Anchorage Amateur Radio Club

Meeting on March 3rd

IN THIS ISSUE:

Note from the Editor Letters from the 1987 Iditarod ARRL SUPPORTS SWITCH TO CISPR STANDARDS

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AARC web page & Email contact addresses:

http://kl7aa.akconnect.com

president to kl0cy@arrl.net

webmaster to kl7aa@lawson.akconnect.com membership to frederickson@iname.com

News Letter Submissions, Information or corrections:

Submissions must be received 2 weeks before meeting Email: **KL0CY@arrl.net** Facsimile: 907-338-4791 Mail: 7013 Trafford Ave. Anchorage 99504

KL7G CODE PRACTICE SCHEDULE

OPPORTUNITY PRB-1 BILL INTRODUCED IN CALIFORNIA SENATE And Much Much More

Nets in Alaska:

The following nets are active in South-central Alaska: 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 Alaska Pacific Emergency Preparedness Net 14.292 MHz 8:00 AM M-F QCWA net 146.97/.37 repeater Sundays 8:00 PM local 850 No Name Net 146.85/.25 repeater Sundays 8:00 PM Son of Sidebard Net 144.20 USB Mondays 8:00 PM local

850 No Name Net 146.85/.25 repeater Sundays 8:00 PM Son of Sideband Net 144.20 USB Mondays 9:00 PM local Big City Simplex Net 146.520 FM Tuesdays 8:00 PM local ARES net 147.30/.90 MHz Thursdays at 8:00 PM local PARKA net 147.30/.90 MHz Thursdays at 9:00 PM local

Anchorage & Mat Valley Area Repeaters

KL7AA systems at Flattop Mt., 2,200 ft 146.34/94 MHz, 80 watts, autopatch, 100/141.3 Hz PL

223.34/224.94, 25 watts, no patch, no PL

444.70/449.70, 25 watts, autopatch, 100/141.3 PL

KL7ION at Mt. Gordon Lyon 4,700 ft

147.30/90 MHz - 80 watts, no patch, no PL

KL7AA, Mt. Alyeska, 2,400 ft.

146.16/76 MHz, 25 watts, no patch, 141.3 Hz PL

KL7CC, Anchorage Hillside, SCRC club

temporary down 146.97/.37 MHz, autopatch, 103.5 Hz PL

KL7DJE at Grubstake Peak, 4,500 ft.

