

The Asymmetrical Environment

The demographics of the Amateur Radio Service are such that most radio amateurs came of age during the Cold War, a time during which there were mostly clearly defined geopolitical boundaries. It was during this time that the term “third world” emerged, a reference to unaligned nations of little or no strategic or economic value to the United States or the Soviet Union.

Things are different today. The clearly defined boundaries between East and West are no longer present. China is an emerging economic and military power. Economic interests, in particular the access to rare earth minerals, are creating a new, distributed geopolitical conflict. The result is an increasingly unstable environment in which the ability of the West to project soft power to leverage stability through economic influence and containment, is diminished.

Within this new environment, the proliferation of technology and knowledge is such that even small nations can engage in aggressive, destabilizing actions. Acts of bioterrorism, nuclear proliferation, cyber warfare, and so forth are well within

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THE OFFICIAL RRI NEWSLETTER

The QNI Newsletter is the official newsletter of Radio Relay international. Please feel free to share this newsletter with other radio amateurs in your community. Regular articles appear on topics such as emergency communications, traffic handling, and general operating subjects. More information about RRI can be found at: www.radiorelay.org

the reach of even small players. Some of the participant in these “black chamber” operations were educated at prestigious Western universities. Toss in a dose or two of radical theocracy or the irrational mind of a dictatorial leader into this environment, and one has a recipe for considerable risk to the developed world.

Here in the West, we tend to “sleep” until awakened by crisis. Americans are mostly unaware of the fragile nature of their infrastructure. We are a people who are very well entertained, but extremely ill-informed. Worse yet, trust in our institutions is at a low ebb. The Fourth and Fifth estates in particular have mostly passed into the great beyond, having been replaced with media content that doubles as entertainment, childish ad hominem attacks, and selective reporting designed to only validate the viewer’s bias. In such an environment, objective truth can be difficult to find.

While cognitive dissonance discourages many to look at present-day realities, the fact remains that we are vulnerable to destabilization and asymmetrical acts that could greatly disrupt our infrastructure, including the power grid, telecommunications networks, and the like.....and this doesn’t address the possibility of bioterrorism or other high-level risks to a population capable of catalyzing long-term failures in our economic and technological structures.

While we are not recommending one hide in his basement or build a bunker like that seen in the movie “Blast from the Past,” this may be a good time to ask if you are prepared for a disruptive event. This means not just communications preparedness, but also family and community preparedness. Communications is important, but always secondary to food, water, shelter and security.

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The National Response Plan—Priority Entry Points

In addition to digital methods and specialized networks, such as Winlink and DTN, the RRI *National Response Plan* recognizes the value of common denominator modes, such as voice and CW methods. Not only are these basic technical capabilities available to nearly every radio amateur, they are often an excellent choice for portable/field operations or mobile deployment.

By definition, major disasters that require supplemental communications via the Amateur Radio Service will require the ability to deploy communications assets to a served agency or various field locations. The complexities of such deployments far exceed that of a POTA activation. The ability for your equipment to remain operational for multiple days or even weeks is a realistic requirement. The risks associated with defective interconnect cables a computer crash, or other technical problems is a realistic concern. As the old military expression goes: “two is one, and one is none.”

Simple field equipment offers some advantages. If all one needs is a microphone or key, a transceiver, a couple of batteries, a wire antenna, and paperwork such as message forms and log sheets, one has less to transport, less to forget, and greater reliability due to fewer failure points. This is not to dismiss the value of

Winlink or DTN, both of which offer a variety of automation advantages and hybrid capabilities. Yet, the fact remains that many hams still rely on common denominator methods either by default or out of necessity.

The *Priority Entry Point* feature within the National Response Plan recognizes these realities. Specialized watch frequencies are established for voice, CW and manual digital modes. These watch frequencies are staffed by experienced Certified Radio Operators with the skills and training needed to provide a proper level of service on both the communications and administrative level.

