the overdriven tones acquired a more complex and deeper character. Our first and only '64 Vibroverb didn't sound like this... For whatever reason, this old Pro was giving up the goods with all the intensity of a blackface Deluxe or Vibrolux Reverb, and we couldn't be more thrilled.



Some of you might think that finding these old relics is too much work, too risky, or perhaps you don't want to deal with the uncertainty of buying an amp that was built 48 years ago... Understood, but the potential payback cannot be underestimated. There are lots of very talented designers and builders of guitar amplifiers working today, but the truth

The History of the Super 17

We have spoken with a lot of interesting and creative people over the years in these pages – musicians, and the talented people that build the instruments and gizmos that musicians use to make music. Some people have a story to tell that pours forth in a steady stream from an uncorked bottle with no back tracking, hesitation or uncertainty. These people do not resort to muttering 'uh' or 'you know' to buy time, they resist weakkneed equivocation, mindlessly leaning on 'sort of' to dilute the potency of their thoughts,' and this ability to speak clearly and coherently with conviction for two hours with no script seems to have become a rare art... Yes, it has - just refer to our past interviews with Peter Frampton, Nalle Colt, Ken Parker, Joe Bonamassa, Elvin Bishop or Eric Burdon... Not only are these characters unfailingly lucid (and not because of clever editing - they edit themselves on the fly), but the reader is also left with no doubt that they have been told the absolute truth (often resulting in a second read – who among us is not

starved for the truth?) The truth is a gift, rarely given in these times, and so it must be recognized with the profound appreciation it deserves.



Five years ago the unthinkable occurred in the United States with very little warning – our economy tanked, investment banks too big to fail vaporized, and a dirty secret was revealed about sub-prime mortgages, mortgage-backed securities and collateralized debt obligations that had made it profitable to bet on America to fail. Suddenly the carefree lifestyle that allows most Americans to

remain clueless and disconnected from the world, oblivious to the economic troubles in Japan, Greece, Spain and Ireland seemed to have gone poof overnight – a quintessential WTF moment like no other in our lifetime.



Meanwhile, Atlanta amp builder Richard Goodsell had been enjoying a steady roll. Business was good,

he had expanded, added employees and looked forward to ascending to the next level as a custom builder with a strong following among working musicians and guitar enthusiasts. The tangled bundle of tour laminates hanging in his shop from backstage visits suggested he had arrived, and a global network of eager Goodsell dealers wasn't far behind. But in September 2008 all of that came to an end. Orders suddenly evaporated as even the most affluent guitar buffs felt the winds of impending doom blow caution into their lives. Goodsell resorted to keeping the company afloat with his Amercian Express card while he waited out the storm, but the bad news just kept on coming. Smelling blood, the media was finally on the case now, ramping up the up the panic with what they sell best. Fear does not sell guitar amplifiers.

Goodsell survived by downsizing, moving to a small industrial space and working again as he had begun, alone, building one amp at a time. If you want a Goodsell amp today, you call and he will build it. His latest is the Mark IV featured here for review. We asked Richard to share the evolution of his amplifiers and his company over the past decade. Rather than dutifully providing a dry dissertation in a veiled attempt to sell you an amplifier, Goodsell delivered the compelling story



of a small American company striving to survive in the midst of change and uncertainty by not standing still. In other words, the truth. It's a fascinating story, culminating in an expanded vision for Goodsell's exceptional amplifiers. Enjoy...

TQR: The Mark IV is a modern classic with a great sound and all the practical features you could want crammed into a portable 1x12 cabinet. Can you describe how this model has evolved from your earlier work in terms of design, component selection, tone stack and other features? Is this the most 'evolved' Goodsell to date?

The evolution of the Super 17 from it's humble beginnings on recycled organ chassis to the current (and probably final) Mark IV iteration was a fairly linear path that reflected my maturation as a builder. I was about 40 units in to what would be retroactively be known as the "Mark I" before it occurred to me that amp building could be a viable career alternative to wrenching Hammond organs. It would be another 60 or 70 amps before the Mark 2 showed up, which was the solution to the erratic and inconsistent supply of organ parts. It was an offthe-shelf aluminum Marshall 18-watt kit chassis with all of the holes drilled in the right places, and I continued to build the exact same 3-knob Super 17 on this platform, which would soon find its way into the Marshall 18-watt style birch-ply combo cabinet that many other small builders have embraced over the years. This combo was the launch pad for most of the innovations that would define later models – it could be a 1x12 or a 2x10, the same chassis could be adapted to the 33-watt models, and it facilitated features like reverb and tremolo, which went through their own process of evolution.