147.09/.69 MHz, 25 watts, no patch, 100 Hz PL

444.925/449.925, 10 watts, no patch, 141.3 Hz PL

KL7JFU, KGB road, MARA club

146.85/.25, autopatch, no PL

KL7AIR Elmendorf, EARS

146.67.07, 1072. Hz PL

KL7G West Anchorage & Events

449.65/444.65 MHz, patch, no PL

Anchorage & Mat Valley Simplex Frequencies

146.52 Mhz Calling and Emergency frequency

147.57 / 447.57 (crossband linked) HF spotters & chat

146.49 Mhz Anchorage area simplex chat

146.41 MHz Mat Valley simplex chat

~~~ HOT LINKS ~~

Internet Web links, the favorites from our readers

AARC http://kl7aa.akconnect.com

New URL for SCRC Web Site

SCRC http://www.home.gci.net/~worcester/scrc.htm

EARS http://www.qsl.net/kl7air

MARA http://www.obarr.net/mara/

Moose HORN ARC http://www.alaksa.net/~kl7fg

ARES http://www.gsl.net/alaskaares

KL7J http://www.alaska.net/~buchholz

Fairbanks AARC:

http://ffdlm1mac.uafsom.alaska.edu/aarc/aarc.html

Yukon Amateur Radio Association:

http://www.klondike.com/yara/index.html

HAARP Project:

http://server5550.itd.nrl.navy.mil/projects/haarp/

<< Amateur Radio Reference Library>>

http://www.area-ham.org/library/libindex.html

Hamradio: http://www.hamrad.com/

Solar Terrestrial Activity http://209.130.27.95/solar/

ARRL http://www.arrl.org/

Propagation Report Recording 566-1819

please let us know if there are other club pages or good starting points that should appear here

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ABACUS RADIO REPAIR

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ALASKA HAM RADIO SUPPLY Ken Weldon, AL0R proprietor 20950 Chickadee Lane in Chugiak, 688-4267

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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 computer disk, fax, or E-mail to the newsletter editor at the address listed on the cover. Submissions must be in the hands of the editor at least two weeks prior to the meeting.

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Regular HAM Gatherings:

* Tuesdays, 11:30 AM to 1:00 PM: Join the gang for lunch and an eyeball QSO at the Royal Fork, Penland Park, East.

Saturdays, 7:30 AM: Here is a great way to get started on the week-end come and meet with some of the locals and have a great breakfast at Phillips Restaurant, at the corner of Arctic and International. Great Fun.

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This Month's Speaker

Susan Woods will be talking to us about the American Red Cross and Kent Petty will speak to us about ARRL Field organization.

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THIS MONTH'S EVENTS

March 7: EARS general meeting at 7:00 PM 1st Tuesday of the month, in the basement of Denali Hall (building 31-270) on Elmendorf AFB.. Talk in on 147.27 simplex.

March 1: VE License Exam 6:30 PM, 1st Wednesday of the month, Carr-Gottstein Building, APU Campus. Bring photo ID, copy of license (if any) and any certificates of completion.

March 3: AARC general meeting at 7:00 PM 1st Friday of the month in the Carr-Gottstein Building, on the APU Campus. Talk in will be on 147.300.

March 14: AARC Board meeting at 7:00 PM 2nd Tuesday of the month at Boniface Bingo

March 10: SCRC general meeting at 7:00 PM the 2nd Friday of the month at Denny's on Debarr & Bragaw. Talk in on 147.57 simplex.

March 11: ARES Planning Committee 09:30 AM to 12:00 PM. 2nd Saturday of the month. No ARES meeting this moth due to activities every weekend

March 11: VE License Exams at 2:00 PM. 2nd Saturday of the month at Hope Cottage 540 W. International in the Board Room. Be sure to bring photo ID, copy of license (if any) and any certificates of completion.

March 18: PARKA Meeting at 11:00 AM. 3rd Saturday of the month at Peggy's, across from Merrill Field

March 31: MARA meeting at 7PM the last Friday of the month at the MTA office in Palmer.

March 4 is the Iditarod Start in downtown Anchorage and March 5 is the Restart at the New Wasilla Airport. Contact Clyde, KL0CW email: clj@alaska.net or leave a message at 373-1436 if you want to help.

An Alaskan HAM Radio Store Upgrade Special!

'arren "Ken" Weldon, ALOR the proprietor of ALASKA AM RADIO STORE is offering a 10% discount to all hams that bring in a CSCE dated 01/01/2000. This will last until April 15th. Get your license or upgrade and save some money!

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H F Station For Sale

One ICOM 725 HF tranceiver 100W
One desk mike SHURE model 444D
One Kenwood Watt Meter HF
One Butternut all band vertical antenna HF (missing one section)
One Triband HF antenna 10M 15M 20M
\$700. OBO Robert 376-3799 WL7SH

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HAM RADIO SALE

Prop Pitch Rotor system by Aztec Engineering Company. (K6NA) All new with the exception of Rotor and system which I had. They rebuilt the Rotor, new wiring and brushes etc. New control console with direction needle centered on Anchorage Alaska. Comes with weather shield, milled coupler ear for a two inch mast, heavy duty Rohn 45 rotor plate, rive belts, Power supply, SS hardware Instructions and paper work. Cost over \$1100.00. Make reasonable offer.

New five Band four element Cubex Quad Antenna 20 through 10. Mark IV with extra heavy duty Fiberglass Spreaders, wind truss 28 ft heavy duty three inch boom, special copper clad wire. Stainless Steel hardware complete instructions. cost over \$1000.00 Make reasonable offer.

Kenwood TS-930 SAT Transceiver just back from Kenwood Factory for Repairs and complete check up. .Have all paperwork etc. Has YG-455C-1, YK-88C-1 CW filters, original Manual, Hand Mike, factory boxes. Stop by Pioneer Home and check it out. \$850.00

Kenwood TH-225A 144MHZ FM Transceiver with manual, extra batteries and charger, soft case, TSU-4 Tone Decoder, factory box, original Owner. \$145.00 OBO.

Kenwood TH-22A 144 MHz FM Transceiver as new, extra new PB-32 Battery, charger and Manual. \$150.00 Original Owner.

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Note from the Editor I am dedicating most of this newsletter to the brave souls that were on the 1987 Iditarod trail and some of the letters that I have received from them. What with is being the first on of the new century and one of the largest. So sit back and enjoy the letters from the front lines so to speak.

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Alascom News Release FOR IMMEDIATE RELEASE March 4, 1987 For Further Information Jim Larsen; 264-7000

AMATEUR RADIO NETWORK KEY TO IDITAROD COMMUNICATIONS

When Susan Butcher's team was stomped by a rampaging moose during the 1985 Iditarod she needed advice in a hurry.

Fifteen of her 17 dogs were hurt. Susan had to describe the injuries to her veterinarian in Anchorage to determine whether she should continue the race.

There's no phone at the Rabbit Lake checkpoint, her first stop after the moose encounter, so Susan turned to Joe Kyle, NL7CP, the amateur radio operator in charge of communications there. Though Kyle and a fellow HAM in Anchorage, Susan was on the phone to her vet.

Based on the vet's advice, Susan scratched from the race. The HAM then radioed for a plane to medvac her most critically injured dogs to Anchorage for surgery.

