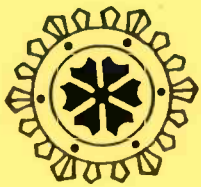
THE FIRST SHACK

PITFALLS & PROBLEMS



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THE FIRST SHACK

Pitfalls and Problems

by
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The first shack is always the best, but it can also be the worst if one is not careful. Failure to plan an installation might find the receiver twenty feet from the nearest electrical outlet, the desk located directly over a heat vent or the equipment crammed into a tiny space with no room left over for the SWL/DXer. If this happens, a lot of time and effort and maybe even some money will be wasted trying to set things right. Therefore, one should try to do things correctly from the outset to avoid some of the pitfalls and problems involved in setting up the first shack.

A shack does not begin with equipment. It begins with a desire. This might be a desire to learn about other countries or to learn a foreign language. It might be a desire to log as many countries as possible or to eavesdrop on war games in the Pacific. Whatever the desire, it is the basis for setting up a shack.

As a hobbyist one should have a shack regardless of how serious one is about the hobby. After all, every golfer has a

set of clubs even if he only plays a few holes a month. The shack can be as simple or complex, depending on the amount of space available, as one wants to make it. A shack can be a separate room, a corner of a room, part of a basement or attic, a desk top or even a closet. To paraphrase an old saying: "The shack is where the equipment is."

Why should one have a shack? One of the main reasons is efficiency. If one must haul a box of equipment out of a closet at 3 a.m. and unpack the rig before one can chase some DX, one's enthusiasm will probably be dampened after only a short time. Therefore, a shack would allow one to leave everything set up for use whenever one wanted to get in some listening time.

Another important reason is operator comfort. If long hours are going to be spent in front of the rig, a shack is an absolute necessity, even if it is only a desk or table in an unused corner of a room. When one is comfortable, one will not only enjoy the hobby more, but will learn more from it.

All right, one should have a shack for maximum efficiency and comfort. Where, then, should it be located? For some of the more forceful SWLs and DXers the answer to this question is the same as the response to the old riddle about where a 500 pound canary sits--anywhere! However, for those of us who must maintain harmonious relationships in our families or find ourselves and our rigs in the back yard, we must often settle for locations that are less than desirable. This is especially true where a limited amount of space is available, as in apartments, mobile homes and small houses.

Several factors affect the selection of a location for the shack. One of the most important is the attitude of the other members of the household. For example, the teenager whose father trips over a poorly located rig in the middle of the night may find not only his monitoring time disrupted, but his social life as well. By the same token, the husband whose utility monitoring disrupts his wife's favorite nighttime soap opera may find himself eating a lot of bologna sandwiches until his shack is relocated. Therefore, before setting up the shack, always check with the other individual(s) who might have to listen to the peculiar sounds coming from one's rig.

Interests and goals are important factors to consider when locating the shack. If one is very serious about one's monitoring and spend several hours per day in front of the rig, one's space requirements will be different from the casual SWL who may spend only a few hours each week with his rig.

Related to the above is the amount of equipment that is to be placed in the shack. It is fairly simple, in even the worst situations, to find enough room for a receiver, a pair of headphones and a logbook. However, problems soon arise when a well-known phenomenon in the communications hobby occurs, namely, equipment left to itself multiplies at an incredible rate. The

lone receiver is soon joined by another, followed by a station clock, an outboard speaker, a CW/RTTY reader, a computer and a variety of other "absolutely essential" accessories. The problem soon becomes one of trying to pour a gallon of equipment into a quart space.

Another crucial factor to consider is the amount of space available in the home that could be used for the shack. If an entire room is available the only problem left to solve is how to make maximum use of the space. However, if only small corners and cubbyholes are available, one is going to be faced with making some sacrifices in setting up the shack.

The final factor to consider is convenience. This refers to both the convenience of the physical location of the shack and to the convenience of the operator when using the equipment. In other words, is the shack and the equipment it contains out of the way? Can one get to the shack and use it without bothering the other members of the family? Does the equipment have to be set up every time one wants to use it or can it be left out?

