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TAP

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Hints on Getting Started in Pirate Radio
by the Magician

Pirate radio is becoming more and more popular these days, partly due to the FCC's leniency towards pirate stations and party due to the relatively easy access to the necessary equipment.

Pirate radio can be divided into three categories. The first is shortwave pirating; operating on the international shortwave bands (sometimes even on CB radio). The second is AM or FM broadcast band pirating, which I consider the most phun. The third is "legal" pirating utilizing wireless AM or FM microphones of low power (less than 100 milliwatts). These devices are useless even with a large antenna; the range is a quarter-mile maximum and due to bad design, the frequency tends to drift.

Another type of transmitter falling into the third ("legal") category is carrier current. Carrier current can run up to 100 watts but are limited because the signal must be fed to the power line and the signal tends to disappear at the nearest utility pole transformer. The frequency is more stable than the wireless mikes because crystal control is used.

Carrier current transmitters can be made extremely useful by bypassing the AC line matching capacitors and feeding the signal directly to an antenna, thus putting quite a bit of juice on the "air" and enabling you to be heard for miles. Carrier current transmitters are usually easy to get at surplus stores, college radio stations, etc.

Other types of suitable transmitters are available at most surplus electronic stores and usually require very little modification to put them on the frequency you want. Ham radio transmitters are also easily adapted, such as modifying a 2-meter FM ham rig to transmit on the FM broadcast band. If you are really gung ho about pirate radio, build your own transmitter. If the transmitter you get is not powerful enough for you, obtain a linear amplifier as used in ham radio to boost the power.

As for antennas, experience has shown the best type to be a simple, very long piece of wire for AM band and shortwave pirating, as it is very inconspicuous. The antenna should be matched for the transmitter's output network. For more information, read any good ham radio antenna book. Much shorter antennas can be used for FM broadcasting. For this purpose, most people use modified ham 2-meter antennnas.

Other equipment needed can be as simple or as complicated as you wish. You might just hook a reel-to-reel tape recorder to your transmitter and broadcast pre-recorded stuff or you might like to do live "shows" which is much more phun.

Equipment needed for good live shows is a turntable (two, if possible), a supply of records, a mixer board with cueing capability (I recommend the Shure Production Master because of low cost, small size, and great features), a microphone, and optionally a radio station cart machine. The cart machine can be expensive (check surplus stores) but you can really sound like a pro by throwing on station jingles and other stuff between songs. Whole setups including turntables, mike, mixer, etc. are sold as disco (ugghhh!) consoles, so you might put one to better use by hooking it to your pirate station.

When selecting a frequency to broadcast on, pick one that will in no way interfere with a commercial station or you are sure to get caught. On the AM band, most pirates have found 1610-1630 kHz to be the best since no commercial stations are yet assigned there. When using these obscure frequencies, the FCC will generally leave you alone if you follow some simple rules:

1) Keep a low profile. Don't tell the world what you are doing.
2) Run less than 100 watts.
3) Do not use blatent (too much) obscenity.
4) MOST IMPORTANT: DO NOT INTERFERE WITH A COMMERCIAL STATION!

Most pirate radio busts come from complaints registered to the FCC by commercial stations either because of interference from the pirate or because they are jealous that the pirate has better programming and is stealing their audience.

The FCC has the power to close down the pirate station, slap you with a $10,000 fine and/or one year in prison. But not to worry; some pirates have operated for years without problems and experience has shown that stations such as WCPU and WFAT, when finally closed down, all the FCC usually does is confiscate the equipment (admittedly a bummer) and send you away with a warning. I have NEVER heard of the FCC actually giving a heavy fine or a jail term to any pirate. The FCC has considers the use of 1630 kHz AM to be somewhat of a joke and will look the other way unless forced to act because of complaints.

Broadcast times should be limited to only several hours per day, preferably at night to avoid the chance of ionosphere propagation causing interference during the day on AM and SW.

As you can see from the above, pirate broadcasting done with common sense can be phun and rewarding - you might even have your listeners call you with requests as some pirates do. Just give out your number as one side of a "cool" looparound and you stay dialed to the other side (preferably the tone side). As long as you keep your wits about you and do not try to challenge a station like WABC on their own frequency with more than their 50,000 watts, you should be OK. The above hints serve only as a motivator to get you thinking and I urge you to do a lot of research and get to know what you are doing before going on the air! I will be glad to answer any specific questions or comments. Send them to The Magician, c/o TAP.

