

# the ToneQuest

*The Player's Guide to Ultimate Tone* Report™  
\$10.00 US, October 2003/VOL.4 NO.12

## INSIDE

Meet Michael  
Burks...  
If You Smell  
Smoke,  
It's the Dumble  
Burnin'...

9  
ToneQuest  
Exclusive  
Interview...  
Dan Erlewine  
Part 2 plus...  
Dan's favorite  
guitars revealed &  
more

15  
Introducing the  
Balls M18  
Amplifier

18  
10 Inch Speaker  
Swaps  
What's hot —  
what's not

## Michael Burks

*Camden, Arkansas is a southern river town founded in 1824 on a bluff overlooking the Ouachita River, 50 miles north of the Louisiana State line. The Indian meaning of the word "Ouachita" is clear, sparkling water. In the days when the most convenient form of mass transportation was a*



Photo: Courtesy Alligator Records ©

*riverboat or a barge, southern river towns rocked. And people wisely congregated in river towns that were located on high ground for obvious reasons (hence the saying "high and dry"). Barrelhouses poured fresh beer from up river, whiskey from pretty much everywhere (including the local bootleggers), and where there was booze, there was music — blues music — and what Long John Baldry once described as he mimicked a London bobby that had arrested him for busking in the street as, "boodjie woodjie music." Well, whatever you call it, juke joints in the American South were rollin' and tumblin' every night til the sun came up, straight through the '60s. Our featured tonefreak in this month's issue, Michael Burks, was literally raised in the juke joints of*

*Camden, where the full-grown men called him "Little Midget." "Must be a midget — ain't no 6 year old boy can play guitar like a man..."*

*Now, perhaps you believe that there are no mistakes — that each of us lives our destiny — or maybe you chalk it all up to a roll of the dice — that our accomplishments and failures, husbands and wives, our children, and the legacy we will leave behind are the result of chance (a tougher, faithless road, unless you can find happiness embracing blind faith). Yet, everywhere we look, if we are willing to look, there are unmistakable signs of something more complex at work... As the*

old blues lyric goes, "I shoulda followed my first mind..." Mmm, well if you was suppose to have done that, that's what you would have done did!

As you read Michael Burk's story, pausing to process the timeless images snapped at shutter speed from distant flash-points in his life and times, you decide... Destiny or chance? If you need a little help, it's available on Alligator Records, titled "I Smell Smoke." Take a little ride on track number 2 — "One More Chance." With a nod to Alexander Dumble, Michael's manager, brother in tone and faithful ToneQuest subscriber, Dr. Tim Wilkin, and the turning tides (moon, turn the tides, gently gently away) we give you Michael Burks, of Camden, Arkansas. Enjoy...

**TQR:** Looking at some of your old pictures, you must have started fooling with the guitar at a very young age.



Yeah, I was 18 or 19 months old. My father taught me how to play that same acoustic guitar in the picture. He took two strings off of it and I kind of started playing bass at first — the first four strings — and then I started playing stuff like "Honky Tonk." Easy stuff — single string riffs. I got that down pretty good and he

put the other two strings on. By the time I was six, I was playing in nightclubs.

**TQR:** Where did you grow up?

Down in south Arkansas in a town called Camden, about 100 miles north of Little Rock. The nearest town was Hope, Arkansas, where Bill Clinton is from.

**TQR:** Was your father a musician?

My father, Frederick Burks, played bass, and *his* father played guitar. It was all kind of handed down to me.

**TQR:** So there must have been a lot of music in your house when you were growing up.

All the time — even when we lived in Milwaukee for about 13 years. My dad was playing all the time. He would always

have a lot of friends over in the basement and they would be down there jamming — could be anyone from Sonny Boy Williams to Albert Collins. He played with most of the local guys up in Milwaukee, but he also did a lot of things on the side. He played bass with Sonny Boy, and he was his *keeper* too. Sonny Boy liked to party, and Daddy would take care of him. He knew most of the great guitar players back then — everyone from Freddie King to T-Bone Walker to Albert King... All the guys that played guitar, my old man knew them, and he would take me to the clubs or joints where they was playing and let me sit and listen to them.

**TQR:** There is one great picture of you with a group of people all standing together playing. Looks like it was in a juke joint somewhere.



Those guys was locals that played with my dad a lot, and I played with them too. I might

have been about nine years old. The guy with the microphone in his hand — they called him 'Foot.' That guy was a great singer, man. He was like one of the best R&B singers in the area.

**TQR:** A lot of people missed that southern juke joint scene. Was it mostly a weekend thing?

It was seven nights a week. In my era there were juke joints on every block — sometimes two. Juke joints back then was plentiful, and you had one almost on every corner. Being a small town like that, you had them on both sides of the track. You had your juke joints and you had your bootleggers and everything. Even the bootleggers had a little place in the back of their establishments for the band to play. My Daddy would play and sit me on the bar stool or put me in a chair or something, cook me one of those old greasy hamburgers and get me a Coke and I would sit there and watch everything going on.

**TQR:** Did big-name players come through, or were they mostly local people?

No, a lot of them places were on The Chitlin Circuit — guys

-continued-

like Johnny Taylor and Little Milton and O.V. Wright, Jeter Davis, Albert Collins... Freddie King was a regular.

**TQR:** How did your playing progress from the time that your dad put the other two strings on the guitar?

I guess I started at the age of five or six years old. It seemed like after that first night I played in the nightclub at the age of six, I was just like a regular. I was one of the guys then — one of the group. I would come and sit in. I had to sit on a guy's lap because I was so little. They called me a *Little Man* — *Little Midget*. "Hey little kid, that's a *Little Midget*."

**TQR:** Because you played like a grown man?

Yeah... "Ain't no kid can play like that, so that must be a little old midget" (laughing).

**TQR:** What kind of guitar were you playing?

I had a Roy Rogers and Dale Evans acoustic guitar. Then my daddy bought me a scaled down model of a Stratocaster.

**TQR:** Who were your early influences and what kind of music were you playing as you were coming up, sitting in with all of these bands?

I listened to guys like T-Bone Walker, Freddie King and Albert Collins. That's who my daddy listened to. He actually used to pay me... When I was smaller, he would pay me a dollar, and one of the first songs I learned was "Hideaway" by Freddie King. He would give me a dollar and say, "If you learn this record by Freddie King before I get off work, I'll give you a dollar." So when he got off from work, I had learned how to play it. Then he gave me "Frosty" by Albert Collins. "Let me see you learn this, and if you do, I'll give you a dollar when I get off work." He got off from work and if I didn't have it, he didn't pay. He did that five or six times, then he gave me a *stack* of 45's. He said, "I ain't going to pay if you don't learn them, but I *will* whoop your butt."

Eventually, there wasn't no more paying. I think I broke the bank. But he found out — that's all he wanted to do is find out could I really do it? Could I really learn? And I was knockin' them *down*. When he came home, I could play it all backwards.

**TQR:** Did you listen to people like Muddy Waters and Howlin' Wolf?

No, I didn't get into those real rootsy groups. Most of the stuff we listened to was Lewis Wilson and the early, early BB King stuff, Bobby Blue Bland... Jimi Hendrix... early Carlos Santana... That's what I was hearin'. By the time I was 12 or 13 years old I was playing for everybody — Rufus Thomas,



T-Bone Walker — guys like that. T-Bone was one of the guys that I played in a show with when I was about 14 or 15 years old. I went out to the West Coast to visit my mother and we did this tour where we played in Watts in Los Angeles. Carlos Santana, Marvin Gay — I was right there in the middle of it,

and that was an experience for me to be around all of them guys. T-Bone was touring with the group I was in, but he wasn't actually playing guitar. He was supposed to sing, and I played all the guitar. He was pretty old, and that was about a year or two before he died. Actually, I did play one of the last shows that Jimmy Rogers did down in Georgia at The Blind Willie's Blues Festival.



**TQR:** Well, you should *still* be playing it. How did your guitars and amps change as you continued to play?

I got a '61 335. I paid \$450.00 for it. That was a lot of money back in... I think that was in '69. It's worn out now — never been re-fretted or nothing. Then I had an old Fender amp — what they called a Super Bandmaster Reverb.

**TQR:** Super Bandmaster Reverb? What the hell is that?

A lot of people don't know... It was a silver thing — 100 watts. It was a head. It was a twin Reverb head.

**TQR:** OK...Same head as a Quad Reverb, maybe. The Freddie King amp.

Yeah, exactly. That's why his dad bought it. That's what Freddie was playing. It was in a big cabinet. You would think it was a whole combo, but it wasn't nothing but the head.

Tim: If you look around, or the next time that you talk with

-continued-

Eric Johnson, he uses those head cabinets to put his Twin Reverbs in.

**TQR:** All right, so you had a '61 Dot and a Super Bandmaster Reverb and a 2x12 cabinet.

Yeah, and I was running it wide open (laughing). The only other thing I used was an old Vox... one of those...

**TQR:** Tone Benders?

A Vox wah-wah — the old ones. And I had two different ones... I had one that was all black, and then they had one that was black with a small chrome ring around the edge. I had one of both of those. Then Vox made an overdrive that plugged directly into the amp that was about the size of a matchbox and about twice as long. They didn't have the stompboxes back then. Vox had come out with this little thing you plugged into like a Tube Screamer thing.