Priority Entry Point (PEP) services are to be utilized for higher priority traffic, generally EMERGENCY and PRIORITY messages or, when circuit capacity is available, WELFARE messaging. The PEP operators are responsible for expediting the routing of the traffic via the most expedient means available, or, if necessary and the connectivity is present, they may deliver time-sensitive traffic directly.

The PEP function is not a substitute for the Winlink-RRI gateways, nor is it a substitute for DTN. Rather, it is a function designed to support both organizational and individual response to a communications emergency.

RRI is looking to appoint a PEP Coordinator to manage this phase of the program. His/her job would be to recruit volunteers and develop an up-to-date database of PEP volunteers that can be quickly activated in time of emergency. If interested in this position, please drop an email to jameswades@gmail.com

RRI is also looking for volunteers in the United States with traffic handling experience (or the willingness to be trained as CROs) to be on-call for this service. If one can speak Spanish, that's an additional benefit (but not required). Again, if interested in volunteering, please drop an email to the RRI Emergency Management Director at: jameswades@gmail.com

RRI Zello Training Net
By James Wades (WB8SIW)

For those unfamiliar with Zello, it is a mobile phone app that simulates a two-way radio net. Zello has become rather popular with small volunteer organizations active in disaster response. It is rather effective, provided the cellular grid is up and running and not overloaded.

RRI has established a Zello Channel for the purposes of training and general coordination of RRI functions. The idea is to provide a simulated voice traffic net on which new operators can develop their emergency and traffic handling communications skills. The plan is to conduct a weekly Zello Net during which operators practice transmitting and receiving complex names and words, transmitting and receiving radiograms and radiogram-ICS213 messages. Messages originated on the net will be transferred to the RRI/NTS system for relay and delivery. Likewise, drill messages will be transmitted so that new volunteers can practice copying radiograms and radiogram-ICS213 messages.

The Zello Net should be an excellent opportunity not just for new traffic operators, but for any radio amateur active in emergency communications. We are seeking a mix of experienced operators to provide an example and mentorship, along with new operators from the traffic and EmComm world interested in learning proper radio procedures.

If you are interested in serving as net manager or as a net control, please let the RRI emergency management director know at: jameswades@gmail.com

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**Spanish Language Documents Now Available
By James Wades (WB8SIW)**

RRI and our Puerto Rico Communications Manager, Jorge Rivera, have been collaborating with both the ARRL and other EmComm volunteer groups in Puerto Rico to develop a cohesive approach to emergency communications.

It should come as no surprise to anyone that Puerto Rico is in a very vulnerable location for both major hurricanes and earthquakes. In addition, the people of Puerto Rico already suffer from an unreliable power grid and a problematic telecommunications environment.

The goal of RRI and all involved is to create an effective emergency communications capability that stands on its own capabilities, which operates as a peer to local government as a respected volunteer organization active in disaster response, and, most importantly, *provide aid to the people of Puerto Rico*.

RRI has been providing training to key PR volunteers in addition to working with radio amateurs on the island to ensure redundant access to Winlink and the RRI Digital Traffic Net is available. RRI is also planning to provide hardened digipeaters for installation on the island, thereby providing additional connectivity in the event of a major incident.

In the coming months, RRI will be conducting some emergency communications exercises to test connectivity, exercise Priority Entry Points, and familiarize volunteers with message formats specified in the *RRI National Response Plan*.

Radio amateurs in the Caribbean and Spanish-speaking world may want to review the Spanish Language version of the RRI National Response Plan along with the Spanish Language tools for the “I Am Safe” welfare messaging program.

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Tropical Storm Events and Weather Data Reporting

By James Wades (WB8SIW)

As tropical storm season approaches, radio amateurs should take a moment to consider how they might be of value both before and after an event. Organized Amateur Radio public service organizations allow for a higher level of quality control over random data submitted by the public. This can be particularly true when it comes to weather data.