Reverb and Gibson Bias-vary Tremolo

From the beginning, the secret sauce has been in the simplicity, including the single tone control, and I was loathe to add



any feature that would detract from the purity of the original signal path. I found I was able to inject the reverb signal on the *ground side of the phase inverter*; and avoid the signal degradation from doing it

the "normal" way, and while it sounds different, it's effective with it's own personality. Soon after came the late '50s Gibson-inspired *bias-vary tremolo*, which begs the question why anyone would ever use any other method. Like the reverb, it is not in the signal path, manipulating the bias voltage on the power tubes instead. These two features could be viewed as "modular" additions as either (or both) could be added to any push-pull amp with a long-tail phase inverter with virtually no alterations to the original circuit.



Within a year, 90% of the Super 17 Mark II combos featured both reverb and tremolo, while most of the heads continued with the basic 3-knob set-up.

Several hundred Mark 2 amps were made before any other changes were contemplated, although during that period there was a 10-piece "Clairmont Classic" re-issue of the original amp as I cleaned out a storage unit that still had a few original cabinets and organ chassis. Since I had another 26 Hammond AO-35 chassis available, I needed an enclosure that would work, and turned to the solid pine 5E3 tweed deluxe box (with some modifications) to complete the series that came to be known as the Limited Edition. With only enough space on the chassis for a pair of 12AX7s, the Limited Edition did not have reverb or tremolo, but it marked the debut of the "5/17" (triode/pentode) switch which created a dual power feature.

Mark III



The smaller, lighter Limited Editions sold out immediately, but

being completely out of organ hardware at this point, I had to develop a new smaller aluminum chassis from scratch, as the Marshall 18-style was too large to fit into the 5E3 box. The result was the Mark III. Available only as a 112 combo, it was more than 10 pounds lighter than it's predecessor, and featured reverb, tremolo, and the 5/17 switch as standard equipment. For the first 3 years, the Mark III had a solid-state rectifier in order to make the same plate voltage with a smaller power transformer to save space and reduce heat, but later ones were wired for a tube rectifier, and eventually the GZ34 became standard. At about the same time, a moderate revision to the reverb design eliminated an entire 12AX7, meaning

amps

only two 12AX7s (besides the phase inverter) were required for pre-amp, reverb return, reverb send, and tremolo oscillator. Since the pre-amp had always consisted of only a single triode (one-half of a 12AX7), you could take a Sharpie and still trace the original circuit exactly as it was drawn on Serial Number 0001. Despite a major change in packaging and the addition of several new features, the touch sensitivity, responsiveness, the heart, and the soul of the Super 17 remained fundamentally unadulterated.



And so it was for nearly five years – the Super 17 Mark III was the bread-and-butter amp of the entire product

line, and to date is the most prolific of all Goodsell amps with more than 500 copies built. The Mark II soldiers on as the basis for every model above 20 watts, including the 33 series, Black Dog, and any build that needs to be a 2x10 or a 2x12, as well as all heads across the board. The larger chassis still requires alteration for every build, including adding and/or enlargement of tube sockets. Meanwhile, the smaller Mark III chassis turned out to be highly adaptable – variations on the 17, the Unibox, the Dominatrix, and finally the Valpreaux are all built on the same piece of aluminum with no additional drilling required.