**TQR:** How long did you stick with that rig?

I played that for several years, and I bought two humongous Peaveys — two 4x12 cabinets, and they had a head called a Musician 400, I think, and I used one of those. I actually had



two of those heads and two cabinets. That's what I played. It was pretty loud — 400 watts.

**Tim:** As a matter of fact, the old guy 'Guitar Pickett' is still playing one of Michael's rigs right now. I'll tell you what, they sound just like Albert King when he was playing through those Acoustic amps. He even has one of my speaker cabinets, too. He won't let it go. He won't play nothing else.

**TQR:** Kind of like BB King with the Gibson Lab 5.

Yeah, right. I have *two* of those L5's. I just run up on those amps in a music store one day. Just plugged into it and I bought it. I fell in love with the thing and I bought another one. I actually owned three of them at one time. I didn't have one bit of problems with any of 'em, and I used them for a long time. The only thing I did was change speakers in them. I put the EV speakers in them because the regular speakers didn't hold up. Matter of fact, I have the EV's in one of my amps right now. I've been playing those speakers for about three or four years and they ain't even hurt — they're just

getting character to them now.

**TQR:** We left you at that festival in Watts. What happened after that?

I went to Arkansas, and all I did was play in juke joints. Guitar Pickett is actually my cousin, and Pickett had a ten or twelve piece band with a four or five piece horn section and sometimes two drummers. He had a *hell* of a band. Lot of times I would play with him. As I got bigger, my dad had started getting his own juke joints, and me and my brothers was pretty good sized boys by then, so we started our own band. We were the house band for my dad.

**TQR:** Still playing the same kind of music or...



Playing the same kind of music, but we mixed it up. We didn't only just play blues — we played

R&B and Rock. We would play something by *Grand Funk Railroad*, Carlos Santana, to *The Doobie Brothers*... We mixed it up. One thing my dad did — he didn't limit it. He didn't want us to limit ourselves to one style of music. He wanted us to learn to be versatile, because if you are a side band, you might not get a job playing blues. You might get a job playing bluegrass or country or rock & roll or whatever, but you can't limit yourself. We learned it all and we had a vocabulary of songs that you wouldn't believe. One hundred songs wasn't nothing for us. Then things got slow and the disco era came along. Being from a small town, it kind of wiped everything out for little local bands. They thought they was doing themselves a favor by having DJ's, and the bands just had to quit. They wasn't playing no where, so most of them had to get a real job. By that time I was a young man, and I caught myself getting married and I had a daughter. She is 16, going on 17 now, and I started working for Lockheed Martin. They build rockets and rocket launchers and all that. I worked for them for 13 years. Up until '93 or '94, I had laid the guitar down. It had been about 11 years since I had picked up the guitar.

**TQR:** Are you serious?

Yeah. I didn't pick it up. Didn't pull it out. Didn't play it or

-continued-

nothing. The only time I seen that guitar was when my daughter was small. Kids are curious, and so it was up under the bed and she would pull it out and she was like, "Daddy, what is this?" "It's Daddy's guitar." I would play a few notes for her and put it back in the case and push it back under the bed, but that was it.

**TQR:** What happened to get you back into it?



I came to Atlanta, Georgia to visit my brother, and he took me to Blind Willie's Blues Club, where Chick Willis was

playing that night. Old Chick was playing and my brother talked to Chick and he let me sit in. Chick said, "We're going to take a break and when we come back we are going to let Michael Burks sit in and then we're going to send him on back to Arkansas." I said "Whatever," you know, and they took a break for about 15 or 20 minutes and they came back off the break and let me play. I wondered why I brought that old guitar with me. I had that old 335, which had the same strings on it from 11 years ago. I hadn't touched that thing, but I was pretty decent, and people got a kick out of it. Being in front of the crowd like that in that little old packed club... I guess that woke something up in me. They tried to get me to stay in Atlanta, but I wouldn't do it. I went back, but I run into an old friend of mine who was a drummer. His name was Lance Womack and Lance had been living in Austin for 10 or 12 years. He moved back home and he invited me to come over to his house and me and him jam a little bit. We did that for a couple of weeks, and we found an old guy that played bass, and he started jamming with us every week. Then there was a local club in my hometown that wanted us to come down one weekend and play a show. We had about 15 or 20 songs that we had worked up, and it all started from that. We started playing that little old club and the next thing you know, it was another little club that wanted us to play, and another little club...

**TQR:** So this 3-piece band that you put together in the early 90's just developed from playing small clubs to festivals.

Yeah, we started playing small towns like Hampton, Arkansas. They have a little festival there that they call *Hog Skin Holidays*, or something like that. We found out they had

a blues jam on Tuesday night in Little Rock, so we went up there one night and played, and they had a competition where several bands would compete against each other. By that time, I had found this keyboard player — a young kid named Michael Davis. We thought we had a little old thing going on, we got in that competition, we won, and they sent us over to Memphis. That was around '93. That's when I first met Sean Costello and Susan Tedeschi. I think we won the Albert King Award or something like that in Memphis.

**TQR:** Did you still have your day job?

Yeah, I still worked for Lockheed. I was trying to fit all this in between. I was working five days a week, 40 hours, over five days a week. Then the plant changed and they went to a four-day work week with 14 hours a day, and that gave you 40 hours and you had Friday, Saturday and Sunday off. That was real good for me, because I could play on the weekends and I had time to get there and get back. We won that first award and actually, one of the promoters from the *Spring in the Blues Blues Festival*, Sam Veal was there. He seen the show and he liked it, and he told me he was going to get me a spot on his festival. This was supposed to be like 100,000—150,000 people — a big thing for us. Then I got booked at the BB King Blues Festival. We started doing stuff like that, and things started happening. I got on a show with BB King for his 71st birthday with *The Neville Brothers*, *Storyville*, Dr. John, Elvin Bishop, Jimmy Vaughan, and all these cats was on this show. For a poor country boy, I was feeling pretty good. Everything started falling into place.

**TQR:** When did you cut your first record?



That first record was actually done around '96 or '97. We were trying to book ourselves in clubs, and you have to have a promo package and a CD. We didn't have a CD, and we actually recorded the album at my keyboard player's house in his bedroom. We had this old 8 track machine and that's what we recorded that whole album with. There was one channel for

the bass and one channel for the guitar, one channel for the keyboard player, and then we tried to put the rest of the channels on the drums and leave one channel open for the vocal parts.

-continued-

**TQR:** Well, sometimes things turn out better when you have less to work with...

Yeah, we was in one of those old houses with the 12 foot ceilings, so we got a pretty good sound. I took my amp, which was a L5 Lab Series and put it in one of the big closets.

**TQR:** To get some reverb...

Yeah. We worked on it until we got it finished. The songs I wrote at the time weren't really written down. I had a little micro recorder, and every time a song lyric came to me, I sang it into the recorder so I wouldn't forget it. When it came time to record the CD, it was like, "Well, what's the next song?" and I would play back the song on my recorder. That's how we learned the songs. Man, I think about that a lot of times. It worked, and it got a little airplay. About a year or so later I got worried that I had been nominated for a Handy Award. Are you sure you have that right — *me*? "Yeah, for your album *From the Inside Out*. You got nominated for *Best New Artist of the Year*." Man, that really knocked me off my feet! That was a real turning point. Then we started getting more gigs. We started playing not only in Arkansas, but over in Missouri and Oklahoma, and a little bit out in Texas.

**TQR:** Where did you cut *I Smell Smoke*?



*I Smell Smoke* was cut at the same studio in Memphis — at Ardent. I used the same crew on *I Smell Smoke* as *From the Inside Out*. Jim Gaines produced it. Steve Potts was the drummer,

Dave Smith on bass, Ernest Williams played B3, Vasti Jackson was on rhythm guitar, and a guy named Billy Gibson did the harmonica work on "Snake Eggs."

**TQR:** You've obviously changed your guitars and amps from the 335 and the L5...

I was wanting to get a better sound, you know? A better sound and a better tone. I didn't want to get it too clean, but I didn't want to get a real dirty, gritty thing, either. It was just me trying different stuff.

**TQR:** How long have you been playing the Flying V?

I bought the Korina V in the early 90's. I finally got something that I really liked between the 335 and a Les Paul. I always liked the Les Paul, but I didn't like the scale length. I liked the tone, but I liked the neck of the 335 because it's long... You've got the long neck and you've got the tone of the Les Paul.

**TQR:** Yeah, playing in high A is a squeeze on a Paul... OK... How did the amps change?

**Tim:** The Line 6 2x12, which is the first of the modeling amps that came out about '96, is 100 watt stereo. Michael just got it set on his own pattern — it sounds like something that he likes. He came up with his own preset on it.

**Michael:** Along with the L5, I was using both of them. I was playing two L5's, but when I got the Line 6, I cut it back to just one. I used the Line 6 for its reverb and delay.

**TQR:** And Tim, you told me that is a 120 watt Matchless head that Michael has been using on the road.

**Tim:** It's a '94 *Super Chief* 120 watt Matchless head. They only made 50. The one that Michael is playing is the



only one that I have ever seen. We had to get Phil Jameson at Matchless to build a 4x12 cabinet because they were long out of production when I bought it. Michael and I met one another about three years ago when I was playing with Guitar Pickett, and Michael came out to see us play. I had a Matchless that I was playing when I was with Pickett, and Michael loved the tone on that. He actually borrowed the head and took it out on tour with him. That's when he started using the Lab Series and one of my Matchless amps. Then I found the big Matchless head. Michael tried it out with a Dumble cabinet and it just kicked ass. It was one of those things — it sounds good and you go with it.

