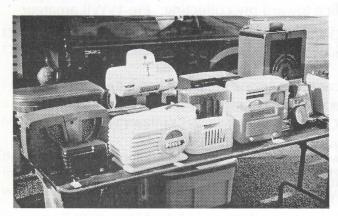
Southeastern Antique Radio Society SARS



First Quarter 1995

THE Meet

This was the standard by which the slogan "a good time was had by all" might be set. The weather was dead center perfect. I pulled up at 7:45A and found a near-full lot of happy, bouncy people. Now it must be noted the day started cold and may be part-reason for the early motion.



Refugees from the 1948 RETMA convention exhibits.

There was a wide geography represented: Macon - Weeks and Ridlehuber, Panama City - Riesma, Tallahassee - Cromer, Augusta area - Patterson and Chris Gimmy, SC at large - a bunch, Atlanta - a bunch-squared.

There were perhaps thirty tailgates and an offering mix covering the description spectrum. Larry Weeks and Mr. Ridlehuber anchored the car-port-stored wood radio div'n from opposite sides of the lot. Also we spotted someone exhibiting jumbo cathedrals (Philco, AK?) while Don Patterson had an AK7 next to a baseball radio showing striker sympathy. Charlie Milton held forth on OTBs ever emphasising how young W2ICE looked in 1966. Gerald Cromer had his garden of 33mfd PCB-mount caps. I had one of each 1959 KLH cone bookshelf units and the ruddy red-head guy from SC next-



Cracked corner on that \$25 TR-1? No Sale!

door had a layout of NOS Vanguard and "Mr. Transistor" radios recently liberated from a hardware store. I told him he NEEDS to get a Mr. T to Henry Cohen, the AWA defrocked expert on the subject..

The meet sure set the mood for our Nashville sister club's fall mega-meet. Hats off to Charles & Charles (Milton & Pierce) for a party well-given!

Editorial

by Marty Reynolds

Following Barry Ethridge's editorial resignation at the February meeting, I have stepped into the temporary breech left by his absence. I can't say I was moved by the spirit but rather by Barry's delicate sales pitch for the post. And Barry had help because Johnny Hubbard sat silently, though smilingly, beside him during his persuasive harangue.

Without appology I have to note this is my first time in the editorial barrel. And it may be my only one because of time and your reaction. Since my turn at the job was unadvertised, you the membership are excused from not contributing.

For want of copy and just as the last issue was the Blake Hawkins edition, here comes one with my slant on things.

As a consequence there will be a definite prejudice toward my collecting: Pre-WWII amateur radio and, lately, audio gear. But note this issue contains a side-trip into that infernal debris I brought to the fall meet. That's the first US radar, the SCR268.

Now in the amateur vein, note the W2AN QSL card that appeared in the last issue. The card commemorated QSOs (contacts) with the restored W1HRX station for James Millen. Millen was National's chief engineer for years. The HRO was his. He formed Millen Co. for "RF parts" during WW2... a good time, the gov't guaranteed success!.

But the W1HRX station was built in the thirties and was the featured station in a 1938 National publication called "Some tips on amateur transmitter design." A special note here is that the 500 watt modulator used huge 861 tubes in class AB1 to avoid the big current swings in more efficient-class B. The reason was the rig ran on a motor generator at Millen's summer camp. The audio power swings drove that unit nuts!

So back to the card. It's mine and the commemorative for working the W1HRX station on 3885 kc (now khz) on a January '95 Sunday afternoon. I got to Bloomfield, NY with the 80 watt output of a 1952 Collins 32V3 transmitter from a downtown Atlanta city lot. Now to obtain full 130 foot dipole performance in 80 feet I used the linear loading principle in a different manner to give the antenna two match points in the 3.5 - 4 mhz band. So some new technology may have fallen out of our "lives in the past."

