



The

Spirit

Voice

an EVP newsletter

Spirit Voices

An EVP Newsletter Published by Bill (Dutch) Weisensale

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Content: Dan McKee
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From Herb Buznfin Jr.
To Herb Burnfin Jr.
Voice Band Filters

In the latter part of 1980, when publication of this paper was undertaken, it was the author's concern as to whether there would be enough material of interest to print a letter of perhaps six or eight pages every two or three month. The problem, however, has turned out to be just the opposite. Were it not for time limitations, as well as printing and postage cost considerations, this issue could easily be extended to well over thirty pages. We have received numerous letters, a number of subscription requests, several voice sample tapes and even a couple of modest donations to help further this work. All of which is greatly appreciated and most encouraging. Because of limited time available and the amount of mail, the author has been as much as three to four weeks late in acknowledging correspondence received, for which we would like to make a blanket apology.

We are very heartened by this greater than expected response. It is becoming apparent, not only that there is more interest in EVP research than had been suspected, but also that this interest is growing steadily as more new people become involved. We are confident that during the years immediately ahead, very significant progress will be made in strengthening the channels of communication with the so-called "dead," in Public education, in electronics, and very importantly, in gathering the evidence, which in time will prove survival is a fact of life.

-Ed

From Mr. Dan McKee
Illinois, USA January 1981
(In part)

There is so much to say I hardly know where to begin. My interest goes back four or five years ago when I read a copy of Raudive's book and didn't believe anything like this was at all possible. Some friends of ours insisted that they had heard tapes of these voices and it actually does happen. To prove to them this couldn't be, I set up the experiment and we got results the very first test we ran. That was all it took to hook me and I have spent about a thousand hours a year since then working with this. I used to work for the Federal Communications Commission and have been a radio amateur for more than 40 yrs. So, this is sort of an extension on previous interests. It's communications all right but I'm not sure who with.

I've performed all the Raudive experiments with about the same results as most people get. In duplicating the Broadcast Band experiment, I took two signal generators spacing them about 10 KHz apart to simulate two broadcast stations (moving just outside the B.C. band so as not to pick up stray audio) and after considerable efforts did receive some voices of quite good strength that sounded kind of like they were in a barrel. One voice said "tomorrow night telephone much improved." Not much happened after that and I haven't followed up very well. Thru mere hap-chance one night using the reel to reel Recorder, I mistakenly put the tape on backwards (you also have to turn it over, i.e. if you were using the left channel then it would become the right side when you reverse the reels), and I heard what appeared to be words and short sentences that weren't just random noises. One of the early intercepts said "We Are Spirits, You Will Come to Know That." Really, this follows simple logic as we know it takes a form of energy and what more logically than the voice spectrum we want to listen in. At one time, they told me to use Single Side Band. This is widely used in communications today and concentrates bursts of voice energy in a relatively small bandwidth. When I did this the quality and readability came up very noticeably and I use this method most of the time. Sometimes I ask questions using my own voice and get answers but the words are drawled or drawn out and you may have to complete a syllable etc. I do not get results all of the time by any means. Sometimes it's Hot and sometimes it's cold and sometimes there are long dry spells with very little.

I make the intercept on a reel-to-reel, then reverse the tape and turn it over, (shiny side up) and make the take off to a cassette for storage and future breakdown into categories. I may use the same middle section of the reel to reel many times in the same place always returning to the zero setting, as of course the erase head clears the tape each time. Occasionally you get a little bleed thru or cross talk and then I may move down the tape a little. Once in a while there will be voices on the tape just by running it backwards and not turning it over. There is a lot I would like to ask someone who thoroughly understands tape recorders.

Another strange thing that frequently happens is that when I return the tape to the 000 or beginning setting, it may over run slightly. You soon become familiar with these last few words on the previous intercept but then they will change completely for a few words and occasionally the whole previous intercept. At first you think you must have made a mistake but it has happened so many times now there is no doubt of its reality.

Now let me mention another strange thing that has happened several times. The voices will mimic my voice or another spirit voice repeating each sentence in duplicate. One time I was

making affirmations and I had said, "God is my source." The little voice repeated except that it said, "God is Your source." I get a great deal of references to God, sometimes a single God and sometimes different Gods. It almost makes you think of man's earlier development stages when we worshiped many Gods. Incidentally, I sometimes get voices that say they are from the Far East and speak of Buda, early Emperors etc. It crosses my mind that some of these voices could be highly developed eastern mystics able to operate out of the body.

Not every time, but generally speaking, the voices seem to express problems or turmoil as we have on the earth plane. I have even separated some of the worst ones under a tape I label "Profane, Obscene & Indecent language" where they abuse everything from each other to the churches and God. Thanks to my background from school, the merchant marine, the army and the construction business, I was able to recognize most of these words. I won't repeat what some of them said they wanted to do to me and suffice by saying that a short prayer for God's protective light and telling them they are not wanted took care of the problem.

Now let me go on to another very strange happening of a couple of years ago. My wife, Marjorie, had been up the street to a neighbor's to listen to a tape of a philosophical lecturer, Joel Goldsmith, on his Infinite Way Path. It was a favorite of our neighbors and had been played many times for others. Marjorie borrowed the tape so she could play it for me that evening, and we sat down on the couch in the radio room to listen. About 10 minutes into the lecture other voices began appearing, some making comments on what the speaker was saying. At first I thought the TEAC reel to reel must be reading the other channel thru head misalignment or something else. As I had two new TEACs I switched to the other machine and the same thing continued to happen. About this time, I realized something very unusual was happening and started taking the voices down on a cassette recorder. There must be 15 or 20 minutes of this before I called the neighbor and she brought her reel-to-reel down. By this time whatever it was ceased to happen and the neighbor was very shaken at what I had apparently done to her favorite tape. She took it home and played the whole thing over and it was as originally recorded. I then sent the recorders back to TEAC to have the head alignment checked and both came back as perfectly normal. When I played parts of this tape for Brenden O'Regan of Edgar Mitchell's Noetic Science Foundation, he said he had never heard of anything like this happening.