-continued-

**TQR:** And what kind of speakers are you running in it?

**Tim:** It's got four Vintage 30-12H's in it. I got the idea to put those speakers in there after reading the *ToneQuest* article with Dr. Z. I thought this would have to work in the Matchless. Michael and I installed the speakers at my house one day. We plugged in and looked at each other and it was like, "This is the shit!" And it is.

**TQR:** Which model Dumble is he playing?

**Tim:** The Overdrive Special. It's a 2002.

**TQR:** I didn't know Dumble was still building them.



**Tim:** Those that know, know. Michael is going out with

the 4x12 Dumble. I'm going to send him out with that and the Matchless. But looking at the ultimate setup, Dr. Z is building Michael a MAZ38 Senior. We're going to run the big Matchless and the MAZ38 Senior, eventually, and I think that's going to be the ultimate road rig.

**TQR:** Indeed. And loud as hell, which seems to be the way Michael likes it. What about his other guitars?

**Tim:** Oh, he's got guitars... Michael's black Mongrel Stratocaster really is the hottest thing. Every time that I would go see his show, I'd say, "Here, try this '63 Stratocaster, try this '57 Gold Top or try this old 335." Every time he would play those guitars and then pick up the Stratocaster, he had a better tone with the Strat.

**TQR:** Does it still have EMG's in it?

**Tim:** Yeah, the EMG's really compliment his style of playing.



After a little while, I hit myself upside the head and thought there must be *something* for Michael. I called EMG and said, "Hey, can you make us another set of pickups like the ones



he has?" I put them in that red Stratocaster, which was originally my guitar. Michael comes by and he had never even seen it. I

had it fixed up, and I had my own version of what he had been playing. He saw it, one thing led to another, and he talked me out of the guitar and took it out on the road. I also found the Flying V that's on the cover of the *I Smell Smoke* album, used, on Ebay. Michael and I were looking at Ebay and it was the same as the Sunburst V, but blonde. We had never seen a blonde V before, and I had only seen it in the catalog. They made them for one year, and it was listed as a natural 1984 'The V.' Michael really likes it now. It sat around my house for almost a year because he didn't like the tone of it with the original pickups. I got to messing around with it and I hooked it up with EMG's, and he's been playing that guitar ever since.

**TQR:** What model of EMG's are you using?

**Tim:** '85's. They are stock, like right out of the store. It's got an '85 in the front and an '85 in the back, and we also installed an SPC mid-boost. The reason I put those in there is because every time Michael would have a flying date to Europe, he didn't want to carry a boost pedal. The guys out at EMG suggested that instead of a boost pedal, we just use the SPC. It's like Eric Clapton's signature Strat boost. Every one of the guitars is a little bit different. I experiment a lot, throw it out there, and if he likes it, he keeps it. On his black Strat we've got an 'Afterburner' that produces 20dB gain. It has a push/pull pot that turns it on and off. It's in his 'Mongrel Stratocaster.'

**TQR:** Is that the extent of the guitar tweaks you've done?

**Tim:** Well, on those two guitars. He also uses graphite saddles to keep from breaking strings, and René has refretted everything with jumbo fret wire.

**TQR:** René Martinez... Stevie's old tech...

**Tim:** Yeah. And one of the guitars has the new EMG passive pickups in it — HZ's.

-continued-

**TQR:** What's Michael's favorite guitar?

**Tim:** The blonde is his favorite of the Flying V's — the blonde Flying V with EMG's. But I think his *actual* favorite guitar is the Les Paul that he stole from me (laughs). It's a 2002 Historic Reissue and it's got Burstbuckers in it. Completely stock, but it's a hot one. It's got 8.4 K in the back. He took it out of the house and it's been gone on the road a year now. Most of the songs on the *I Smell Smoke* album were recorded with that... The red Stratocaster with EMG's and the Les Paul with the Burstbuckers are the two guitars on that album.

**TQR:** Which guitar did he use on "One More Chance?"



**Tim:** The red Strat with EMG's. It's got a real fluid, creamy sound to it, which is kind of Santana-like, if you think about it.

**TQR:** That cut in particular really captures his signature tone. There is a *percussive* quality to it.

**Tim:** I think that's the Dumble.

**TQR:** Well, it's the Dumble, and Michael, you have this technique where you rake the strings before you fret the note. After I listened to the CD the first time, "One More Chance" really struck me as being a great example of your signature tone. When you hear that song, it's nobody but you.

Yeah. It's my own thing. I don't think about it. It's just something that I do automatically when I play. But the tone is basically that Dumble and the Matchless, and 80% of *that* is the Dumble.

**TQR:** The first time I put that CD on, I thought, "Man, this guy's guitar sounds like a *horn*" (laughter)... Sounds like he's *blowing* the notes.

Everything has the EMG's in it but the Les Paul. The notes sing. I listened to a lot of recordings and I want the notes to sound like a singing melody. That's the way I always liked it, and I finally got the guitars and the amps to *make the notes sing*.

**TQR:** I think that Dr. Z is going to work out really well for you with the Matchless.

Yeah, when we're in smaller clubs, I'll still get that singing tone, but at a level that the audience can stand, and that I can handle, too. It's a 38 watt amp...

*Editor's Note: We spoke with Dr. Z about Michael's MAZ38 Senior and Z explained that after listening to Michael's CD,*



*he pulled his usual choice for preamp tubes, JJ Tesla 12AX7's, and replaced them with 12AX7EH's. Why? The JJ's have a little more gain, which Z didn't think would be needed with Michael's EMG pickups. According to Z, the 12AX7EH's are very similar in construction and tone to the old GE 12AX7's, which are a*

*slightly clearer, sonically neutral tube that lack some of the upper midrange crunch of the JJ's.*

*The speakers in Michael's MAZ38 are the standard combination of a Celestion Vintage 30 and a G12H 70th Anniversary. Michael is also having a Z Best extension cabinet made with two Celestion G12H100W speakers (provided by Tim Wilkin).*

**TQR:** The guys in your band now are not the same people you started with, right?

No, they are not the same guys that I started with, but they have been with me for the last two years. I actually just changed bass players about four months ago. My other bass player, Don Garrett, had been on the road with me for the last couple of years and I guess he was pretty well tired and wanted to be around home. I've got a great organ player, Wayne Sharp. Wayne is a veteran. He played with Elvin Bishop and has done a lot of studio work. He also worked with *The Allman Brothers*.

**TQR:** Well, as soon as you see that B3, you know he's not screwing around. That's the sound, man. Who's playing bass?

You've listened to *The Cate Brothers*, right? They used to back up Levon Helm and Ronnie Hawkins. John was the bass player for The Cate Brothers for about nine years. The drummer, Cecil Parker, played with Albert King, and he did a lot of work with old Topsy Davis.

**TQR:** Michael, what's ahead for you? You've been playing like, what — 150 gigs a year?

More like 200 gigs a year. What's ahead is mostly to keep on

-continued-





recording, you know, keep putting out some great recordings — even better recordings. I'm my own worst critic. I feel like I'm

still growing. I haven't got to that point with myself where I'm satisfied with my playing or singing, so I work hard at both to improve. That's it — to keep getting better. My plan is to keep on writing more songs and I'm looking forward to keep on recording and touring. Each time I hit that stage, it's my world. It's like someone turned on a light switch. **TQ**

*Michael's current effects include: Real McCoy Picture Wah (Geoffrey Teese), Z Vex Wah Probe, Klon Centaur, Boss Digital Reverb & Delay, Voodoo Labs Power Supply*

[www.michaelburks.com](http://www.michaelburks.com)  
[emgpickups.com](http://emgpickups.com), [drzamps.com](http://drzamps.com)

## Dan ERLEWINE PART 2

**TQR:** What are some of the most memorable guitars that you have had in your shop in terms of their character, vibe, and what made them so?

The '59 White Falcon, Albert King's original '58 Flying V, a real Moderne which had the neck replaced by Gibson and which later caused considerable controversy, a 1937 Gibson J-35 that *ruled*, an early '40s D45, and a small-bodied (early 1930s?) L5 that I restored; it had the loveliest tone. What made these guitars great was that they had been played heavily — lots of music had passed through them — and they had been cared for well enough that they retained their structural integrity. Of course, there were many, many more.

**TQR:** What are some of the most challenging and ultimately satisfying repair and restoration jobs you've tackled?

That is a tough one! I have enjoyed *so* many repairs over the years. Frankly, I still take great satisfaction in doing a great fret job, nut replacement, and setup. As for challenges, more than once I have built complete pegheads for valuable electric

guitars that required it. And recently I restored a 1928 Gibson L1 (the type that is shown in the Robert Johnson photo of him in a zoot suit with his legs crossed and sitting down). That was a 'detective job.' It was missing the bridge, but clean. Someone had carved a crude version of the bridge, which



probably fell off and was lost and only bolted it on (no glue). This was a recent job. I had to research through friends' and 1920s catalogues to know what the bridge looked like. I knew it was a strange contraption, but I wasn't sure how it looked. I rebuilt that top under the bridge, plugged a zillion holes with an invention of mine that is perhaps one of StewMac's greatest tools (the Bridge Saver), made the bridge, did the fretwork and nut, and brought it to life. It is a fine guitar.