With these factors in mind one is ready to begin the actual process of locating the shack. This involves making a comprehensive list of every item that will go into the shack, from the receiver to the logbook to the old coffee cup that holds the pencils. This is followed by a room-by-room survey. Note every unused inch of space, no matter how small, that could be turned into a shack.

When doing the room survey there are some things to look for besides unused space. They are listed below.

Electricity:	Are there enough outlets available? Are the outlets close enough to where the shack is to be located to avoid using extension cords? Will the gear overload the circuit?
Lighting:	How is the lighting in the area? Are there light fixtures in place or will a desk lamp or other light be required?
Environment:	Does the area suffer from extremes in temperature or humidity? Are there any heating or cooling vents close to the operating area that would cause operator discomfort? How is the noise level? Will there be a lot of traffic through the area that would add to the noise level?

Access: Is the shack easy to get to and use?
Is the gear safe from unauthorized users?
Is there easy access to the outside that will make running any antenna cables simple?

After the survey, one should have found some unused spaces that can be turned into a shack. At this point go back and reevaluate each area in light of the information above to determine which one is the best. Since one will probably have to set up a small desk or table to hold the equipment, ignore any space under six feet square. Don't worry if a spot cannot be found that fits every requirement because there is no such thing as the perfect location.

After the site is chosen comes the problem of what to put the equipment on. Three options are available, namely, tables, desks or special radio desks. The amount of space in the shack will influence one's choice.

A table is great for holding equipment because it has a lot of room on top that allowes the equipment to be spread out and it provides good support for the rig which is especially important when heavier tube-type equipment or more than one receiver is being used. However, a table takes up a lot of room making it a poor choice for limited space applications and it has no provision for storing paper or other supplies.

A desk is a good choice because it offers the benefits of a table with the added feature of drawers for storage. Desks are available in a wider range of sizes than tables, from the small writing desk to the mammoth executive model. The disadvantages of a desk are surface area and storage space in the smaller ones and the cost involved the larger units.

A special radio desk is also a good choice particularly if one has a lot of equipment to fit into small spaces. This desk is available in two configurations. The first is a desk with a shelf unit on the back and the second is a console into which the equipment is placed. Both configurations provide storage space in the form of drawers or trays under the desk top. The drawbacks to these desks are cost and size.

Of the three options above, which is the best for the reader? If a lot of space is available, such as an entire room or a large part of one, any of the options will work. The only limitations will be personal preference and the size of one's pocketbook. However, if space is limited one will have to decide between a special radio desk or a small desk. Again, preferences and finances will influence the final decision, but this time the size of the desk will also be a factor.

The next most important item of furniture in the shack is the chair. Many hobbyists fail to realize how important the selection of a chair is and, as a result, suffer as they sit in front of their rigs. One can use any type of chair as long as it is comfortable and offers good back support. The chair should also be of the correct height to match the desk or table the equipment is on. If the chair is too low one will be reaching "up" to write or tune the rig and if it is too high one will be reaching "down." Either of these positions will cause fatigue in a short period of time. Lastly, the chair should be sturdy since a wobbly chair will make the user tense and, therefore, tire more quickly.

One other item one will probably want in the shack sooner or later is a bookcase or shelf unit. If one has a lot of books, magazines, club bulletins, etc., a bookcase or some shelves will be indispensable. Shelves can also be used to hold accessories or peripheral equipment that isn't used all the time. Be sure to use sturdy wooden bookcases or metal utility shelves because of the weight that must be supported.

"Do-it-yourself" shelf kits that fasten on the wall, the kind that use metal strips to hold the shelf brackets, can be used to good advantage in limited space applications. By fastening a unit on the wall above the desk it is easy to create a rough approximation of a radio desk. Depending on how much is spent on the desk and shelf unit one can make their own "radio desk" for around $100.

Once the shack is furnished one can begin setting up the equipment. How to arrange it is largely a matter of personal preference, but there are a few things to keep in mind that will help obtain maximum benefit from the installation.