'59 Bassman cathode-follower driven tone stack



Last year, while preparing to build myself a '59
Bassman clone (with reverb and tremolo tacked on) I became intrigued by the tone stack – it had always been

there – we've all looked at it a million times, and I had already been using similar Treble/Mid/Bass stacks on the Black Dog and Dominatrix. Whereas these amps had the tone stack in between two gain stages, the second to make up for the inherent losses in complex tone controls, the '59 by contrast had a cathode-follower stage pushing the stack from behind. Now at this point I'd been building guitar amplifiers for 8 years, Hammonds and Leslies for 12 years before that, and I never had the occasion to delve into the virtues of a cathode-follower. With single-stage pre-amps, single tone controls, and no effects loops I had no use for a current amplifier or impedance coupler/buffer – but wait a minute... Is it possible that

a cathode-follower-driven tone stack would allow the secret sauce to pass through relatively unscathed? Could I get tone modification without radically altering the signal amplitude (a philosophical mandate) between a single-stage pre- and the phase inverter? Turns out the answer is yes, yes you can, as the cathode-follower amplifies current, not voltage. I'm sure that most senior amp builders have known this fact since their days at The Academy, but to me, it was a revelation, and it would eventually change the way I build amps and how I run the amp business...

Super 17 Mark IV



So at this point, the Mark III chassis still had the vestigial tube hole from the reverb redesign, and it was getting a

stainless steel plug for the sake of safety and aesthetics, so the necessary real estate was already there, at least internally. Externally there was two inches of blank chassis on both sides, most of which went underneath the edges of the cabinet's chassis cutout. I would need to re-claim some of that space in order to expand beyond the six control holes that I had to work with, so a call to the cabinet shop and three weeks later, I had a modified 5E3 with a 13.5" opening. I moved the pilot light an inch or so to the right, and in doing so I returned to the Fender-style pilot light jewel for the first time in five years – thus silencing forever the shrill screams of an entire market segment that had been demanding this change for years (maybe some day I'll have a light-up logo, too, but not today) and I am absolutely certain that I have sold a number of amps based solely on the fact that they were furnished with a violet jewel. So I moved the input jack the same distance to the left for symmetry, lost the 5/17 switch (hallelujah, I never liked the triode mode) making room for bass and treble controls and a 3-way mid- switch. Behold, ladies and gentleman: The Super 17 Mark IV. Adding the cathode-follower was literally cut-and-paste straight from the '59 – it fit right between the pre-amp stage and the phase inverter without any changes at all, except I used a 12AU7 for the cathode-follower instead of a 12AX7.



At the end of the day we have the most technically complex and feature-laden version of the Super 17 ever. It would be hard to imagine a

amps

practical reason or way to add anything else to this amp, but a Peavey Classic 30 looks like the space shuttle in comparison. Not being confined by any PC boards, we can do anything we want – if you wanted to draw a box around each individual element in the schematic of the Mark IV – the preamp, cathodefollower, phase inverter, reverb, tremolo, output – you could find similar "chunks" individually in amps from Vox, Traynor, Gibson, Matchless, and Fender. There is nothing really new under the Sun in Tubeland. The difference is in the execution – what element goes where and how. Technique, transformers, topology and the accumulation of experience learned from the individual assembly of over 1,000 17-watt amps in the last 9 years is neatly summed up in the Mark IV, and I don't believe it can be taken any further without compromising that intangible sparkly thing that lives in each one of them.

TQR: It appears that you have adopted an "anything is possible" approach in accepting custom orders and variations on your base models. Rather than building four static models, for example, you seem to be willing to consider different head and combo configurations and design features that aren't limited by a template... Can you elaborate?



Well, almost anything is possible. It is true that I am accepting orders now that I wouldn't have considered a couple of years ago – I was quick to remind customers and dealers that I wasn't Burger King

– you get it my way or maybe you should look somewhere else. But times change, and after five years of an unbelievably challenging and hostile economic environment, I have downsized to the point where I am pretty much a one-man shop. It is no longer the goal to see how many identical black amps I can build to stock dealer shelves, and I am not looking to take on any dealers at this point. There's a small, and I mean *very* small handful of dealers that still provide a useful brick-andmortar presence, but the tide has turned to where more and more of my business is the end-user calling me or e-mailing to ask me exactly what is possible, not just in terms of color and features, but also weird, one-off, and highly personal builds.

There still is a template in terms of the limitations of the two chassis I use. I will go pretty far off of the menu as long as the aluminum and iron parts don't change. That means a total of no more than two octal-socket power tubes, or four 9-pin mini tubes like the EL84 and 6973, so the most powerful amp I can or will build is about 45-50 watts, but the sweet spot is the



30-35 watt range, which can be achieved with a number of different power tube configurations. The customers impose their own limits as well – nobody wants to spend a ton of money on something that can't be quantified or auditioned, though return customers

have a lot more latitude based on their previous experiences with me and/or the amps.