Really, I do satisfying repairs all the time. One this year was a '62 white Gibson Les Paul (the 3-pickup, SG-shaped model). I plugged the holes where someone had installed a stop tail; touched into the existing finish and rebound the neck (the binding had been removed). I added .030" of ebony to each side of the fretboard before the new binding went on to give the neck the shape it originally should have had. This one had been way over-shaped at the factory where the binding rolled into the fretboard. If you know those old necks, most are quite wide in the hand.



The tremolo arm had broken, and it had been poorly welded. I built around the crooked weld with 'JB Weld' catalyzed resin and painted it gold. It matched pretty well, and it works, too. In the picture, you can see the repaired arm, plugged, painted, and finish-checked top, and the ugly original string claw. I found a second tremolo with a good claw (its arm was broken, too) and sent it and the cover to be gold-plated. I also replaced the sideways vibrola string claw, which had been filed away to nothing because

someone must have removed the tremolo at one point and dismantled it. They put it together upside down, and, of course, it wouldn't work because the

-continued-



string-to-bridge angle was lost. I was lucky to find another entire side-ways vibrola for parts (it also had a broken arm, exactly the same). It was nickel, however, so I stripped the string claw and had it plated.

When I was done, the guitar looked original because I recreated the cracks in the finish by following them with a knife (you could see the original finish checks under the finish I sprayed, so I followed them). The tailpiece looked great too!

Not to brag, but I have jigged and fixtured for some pretty complex repair jobs over the years — one-of-a-kinders, often. That's one of the thrills of repair work (compared to building). There is such a wide variety — we never get bored. It's somewhat hard to make good money when you do structural repairs that take days just to figure out how to do it. Often we repair the 'impossible' because that is our calling. I mean that, sometimes we repairers have a duty to the guitar and to history. The ability to do some of these repairs does not come early in your career. When one finally reaches the skill level and has the knowledge base to execute certain repairs, it's very hard to turn a guitar away. I am sure I'm not the only repair person to take on work sometimes for almost nothing, just to be able to get my hands on the instrument for awhile.



I guess I had a great time this year working on a Les Paul Junior. The neck set was not pitched back enough, and consequently, the strings were high and the bridge was almost as low as it could go. I managed to pull off a few tricks and got the bridge low enough that the action was good. Trouble was, the strings hit the pickup pole pieces and cover. I thought about it and gave it this fix:

\* I routed under the pickup to lower it into the body the right amount. However, the original cover was far too tall. There was no replacement cover that would be right for it now. What to do?

\* I took a StewMac tall replacement cover, cut the bottom off and saved it, and then took a slice off the remaining part to 'shorten' the cover.

\* Then I glued the two pieces back together with acetone-based glue.

\* After sanding it out completely, I buffed it.  
\* Then I made some more.

Just as with the pickup cover fabrication, I enjoy pulling off the weird small jobs that are difficult to do. I love surprising the customer. I'm certainly not the only clever repairer out here by any means, but some of my peers have been doing this so long that, well, it's like we've already tried everything that doesn't work. That makes it much easier to make a good decision. And by peer group, I mean luthiers from all over the world — Yasuhiko Iwanade in Tokyo, Japan, Stephan Sobell in Hexam, England, Abel Garcia in Paracho, Mexico, and hundreds of North American builders and repair people — from Ken Parker and Bill Collings to TV Jones and Paul Reed Smith. Through my job as a representative of StewMac, I have been fortunate to make more than just an acquaintanceship with many of the greatest guitar people on the planet. These friends are part of a great knowledge base, and they don't mind helping each other — even little guys like me (that's the way I feel when calling a heavy-hitter like John Monteleone for advice).

An example of a weird, small job that was both tricky and fun to do was a brand-new, left-handed Les Paul R8 Historic that wouldn't quite intonate. Close...but no cigar. It was the low E-string that remained flat even with the saddle facing forward. I had never tried this one before, and it was so simple:

\* Remove the saddle and file or mill an undercut ledge and recess for the shoulder of the screw.

\* By doing so, I gained a full 1/16" of forward travel!

These kind of jobs thrill me, and that's all I need. That trick made my day! (Sometimes I wish I had someone to show it



to, though). That's one thing about repair work —

when you do a great job, nobody knows! The customer doesn't realize how hard it was (they expected it), and they certainly don't want to tell someone that their guitar was broken. So, some of our best work goes unseen, as it should be.

Sometimes a few of us call each other up and describe what just happened, to a friend that can comprehend. I remember Bryan Galloup calling me one day and saying, "Dan, I just nailed the perfect orange on a 6120 — I had to tell someone!"

Oh, I just remembered... I (we, as you shall see) restored the face of a '54 Strat that Dave Hussong, of Fretware Guitars owns. (Dave is, to me, one of the most honorable, smart, knowledgeable, and trustworthy veterans of the vintage guitar

-continued-

market). The previous owner, the brother of Robert Ward (a mentor to Lonnie Mack), used epoxy to glue about 75 silver dollars to the face of his Strat (that he got from Robert), so that it would be a good showpiece on stage under lights. My job was to remove the coins and make the Strat look original again. At best, I could only remove some of the coins cleanly. Some took wood with them — small divots, or craters. The fix here involved my cousin Nora Sturges. At the time, Nora was pursuing her master's degree in Art at Ohio University. Today, she is a well-known painter and an art professor at Towsen College in Towsen, Maryland. Nora must have been



in her mid to late twenties at the time of this repair. I stripped the face of the guitar, inlaid somewhat-matching wood into the many pockets left from the coin removal using the Japanese 'scoop technique' taught to me by Yasuhiko Iwanade (author of *Beauty Of The*

*Burst*, and famous guitar craftsman). I also made a male and female plug-cutting set for round plugs, then wondered how



to hide the fills. Idea! Nora excels at fine-detail painting in her work, and many of her famous paintings have thousands of tiny small blades of grass and leaves. "Nora, could you paint a picture of this ash wood over the face of this guitar and match all the grains and color?" "Yes, cousin Dan, I can..." and she did. It was so fine! When she was done, the entire face of the Strat looked like the original bare ash. Then I

simply sun-bursted it as they might have in 1954, over a *painting* of ash, and then blended all the finish into the dark edges of the guitar at the rollover edge where the top meets



the sides. After much drying of the purposely thin lacquer finish, we aged the top (Nora was better at that than me, and I thought I'd invented the technique).

Together, Nora and I pulled off a really good one I guess, because four years later I was visiting Dave Hussong and picked up a nice old Strat. "When did you get this one, Dave?" "That's the one you refinished the top of for me," said Dave. WOW! I didn't even know it! I said, "I didn't



think I could do that good of a job!" I simply could not tell at all. I couldn't see the finish blend; there was no shrink-back or anything! Another thing she did was paint and touch up the decal. Some might have preferred it left alone, but she's like a museum restorative artist — she knows all the mediums

and how to use them for effect. She copied on old decal and touched up all of the missing parts. Again, you wouldn't know it wasn't real. This job came out so well from teamwork and knowing when to call in a specialist rather than trying to the whole job myself. We are still in touch, but I don't have Nora in the shop anymore (sad to say).

**TQR:** Can you describe your perception of the different character of various woods used in acoustic and electric guitars, such as ash vs. alder vs. mahogany, different types of spruce tops, rosewood vs. mahogany backs and sides, and any other under-appreciated wood species that make great-sounding guitars?

Again, I leave this to the wood experts. Ash is a hard tone, alder is sweet, mahogany is sweet (that is why I always loved Martin D18's, OM's, and concert-size models with mahogany back and sides. Also, why I favor Gibson round-shouldered jumbos and L00 size). Gibson is probably my favorite, because I can buy a guitar with all the tone I want at an affordable price. I have loved some rosewood Martins, but rosewood is a harder, 'darker' sound than I am after. Mahogany does it for me nicely. My old Michigan buddy Tim Shaw, who worked for Gibson for many years and now works for Fender/Guild once said (and I love this quote, it's so perceptive): "When you hit a chord on a Martin guitar it sounds like a trained choir singing together; when you strike a Gibson it sounds like a family singing together." How true!

**TQR:** What role does the finish material used (and thickness) play in determining the tone and resonant sustain of acoustic and electric guitars?

Again, there are experts on this. I am a veteran lacquer man — nitrocellulose lacquer — and not too thick. I think many of my favorite tone-producing guitars would never have been so with a modern polyester or polyurethane finish. Shellac and varnish as used in the early part of the century can't be beat. Today, those finishers who use and *can* use shellac as a French polish get tremendous results, tonally. Also, I think 50 years of drying and cleaning of the instrument (which thins the finish) adds to the quality of sound we hear. We love the

-continued-



old guitars because they have lacquer finishes that are dry and brittle. Some makers today are putting on very thin, very labor-intensive lacquer finishes that are thin.

I have also recently been very impressed by water-based finishes. At StewMac, we have pursued them since their inception, starting with the original 'Hydro-coat.' It took around 14 years to get there, but I just used the StewMac *Colortone* waterbase brush-on varnish to finish a mandolin. The finish is thin, crystal-clear, hard, and buffed out like lacquer. I mention this because so many people have tried water-base finishes with little luck. I like to get the word out that it looks good and sounds good — especially for those not able or wanting to get into expensive spray finishing equipment.

**TQR:** Which guitar models would make your list of reasonably priced, under-appreciated vintage guitars (acoustic and electric)?