Easy? It sounds that way because, even in frontier Alaska, we've gotten used to relying on complicated technology -- the kind that carries advice from an Anchorage veterinarian to an anxious mushier calling from a tent in the wilderness.

But it takes technical expertise, mounds of equipment and a lot of people to set up a communications network like that used on the Iditarod. It's a system that must function in savage weather and primitive conditions.

It's operated by the 100-member team of amateur communicators who volunteer their services and personal equipment to support the race. Twenty-five HAMs are stationed at checkpoints on the 1,200-mile trail, with another 75 in Anchorage, Nome, Fairbanks and other locations throughout the state.

The report the musters' times in and out of checkpoints. They handle medevac requests, relay messages for food and supplies, communicate flight plans and provide weather updates.

And, just in case, the HAMs are there to provide emergency communications too.

"One of the major reasons we rely on HAMs is tradition," says Iditarod Communications Manager Jim Larsen, AL7FS. "Our statewide phone netwide has been completed only within the past 10 years. Prior to that, communications in Bush Alaska meant radio.

"Also, our phone network doesn't cover every location along the Idiarod," he explains. Nine of the 25 checkpoints aren't permanent locations, or are too small for installation of a phone.

Larsen, a member of the Anchorage Amateur Radio Club and an Alascom marketing representative, says activity on the sun's surface has caused a change in race communications technology.

We're in that part of a solar cycle when high frequency radio signals are at their poorest, especially in these northern latitudes," he explains.

"For years we used HF sets which bounce their signals off the ionosphere. But now, we can't rely on that system so we've begun using another kind of radio that operates on very high frequencies.

VHF signals are fed into repeaters which beam them to Alascom's communications satellite, Aurora I. Race officials in Anchorage and Nome and any other VHF operator in between can pluck the messages from the satellite.

The communications firm has donated and installed three repeaters -- at Tatalina, Unalakleet and Nome -- dedicated solely to the Iditarod Race. The Tatalina repeater is connected by a 17-mile Alascom microwave link to a satellite earth station at McGrath.

A fourth repeater in Anchorage serves two purposes: It connects race headquarters in the Clarion Hotel with the entire VHF network and relays signals from nearby checkpoints at Settlers Bay, Rabbit Lake and Skwetna to the Clarion.

A fifth dedicated repeater will be installed next year at Galena for the 1988 Iditarod which will be run on trail's northern route.

Larsen explains even the modern VHF system has its drawbacks:

"It's a line-of-sight system," he says. "That means it doesn't work at all or is just marginally effective in the mountains. Operators at checkpoints in Finger Lake, Rainy Pass and Rohn on the southern portion of the trail and Elim, Golovin and White Mountain on the northern portion don't have a clear shot at repeaters."

Larson says HAMs at those locations will probably have to relay messages via their HF sets to fellow HAMs near the repeaters who then will re-transmit them on VHF frequencies.

"Besides," he notes, "if a repeater goes down, the HF is a great backup system."

In addition to the voice links, Alascom is proving race officials with teletype terminals in Nome and Anchorage for hard-copy traffic. That usually consists of logistical

requests and information relayed from mushers and race officials through the HAMs at the checkpoints, Larsen says.

Alascom also is programming its AlaskaNet data system to carry race progress reports. News editors and school teachers who have computers and modems will have access to that system which will provide a list of the mushers and up-to-date progress through trail checkpoints.

Anchorage-area fans can read those AlaskaNet messages at the Valley Feed and Seed Co. in Eagle River, or at one of the Iditarod Shops, on the east end of the Northway Mall and at 805 W. 4th Ave.

The information will be available in two Fairbanks locations, the Iditarod Shop in the Bentley Mall, and Empire Electronics in the Washington Plaza, 3411 Airport Way.

Larsen calculates his company's contribution to the Last Great Race at \$50,000.00. In addition to equipment and service contributions, he notes Alascom pays for the HAMs round trip air transportation to their wilderness checkpoints and purchases the food they eat while on the trail.

"I hate to sound commercial about this, but I'm real proud of the company," he says. "Alascom's been involved in the race since it got going in 1973 and I think its contributions have been significant in continuing some great Alaska traditions."

Larsen says he and his fellow HAMs enjoy working the race because of the challenges inherent in operating from remote locations and under the pressures generated by the competition.

"And what we learn on the race -- operations in tough conditions, message handling, gear packing and transportation -- is very transferable. When major disasters strike and we're needed, we're a lot more prepared because of the Iditarod."

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Iditarod 87 - Relay to Net Control by EM Mockerman, KL7GID

It is 1956 Alaska Standard Time and breaking the cold winter silence of the 75 meter band on 3.940 MHz, a YL's voice startles the listener as she calls repeatedly: LK7AA Iditarod Headquarters this is KL7NG Shaktoolik.... KL7AA Anchorage this is KL7NG.....KL7VY Nome this is KL7NG Shaktoolik. Do you copy? Nothing but silence, and you wonder what is happening in this little Alaskan village a hundred miles south of the Arctic Circle. Bemji Menard, KL7NG, is just one of the thirty or more Ham Radio Operators stationed at the various check points on the Iditarod Trail - the longest, toughest dog sled race in the world, m ore than 1100 miles across the frozen North from Anchorage to Nome

Band conditions have been marginal the last few days as 55 dog mushers pass through the check points winding their way to Nome. Arctic blizzards are facing the front runners and several teams have holed up at Kaltag and Unalakleet, waiting out the 70 mile an hour winds and the 50 below zero

temperatures. Weather reports have been passed between stations and head-quarters, race officials are on the alert for ving conditions as they arrange shuttles of veterinarian and ...og food and supplies along the length of the trail. In other words, it is a time of tension and concern for the well-being of all the race participants, and it is no wonder that the voice of LK7NG commands the attention she is about to receive......

KL7NG this is KL7LA Montana Creek. I copy, Bemji. Go ahead! Montana Creek is located more than 350 miles from Shaktoolik and is the home of KL7LA and KL7JKW who have served as a relay station since the race first began. Located a hundred miles north of Anchorage at the foot of Mt. McKinley, their antennas cover the entire State of Alaska and if they can't copy a signal on the airwaves, almost no one else in the state can either. And now...the fantastic story of at least forty more radio operators who back up the trail communications from as far away as Portland, Oregon to KB6GOZ on the United States Coast Guard Cutter Midgett, cruising the Bering Sea on Search and Rescue Missions.