One more strange thing. One evening I was working in the radio room with the FM/AM turner on to the Aux 1 position and the Cassette recorder powered but in the standby position. Out of the speaker came a four-note cord, eerie sounding, that repeated itself about every 8 or 10 seconds. I listened a while and then called Marjorie to make sure I wasn't hearing things and she heard it. In a few moments, it turned into a low-level voice speaking something that didn't even sound a little familiar. To try and determine the source I first turned the turner's function switch to Aux 2, Phono, etc. but nothing changed. Then when I killed the power to the cassette in standby, it disappeared. My only explanation was an extremely strong Short Wave signal riding in the IFs of the receiver but this doesn't really make any sense. Besides, you never heard programming like this.

Well, there are some other things that have happened also but I am a born Doubting Thomas and always look for a plausible explanation. You know if those attempting to discount what we are doing can find ONE thing where you goofed, then they think the whole operation

is false. I am trying to build as foolproof a case as possible before sticking my neck out very far. We all know about trying to convince someone against his or her will.

A word of Warning about reverse taping—it is possible to get some intelligence from sound combinations running the tape backwards. Try Space Ships, it sounds the same forward and backwards. I once asked the spirit voices how I could tell what was random and what was them? The answer came back immediately, "We don't know."

Bill, you have your reservations about some of the voices coming from so-called UFO or Space Ships. I'll have to send you a couple of hours of tapes relating to this area. If they're not having a grand time pulling our legs, then they must be flying from place to place because they certainly talk about it often enough.

Another category I started collecting on one tape is talk about the mirror. They speak of going through the mirror as if it were a reflection of our world. Although I certainly do not understand Anti-Matter, the layman's description of this fits very well into what I am receiving on the tapes. They seem to almost lead parallel lives with us in some cases. I feel I receive communication from many different places. I do not get the good response from what appears to be spirits, as Sarah Estep does. When I ask for a friend who has made the transition, sometimes a voice will answer, "We don't know, we will have to ask the Spirits" and then later a reply may come back relating to my question, such as, yes, they did arrive all right.

And speaking of Sarah Estep, doesn't she have some very good and interesting tapes? I do not seem to be able to achieve the good results she does with any consistency. I used the UHF method for some time and occasionally would receive a voice comparable to hers but I cannot do it consistently. You know Sarah got me interested in the "picture" phenomena and I almost went cross-eyed trying to receive something. I believe I did at one time but it was so brief it is hard to prove. I have a collection of voices answering my questions about working with me on getting pictures and they are most encouraging but the results weren't. I used channel 42 UHF with a small loop antenna. I didn't expect to ever get a regular picture here from a TV station as we are about midway between Chicago and St. Louis, unless by meteor scatter.

Well one night I flipped the receiver on and there was a weak but copyable signal on channel 42. It was no ghost picture as you could easily recognize it as a TV station. Then the transmitter framing lines were also prevalent. So, I sort of gave this project up for the time being and hope to do some more work on it later.

While the thought enters my mind, at the urging of my wife who for some reason wanted me to ask for the deposed Shah of Iran on the day of his burial, I asked friends this question and they came right back and said, "The Shah has come to live with us" and another voice said, "As it should be." Very interesting, I wish I knew where "Live with us is."

I am also collecting references to man's transition, which make very interesting copy. Also, a tape on a number of references to Russia.

Reply

When I was working on our first Spirit Voice Receiver around '77 and '78, which, was designed to operate at 455 KHz AM, we were told by the Spirits to use Single Side Band. Since this would have meant rebuilding the receiver from the floor up, so to speak, we did not do this. The only SSB radio we have is a CB unit and as you know, the CB channels are notoriously full of "garbage," so we haven't tried this either. The method, however, definitely does make sense,

and especially since you are getting such good results with SSB, I think we should keep this in mind for possible future use in experimental Voice Receiver designs. Perhaps there are some of our readers who have an SSB radio and would like to experiment with this method.

The voices you heard on the lecture tape appeared somewhere in and/or between the recorder's pick-up head and the speaker. In one of the methods I've used to record, a recording of electronic noise is used as an audio carrier, which is played back through the recorder's speaker or a separate speaker, while the voice recording is made through a microphone connected to a second recorder. At times while doing this I can hear voices through the speaker of the carrier recorder. Although these voices are extremely weak and hardly even understandable, on occasion I can catch a word or two, such as "Hey Bill." These voices are not on the audio carrier tape in the carrier recorder but are later heard on the voice recording made on the second recorder. Others have also had the same experience at times. I think what you experienced is the same effect, only stronger.

In essence there are only three conditions that must be met in order for voice reception to take place. 1) There must be an electronic signal to act as an audio carrier. 2) There must be amplification of this signal. 3) The signal must be reproduced by speaker or earphones or it must be recorded on another recorder.

In the case of your lecture tape, the audio carrier was supplied by the lecture tape itself, the signal was amplified by the recorder's amplifier or by the audio amplifier to which it was connected, and the signal was reproduced by the speaker to which you were listening. I know of one case in which such voices appeared while western music was being played back from a phonograph record.

