

ROBERT C. BREWSTER, JR.

Montreal Sound Studio

The following three act saga recounts the building of a new audio control room in 'The Great White North.' Take off, aeh!

CANADA IS BEST KNOWN in America for our exports of toothless hockey players, strong beer and spacearms for the N.A.S.A. Shuttlecraft. With any luck, this list will soon include low cost acoustically designed and constructed audio control rooms.

Due to a gut feeling, and with a Vegas craps shooter's savvy, a project was undertaken by Montreal Sound Studio owner and Head Engineer Bill Hill that, to a logical eye, would appear foolhardy at best. The tough economic times having already forced a few of the better known and higher priced studios in Montreal to close their doors, there was no doubt about the demand and the need for Montreal Sound to have a perfectly designed and constructed audio control room. Shouldn't every studio have one? We all thought so, and were thoroughly convinced, until we found out that the basic going rate for such a room was \$35,000 and up. I mean, the last twelve months had been a banner year for Montreal Sound. We'd recorded two movie soundtracks, a disco album by a well-known major European star, and a dozen or more Canadian twelve-inch releases, not to mention all the jingles, commercials and audio visual presentation work generated from our two in-house companies, Hill/L'Espérance and Wavelength Productions. But there was still last year's purchase of a Harrison 4032 console to pay for. So the acoustically designed control room would have to wait...or would it?

ACT ONE, SCENE ONE June 15th, 1982

Enter into the scenario "The Seed Sower," twenty-five year old technical engineer Daniel Séguin, whose dreams and expectations went far beyond his current job of teaching studio sound engineering for a local institution. Séguin had rented time from Montreal Sound on June 15. Bill and Daniel innocently started talking about the weather that morning, and how nice it would be for the studio to have a perfectly designed and constructed audio control room. Four hours later, after learning that Daniel was the creator of the Dan Systems D.C. Power Amplifier, and had also designed two local four and eight track studios and was just itching to tackle a full-fledged twenty-four track room, the VU meters in Bill's head started peaking for the first time. Daniel was so eager to design the new "Montreal Sound" control room that he was willing to donate his design and manual labor for future considerations (many hours of late night studio time once the job was completed). Daniel also had access to some kiln-dried and aged two-inch Quebec White Pine that could be hand picked from a large order that was being prepared for export to Europe. In fact, his lumber contact was so good that he could buy the 3,200 board feet necessary to do the control room for only \$1,500.00. These meters in Bill's head were now nearing distortion level. Once Daniel revealed that he had just recently installed the brand new video projection system aboard Air Canada's L-1011-500's, and just happened to be part of the technical team that worked on the

Robert Brewster, Jr. is a freelance creative writer, specializing in audio and television commercial scripts.

Canadian-made spacearm for the Shuttlecraft, Bill's heart couldn't handle the excitement anymore and he told Daniel to go ahead with the design.

ACT ONE, SCENE TWO July 6th, 1982

Michel L'Espérance, Paul Zakaib and Bob Brewster are trying to enjoy their morning coffee. Bill Hill is making it extremely difficult as he spews forth this insane idea about putting together his dream control room for only \$5,000.00 (that's only \$5,000.00 American, aeh!). Needless to say, we found it quite hard to laugh and drink coffee at the same time.

Paul: I think the boy needs some new batteries for his adding machine.

Michel: Let's hope it's only that.

Bob: You mean?...

Michel: It's highly probable.

Paul: You mean the dude has finally gone one disco mix



Some of the cast: (left to right) Bill Hill, Daniel Séguin and Bob Brewster.

over the line and has harmonized and flangerized himself to the point of mummifying his brain?

Michel: All the evidence is pointing that way.

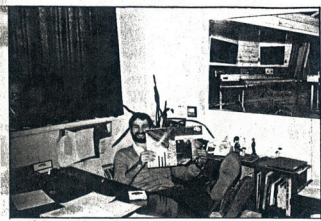
Bob: Who's going to break the bad news to his wife and kids?

Paul: (with a young child's excitement) I'll do it! I'll do it! Please, please. Can I? Can I?

Bill: (very seriously) Really guys, if we all pitch in a few hours of labor a day and can find a master carpenter who will work for nothing, we can pull it off for about six grand. The best part of this whole plan of mine is the estimated downtime of only three weeks.

Everyone in the room shared a warm hearty round of laughter; all, that is, except Bill. He had a look in his eye that reminded me of a young child lost in his dreams of anticipation, waiting for his new toy to arrive.

Paul: So Michel, shall I call the cookie wagon for Bill, or what?



Daniel Séguin hard at work reading his favorite magazine. (Isn't it everybody's?)

