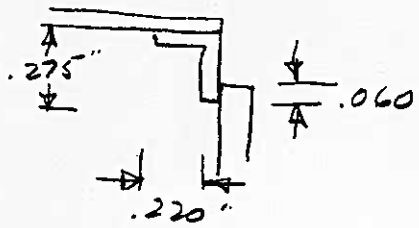
#11-8 Contoured carbon (1 @ 45°) Clef holes

	RL	SN	K	FF
12/02/74 – CMcD	.149/.142	.066/.068	.124	84~
11/25/74 – beefed up shelf to create #11-3 (patch on)	.123/.124	.050/.058	.092 tight	100~
3rd test 11/20/74 CMcD – bowl patch off	.126	.048	.102	
ground braces to make -2			no strings	
2nd test 11/19/74 CMcD – bowl patch off	.127	.045	.097	
0 CHK 11/18/74				
1st test 11/15/74 BW/CMcD – bowl patch on	.129	.058	.101	
#11-1			.081	

11/20/74 11.6 □" of clef holes

#11-2 carbon contoured 1 @ 45° clef holes

- as 11-1 had #2 fan pattern w/trapezoidal cross section
- as 11-2 the fans were ground down to about 3/16" high
- has full neck block and excess resin on block
- fans have been cleaned of excess resin
- has large patch on back of bowl
- the shelf is lightweight and the shelf-to-bowl bond looks like only .060 to .080"



- has extended fingerboard
- had bowl reinforcing for strap pin
- has large patch on back of bowl

Bridge is .080" right

Carbon #11-2

"Triad on this guitar is clear, but not bright like Master #1 and the E string is definitely weak. There is definite tin pan on B and A flat when played individually. The mid-range series D, C, B and A are quite clear and extremely nice. The low E string is quite muddy and muted; the overall sound of the guitar is sort of flatish and is not acceptable for a carbon guitar. It rates in sound output between #2 and #3 masters."

Excerpt from 11/18/74 CHK report.

It is also noted that Carbon #11-2 began life with the wide footprint tapered fans of the CMcD design #2 and initially displayed very restrictive sound as did Master #3, originally equipped in the same pattern.

original Top K = .046 (need grams)