KL7NG, KL7NG, KL7NG Shaktoolik...this is KB6GOZ on the Cutter Midgett. I copy. Go ahead with your traffic. And Bemji has made contact! At least five stations have her turned in - from Fairbanks K7JUT to KL7GID Big Lake to KL7JDR Soldotna. Her message is vital. Susan Butcher has just arrived at Shaktoolik with 12 dogs. The world is listening! Susan is the front runner in the race to Nome this year and will eventually be the second-time winner the close of this race. No wonder this message gains the atention of everyone listening on the band. A new T-shirt is about to hit the market emblazoned with attractive lettering which says, "Alaska - where men are men and women win the Iditarod!"

But this is not the only important message relayed through the system of dedicated operators standing by to copy and to forward information when band conditions and propagation prevent headquarters from having direct contact. More than 600 dogs are also on the trail and 20 veterinarians and 6 Dr. and host of trail breakers and checkers and race officials; all requiring services available only through amateur radio. Chief Veterinarian Jim Leach, KL7TK, on 2 meters from his aircraft flying the trail, arranges the travel of his staff while journeying from Unalakleet to Koyuk. Trail Boss Jack Niggemeyer, contacts his Chief Pilot Danny Davidson through AL7HU to warn him of the incoming storm which will isolate 7 teams between koyuk and White Mountain. Rookie Musher John Gourley, checked out of Koyuk at 1705 hours on the 20th with 11 dogs; it is now the 23rd of March and he has not been seen. Winds in the area are estimated at 0 miles per hour, temperatures 40-50 below zero, ground blizzards have grounded all airplanes alone this part of the trail. Rookie Lozano reports by radio that he is now in Golovin and he did not see Gourley on the trail. Relay stations pick up the message and forward it to headquarters in Anchorage and ome. Pilots are alerted and stand by for the weather to improve; W7IPB at Koyuk arranges with the mayor of the village to send two snow machiners out on the trail, into the

blizzard to locate the lost musher; AL7GN at Elim arranges for four snow machiners to leave in the opposite direction to cover the other half of the 48 miles between the two villages. The radios crackle with traffic of search and rescue. Word comes back after several hours that the two search parties met each other on the trail...no dog musher was found! The 2 meter satellite link goes down and communications between check points is dependent upon relay stations to copy and forward their traffic. The hour is late, skip conditions have stretched out and N7IKH, Wheeler, Oregon informs the group that he copies all stations and will stand by on frequency!

What a thrill!!! What an opportunity to be of service! What a reward for a small or great investment in equipment and long hours of research and antenna design. What a fraternity to belong to! How interesting to hear a weather report from NL7DK at Unalakleet: 0715-Wind Calm-Ceiling inside 8 feet-Ceiling outside 8 feet! Snowing! And even more lightheartedness can be found in some of he routine messages relayed along the trail such as: "In Eskimo village of Elim. Wish you were here to cuddle with. I miss you very much. Love!"

And lest you think that CW (Morse Code) is a thing of the past, N7HER is heard calling in his arrival at Unalakleet, bag and baggage but without a microphone! Keying his transmitter with a screwdriver stuck in the microphone jack...

The race goes on...Susan Butcher wins again...but the race is not over by any means. Teams are still on the trail. The front runners make the goal at Nome in 11 days, but some will not arrive until April 1st having left Anchorage on March 7th and ham radio operators will stay at most of the check points until they are through. For some, this can be a trying time. Interest in the race often dies as quickly as it comes to life and radio operators must adjust to the local customs which are often full of surprises. KL7AVS calls out to KL7VY at Nome with the information that the folks who run his station have decided to close the building. He is now on the steps outside with no tent or stove! Lois English, NL7KE, logistics coordinator, comes up on the air with assurance that one of the Iditarod Air Force planes will pick him up-hopefully within 24 hours.

KL7VL KL7VL KL7VL White Mountain. Do you copy? KL7VL KL7VL KL7VL this is KL7GID Big Lake. Do you copy? KL7VL KL7VL this is KL7IKR Nome. Do you copy? Nothing but silence! KB6GOZ do you copy KL7GID? Roger-Roger! KL7KR do you copy KL7GID Big Lake? Roger-Roger! Okay. We have lost Sharon at White Mountain. Will you see if you can raise her on 2 meters? Roger. No response. KL7VL this is KL7IKR. If you copy kerchunk the repeater....kerchunk! Sharon if that is you-do it again....kerchunk! Sharon-if you have high frequency kerchunk again...kerchunk! Okay you have HF. KB6GOZ will you try to reach her from the Cutter/Roger Roger. No reply from VL. KL7IKR this is KB6GOZ. I have tried CW, SlowScan TV and RTTY. See if she has copied anything...KL7IKR to KL7VL did you copy KB6GOZ?...no response... Sharon did you copy RTTY on HF? Kerchunk the

repeater if you heard RTTY...kerchunk! Okay John we have some communication but not much. KB6GOZ/KL7IKR. So went the night and into the early morning hours as IKR and VL kerchunked the reports to Nome concerning the four teams in White Mountain. VL had lost the audio on 2 meters, HF was practically wiped out, but at 0300 headquarters knew what teams were in Nome.

These activities took place daily from March 7th to March 26th while mushers and dog teams and race staff traveled the 1100 miles to Nome. At some relay stations such as Big Lake and Montana Creek, radios and tape recorders were never turned off and operators were on the air from 0600 one day to 0300 the next without a break other than by an enthusiastic spouse. But what a wealth of information passed by. Relay stations have a distinct advantage during these events. With 2 meter and high frequency capabilities simultaneously, and operators often knew more of what was happening on the trail than any other station.

sure it takes dedication to serve as a relay operator. But there is a compelling force, like a magnet, that draws us back every year. And at the end of the race, as check points are closed, there is a sense of sorrow that the excitement and fellowship during these hours and days of volunteer service are coming to an end. New friendships have been welded together, new operating techniques have been aired, new antennas are planned for the next race and when we meet together during the year we always say, "Whew! I'll never get that involved again!" But we always do...see you on the Iditarod...next year.

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White Mountain by Sharon Dean, KL7VL