Bob: What I mean, wait. I know the perfect carpenter for the job, but he sure as hell won't work for nothing.
Bill: (dead serious) Call him. Now.

ACT TWO, SCENE ONE
July 30th, 1982

Enter into the scenario the final key character, twenty-eight year old self-taught master carpenter, Robert Maher. If this insane project had any hope of being completed in the allotted three-week time period, it would be due solely to the magician-like wizardry that would have to be displayed by Maher and his large entourage of fine woodworking tools.

Little did Maher realize when he walked into Bill's office that morning just how much of that self-taught know-how he was going to have to rely on. Maher had just finished three of his biggest and most satisfying projects. The first was an interior cosmetic renovation of one of Montreal's hottest



The brand new audio control room at Montreal Sound Studio.

night-spots. This was followed by a total interior renovation and restoration of a mansion in Montreal's extremely wealthy suburb of Westmount.

Maher: The house is owned by this man who has a lumber importing business. I got the chance to work with some of the finest exotic woods in the world. Stuff like Brazilian Pine, Burnese Teak, Burl Rosewood. Hey, some of that wood cost ten bucks a board foot.

Maher's last job was designing and rebuilding the interior of recently released Montreal Expos' pitcher Bill Lee's new home. There was no doubt in anyone's mind that Maher was capable of handling the job. But, could he handle the totally inept crew of Paul Zakab, voice-over dialect specialist and impersonator. He's usually a very pleasant guy unless the office's cold or someone has stolen his precious "brown

bagged lunch". Dino Bartolini, Montreal Sound's apprentice engineer. He is overly polite, extremely patient, young, strong, and willing to do any job; Bill Hill, owner and chief engineer of Montreal Sound; he is not to be counted on for too much on-site labor as he'll be too busy pulling out his hair and his wallet; Michel L'Espérance, musical composer and arranger. Generally, he's your basic sweet guy (you got to watch those sweet guys); and Bob Brewster, without a doubt one of the world's leading excuse-makers, who can back it up with an uncanny natural ability of being totally incompetent when it comes to handling any task that even slightly resembles manual labor?

Before Robert Maher would have the honor of working with this unique ensemble of "tundra monkeys" (we've been led to believe that this is a popular American term for Canadians; we like it a lot better than hoers, ach!), he would have to come to terms with the legendary financial negotiator, Bill "it costs too much" Hill. Good luck, Robert!

ACT TWO, SCENE TWO
Same day

Bill was sweating bullets as Maher walked into his office. He had just gotten off the phone with Daniel who had informed him that the wood had to be purchased immediately or there would be a 25 percent price increase and maybe even a chance of losing the wood altogether to another buyer. Daniel could bring the selected pine and cedar to the mill for planing in the afternoon and deliver it himself to the studio sometime during the evening. Bill had hoped that he could have slowly eased into the project. Like, sometime next year. Messrs. Maher and Hill held very intense negotiations behind closed doors that lasted for over an hour. Every few minutes during that memorable hour, Maher could be heard yelling clear down to my desk at the front door, "Bill, you can't be f*&%^+ serious!"

Against all logic known to modern man, Robert Maher actually came out of the office that morning with a smile on his face and a challenge in his heart.

Maher: Okay, you lazy bunch of f*&%^\$! Get off your tits and tear this control room apart. The new one starts going in Monday morning.

Paul, Michel, Dino, Bob: What?!!
Maher: Rule Number One, and the only Rule. I never repeat myself, or tear things down. Just build them up. I like lots of hot coffee and I never work weekends. Any questions? No. Good. See you all Monday morning, 7:30 sharp.

While the boys started scurrying around wondering what to gently rip out first, I ran after Maher to find out why he accepted the job of constructing the "fancy perfectly acoustically designed control room." If you notice a slight bit of sarcasm in my words, it's because I was the only one who was perfectly happy with the old control room. It sounded great to me and the grease stains on the walls gave it that homey touch. But what the hell do I know? I'm tone deaf.

Bob: Hey, Maher. What's the hurry?
Maher: I have to get back to my shop and sharpen all my tools. Then, I have to disassemble my saws, pack them in the truck, double check all the plans for extra tools and material that might be needed....

Bob: Okay, I believe you. So tell me, how come you took the job?

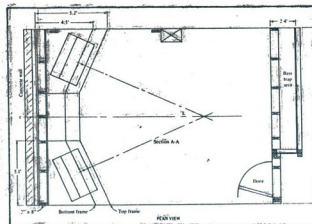
Maher: Not for the money; that's for sure. I'm lucky if I get paid at all. You musician types have a bad reputation. I'm doing this strictly for the challenge and the experience of tackling something totally foreign to me. Actually, I'm approaching this control room as one big piece of furniture.