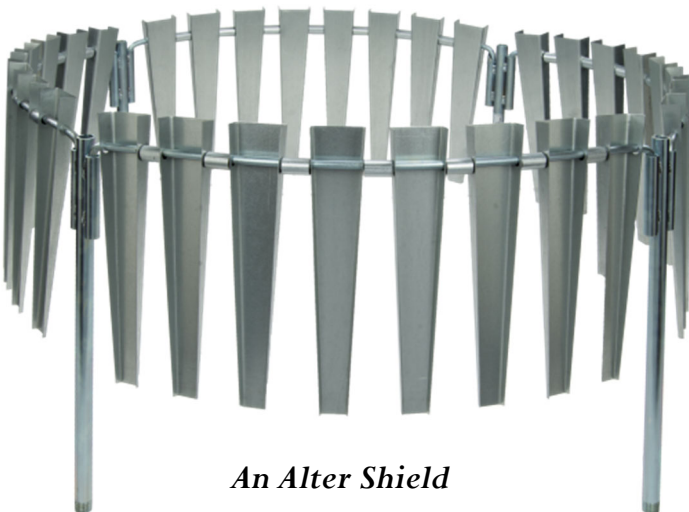
Let's take a look at a day-to-day example of a quality control/data management problem using the popular application "Weather Underground" on a random day in a disaster benign state like Michigan under stable atmospheric conditions. Here are some typical barometric pressure readings from home weather stations near the author:

30.00, 30.30, 30.03, 30.12, 29.91, 29.67.

Again, this data is all within a 30 mile radius under calm, stable conditions. One doesn't need a degree in meteorology to see the problem here, which, by the way, is certainly not unique to Michigan or Northern Indiana. It is quite clear that many of the volunteers submitting data have made no effort to calibrate their equipment.

Rainfall data can be equally problematic. For example, by design, tipping bucket rain gauges tend to under-report intense rainfall, such as that occurring during significant tropical storm events. Hydrological models and the VIL function in the NWS doppler weather RADAR can manage this to an extent, but data is, ultimately, data and for it to be useful, some quality control must be present. Most rain gauges associated with home weather stations require maintenance. The rain gauge throat must be kept clear of debris. The unit must be opened occasionally and the tipping mechanism must be *gently* cleaned with some light dishwasher detergent or even some isopropyl alcohol, depending on the material used by the manufacturer.

During tropical event, high winds create problems with rain gauge accuracy. It's not typically in the scope of an amateur weather observer to install an alter shield, which creates a micro-scale frictional boundary layer around the throat of the rain gauge to improve accuracy. However, one can place a rain gauge at a location that provides an unobstructed vertical view of the sky, but perhaps offers some small shrubs or other barriers a short distance away to better impede wind flow over the throat of the rain gauge.



An Alter Shield

Rainfall data is of particular value during tropical events because it can enhance hydrological models, but



A four-inch rain gauge.

remember, “garbage-in, garbage-out.” The hydrologist doesn’t want more data, he/she wants more ACCURATE data.

A good quality manual rain gauge makes an excellent supplement to the automatic type usually incorporated with a home weather station.

Analog Instruments:

Speaking of manual instruments.....professional grade or advanced amateur grade analog instruments are increasingly available as universities, drain commissions, and forestry organizations turn to automation. The value of these older instruments should not be overlooked. They can offer a high level of reliability, they are less dependent on power sources, and they will likely remain operational and accurate well past

the user’s lifetime. One regularly sees decommissioned professional instruments by makers such as Belfort, WeatherMeasure, Nova Lynx and so forth available on auction sites and at university sales for bargain prices.

One area in which the typical home weather station can offer a very high level of accuracy is in the area of temperature and humidity measurement, but this too required some level of care during installation.

Temperature and humidity data can be useful both in the area of synoptic meteorology and mesoscale meteorology. Therefore, it is necessary to measure *air temperature* rather than the intensity of incoming solar radiation (“insolation”). **Accurate temperature and humidity readings require that the sensors be shielded from direct sunlight and isolated from possible sources of ambient heat (e.g. heat from a nearby building or other source of heat).** This is typically done by mounting a temperature sensor in a radiation shield. In the old days, the “cotton region shelter” or “Stevenson screen” was the primary tool for isolating instruments from insolation. For modern, electronic sensors, the *multi-plate radiation shield* usually does the trick.