For new guitars (let's not leave them out), I love the Mexican-made Strats. Many imports (Epiphone, for example) give a basic good guitar that simply needs great setup and perhaps better pickups and hardware. The price is right, though. For an acoustic guitar, I have been buying and recommending the Seagull S6 line for many years as the best possible guitar for starting out. They sound like old Gibsons to me, right off the shelf. The S6 is a round-shouldered Dreadnought, and the S6 Folk is a concert-size. I prefer round-shouldered Dreadnoughts (alá Gibson J35, J45, J50) to the square-shouldered Martins.

For vintage acoustic guitars it would be Gibson and Kalamazoo models from the '30s through the late '50s. Also, Harmony Sovereigns (large and small), and of course, a number of American made guitars that abound, like Washburn, Bay State, Bruno, etc.

For vintage electrics, I like Danelectros, numerous Harmony and Silvertone, and Gibson Juniors, Melody Makers, and other 'lesser' models (although Juniors are in high demand these days). Again, it's the mahogany I like, and lots of it.

**TQR:** Price aside, what are your personal favorites and why?

That's another tough one! Do you mean vintage guitars, or are you including new guitars?

**TQR:** All of 'em.



One advantage of being in the repair business since the early 1960s is that I have seen almost every brand and model of guitar extant. Not all, mind you, but a bunch. So I must say that I have way more favorites than a lot of people might, since I have worked on so many and had the opportunity to play them set up well — both unplugged and plugged — in the peaceful atmosphere of my shop rather than a music store or vintage store. Just some favorites that I have owned at one time or another are: (the \*\* indicates that I own it today).

1959 Gretsch White Falcon  
Early '50s Gibson ES—350 with thick body, spruce top, and 24-3/4" scale; P90s. I don't know *what* it was, to be honest.

Two '59 Les Pauls (one went to Bloomfield)

Three goldtops: A '54 (Bloomfield's); '56, & '57

1956 Danelectro U2 \*\*

1958 White Strat

1957 Sunburst Strat

1956 Sunburst Strat

2002 Gibson R9 Historic \*\*

1992? Gibson Firebird re-issue \*\*

(I installed Maestro Vibrola on it)

1999 Gordon Smith Graf \*\*

1999 Korina made by Trev Wilkinson \*\*

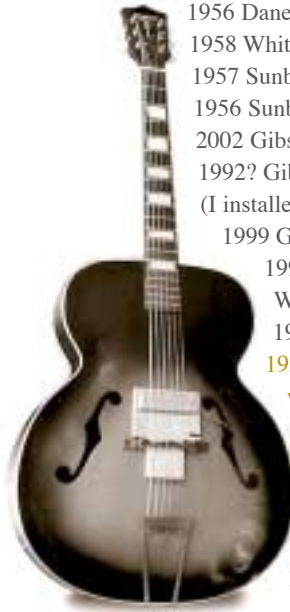
1996 Fender Bajo Sexto \*\*

1953 Kay hollow body acoustic with Teisco pickup attached (a favorite)

1960s Silvertone Danelectro set up for slide \*\*

1939 Gibson J35 \*\*

1936 Gibson L00 (Black with white guard) \*\*



**TQR:** By contrast, what are some of the most trouble-prone models of the past, and why?

Gretsch is notorious for bad necks and bad neck joints even during their 'good' years, at times. They're still worth pursuing, but have your wallet out. I have dismantled many Gretsch neck joints to repair that area. Any plywood guitar from the past 35 years is prone to trouble with the top and the neck joint. Most of their neck joints were not built to come apart easily (and they don't). Mosrites can be a nuisance. '70s and '80s Gibsons often — *especially* the acoustics made in the '70s. I don't consider them to be good investments unless you really know what to look for. During that era, just because it says Gibson does not necessarily mean it's 'Good Enough.'

**TQR:** We haven't talked about them, but since you are also a *player*, what amps do you like?

Since 1962, the amps I have used are: Gretsch Electromatic;

-continued-

Fender Concert, a tweed Twin, Pro Reverb, blackface Twin, Princeton Reverb, Deluxe Reverb, Super Reverb, and a '61 Bassman blonde piggyback. Another favorite was a '69 Guild amp that Herb David owned. Today I use a ToneKing Imperial, Gibson GA-6 (two of them), a '52 Deluxe, and a Magnatone 260.

**TQR:** Describe the type of work you are doing today, and what kinds of projects you enjoy most.



Last year I took a leave of absence from Stew-Mac duties for several months and filmed a new digital DVD/Video footage to replace the *Dan Erlewine's Guitar Hospital* video repair series that I taped in 1983 — that was just too long ago! Times had changed, plus, at StewMac, we have professional digital equip-

ment. I really have two jobs, in a sense, but they are inseparable. My 40-hour 'day job' is working for StewMac, but except for meetings, road-trips, conventions, and some heavy-duty R&D that I do in the StewMac shop, I work at home (either on the computer or in my shop). The majority of my part of StewMac R&D I do in my shop. So, I am a weekend warrior as a repairman, except that I have two men working with me that have been with me for years. Between the three of us, we get whatever needs attention taken care of. Both these men — Elliot John-Conry, and Adam J. Fox, were trained by me, and they specialize in fretwork, nuts, and setup, just as I do. I still have to get in there and do my share of the work, too. I am the shop's project manager and I know exactly what's going on at any moment. I do the advanced woodworking and machine-work, and lots of fixturing. I may level a fretboard in the neck-jig, and then Elliot will fit all the frets, then I may come back in and fret half of it myself, then go off and Elliot will finish it, and perhaps Adam will level the new frets and dress them. The three of us sometimes study a problem guitar in the neck-jig together, deciding what approach would be best. We share the duties quite well, and any of us could take up where the other left off on a job. Elliot has worked with me for seven years, and Adam four years. Nobody cuts frets and files them better than Elliot, and nobody can dress and polish frets better than Adam (not even me). So we compliment each other on our most important work — the day to day task of making guitars play their best. So, thanks to having good help, our repair load goes as normal — any repair that comes along, really. Some repairs I refer to others, some

I turn away, but not much. It's the bread and butter of the trade, plus such work brings many great guitars through my shop. As soon as you start turning people away, I think word gets out and work stops coming to you. My shop receives a lot of brand new guitars for deluxe setup, which often includes a new nut, usually a fret level, and always careful attention to the bridge.

The past two years I have been doing more than the usual amount of tool designing for StewMac, and we've been on a roll. I've also been busy this year building our kits and writing instructions for them. I really enjoy bringing a new tool to the StewMac catalogue. This year, for example, I have been very involved with three new-tool projects of which I am not only proud of, but these are tools that I have needed all my life.

One is the proportional String Spacing Rule designed by Kevin Ryan. If I hadn't spent time admiring his guitars a few years back at an ASIA Symposium (Association of Stringed Instrument Artisans convention), and chatting with him, I would never have known about it. Simply put, the scale has



graduations between strings of .002" and .004". We took what we thought was the smallest distance between the E and B strings, then added those numbers to it, made a mark, then added again across the fretboard. You end up with string slots that

are proportionally spaced — not equal between centers, and not equal between strings. It is the way I would make a nut 'by eye.' Check it out on the StewMac web site.

Second is the String Action Gauge, a tool that was initially intended to have been a punch-out tool in the back of my latest book, *How To Make Your Electric Guitar Play Great*. The



book does have a set of punch out radius gauges, but the measuring tool never made it because the printer couldn't print the fine tolerances.

Finally, two years later the tool exists in stainless steel. It is so very handy! The string-height gauge reads in thousandths of an inch, and with the long edge of the gauge resting on the fret tops, I can know exactly what the string clearance is (I'm not just reading something like 3-1/2/64" and part of one of the little black lines).

-continued-



Third is the Bridge Saver. This tool is of major importance, and I am proud to say was super well-received by people that are important to me (the C.F. Martin repair team, Frank Ford, George Gruhn's shop, Charles Hoffman, to mention a few). The Bridge Saver is a bridge pad and top-plugging tool for acoustic bridge repair. It cuts a dome-shaped hole into the bridge plate from the inside, while the operator turns the cutter from outside the guitar. The female cutter makes matching domed plugs to fill the holes. With this tool, I can avoid removing the bridge pad, plugging it perfectly. If the bridge is off, I can also plug the top. The two dome-shaped plugs meet on the glue line between the bridge plate and top, hence the bridge plate can be removed at a future date

Fourth, and it's not in the catalogue yet, is a tool that will have as great an impact as the Bridge Saver. It is a set of tools for repairing broken-off and stripped truss rods. The two-tool set consists of a plug-cutter end-mill that fits over the truss rod and removes wood around the rod. With the 'tunnel' made, next you use the two-fluted miniature die to 'chase,' or clean the thread, or to cut a new thread. This tool was a gift to me from my repair friend Frank Ford. He heard me describing the need for such a tool (and wanting one), and he made it as a surprise. Frank is quite the machinist. His wasn't hardened properly and couldn't actually cut the thread, but it worked for cleanup. Plus, it gave us a model to work from so that we could prove that it *did* work. Ours is



made by a major die-manufacturer, and it is hardened. It has only two cutting teeth, which allows it to be small, yet still clear-chips well.



I've thought about having such a tool for 30 years or more. I always assumed that it would be impossible to make a thread-cutting die with a diameter that small. I was wrong! Right now the die cuts 8-32, which is a common (Gibson and some Fenders) truss rod thread. There are other threads sizes used by Fender and

some others. If the tool turns out to be popular, we will offer others sizes.

