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 eods and magic was being defrauded; and all he wanted was to make the aether speak. voices, for unlimited distances, and unlimited lights. The mystic of radio with his loops and "defrauding the public." What he meant was that they were defrauding his dream of unlimited Stubblefield called the New York promoters a bunch of "damned rascals." He said they were 1928 in a shack in Murray Kentucky. He died of starvation The apparatus on which I am working...distance...unlimited. Nathan B Stubblefield died in






 but there were no wires I tell you.
 o panou shrm] ЭOVTdJWOS SJYIM SVH ЗH JW RAINEY come booming out of the receiver. I jumped a I had hardly reached my post...when I heard HELLO
handed his friend Rainey T Wells a box, and told him to walk away from the shack.
Stubblefield always lived in a shack. Wells said later the voice, out of the air. In 1892 ( 14 years before Fessenden's experiment from Brant Rock) he Everybody knew about Siubblefield's Black Box. The Black Box made the light, and and land and water, to the nether reaches of the stars beams.' Stubblefield, the mystic of the mystic transmission of waves everywhere, through air Kentucky, who would later tell people that he would turn whole hillsides light with 'mysterious
 -алачпкиапа s! uп!pau ки วsnьәaq 'чдра
 through space. But, I can also telephone

 stubby mystic that he was, said "that if a stranger approached within a half-mile, it set off a battery of bells." And Stubblefield, Everyone wanted to steal his invention from him. Jim Lucas said that his home was so wired Stubblefield was poor, and a mystic. He was a mendicant and a martyr to his invention.

 Nathan B. Stubblefield. Nathan B. Stubblefield? Nora Blatch? Reginald A. Fessenden?


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Drawn from an article by Thos. W. Hoffer in THE JOURNAL OF BROADCASTING,
Summer 1971 asked her to write his story. He said
l've lived fifty years before my time. The past is nothing.
I have perfected now the greatest invention the world
has ever known. F've taken light from the air and the
earth as I did with sound...I want you to know about
making a whole hillside blossom with light...

Two weeks before his death, Stubblefield visited with a neighbor, Mrs. L. E. Owen. He Some observers reported se in the vicinity of Stubblefield's home.
idaoxa
 these damned rascals. He went back home to his shack in 1913. And for fifteen years was Nathan B. Stubble And Stubblefield was hurt wrenched torn by these animals from the city,


Tom Robbins
Once Lorenzo said to me, "Tom, who's gonna chop your suey when I'm gone?" And it's true.
Noone has chopped my suey for a won, won ton. Andreas is nobody's fault.

 Pudding. As a child he was an imaginary playmate.



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a sudden your dream station is locked in the monster jaws of governmental inertia for years and seek a permit. 'Sometimes they come in the night and 'freeze' things---which means that all of this body. Then again, as I am writing now, they may be fuddling up the rules whereby you governmental process of cotton and delay. You may be able to pry a construction permit out of
 And then again you may not. For whac am going commission and Form 340 and site able to do it. That's for later: now I want to give you some hope on the how-to-do it-because you may be the fine hard mesh of microphones, and the dizzying amplification of a Collins transmitter. sensual nature of broadcasting, the fascinating tingle of control rooms, and rack panels, and stretching to die on the Santa Cruz Mountains, and I can titillate you with my image of the