Hi, there, my name is Sharon Dean and I live in Palmer, which is about fifty miles north of Anchorage. I came to Alaska in 1971 from the Upper Peninsula of Michigan by way of California. I have always been interested in ham radio as far back as I can remember, but did not get the opportunity to learn it until I was in my forties. I am now forty-nine and have been licensed since 1981. This winter was my fourth trip out on the Iditarod Trail. This year I went to White Mountain which is about seventy miles east of Nome. I flew out on a commercial flight to Nome (a little smoother than some of the two and four seaters I have flown on to checkpoints and I don't get sick). From Nome I flew back to White Mountain on a "bush" plane. "Bush" is similar to "outback" in Australia except this is this is Alaska and we have snow and cold. Awhile Mountain is a native village of about one hundred and fifty people and is sheltered by a small mountain for which it is named. It is located on the Fish River. I stayed in one of the Village's city buildings. We had heat and electricity but we had to haul water from the lodge which was no big deal. I threw my pad and sleeping bag on the floor and slept by the radios. I sleep by the radios for two reasons:

1. passing traffic at night and

2. I like to talk to the mushers who come into the checkpoint.

We had a blizzard out there which caused a lo9t of static electricity and played havoc with my HF. It scared the heck out of me because I didn't know what it was. I couldn't even touch the radio it was so bad. This was about 0400 and I didn't waste any time in getting hold of someone. I unplugged the radio, disconnected the antenna and grounded the radio. I didn't realize there was a copper pipe nearby that I could have grounded the radio to in the beginning. Needless to say the static electricity disappeared. When Susan Butcher was due to come through, the Fish River looked like a small international airport with all the small planes on it. White Mountain is on a hill and I sure did develop some good leg muscles running up and down it during the ten days I was there. The people were very friendly and helpful. The radios were on all night because mushers would come and go in the night. Some of the nights were fantastic for star gazing. The temperature went down to about 0*F. The sunsets were some of the best I have ever seen. I have taken seven checkpoints on the Trail and on every trip my friend Murphy was along. My equipment is a Kenwood TS530S HF and a Kenwood 7950 2 meter. My antennae were an 80-40 meter dipole and a 11 element beam. This is one event I live for each year, besides taking part another events year around.

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I was new to Alaska, new to Ham Radio and last year I had never heard of Iditarod. So ... I was ready for an adventure. And that's what I got, from the day George & I stood at checkpoint nine from the start of Iditarod until after I had made a forced landing for funning out of fuel in the plane on the way back. A little over a week of adventure that I'll never forget and hope to continue during next year's "Great Race".

So..... Day one we stood in the cold counting dogs and searching for numbers at the edge of the woods on the trail out of town. The first five or ten were exciting but after twenty or thirty dog teams had slid by it began to be old hat...."Here they come", "What's the number?", "Hey, who are you?", "One by Nine", Two by Nine," etc., etc., for three hours. Yes sir.....Real adventure.

Day two was the day George (KV9D)Hurd and I (NL7JH) flew to our position in McGrath. Uneventful flight but I began meeting some of those wonderful people that made the adventure the fascination that it was. Benji (KL7NG) Menard spent the first night with us on her way to Nickoli. Our first effort at team work was to untangle the nylon sleeping bag for the zipper of the canvas duffel bag. Won it took all three of us but we managed it! Then on to the real fun of watching George toss a string with a wrench tied to it, trying to catch a metal hook to attach the antenna. After a few hours, this was accomplished and we were on the air.

Day three and four were scattered days of catching up on the positions of all the teams, perfecting out antennas, yacking with the locals, eating the fantastic food from the Caft, eating the snacks provided by Iditarod, learning all the Iditarod workers, Bobbi Lee, Jack Niggemeyer, Tony nthony, all the pilots, all the trail breakers, all the checkers, all those hundreds of people who all volunteer to make Iditarod. The veterinarians, one of which come to Alaska every year from France to help and take back ideas, Dominick. While he was waiting for Iditarod teams to come, he worked on the locals' dogs. Explaining to me what was wrong "He have flies! You know flies?". I was confused. "FLIES?". "Oh yes," he says and begins o hop up and down. "Fleas!!" Now I get it!!! Just a common miss communication as we all laugh and giggle at the thought of a poor dog with flies!

Early, Early on day five our pure first dog team arrives. Now we have pure, unadulterated excitement! Our very first dog team #51 Guy Blankenship slips into town at 0042 on Wednesday morning and declares his 24 hrs. Now we have something happening! From this point on days and nights begin to blend into one as the race comes full onto us. Messages passed back and forth, "where's Bobby Lee?", "How far is the trail marked?" "Libby Riddles, #12 has scratched!" "STOP!!!!! Big News!" Everyone crowds around Bobby Lee as he explains that Libby Riddles is now out of the race. The pause of shock doesn't last long, the race still has sixty other dog teams! The continuous excitement blows by like a hurricane. Small snatches of stories get caught like a checker reporting that one of Jerry Austin's dogs ran into a tree and it was dead and how would he explain a dead dog vith a knot on it's head!! Continuous laughter and then the ension builds... "Nicolai has had to evacuate its check point because of a local who's decided he doesn't like ham interference with his HBO Sounds funny unless you're Benji Menard, KL7NG, hearing gun shots and shouting. Local sheriff is called and hurries to rescue the operation. Slowly this too calms down and passes by. There seems to be no breaks in the continuous information. Sleep is snatched in two or three hour increments and showers are wished for by each individual (for themselves and others too!!!!!).

Slowly the race passes by and excitement is heard in the voices further down the trail. MeGrath's time in the line light is nearly over as the last three musher teams, the Colonel and his entourage arrive and declare twenty four hours.

Day 9, times up for me and I feel my adventure is ready to end. I'm exhausted and George says he will stay until Monday afternoon so that I can come home early Sunday and get some rest. I find a veterinarian who is flying his own plane back to Anchorage. Sure Lee's got plenty of room in his Piper Cub. We take off at 1230 prepared for a three hour flight. The sceneray is gorgeous and I snap pictures of everything. I've never been airsick and even though the flight got roughten and roughtener, I really wasn't worried. Then my head hit the ceiling twice in rapid succession and I realized my adventure wasn't over! I lost my lunch and laughed about "aring my bag with me into the Anchorage Airport. However, didn't realize I was to have a coupled of stops before then!!! As we passed Rainy Pass Lodge, the skies got heavier and darker. We tried to go over it but it was no use, landed at

