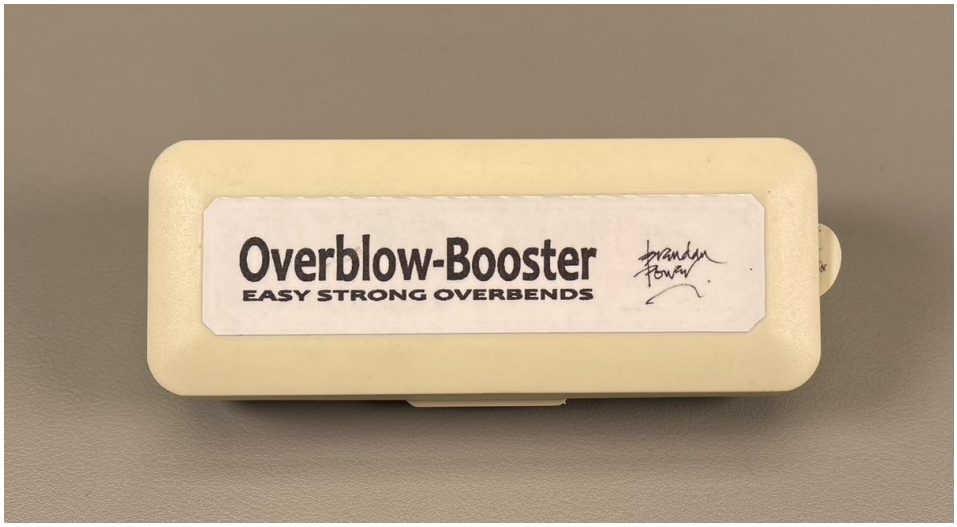
Hello Harp Techs, our friend and favorite mad scientist, Brendan Power has just released his diatonic **Marine Band Overblow Booster MK2 Harmonica**. I purchased one from his first batch of 25 signed and numbered hand-made lots. It is amongst Brendan's top tier innovations that will benefit the Diatonic Richter harmonica player. I'll explain why in just a moment, but becoming aware of the back story will increase your appreciation of this little marvel.



Brought to prominence by Maestro Howard Levy, the overblow method has been adopted by other contemporary harmonica greats, such as Carlos del Junco and Jason Ricci. I can recall Howard explaining to our 1999 Harmonica Masterclass student body that as a piano player he could not only hear the notes of the song, but also visualize them on the keyboard. He went on to tell our class that he intuitively knew those notes were inside the diatonic harmonica as well, but where? As with most diatonic harmonica players, Howard had already mastered the fundamental bending techniques to fluently play the 12 hidden notes, but wondered if there was a method to play the other (7) missing chromatic notes. A chance meeting with an acquaintance discussed how he was able to play "missing notes" on his Saxophone by *overblowing*.

Technically, saxophone overblowing is not the same phenomenon that harmonica players experience, but the name stuck; "**Overblowing**". For harmonica players a more accurate descriptive word would be Overbending. After numerous hours of experimentation with his embouchure and harmonica reed gapping, Howard was able to consistently conjure up never-before-played (pitch) perfect notes.

For diatonic harmonicas, achieving "normal" (near pitch perfect) bendable notes is possible due to the phenomenon found within the basic BLOW/DRAW (open/close reed) harmonica architecture. *Eight (8) DRAW bends are available for Holes 1 through 6, and Four (4) BLOW notes are available for Holes 8 through 10.*

HOW BENDING WORKS

Within the BLOW and DRAW reeds inside the same hole, the higher pitched reeds can be lowered (flatted) by the number of scale degrees (spread) between those two reeds.

For example; on a C harmonica, the #3 BLOW reed=**G** and the #3 DRAW reed=**B**. If you were to lay out those notes into a chromatic scale, it would look like: **G**, Ab, A, Bb, **B.**

This means that in addition to playing the normal #3 draw B note, the player can modify the shape of their resonant tone cavity to match the frequency of the hidden notes, and in this example, conjure up the hidden **Ab, A**, and **Bb** notes. Voila, bending!