screens and in a million speakers in a million homes..
 outer edges of the universe
 the broadcast transmitter. You and $\mathbf{I}$, caught in the transmission of generations of words... a habit as hard and driving as the very shriek of the blower which cools the white-hot tubes in A disease. Maybe we can even think of the art of transmission as a need of purblind sickness: vibrant as the need to love, and to eat, and to sleep. free and loving transmission--radio operations and
have that dreadful need to communicate. A need which some of us feel to be as strong and as
 So, for he first our precious Aether---for the first time since those wild experimental days of Russian government through obscure pild early days of AM radio, back in the 1920s before the the application process. It is not unike the exasp the back page of PRAVDA. BROADCASTING. Sometimes the only way to test new directions in FCC policy is through low power station specifically using suggestions outlined in the first edition of SEX AND band. 'Pataphysical Broadcasting Foundation, especially, was granted a permit to construct a booklet. For the first time lilly qualified to broadcast on the non-commercial part of the broadcas
 ns for the purposes of this Broadcasting Foundation) of Santa Cruz, and two or three other groups have asked for and
 utilized KPFK in Los Angeles, KPFT in Houston Texas (both Pacifica stations) and, as well,
 FCC permitted (suggested, in fact) that Pacifica Foundation in Berkeley make use have Communication at various colleges and universities and even public schools. But in 1954, the megahertz. Traditionally, this has been set aside for the big bores who run Schools of

forever and out of sight in the mind of Mr. FCC-FM, Ed Hackman.


 people whose job is to oversee a million or so acres of aether. But FCC bureaucrats are in Kayl 'рачıо local regional office of the FCC and asking for their help on your community station. For one
 for $\$ 2.50$. Some enging
method for FM found on page 79 of the ATLAS. But you are best off with the rules themselveg
which tell you most (not all) of what has to be done for an FCC application.: for $\$ 2.50$. Some engineers have to go to school for five years to learn the contour prediction LOLSS uun $\quad$ 万Z xog complete FM STATION ATLAS from almost do a frequency search of your own by ordering Bruce Elving's excellent, concise, and When the FCC rules finally come, your most important $\$ 500$ in engineering fees. You cal
Footnote to Part 1, Section 1.573. I have just saved you $\$ 50$
 delay from the Government Printing Office, Washington D. C. Your engineer will have to order A hand a copy of Section $0,1,2$, and 3 of the FCC rules-available after a mere 6 month 10 chart, and knows FCC rules, and who win do a feqio and listening for holes. It means having this boring and complicated work, you will need an engineer who knows how to work the F50 outside of town, or if you will have to try to move two or three 10 watt stations around-to do all file dreadful "Show Cause Orders" whilate 20 miles they won't even consider moving, much less give you the time of day. In this case, you have to move around, frequency Musical Chairs. But most of them, I must warn you, are so piggy that another solution which has to do with trying to get some of the existing educational stations to market even though you have to put your transmitter some distance from city center. There is Portland (Oregon)
There are other cities which are marginal-even for ten watt stations. And I may be wrong


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pies nearoчl entanglements. The temptation may be overwhelming, but hisory points in another direction; as that have grown up like weeds in broadcastill bot help you to get involved in these vicious


 these 45 year old pesky pee-heads, in their offices, scheming on how to make trouble for that best to do in their fellow media barons. "P'm gonna tell," they say, and they do: tattling like in their managerial positions in the $\mathbf{1 0 , 0 0 0}$ broadcast outlets around the country, thinking how Well, it's that radio executives, when they are not counting their millions, are sitting around enforcement machinery of its own; yet we read eachs. How do these come about?
radio and television and common carrier operations. How always expected: and broadcasters take the vileness sweepstakes. The FCC has almost no You are learning from these experiences that the world of business is as gruesome as you pre-on-the-air contacts with the people in your community, you have nothing to fear moк u! pue 'ио!реэ! if the FCC is a bore and a lump to all wing dogs of broadcasting and keeping them from tearing death of your miniscule effort, he can do little to influence the FCC either for or against you. For Forget it. Even given the ulikely chance that some existing broadcaster is frightened to गgnon The other story will be one of how the existing AM or FM station in town is going to make applications and will probably be wrong, or greatly exaggerated. application, you will hear of at least three other groups who are putting together cheir function. The stories you will hear will be of two types: immediately as you start on your the constant flow of rumor, half-truths, misinformation, and outright absurdities in order to It is as if people in radio are not content wy electronic means. No, they also seem to need around the broadcast industry Well, not all: maybe $95 \%$ of them. As soon as you get your idea for a viable community outlet
and start to work on it---you will be besieged with stories that flow out, through, under and It is very important at this point that you carefully ignore any and all rumors that you hear. bath-tub: and no radio station at all to hook them to 0
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 around and dream of what call letters you are going to ask for. This opportunity occurs only your dinky 10 watt station.
As long as we have gotten this far, 1 should tell you some things not to do. One is: don't sit their job, and they share in television outside of the moneygrubbers---are bored to death with the day-to-day workings of
your Chief Engineer for a small fee every month. They---like most people in radio and