The first thing to consider is the placement of the receiver. A lot of hobbyists think that the rig should go right in the center of the desk. However, this position will prove to be rather awkward after only a short time. It is better to place the receiver slightly to the left or right of center and angle it so that the front panel is facing the user. If one is right-handed the receiver should be placed to the left of center, thus enabling one to tune the rig with one's left hand while keeping the right hand free for jotting down reception details, etc. Left-handed operators would reverse this and put the receiver on the opposite side.

The front of the receiver should be tilted up slightly so the dials and frequency readout can be seen more easily. Most of the newer rigs have a wire bail or longer feet under the front to accomplish this. If one's rig doesn't have this provision, put a small wooden block about one inch square and two or three inches long under each front corner. An additional block under the center is recommended for added stability. Nonskid mateial attached to the blocks and rig will keep everything from "running" around the desk while one is using it.

After the receiver is in place, arrange any secondary equipment around it. The principle involved here is to put everything used regularly or that requires frequent adjustment where it can be reached easily. This includes backup receivers, scanners, transmitting equipment (if any) and accessories such as antenna tuners, preselectors, antenna switches, etc. If using a CW/RTTY reader it should be placed at eye level for easy reading.

Equipment that is used only occasionally or requires infrequent adjustments can be placed practically anywhere. The only thing to watch here is that it does not block one's view of dials, frequency readouts, clocks or hide external speakers behind something that would muffle their output.

A word of caution about stacking equipment is in order here. All equipment generates heat when it is in use, even solid state gear. Stacking equipment obstructs the air flow around each piece of gear and hinders cooling. This is not good for the gear, especially in the case of tube-type equipment. If faced with stacking the equipment put up some more shelves instead.

Now that all of the equipment is in the shack and arranged the way one wants it, start thinking about accessories. Base choices primarily on interests and, to a lesser degree, on the quality of receiving gear.

Depending on one's outlook the first two accessories, headphones and a clock, might be classified as necessities. A good set of headphones will allow copying of weak stations more easily while cutting down on the noise the other members of the household will have to tolerate. Be sure to get a good set of communications headphones since they have a narrow frequency range and tend to be more sensitive. Also they are more comfortable and can be adjusted to fit even the swelled head of an egotistical DXer!

Since loggings will be made in GMT get a clock that uses a 24-hour format. Two basic types, digital and analog, are available. Some of the more elaborate digital models have alarms and dual time displays which allow setting of one to GMT and the other to local time. The type and style of clock will depend on personal preference.

A couple of accessories added to the antenna system can boost reception and increase operating efficiency. The first, an antenna tuner, will match the antenna to the receiver for maximum signal strength. Some tuners even have a preamp built into the same package. The second, an antenna switch will allow multiple antennas to the receiver through a single lead-in, eliminating the tangle of cables behind the rig.

A receiver preselector is another accessory one might want to consider. This device improves the reception of weak signals, reduces images and rejects out-of-band signals. If one does not have one of the newer rigs with lots of "bells and

whistles" or have an older rig, consider a preselector.

Depending on one's interests there are some other accessories one might want. If one is a utility buff consider a CW/RTTY reader, facsimile equipment, a CW/SSB filter or a computer. A high quality tape deck might be of interest if one enjoys taping music or recording reception details for reports.

A selection of books is a valuable addition to any shack. One does not need a large number of books, but here are some suggestions:

General:	World Radio TV Handbook
	The Complete Shortwave Listener's Handbook
	QSL Address Book
Utility:	The SWLs Manual of Non-Broadcast Stations
	Confidential Frequency List
	Shortwave Frequency Directory
	SPEEDX Reference Guide to the Utilities
Reference:	Shortwave Propagation Handbook
	Antenna Data Reference Manual
	Home-Brew HF/VHF Antenna Handbook

(Suppliers for these and other items are listed at the end)

Other books will undoubtedly be added to this list as listening interests develop and change.