NEWSLINES

Did you ever hear mention of the AT&T newslines ? Or perhaps you may know of a few ? Well for the uninitiated, they are the 'confidential' numbers at area phone offices that telco employees call, For the latest info on new technology, stocks etc. The reports range from boreing to very, very interesting !
Here they are: (Sequenced by NPA)

201-751-9931 , NJ
203-771-4920 , CONN.
212-393-2151 , NY
213-621-4141 , CA (LA BELL)
213-829-0111 , CA (LA GTE)
213-449-8830 , CA
312-368-8000 , ILL.
313-223-7223 , MI
314-247-5511 , MO
408-493-5000 , CA
412-633-3333 , PA
414-678-3511 , WI
416-929-4323 , ONT.
503-228-6271 , OR

513-421-9060 , OH
516-234-9914 , NY
518-471-2272 , NY
617-955-1111 , MA
702-789-6711 , NEV.
713-224-6116 , TEX.
714-238-1111 , CA
717-255-5555 , PA
717-787-1031 , PA
802-955-1111 , VE
808-533-4426 , HAWAII
813-223-5666 , FL
914-948-8100 , NY
916-480-8000 , CA

Many of the above numbers do not supe. However this status changes from time to time so 'listen' carefully for suping when calling.

I would appreciate any additions anyone has to the above list, Just send em to me c/o TAP.....

MAGICIAN

[illegible]

Los Angeles — Rejected by the law-enforcement industry as impractical, the 50,000-volt Taser stun gun is getting a fresh look and new name as its manufacturer shoots for a different market—the crime-stricken public.

The weapon fires two electrified darts that temporarily disable victims. It was introduced in March 1975 as a non-lethal alternative to the police service revolver. But police say the Taser's high voltage can kill the weak-hearted, while it still does not provide enough protection to be used as a police weapon.

The gun's image was tarnished by several well-publicized shooting incidents involving the Taser. In one case, a woman received a [illegible] term for a murder that [illegible] stun gun and a crossbow.

— letters to the editor —

Ah, Thomas, you distress me. I recognized my typewriter in your latest issue, and I feel pressed to respond to your response. At least I got front page...you must have really gotten heated up.

Now, those two issues were dandy, just chunk full of good, useful material. See what you can do when you set your mind to it? As I noted in the previous missive, we of the everyday world subscribe because we know little of the wondrous ways of the world of technology, and we wish to learn from the experts, researchers, and other fools who fence with the fuzz on our behalf.

Not for a moment am I ungrateful...better you than me whose ass is on the line. That alone justifies the price of the subscription, and perhaps those occasional busts provide positive information for the faithful.

People are, as you suggest, basically lazy. They are also basically stupid (read 'uninformed'), and for such a reason, they seek new informational horizons. I cannot begin to tell you the great joy with which your publication is received in the bureaucractic agencies here in Washington. I am frankly surprised that huge numbers of underlings at such places as the FCC and similar lodes of information aching to be mined, have not yet turned on the upper echelons by supplying you with a legislative bypass portfolio. (Hear that, bureaucrats? Your input need not be resistors and diodes; it can also be more cerebral). Also, I know of a few very high level people in a leading computer firm are subscribers. They might get some perverse joy out of letting us in on the creative quirks of their toys.

But I digress.

My original complaint stands. When you spend your space bitching, the publication isn't worth it. When you deliver, it's OK. We subscribed to learn from those who know, not to begin a career in phantom journalism. I surely sympathize with your problem, but I am uncertain that your assessment of the solution is accurate. I also subscribe to Time and Playboy, but have never had either the time, opportunity, or inclination to visit their offices during 'open house', much less write their cover story for them. As many of your articles have noted, there is an incredible amount of information tucked away in odd corners of magazines, books and technical journals which is either directly applicable or easily adaptable to our common interest of corporate guerilla warfare. Some creative use of the Dewey Decimal System might be in order by your extensive staff of technical journalists.

I shall now submerge again to Middle Earth to pick the fuzz off my feet.

Wash., D.C.