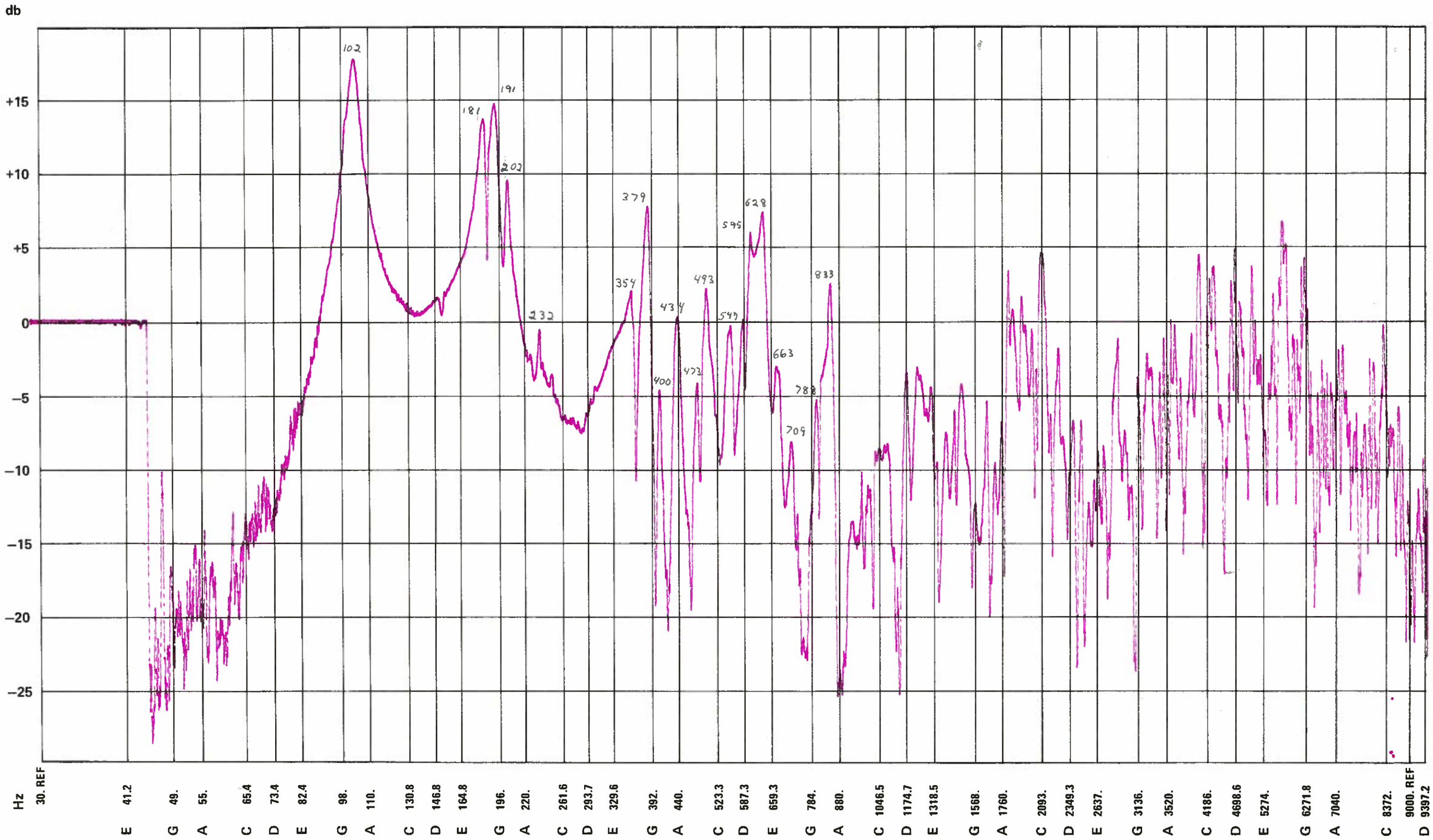
3/8/77

11-9 Contoured Top – Acoustic
Changed braces – note that the fingerboard is glued to the top to fret #20

R	L	S	N	K
.013	.013	.009	.009	.050
.027	.028	.019	.018	
.057	.059	.039	.037	

? top ?
Bridge – Ovation acoustic
Bracing: 1 – 8.7 6 – 3.0
2 – 3.2 7 – 4.6
3 – 4.8 8 – 3.0
4 – 2.7 9 – 8.1
5 – 4.3 Bridge brace – 4.1

TECHNICIAN _____ DATE 3/17/77 DESCRIPTION All new braces contoured carbon GUITAR NUMBER 11-9



UNIT NAME 11-8 SER. NO ~~TEST RECORD NO~~ # 11-8 graphite

db
+20
+15
+10
+ 5
0
- 5
-10
-15
-20
-25
-30
-35
-40

87.4
165.9
365.7
510.6

30 HZ 50 100 200 300 400 500 600 700 800 900 1K 1.5K 2K 3K 4K 5K 6K 7K 8K 9K

TECH. EHS. DATE 1-20-75

UNIT NAME 11 - 8

TEST RECORD № ~~58~~ 11-8

db +20 +15 +10 + 5 0 - 5 -10 -15 -20 -25 -30 -35 -40

E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D

84

GROUND DOWN OUTER RIM TO MINIMUM

Dropped frequency on fundamental to 84

as in changing from 3 to 4 this rim cut is the most significant of the changes

E is 82.4

F is 87.3

DESCRIPTION:

TOP CONTOURED 1 ply 45°

CLEFF HOLES

CLOSE FAN PATTERN

While good in the overall this more has a definite tin pan on high chords like a guitar without fans. Of course there are very slight fans here. The fill at 393 ~ is definitely superior to the 400 ~ ± hole in Carbon 3-3. More high response is needed but the low-to mid range power out put is about right. Master #1 is a brighter guitar with more ring and sustain but less power

Hz 41.2 49.0 55.0 65.4 73.4 82.4 98.0 110.0 130.8 146.8 164.8 196.0 220.0 261.6 293.7 329.6 392.0 440.0 523.3 587.3 659.3 784.0 880.0 1046.5 1174.7 1318.5 1568.0 1760.0 2093.0 2349.3 2637.0 3136.0 3520.0 4186.0 4698.6 5274.0 6271.8 7040.0 8372.0 9397.2

OPERATING TECHNICAN

DATE 11/27/74

OVATION INSTRUMENTS

UNIT NAME 11-7

TEST RECORD № ~~#57~~ 11-7

db

+20 +15 +10 + 5 0 - 5 -10 -15 -20 -25 -30 -35 -40

E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D

88

Ground pans down to about 1/8" high

slight lower base frequency

Hz 41.2 49.0 55.0 65.4 73.4 82.4 98.0 110.0 130.8 146.8 164.8 196.0 220.0 261.6 293.7 329.6 392.0 440.0 523.3 587.3 659.3 784.0 880.0 1046.5 1174.7 1318.5 1568.0 1760.0 2093.0 2349.3 2637.0 3136.0 3520.0 4186.0 4698.6 5274.0 6271.8 7040.0 8372.0 9397.2

OPERATING TECHNICAN

DATE

OVATION INSTRUMENTS

UNIT NAME Graphite #11-6

TEST RECORD № 56 11-6

E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D

ground off fingerboard on tab track to last fret
Lost a touch on first peak, gained a little on second peak.
No ~~objectionable~~ discernable frequency shift

db
+20
+15
+10
+ 5
0
- 5
-10
-15
-20
-25
-30
-35
-40

Hz 41.2 49.0 55.0 65.4 73.4 82.4 98.0 110.0 130.8 146.8 164.8 196.0 220.0 261.6 293.7 329.6 392.0 440.0 523.3 587.3 659.3 784.0 880.0 1046.5 1174.7 1318.5 1568.0 1760.0 2093.0 2349.3 2637.0 3136.0 3520.0 4186.0 4698.6 5274.0 6271.8 7040.0 8372.0 9397.2