Pointilla Lake was a necessity. What a beautiful place. The vet worked on the horses and I listened to more stories about the Iditarod from the young caretaker and his wife who live the winter alone in the remote. What a winter paradise. Oh well, what a nice place to stop I thought and after a few hours lay over, the skies lifted and we got back to the initial plan of home to Anchorage. About an hour later we are nearing Merrill field and I know home was close. The vet/pilot had already talked to the airport and been cleared to approach. The plane coughed. Interesting noise I thought (not knowing anything about airplanes) "No problem" says the vet/pilot, "I'll just switch to the other tank." While I tried to assimilate what that means the plane coughed again. "We're going down" says the vet/pilot. Before my poor exhausted brain had been able to prepare, or even to get scared we were nose diving past some trees. I told the vet/pilot I had, had enough adventures and really prepared to go on home, next year I can try again but I think maybe I might just dog sled home. It could be faster than plane!!!!!

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OPPORTUNITY

I'm Kim Rampmeyer and I teach at Bowman Elementary and I want to pass on information on two great opportunities. They are in regards to Alaska hosting the Special Olympics World Pre-Games and Winter World Games.

The opportunities are (right now) for the pre-Games being held March 9-12. I'll try and be brief.....

- Schools and classrooms (Middle school teams) have a chance to be involved in supporting a team or athlete by cheering for them during their event.
- 2) It is a possibility that the athlete might be able to visit your school or a Global Messenger could come and speak to your school/classroom. (Many principals heard about how to get involved in this, so many of you know about this already.) The person to contact is: Nicolle Egan, School Enrichment Program Coordinator. Her email is nicolle_egan@2001worldgames.org; her phone is 277-2465.
- 3) The Special Olympics is still looking for over 700 volunteers!! Volunteers must be 14 years or older. The commitment includes a 90 minute training between now and the games and a six hour "work detail". You can choose what kind of work you want to do (data entry, athlete support, medical support, entertainment, housing, hospitality and many more) plus you can choose the time of day that works best for you. The person to contact is Lisa Farber at 277-2427 or email her at volunteers@2001worldgames.org I hope many of you will take advantage of this wonderful opportunity! If it doesn't work this year, keep it in mind for next year, as they will need more support for the World Games. This year is a "trial" for Anchorage and is the preliminaries (I believe) for the United States athletes. Athlete's Oath

"Let me win; but if I cannot win, let me be brave in the attempt."

Kim Rampmeyer Willard L. Bowman Elementary

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To all radio amateurs Georgia Amateurs Respond to Tornado Disaster ARRL Bulletin 10 ARLB010 From ARRL Headquarters Newington CT February 15, 2000

Amateur Radio operators are responding in force in the wake of tornadoes that struck rural extreme southwestern Georgia this week, killing more than a dozen people and injuring many more. Georgia Section Emergency Coordinator Tom Rogers, KR4OL, reports that hams from nearby communities including Moultrie and Albany have turned out to help.

Twisters late Sunday and early Monday leveled a housing development in the town of Camilla, in Mitchell County. The town was one of the worst-hit areas. The storm also tore roofs from houses and flattened mobile homes. The storm caught many residents by surprise since warnings were not issued until after they'd already gone to bed for the night.

Georgia Gov. Roy Barnes has declared a state of emergency in Colquitt, Grady, Mitchell and Tift counties. Georgia Emergency Management Agency reports emergency shelters have been set up in Camilla and Moultrie.

"Shelters are open, and the Georgia Baptist Hams are setting up feeding locations and assisting with the cleanup," Rogers said.

An HF emergency net is running on 3975 KHz to coordinate activities. Rogers advised all participating stations to monitor that frequency. If relief operators are requested, operators should coordinate through the emergency net on 3975 KHz before attempting to enter the disaster area.

Thousands were left without power in Georgia and elsewhere. The storm that wreaked havoc on Georgia was part of a system that also struck Arkansas, Tennessee, Mississippi and Alabama before moving into Georgia, Northeastern Florida and the Carolinas.

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ARRL, NFCC FIRM UP RELATIONSHIP DURING ARRL HQ MEETING The ARRL Letter Vol. 19, No. 8 February 25, 2000

A February 15 visit to League Headquarters by three Board members of the National Frequency Coordinators' Council has helped to solidify the relationship between the League and the NFCC. The NFCC had requested the meeting earlier this year.

"The main purpose of the meeting was simply to touch base," said Executive Vice President David Sumner, K1ZZ. Participants on both sides described the face-to-face session as constructive and positive.

On hand from the NFCC were President Owen Wormser, K6LEW, Secretary Dick Isely, W9GIG, and board member Nels Harvey, WA9JOB. Representing the League in addition to Sumner were Field and Educational Services Manager Rosalie White, WA1STO, and National Frequency Coordinators' Officer Tom Hogerty, KC1J.

Participants discussed a potential shift in philosophy by the NFCC away from seeking mandatory coordination and toward serving as an educational organization, a repository for a master database, and a point of contact with the FCC on coordination matters. The NFCC also sees a role for itself as a "centrist" or neutral organization to mediate and arbitrate disputes that cannot be resolved at the local or regional level. Wormser said his Board believes the NFCC should "remain centrist in its dealings with everyone--keeping an open door policy."

Wormser emphasized, however, that any change in NFCC strategy would require a discussion and vote of the NFCC membership. Summer suggested that the ARRL Board of Directors might be open to the change, given the directors' cool reception to the NFCC's draft Petition for Rulemaking last year that would have called on the FCC to codify mandatory coordination.

A letter last fall on repeater coordination issues from FCC Wireless Telecommunications Bureau Chief D'Wana Terry also came up for discussion. The letter--in response to two amateurs' complaints about coordination in Southern California--reiterated the FCC policy of voluntary repeater coordination. Both sides agreed that while the letter simply represented a restatement of past FCC policy, it might inadvertently have resurrected some regional coordination issues.