To the Editor:

I read the article on phone-phreaks, and thought that, purely for their information only, your readers would be interested in some of the ways that Ma Bell uses to detect these devices:

1) The long distance frequencies must be accurate and at the right speed, or they are not even recognized. Also, modern equipment is now transmitting them as trapezoidal pulses instead of square pulses. These are much more difficult to generate, pass through the normal switching equipment, but can be distinguished by anti-fraud devices.

2) A blue-box call appears to the billing equipment as a long 800 call, so statistical tests can be run on the billing records to find users making many 800 calls. This, and all the other tests, can be applied specially to exchanges around engineering colleges.

3) A black box call appears to the equipment as if the caller dialed a long distance number that didn't answer and just let it ring for an hour or so. Clearly traps can be installed for this.

4) Blue boxes and black boxes only work because the phone company does signalling and talking over the same lines. The next generation of equipment will separate this.

5) Some pay phones send a tone to the central office when a coin is dropped in, independently of the tone indicating the value. Some phones soon will (or already are) send a pulse for every 5¢ that the coin is worth so that the central office computer can automatically count the money.

6) If the phone company gets suspicious, they can legally put a line recorder on the line to record all numbers dialed without a search warrant since they are not listening to the conversations. If this record shows that you dialed the army recruiting's 800 number 100 times last month, all between midnight and 4 a.m. and they don't have any record of talking to you, you're in trouble

7) Ma Bell has the right to listen to conversations to verify transmission quality, and if they happen, purely by coincidence of course, to be verifying your line during a phone-phreaking call, tell it to the judge.

8) If they get on to a call from the called party's end, and it goes through an ESS exchange, they can trace it back to the caller as quickly as they can type the called number on the keyboard.

9) While originally Ma Bell hired phone phreakers they caught, now they prosecute for theft of the value of services equal to the value of all the calls made.

By the way, phone phreaks in the US have nothing on some of the ones in Britain. New Scientist reported about 5 years ago that some engineers working for the post office (i.e. the phone company) had been installing special circuits in the switching equipment. Then they could dial a special number from any phone in the city, activate the circuit, and get on a free trunk line. These circuits would pass unchanged all calls not starting with the secret number.

Also, computer phone-in numbers for modems are considered trade secrets if they are not published. This was used in a recent trade secrets theft case against a former employee of a company who dialed up the number after he left the company to get some programs. The account password (which hadn't been changed) was also a trade secret.

Happy freaking.

The Mad Programmer

Dear TAP:

I thought that I would make a few points about Power Bus's letter in the January/February issue.

I agree with Power Bus about obtaining a copy of the Motor Vehicle Code of the state you're driving in. Generally speaking, however, and this especially applies in a large metropolitan area, there's no problem at all in finding a lawyer to take your case. They're the guys standing in the Traffic Court lobby wearing three piece suits, with or without matching accessory briefcases (9" by 14"). The great advantage to using these shysters is that almost always your case will be thrown out if you show up with a lawyer, unless you've done something really horrible. For the average speeding, or missed regulatory device violation, there's no problem. Why? Traffic court is a revenue court and they are concerned with getting as much money in as short a period of time as possible. A lawyer can effectively tie up a court for one or two hours on something trivial, so it's more cost effective simply to let these people who show up with lawyers off. The lawyer operates on the same principle: volume. Because of this, (unless you are about to lose your license) the fee for the lawyer will be about what the fine would have cost, and of course, there's no mark on your record.

For many people, the driver's license is essential. If you attempt to try your case yourself (and you better be good) odds are you will fail, and many states don't give you more than a couple of chances. With street smart counsel, it's almost a sure thing, and you don't have to worry at all about losing your license.

Secondly, if you or your lawyer ask for a continuance, the lack of prosecution 45 day defense doesn't apply. It only applies where they delay more than 45 days. There is a proviso like this in most states.

Finally, while my suggestions are good for the large city offense, if you're out in the stix, forget it. Small county judges are normally quite willing to let you sit and yap for hours before assessing a fine with costs. If you take into account the extra time it took to get out there on the day of trial, and return, it's better just to pay and forget. If it is out of state, and you don't often return to the state, you may be able just to forget about the ticket, as long as you haven't posted bond. This happened to two friends of mine: one in Indiana, the other Mississippi. Both tickets were for speeding on the interstates, and nothing has come out of either. (Though they have avoided returning to these states, or letting others drive while passing through.