What this means is I am not in the business of saying "no", however, if you need 100 watts or channel-switching, we're probably not going to be a good fit. I'm amazed by the evergrowing number of customers who call and want to be personally involved in the building process, yet still respect my boundaries and understand what is technically possible. They tell me what they want, I give them a price and a turnaround time, and they wind up with an amp that they can't get anywhere else. I'm currently building an amp on the instructions that it be "...a Super 17 only with 6V6s instead of EL84s..." Why not? I've never even tried to compete in that category, but evidently a lot of players overlook me because I don't, so maybe I should. The outcome of that particular build may spawn a brand-new model. The same thing happened after I was commissioned to build an EF86-driven 17. That one is a keeper for sure.

The bottom line is this – I can build only 90 or 100 amps in a year, so it no longer makes sense to go to trade shows looking for dealers or spending a ton on advertising. I already have all of the work I can handle, and I'm not merely selling amps – I'm offering *access*, the experience, and involvement, which has led to a degree of diversification in the product line, without changing the look or compromising my "simple is better" mission.

TQR: What was your target when you developed the signature speaker?



There are actually three actually three as signature" speakers, but by far the most common is the Goodsell RGH, which, like

the others, is assembled for me by Warehouse Guitar Speak-

ers (WGS) in Paducah, Kentucky. The RGH, like WGS' own Reaper, is pretty much a drop-in replacement for the G12H30, and that has been my all-time go-to for years. It's soft parts (cone, etc.) come from Mueller in the UK, and while their steel baskets are stamped overseas (as is everyone else) the assembly takes place here in the USA, and I can actually talk on the phone to the guy who assembles my speakers. I can get a one-off or a prototype in a matter of days – that, along with super-compet-



itive pricing, and OEM branding in the modest quantities that I use is a winning combination. They also make a special light-weight ceramic 16-ohm speaker just for the Unibox, and for high power applications or if I need to darken things up a bit, I have my own Rola G65-inspired model

(called what else - the RG-65) that I also use with the RGH in a mixed 2x12 application. I'm very fond of the WGS Black & Blue for my AlNiCo Voxy-sounding builds as well.

TQR: An overdrive pedal seems like a natural extension of amp building, but it is a very crowded and fickle market. How did your OD pedal take shape, what can you tell us about any unique design features, and how would you describe its sound?

One would think that pedals come naturally to amp builders, but not many have done much with them compared to contemporary pedal-only guys like Brian Wampler. It's really a different skill set, almost always PC boards, which have to be designed and manufactured, and you're using solid-state if not digital technology. The Goodsell Overdrive, on the other hand, is a direct extension of the amps, and in fact twothirds of the pedal's parts are shared with the amps. There's a terminal strip in there, full-sized chassis mounted pots, and all of the resistors and caps can be found in the amps as well. There's a single NPN transistor that provides the gain, and in concept it is very similar to the pre-amp on a Super 17. It's all wired point-to-point same as the amps. The Super 17 loves this pedal because it "thinks" that it's the first gain stage in the amp, with the same Gain/Tone/Volume controls performing the same functions that they did on the original 17. It is not a re-invention of the wheel, but it is optimized for use with a Super 17, 33, or Valpreaux. People who buy it thinking it will make their amp sound like a Super 17 will probably be disappointed – that wasn't the design intent. It provides clean boost to moderate overdrive, and to me, at least, it avoids the need for a second "lead" channel. It interacts with the knobs on the amp to raise or lower the distortion threshold so seamlessly that together they function as if they were a single device.



I don't have any serious intention of getting into the pedal business, but I think it is important to make relatively inexpensive goodies available to your customer base. Gear geeks are going to always need a fix, but when the chips are down, they are way more likely to spring for a \$150 pedal than a

\$2,000-\$3,000 amp. It is likely that I'll make a MOSFET version with considerably more gain on tap, but I have no plans to go any further.

TQR: A lot of 'boutique' pedals nudge the \$300 price point. How are you pricing yours for nearly half that?

