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Amateur Radio's Technical Journal

A Wayne Green Publication

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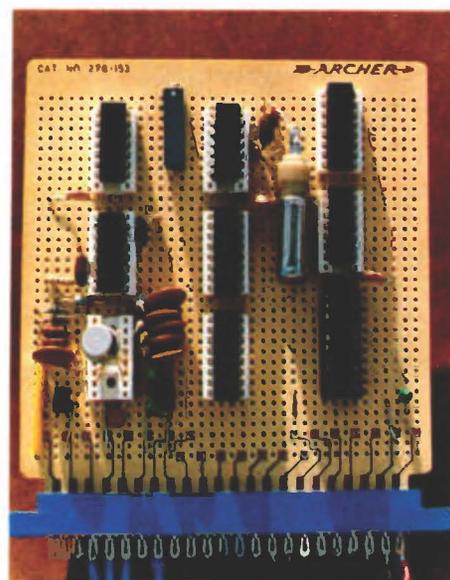
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tions which science has been unable to answer. Science has done a good job of answering many questions about how the universe works. But it has also failed to successfully tackle a great many observable phenomena. We have come to terms with many of these via religions, which call for belief without scientific proof. Other questions which are not answered either by science or religion tend to be pushed aside with annoyance.

But it is dishonest of a scientist to deny the existence of data just because he is unable to explain it or set up an experiment which repeats it. Science, if it is going to be true to itself, is going to have to admit that there are a lot of things which do not fit into the framework of the universe that they have built up. Scientists are going to have to start seriously trying to understand pesky things such as UFOs, ESP, reincarnation, PK, the spirit body, how memory works and where it is, medium communication with the dead, ghosts, and so on.

The easy path pursued by most scientists has been to unmask a few charlatans and then ignore everything else. Proving that a few of the UFO photos are fake doesn't solve the UFO situation at all.

The more we interest our kids in technical hobbies, the more scientists we'll end up with. You don't develop first-rate scientists by starting people in their 20s any more than you get good ballet dancers from late starters. No, it takes the twist of mind provided by amateur radio or computers (and I think we can all agree that these hobbies definitely do twist the mind) to get a good scientist going.

Dr. Hynek, the outstanding scientist investigating UFO phenomena, got his start as a ham. His credo seems to be much like mine...pointing to a wealth of data and a paucity of provable explanations...and asking if anyone can come up with a theory to explain all of this.

For all of our wonderful progress in science and the high technology gadgets we have derived from it, we still have an enormous number of rather key things which we don't understand and thus have to accept on belief. Once we start getting a handle on some of these mysteries, we will have powerful tools for further progress. Will an understanding of the essence of man lead to time and space travel in some mode barely dreamed of today?

Or will we find out that there really is some benefit to praying to the coffee table to have a nice day?

The questions are there in large numbers. We have to find out more about talking with plants, Kirlian photography, mind photographs, bent spoons, and so on. Can an understanding of human memory lead us to design computer memories in a different way, perhaps ridding ourselves of all size limitations?

Until we understand all of the mysteries of our world, we have plenty of room for science to work...and we need a good supply of new scientists. Hopefully, there will be a few more with the combination of the artistic and the mechanical...the scientific and the metaphysical...so that we will have some scientists able to tackle these things. Just ignoring them and refusing even to think about them is not a scientific answer.

In the past, I have written about such odd phenomena as UFOs, both about my own experiences in this field and those of other readers. I got quite a bit of mail from hams who had had personal UFO experiences. The easiest way to handle things like this is to ignore them. There was a "Nova" program recently which went to rather great lengths to debunk UFOs. And since then, I've read quite a bit about the

films they took for the show which were not shown...or even mentioned...films which give strong evidence that something odd really is going on. For some reason, they wanted to do another whitewash on the subject.

The same situation surrounds many of the anomalies which perplex the more thoughtful and open-minded scientists today. One can still find scientists with good reputations in some field who refuse to accept that there is any such thing as mental communication. Yet most of us have experienced this at one time or another, so we know it exists...and wonder at the objectivity of someone who won't even check the evidence. I will never forget some emotional distress I was under one day many years ago. I was distraught...and at that very moment the phone rang. It was my mother asking what was wrong, calling from 135 miles away. She'd never done that before...and never has since. There was no way on Earth that was a coincidence. She knew nothing of any of the situation or its development.