AT&T IS BIG... Since conversation eventually touches on the sheer size of the Bell Telephone system, here are some numbers for your next discussion: AT&T is the biggest corporation on earth with 962,000 employees; it has assets of $90 billion which is more than the combined assets of General Motors, Ford, General Electric, Chrysler, and I.B.M.; it makes $4 billion per year, $11 million a day, or $7,500 per minute; its wire and cable would run to the sun and back three times; AT&T has 6,500 job discriptions; as a major publisher it turns out 130 million copies of telephone directories using 400,000 tons of paper; AT&T raises $1 billion every 90 days and between 1945 and 1964 it collected enough revenue to buy up the gold reserves of the US, the UK, and several other European nations.

MA BELL IS A CHEAP MOTHER

FUN WITH REMOTE TRANSMITTERS

By now everyone knows about the ingenius use of remote transmitters by the British and others. However, not all of us have such ambitious plans. For those that do let me reccommend The Graffiti Gambit by Alan Wingate.

I have here some little diversions that use simple equipment and involve minimal risk. Think of them as beginner projects.

ALARM SYSTEMS

Alarm systems are particularly vulnerable to the manipulations of a knowledgeable prankster. The owner and at least one police unit are tied up for hours on each arlm.

For the metal foil on the doors and windows of nearly every rip-off store in Amerika, I recommend the following procedure. Visit the store during working hours and use a razor blade to cut a thin line thru one of the foil strips. Since this breaks the circuit (but leaves no obvious trace), the alarm will go off as soon as it is activated. the owner will have to leave his store unguarded or hassel with the repairman.

For sonic detectors one could use a simple oscillator and speaker attached to a timer circuit. The entire circuit, complete with battery, will be smaller than a cigaret package. The timer should activate the oscillator several hours after closing and the audio output should be about ½ watt in the audio range. This will set off the sonic detector and attract all types of curious persons. If you set your 'disruptor' to turn off before the security people arrive they probably won't find it and you can use it again.

Ultasonic and Microwave detectors are treated the same way, except the output is in a different range. Read some old Popular Electronics for ideas along this line.

BUMPER BEEPERS and BUMPER SPEAKERS

Track those narcs just like they track you! Just build a simple AM or FM transmitter in the broadcast bands. Add an audio oscillator and a timer to 'beep' the output, and you have a cheap device that could be attached to anyones vehicle. Be sure to design a 12 volt circuit so you can use available power. Depending on the power output of your transmitter, one can usually detect the 'beeps' up to a mile away on some frequencies. To get the most good out of this one needs to advise all ones friends that a high-toned beeping on 710 Khz means the target vehicle is nearby.

It has been rumored that some phreak used this basic plan but had a taped message on an endless loop. The transmitters were low power and tuned to one of the most popular stations, attached to police cars and treated quite a few people to a constant stream of verbal abuse that seemed to only occur when in close proximity of a police car. All of the messages were like radio messages to and from police so people assumed the radio was picking up the police radio.

This same play(with your own personal message) can be done with a car tape player and a CB radio. Detroit is now providing this equipment as factory options on Gas Guzzlers. If one should find such equipment untended, then he should activate it for the people.

FIRST WAVE — Nick Haflinger

- To 'A.C.' (TAP #45) Concerning those non-reproducing Lindy pens. Someone who works with microfilm machines told me that the machine is just not sensitive to the red band. This means that you can use a red FLAIR for the same purpose. I'm sure its not illegal to write checks with a felt tip marker.

- A few words on Bell's private Tv network. Bell is required by federal law to maintain 24 hour backup for the national television network. I presume this is part of the civil defense plan. Bell however, does'nt like to see all this equipment just standing by so they use it for a private communication network. The signal is transmitted on video frequencies over microwave relay and the audio is carried on lease lines that we probably pay for. The system is used like a two-way closed circuit TV.
  To find out more make friends with some television workers or microwave equipment repairmen. Would'nt it be nice to TAP in.

- About those military MUF tones. Have you thought about your friends in the national guard? Most of them (well, the younger ones) dont give a shit for the guard. Try someone on a S.A.C. base since they have more of the 'secret' gear. And don't forget your Guard friends as a source of parts either.