Ideally, the temperature/humidity sensor should be installed within a radiation shield and mounted on a post over cut grass at a height of 3 to 6 feet. While temperature is not as critical a factor during tropical events, it is of interest to both the meteorologist and the public should you decide to share your data on-line. Accurate humidity data can be useful for identifying dry lines and gust fronts during severe thunderstorm events.

The role of a standardized message format.

If one listens to some of “hurricane nets,” one will note that a lot of effort goes into disseminating information that is readily available from other sources, be it the Internet, broadcast radio and television, or even USCG broadcasts. In some cases, it seems the net control is emulating broadcast techniques, transmitting information to the ham radio community rather than collecting data from the affected area. In



A variety of weather instruments at WB8SIW: On top is a Belfort microbarograph and a military ML-102-E barometer, both extremely accurate instruments. Below is an older “Texas Electronics” weather station purchased for 10-dollars at a local estate sale after the passing of a local TV meteorologist.

many cases, the vast majority of participants in these nets are from far outside the affected area. We’ve all heard it...”This is W0ABC in Fargo, North Dakota. I’ll be available if needed.”

A couple of the theoretical advantages of ham radio are the fact that radio amateurs are already dispersed throughout a potential disaster area, and the fact that they can be organized effectively through organizations like AUXCOM, ARES, NTS, RRI, etc. However, there are also disadvantages, one of which is the fact that some hams suffer from a deficit of imagination. They cannot see, or are unwilling to see, how data might be collected, consolidated and managed in a way that is easy to digest and disseminate to end users, such as emergency service organizations, meteorological organizations, or the like.

The RRI National Response Plan uses a standardized weather observation format (WXOBS) for a reason. **It ensures that each incoming message holds the data in the same sequence.** This makes it possible for a target station to quickly transfer the data to a spreadsheet or tabular table for transmission to a served agency. It also makes it possible to automatically parse the data for upload to a server for use in hydrological models. The radiogram format network management data in the header contains important location and time-of-observation data. The address can define the NWS office. The data, if received in the standard sequence can be culled and placed in a useable context.

Let’s take a look at a typical WXOBS message:

13 P KP4RRI 8 PONCE PR 1325Z AUG 31
NWS SJU

WXOBS 1/TJPS 2/270/50/83 3/CB 4/83F 5/955R30 6/RAIN 7/13R25

ORTEZ

Now, let’s decode the WXOBS message.

- The station of origin is KP4RRI. This allows for routing a service message to the station of origin should any issues arise, such as garbled data or should a request for detailed information regarding storm damage or the like be requested.
 - The observer is located in the city of Ponce, Puerto Rico.
 - The time of observation is 1325Z Aug 31 (311325Z Aug 2025)....date and time are always in UTC.
-
1. The METAR code for the nearest airport, that being Mercedita Airport in Ponce is TJPS
 2. Winds are out of the West at 50 mph with the highest wind gust measured in the last hour at 83 mph
 3. Cloud type is cumulonimbus (any hurricane event will likely use this code).
 4. Temperature is 83 degrees Fahrenheit
 5. Barometric pressure is 955.30 millibars. Note: the NRP has a chart for converting between inches mercury and millibars.
 6. Precipitation type is RAIN. Note: this is a universal message format that can also be used for winter storm events in the Northern hemisphere.
 7. Storm total precipitation is 13.25 inches
-
- The last name (and title if an official) of the observer is Ortiz.

The WXOBS format looks complicated, but in fact, the volunteer can pre-format much of the message content including station of origin, check, place of origin, NWS-*** address, the METAR code, etc. Then all he needs to do is fill-in the blanks. Also, it is important to note that RRI is working on a Winlink form that will automatically create the needed message format.