Your method of reversing the tape after it is recorded, and then playing it backwards, is very interesting and unique. I'm a practical individual and I believe if it works, use it, and you definitely do get very good results using this method. But to be frank, it simply doesn't make sense. It would appear that in order for the voices to be understandable on playback, they would have to speak or think backwards at the instant of reception so that their voices would appear forward or normal after the tape is reversed and played backward. I would be very interested in your thoughts on this subject.

From Dr. Karlis Osis

New York U.S.A. January 1981, American Society for Psychical Research, Inc.

Thank you for sending your newsletter. I found several ideas expressed there very interesting. Apparently, you are convinced that the external agencies, whatever they are, convert noise into voice. If I understand you correctly, the noise can be either acoustical or electrical or both, but the "converter" uses energies, then than radio waves. If this is so, I propose the following: enclose your entire system--noise source, receiver, amplifier, recorder, or what not--in a box shielded for radio signals and some acoustic shielding. I would be most interested in results so obtained. If this is not practical, tell me why. I do want to understand your basic rationale. I might suggest something more: have your most successful recording person present in some randomly selected sessions and absent in others. Loosen the shield at some randomly selected

intervals and keep the box tightly shielded in others. Take pains that your successful recording person is blind as to the shielded or non-shielded sequences. I mean, for example, have the box screened from him visually and noises masked by music in the room. Please, let me know your reactions.

I am including a reprint of an experimental report where we used shielding for different purposes.

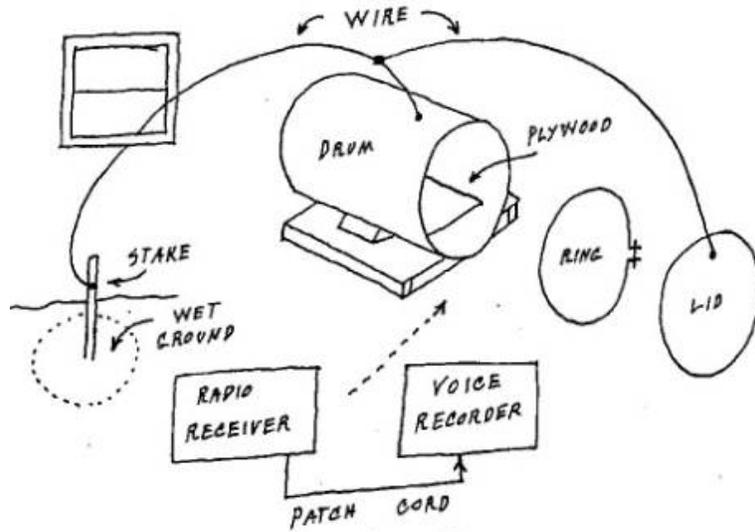
P.S. Of course, the shielded system has to be battery powered.

Reply

In early 1975, when I was becoming interested in the EVP as something more than just a matter of curiosity, the controversy was still raging as to whether EVP voices arrived via acoustical or electromagnetic means. (It is generally ~accepted now that neither is the case.) At the time this was most perplexing. It seemed reasonable to believe that if they arrived by electromagnetic signal, a radio receiver would be required in all cases, and yet some methods did not involve any form of radio receiver. Conversely, if they were of an acoustic nature, then all methods would, of necessity, require the use of a microphone, and yet there were some methods that did not involve a microphone.

I reasoned the voices either had to be both acoustic and electromagnetic, depending upon the method of recording, which seemed very unlikely, or they had to arrive by some other kind of energy, which was of neither electromagnetic nor acoustic in nature. (We have come to call this PK energy for lack of a better explanation.) In order to find out which was the case, I used a 50 gal. Drum with a removable lid, which I happened to have at the time. The lid was held in place by a separate ring and cinch bolt arrangement. The ring had a "U" shaped cross section, which gripped the lid and a flange around the top of the drum, holding the lid tightly in place. Drum, lid and ring were all made of steel.

I brought the drum into the house, laid it on its side on a wooden pallet and blocked the sides to prevent it from rolling. Next, very small holes were drilled in the drum and lid. A piece of heavy wire, with a solder terminal, was then "bolted to the drum and run out through a window where another solder terminal and bolt were used to attach the wire to a steel stake driven into the ground. A second wire and solder terminal was attached to the lid and soldered to the first wire. All connections, drum to wire, lid to wire, wire to wire, and stake to wire, were checked with an ohmmeter to ensure there was no resistance and everything was properly grounded. Before doing the experiments, water was poured around the steel stake to ensure proper grounding.



A piece of A piece of plywood was cut to the right size to be used as a shelf inside the drum. In the initial experiment, which was to check the efficiency of the shield a battery powered radio receiver was tuned to a strong station, the volume set rather high, and placed inside the drum. A battery-powered tape recorder was then connected via. patchcord to the radio, also placed inside the drum and the lid bolted into place for several minutes.

Upon removing the recorder and reviewing the tape, it was found that the station was quite clear with the lid off, but when the lid was bolted into place the station totally disappeared and its presence could no longer be discerned even with the closest listening. We then adjusted the radio to between station static, listening carefully to be sure there were no distant stations present, placed the radio in the drum with the recorder and made several recordings with the lid bolted in place each time.

We found the voices appeared inside of the shield just as they did with no shielding. Also, since the radio and recorder were connected via patch cord and there was therefore no microphone involved, this experiment eliminated (to at least my own satisfaction) both the acoustic and the electromagnetic hypotheses.

I realize, of course, one such experiment does not constitute scientific proof, nor even scientific evidence, since I am not a scientist. It is, however, as a scientist would say, indicative of a paranormal event, and I do believe if such experiments were repeated under scientifically controlled laboratory conditions, with a good EVP Operator such as Sarah Estep, the results would be very interesting.