Ask me sometime about the UFO which a bunch of us here at the magazine saw just down the road one evening...and which suddenly sped away over the horizon in seconds when it started moving. We could see it for at least fifteen miles, a distance it covered in about four seconds—after hovering for several minutes.

There are a lot of things to investigate...if we can develop enough scientists...and they are able to break away from orthodox thinking enough to handle these elusive problems. But until we start getting more kids started in high-tech hobbies, our chances of making progress will be slight. Has your ham club done anything to spread the ham radio bug in your local schools?

DOWN WITH DXCC

My recent editorial pointing out the harm which DXCC and the Honor Roll has done to our hobby brought in an interesting letter from a well-known DXer. His response was to attack me, not the ideas which I had discussed.

The problem with DXCC is that it puts a premium on making contacts with operators in rare countries. This, in turn, if you stop even for a moment to think about it (which may be too much to ask DXers), means that operators in rare countries are not permitted to get on the air and rag-chew. Now, let's think about that for a minute. What is the most popular aspect of amateur radio? No, rag-chewing is by a wide margin the most popular amateur radio activity. We see the bulk of our low bands used for this, as well as virtually all of our VHF operation.

What chance does Paul 9M8PW in Sarawak have to rag-chew? He is no sooner on the air than the pileups start, with ops getting ever more insistent that he stop talking and give them a report and a QSL. They don't want to know about the Sarawak River and the twenty-foot-long croc which has been grabbing children up river. They don't want to know about Paul and what he teaches or that the monsoon rains have flooded half of Kuching that morning. They don't really care that his name is Paul or how long he has lived there or what he is doing...they want a QSL card so they can get a certificate. Many callers have no idea of where 9M8 actually is.

It turns out that Kuching is a fascinating place to live. Just a generation away from head-hunting, the people there are friendly and hard working. Once you get away from the capital city, you find that many of the small towns are built on stilts. Not just the houses, but entire villages are on stilts. They call them long

houses—often they contain hundreds of families living together. Each family has a separate set of rooms, but they are together, sort of like a bamboo-made hotel or motel. The ladders down to the ground are made out of single trees, notched to provide the steps. The people zip up and down these narrow stairs just as we do our three-foot-wide staircases.

Having towns on stilts keeps them above the water that runs off on the ground after the monsoon rains, which hit just about every day during half of the year. The temperature is comfortable, even though this is only about a hundred miles from the equator, running about 70° at night and maybe 88° during the hot afternoons. The humidity? Ugh! The rains last a few minutes to maybe an hour at a time, so you can usually outwait them.

Living is easy in a place like this, with hunger unknown. Wild bananas and pineapples are all around, coconuts, and so on. All sorts of fruit and vegetables grow in profusion. You just plant 'em and jump back. And living up off the ground not only keeps you away from the floods after each rainfall, but also keeps you away from most of the small animals and bugs. It's cooler, too. Even in town, many of the houses are built up in the air, with an open parking space for cars on the ground level.

But each remote country of the world has a different story to tell, if you'll listen. However, until we take off the pressure of the awards for getting QSL cards from rare countries, how are we going to share in these things? And how are we going to make hamming fun for ops in these spots?

I enjoy getting on for a few days from some weird place and making thousands of contacts. But remember that I do this for fun. I know that if I were to live in one of these places, I would get pretty tired of the unending pressure for the shortest contact possible, writing down calls month after month so chaps can get QSL cards. The paperwork involved is a drudge.

It's no wonder that every now and then we develop a DXpeditioner who uses this pressure to make money. People on the Honor Roll will eagerly pay \$50 each for a contact with a new spot. Indeed, that was the going price ten years or so ago. I'll bet that a mercenary today could ask for and get \$250 each for a new country. The charge for those not on the Honor Roll would be down to around \$25. If I ever retire from publishing, I just might grab a couple of portable rigs and set out to prove that I can make \$100,000 a year via DXing.

Now, for those readers who have not followed my personal enthusiasms, I'd like to assure you that you will have to look hard to find a more energetic tester. And I think I can keep up with anyone in the world when it comes to making fast contacts from rare spots. I've got that down to a science now, if you'll break quickly with the last letter of your call, please. Hold off for a few seconds and give it to me just once phonetically and I'll get you. If you give it twice, you'll go to the end of the list. I don't just work the loud stations that way—I work right down to the weak mobile stations and other rare DX callers.