NFCC representatives said that, in light of the Terry letter, they felt the time was right for them to meet with Terry and the WTB staff to educate them about the NFCC. Sumner encouraged them to do so. "Many FCC field offices know and work with the coordinators in their areas, but WTB hasn't had much recent contact with the coordination community," he said.

Repeater Directory policy also came in for considerable discussion. Sumner noted that recent League policy in producing the Repeater Directory has been to accept data only from coordinators. He said the League plans no changes with

regard to areas that have functioning coordinators. "In those areas we will continue only to publish information on accordinated systems as supplied by the coordinator," sumner said. For areas lacking a functioning coordinator, NFCC representatives expressed no objections to the League's accepting information from other sources, as long as there's no implication that the systems are coordinated.

In a statement following the session, Wormser said he and his colleagues came away with an "increased understanding and appreciation" for the issues both organizations face. Plans are being made for an in-person meeting of coordinators later this year, with invitations also to be extended to FCC and ARRL officials.

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ARRL SUPPORTS SWITCH TO CISPR STANDARDS The ARRL Letter Vol. 19, No. 8 February 25, 2000

The ARRL says it supports an FCC proposal to adopt the slightly stricter International Special Committee on Radio Interference--or CISPR—standards for conducted emission limits for Part 15 and Part 18 devices. In comments filed in an FCC Notice of Proposed Rulemaking (ET Docket 98-80), the League said the proposed FCC standards will reduce both the otential for interference to Amateur Radio HF operation and nanufacturers' costs for Part 15 and 18 devices.

Last fall, the FCC proposed to amend Parts 15 and 18 of its rules to revise the limits to which unlicensed Part 15 electronic devices and Part 18 Industrial, Scientific and Medical devices are permitted to conduct RF onto the ac power lines below 30 MHz. In comments filed January 31, the League called conducted RF energy into the power lines "a particularly significant concern in the high-frequency range" and called on the FCC to adopt the tighter standards.

In general, the current conducted emission limit for Part 15 devices between 450 kHz and 30 MHz is 250 uV. Part 18 limits are device-specific. The League pointed out to the FCC that the CISPR standards "are slightly more stringent than the current Part 15 and 18 regulations, offering at least a few dB of additional protection for HF over the existing Part 15 standard."

ARRL Executive Vice President David Sumner, K1ZZ, says it's "no accident" that the CISPR standards are as tight as they are. The International Amateur Radio Union is a member of CISPR and has participated actively in its meetings since the late 1980s, he explained. Sumner credited two hams in particular--Tom Sprenger, PA3AVV, and Christian Verholt, JZ8CY--who have represented IARU at CISPR meetings-with being instrumental in making sure that CISPR standards take sensitive HF receivers into account.

The ARRL also recommended the FCC conduct empirical studies on the levels of noise in the HF spectrum caused by unlicensed devices as part of an effort to quantify the rate of increase in RF interference in urban and suburban environments. The resulting data, the League said, could help the FCC in determining how to regulate conducted and radiated emission levels. It suggested that amateurs could contribute to such a study and offered the League's own services for the project.

The ARRL also said it could not accept any liberalization of broadband emission limits that may result from the use of Part 18 fluorescent lighting devices or RF light bulbs. The League said the present limits for such devices already are "extremely liberal."

A copy of the League's comments is available at http://www.arrl.org/anounce/regulatory/et98-80/arrl-cmt.html.

PRB-1 BILL INTRODUCED IN CALIFORNIA SENATE The ARRL Letter Vol. 19, No. 8 February 25, 2000

California has become the latest state to consider PRB-1 legislation. ARRL Southwestern Director Fried Heyn, WA6WZO, reports Senate Bill 1714 was introduced February 23 in the California Senate.

Like a similar PRB-1 measure passed last year by Virginia's General Assembly, the California bill would require localities to accommodate Amateur Radio antennas of up to 200 feet, according to local population density.

Echoing the language of the PRB-1 limited federal preemption, the measure says that local ordinances regulating antenna placement, screening or height "shall reasonably accommodate amateur radio antennas and shall impose the minimum regulation necessary to accomplish the legitimate purpose of the city or county."

Under the proposed bill, cities or counties with population densities of 120 persons or less per square mile (according to the 1990 US Census) would not be able to restrict Amateur Radio antennas to less than 200 feet above ground. Localities having population densities greater than 120 people per square mile would not be able to restrict ham antennas to less than 75 feet above ground. In both cases, localities would not be allowed to restrict the number of support structures.

The bill stipulates that "reasonable and customary engineering practices" be followed in erecting Amateur Radio antennas. The bill would not preclude localities from regulating amateur antennas with respect to the use of screening, setback and placement, and health and safety requirements.

Heyn credited Michael Mitchell, W6RW, will helping to get the bill introduced, and he asked California amateurs and clubs to contact their state lawmakers to support the measure.

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WASHINGTON, Feb 19 (Reuters) - This year should be one of the worst for solar storms -- surges of charged particles that knock out satellites, power grids and even garage door openers -- but a whole new industry has popped up to try to prevent the worst disruptions.

No one can predict which month or week will be worst, but the sun is at the height of its 11-year cycle of storms, which means the Earth can expect several barrages of excess charged particles.

"We are literally talking about most of northern Europe, most of North America, that can be impacted by space storms," John Kappenman, a senior engineer at Metatech in Duluth, Minnesota, told a news conference at a meeting of the American Association for the Advancement of Science (AAAS).

Both government and private industries have geared up in the past two years to prevent the most serious disturbances. During the last solar maximum in 1989, Quebec's power grid was knocked out completely, throwing six million people into the dark for nine hours.

At that time experts could at best make a 50-50 guess about when a blast from the sun was on its way.

But now NASA's Advanced Composition Explorer (ACE) spacecraft, orbiting a million miles (1.6 million km) from Earth, has a magnetometer and a particle detector aboard that can warn of the solar bursts about 45 minutes before they reach the atmosphere.

Its information can help to protect not only electricity networks, but satellite users ranging from broadcasters to automated teller machines and even pager companies.