Something that came to me in the dentist's chair a year ago last Thanksgiving was that perhaps this stuff they were filling my tooth with (they have all the colors of teeth — or bone and ivory, I was thinking) would work to fill nut slots on old guitars with original bone or ivory nuts and only a slot or two that was too worn. They cure this material with 'blue light,' sort of like a UV-cure, and it's *instant!* My dentist is my pal, and he loaned me the equipment to try over the holiday weekend. Soon I owned my own 3M Dental Curing Light, and lots of clear, semi-clear, amber, and solid colors of the 'stuff' — a light curing resin. Add silica (glass) to the resin (in colors) and you have what they fill the tooth with today (instead of the old silver amalgam). Soon, Frank Ford had one (he trusted me to buy him the outfit just from what I said on the telephone, and Joe Glaser too). Stuff like this is what keeps me at the cutting edge or guitar repair — trying new stuff all the time.



Dan using cure-light on nut ends



finished nut-ends

Besides making instant drop-fills in finishes that surpass any superglue work and don't take weeks like lacquer, I found it was the perfect medium for putting back the finish on the ends of a brand new bone nut that I replace so often on new guitars. Gibsons, for example, with their Corian nuts, are often cut too low at the factory. I carefully heat the lacquer on the nut ends, score and remove a 'potato chip' of lacquer from each end, make the new (bone) nut, then

replace the finish with my dental kit, as I call it. I have one large toolbox full of stuff, and it smells like the dentist office. Once it took me two weeks to drop-fill lacquer onto nut ends when the customer wants that brand-new, untouched finish on the ends of a replaced nut, which is often, and I don't blame them. Now I can do it very fast, and better. The result is flawless.

**TQR:** What would you like to accomplish in the future, Dan?

That's an easy question. I hope to stay happy and healthy and keep on doing what I have always done. I will be 59 years young in September, and I hope there are lots more guitars to fix, books or DVDs to work on, and tools to design in my future. Also, I love teaching. For years, a big focus of that desire has been the *Great Northwoods Guitar Building &*

*Repair Seminar*, which is held in my old town of Big Rapids, Michigan. We hold it at Galloup Guitars, run by my old pal Bryan Galloup and his wife, Susan. They are usually bi-annual, although we skipped this year because of the war in Iraq. There were other more important things to focus on. These seminars are the very best. Here's a photo taken of the second



to last one I believe, probably about 1999? If you could see close up, you'd find some great teachers that we had that year (and every year). In this photo you'll find: Yasuhiko Iwanade, Lindy Fralin, Flip Scipio, Naoki Ogane, Bill Antel, Tom Murphy, Seymour Duncan, Frank Ford, Al Rorick, Dan Erlewine, Joe Glaser, and Bryan Galloup.

The past two years I've been holding 3-day weekend seminars on guitar repair. Often it is how to use the neck-jig to do refrets and fret leveling, nut-making, and final setup. I have had students that aren't even planning on making guitar repair a career, but really want to learn to do this work for themselves. People interested in arranging a seminar may email me, write, or call. To sum this story up I would say that my friend and co-worker Don MacRostie and I often tell each other that we have the best jobs in luthiery working for StewMac. We have spent most of our adult lives working for a company that we love and respect, and our jobs give us the opportunity and freedom that those in the trenches seldom get. We have time to cut new ground and design new tools that help everyone. We like to think that we are on the cutting edge. **To**

Dan Erlewine, 90 Columbia Ave. Athens, OH 45701  
1-740-593-9072, rderlewine@frognet.net

## **BALLS** amplifiers

*Here we go again... another unknown (not for long) amp builder has created a vanilla fudge 5-layer cake slathered in raspberry creme frosting with the high and mighty intention of weaning we guitar players from the sonic equivalent of the yeast donut. Really...the amplifier biz has begun to resemble the restaurant game, with another glitzy five-star opening every week. Is the Amplifier Network next? Will we soon be watching 'soldering' shows where designer amp builders gleefully throw caps and resistors on to circuit boards, yelling "POW!" and "Up another notch!" as they furiously solder together recipes for designer tone? Imagine the scene as the camera pans the audience for that one...*

*Well, it is our pleasure to introduce you to Danny Gork, the man who had the balls to name his amp *The Balls*. (With all due respect to Danny, we think it would have taken a lot more balls to name it *The Gork*). But let's not get all balled up in the name game... His amp really does have balls, as you are about to discover. Enjoy...but don't wait too long to make that call — *Balls Incorporated* is a one-man operation (and no, we ain't selling ours).*

**TQR:** What inspired you to re-create the Marshall 18W amp?



Years ago, I read about these amps and I have been intrigued by them ever since. Their distortion tone was alleged to be incredible and under-appreciated. When I was looking for a low-power amp for

my home studio, I considered an original Marshall 18. Unfortunately, I couldn't find one in my price range, and I purchased another nice amp — a Bruno Tweedy Pie 18. The Bruno is a great sounding amp based on the tweed Deluxe 5E3 circuit, but I've always loved Marshalls and found myself thinking about the 18 over and over again. I wanted to find a way to get Marshall distortion at lower volume without using any attenuation. The Bruno's 6V6's had a great bluesy distortion tone, but it wasn't the character of my favorite tube, the EL34. The biggest problem with the EL34's was their power when really pushed, and that wasn't going to work for my purposes. Enter the EL84's... My impression of these tubes had been etched by a friend's early '60s AC30. I tried several amps with a pair of EL84's, but the tone never seemed quite as good as amps designed with a quartet. My intrigue got the better of me with the 18, and that's when I decided to build one for the hell of it. I really wouldn't say that I *recreated* the amp at this point; my amps have evolved significantly from the first one I built. Number one sounded good, but not incredible. You could tell there were some great characteristics present, but I wasn't entirely pleased with the tone. I continued to experiment with different parts and the design of the amp until I found what I was looking for, and the Balls amps are quite different now in several respects from the originals.

**TQR:** You've credited members of the Marshall 18W discussion page for having significantly helped you crack the code on the 18W. How so, specifically?

When I was searching for technical information on the 18 circuit, I stumbled onto the 18 watt site. The discussion page

-continued-

has been a great place to learn about these amps, and much credit should be given to the individuals that started it. The original Marshall 18W amp is very obscure, and not much information had ever been available — even from Marshall. Having some real examples to examine and mp3's to listen to helped me close in on the circuit and tone. Due to their scarcity, it has always been difficult to find original examples to evaluate.

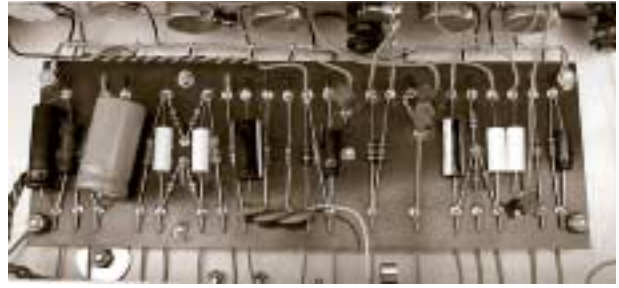
**TQR:** Even though the Marshall 18W is one of the most obscure models ever built, were you able to evaluate the tone of the originals as a reference point for your amps?

The originals definitely gave me a reference point. I really loved the progressive nature of the distortion. As you turn up the amp, the distortion increases nicely without clipping or breaking down. It's very dynamic and full of harmonics, but sometimes the originals sounded a little harsh and thin (possibly due to time and other factors). The first amp I built sounded the same, and I felt certain I could get more warmth and tone out of it.

**TQR:** Let's talk specifically about the construction and unique components found in the original Marshall 18W, and in your amp. What made the original 18W feel and sound the way it does?

Original 18's were built like other Marshalls in that time period. They used turret boards made of fiber materials, and most parts were strung between the turrets, often with fairly long lead length. The 18 also had some capacitors floated between the board and the pots. I built a couple of amps just like the originals and found that with time, components could start buzzing as the leads stretched (components have thinner leads these days), and I never felt that was a reliable way to construct the amp. I have built my amps using terminal strips, turrets and eyelets, and I decided to use 1/8" G10, shorten lead length considerably, move all the parts to the board, and use a combination of eyelets and turrets. Each part is glued to the board to prevent buzzing. For point-to-point construction, 1/8" G10 fiberglass is a popular choice since it is stiff, and eyelets and turrets mount easily to it (the purists are probably screaming about now!) My building methods don't affect the overall tone, but help the roadworthiness of the amps.

As for tweaking the tone, I played with some of the cap and resistor values and types to thicken up the low end while keeping the mids and highs smooth. Most of the changes were very slight, but significant. I really wanted to avoid the harshness or brighter character you sometimes see with other EL84-based amps of this power. Once again, original Marshall 18's were somewhat inconsistent from amp to amp, so they're open for interpretation. I also worked to tidy up the wiring and lead dress of the amp to control noise and oscillations.



All wiring is silver stranded, Teflon insulated. It can be more difficult to work with, but once it's twisted and soldered, it stays very stable and sounds great. My wiring is time consuming to do, but I feel it's worthwhile.