Can anything be done about DXCC and the Honor Roll? Of course not, but that isn't going to stop me from beefing about what it has done to amateur radio. Who knows, I may come up with something even more pernicious.

ASIAN TOUR

Speaking of Asia, I'm sponsoring a tour

of Asia for this coming May, if you're interested in a first-class trip. This will be a short one, running about two weeks, and will visit Tokyo, Taipei, and Hong Kong. This is aimed more at the computer aficionados, so it will coincide with the micro-computer show in Tokyo, plus smaller get-togethers in the other countries (which are not as deeply into micros as Japan).

The tour will use the best of hotels...strictly first-class...and includes breakfasts and even some of those spectacular dinners. Having just returned from one, I can tell you that they are truly first-rate.

In Tokyo, we'll try for a meeting with the TIARA, the Tokyo International Amateur Radio Association. You'll not want to miss Akihabara, the electronics section of Tokyo, with hundreds of stores selling electronic equipment, ham gear, parts, and so on. You'll find most of the ham rigs running about 50% to 75% of the American price...unless you wait for Hong Kong, where they are generally even lower.

You'll get a kick out of Tokyo. The subways are easy to use. There are McDonald's all over the place in case you get a Big Mac attack...plus all the old home features such as Shakey's, Kentucky Fried, and even Wendy's. For the more adventurous, there are all kinds of Japanese meals, from raw fish right on through. This last trip, we had a complete raw-fish meal, with two courses of raw whale included...courtesy of the chaps at TDK.

If we get some hams on the trip...and you're interested...I'm sure we'll get a good reception from Kenwood as well as TDK...and perhaps Yaesu. We'll be too far away for Icom, unfortunately...wonderful people.

In Taipei, you'll enjoy the city...the people...and some of the incredible things you can see there. We can certainly get together to meet Tim Chen and see the radio club...and BV1A. I don't know if we can swing it to let you sit down at the mike of the station or not...but it's worth a try.

The next stop is Hong Kong, where you won't believe the prices on electronic equipment. There are dozens upon dozens of small shops, all trying to outdo each other. The city is big, with hundreds upon hundreds of high-rise apartments and business buildings. Transportation? Anything and everything...from modern subway to trishaws. I like Phil VS6CT's approach to crossing the ever-jammed streets. He just steps into the traffic without looking at the cars and they always stop for him. It takes some guts to get used to his system, but I can assure you that it works. He's lived there for years and is still alive as testimony.

If you bring along an HT, we can get ham tickets in Hong Kong. No problem...get 'em in minutes. They have a repeater, of course.

The ferry across the bay between Hong Kong and Kowloon costs 8c for first class, as I recall. Wonderful sight—and you'll get great pictures.

The tour starts from Los Angeles on May 20th and will be returning two weeks later, June 3rd. This is immediately after NCC in Anaheim, which runs May 16th-19th. I'll be there for NCC and then go on the tour, so if you go, you might not only have someone interesting to talk to, but you will also have someone who really knows the ropes.

If you have the wanderlust as I have, you may want to delay your trip back for a few days and add some other countries to your trip. This can be done remarkably inexpensively. Travel in that part of the world can be surprisingly low-cost. This last trip, I added a bunch of extra stops to

W2NSD/1 NEVER SAY DIE

editorial by Wayne Green

from page 8

which is sought in schools, but merely that the right system be used in getting an answer.

We know that some people have no problem at all in learning the code. These people normally see no reason why everyone else shouldn't have to learn the code, too. I'm fortunate in that I am able to get my code speed anywhere I want it in a jiffy. A few hours and I'm zipping along. It took me maybe a half hour to learn the code in the first place and just a few hours to get to 13 per. The nervousness of the exam put me off the first few times I went down, but finally... after not having practiced more than an hour total since failing the test, I went down... more to help another chap than to take the test myself. I decided that well, hell, as long as I was there, why not? Passed—no strain.

Others are able to rack up hundreds of hours trying for the big 13 and develop quite an inferiority complex over the situation. They try code tapes, copying over the air, classes, and so on. Nothing works. I'm talking about reasonably intelligent people. The army found that a certain percentage of their recruits were just flat unable to learn the code, so they would try them out for a few days and get rid of the people who were difficult learners.