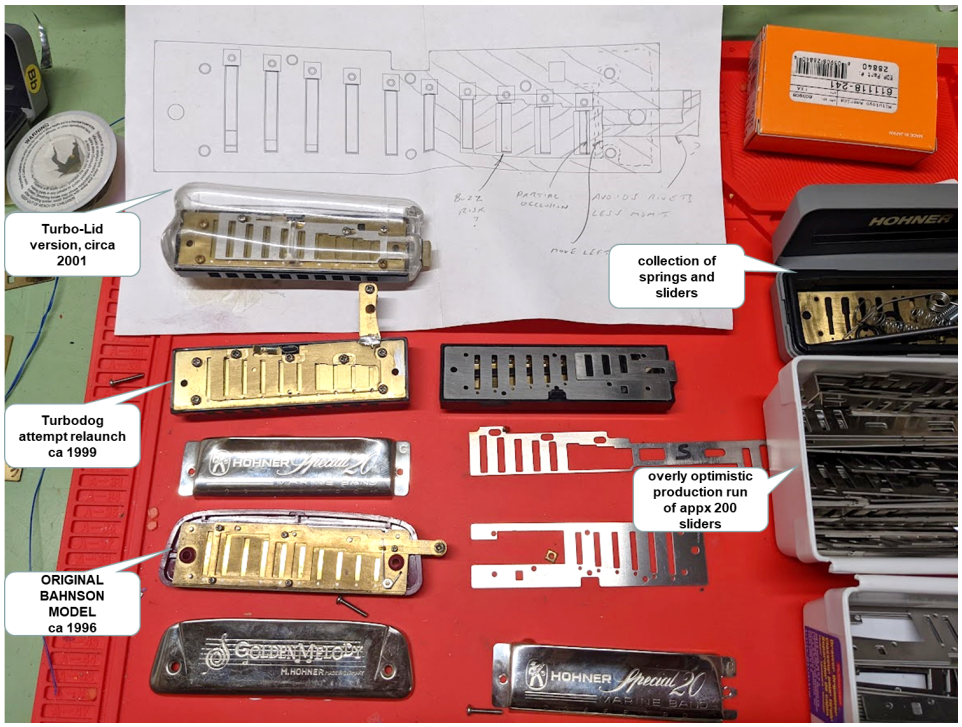
Overbending operates by slightly different rules. Here the opposing reed inside the same hole should be almost, if not completely "shut off", to avoid contamination from that reed's vibration. See for yourself with this simple experiment; remove the blow cover plate, then as you blow into hole #5, use your index finger to close off the opening of the blow reed slot. The tighter the closure the purer the overblow note will speak. On your C harmonica, this E will become a F#.

HISTORY LESSON

Dr. Henry T. Bahnson met Howard Levy at an Augusta SPAH convention, and became intrigued (some would say obsessed) with Howard Levy's discoveries, and soon realized that the effort required to achieve skillful Overblow/Overdraw techniques were extremely challenging-if not impossible-for most harmonica players. He took to the bench and created a working Overblow assisted harmonica. United States Patent #5,739,446 was issued April 14, 1998 (expired 2015).

Conceptually, Henry Bahnson's invention was solid, but from those fortunate few who were able to play one of the 200 made, shortcomings in that original design were exposed. Namely, the "shutter" (my word) reed slot slider assemblies for both the Blow and Draw reed plates lacked the air tightness and precision required to enable the player to *consistently* produce pleasing overblow/overdraw notes.