What's interesting with the 18W was the inconsistent use of certain parts. Several had the famous 'mustard' capacitors in the tone stack, while others might have ceramic disk capacitors or a combination of both. Resistors were carbon comp. Also, speaker types varied considerably; early examples had Alnicos, while later models had ceramics, such as the Celestion Greenback. When the Marshall 18W was built, they probably used whatever parts were available. It seems as if the bigger Marshalls of the day were built in a more consistent fashion. Two original 18's side by side can have different parts, a slightly different chassis layout, and, of course, different tone. I settled on various types of Rel-Cap film capacitors, Allen Bradley, and other film-type resistors for my amps. The power resistors are Ohmite, Caddock, Mills, etc. I use the best power resistors because of their tight tolerances, reliability and long life. Some of the parts I use are not typical of a guitar amp, but they work well and sound fantastic.

One thing the originals were not known for is headroom, and my amps seem to have a bit more. The components I use don't impart much of their own tone on the signal coming from the first 12AX7 — they really enhance it. The cheaper parts can get harsh or brittle sooner and add to the distortion characteristics of the amp in an undesirable way.

**TQR:** We'd assume that an original 18W would have mellowed over the years due to the aging of components and transformers. Have you taken this into account in voicing your amps?

I really wasn't trying to replicate the sound of an original, so I chose parts based on how well they nailed the tone I was looking for. I definitely wanted to keep some of the characteristics of the original, but there were things I felt I could improve, as well. I'm sure you're right that most originals would have mellowed somewhat and that certainly would influence the tone today. Once again, I didn't restrict myself to how an original might sound today or 30 years ago and shoot for that exact tone. Another thing I wanted to do was achieve a warm tone using *current production tubes*. New

-continued-



tubes still don't have the warmth or character of the NOS stuff, but NOS tubes are a finite resource. It's futile to base an amplifier's tone and voicing around the sound of NOS tubes, so one of my main goals was to make my amps sound great with old as well as *new* tubes. Once again, I chose parts that could work with new tubes and deliver a warm, detailed, and full, musical tone. I experimented with just about every available capacitor and resistor to assess the differences and find just the right parts.

**TQR:** How were the transformers recreated?

My amps use transformers based on the original Marshall 'Radiospares' transformers. A member of the 18 watt group, Mark Durham, acquired two actual 18 watt tranny sets in England and sent them to two different companies to be reproduced. Both Heyboer Inc. and EMC Inc. thoroughly measured and analyzed the windings to precisely reverse-engineer them. I have been using the Heyboer transformers in most of my amps with excellent results. Heyboer actually made tranny sets for Gibson amplifiers in the '50s and '60s. The real *engine* of the amp is the tranny set. The power and output trannies were at the edge of practicality for an amp of this type, and Marshall 18's operate at higher voltages than typical amps with two EL84's. Also, they employed an EZ81 rectifier tube instead of the more common varieties found in amps with similar power. Cathode bias, higher plate voltages,



and great compression and sag all blended together beautifully to create an amazing amp. Unfortunately, the 18's were probably too time-consuming to build, and Marshall made the decision to replace them with the

simpler 20W watt amp in 1967. The circuit was different, and as with the bigger Marshalls, tube rectification was dropped in favor of solid state rectification. The 20's never had the dynamics or the mojo of the 18, but they were cool amps in their own right.

**TQR:** What was the predominant cabinet configuration of the original 18W?

They were originally offered in 2x10, 1x12 and 2x12 configurations. The 2x10 and 1x12 are the most common, and collectors tend to pay more for the rare 2x12's. I build my amps in the same configurations, as well as a head and speaker cabinet variant. The 2x12 combo tends to be my most popular configuration.

**TQR:** Did you evaluate different speakers?

I literally bought every popular speaker available *and* a few obscure ones — both ceramics and Alnicos — and I played each for extended periods to make sure they were broken in well. Identical speakers were tried in pairs, and different speakers were combined. I listened up close, far away, at live shows, in different rooms, and miked in the studio. My favorite 12" is the G12H30, and in a 10" I preferred the Eminence Legend 105. The Alnicos have a certain chime at lower volumes — especially the Tone Tubby Hemps — but they seemed less smooth when the amp was really cranked.

**TQR:** Overall, can you summarize what you've learned about the unique tone and dynamic response of the original 18W and how close you've come to duplicate it (or not)?

I don't think Mr. Watkins realized how great this circuit was. Whether or not Marshall did is questionable, since they stopped building the amp after such a brief period of production. Marshall really needed a low power amp to fill a void in



the line and adapted the Watkins Dominator circuit to what would become the 18 watt.

For all their simplicity, both my amps and the originals are very versatile. They are extremely touch-responsive and work well for players that like to work the volume and tone controls on the guitar. The Tremolo and Normal channel are distinctly different, too. You can get a wonderful Vox chime in the Tremolo channel, while the Normal channel has that great 'brown' Marshall tone. **To**

[www.ballsamps.com](http://www.ballsamps.com), e-mail: [ballsamps@comcast.net](mailto:ballsamps@comcast.net)  
1-423-875-3538

## Review

*"The best amp I've ever heard."*

— Dave Tiller, Midtown Music, Atlanta

The longest that one of Danny Gork's \$2,700 amps has remained on the floor at Midtown Music is about two days... We've had the opportunity to evaluate the 1x12, 2x10, and 2x12 combo versions of the Balls M18, and the first M18 head and 2x12 cabinet (built at our request). They are all outstanding, if slightly different in tone, even though the actual *amplifiers* are identical in design and construction. Of course, the 1x12 or 2x10 amps are most appropriate for close-in work in small venues, and recording. We were the first to play the Balls 2x10 loaded with Eminence Legend 105's, and when we compared the 2x10 with the 2x12 and 1x12 combo

-continued-



amps, the 2x10 seemed curiously more open-sounding, which flies in the face of the theory that bigger speakers moving more air always produce a ‘bigger’ sound. Let’s just say that the Balls M18 circuit matches up extremely well with the

Eminence Legend 105’s. But the Celestion G12H30 70th Anniversary speakers used in the 1x12 and 2x12 cabinets are also exceptional. You’ll recall that Dr. Z first tipped us to these speakers in his July 2000 ToneQuest interview, and they very nicely emphasize midrange frequencies without sounding ‘scooped’, dark, or too narrowly focused. They work beautifully with the Balls M18.

Now, about the amp... Without reservation, we enthusiastically agree with Dave Tiller (and he’s heard them *all*). The Balls M18 is indeed one of the sweetest, most inspiring amplifiers we have ever played, and it’s all about distortion. Mr. Gork may not have set out to precisely duplicate the original Marshall 18W circuit, but we can’t imagine a more pure overdriven tone and mesmerizing dynamic response that bridges the best of Marshall and Vox *in one amp*. The ‘Normal’ channel is voiced with a tight emphasis on upper mids that is perfect for leads, while the ‘Vibrato’ channel is more chimey, with a broader, wider frequency response. In terms of volume, the Balls amps roar with almost the same perceived output as our 6L6-equipped Deluxe Reverb. The 2x12 combo version blows past the Deluxe by another 10%-20%, and the deeper 2x12 cabinet with a ‘football’ back built for the Balls head adds even more perceived power, punch, and head room. Just how good is the Balls head and 2x12 cab? The first day we hit the standby switch, three hours passed in a flash before we could muster the will power to shut it down (a *record* audition).



We couldn’t find a guitar that *didn’t* suit the Balls, but our Nocaster equipped with a Jason Lollar ‘Charlie Christian’ pickup in the neck with a matched, flat pole Lollar bridge pickup *really* knocked us out... With this rig we could range from absolutely dead-on early Led

Zep, to Petty, and a stunning array of slide tones reminiscent of the best of David Lindley and Ry Cooder. Naturally, you’d *expect* an amp like the Balls 18 to really rip with humbuckers and P90’s, but the earthy, low down hollowness of our Stratocaster was all there, too. The creamy, silken character of the Balls actually improves the tone of a typical set of Strat pickups, smoothing out the highs on the bridge and imparting a funky-cool quack in the 2 and 4 positions, while preserving the *Rainy Day Dream Away* big low-end of the neck pickup.

Controls are straight up: Dual inputs and Volume and Tone on both channels, Speed and Intensity on the tremolo channel, selectable 4, 8, and 16  $\Omega$  dual speaker outputs, and a tremolo footswitch. The second inputs on each channel are lower gain and useful for a cleaner tone. The circuit layout, lead dress, and birch-ply cabinet construction are faultless. Our absolute favorite version of the Balls is the head and 2x12 cab, with the 2x10 combo close behind. Tough choices... What the Balls *won’t* do is give you the clean head room of a 30W amp, reverb, or expanded tone controls. *Delta Moon* slide guitarist Mark Johnson used our Balls 18 head just last night at *Blind Willie’s*, which was filled to their capacity of 150. The amp sounded fantastic, but Mark felt that he could have used a tad more headroom. Of course, when he switched to a higher-powered head, he couldn’t get the Ball’s brilliant sustain without a pedal... Sound familiar? Our take — the Balls 18 is everything you could possibly want in a moderately powered, beautifully built amplifier that will captivate and inspire you for life. **To**

**SPEAKER Swaps**

“The easiest major amp mod you can do.” — Jeff Bakos



With the recent arrival of a *super clean* 1968 Vibrolux Reverb model AA864, we were faced with the prospect of replacing the original Fender

‘blue label’ Oxford 10’s. They weren’t awful, really, but we detected a slight voice coil rub in one speaker, and they *were* 35 years old... We surely would have blown them sooner than later, and matching speakers to a specific amp is always fun. So, we went shopping, acquiring a pair of Jensen C10Q’s (recent Italian-made reissues of the original Jensens found in earlier ‘65-’66 Vibrolux Reverb amps), Jensen P10R AlNiCos, Eminence Legend 105’s, and the new Tone Tubby

-continued-

hempe cone 10's with what we call the 'Clapton' voice coil. More on that in a minute...