But my obvious ham slant isn't to say I can't love an occasional entertainment radio. Witness the presence of the Murphy radio article here. And for later I've decided to retain an article on what may be Philco (M939-124) and Zenith's (M723) last tube-type AM/FM table models. Note you can see Predicta in that Philco. But then wasn't a lot of stuff "Desi-lu" in 1959-62? Do contribute for the summer newsletter.

Murphy's Law -aka- Murphy Brown

The second name is the more descriptive as the subject, Murphy Mfg., Ltd. of England, has done little to change at least two club member's codes of conduct. However Marty Reynolds and Norm Schneider are two happy ownders of Murphy product.

Norm's is an A146 that looks for all the world to be a Cabinart Hi Fi corner enclosure of the 50s with two important exceptions. These are it's high finish and the dial on top! Norm's is a post-WW2 example that employs British miniature loctal-style valves, er-, tubes.

Mine is an A72 that appears to a pre-WW2 model with Brittain's (Mazda's) version of the keyed 8-pin octal base. Theirs just misses fitting our sockets. As an aside, post-ww2 British octals interchanged with ours perfectly - an example is the KT66 where, note, the KT meant "kinkless tetrode."

This A72 is a 250volt AC transformer-powered 6 valve model where one's a magic eye, another a 6K8-type triode-hexode converter and the rest the expected. To verify valve placement I had to scratch windows in to the shield-paint on a couple. The reason for the "scratch and peek" was to view the internal construction.

Do note Majestic 30-s shield-paint "S tubes" like the G85S, etc. - English Mazda did it too! Hey the G on G85S probably denoted Majestic's owner, Grigsby-Grunow.

I got the A72 from a friend who's just turned member. He found it a local flea market being "hawked" by a woman with an English accent. She claimed it was her aunt's and had been taken all around the world. My bet is it heard every BBC WW2 broadcast live!

Being a sucker for looks, it was love at first sight. It favored a 20-inch high walnut (Murphy Brown comes in here) jukebox replica with a circular speaker grille. The dial was a celuloid drum in a horizontal window across the top. The entire drum moves while tuning. It's operated by cycle control cables.

First order of restoration was to call AWA conerstone Bruce Rolloson. He's a friend of BVWS past-president Pat Leggett. I got Pat's number and he promised an A72 diagram and a 10C1 valve for Norm's A101.

To while away the Legett delivery interval, I set about fixing one broken drum cycle cable which was a hard job! Next came testing the wax impregnated paper capacitors - all good, and the electrolytics - all bad. Then a rubber cable to the magic eye socket was changed out. Still no diagram so the scratch and peak procedure was used for valve placement (the IF, converter, and 2nd detector tubes were the toughies - half the tube count).

I'd proceeded completely from theory and experience. No diagram yet. Unable to contain myself, I fused the primary of a step-up xfrmr with a 60W light and threw the switch. It worked... and worked, and worked, playing for weeks.

Then came Pat Leggett's delivery confirming my procedures and producing Norm's 10C1... the diagram and valve turned out to be difficult. I have a concern now in repaying Pat's hospitality and help.

Here's a late-breaking happy postscript. Norm tried the 10C1 in his A146 and the set came right up. The girl'd been held back for years only by that valve's open filament!

And the Murphy love affair lives on.

Me and Mr. Jones

A collecting Perry Mason reconstruction by Marty Reynolds

Some of readers will take this article name as song title theft from a pop group called the Counting Crows. But au contraire, it's a brief recount of of a now-deceased Grant Park man's collecting.

Grant Park is an Atlanta downtown working man's neighborhood that's now being regentrified. But a dozen years back, when Mr. Jones died, the area was, being kind, down at the heel. Mr. Jones' home had about a 2500 sq-ft two-story barn behind it which was the scene of his activities up 'til the end. Now this man 'came out' of Ga Tech about 1946. His daughter, and I'll note later how I know, says he was an electrical engineer.