There are a lot of great pedals out there. The Timmy and the OCD, for instance list for around \$169 or so and they are extremely popular. There is a lot of pedal activity between \$140-\$170, but when you head north of \$299 I think there's a huge increase in expectation. My pedal simply doesn't do enough to command that kind of price, and very few do. My production costs are modest; I make them myself one at a time as they're ordered.

TQR: What's ahead for you, Richard?



Well, right now business is very good – perhaps as good as ever at this scale. I really enjoy talking to the customers and players who will actually be using my amps, and (within reason) I enjoy the

challenge of incorporating their ideas into the builds. This is exactly how the EF86/EL84/EZ81 GC-12 series came to exist. I've just started building 1x15 combos for the first time, as well as two channel amps. I'm heading in the direction of becoming a true custom shop.

Goodsell Super 17 Mark IV

If you are remotely considering a new amplifier and you don't know what you want, we do. Well, at least we know what the overwhelming odds would dictate in 2013 – a small, lightweight 1x12 in the realm of say, 25 watts, maybe less or a little more, with exceptional tone and optional reverb and tremolo if they don't jack up the price too high or compro-

interview

mise tone. That's the 'new normal' among custom-built guitar amplifiers, and it's been trending this way for years. Why? Sound and monitor systems have steadily improved, high stage volume kills the mix, and most guitar players with cash are too old to lift a 65 lb. amp into the cargo bed of an SUV, let alone wrench it across the parking lot of a bar. In February... On ice... Wearing their best gig boots...



If this new demographic suits you, you may want to seriously consider a Goodsell Mark IV. Why? Because you can lift it, it has plenty of volume and personality that belies its size, and because the Super 17 Mark IV just sounds

so damn good. Among all the smaller combo amps we have reviewed, the Mark IV qualifies as a true desert island amp. If you are playing gigs in small to medium sized rooms you can use it without a mike, yet it will certainly hold its own on larger stages miked... If you pretty much play at home the Mark IV could easily become your favorite go-to amp thanks to the exceptionally versatile nature of the gain and volume controls that allow you to dial in high-headroom clean tones and beautifully overdriven sustain and drive at low *and* higher volume levels. Yes, you can do it all with the Mark IV. There may be seven knobs on the control panel, but this amp still defines the value and appeal of simplicity at its best.

A quick look inside the chassis confirms Goodsell's penchant for keeping things simple. Seeing how a small number of



electronic components and a couple of tag strips can produce

big, complex sound, you begin to consider the simple circuits of the past in a new light. Perhaps the secret sauce in classic vintage tone was knowing when to stop, and not piling on features that only diluted the end result. Do you *really* need 16 knobs to play blues or rock & roll?

The Mark IV utilizes dual EL-84 power tubes with a GZ34 rectifier, yet this amplifier does not seem to compress down or lack the headroom of many dual EL-84 amps. The tone stack is also far more nimble and effective in adjusting EQ, and the reverb and tremolo effects are both outstanding. The sole 'extra' features consist of an 8 ohm extension speaker jack tucked

underneath the chassis next to the speaker jack, and adding an additional 1x12 cabinet creates a much more formidable soundstage should you need it. You'll also find a 3-way mini 'Mid' toggle switch on the control panel described by Richard:



The
"MID"
knob
on most
amps that
you are
familiar
with is

25k ohms with a linear taper. On amps like the blackface Bassman, where there are only Bass and Treble controls, there is a fixed mid resistor, usually 8.2k or 10k. I could have gone that route, but it was almost as easy to offer three values at that junction, so here they are: Switch "up" =11k; switch "center" =22k; switch "down" =3k. This is electrically identical to the mid knob being set at 12 o'clock, 3 o'clock, and 9 o'clock, respectively. You can roughly look at it as flat/bump/scoop in that order. There is a small but noticeable change in the response of the bass and trebles knobs between the midpositions. Conceivably, if one were to order the Mark IV with reverb or tremolo deleted, (perish the thought) they would get a fully sweepable MID knob.