The main point to take away is the fact that one must look at the entire data management process. The amateur radio networks are not an island. They must work in concert with the end customer. Proper presentation of data is important. A target station may be receiving dozens of weather observations each hour. These will then be placed in a format that allows any agency to search data by location, METAR code, or by value. This is the “value add” for the message format. Best of all, the traffic system offers a high level of survivability and redundancy. The use of the standard format may require a bit of extra time for the individual operator to originate, but at the “choke points” of data collection and distribution it greatly speeds the process! Again, one should always consider the ENTIRE communications process when developing a response plan or communications tools.

Weather is a fascinating subject in its own right. One needn't spend a lot of money on expensive instruments to collect useful data or to be of service to his community. If one doesn't want to procure a complete home weather station, all that's required to be of assistance is a decent manual rain gauge, an inexpensive wireless thermometer/hygrometer, and a good quality analog barometer properly calibrated. -30-

Some Common Service Message Abbreviations Used by Western Union and Postal Telegraph

GBA—Give better address
GSA—Give some address
NSN—No such number

SYS— See your service.
UNLOCATE— Unable to locate addressee
UNDELD— Undelivered



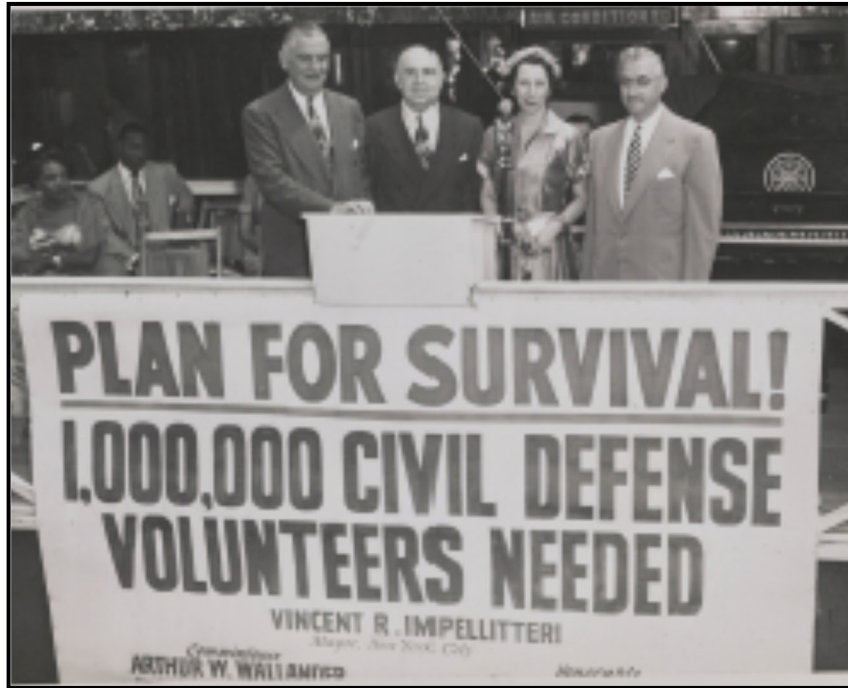
A bit of Canadian Radio History. This Myers Valve was manufactured in Montreal during the early 1920s to avoid patent infringement lawsuits from Deforest, RCA, and others. It was a rugged vacuum tube with a good reputation for performance.

The Post Office Net

Based on information from the USPS Historian

During the early days of the Cold War, the U.S. Post Office anticipated that a civil defense emergency could cause a breakdown in normal communications channels, like telephone, telegraph and commercial broadcasting.

In the May 8, 1958, issue of the *Postal Bulletin*, Postmaster General Arthur Summerfield appealed to all postal employees who were amateur radio operators to volunteer for service in an emergency. By July 1959,



Postmaster Albert Goldman supported the city's mayor and civil defense officials during an appeal for volunteers in New York City in 1950.



Postal employees who were licensed amateur radio operators were organized into a “Post Office Net (PON).”