Oxford

We've learned over the years that when it comes to speakers and pickups, as soon as you make pronouncements regarding tone, changing amplifiers and guitars can make you out to be a liar. Matching specific speakers to a specific amp is critical,

and a speaker that sounds outstanding in a blackface-era Fender could be a dog in something else. Please remember that, because the same can be said for matching guitar pickups with the amps you really *play*.



We started our evaluations with what seemed to be the most appropriate choice — the **Jensen C10Q** — original equipment in the AA864 Vibrolux Reverb. Our previous experience with a '66 Vibrolux equipped with vintage Jensens was impressive; not so with the reissue C10Q. These speakers seemed oddly scooped and linear, notched in the upper midrange-to-high frequencies. None of the strong, tight lows and smooth mids that we loved so much in the vintage C10Q's were present, and the highs seemed thin and dull.

Mark Baier at Victoria has reported that the new Jensen P12Q's are fantastic, so perhaps hope remains for a second look at the C10Q by the Jensen designers in Italy. Granted, our speakers weren't broken in, but they had *such* a long way to go...

Next up... the mighty **Jensen P10R**. Installing an AlNiCo speaker in a late '60s Fender amp is definitely not traditional, but there's absolutely nothing wrong with the idea, either. After all, ceramic magnets replaced AlNiCo only because the demand for cobalt temporarily priced AlNiCo magnets in guitar speakers out of the market (the largest use of cobalt is in *superalloys*, which are used to make parts for gas turbine aircraft engines).

The P10R is a very good speaker, and our pair produced a classic, bright Fender tone with lots of bounce. The P10R is a happy-sounding speaker, if you can get down with that concept. What it lacks in midrange girth is offset by brilliant, smooth top-end and beautiful upper mids with depth and unmatched clarity. If you really dig the bright, sparkly vibe of a Fender (especially nice when matched with a non-Fender guitar pickup), the P10R is



What it lacks in midrange girth is offset by brilliant, smooth top-end and beautiful upper mids with depth and unmatched clarity. If you really dig the bright, sparkly vibe of a Fender (especially nice when matched with a non-Fender guitar pickup), the P10R is

a great choice — alone, or paired with a different speaker, such as our next selection...



The **Eminence Legend 105** has long been a favorite of ours, and of many amp techs seeking high-quality replacement speakers. Unlike the Jensens, the Eminence produces a bigger, wider sound, and it *growls*... We like that, and we think most of you will, too. The

Eminence 105 throws a ton of lows and mids, with an underlying subtle edge that reminds us of a great British cone. The highs are not as emphasized or prominent as a Jensen, but they aren't masked, either — the emphasis is simply different. All of the Legends we've played have been very well balanced, with tremendous character that suits all kinds of musical styles. The Legend 105's are very highly recommended, and they undoubtedly offer the best value of any high-quality guitar speakers made today.



Since their introduction in 2001, the **Tone Tubby AlNiCo** hemp speakers have been enthusiastically embraced by Carlos Santana, Billy F. Gibbons, Kirk Hammet and Eric Clapton, among others. But John Harrison is a tinkerer, and despite the accolades he's received from so many of his

rock idols, he has continued to experiment with the evolving art of speaker craft. His latest version of the hemp Tone Tubby features a super lightweight, copper-clad aluminum voice coil that will permanently silence critics who have claimed that the hemp Tone Tubbies were too dark and lacking treble. We received some of the first 10" hemp Tone Tubbies with the new voice coil (initially developed for Eric Clapton in an effort to eliminate the subtle dropouts that can occur when extremely subtle, soft passages are played on a big stage with a band). The hemp cone Tone Tubby 10's are utterly magnificent, with an incredibly solid bottom, fat mids, and gloriously detailed, creamy highs. Uncork these bad boys and you'll hear rich, textured harmonic overtones that you've *never* heard before. We don't pretend to understand how hemp versus paper pulp can deliver such a radical step up in dynamic response and tone, but Harrison has taken the basic design of the AlNiCo Celestion G12 (call it 'blue' or 'bull-dog' if you wish) and forged an *instrument* that can inexplicably handle 50 watts of your best whoop ass. *Quest forth... To*

[www.jensenvintage.com](http://www.jensenvintage.com), CE Distribution, 1-480-755-4712

[www.eminence.com](http://www.eminence.com), 1-502-845-5622

[www.abrownsoun.com](http://www.abrownsoun.com), 1-415-479-2124

coming in  
**Future Issues**

**INTERVIEWS:** Eric Johnson  
Gordon Kennedy  
Adrian Legg  
Leslie West  
Peter Frampton

**FEATURES:** Jerry Jones  
Don Warren Guitars  
The Force Pedal

**AMPLIFIERS:** DeArmond

**PICKUPS:** TV Jones  
More From Jason Lollar

**GUITARS:** \$400 of Blues Power Revisited!  
Gibson 336  
Warrior  
TQR's Acoustic Picks

the  
**ToneQuest**  
Report™

**Editor/Publisher** David Wilson  
**Associate Publisher** Liz Medley  
**Graphic Design** Rick Johnson

**EDITORIAL BOARD**

**Analogman**

**Tom Anderson**  
Tom Anderson GuitarWorks

**Mark Baier**  
Victoria Amplifiers

**Jeff Bakos**  
Bakos AmpWorks

**Joe Barden**  
Joe Barden Pickups

**Dick Boak**  
CF Martin & Co.

**Don Butler**  
The Toneman

**Steve Carr**  
Carr Amplifiers

**Mitch Colby**  
KORG/Marshall/VOX USA

**Ben Cole**  
GHS Strings

**Dan Erlewine**  
Stewart-MacDonald

**Larry Fishman**  
Fishman Transducers

**Buzz Feiten**

**Bill Finnegan**  
Klon Centaur

**Ritchie Flegler**  
Fender Musical Instruments Corp.

**Lindy Fralin**

**Billy F. Gibbons**  
ZZ Top

**Joe Glaser**  
Glaser Instruments

**John Harrison**  
A Brown Soun

**Johnny Hiland**

**Gregg Hopkins**  
Vintage Amp Restoration

**Phil Jones**  
Gruhn Guitars

**K&M Analog Designs**

**Mark Karan**  
Bob Weir & Ratdog

**Ernest King**  
Gibson Custom Shop

**Chris Kinman**  
Kinman AVn Pickups

**Mike Kropotkin**  
KCA NOS Tubes

**Winn Krozak**  
Paul Reed Smith Guitars

**Sonny Landreth**

**Albert Lee**

**Adrian Legg**

**Dave Malone**  
The Radiators

**Domenick Mandrafina**  
European Musical Imports

**René Martinez**  
The Guitar Whiz

**Greg Martin**  
The Kentucky Headhunters

**Richard McDonald**  
VP Mktg, Fender Musical Instruments

**Terry McInturff**  
Terry McInturff Guitars

**James Pennebaker**  
Delbert McClinton

**Scott Petersen**  
Harmonic Design Pickups

**Doug Roccaforte**  
Roccaforte Amplifiers

**Paul Rivera**  
Rivera Amplifiers

**Roger Sadowsky**  
Sadowsky Guitars Ltd.

**Tommy Shannon**  
Double Trouble

**Todd Sharp**  
Nashville Amp Service

**Tim Shaw**  
Fender Musical Instruments Corp.

**Chris Siegmund**  
Siegmund Guitars and Amplifiers

**John Sprung**  
American Guitar Center

**Peter Stroud**  
The Sheryl Crow Band

**Randy Volin**  
Rockindaddy's Guitars

**Donnie Wade**  
Jackson Guitars

**Laurence Wexer**  
Laurence Wexer Limited  
Fine Fretted Instruments

**Buddy Whittington**  
John Mayall & The Bluesbreakers

**Don Young**  
National Reso-phonic Guitars

**Zachary Vex**  
Z Vex Effects

The ToneQuest Report™ (ISSN 1525-3392) is published monthly by Mountainview Publishing LLC, 235 Mountainview Street, Suite 23, Decatur, GA. 30030-2027, 1-877-MAX-TONE, email: tonequest1@aol.com. Periodicals Postage Paid at Decatur, GA and At Additional Mailing Offices. Postmaster: Send address changes to: The ToneQuest Report, PO Box 717, Decatur, GA. 30031-0717. The annual subscription fee for The ToneQuest Report™ is \$69 per year for 12 monthly issues. International subscribers please add US \$20. Please remit payment in U.S. funds only. Visa, MasterCard and American Express accepted. The ToneQuest Report™ is published solely for the benefit of its subscribers. Copyright © 2003 by Mountainview Publishing LLC. All rights reserved. No part of this newsletter may be reproduced in any form or incorporated into any information retrieval system without the written permission of the copyright holder. Please forward all subscription requests, comments, questions and other inquiries to the above address or contact the publisher at tonequest1@aol.com. Opinions expressed in The ToneQuest Report are not necessarily those of this publication. Mention of specific products, services or technical advice does not constitute an endorsement. Readers are advised to exercise extreme caution in handling electronic devices and musical instruments.

the  
**ToneQuest**  
PO Box 717 Decatur, GA. 30031-0717 Report™

PERIODICAL  
POSTAGE  
PAID AT  
DECATUR, GA  
AND ADDITIONAL  
MAILING OFFICES