Bob: Very interesting.
Maher: I don't know how this room is going to sound, but you can bet your ass it's going to be constructed perfectly and look even better. See ya' later. Bob. I got work to do.
Bob: Yeah, later.

ACT THREE, SCENE ONE (Week One)
August 2nd 1982

The whole studio complex looked like a quickly thrown together lumber yard as I awoke on that morning. Thanks to some spontaneity and thoughtful maneuvering by Bill, we had use of the empty office next door to store and cut the wood. To get this space, Bill had promised the building superintendents that he would let them sing on our next jingle. As fearfully tiptoeing way to the now empty control room, I could hear Maher's gruff voice barking out orders. He drove home the point about power tool safety and proper maintenance procedures to the crew of novice laborers at his disposal. Maher later told me in private that if he had realized there was disposable, he would have dumped the whole lot.

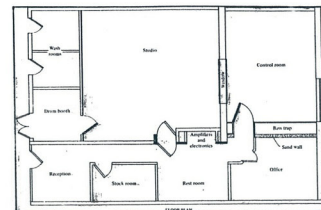
Most of the first day was spent unpacking and setting up Maher's makeshift portable work shop. We also separated and selected the wood that was to be used in the framing of the cushioned footings that the whole structure would sit on. Daniel Séguin didn't arrive on the scene until late afternoon, as he spent most of the day double checking the data on the computer readout. Daniel once told me that if it's possible for any variable or group of variables to be computed, they should be, and then programmed, to be considered in the design. Daniel had assured me that everything from the total weight of the completed structure, down to the uniform absorption coefficient patterns of the two-inch white pine versus the half-inch cedar, had been considered. Daniel was convinced he had thought of everything. I'm glad he was, because I wasn't. We'd forgot to compute the piece of



bubblegum I'd left stuck under the Harrison console before they built the box around it.

August 3rd, 1982
Disassembly of truss in the workshop and the setting of it into place in the control room was painstaking work, as the self-contained box structure was to be floated on pads and remain independent of any adjacent walls. This would achieve an air space around the whole box and would free the control room of all structural sound transmissions and vibrations. The many compound angles and lab joints were mathematically scribed together. Each one was glued, then bolted together with two one-eighth inch steel plates. This was done to prevent the wood cracking at any joints.

August 4th and 5th, 1982
Work that was started on August 3rd was completed. Amazingly, after only one day of intense training, Maher had the boys working as a unit. Tools were being plugged in, passed, used, and unplugged without a word being spoken. Michel was claiming that this harmonious working relationship was being achieved by him having the foresight



of pointing out to Maher the similarities between writing a complicated melody line and coordinating an on-site working crew. Whatever the system, it appeared, on the surface at least, to be working. Daniel could be seen every once in a while running around with his slide rule and tape measure.

August 6th, 1982
While Maher was cutting and fastening the inner pine shell to the frame, Michel was trying to force Maher into signing over the publishing and performing rights of their newly discovered idea. "The musical method of manual labor." Daniel and Paul spent most of the day building the cavity that would hold the Westlake studio monitors. Dino was stuffing insulation all over the place and silicone caulking everything in-sight. No one saw too much of Bill that day as Maher kept him and his wallet very busy driving all over Montreal to purchase a few unforeseen supplies.

**Get Aligned
Stay Aligned
with STL precision
magnetic test tapes**

These dependable tapes are used by broadcasters, recording studios, equipment manufacturers, governments and educators throughout the world. Widest variety... Alignment, Sweep, Pink Noise, Level Set, Azimuth and Flutter/Speed. Available on reels, in cartridges and in cassettes. Also, the Standard Tape Manual & the Magnetic Tape Reproducer Calibrator.

Phone for fast delivery of free catalog.



STANDARD TAPE LABORATORY, INC.
2610 DEER LANDING ROAD #5, HAYWARD, CALIFORNIA 94541 • (415) 786-3548

Circle 34 on Reader Service Card

30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

Week One Summary

After five non-stop sixteen-hour work days, interrupted only by hundreds of threatening phone calls from our wives and periodical visits from the local Greek pizza delivery man, we decided to call it a week.

It was two a.m. Saturday morning and the whole crew was beat, not to mention Bill who was a total nervous wreck as he watched his carefully planned budget slowly get up and casually fly out the window. Down to the last man, the now finely tuned crack work team was ready to come in the next morning and continue the impossible dream.... It should be duly noted at this time that I was personally banished from the work site at three p.m. that day for being a threat to worker safety and a public nuisance, so, I don't believe them when they say they were ready to come into work the next morning only a few hours later. It's no secret how long and cold Montreal winters are and just exactly how lonely they can be without wives... say no more!