 You can get a boost to your application-‥and a true boost to your of intense and devoted in any way they can to put on a good operation. lawyer, a school-teacher, interested enough to come to your meetings regularly, who will help you
living. People who are You should try to get people who are come people who have learned the aesthetic of good accused of monopoly practices. one doesn't give a goddamn what hership, where they were born, and whether they have been foolish pride. What you need is a working board---- nou have on your corporate letterhead. All meetings, and if they do, they will probably fall asleep or domin dressing, because the FCC for Don't look for bullshit 'community leaders' to be on your board. They will never come to your telephone just keeping them informed. usually the best size. If you have less, your meetings will turn into orgies, and whers on the

thirteen, you will have to explain everything to all the latecomers--.and spend hours on the Your corporation Foundation organization will need a board of directors. Seven or nine is as metaphysics is to physics. | 2 |
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 hardly help you to obtain a permit from the Federal Government which is understandabl the medest, even a bit of a shuck, in nams. Forever" may be scenic and funny to you, but they will When you go to incorporate, may I suggest you avoid fiag-wavis night-On Foundation," or Commitiee, of your friendly local radical group to see in they have an the than a politically
warthwhile to be cautlous in your search: you need more of a maverick rather
 heif luty digpeseesing widows and orphans from houses with unpaid morgages.
mentality. I hnow of one who claims that when he is not doing free work for our radio station, ehitits,
Be veu think that bureaucrat wants to read any jokes, any Existential philosophy?
thinthe wants a good boff-or maybe wants an intimate sketch of the realities of the theories

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 I tell you all this not so you can exercise your ability to scare your friendly local
 station itself. And you are entitled to see it. And if they continue to hide it from you, you will office, and he is located in Washington, D. C. You can must maintain a file for the public at the
all stations in the country-both educational and not -must organization you are with. That's a lie. They will state that their public file is at heir lawyer's They will tell you that they don't have to show you the Public File unless you state what the A \#1 golden fuck-a-duck runaround. I mean!
 public file. Of course, when you do this, you wiflers paranoia) which is to deny their 'private' your name and address (no further identification needed) and tell hem you want to see their
public file. Of course, when you do this, you will be tramping on the natural paranoia of all between 9 AM and 5 PM, Monday through Friday. All you have to do is to give that station