By now one should be ready to actually begin operating the station. Since the equipment is already arranged so everything is easily reached, begin by setting some listening goals. These goals will depend on one's interests and can be as simple or complex as desired. They might range from learning a foreign language by radio to verifying as many Indonesian shortwave outlets as possible to hearing Air Force One. No matter what interests or how serious one is about shortwave listening, set at least one goal for oneself.

Now that a goal has been selected, how does one go about reaching it? Let's assume that the goal is to log one station in every country in Europe. The first step is to make a list of the European countries. After this go to a recent addition of WRTVH and note which countries have a shortwave outlet. Now go to the various club bulletins (SPEEDX first, of course!) and note on the country list the times and frequencies used by the various broadcasters. Pay particular attention to the broadcasts that

are being well-received in one's general area and, if one does not speak a foreign language, to those in English. Note also any that are aimed at a specific target area, e.g. West Coast of North America, Asia, etc.

Once this information is compiled one is ready to begin monitoring. One can either monitor chronologically, following a regular plan of monitoring based on the time of the broadcast, or one can try to log one country at a time, moving on to the next one only when the preceding country is in the log.

Setting goals and taking the necessary steps to reach them is a good way to improve operating efficiency, but it also has a negative effect of generating additional paper work. However, with a little preparation this headache can be handled relatively easily.

Begin by setting up a logbook around a three ring, loose leaf notebook. Put some log sheets in the front and fill the rest of the notebook with lined paper. Some notebook dividers should be used to "break" the logbook into the following sections: SW/UTE log, Want List, Reports Mailed and Verifications. Those sections are explained below.

SW/UTE Log: This is the basic section of the logbook where one lists the station heard, the date and time, the frequency, the SINPO or SIO rating and reception details. For utility stations one might list mode used, language, wpm/shift and call letters. The log sheets used here can be homebrew or commercial.

Want List: This is a list of countries and/ or stations one is interested in logging. Have a separate list for each area of the world, i.e., Europe, Asia, Africa, Oceania, North America, Central America and South America. Utility buffs might use a list of station classifications instead, i.e., military, maritime, point-to-point, etc. List all current information pertaining to times and frequencies used by each broadcaster that have been gleaned from the bulletins.

Rpts. Mailed: This is a list of all reception reports that are outstanding. Note the station the report was sent to and the date it was mailed. Also note when a follow-up report, if any, was sent. When the QSL is received simply draw a line through the information.

Verifications: This section lists, by area, the countries verified. Include the country, station, frequency and date verified. Again, utility monitors might want to use station classifications instead.

In addition to the above one might also want to include a section for miscellaneous information such as propagation data and forecasts, station addresses, equipment maintenance schedules and other information one does not want to loose. For those of us who are married we might want to jot down our spouse's birthday and our wedding anniversary!

If sending out a lot of reception reports it is necessary to have a few file folders to keep copies of the reports in. Use a file for each area of the world or station classification as out lined above. When writing a report, make a carbon and place the copy in the appropriate file folder. When the QSL is received pull the copy and get rid of it. If, however, a QSL is not received in a reasonable length of time, use the information on the copy to prepare a follow-up report. Other file folders can be used to hold reception report forms, magazine articles, charts and graphs and any other information one might accumulate. Depending on the number of folders, one can use a small metal file box, a cardboard file cabinet or a large metal file cabinet to keep them in.

All of this stuff sounds great but does it work, especially in limited space applications? Yes, but some sacrifices do have to be made. Even though a lot of room is not available it is still possible to put together a very respectable shack.

An example of such an application is seen in my own shack. I live in a two bedroom mobile home, so I am very limited in the amount of space for my shack. I found about six square feet of unused space in one end of a walk-in closet, so I set my shack up there. First, I installed a small writing desk and a couple of shelves. Then I "appropriated" an extra chair from my XYL's kitchen set.

Two sacrifices were made initially when I was setting up the shack. First, there were no electrical outlets close by so I was

forced to install a power strip with six outlets and run a heavy duty extension cord to it. Second, there were no light fixtures in the closet so I had to fasten a utility light on one corner of my desk which cut down somewhat on the amount of room on top for writing.