Incidentally, my wife, Mary, and myself work alone in EVP research. We live in the Mojave Desert, 17 miles from Barstow, which is a very small town 125 miles from Los Angeles. We do not happen to know of anyone in Barstow or, for that matter, even in Los Angeles, who has qualified themselves to participate, as an EVP Operator, in these experiments.

I would be very interested in the results of any experiments you might undertake with the EVP.

From Mercedes Shepanek
Virginia U.S.A. February- 1981
(In Part)

I have been taping for the past six years, with great success at times and very little success at others. Over the past six years my partner and I have had hundreds of voices. We use a system very similar to that which Sarah uses. We have not had great success with the radio as background sound and are currently using a sound synthesizer in experimenting with background noise. Over the years we have come to believe "new" noise is an essential component of the voice modulation.

Reply

Your method of using a sound synthesizer is very interesting and other than the diode noise generator I use in most experiments, you are the only one I know of who is using an electronic audio carrier generator of this nature. A diode noise generator creates an electronic white noise that sounds similar to the "hiss" of a gas flame. On the other hand, a sound synthesizer, depending upon its type, can create almost any kind of sound. Could you tell us more about the synthesizer you are using, what kind of sound you use, etc.? I am sure our readers would be interested in details about this method.

Sarah also believes a "new" or "live" audio carrier is better than a taped carrier. Recent experiments of our own, in which a "live" and a taped carrier were compared directly, yielded better reception with the "live" carrier. This will be gone into in more detail in issue # 4.

To Mr. Ken Mayer
Oregon U S A, March 1981
(In Part)

We would like to thank you for the interesting letter. I was glad to learn you are an electronics experimenter. People who have some knowledge of electronics and the imagination to experiment, are badly needed in EVP research.

EVP recording normally requires a great deal of patience and persistence. We believe anyone can record these voices if they have enough patience and persistence. So, if at first you seem to get nothing, do not be discouraged, --this is normal.

I would recommend, after asking for communication, (they can hear you) that you record only about 10 counts on the tape. Then, listening as closely as possible with earphones, replay this short section at least 10 times. (Do not turn the volume up too high as excessive volume can cause ear damage.

To start out, perhaps an hour or two of listening in an evening would be good, until your ears become accustomed to this sort of thing. At first the tapes may seem to be blank. After some practice, you will begin to hear there are human voices present, but you probably will not be able to understand what they are saying. As you continue to practice several times a week, you will first be able to understand an occasional voice, and then more and more as you continue to record. This whole process usually takes anywhere from several days to several

months. On the other hand, you may be one of those very rare and fortunate individuals who are able to hear and understand voices the first time they try to record.

To Mr. Herb Buznfin Jr.
Missouri, U.S.A. January 1981
(In Part)

I don't blame you in the least for being skeptical about the EVP. When I first heard of EVP recording in 1974, which happened to be through Mr. Sherman's book, *You can communicate with the unseen World*, I thought certainly somebody was putting me on. I did not doubt Mr. Sherman's word because he is known as a man of integrity and in any case, he was reporting experiences, which were reported to him by others. However, I did at first believe those reporting such experiences were either lying or more likely deluding themselves into believing weak radio voices, miscellaneous microphone sounds, etc., were voices and were of paranormal origin. Unfortunately, at the time I did not know anyone who had experience in EVP recording nor did I have a sample tape to listen to or I would soon have disregarded such notions.

Being the type of person to try anything once (well almost anything), I decided to try recording for myself and see what would happen. I had a Sears portable cassette. I took it out to an old travel trailer we owned, where it would be quiet, and tried my first recording. Now I don't believe there are appropriate words in the English language to describe how absolutely ridiculous one feels the first time they try this. Here I was sitting alone with a tape recorder in a small trailer in the middle of the desert (where we live), and I was talking to thin air. And what was even more ridiculous, I was expecting thin air to talk back to me through the tape recorder!

To make a long story short, I got no results, even though I tried the same thing on other occasions, studying the tapes carefully each time. To be more accurate I should say that at the time I thought I had no results. Later, Mary and I spent an evening with Mr. Bart Ellis who had been doing EVP recording and also had samples recorded by others. After hearing these samples and recording others during the evening and becoming familiar with the peculiar whispered sound of these voices, which at least for most of us, are generally weak and buried in noise, I was later able to hear the voices on my own tapes. Upon review, I discovered that on the very first tape I had recorded and thought to be blank, a voice had appeared within seconds of the beginning of the tape. Within less than two minutes of the beginning of this first tape another voice says "contact." This is immediately followed by a second voice, which says "contact right now."

(and)

We believe, as mentioned in the *Voice*, that a few EVP researchers are mediums in the presence of a tape recorder, but for most of us reception is quite weak by whatever method, and we have to replay each several times through earphones in order for it to be understood. Being in electronics you can imagine what a challenge this is. There has been a considerable amount of effort devoted to voice clarification. Unfortunately, so far these efforts have had practically no results. No one has yet discovered the "key" to clarification. It has been believed for several

years that we are dealing with a modulation effect versus mixing. It is also believed this modulation is caused by *PK* energy. Unlike normal modulation, however, EVP modulation seems to require multifrequency or random frequency audio carriers within the voice band itself. It's almost as if modulation is caused by a *PK* "voiceprint," and that modulation can only occur if there are frequencies in the carrier which more or less correspond to at least some of the frequencies in the *PK* "voiceprint." In other words, there may be some kind of resonance effect.

