



# Catch and Release/The Sonic Spitball/Deep Space Program...

## At The Harmonica Microphone Bench

by Fritz Hasenpusch

So you've assessed the resulting audio produced by your current harp rig and find that there's more in the sonics of your imagination than yielded by the EQ at hand. You want to be hearing something ELSE, something MORE... Relax! These symptoms are a normal bi-product of being Human: You've got that over-developed brain that's always seeking/wanting/needing what it doesn't have. Just ask anyone who's in advertising... Remember our last outing in the HARPMOBILE and the lessons of Gaylord Perry, MLB pitching great who became infamous for the additives he'd apply to the ball's surface to affect its flight path toward the plate? In our case, the placing of additional audio circuits in the signal path between Mic and Amp may yield surprising results: a Sonic Spitball. You're ready to step outside the lines and electronically monkey with your sound? OK, so how can you maneuver through the vast jungle of in-line/outboard audio add-ons, find sonic bliss, and avoid dumping a fortune on expensive audio booby traps while ducking the sucker punches of non-harp-friendly salesmen that lurk seemingly everywhere in the undergrowth of your local Mega Noise outlet? Relax! You're in the HARPMOBILE!

We'll start with the Basics...

**THE ILLUSION OF SPACE, ANALOG-STYLE:** In the Beginning... Both Les Paul and the early Chess recordings showed some innovative experimentation that's stuck with us: Taking the output signal of a tape recorder and reintroducing it at a controlled level back into the machine's input would yield the "slap-back" ECHO heard on countless Blues (yes, Rock-a-Billy, too) recordings. Prior to tape, most recording studios could only utilize rooms/spaces (REVERB chambers) set-up with playback and mic gear within to create the illusion of greater physical space in the recordings than afforded by most studio rooms themselves (and many still utilize them). But live?

**TWO SCHOOLS DEVELOP: ECHO-PLEX,** developed by radio repairman/non-musician Mike Battle, was a portable endless loop-version tape recorder that was designed to be used between instrument and amp. Although not the first (Ray Butts' EchoSonic was a bit earlier but fewer than 100 were produced), it employed some advanced features: With a moveable "play" head, the time interval of the effect could be adjusted. It could also be utilized for recording and playback at a time when reel-to-reel tape decks were uncommon. The first batch of 500 was delivered to C.M.I (Chicago Musical Instruments) in 1959. Although marketed to guitarists, soon it was discovered that they sounded great with mics and PA systems as well... REVERB is the more accurate term to describe the smooth decay of the multiply-reflected audio signal that mimics the acoustics you'd hear in a concrete tunnel or blimp hangar (both of which HAVE been used in recordings for this purpose) and approximated in their studio cousins. Gold foil and the legendary EMT plate reverbs are heard on enumerable recordings, sound gorgeous, cost a fortune. It was the SPRING REVERB developed by Bell Labs that put this acoustic tool to work: Lauren Hammond of Hammond Organs knew that he could sell more organs IF they could sonically mimic a cathedral-like environment in a more user-friendly package. At first, 4' long vertical springs in oil-filled tubes were used. Eventually, the considerably more compact Hammond Reverb "pan" was developed and popularized. In '63, radio repairman/non-musician Leo Fender adopted the Hammond-developed Accutronics Type 4 reverb unit for inclusion in designs for his first reverb-equipped amp, the Vibroverb, as well as the legendary stand-alone reverb tank, the Fender 6G15. REVERB has been commonplace in live music ever since. What Harpster wouldn't want a piece of that?

ANALOG examples, phantoms, and bargains... Next time, on THE MIC BENCH.

YOUR QUESTIONS ANSWERED (Email them to me at [HARPMICMAN@earthlink.net](mailto:HARPMICMAN@earthlink.net))  
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For pictures and descriptions of most of the microphones listed visit  
[http://www.harmonicamasterclass.com/vintage\\_collection.htm](http://www.harmonicamasterclass.com/vintage_collection.htm)

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