The mission of the network was to “provide communications for the Postal Service in the event of emergency or natural disaster situations.” Participation by ham radio operators was voluntary. Interested employees were encouraged to fill out and submit a questionnaire, first published in the *Postal Bulletin* and later as POD Form 1858, entitled “Amateur Radio Operator Membership Questionnaire.”

The Post Office Net became fully operational in 41 states during fiscal year 1960. Operating procedures and identification of each participant by address and call sign were incorporated into a directory. By 1962, approximately 1,500 postal employees, in 43 states, were part of the network. The PON was then opened to licensed radio operators who were not postal workers.

In 1964, when Assistant Postmaster General Frederick Belen testified before Congress about the Postal Service's civil defense readiness, he praised the network as a hidden gem: "One of the little-known things is our amateur radio network called PON which was established to provide emergency communications in event of disrupted land lines." Belen's assistant, James R. Thomason, added, "In the event of an emergency, this system becomes immediately available for any communication that we want. It is an informal but well-organized group which can participate in any kind of emergency."

In 1968, The *Ludington Daily News* [Michigan] profiled Mrs. Willard Lake, reportedly the only PON member in Mason County, Michigan. She relayed as many as 184 messages in a single month, mostly from U.S. servicemen sending messages home. "The Post Office Net is the only network supported by a government agency," the article stated. "It originated among postal employees but has now branched out to include any amateur operator with the necessary license."

Although POD Form 1858, Amateur Radio Operator Membership Questionnaire, was last listed in a March 1969 postal forms catalog, newspaper accounts indicate that PON operated in some areas until at least the early 1970s.

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The Seven Mounds
From "Autographs and Memories of the Telegraph"
By Jeff W. Hayes (published 1916)

Many solicitous inquiries have been made in the last decade as to the whereabouts or probable fate of Aaron B. Hilliker, telegraph operator, minstrel and story writer.

Aaron Burr Hill was known from New York to San Francisco prior to the War of the Rebellion. His was of an adventurous nature, and he assisted materially in making the path to the great West easier for the next comer. He possessed a gentle spirit and many loveable traits, which endeared him to all. His friends who were legion. The following weird story, which came to the knowledge of the writer through the late Ed C. Keeler, may establish beyond question the passing of Aaron B. Hilliker and his last days on earth.

A party of thirteen left Boston in May, 1888, bound for the West. It consisted of John B. Lansing, his wife and her sister, and eight young fellows about town, well-to-do and of an adventurous turn of mind, the party being under the guidance of two middle aged prospectors. The two latter personages had come to Boston to organize a party for the purpose of prospecting and developing some alleged wonderful gold mines in Southern Nevada and California.

The members of this little band were in high spirits as they pursued their journey to the far West; the grandeur of the scenery and the vastness of the country filling all with awe and admiration.

Many stops were made en route, mostly in Colorado, Wyoming, and Utah. At one of the stations in Colorado, Mr. Lansing and his wife formed the acquaintance of a telegraph operator. He had passed the middle age, but was hale and hearty. He appeared thoroughly conversant with the country, and as the party numbered the unlucky thirteen, the operator was asked to join the adventures, which he did. It is said that his singing "The Old Oaken Bucket" which was rendered in a most artistic manner, was one of the leading attractions that caused the telegraph operator to be offered a place with the party.

It was sometime in July, 1888, that a caravan composed of seven wagons, drawn by a dozen horses and a yoke of oxen made its departure from Reno, Nevada bound South. No address was left with any of the merchants who fitted out the party, and it appeared as if that were to be a secret. There were two ladies in the party, properly dressed for the occasion. The ox team was driven by a man of fifty-five or thereabouts, who seemed to be the life of the party. He was continually play-

ing jokes upon his comrades and just before leaving, he, with three other good voices, sang "The Old Oaken Bucket" which received a rousing encore.

As cash was paid for everything they obtained, the episode of their coming and going passed out of the minds of most everyone, excepting the several persons that helped to outfit the party.