This Public File is available to anyone, anyone (even you) who goes by any radio station public file, they keep their applications to the FCC-along with important changes, and Every radio and television station in the United States is required to keep a public file. In this
 my motives. Which are something else again-let me tell you. am so generous that I can't look at myself in the mirror without crying, and wondering about somewhere between $\$ 2000$ and $\$ 4000$-and $I$ am going to give it to you for $\$ 3$. Sometimes 1 I am now going to give you a super-secret on how to do your form 340. This secret is worth them to act on that particular application? of very clever and witty and brilliant statements in an application I filed with the Factior for Please. If not, give up. Now. You'll never have a station. Believe me, I tried. I put a collection in the slightest. He wants an application which conforms to all those other forms he has been that will not bother his mind (and more importantly, his bosses' minds-or what's left of them)
 би! If line of-sight-and that means that what you can see (outside of fog and smog) is what you II You con't find a tower, then look for a good tall building in your town. Remember that FM hhould be specified that, if at all possible, you will not have to start paying rent until you are
 yeu get, be sure you take care of the simple problems: who will supply the power (will you have daye of grief further on down the line if you are challenged by some poop. In any agreement a peitive answer-be sure you have that in writing. A short letter of acceptance can save you tan affect your attempts to get mileage or space waivers from the FCC later on. And if you get Eammunity-and get noes from all of them-you should try to get these refusals in writing. It qeed reason. If you make contact with all the antenna farms or large towers in your aperate their transmitting apparatuses from, causing the least amount of interference to other鄨 FCC actively encourages 'antenna farms'-where most of the FM and TV stations can
 liitle trouble as possible. If he sees it as an easy way to get a bit more revenue into his will not Impose a large wind-load factor on his structure-in general, that you will cause him as He lower. You should explain to the station owner (or engineer) that you are not a competing
application, that you are just looking for a place to put a low power station, that your antenna In all cases, you should be willing to pay $\$ 100$ or $\$ 200$ a month rental for the chance to use
He tower. You should explain to the station owner (or engineer) that you are not a competing
 willing to permit you to lease space from them, because they need the money the most. Next, UHF television stations in your area first. They usually have the tallest towers-and are most hook you up with a local broadcaster who will let you perch on his tower. You want to go to Aesides a showing of money, the most important part of the Form 340 is the showing of a Wan done right. Try to do yours generally the same way. how they did it. Obviously-if they got their application through the threshing machine, then it semething right for the government, go back to previous filings. Find the successful ones. Find In general you are learning with this copying act a central part of law: that is, to do There are other differences which will show up between you and some School district...espec-
ially in the realm of funds available, and organization of your corporation. 10 watts, remember there are parts of the part called V-B which you don't have to fill out. non-controversial programs. Emphasize your educational programs. If you are going for only When you go to raid your local educational broadcaster's application for your own, don't just misleading to you. in the last five years. The reason for this is that the Form 340 has evolved (more complicated)



 from daily engineer care\&loving (which is the case with the present state-of-the-art which is vigilante law-as in Houston-becomes more possible as we invent machinery to survive away of the jet. And the disruption possible through one fool willing to embark on his own brand of process of a single individual with a single easier for one individual to fuck us up. The disjointing fica's station in Houston-as a scarey message from the future. As our lives and equipment get pieces of beaverboard. Pardon my paranoia-but some of us saw the bombing of KPFT-Pacipeople can render your remote transmitting apparatus nothing but broken shards and a few concrete-\&-broken glass fences, land mines. You think I am kidding-but out in the country bunker so that curious idlers won't take the whole things home with them one day: bunkers power and telephone lines. Then you have permission from the owner of the property and adjacent property owners to bring in roads and variance on the property; probably an ecological impact study. Then you have to have Federal Aviation Authority (Form 7460-1); approval from your local city or county for use everybody and his brother, you have to have all sorts of permits: tower approval from the your studio. This can be El Paino \#1 however. If you take a virgin hill, which overlooks outside of town where you can build your comes to worse, you can try to find your own hill there. (Of which I bought three) offering nothing more exciting that 3 -foot-tall landing strobe lights for $\$ 10$ the last time I was agencies can be junkers: the California State Agency for Surplus Property in San Lorenzo was feet of brand new Heliax 3-1/8" cable at the Seattle office for $\$ 50$. However, some of the state Improvement Division - has a list of all names and addresses. Ben Dawson said he found 150 your state surplus distribution agency. Federal surplus supplies are divided among the fifty
states, and are administered by those states: HEW-through the Broadcast Facilities eligible to purchase any and all equipment, furniture, shoes and bib overalls you may need from you have your construction permit as an educational radio station, you are automatically of Morris, New York; and Guarantee Radio Supply of Laredo, Texas are the best-known. Once There are some companies which specialize in used equipment: Maze Company, of
Birmingham, Alabama; Broadcast Equipment Supply of Bristol, Tennessee; Boynton Studios If he likes you. If he is in a good mood they can take as some sort of a write-off, they will give away. If you can reach the right person. Anything that's an antique, which is ruining the good will of their engineering staff, and which But please understand that sometimes this is all you can get. And, often, you can get some
equipment donated by one of your local broadcasters after you have a construction permit. running. The same goes for tape recorders, turntables, and the like built in 1947 -but I can tell you those things are murder to get running, and worse to keep more than 10 years old. It sounds all antique and funky to have a Western Electric transmitter have taken in on trade from rich broadcasters. I would try to avoid buying equipment which is

representative. He is paid to try to sell new transmitting equipment - and might even give you