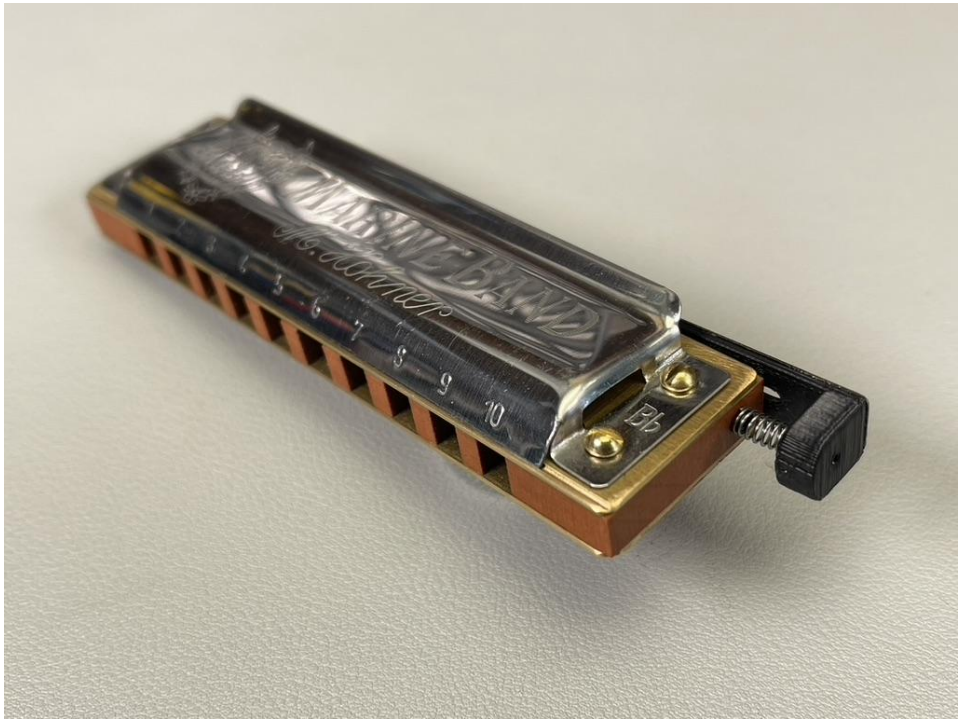
Our friend Jim "Professor" Antaki, owner/operator of **TurboHarp** was on the front lines with Dr. Bahnson. Jim was instrumental in making those 200 Bahnson Overblow Harmonicas come to fruition. Like the proverbial onion metaphor, the more I peeled away, the richer the Bahnson story. I plan on dedicating a future article about Dr. Bahnson's connection to the harmonica community.



Greatly appreciated are the rare photos provided to me by Jim Antaki of TurboHarp