Did you see how I just said he 'came out' of Tech? This is because I don't think he graduated. His effects and the neighborhood where he lived don't indicate prosperity. It appears he did warranty repairs on Philco and Silvertone radio & TV. His daughter reportedly said he was involved with alarm systems. Flourescent lighting comes to mind from that report and remaining debris points this up. My tangential brush with his estate remains made it seem Jukeboxes were part of the picture too... perhaps with the Star Co., a 40-s Mills distributor. There were no ham radio effects so that matter is laid to rest.

A decade of tennants had access to all trappings of the estate that were in the attic and the basement. Heaven only knows what may have leaked into our community that way. I believe the barn was off-limits.

Mr. Jones daughter terminated the rental with the last tenant in March '93. She then decided to sell. The house was still horribly congested so she had a 'downtown clean-up crew' enter and clear tunnels. The clean-up crew was half-saavy and took much of the salvage to a local swap-meet.

Comes now our first member's encounter with the estate at a big antiquemeet. 'Member one' bought a beautiful Silver Marshall for nothing. No question that the Silver and all the lit were marked Mr. Jones, hencepart of the March clean-up/out. Note 'member one' parlayed it to amirrored Sparton and later to a grand and the rarest TR1.

Now comes member two who got a cheap catalin deal (story in itself) from a man who'd just bought out of the salvage pile. Well 'clean-up crew' caught the episode and immediately tripled their prices... just as I came up and threw up my hands in disgust.

I and the 'clean-up fellows' both re-appeared back at the swap meet some three weeks later & I found the prices realistic. I bought a couple of pieces just as a second member came up. Second SARS member and myself were invited with a friend of mine to come to the 'clean-up' warehouse to see the main inventory.

Well there was little obtained at the warehouse save non-radio lit that my friend got. I did obtain a piece or two and what became the basis of a summer obsession though. That was one of four receivers out of a 1937 SCR268 (1942 SCR516) radar. I got very excited about the receiver & brought it to the Dayton Hamfest in late April for identification (all that came was there was one in the Wells of Harvey-Wells estate that W1YG got and donated to Ft. Monmouth's museum)

So it's June '94 and I remember I'd seen a '268 display in an estate collection on the west side. I went back, found it gone, but did discover a few accessories remaining, almost certainly from the same radar. The converted '268, one of seven or eight '516-upgrades,' was probably shut down in '43 as a flop. It was likely at one of two Ga coast defense sites and sent to Atlanta's Ft. Mac for disposal.

The 'west side estate' was a ham's, pointing up a MARS (ham Military Affiliate Radio System) disposal by the government. My 268 receiver was ink-marked D. E. Howard / Hill St. / Decatur, Ga. It may be possible to trace him. What I bet is that MARS-member Howard passed all this SCR268/516 debris to Jones, who I again believe wasn't a ham, in the fifties.

So how do I draw this conclusion? Well, here's how. It's now October and a friend who's in the Military Surplus business gets a response to one of his local 'buyads.' He goes and gets a truck load of gear which he calls the 'radar mother load.' Well there were a few pieces and it certainly got my attention. He says he's skimmed most of the cream. I ask if we can make a joint visit where he gets 1st refusal on any military discoveries. He agrees.

Well a week goes by and Mr. GI Stuff finally gets contact with the Grant Park house debris seller. This fellow is a rennovation contractor's son who says the house contents have been sold to an 'electronics guy' and nothing remains. Mr. GI Stuff thinks he's being flimflammed and I volunteer a fly-by since I live nearer.

So I get directions and find the rennovation contractor on the premises who says the 'sales door is open.' I find a few interesting small objects and then have to leave. I did note that nearly every remaining piece had it's tubes removed.

Upon contacting Mr. GI Stuff who's puzzled about my buying where it was strangely terminated, we decide to blow in for another lunch visit. So comes the visit wherein we find little and are preparing to leave, when of all things, the other two displays from the surmised 'Ft. McPherson- disposed' SCR268/516 appear in a remote cranny. They're complete except for the assumed-scrapped copper housings. And later investigation shows they're from a 268-516 upgrade. Too much coincidence. My 268/516 receiver must have come out of this barn in the 3/94 clean-up/out.

