7NN4606 at yahoo.com

Tom Rutigliano, NL7TZ, tomr at alaska.net Sean Jensen, KL2CO, sean.jensen at gmail.com Hugh McLaughlin, KL7HM kl7hm at arrl.net

Kathleen O'Keefe, KL7KO (Past President) kok at woodscross.net

#### AARC web page & Email contact addresses:

Homepage: http://www.KL7AA.net/ webmaster at kl7aa.net Webmaster: Membership: membership at kl7aa.net editor at kl7aa.net Newsletter:

#### News Letter Submissions, Information or corrections:

Submissions must be received 2 weeks before meeting

Email: editor at kl7aa.net

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.

#### Anchorage & Mat Valley Area Repeaters-a/o JAN 1 2009 **KL7AA:** Flattop Mountain 2,200 ft

146.94/34 MHz, 80 watts, auto-patch, 141.3 Hz PL

224.94/223.34, 25 watts, no patch, no PL 444.70/449.70, 25 watts, auto-patch, 103.5 PL

WL7CVG: Mount Susitna 4,396 ft

VHF: WL7CVG/R1 147.270/147.870 PL 103.5, no auto-patch UHF: WL7CVG/R3 443.300/448.300 PL 103.5, no auto-patch

WL7CVF: Grubstake: Hatcher Pass 4,536 ft

VHF: WL7CVF/R1 147.330 / 147.930 PL 103.5 Hz (no patch) UHF: WL7CVF/R3 443.900 / 448.900 PL 103.5 Hz (no patch)

KL7ION at Mt. Gordon Lyon: PARKA 3,940 ft 147.30 / 147.90, MHz - 80 watts, no patch, 141.3 Hz PL

**KL7AIR Elmendorf AFB:** EARS: 146.67/146.07, 107.2 Hz PL

#### KL7CC, Anchorage Hillside, SCRC & QCWA

146.97/.37 MHz, 30 watts, auto-patch, 103.5 Hz PL

#### **KL7M Anchorage Hillside**

147.21 / 147.81 MHz, on IRLP, 97.4 Hz PL

**KL5E Chugiak**: 147.15/147.75, 123.0 Hz PL, auto-patch

KL7JFU, KGB road, MARA: 146.85/146.25, auto-patch, no PL

Palmer IRLP: 146.64/.04, simplex patch, no PL

Mile 58.3 Parks Highway IRLP: 147.09/.69 MHz, 97.4 Hz PL

Winlink VHF RMS 145.190 MHZ, mode is Packet.KL7JFT-10

KL3K, Girdwood - IRLP

146.76 / 146.16 MHz, 25 watts, no patch, 97.4 Hz PL

**KL7AX**: South Anchorage IRLP - 146.79/ 146.19 MHz, 100 Hz PL

#### WL7CWE: Cliffside Amateur Radio Association

WL7CWE Anchorage IRLP

2 Meter: 146.82/146.22MHz PL 103.5

6 Meter: 51.65 output / 51.15 input, PL 103.5Hz

70 cm: 444.85/449.850 MHz PL: 103.5 Hz (Node 3400)

#### **South Central Area Simplex Frequencies**

146.52 MHz Calling and Emergency frequency

147.57 MHz National DX Calling / Coordinating frequency

146.49 MHz Anchorage area simplex chat 146.43 MHz Mat-Su Valley simplex chat 147.42 MHz Peninsula simplex chat

146.58 MHz Simplex IRLP - Wasilla Lake



#### Nets in Alaska: The following nets are active in South-Central Alaska:

#### VHF

**ARES Net:** 147.27/87 103.5Hz - Thursdays at 8:00 PM local **PARKA Net** 147.30/.90, 141.3 HZ Thursdays at 7:00 PM local

#### **Morning Road and Weather Report:**

147.27/87 103.5Hz - Daily at 9:00 AM

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No Name Net: 146.85/.25 repeater Sundays 8:00 PM

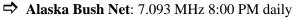
**Big City Simplex Net:** 146.520, 446.0, 52.320 FM, 29.6 FM, 28.400 USB With Packet 145.01 and 147.96, Tuesdays 8:00 PM local

**Grandson of SSB Net:** 144.20 USB Mondays 8:00 PM local Alaska VHF Up Net: 144.200 USB Saturdays 9:00 AM local **Statewide LINK Net**: 147.27/87 103.5Hz Sunday 8:00 PM local

Echolink: KL7M

#### HF

 
 ➡ Alaska Sniper's Net
 3.920 MHz 6:00 PM daily



- ⇒ Alaska Motley Net: 3.933 MHz 9:00 PM daily
- ⇒ ACWN (Alaska CW Net)

3534, 7042 Daily @ 0700 -1000, Net Purpose:Formal NTS traffic via CW.