The three midrange toggle options are all very usable, with a fat boost in perceived volume and gain from the center position 22K setting. The

effect is similar to adding a 25K midrange pot on the back panel of a blackface Deluxe Reverb as we have often described here. We should also note that the Mark IV doesn't look like a designer booteek amp shoved in a cheap generic box. Our review model covered in optional rough white tolex with gold grille cloth, gold metal control panel and creme knobs creates a timeless 'modern vintage' appearance that we like a lot. For our money (or yours) there simply isn't a better sounding, more versatile or toneful 1x12 amp being built by anyone today, but the Super 17 Mark IV is also just one of many models found on the Goodsell web site. If you need or just want a new amp, make the call, and *Quest forth...* To Super 17 Mark IV as reviewed: \$2099.00

www.superseventeen.com, 678-488-8176

REVIEW

Goodsell Overdrive Pedal

Overdrive and boost pedals surely must be the most soughtafter and prolific guitar effects in existence. Hundreds new and old have been built with more introduced every year by big, small and one-man operations. For the hobbyist or aspiring designer the barrier to entry is low, and because pedals are so much more affordable than guitars and amps, guitarists can afford to freely experiment with their overdriven mojo.

It seems easy enough to whip out a review on an overdrive pedal – plug

several guitars in to a few different amps, evaluate the effect of the controls individually and in varied combinations, listen for noise and any changes in EQ and tone from the unaffected sound of the guitar and amp...

These are all important considerations, but you buy an overdrive effect for the quality of the overdriven

sound. The difference between a smooth, musical, natural sounding effect with a good range of variable intensity and one that is less pleasing or too confining is the difference. In reality, some pedals sound better with single coil pickups, others with humbuckers, and it can be difficult to make sweeping generalizations, although most manufacturers would have you assume that their pedal sounds equally good with whatever gear you play. Stevie Ray Vaughan was known for his use of old Arbiter Fuzz Faces (modified by Cesar Diaz) and Tube Screamers, but that doesn't mean you're gonna get Stevie's tone from your rig. The big variable – the bogey, if you will, when it comes to chasing tone with pedals is the fact that your rig is probably somewhat unique, and perhaps very different in sound from whatever gear the builder and designer may have used to prototype their pedal. In the Quest for tone, one size very often does not fit all...

The Goodsell Overdrive sounds very, very good, producing smooth, rich, natural sounding distortion, and it should, since it is basically a circuit borrowed from a Goodsell amp. It can behave a bit differently from other pedals, however – especially when inserted in a pedal board, and we would be derelict to gloss over such details. We know for a fact that when guitarists find themselves resorting to unfamiliar control settings on an amp or effect, a common reaction is to feel that something is 'wrong.' We once had an amp here for review that required us to turn the bass control way up while leaving treble set very low to get a good tone, and it did seem strangely counter-

intuitive. Like a vintage wah or fuzz, the Goodsell Overdrive wants to be first in the chain, or better yet, connected directly to your guitar and amp. You will also notice that unity gain is achieved with both the volume and gain controls at 12 o'clock. As you turn one or both controls above this setting sustain and distortion gradually increase from a greasy grind to full burn, and the overdrive effect is outstanding – very organic and realistic – this pedal just functions a little differently from what you may be used to......

MSRP \$169, but the first 100 pre-paid orders will be \$139 + UPS Ground shipping.

John McGuire Guitars

If you aren't familiar with John McGuire, perhaps you have heard of his father, Mike, one of the original co-founders of Valley Arts Guitars in Los Angeles, and production manager for the Gibson Custom Shop in Nashville from 1993 until his recent retirement. John's brother Mike Jr. is also an extremely accomplished artist who works in the finishing department at the Gibson Custom Shop in Nashville. Mike Voltz, production manager at the Gibson Custom Shop in Memphis initially introduced us to John McGuire, he sent us one of his Tradition guitars for review and we asked him to share his story. Enjoy...

TQR: Well John, being the son of Mike McGuire who just recently retired from running production at the Gibson Custom Shop, we can kinda guess how you got into the guitar building business, but give us the details. Where did you grow up, did you start out by learning to play the guitar, did you pursue music first, and when did you initially become interested in doing repairs and building?



I grew up
in Southern
California, and
I used to go in
to work with my
dad pretty often.
I bugged him
with new designs
all the time that
were just not for
the Valley Arts

brand. You could say I was into pointy guitars back then. He allowed me to pull some scrap parts and I reworked and built my own guitar (with help of course) when I was 12 years old. I guess you could say that was when I figured out that I really