The caravan went due south through Carson and Jack's Valley where they entered a sterile country, once known on the map as "The Great American Desert."

It was in June 1907 that Eugene Burdick, a mining engineer, civil engineer, and prospector residing in Tuolumne County, California received a letter from Boston which read as follows:

"I am seeking information regarding a party that left Boston in May 1888, bound for Southern Nevada and California. I am willing to pay \$5000 for authentic information which will enable me to establish beyond a doubt the fate of these people. There were thirteen persons, two women and eleven men. The leader of the party was John B. Lansing, and it is of his fate that I desire to know, because a large estate is in litigation. The last heard from Lansing was from Reno, Nevada in July 1888."

Burdick was well acquainted with all the country leading from Reno to the South, and readily accepted the mission. His visit to Reno elicited the facts related above and taking up the clue, he began the laborious task of finding the lost caravan. Carefully he followed them across mountains and desert, through what looked like inaccessible canyons, but not one item of intelligence could he learned of the missing ones.

It was on the evening of the seventh day after leaving Reno that Eugene Burdick stopped for the night at the wickiup of Shoshone Joe, on the border of Death Valley. The Indian had lived in and around the neighborhood with his wife Salley, for more than twenty-five years, and he was a character well known to emigrants and prospectors.

A present of a few trinkets to the Indian made him quite friendly. Burdick inquired if they had ever seen a caravan of seven wagons passing that way long ago. Shoshone Joe, with many "ughs" picked up seven twigs, which he placed in the ground in a straight line a few inches apart, and then taking a stick with one sweep knocked them all down, dramatically exclaiming "all gone."

Burdick inferred from this that the Indian knew something which might assist him in finding the lost ones. He gathered that the Indian had seen the party, and had furnished them with fresh water prior to their crossing the Valley. A blinding sand-storm occurred a few hours later, and the caravan lost its way going south of the regular trail. Shoshone Joe said that once, when he went down the valley, he could see seven little hills at a distance of ten miles, but Indian like, he was afraid of the "Devil," and he never investigated.

This information interested Burdick very much and by offering a few more presents, he induced the Indian next morning to go with him to locate the seven hills he had told about.

Taking a two days' supply of water and a pick and shovel, Burdick, with his companion, started across the valley in the direction indicated by Shoshone Joe. The route was arduous, the sand being so deep and fine not more than a mile and a half an hour could be traveled.

Five miles of this wearisome journey had been traversed when Burdick located by means of a spyglass, the seven mounds described by the Indian at a distance of probably ten miles away to the south, and this added fresh impetus to his efforts.

Six hours later, the two arrived at the seven mounds. A vigorous blow with pick-axe felled one of the mounds and two skeletons fell out into the deep sand. The relics were those of a wagon which was ready to crumble to pieces, the tires on the wheels worn as fine as ribbons. The wagon had been drawn by an ox team, the horns and bones of which were half covered by the desert sand.

Twenty feet further along was another, similar mound. It took but a little shake to bring the second wagon to the ground, and two more skeletons were exposed to view. An object that proved to be a gold watch and chain fell out into the sand, but was speedily found by the watchful Burdick. He pried open the case of the watch, and on the inside read the following inscription:

“To John B. Lansing. From his wife. Dec. 25, 1886.”

“This is the proof I want,” said Burdick, and bidding good bye to the gruesome spectacle, he beat a hasty retreat. The Boston people were satisfied with Burdick’s story, and the evidence was produced, and he received the reward.

The shifting, treacherous sands now completely cover the seven little mounds and all that was mortal of Aaron Burr Hillicker, telegraph operator, philosopher, bohemian, gentleman.

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How Old?

The little girl was on a visit to her aunt and grandmother.

“Grannie, she said, after her aunt left the room, “how old is Auntie Agatha?”

“I couldn’t tell you, dear,” answered the old lady, “without looking it up in the family Bible.”

“Gracious!” gasped the child, “is she old enough to be mentioned in the Bible!”