Since we'd been exhorted to bring as much to the SARS meet as possible, I went back for a last visit and

picked up a scad of ungraceful things such as some amp chassis. But there was, to me, one other jewel and that's a 630 tv!

So now it's the SARS meet. Early on I spot a bunch of bat poop-spotted stuff that looks like the few pieces I've got. I ask what's now 'member 3' and find that most of his offerings came out of Jones' place and that he indeed did pay the salvage rights. Mine and Mr. GI Stuff's Jones goods were obtained from rennovation contractor who had no sales rights... here please note rennovation contractor's son had ethics enough to attempt to hold Mr. GI Stuff away from another visit.

Well guess what SARS 'member 3' has? It's a 268/516 frequency meter, a BC-1068! I buy it then begin relating the 268 story noting that the 'clean up/out' March crew sold 'member 3' his catalin from Jones' estate. This was profound insight to 'member 3' who smiled lavishly at the revelation. The 'member 1' Silver tie-in became apparrent and suddenly it was apparrent that I, 'member 4,' was thickly involved too... and the coincidence of picking all these 268/516 parts up around town tied up the story.

Now back to ethics and my Jones estate purchases that were unscrupulously sold? Well 'member 3' said he'd been through that mill and there was no ill-will or claim. I gratefully donated an extra 7JP4 to use with his Jones Teletone for this conscience relief.

So now what of Mr. Jones and his gizmo-trove that had so much treasure? Was Jones an earlier day eclectic collector or was it the law of large numbers that yielded so much? I'll submit a combination of both. But one thing's certain, C. T. Jones' accumulation certainly has benefitted our collecting community last summer. Thank you sir!

note: I'm still trying to find when C. T. was enrolled at Tech through the registration office there. .

LATE DEVELOPEMENTS

Long time Atlanta ham John Fearon, W4WKP, notes the west side estate" equipment was Roy Brewer's, W4UUH. He also points out there was once an East Point ham named Chester Jones, K4JWJ.. John also notes Ga official Virgil Baker, K4CFO, grew up with all these people

Now on the "Frequency Meter" from Jones' collection. It covers both the I band (SCR268) and the G band (180 mcs). This leads me to believe it was part of the 1st IFF, the English Mk III. It may have been associated with a '268, but I now know from a '268 manual manuscript from another source that the real thing was a BC423.

I saw 'member three' at a fleebie this AM who was there with his friend Hans who's a 78 collector. Hans said he'd toured R. C.Carter's collection fifteen years ago. R. C. was the seventh ham licensed in this fourth call area, R. C. started WSB in '47 with a loaned TV camera

(AN/TRQ-2??? - an image orthicon set from Kennedy B24 fame) and had a full southeast Atlanta basement that could be visited by navigating narrow walkways. R.C. Died ten years ago and I bet Jones, living in the same neighborhood, made his last accumulation from this agglomeration - remember my earlier contention that Jones, not evidently a ham, got much of his stuff from a deceased ham. Note please that R.C. was the Fox's audio man, an Altec Lansing fella, which lends further credence to this theory.

The mysteries continue. Whatta hobby!



Can you find the BC-1068 in this picture?

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RESTORING A CATALIN CABINET by Kris Gimmy

A nicely restored Catalin radio is a thing of beauty. Both the cabinet designs, and the bright colors set them apart from other table radios of the 1930-1940 era. And, the Catalin material itself with its rich "marble" look separates them from the cheap plastic sets that followed.

Most collectors would like to have at least one nice Catalin radio on their shelves. But, why are they so rare and expensive? Well, I know two reasons: few were sold, and they self-destruct.