The equipment in the shack is arranged on the desk and shelves. On the desk is my DX-302, a Kenwood TS-130S transceiver, a Yaesu FT-227R two meter transceiver, an antenna switch, an antenna tuner, a code key and a microphone. The shelves hold the power supplies for the ham gear and a PRO2020 scanner. An external speaker for the TS-130S is fastened to the wall above the rig.

As with the furnishing of the shack some sacrifices had to be made when setting up the equipment. First, the FT-227R is on top of the DX-302 and the power supplies are stacked. Second, there is very little room on the desk for a full-size notepad, so I have to use a clipboard which I hold on my lap to make my loggings.

Even though the shack is pretty small I have been able to log and verify 47 states on the ham bands and nealy 100 countries on shortwave and about 30 on the ham bands.

After everything is set up and running smoothly and humming along with maximum efficiency one can't possibly get bored. Right? Wrong! Even though things are running well and one is logging everything one hears, there comes a time when one's interest begins to slip. What can be done about this?

One of the most intriguing things to do is to keep a news log. Pick a major international story and follow it around the bands, taking notes on how each broadcaster reports it. As one follows the story one will not only stay informed on current events, but will learn how some countries distort the news to fit their political ideologies. One might find it hard at times to recognize the same story when it is reported by the BBC and Radio Moscow.

If one lives in a cold climate one might want to record some tropical music to listen to when the temperature is at or below zero and the snow is falling. Radio Tahiti is an excellent choice when it comes to music for a cold winter night.

Also consider branching out in the hobby. If listening only to international broadcasters, check out some of the utility bands occasionally and vice versa. Since most receivers also cover the longwave and medium wave bands, try tuning them for a change of pace. Utility buffs might want to consider adding a scanner to their station so they can check out some of the local action when the shortwave bands are quiet.

A quick scan of the ham bands can also reveal some unusual countries. For example, Cocos Island and Kermadec don't have

shortwave outlets, but whenever a DXpedition heads out they are apt to show up with a pretty strong signal.

One of the best ways to avoid boredom is to focus attention on something else. One might want to study some electronics theory, learn more about propagation or teach oneself the Morse code. If one is an avid SWL one might want to become a "country specialist" and learn all one can about the geography, history and culture of the favorite country. This is a good choice if one's roots are in that country. One could also support any of the clubs one belongs to by contributing some of the loggings. One might even try writing a BIP!

Another interesting activity is pen pals or tape pals. By corresponding with somebody in another country one will be able to learn more about that county than one ever could by listening to the radio.

What conclusions can we draw at this point? First, one should have a shack even if it isn't elaborate. Second, advance preparation is essential if one wants to avoid many of the problems one will face when setting up a shack. Third, organization is an integral part of efficient monitoring and station operation. Finally, one should have fun with the hobby.

If the reader remembers one thing from this information, it should be that one does not need a lot of room to make some good loggings. All one needs is a desire. If one has that everything else will fall into place.

SUPPLIERS

Century Printing
6059 Essex
Riverside, CA 92504

World Radio TV Handbook

CRB Research
P.O. Box 56
Commack, NY 11725

Various utility references

Gilfer Associates, Inc. P.O. Box 239 Park Ridge, NJ 07656	Shortwave equipment, accessories and books
Grove Enterprises, Inc. 140 Dog Branch Road Brasstown, NC 28902	Shortwave equipment, accessories and books
SPEEDX 7738 E. Hampton Street Tuscon, AZ 85715	SPEEDX Reference Guide to the Utilities

SOCIETY TO PRESERVE THE ENGROSSING ENJOYMENT OF DXING

SPEEDX publishes an off-set printed monthly magazine for Shortwave Listeners and Utility DXers. Features include loggings from around the world, QSL reports including photos, feature articles, technical articles, plus loggings and QSLs from the Utility bands. For a sample copy, in North America, send US$1.50; in the rest of the world, send US$2.00, or 8 IRCs, to: SPEEDX, 7738 East Hampton St., Tucson, Arizona 85715 USA.


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