Enter the Marine Band MK2 Overblow Booster Harmonica

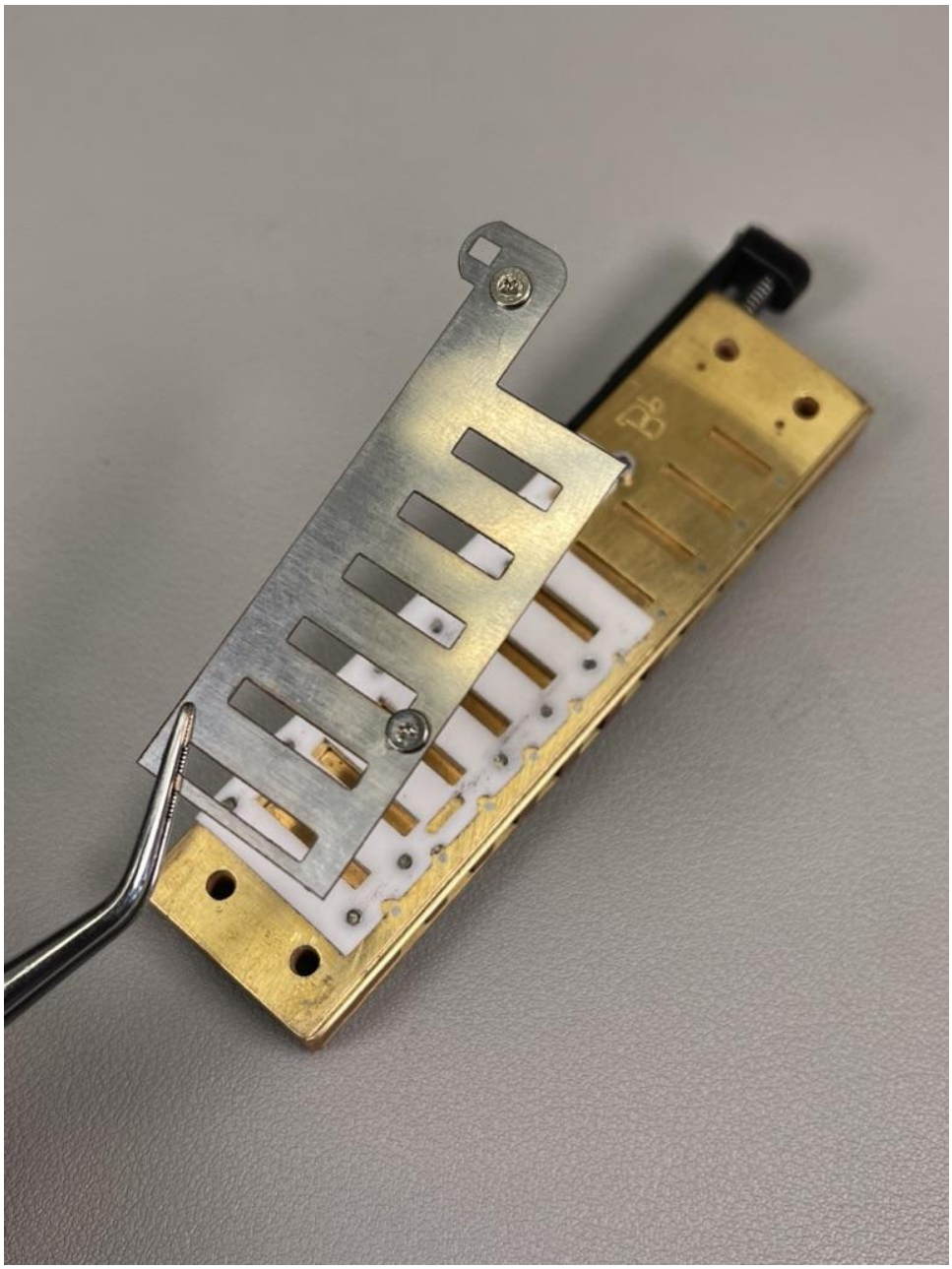
Working under a provisional patent, Brendan Power toiled over numerous prototypes since 2019, and ironed out the production and cost issues of this instrument. The Marine Band OB MK2 is not a panacea for achieving pitch perfect notes (consider switching to the Chromatic harmonica for that ;o) however, it is a "must have" for those harmonica players *already proficient* with their diatonic harmonica bending skills, and are ready-willing, and able to expand their musical palette to the next level.