As you can imagine one of the first things that was tried was to eliminate the noise carrier by attempting to obtain modulation of an RF carrier. A number of people have spent a great deal of time on this, usually with arrangements consisting of a miniature radio transmitter or wireless microphone and a radio receiver. The theory of course, being that whereas 10% to 50% modulation would be essential on a noise carrier in order for the voices to be discernible, only a fraction of this percentage would be necessary on an RF carrier for full clarification. I personally spent well over two years attempting to obtain modulation on an RF carrier. Among other things I built a FET detector, which was so sensitive it was capable of making audible a tone that had been modulated on an RF carrier at less than 1/10 of 1%. It was to no avail.

Since we had been told at one time (from the Spirit World) that we should have "feedback through continuously repeated sections," I also built quite an elaborate arrangement, the heart of which consisted of four FET RF amplifier stages with the output of the last forming the input to the first. Each stage contained an input tank and an output tank. Loop feedback was positive. A second FET in each section was connected to a slow AGC to control the RF level at about .002V P-P. The arrangement was bread boarded in a square configuration with about one inch of space separating the input tank coil of each stage from the output tank coil of the preceding section. This, of course, formed four electromagnetic couplings in the loop, which would (I hoped) act as EVP modulation points. Initially there were no voices received. After I slightly modulated the RF carrier with a voice band, noise carrier we got voice reception and it seemed to be slightly better than by other methods we had used, but the difference was not significant. I still have this arrangement and I am still convinced it is part of the solution, but there is still something else that needs to be added and at this point we do not yet know what it is.

Another method some of us have worked on is attempts to use a single audio frequency, either within or outside of the voice band, as a carrier. The hypothesis, in this case, being that the carrier could then be eliminated by either a detector or notch filter. These efforts also have been without success. Other methods similar to the transmitter/receiver method have been tried employing lasers and beams of light between a source and light sensitive device. These efforts also have not succeeded. Since some or all of the above methods are still under experimentation I should say, in order to be more accurate, that as of this writing I am not aware of any experiments along these lines that have resulted in significantly improved reception.

About the only device that we know of so far that is of some benefit, is the voice band filter. So far I have used an active filter based on 741 Op amps with a 350-2.8KHz pass band and also a passive filter based on a certain 3-way crossover network for a speaker system that has a 300-3000 Hz pass band (midrange) at 12 db/octave.

Recently I have come to suspect the EVP effect maybe magnetic rather than electromagnetic, i.e., it may be a modulation of the flux density or eddy currents of the

permanent magnets found in the receiving system. These magnets, of course, are found in speakers, microphones, tape heads, earphones and on the tape itself, and it is exactly these places where the voices are suspected to enter. I would like to experiment with a Hall Effect device but despite my best effort to date, I have not been able to locate a source of supply for a suitable Hall Effect IC or a suitable semiconductor wafer in order to make one.

I gather from your letter you know more about electronics than I do, still you may not be familiar with the Hall Effect device as it is rather uncommon. Briefly, if one passes a current from end to end through a thin semiconductor wafer, that is in a magnetic field whose lines of force are perpendicular to the flat surface of the wafer, a voltage will be developed at right angles to both the direction of current flow and to the lines of force, that is from side to side in the wafer. The amplitude of this voltage, known as the Hall voltage, is determined by the current through the wafer and by the flux density of the magnet.

There is one Hall device on the market that I know of and this is the Hall switch. This device consists of a voltage regulator, Hall wafer, differential amplifier and schmitt trigger, all of which are integrated in one IC. The device is either on or off depending on its proximity to a magnet. What we need for experimentation is a Hall device with a linear output, which of course, would be controlled by flux density. The input to the Hall wafer should also be accessible in order to apply an audio carrier. Another device that looks interesting in this respect is the magnetoresister, for which we also have not yet located a source of supply.

You mentioned in your letter the balancing of electromagnetic fields. I'm not sure if you mean by this is what we call the transmitter/receiver method or whether you have something else in mind. Could you draw us a block diagram? Also, in case you should happen to know of any sources of supply for linear Hall Effect devices and/or magnetoresisters it would be of help. Another device you mentioned is the digital filter, which I must admit I have not heard of. Could you tell us something of how these work? Any information along these various lines or other suggestions you may have would be appreciated.

From Mr. Herb Burnfin Jr.

Missouri, U.S.A. February 1981 (Electronics and Computer technology)

Yes, I know all about the Hall Effect semiconductor chip, and sensor. Have you tried National Semiconductor, Fairchild or called N.A.S.A. to get help?

You asked what is a digital filter. Simply a digital to analog chip (D/A), or an analog to digital (A/D) chip coupled up with an operational amplifier. The Concept is used in digitally controlled analog systems. The fields of study are noise reduction or signal to noise ratio systems custom designed for your personal needs. Also, signal processing under microcomputer control would be applicable.

What I recommend is Don Lancaster's *Active Filter Cookbook*, his *TTL Cookbook*, and his *TVT Cookbook*, all sold reasonably priced through Howard W. Sam's Company. I have studied them very thoroughly, and you'll find everything you need to custom design some fantastic digitally controlled active filters of all four varieties. Low pass, band pass, high pass, and notch. Any good signal processing equipment will have all four tanks with full tuning versatility at a push of the button. Sound great? It is!

A block diagram would be of little help in understanding the concepts behind the system of signal processing digitally.

Reply

We would like to thank you for the letter and technical information, which we believe will also be helpful to some of our readers who are working on the electronics of the EVP problem.