AL7N or KL5T monitoring.

**⇒** Alaska Pacific Net:

14.292 MHz 8:00 AM M-F

ERC HF Net: 3.880 MHz – Sunday 8:30PM

**MAY 2009** 12 Volume 38, No 5 **Internet Links, the favorites from our readers:** 

AARC http://www.KL7AA.net
SCRC http://www.KL7G.org
EARS http://www.kl7air.us
MARA http://www.kl7jfu.com

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

PARKA <a href="http://www.parka-kl7ion.com">http://www.parka-kl7ion.com</a>
ARES <a href="http://www.aresalaska.org">http://www.aresalaska.org</a>
Practice Exams: <a href="http://www.AA9PW.com">http://www.AA9PW.com</a>
Fairbanks AARC: <a href="http://www.kl7kc.com/">http://www.kl7kc.com/</a>
ALASKA MARS: <a href="http://www.akmars.org">http://www.akmars.org</a>

Alaska VHF-Up Group: <a href="http://www.kl7uw.com/avg.htm">http://www.kl7uw.com/avg.htm</a> Béthel Amateur Radio Klub: <a href="http://www.al7yk.org/">http://www.al7yk.org/</a>

**Yukon Amateur Radio Association:** 

http://www.yara.ca/

**Links for Propagation** 

http://www.haarp.alaska.edu/

QRP and Homebrew Links <a href="http://www.AL7FS.us">http://www.AL7FS.us</a>
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

#### **Regular HAM Gatherings:**

**Tuesday Lunch, 11:30 AM:** Denny's on Denali behind Sears. Several old timers show for this and have lots of stories to share about amateur radio in Alaska.

**Saturdays Breakfast, 7:30 AM:** Here is a good way to get started on the weekend. Come and meet with some of the locals and have a great breakfast at American Diner, at the Northeast corner of Arctic and International. Great Fun.





#### Who Do I Contact to Join AARC

Fred Erickson KL7FE

12531 Alpine Dr

Anchorage, AK 99516-3121 E-mail: membership (at) 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. Ask about Life Memberships



#### **MONTHLY EVENTS**

1st Friday each month: <u>AARC general meeting</u> - 7:00 PM in the Carr-Gottstein Building, on the APU Campus. Talk in will be on 147.27+ repeater.

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

<u>VE License Exam</u> **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 338-0662.

2<sup>nd</sup> Saturday each month: <u>PARKA Meeting</u> at 11:00 AM. Polar Amateur Radio Klub of Alaska. All amateurs welcome. Denny's on Denali Street in Anchorage. Talk in on 147.30+.

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

<u>VE License Exams</u> 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 338-0662.

3<sup>rd</sup> Saturday of each Quarter month: <u>EARS general meeting</u> at 3:00 PM. EARS meetings are held formally each Quarter during the first month: Jan, April, July, and October. Meetings are held informally each month at R1 North. Contact info - PO Box 6079, Elmendorf AFB 99506 or email Ron Keech, KL7YK for information. EARS: 552-2664 (recording); Talk in on 146.67-. Email: KL7AIR@arrl.net or KL7YK@arrl.net

**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.

**3rd Saturday each month:** ARES General meeting 9:30AM to 12:30 PM. Call Michael O'Keefe, ANC DEC: dec@kl7aa.net HM: 243-4675 for additional information. Also check for ARES Info at: www.aresalaska.org

4<sup>th</sup> Saturday of each month: <u>Valley VE Testing</u> at 7PM. sessions will be held at the Wasilla Red Cross at 7 pm on the fourth Saturday of each month unless it is a major holiday weekend. Wasilla Red Cross is in the Westside Mall, next to Speedy Glass...it's just a click up from AIH hardware.

The last Friday each month: MARA meeting at 7PM Fire Station 61, located two blocks up Lucille Drive, from the Parks hwy. Talk-in help for the meeting can be acquired on either the 146.640 or 146.850 repeaters. Further details can be found by contacting Tim Comfort, NL7SK, NL7SK at arrl.net.

#### THE MODULATION TIMES

Anchorage Amateur Radio Club, Inc Post Office Box 101987 Anchorage, Alaska 99510-1987 www.kl7aa.net

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## AMATEUR RADIO





# MIEMBERSHIP SURVIEY

Please consider participating in the KL7AA MEMBERSHIP SURVEY currently located on the KL7AA website. This survey is open to all ham operators. If you do not have internet access and wish to participate in the survey, a paper copy can be provided to you upon request. Results of the survey will be available in the JULY 2009 Newsletter. The survey will close on May 31st, 2009. Thank you for your participation!

www.kl7aa.net