The bright colors, that we prize today, actually hurt sales in the 1930's. Think of your Grandmother's house with its dark furnishings. Would she have bought a red or green radio? Grady Richards of Cincinnati was a Motorola dealer, and he told me they could hardly give-away Catalin sets. He remembers cutting the price on new Motorola "Circle Grille" sets to \$10. each to get rid of them!

The self-destructing aspect is something many people don't recognize. So, let me elaborate a bit. Catalin is made of phenol-formaldehyde, the same material used in Bakelite. But, it isn't cooked like Bakelite, and it doesn't contain fibers to strengthen it. It was poured like a hot syrup into a mold - where it took a week to harden. Because it was a colorless liquid, it could be dyed to a translucent color, and other colors could be swirled-in to give the marbled look.

But over the decades, heat and ultraviolet rays caused some of the phenol-formaldehyde to break down into a yellow-brown oil - usually near the surface of the catalin. Thus, the "butterscotch" catalins we see today, were originally white. And, they will turn back to white if you polish away enough of the surface material. This "oil" causes blue sets to appear olive-drab green. It causes green sets to appear brown or black.

The breakdown of the Catalin also leads to self-destruction. As the "oil" is formed, the Catalin shrinks and becomes more brittle. After 50 years some radio cases have shrunk 1/4" or more. This is what breaks the glass dial-scale on the DeWald "harp" radios. This is what makes the speaker jam against the top of the case when you try to remove the chassis. In Sentinel catalins where the metal chassis was a tight fit, the case itself will break along the sides where the chassis won't let it shrink any more.

The radio collector with his first Catalin often finishes the self-destruction when he encounters: the chassis that won't come out, the screws that won't turn, or the knobs that won't come off. All he has to do is force it or pry with a screwdriver and the now-brittle Catalin rewards him with the sound of a \$100. "CRACK".

Planning The Job

When I first went to work for DuPont, an old timer told me "If you want to succeed, you must Plan Your Work - and - Work Your Plan". It was a great piece of advice, and it especially applies to

working on Catalin radio cabinets.

The first question is: should I clean this set at all? If you are happy with the color of the case, a once-over with a liquid car polish will remove surface oil and make it shine. If the color is too dark and you want to lighten it, you need to decide how much. Look it over carefully: is there a dark crack or a tube-burn? Don't plan to lighten it very much, because these flaws won't change color and may be even more obvious.

How about the trim parts (handle, knobs, grille, bezels)? If they are O.K., you may not need to take the cabinet apart. Just work on the case

carefully with auto rubbing compound.

Ask yourself, how even is the color on the main case? The face is usually darker because it is thicker and has more oil. But is its color even? I have seen sets that looked like a zebra after someone used a buffing wheel to try and even-up the color on a radio that had sat in a partially sunny spot. This problem is especially acute on butterscotch cases. Only the very lightest and uniform colored cases can be taken back to a "banana yellow" or the original "alabaster white". However, red, blue, and green cabinets usually clean-up to a uniform color.

As you will see, you need to Plan Your Work at every step. I'll give all the helpful hints I know. But, no guarantee of success is promised.

Disassembling The Radio

A major dealer in Catalin radios, who had handled hundreds of them, once estimated that 50% of the cracks in Catalin cases were caused by a collector trying to take apart or put together the radio.

Knobs: Don't just wrap your arm around the case and pull. Knobs shrink too, and sometimes the spring corrodes to the shaft. If you pull hard enough, the chassis screws will crack the bottom of the case - for they are what you are pulling against! Instead, remove the back first and use one hand to hang onto the metal chassis when you pull. If this fails, you can try WD-40, and perhaps warm the knobs with a hair dryer. But, don't pry with a screwdriver; a sure way to crack the front of the case.

I've heard of knobs that were stuck so bad, the owner cut the metal shaft or crushed the knob with Vise-Grip pliers to get the chassis out.