There is one other question we would like to ask, and that is, is there any way in which we can "freeze" portions of an audio signal so the various waveforms can be examined in detail? I have been able to glimpse brief segments of the signal by adjusting the trace speed to an appropriate setting for voice and then using an external trigger with a repetition rate of about 5 or 10 Hz. With this system, of course, almost all of the signal is missed between traces.

The reason I am interested in this matter is because although most EVP voices are indistinguishable from noise on a scope, there are a few which break into clean sine waves. Also on some there appears to be background dropout at the instant the voice appears which, of course, would indicate activation of the AGC by an RF carrier. Other voices sound as if they are artificial, that is, created by a voice synthesizer, while yet others sound normal but are accompanied by echoes or other sound effects, etc. Because of this I believe it would be very interesting and I think we may gain some very valuable information if we could "freeze" portions of the signal long enough for a detailed examination.

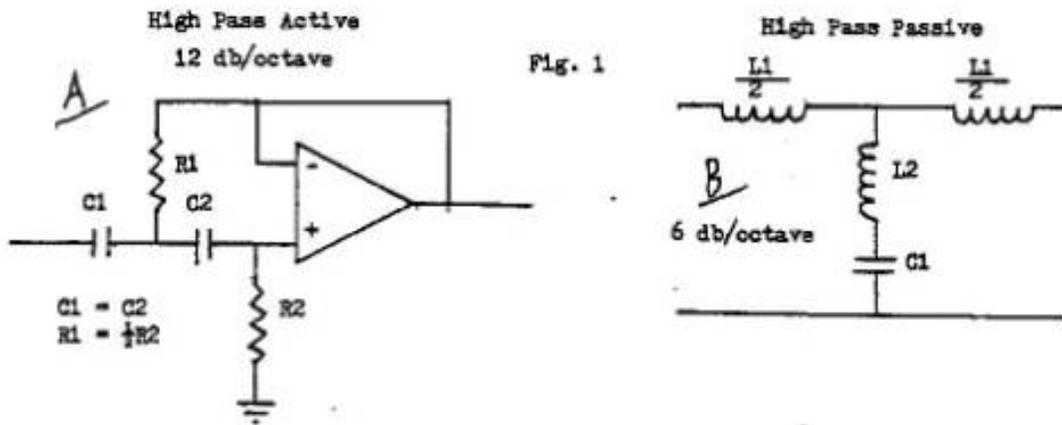
Would it be possible to do this by passing the signal through an A/D chip, feeding it into a computer's RAM, and then recalling the signal in the graphic mode, so many bits at a time? I haven't had a chance to get my hands on a real live computer so far, but I have a couple of programming manuals and I have studied basic level 1 and some level 2 language and a little bit of machine language, so I would have at least some idea what you are talking about.

Depending on how my Job, which is a bit shaky, goes within the next few months, we have tentative plans, for several reasons, to buy a TRS-80 with 16K RAM and level 2 language. If this kind of analysis is possible, would this size computer be "smart" enough or would we probably need a disk drive for extended memory? Any information you could give us along this line would be appreciated.

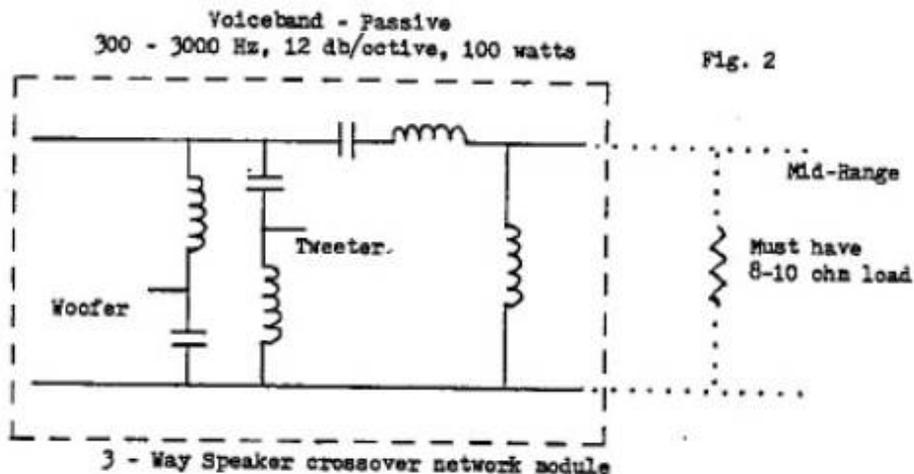
Voice Band Filters

Part 2

Of the two kinds of voice band filters, the active and the passive, the active filter is, by far, the easiest to design and build. Since this article is written primarily for the electronics experimenter, rather than the technician or engineer, we will concentrate on active filters and mention passive filters only briefly. As can be seen in Fig. 1, A & B, there is a considerable difference between active filters, whose filtering characteristics depend on the time constant of the RC network, and the passive filter whose filtering characteristics depend on the size and arrangement of L and C components.



In Fig. 1-A, C1 & C2 + R1 & R2, determine the cut-off frequency of the circuit, which is easily adjusted by simply changing the values of C1 & C2, or R1 & R2, or both. In Fig. 1-B, the cut-off frequency is determined by the L & C components and is more difficult to adjust. The active filter illustrated in "A" is a second order filter with a slope of 12 db/octave, the passive filter in "B" is a first order filter with a slope of only 6 db/octave. This means, in effect, that two stages would have to be used to equal the filtering characteristics obtainable with a single stage active filter.