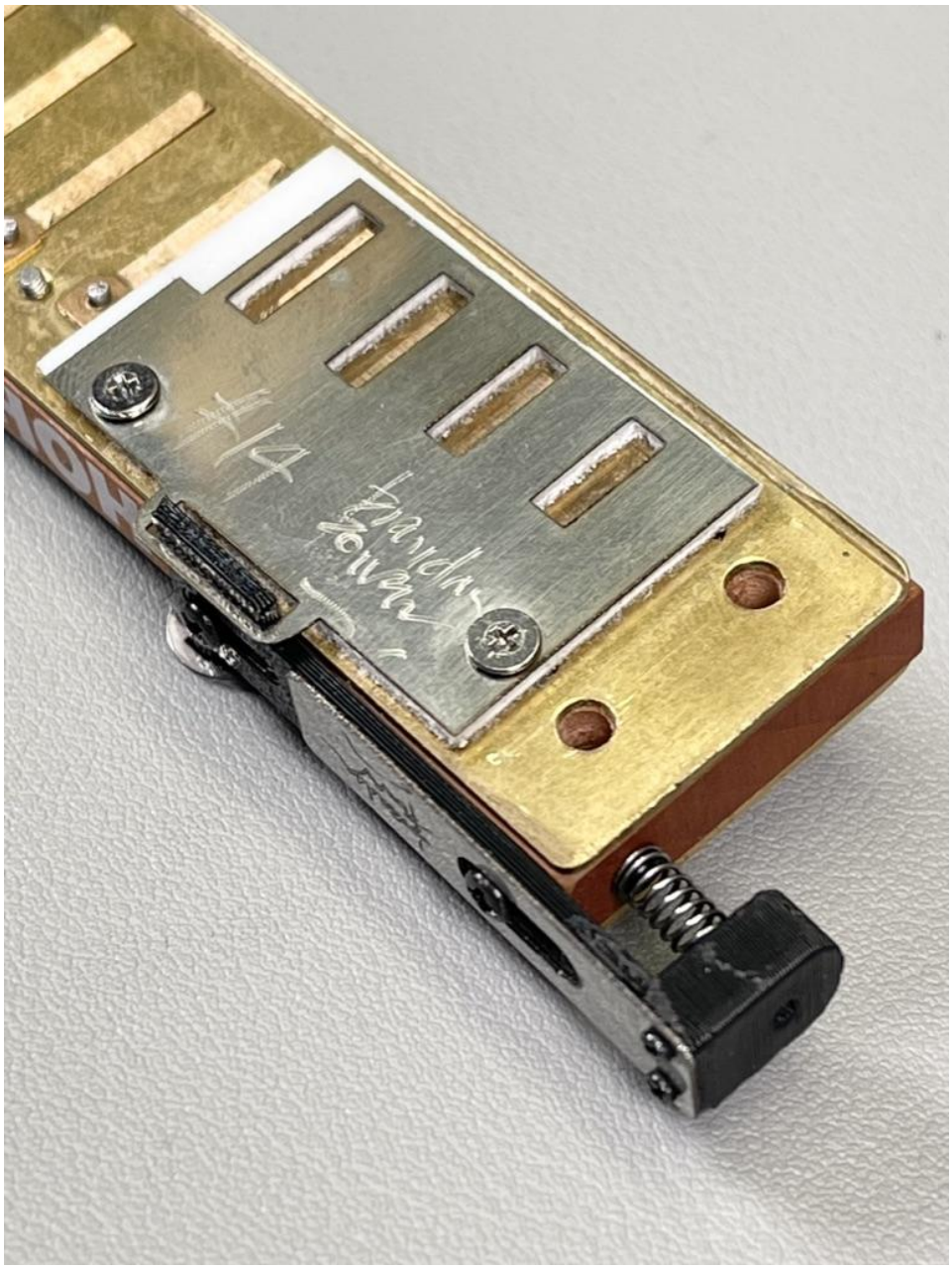
With or without the bullet mic, it should not take you long to become comfortable with the discreetly positioned slider button. For Chromatic Harmonica players, the button will be reminiscent of the Hohner CBH2012 and CBH2016 chromatic models designed by the late great Cham Ber Huang.

Brendan was self taught and now an expert with designing and fabricating 3D printed parts. Notice the black ABS slider tabs nested inside the BLOW and DRAW slider plate