Now, if a person makes a serious effort to learn the code, but is prevented by a lack of the right brain circuits, I assume that this is the kind of stupid person we want to keep out of our hobby, right? And I assume that no matter what this person has achieved outside of this code failure, he should be prevented from getting a ham ticket and bothering us. I have in mind some absolutely brilliant electronics engineers I've known who tried and tried to get the code and just couldn't... who needs that kind of trash on the bands?

No, the majority is probably right in pushing hard for us to keep our present system of encouraging everyone to cheat as much as possible on the technical exam, using the Bash materials so they don't have to know one damned thing about electricity... and sorting it out with the fabled code test... unless, of course, they buy those California tapes... in which case, they will have in their hands the actual FCC code test. Oh, well, we can't win 'em all, right? Will these tapes be available in Dayton again this year? Bet they will.

More than changes in the exams or in the code tests, perhaps it is time for us to consider putting more of the responsibility for the growth of amateur radio onto our clubs. Right now, most of our clubs attract newcomers, who attend a few meetings and then get bored, dropping out. For the most part, I've been finding our ham clubs in the hands of a few old-timers who like to get together and meet each other. Not much more than that happens. I see youngsters very rarely at club meetings and when I do, I often hear grumbling by the grizzled old men who sit toward the back of the room in a separate group.

Perhaps we are happy with a dying hobby and perhaps these old-timers are absolutely right... we shouldn't make any changes. Why should we go out and try to get 12-year-old kids into hamming? They're a bore on the air and create trouble at club meetings. Besides, all this stuff about needing kids so they can become career engineers and technicians is a waste of time... we can buy all we want from Japan and other Asian countries. Heck, even if we did develop technicians, our companies couldn't afford to compete with Japan and Taiwan... wages are too low over there. And besides, their governments are backing their electronics industries while ours is doing its best to screw ours.

Yes, perhaps the old-timers are right and the situation is completely hopeless and there is no use in even trying to do anything about it.

But, Pollyanna me... always the hopeless idealist... I keep thinking that if we could only get our ham clubs to get into the excitement of recruiting youngsters in the 12-15-year age bracket... Infect them with the virulent virus of hamming... run classes as part of our club activities... and then have it so our clubs could give the license exams instead of wasting FCC money on this, we just might get some growth started.

We have such an incredible way to go to even catch up with Japan, much less get ahead of them again in electronics, that even if we were to get ham radio growing at 33% per year, it would take over ten years just to catch up... and a few more years to get ahead again. It may take that long before the government (congress) recognizes that business needs help, instead of regulation and taxing, if it is going to compete on a world basis. I really hate to see the US losing one electronics market after another to Asia... because we have so few technicians, so much difficulty getting growth capital, minimum wages driving up costs, so little emphasis on automation and robotics... and so on.

When I looked into building a new plant for our instant Software division, I found where the bottom line was. Let's say I wanted to set up a plant with \$100,000 worth of equipment to produce a product which I would sell largely worldwide. Now, in the US, before I could invest the \$100,000, I would have to earn \$200,000 and send half of that to the government in taxes. In Ireland, I found that I would have to invest only \$50,000 and the government there would match that, giving me the needed \$100,000. Further, the government would train workers for me at their expense... and wages would be far below ours to boot. Is it any wonder that Apple, Memorex, and many other firms expanded into Ireland instead of adding facilities here? You get four times the bang for the buck there, so businessmen put down their waving flags and were practical.

Getting back to hamming... one of the reasons I have been pushing so hard for all these years to get the legislation through to allow clubs to give the tests is my faith in the clubs as the best approach we have to getting growth of the hobby.

Now that the law has been changed to permit this, I'm anxious for us to get started. I believe that if clubs do the teaching of our newcomers and the testing, we won't need any FCC tests or code. The clubs will know who is serious and who isn't. I'm hoping that this sort of entry into the hobby, where newcomers are taught not only theory, rules, and such, but operating procedures and ham lore as well, will result in much better hams.

In the meantime, I'll be pushing where I can... publishing articles on construction projects... and so on, all trying to keep things moving in the direction that seems most productive for hamming... and our country... In the long run, I'd sure like to have your help and support, but I'm used to being fought and jammed, so I'll do my best with or without help.

BASHED YET?

Yep, my good friend Dick Bash is at it again. You really have to give him a lot of credit. A lesser person would have become discouraged when the FCC changed the test on his blitz-taught students and flunked almost all of them. Well, Dick had their money, so it was no skin off his... er... nose, right?