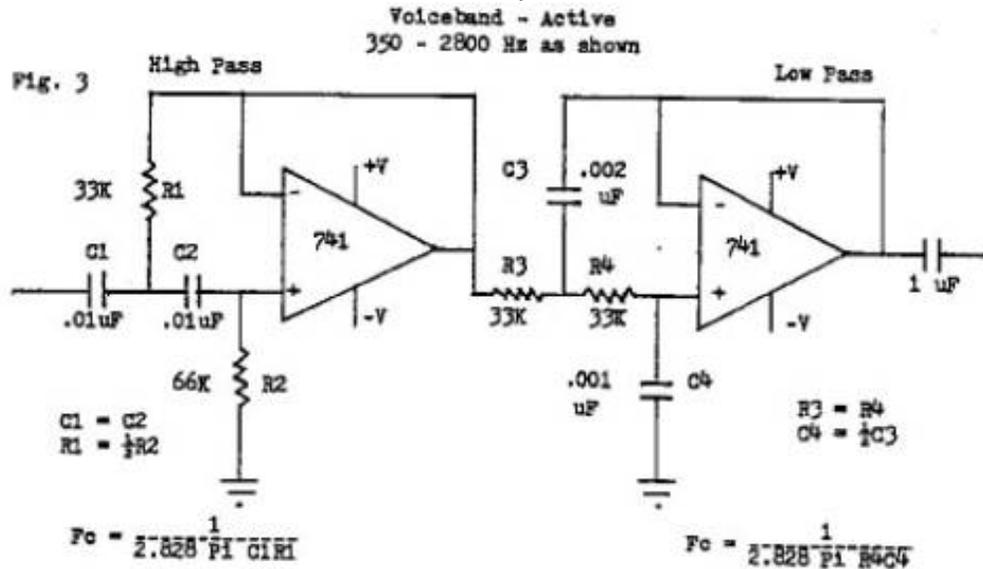
Although passive filters appear to be the simplest to build, the computations necessary to determine component values needed for the desired cut-off frequencies, are far more complicated than are the single formulas for active filters. Another drawback of passive filters, is the difficulty of finding or hand winding the coils, which are usually required in some odd-ball size. For these reasons, we will leave the design and construction of passive filters to technicians or engineers who may wish to experiment with this type of filter.

There is one exception to this in that the author has located a certain type of three-way speaker crossover network built originally for a special speaker system. These networks, according to manufacturer's specifications and to my own tests, have crossover frequencies of 300 and 3000 Hz, with slopes of 12 db/octave and power handling capacity of 100 watts. (See Fig. 2) Using only the midrange, they are ideally suited for use as voice band filters. The author has several of these network modules on hand at the present time, and they are available at \$

20 each, wiring diagram and shipping included, as long as supplies last. (Use your own cabinet, switches, jacks, etc.)

ACTIVE VOICE BAND FILTERS ---FIXED FREQUENCY

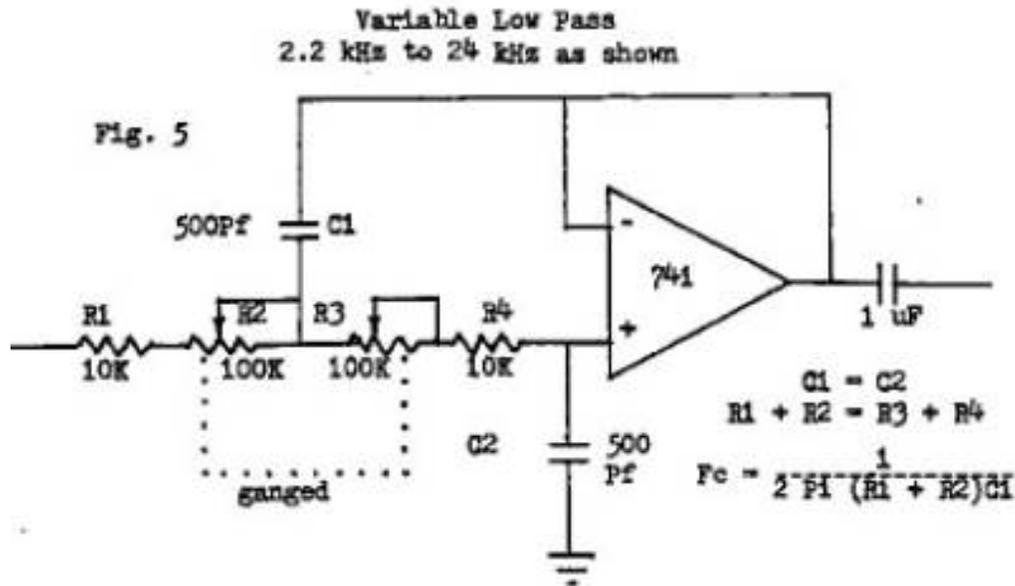
As can be seen in Fig. 3, a voice band filter is actually composed of a high pass filter and a low pass filter arranged back-to-back. Since the cut-off frequencies are independent of each other, both the width of the pass band and the position of the pass band in the audio spectrum is readily adjustable. With component values as shown in Fig. 3, the cut-off frequencies are 350 and 2800 Hz. All parts are Radio Shack, capacitors are disc ceramic or mylar, resistors are t watt, ICs are 741 Op Amps. Double component values can be easily obtained by using two capacitors in parallel or two resistors in series, as the case may be.