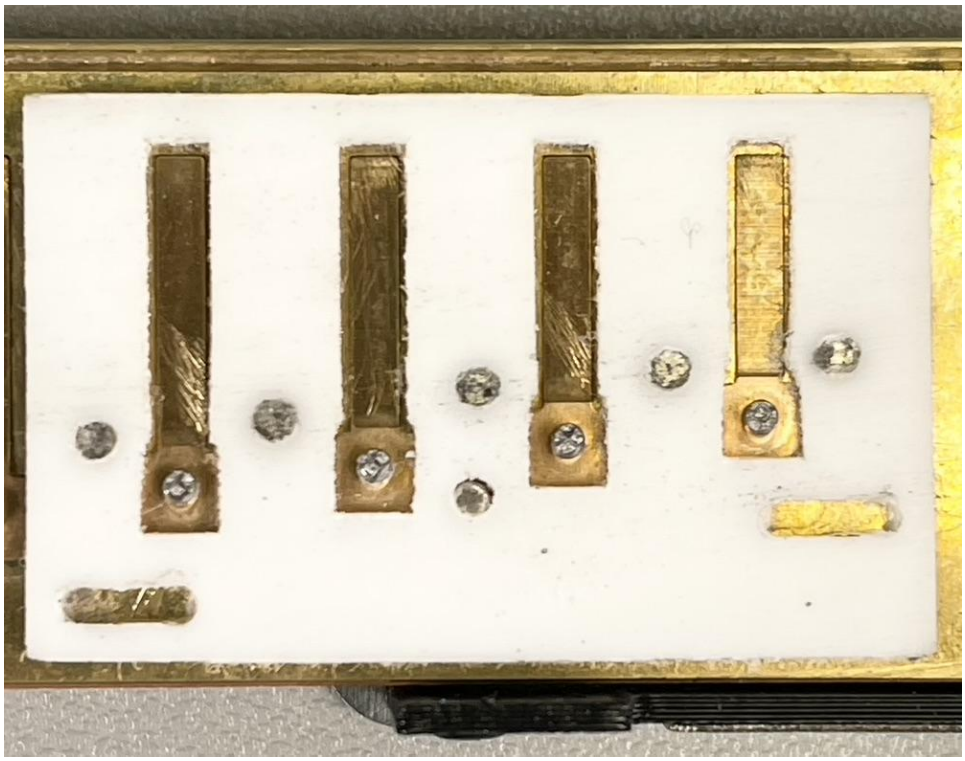
With the cover plates removed, you will see the BLOW slider for reed slots #1 through #6



Shown again is the BLOW side with the slider removed. The ultra thin, lightweight and precision cut steel slider plates, coupled with powerful Teflon embedded Neodymium magnets (see small silver dots) are the “secret sauce” to the OB MK2 recipe. This unique combination of materials provide constant downward pressure for airtight reed slot closure. The slip and slide properties of Teflon enable the player to confidently depress the CX12 type button to play Overbend notes.



Flipping over the harmonica, notice the DRAW slider plate hovering over reed slots #7 through #10. On Richter tuned diatonic harmonicas, the higher note within the same hole switches from the DRAW reed side over to the BLOW side. This is why the #7~#10 slider plate is located on the DRAW side and not the BLOW side (confused yet ;o)



Here is a close-up of the DRAW reed plate side without the slider plate. Easy to see the white Teflon spacer with the precision embedded Neodymium magnets.

The slider button released, "shutters" are fully open to allow the reeds to vibrate

Slider button depressed at 50%

Slider button depressed at 100% stops reeds #8~#10 from vibrating and enables the Overdraw notes to “speak” out

HARPSMITH Impressions

Previous prototypes I had on my bench experienced issues with the slider tab popping out of the nest. Initially, I wondered if the OB MK2 was bumped (or dropped), would it render the instrument unplayable? I ran a series of “shaking” events on my harmonica shaker. Fortunately, my concerns were unfounded. The OB MK2 played perfect after every vibration test.

My only recommendation would be to counter sink the slider fastener heads (located behind the right rear of the instrument) for greater player comfort and protection of the slider mechanism.

I have never played an overbend note on the bandstand; however, with the little time I had to evaluate the OB MK2, I now have the confidence to play overbends on an upcoming show.

FINAL WORDS

If the possibility of accessing (7) seven more *usable* notes on your Diatonic harmonica intrigues you, then investing in a **Brendan Power Marine Band Overblow Booster MK2** harmonica would be your clear choice. The tuning layout is Richter so it will be instantly familiar to you.

I suspect this new product will be a best seller for Brendan, so don’t delay. Orders should be placed directly with Brendan at his web site: https://www.brendan-power.com/OverblowBooster.php

SoundCloud recordings of Kinya and Ross Garren taking the OB MK2 out for a spin:

https://soundcloud.com/user-678833265/ross-garren-ob-mkii-samples?utm_source=clipboard&utm_medium=text&utm_campaign=social_sharing

https://soundcloud.com/user-678833265/rg-ob-booster-demo-for-kinya?utm_source=clipboard&utm_medium=text&utm_campaign=social_sharing

Your Harpsmith, Kinya