So Bash is going out again, giving his one-day intensive memorization of the FCC answer courses, all for the low, low price of \$150 for the Tech/General or Advanced, or \$225 (wow, a bargain!) for both. Dick has a nice guarantee for you, too... if you pass, he keeps the money. If you flunk, he keeps the money. What could be fairer than *that*? Oh, if he runs the class again, you can take it again for free if you can find it. If you don't register ahead of time, it's \$25 more at the door for each course.

Will the FCC be waiting for their nemesis again with a new exam and flunk his trusting flock? Heh, heh, only the Shadow knows.

If the FCC doesn't change the questions, Bash will definitely get you ready to pass the exam. And you don't have to worry one little bit about having to learn a thing about electricity or radio. No knowledge or understanding whatever is necessary to pass this test once you have been grilled in the answers for a full day. But better not wait a day or you may start forgetting some of the test answers.

Bash will be going around to Seattle, Los Angeles, San Jose, Chicago, Boston, and Dallas. Let me see... with about thirty students per class, twelve classes in about a one-month period, ole Dick is going to really rake it in. Who says you can't make big money out of amateur radio? Not counting all of his sales of books and code courses (\$10), it looks as if Dick could pull in \$45,000 in that one big swing. Hey, good work there, Dick!

I don't know if Dick picked up the FCC's actual code exam from the booth near his at Dayton, but if he did, you are really in luck. Why, you would then be able to pass the whole FCC exam without knowing either the code or the theory, rules... or anything! By golly, if we can't get some growth in the hobby this way, what will do it?

ANOTHER OGRE

Not all of the falling behind of electronics manufacture in our country can be laid at the feet of the ARRL and their incentive licensing disaster of 1963. The resulting loss of engineers and technicians to the country has been devastating, but there have been other factors involved which

have worked to cut American production and put Americans out of work.

One of the more insidious robberies of jobs has been caused by the borrowing of cash by the government to pay the increasingly large government debt. They've done this via short-term, high-interest notes which investors have been buying. According to the most recent figures, the government is now responsible for 29.7% of all borrowing. This has doubled in the last decade and has a lot to do with the unemployment situation.

Remember that the more profits companies can make, the more they will expand their operations, creating jobs. And as people make higher salaries they will spend more, again creating jobs. But when the government comes in with super high interest on their borrowing, this takes billions away from the private sector... billions which would otherwise be invested in making more jobs.

The deficit of 1982 is mind-boggling, of course, but one sadder result of this is that the 200 billion will have to be borrowed from investors, further robbing our industries of investment capital and thus preventing them from investing in growth and the badly needed creation of jobs.

This bleeding of investment capital by the government reflects back on us in another insidious way, too. By keeping our industries from getting reasonably-priced money for modernizing plants, they are forced to be ever less competitive with foreign manufacturers. Today, the US has the highest percentage of obsolete plants, the lowest percentage of capital investment, and the lowest growth of productivity of any major country.

This is a difficult situation for those who want to expand welfare and unemployment benefits. In order to get the money to pay people who are not working, we have to borrow it from those who are. And when we use money in that way, the government has to compete against our industries to borrow the money, taking it from them with higher interest rates. Yes, these people spend the money, but make nothing for us to buy in return for it, so the capital thus used up does not end up making more. This unwinds the economy and makes us less productive.

There is no simple answer to everything, but we do at least see a lot of the problems which are sinking our country. The lack of capital for building new and modernizing old businesses is damaging. The lack of trained technicians and engineers puts us at a further disadvantage. If we did have the cash to expand electronics production, we would probably send it to Asia, where we would get more return for the investment because they have more and better technicians there.

If we are able to start getting our kids interested in amateur radio, we could, in a decade, begin to turn the engineer and technician problem around. The cash situation is not going to improve until we make it clear to politicians that we are serious about eliminating deficits. I note that there are a lot of senators and representatives who do not yet have this message... which means that we are not making that clear.

TOO MUCH SCIENCE?

On my birth certificate, it lists the occupation of my father as "aviator" and my mother as "artist." If you think about that, you'll get some insight into my trains and lapses of thought. There is the mixture of the mechanical and the artistic which resulted in a technical publisher.

This same background has led me to be interested in both the scientific explanations for the world and the occult ques-