Chassis: Before you loosen the chassis screws, take off the back and see if the chassis is jammed up against the case anywhere. If it is make a note of where to file-down the chassis. As mentioned earlier, the Sentinel radios are particularly badbut many of the small square sets also have a tight fitting chassis.

Try to slide the chassis out evenly and don't get it cockeyed as you pull. Realize that you may have to lift the rear of the chassis so the top of the

speaker will clear the handle screws.

Again, no prying with screwdrivers. As a last resort, you might try heating the case uniformly with a hair dryer to expand it.

Screwed-on Trim Parts: I see lots of broken trim parts like handles and front bezels. They are always broken at the screw-holes used to mount them on the case. Some are broken by case shrinkage that pulls sideways on the screws. But, many are broken when someone tries to remove the screws.

For some reason, rust builds up on the screws, even though they are inside the catalin piece. If the part has never been removed before, and you just stick a screwdriver in and start turning, I can practically guarantee that the part will break. The screw will turn easily at first, but as rust catches in the threads the screw will jam. If you try to go even one more turn, you will hear that "crack" that means you will be calling me for a reproduction part.

The proper technique is to "rock" the screw

back & forth as you unscrew it, like this:

1/4 turn loosen then 1/4 turn tighten.
1/2 turn loosen then 1/2 turn tighten.

- 3/4 turn loosen then 3/4 turn tighten.

And, so on until it comes out. This back & forth motion keeps the rust granules from jamming into one screw thread.

The Plan Your Work step here is to have a plastic bag that is labeled to put these tiny screws into. These are very special tapered screws, and they are not all the same size. If you try to put the wrong screw into a catalin hole, you will break the catalin.

Glued-on Trim Parts: The grilles and trim rings on many catalin radios are glued-in. As you view them from the inside, you will see the amber colored furniture glue they used. The best way to un-glue the part is to soak it in warm water for 30 minutes. But, first you need to remove the plastic dial lens, and the grille cloth. Then, if the cabinet has nice stickers on the bottom, you have to figure out a way to soak the the glue but not get the stickers wet.

If you can't soak it, you can try wetting the glue over & over with an eye dropper. Then pick-away at the glue with an Xacto knife.

Now comes the critical step. Frequently, one side of the ring or the grille will come loose, but the other side will be firm. You think, "all I have to do is bend this back a little bit and it will come loose". Don't do it. The side that is still glued with break off a piece of the cabinet with it.

Try to find a way to soak that corner, or pack it with wet cotton. Keep picking at the glue, but don't bend it back - try to slide it from side to

side.

The Dial Glass: Some popular catalin radios have a glass dial scale mounted to the case (Fada Temple, DeWald Harp, Big Addison, Sentinel). Again there are screws to remove, and keep, for the metal brackets that hold the glass.

But, the real problem may be getting the glass out of the recess in the case. Sometimes the case shrinks enough to crush the glass: often it just clamps it tightly and waits for you to break it. Go easy on the painted side of the glass, because-

the paint is delicate too.

Try to wiggle it out. If the glass can be moved at all, you can probably get it out; though you may have to shave-off a bit of catalin on the inside with an Xacto knife.

If you get it out unbroken, sand down the edges using 200-360 grit wet sandpaper. Put the paper on a flat surface, keep it wet, and slide the ends of the glass back and forth. Don't touch the painted dial numbers. If you break it, there are repro dial glasses available for some of the sets

Replacement Trim Parts

You can often make a very good buy on a catalin radio if it is missing the knobs, the handle, or has a broken piece of trim like the grille. Or, a piece may have been broken during disassembly as described above. You can buy very good reproductions of these parts from me or other suppliers. But, don't order them until you have cleaned the other trim parts to the color you want. The more you clean a catalin part the lighter it will get - but reproduction parts are the same color clear through, and you can't change it.