"These systems are arguably more vulnerable than ever before. We are not going to grow out of these problems any time soon," Kappenman said.

He says his company has signed an agreement to help protect Britain's National Grid Group (NGG.L), the owner and operator of the electricity transmission system in England and Wales.

Solar storms disrupt electricity grids by causing extraneous currents that cause the flow to fluctuate. Careful management can prevent this from knocking the grid out, but power system managers have to know it is coming.

Metatech takes the warning of a flare and runs a computer model of the client's particular power grid, identifying the areas that will be vulnerable.

A power company can respond by making sure enough electricity keeps flowing in that particular area, either by increasing the flow or reducing the demand.

Metatech charges a base rate of \$5,000 a month, but utilities and companies can also ask National Oceanic and Atmospheric Administration (NOAA) for information from ACE.

Ernest Hildner, director of NOAA's Space Environment Centre, said NOAA probably would never know who it saved from trouble or when, ``unless someone tells us over a drink." ``People don't reward champions," he told reporters.

Also in the public area, the Aerospace Corporation is working to warn operators of both government and private industry satellites. "We are not at the point where we can say this satellite will experience this effect," said David DesRocher, senior project engineer at the Colorado Springs-based group.

But they can advise on how a satellite's attitude -- its relative angle to the Sun -- can help or hurt. During a solar storm, charged particle build up on the outside of a satellite, and more powerful radiation can penetrate deep inside, causing both immediate and long-term damage.

The effects can be disastrous. In 1998 the Galaxy IV satellite was disabled by a solar storm, silencing 80 percent of North America's pagers, knocking financial services off-line and stopping credit card transactions.

It is not just machines that are affected. Mark Weyland, a project manager at Lockheed Martin Corp., said they were keeping a close eye on the six astronauts currently orbiting in the space shuttle Endeavor.

Radiation from a solar storm can easily reach the equivalent of several chest X-rays.

"We had a space weather event happen a few days ago," Weyland said. It was not bad enough to force the shuttle astronauts to take shelter in the airlock, the most shielded part of the shuttle, but NASA officials are keeping a careful eye on the crew.

"This is one of those risks they'll carry the rest of their lives," Weyland said.

Aircraft crew are also at risk, especially those flying the polar routes. Frequent flyers may be, too.

Travelers may soon be able to log onto a Federal Aviation Administration (FAA) Web site for more information, and they can call a hotline established by Dr. Robert Barish, founder of In-Flight Radiation Protection Services Inc., which lls callers about possible health risks.

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ALASKA QSO PARTY

The Alaska QSO party, sponsored by the South Central Radio Club, takes place on the 3rd full weekend of March. Please plan to participate in this exciting event. We have received word that there are literally thousands of stations in the "South 48" that will be looking for Alaska contacts.

The Alaska QSO party is both a fun event and a remembrance of the 1964 great Alaskan Earthquake, which occurred on Good Friday in March, 1964. Hams provided much needed emergency communications during that time. You might think of the QSO party as a sort of a drill to make sure you are ready to assist should another emergency befall us!

Contest period: Begins at 00:00Z March 18 to 24:00Z March 19, a 48 hour period. Note that the start time equates to 3:00 PM Friday, March 17 for stations using Alaska standard time, and ends at 3:00 PM Sunday!

Who to work: Alaska stations work everyone, including other Alaska stations, others work only Alaska stations. All bands, except for the 30/17/12 meter "WARC" bands, may be used, and contacts may be on CW, voice (phone), satellite, SSTV, or any data/digital mode, such as RTTY or PSK31.

Scoring: 1 point per phone contact, 2 points per contact for **any** other mode (CW, RTTY, SSTV, etc.). Contacts via 160 or 80 meters, or satellite, count double.

Multiple contacts: Contacts with the same station on the same band, but using a different mode, count as separate contacts. Duplicate contacts (additional contacts with a given station, using the same band and mode as a previous contact with that station) do not count!

Multipliers: AK stns: USA states or DX countries. Others: Alaska cities. Note that the rules published in magazines often confuse this point. The multiplier is for Alaska **cities**, not counties. Also see band and mode multipliers, above.

Final score: Multiply total QSO points, including band and mode multipliers, X cities/states/countries as applicable. Example: 20 CW contacts (40 points) plus 10 phone contacts (10 points) times 10 US states and 2 DX countries (12 total). Score: 50 (QSO points) times 12 (location multipliers). Total points: 50 X 12 = 600.

Awards: Certificate for participation for any station submitting log, plus awards for most total points. (1 each for Alaskan and non-Alaskan stations)

Suggested frequencies:

CW	Phone
1835	1855
3700	3875
7035, 7135	7235
14035	14245
21135	21335
28135	28335

All frequencies +/- QRM, try to stay within 5 Khz either way.

Logs: Send logs to South Central Radio Club, c/o Jim Wiley, KL7CC 8023 E 11th Ct, Anchorage, AK 99504. Cutoff date June 30.

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Anchorage Amateur Radio Club, Inc Post Office Box 101987 Anchorage, Alaska 99510-1987

Bulk Rate U.S. Postage PAID Anchorage, AK Permit No. 223

Roger Hansen KL7HFQ L036
POB 520343
Big Lake AK 99652-0343

ARISS CREWS GET INITIAL HAM GEAR TRAINING

The first International Space Station expedition crew and its backup crew have received some initial training on the use of the initial US-provided Amateur Radio gear to be installed as part of the Amateur Radio on the International Space Station, or ARISS, effort. The session was conducted at Russia's Gagarin Cosmonauts Training Center.

As part of the ARISS training effort, NASA's Matt Bordelon, KC5BTL, is preparing a consolidated schedule for training in the US and in Russia that will include familiarization with equipment, packet theory and hands-on training, using a hardware mockup, and simulation. Training will focus on general principles of ham radio as well as preparations to use ham radio, equipment types and operating modes, and general packet module information and software.

Bordelon has held an initial training session with astronauts and cosmonauts that provided exposure to the actual hardware. Other training has included the information required to obtain an US Amateur Radio license. The first ISS crew includes US astronaut Bill Shepherd, KD5GSL, and Russian Cosmonauts Sergei Krikalev, U5MIR, and the recently licensed Yuri Gaidzenko, whose call sign was not available.--Carolynn Conley, NASA.