## N (transmitter, antenna, control board) was available for free or loan.

 expenses of $\$ 1500$-but they had documented proof that the most expensive equipment available as cheaply as gou list in the fermit for a ten watt station showing net construction volunteer organization? If you plan used equipment, prepare filings to show that it is contemplate paid staff? If so, how many and how much? Or will yours be an all SBlLITIGVIT building that stations should show balance sheets as part of your application. These Any and all persons or organizations that have pledges to your group, to help finance the broadcast station embodied in its articles of incorporation. (ррге э!ррпиоqи 2. All the questions in the form that do not specifically apply sher (amous non-existent spiral di-oxy 1. The Board of Directors of the applicant corporation will have to meet-note time make sure that the following steps have been taken: When your Form 340 with its 16 or 18 exhibits is completed, you will want to look it over to
 the exact location of your site on the $71 / 2$ map, and by means of rulers and such, figuring out the In all these, you will have to determine your latitude and longitude. This is done by finding An the floor, light up a toker, and have the omphaloskepsis of the world. What a dream. diatalled, beautiful large scale maps-glue them together, stick them on the ceiling, lie down
 geing for more than 10 watts). They also have the large Sectional Aeronautical charts-for EEntif each-the $71 / 2$ maps that your engineer will need for the plotting of his radials (if you are时 the telephone book under UNITED STATES GOVERNMENT. There you can buy-for 75 'the engineering' portion of your application. You will need maps. Find out the address of the Transmitter location. As soon as you have that taken care of, you will have to go to work on affangers-like you-and impressing you with
Alace for your transmitter. Rent free. He just might have one of them onions up his sleeve. Find out who he is. Go talk with him. He probably likes his job. He probably loves talking with daenn't even know who he is, or how important he is for their communications machinery. impassible heights in the country. He is a quiet expert. Most of the city or county government aint within 50 miles. He has personally travelled up to and through some of the most He may work in some obscure part of the county government. Everyone recognizes him as the fuilding top location in your area. He may be your local Motorola Mobile sales representative.
 community before: all those feelings of love and bitterness and rage and beauty. You, with this

 the secret to getting your chance to play your fingers down the timbrels of the aether, to make halls of our ages. For even they can get tired of saying NO, and one sweet day you have found
 can't-have-it like some miserable child and will grant you permission to do the thing that you right, and honorable, and persistent, then they'll get tired of saying can't-have-it can't-have-it you have a construction permit, but they do recognize that they have a job to do. And if you are Great Aether God - you may well get a permit to go on the air. They aren't out to help you until However, however; if you submit a clean, respectable application, and pray fervently to The
 4. Influence means little to them 2. They have heard your story before; 1. They don't care about you;
giving you too much of a scare about the FCC. Remember this about them:
As I look over the things I have written to help you with this project, I think I may have been after you file.
ss-is that you will be hearing from them sometime between 5 weeks and 27 years frequency that has been in the hands of the FCC since 1947. So, the best you can guess-if you
 Burches to different drummer than you or I ever dreamed of. I have upon within 12 weeks applications with no questions as to financing, ownership, or interference were being acted write and ask what has happened to it. The last time I heard, low power FM educational application. If you don't hear from them six months after you have filed (seriously!) you might weeks. Otherwise, they will merely send you a card giving you the official file number of your there is some serious deficiency in your application, you will hear from the FCC within 6-8 Commission, Washington DC 20554 Keep another copy for yourself for your public file. If коиа!̣yัр
 stuff I know about engineering could fit into a midge's cupola.
 engineer, or even a 1st class engineer-but anyone who knows what they are doing can