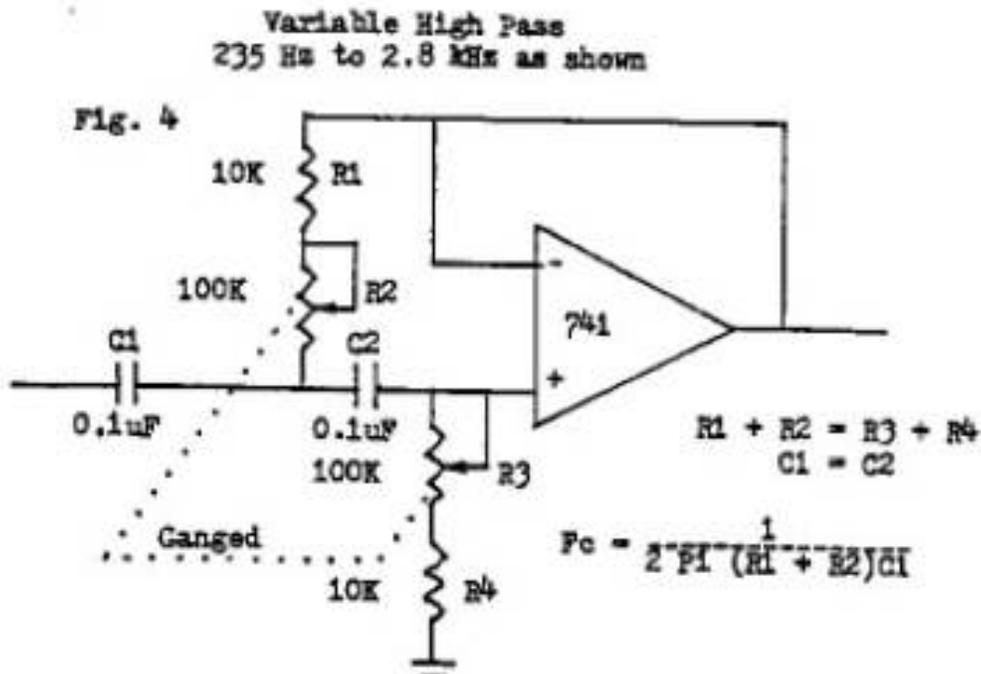
One word of caution: precision components should be used if possible. Radio Shack disc ceramics are usually 20 % tolerance and resistors are usually 5 % tolerance. These wide tolerances will change the cut-off frequencies to a greater or lesser extent. (For example, in Fig 3, according to the formula, the upper cut- off frequency should be 3400 Hz.) Although building the circuit as shown will probably result in a pass band, which is in the "ball-park." It is nevertheless recommended that filter performance be checked using an accurate audio frequency generator and oscilloscope.

The proper testing procedure is to tune the audio frequency generator through the filters pass band, noting the trace amplitude. At maximum amplitude, which should be at or near 1000 Hz, adjust scope gain to display the signal at 8 CM P-P. Watching the trace, gradually decrease the audio frequency generator frequency until the signal appears to be 6CM P-P. This is the 3 db lower cut-off frequency. The same process is repeated to determine the upper 3 db cut-off frequency. In the case of the passive crossover network, the filter must be terminated by an 8 to 10 ohm load, otherwise it is simply a high pass filter not a band pass filter.

ACTIVE VOICE BAND FILTERS ---VARIABLE FREQUENCY



As can be seen in Fig. 4 & 5, variable voice band filters based on the Op Amp design are very similar to fixed filters, the difference being in component ratios, and the addition of dual potentiometers. Please note that in this case the formulas are somewhat different. The adjustability range is determined by the ratio of fixed resistance to variable resistance and can be tailored to individual preference. Range of adjustment of each half of the filter will be the difference between the frequency of cut-off with only the fixed resistors (pots to zero) and the frequency of cut-off with fixed and variable resistance (pots to max). In construction, to prevent hum and noise pickup, it is highly recommended that shielded cable be used for all wiring.



In the next issue the application of voice band filters in voice receiving and playback systems will be discussed.



**ASSOCIATION FOR THE STUDY OF
ELECTRONIC VOICE PHENOMENA**

Dear Friends and Members:

You are cordially invited to attend the March 1981 meeting of the Association for the Study of the Electronic Voice Phenomena.

Following the potluck and socializing, there will be a short presentation of paranormal voice recordings from various EVP researchers. This will be followed by a demonstration of different recording techniques.

Finally, we will turn on our tape recorders and attempt to record some "paranormal" voices. We will play back several of the groups' tapes and hopefully find some EVP voices.

TIME: 5:00 PM
DATE: Saturday, March 14, 1981
PLACE: Oakland, California

PHONE:

If possible, bring a portable tape recorder, batteries, microphone and tape. Potluck dish would be appreciated but is not necessary.

There is NO CHARGE and no money will be solicited. We look forward to seeing you. Very truly yours ,
David A. Lothamer
Chairman

THE SPIRIT VOICE is edited and published by Bill Weisensale as a service to all who are interested in Electronic Voice Phenomena. Your hypotheses, opinions, viewpoints and comments are invited. Any statements printed in *The Spirit Voice* are open for discussion. If you disagree let us know so we can present your viewpoint.

The Spirit Voice Newsletter

Published by Bill (Dutch) Weisensale

About Dutch

Bill Weisensale, nicknamed "Dutch," began taping in 1974 "To prove to myself that it can't happen, and that EVP was no threat to our "comfortable" material reality. Within a few months I had done a complete about-face, and my life has never been the same since."

In 1980, Dutch began publishing the newsletters, which will be made available on this web site as they are converted from hard copy. His purpose was to provide a forum to communicate EVP concepts to other experimenters. He understood the need to keep this information available in the public domain.

The *Spirit Voice* is a technical EVP newsletter, and in it, you will find considerable historical background concerning what has been tried before and possible explanations about why EVP is the way it is.

Contact

For additional information, contact:

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atransc.org/contact-atransc/