OPERATING TECHNICAN

DATE

OVATION INSTRUMENTS

UNIT NAME Graphite 11.-5

TEST RECORD № 55 11-5

db

+20 +15 +10 + 5 0 - 5 -10 -15 -20 -25 -30 -35 -40

E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D

92

Fans were scalloped 1" back from neck blocks compared to 11-4

Hz 41.2 49.0 55.0 65.4 73.4 82.4 98.0 110.0 130.8 146.8 164.8 196.0 220.0 261.6 293.7 329.6 392.0 440.0 523.3 587.3 659.3 784.0 880.0 1046.5 1174.7 1318.5 1568.0 1760.0 2093.0 2349.3 2637.0 3136.0 3520.0 4186.0 4698.6 5274.0 6271.8 7040.0 8372.0 9397.2

OPERATING TECHNICAN

DATE 11-27-74

OVATION INSTRUMENTS

UNIT NAME Graphite top #11-4

TEST RECORD № ~~54~~ 11-4

Graphite 11-4 differs from 11-3 by stripping off the glass binder strips outside. Previously adding this strip increased K about 6. Taking it off compared to run #50 resulted in a $\frac{1}{2}$ tone drop in low peak from G to F#. Second peak and others remain unchanged.

11-5

db +20 +15 +10 + 5 0 - 5 -10 -15 -20 -25 -30 -35 -40

E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D

Hz 41.2 49.0 55.0 65.4 73.4 82.4 98.0 110.0 130.8 146.8 164.8 196.0 220.0 261.6 293.7 329.6 392.0 440.0 523.3 587.3 659.3 784.0 880.0 1046.5 1174.7 1318.5 1568.0 1760.0 2093.0 2349.3 2637.0 3136.0 3520.0 4186.0 4698.6 5274.0 6271.8 7040.0 8372.0 9397.2

OPERATING TECHNICAN

DATE 11/27/74

OVATION INSTRUMENTS

UNIT NAME GRAPHITE TOP # 11-3

TEST RECORD № #50 11-3

db

+20 +15 +10 + 5 0 - 5 -10 -15 -20 -25 -30 -35 -40

E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D

Hz 41.2 49.0 55.0 65.4 73.4 82.4 98.0 110.0 130.8 146.8 164.8 196.0 220.0 261.6 293.7 329.6 392.0 440.0 523.3 587.3 659.3 784.0 880.0 1046.5 1174.7 1318.5 1568.0 1760.0 2093.0 2349.3 2637.0 3136.0 3520.0 4186.0 4698.6 5274.0 6271.8 7040.0 8372.0 9397.2

OPERATING TECHNICAN

DATE 11/27/74

OVATION INSTRUMENTS

UNIT NAME Cavbon 11-2 Clef Hole Arched

TEST RECORD № 11-2 ~~447~~

db

+20 +15 +10 + 5 0 - 5 -10 -15 -20 -25 -30 -35 -40

E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D

BOWL RESONANCE

FUNDAMENTAL

SIDES BRIDGE

3" IN FRONT SEE RUN 45

AROUND INSIDE OF CLEFF HOLES BIG WADE AT 3" BELOW BR.

2" BELOW SADDLE BUT INSIDE ENDS OF BRIDGE ALSO IN FRONT OF BRIDGE

3" OFF EACH END OF BRIDGE

Hz 41.2 49.0 55.0 65.4 73.4 82.4 98.0 110.0 130.8 146.8 164.8 196.0 220.0 261.6 293.7 329.6 392.0 440.0 523.3 587.3 659.3 784.0 880.0 1046.5 1174.7 1318.5 1568.0 1760.0 2093.0 2349.3 2637.0 3136.0 3520.0 4186.0 4698.6 5274.0 6271.8 7040.0 8372.0 9397.2

OPERATING TECHNICAN

DATE

OVATION INSTRUMENTS

UNIT NAME Carbon 1/-2 Cleft Hole Archtop Top Pencil held againts top 8" above Saddle TEST RECORD № 11-2 ~~#55~~

db

+20 +15 +10 + 5 0 - 5 -10 -15 -20 -25 -30 -35 -40

E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D E G A C D

Hz 41.2 49.0 55.0 65.4 73.4 82.4 98.0 110.0 130.8 146.8 164.8 196.0 220.0 261.6 293.7 329.6 392.0 440.0 523.3 587.3 659.3 784.0 880.0 1046.5 1174.7 1318.5 1568.0 1760.0 2093.0 2349.3 2637.0 3136.0 3520.0 4186.0 4698.6 5274.0 6271.8 7040.0 8372.0 9397.2

OPERATING TECHNICAN

DATE

OVATION INSTRUMENTS