- One way to play it safe with Toll Free calls is to use a good number to beep off of. To build your list of 'good' numbers, write down the number of the TV specials. In my area I am constantly bombarded with those silly advertisments that ask you to call ## for your free whatever. Well it should be obvious that Ma Bell can't watch over all these lines. Make your special calls using these numbers just a couple of hours after they are used in a commercial.
  Also, about two years ago I saw a book of Toll Free numbers. Does anyone know more about this?

1981 credit card code

If the fourth Digit is:	Check Digit is:
1	7
2	0
3	6
4	1
5	4
6	5
7	9
8	3
9	8
0	2

Live Better With ... FREE Movies

by Claudius I

As some of you may have noticed, many hotels now offer in room first run movies on the televison set (for a nominal fee, usually ranging from $3-$6).

There are two variants of this system. One involves calling the hotel desk, and requesting that they transmit a requested movie to your room. Our department is unfamiliar with this system - details would be appreciated.

The other system involves a modified set. The customer (hotels have the annoying habit of calling them "guests", but nobody who charges me $60 per night can call me their "guest") simply tunes in the movie he/she/it desires, and recieves the bill at checkout time. In order to save the trouble of rewiring the entire hotel, a single cable is used. Each television recieves the signal over this cable, and transmits information back to the c.o. (to use a telco term). Naturally, it is necessary to uniquely identify the individual sets so as to know whom is to recieve the bill. There are usually two dip switch packages mounted on a printed circuit board in the television set, or attached box. These switches are set to a binary value which tells the hotel billing machine who is watching what. Simply reset these switches (remember what they were so you can reset them later), enjoy the movies, and reset when done. Although probably an unnecessary precaution, it is wise to use a different switch pattern each night, and leave the unit in its original position whenever you are not occupying the room (or suite as the case may be).

It will probably be necessary to use a screwdriver to get at the dip switch assembly. Once open, it should be fairly simple to find - after all, this is an adjustment which must be made to every set before installation. One more thing - try not to giggle when you see some sap arguing with the desk clerk about being billed for movies he did not watch.

For those of you who need a bit of clarification on this concept, I suggest you read the manual to a Sears garage door opener. They use a similar setup so that your neighbor's opener won't open your door (or vice-versa).

This is my first TAP article. I will be a regular contributor providing that Mr. Edison considers my work worthy of inclusion in this journal.

5-finger discount

NEW ULM, Minn. — For several years, residents of this community of 13,000 wondered how [illegible] Clothing could consistently sell for less than [illegible] next door.

Police have a theory. They have arrested [illegible] Jr., owner of [illegible] Clothing, and charged him with possession of stolen merchandise — stolen from [illegible].

CAN JUMPING
by Phlash Bazbo Esq.

Well, don't panic! Look at the bright side...with CCIS our illegal calls will sail through with only a mere 10-12 ms trunk time. Now, with that in mind, let me explain how to terminal jump.

First, let me explain terminal boxes ("cans"). As the outside cans are generally more accessable, I will dwell on them. The largest cans are about 3'Hx2½'Wx1'D & occur singally or in groups of 2 or 3. This type holds about 900 - 1200 pairs. (Larger cans are riskey buisness...) These biggies are made by 3-M and hold a cable/ID system that they call "[illegible]". Next comes the middle sizes, approx. 3'Hx2"Wx6"D, and the small "drop boxes, about 3'Hx4"Sq.. The larger of these two is the SAI box, while thedrop is the splice for 3 or 4 lines. Other, smaller cans are good, too, and can be found almost anywhere, especally aerial drops, etc.

Now, for tools, get a set of ratchet wrenches (not crescent, adjustable, etc. They won't work!) with ½" & down sizes, a pair of bolt cutters (optional), a penlight, your book of numbers, and a box of LaChoy chicken eggrolls. For your phone, use something small, and hard-wire a few feet of wire onto the network. I always use a couple of test-cords (butt-ins) but I realize they aren't easily obtained by evrybody, so...Also, go with dial, not TT. I realize it can be a pain for some of you auto-dialers, but at 2 AM with 30 deg. outside, it is a pain looking for a TT line.

Oh! As you become more involved with jumping, you may want to obtain a Bull System hard hat, a set of "belt tools", a couple of 100' rools of #22 solid, and a manhole "cover puller". The first 2 make you look good, the second 2 come in handy occasionally. I had a guy fall for a Bell hat in a GTE area code...