So clean your trim parts first, then be very specific about the color on the part you need to match. To order a "yellow handle" or a "red ring for a Fada Bullet" is not enough. There are many shades of "Yellow" and "Red". The best way is to match your parts to a specific color photo in one

of the many books on plastic radios.

Cleaning The Cabinet & Trim Parts

Your goal is to get a nice even color on the catalin case, and to have the trim parts (which may be another color) to match each other. The safest way to achieve this is to work slowly, and polish each part a little bit at a time. I like to hand polish parts with MeGuires No.4 Professional Cleaner. Get it at an auto paint supplier. Comes in a tan plastic bottle.

Don't ever stop and rub on just one spot. Pick the darkest surface (usually the face of the cabinet) and polish it. When it matches the other uncleaned parts, stop. Now go on to do all sides evenly, including the face. Keep going from part to part each time until you have the color you want - and it looks even. Then do your final polishing with Simichrome Polish - a pink paste that comes in a tube.

A Comment on Other Methods: There are techniques for doing this quicker on a motorized buffing wheel. BUT. If you catch an edge on the buffing wheel, it is goodbye catalin. If you over buff one spot it's hello zebra case.

There are also ways to wet-sand a cabinet with 600 grit paper if it is very dark. The problem here is sanding-down the detail, such as the shallow grooves that run around the Fada Bullet.

There are people who successfully use all of the methods, but I recommend hand-polishing for the beginner, or the person who only wants to restore one catalin set.

Assembling The Radio

Assembling the radio is easier and safer than disassembly. Generally speaking, if you got it out, it will fit back. But, if replacement parts have been obtained, be sure they fit in easily. You may need to file a bit to get a good fit. The cardinal rule is don't force anything to fit.

Screwed-on Trim Parts: Put the handle on first, using the proper screws. For thin parts, like face trim, be sure you have the original screws and just snug them up - don't over-tighten. You may want to consider gluing on face trim. It works and there are no screws to worry about. See below.

Glued-on Trim Parts: These are best installed with Dow Corning Clear Silicone Sealer. You can get it in the paint department of K-Mart or most hardware stores. It is also good for plastic dial lenses. Let it dry overnight. If any squeezed out around the edge, you can remove it with your fingernail without harming or discoloring the catalin. The part will never fall-off, but can be removed by sliding a razor blade under the part.

The Dial Glass: Make sure the dial glass, or the replacement has clearance. Don't force it in. Sand the edges if needed. You may choose to glue it in, with a small dab of Silicone Sealer at each end.

The Chassis: The chassis should have clearance to slide in easily. To get clearance, you should remove metal, not catalin. This means filing metal parts, such as the top of the speaker, the bottom edge of the chassis, and especially the bottom corners of the chassis. Many catalin cabinets curve-in at the bottom and the corners are where binding occurs.

Filing a chassis down is awkward work. But, it will go easier if you buy a new Nicholson "Mill Bastard" file and file along the length of the

metal rather than across the metal.

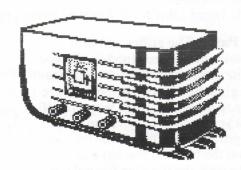
Some problem cases are: the Fada 5F60 where the output transformer must be replaced with a smaller one. And the Sentinels 248 & 284, where you need a round file to enlarge the "runners" on each side of the chassis.

When you finally slide the chassis in, check how the holes on the bottom line-up with the chassis threads. Shrinkage may have caused mis-alignment. It is better to enlarge the bottom holes, and use a washer, than to force a screw in at an angle and break the case.

Finally, be careful what screws you use to hold on the back cardboard. They should be straight machine screws, and they should go in easily by hand. How many of the 4-corner holes on the back have you seen broken?

Knobs: If the knobs came off, they should go back on easily. Especially if you cleaned up the metal shafts with some fine sandpaper.

Well, I hope your set will be beautiful, and that I have helped in some small way to make it a radio you will be proud of.



Kris L. Gimmy 1441 Nottingham Dr. Aiken, SC 29801