A Careful Judge

In a certain town in a South American banana republic, the local judge was also the cashier at the local bank. One day, a man came in and presented a check which he wanted cashed. The judge was not satisfied as to the visitor’s identity and refused to hand over the money.

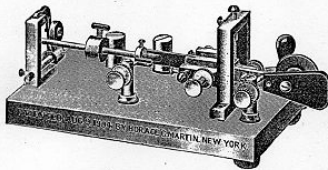
“But your honor, I’ve known you to hang men on no better evidence than this,” said the man heatedly.

“Very likely,” retorted the judge, “but when it comes to a matter of money, we’ve got to be careful.”

MARTIN'S

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UNITED ELECTRICAL MANUFACTURING CO., Inc.
53 Vesey Street New York

Certified Radio Operator Program

In the coming weeks, RRI will be reaching out to all CRO volunteers to discuss the status of their training and to make official appointments for those who attended the recent training sequence during the fourth quarter 2024 and first quarter 2025.

We apologize for some of the delays following up on these administrative actions. The combination of some health problems and the need to wrap up some projects has resulted in some unintentional delays.

RRI appreciates the interest and support of all involved.

The Origin of the Prosign "KN" By James Wades (WB8SIW)

The prosign KN (DAH-DI-DAH-DAH-DIT) is still occasionally used by CW operators. Undoubtedly, some believe it is an official procedure of some type, perhaps promulgated at an International conference or an import from military or commercial practice. The prosign was intended to indicate that a reply was only wanted from the specific station called. For example, if one sends W6RRI de W1MK KN, this means that W1MK only wants to communicate with W6RRI. This old 'Gil' cartoon illustrates the meaning well:



In fact, the prosign KN was entirely a creation of the ARRL, having been first announced in the April, 1947 issue of QST magazine. The QST article describes it as follows:

A new signal, KN, has been introduced to clarify the actual intent of an operator when concluding certain transmissions....To avoid calls from other stations when in contact with a specific station, and to avoid being called by another station upon completion of a call to a specific station., a new signal, KN, has been added.

While it was definitely intended to be sent as a prosign, and while it is perfectly legal to use it on-air today, it is only rarely heard. Assigning it the birthdate of April 1, 1947 was perhaps a happy accident, as it appears most hams, at least today, see it as a bit of an "April fools joke" despite it having been promulgated in numerous Amateur Radio publications over many years.

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QNI NEWSLETTER

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The Case for Common Denominator Modes

Digital modes have proven very useful in the Amateur Radio emergency communications environment. Networks that offer a degree of automation, such as Winlink and the RRI Digital Traffic Network offer a hybrid approach that serves as an excellent force multiplier, allowing a smaller pool of better trained radio operators to support a significant emergency event. **However, digital methods are not the only tool in the EmComm tool box.**

Consider voice communications. Walk into any ham shack in the world, and the odds are quite good that one will find a transceiver and a microphone. Likewise, simple portable transceiver, a microphone or key, a few batteries, and a chunk of wire are all that's re-quired to establish communications from a disaster area.

Certainly, voice methods do not always provide the circuit capacity needed for high vol-umes of traffic, but they do provide almost universal accessibility. CW methods offer some-what higher circuit capacity than voice methods, provided one has the necessary Morse skills.

Any effective EmComm program should treat basic voice and CW skills as an essential capa-bility. Part of the value proposition for the Amateur Radio Service is the fact that ham radio operators are decentralized and already dispersed in a typical disaster area, but not every ham is equipped for Winlink or DTN. As happened during the aftermath of Hurricane Maria, thousands of message were exchanged not by the ARRL team of "50," but buy a team of ad-hoc volunteers using basic HF-SSB methods, supported by operators, many of whom had traffic handling experience, such as RRI Board member Jeff Miller (WB8WKQ—SK), who handled over 2000 messages out of Puerto Rico.

What do you do when you're not on air?



Your editor doing dental work on an equine patient. Send us a photo of some of your non-ham radio work or hobby activities.