So, find a can. In the Bull Sys, they usually aren't locked up, but in some independants, all are. Maybe Bull-Boys can't remember combinations. Anyway, if you can pick it great. If you are like me, chop it off and hang onto it!!! (nothing worse then cut locks laying around) They think some ass lineman just forgot it. Open it up, and the pairs are arranged this way:(Bull & most others)

TIPS	RINGS
1. WHITE	1. BLUE
2. RED	2. ORANGE
3. BLACK	3. GREEN
4. YELLOW	4. BROWN
5. VIOLET	5. SLATE

Thus, pair #1 is white-blue, pair #2 is white-orange, #23 is violet-green, etc. In large cables, the banks are wrapped in color groups that are the same - bank 4, line 17 would be the yellow-orange pair in the white-brown bank. This should save some searching, as white-red, etc. is no good.

Anyway, clip on a line and go, If the box is nearby (I should hope not though) leave your phone off the hook before you go. If you tap on and get the off-hook message, or the warble, go to a new pair. If you are at a '[illegible]' box, there is a clip and set of test wires inside the right door, along with instructions on how to use them. When you are done, take the connector with you. It comes in handy when you want to call with a fellow phreak. Also, in some areas, you can dial 011 + 3-D and get overseas direct. If not, go through the operator. (Caution: at TSPS stations, the operator will ask your # to see if it matches what the console says. Some areas have a # you can dial to get your #, as a test of the system. If you are lucky, she wont ask, but it is always better to find out if you can.)

Anyhow, give it a try. And after a good night of calls, it is proper to preheat the oven t0 400 and cook your eggrolls for 10 - 12 min. Serve with cocktail sauce, and Big-K cola. Happy calling!

Phlash Bazbo

"Remember, gentlemen, there's more to life than just increasing profits. There are acquisitions, mergers, driving competitors out of business..."

"I like men who have a future and women who have a past." —Oscar Wilde

RING JOB by Grandfather's Ghost

Sooner or later in our career as phreaks we run into that unpleasant lock - the handcuff lock. Knowing how to open these can mean the difference between placing yourself at the mercy of a Legal Aid lawyer or leaving them with nothing but your fake ID and a dangling chain. Don't panic; stage magicians have made a living for years getting out of handcuffs, and that's not because they're hard to open.

Best thing to do is borrow a pair (a GOOD pair- Smith & Wesson or Peerless) from your local novelty shop and practice; examine the mechanism and get an up-close look at how they work. Breaking the cuffs involves hacksaws, heavy screwdrivers, etc., tools that are usually not available "in the field" so we will concentrate on the two most common subtle methods of opening or "springing" handcuffs.

METHOD #1 - The Shim. The shim is a thin strip of metal about 2" long, about 0.14" wide and no more than 0.01" thick. It's purpose is to separate the two ratchets (one on the "jaw" or rotating section, and one on the locking mechanism) that hold the cuff shut. To use the shim, slide it into the cuff over the teeth of the jaw, while pulling down on the jaw to prevent its tightening. (With practice, and if you are SURE that the shim is entering the ratchets you can allow the cuff to close and carry the shim with it to get the shim past all 3 ratchets on the locking section.) The inner ratchets are on a spring and will press down into the body of the cuff, allowing the jaw to slide open. Under two conditions this method will not work - a) The handcuff contains an anti-shim wheel or gate, or b) the cuff has been double locked. This means that the end pin or lever has been pushed in to prevent rotation of the jaw in either direction. When this is done the lock must be picked twice, once in either direction, so on to:

METHOD #2 - The Key (or a reasonable facsimile). The lock of a handcuff is among the simplest possible, depending on its small size for security. The keyway is also blocked by a post which acts as a pivot for the key (which has a hole in the end to match) to turn on. You get two with a pair of cuffs, and Smith & Wesson keys will fit Peerless, though not vice versa. Cutting part of the handle off a key will make it very concealable, and not affect its operation. A piece of spring steel like the one you used to make your shim can be cut and bent to act as a pick. Also, the metal barrel refills from some ballpoint pens will fit the shaft, and if a section of the bottom is cut and bent up, it will work as well as the intended key. Good luck with your magic act!

Grandpa

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