August 7th and 8th, 1982

And somewhere, some wise old man said, "Let the poor boys rest a couple of days, they are all plum beat, and besides, the carpenter don't work weekends."

ACT THREE, SCENE TWO (Week Two)

August 9th, 1982

Robert "we're going to need more" Maher was driving Bill crazy with his outrageous demands for inconsequential items like screws and nails. Way back on August 2nd, Bill had bought a brand new note pad. This rather thick pad was quickly being filled up with a list of "don't worry Bill, it's only ten dollars" items. The office wall was demolished to allow an extra two feet to the control room for a base trap and sand-filled baffle wall. Since I had once sat through a Bruce Lee Kung Fu Festival, I was awarded the honor of running through the old gyprock wall. Both of the new walls began fabrication that day.

August 10th and 11th, 1982

Everyone was feeling the pressure as the ten-day construction deadline was rapidly approaching. The always polite Dino was now snapping at everyone with some of the finest mixture of street Italian and French heard this side of New Jersey. The clear-red B.C. cedar was cut and put into place on the control room walls. Sixty bags of sand were painfully lifted and poured into the baffle wall by Paul and Dino.

August 12th, 1982

The two new door frames that would separate the control room from the rest of the studio complex were set into place. The suspension system for the 630 cubic feet of bass trap was fastened into the ceiling. Daniel was busy measuring and cutting the many sound absorbing panels of various lengths and dimensions that would make up this suspended bass trap. This, he said, would achieve the transfer of acoustic energy into kinetic energy, thus reducing the sound pressure level at low frequencies.

August 13th, 1982

Maher was busily putting the finishing touches on his latest woodworking masterpiece. Dino and Daniel were passing A.C. wires through the ceiling of his clothes closet in the hallway. This, I was told, had become the new home of the power amp rack. Paul was trying his best to put Bill's office wall back together while Michel was on the phone trying to hustle up some new business to pay for the over expenditures of the new control room. Bill was keeping a low profile, as we all knew he still had some money left in his wallet.

Week Two Summary

We called it Week Two around nine o'clock on Friday, August 13th. It might have been an unlucky day for some people, but this unsightly bunch of bumbling bafoos was right on schedule and damn happy about it. Bill was so overcome by the absurdity of it all that he took the whole crew to MacDonald's for burgers and fries. (Actually, we went to the local striptease club for a round of cold beer and a "look-see," but MacDonald's sounded better to the wives.) Everyone was a little saddened that night as we helped our spiritual leader pack up all his magical woodworking tools and place them carefully into his van. His job completed, Robert Maher would now be leaving us, but he vowed to return.

Maher: You guys just know I'm going to drop by at the end of next week to watch you all crawl as your deadline passes you by.... Bye!

As Maher's truck slowly pulled away into the city streets, the boys all stood there and waved until the last glimmer of his taillights dissolved into the night. I think Bill even had a tear of joy in his eye as he thought about how good it would feel to have a few dollars left in his pocket at the end of a day.

Michel: Who was that man?

Paul: I don't know but the sucker drove a six-inch silver nail through my skull before he rode off.

Bob: See, Dino, I told you he liked Paul best.

Montreal Sound Studio Equipment List

CONSOLE

Harrison 4032 with Allison Automation
TAPE RECORDERS
1 24-track MCI with Autolocator III
2 Studer 2-track with Dolby noise reduction
SIGNAL PROCESSING DEVICES
1 Eventide Harmonizer
1 Eventide Flanger
1 Eventide Phaser
1 Lexicon DDL
2 UREI LISA Limiters
4 Kexex
1 EMT 240
6 Custom Compressors
AMPS

1 Crown DC300

2 Ward-Back

SPEAKERS

Westlake, bi-amped

Auratone and JBL 4311s

Bryston 4Bs

MISCELLANEOUS

10 Beyer Headsets

20 various Microphones: Neumann, AKG, Electro-

Voice, Shure, Milab

Yamaha 6-foot Grand Piano

Fender Rhodes Piano

Clavinet

Fender Twin Reverb

Hammond and Leslie Organs

storage. Daniel was zooming around spraying all the components with contact cleaner before setting them into their proper place in the new scheme of things. The decision to totally rewire everything where at all possible was made by Bill. I mention this only because I spent the better part of two days running around Montreal trying to find some one fool enough to give us the wire we needed on credit.

August 18th and 19th, 1982

The color in Bill's face that had been missing the last few days slowly returned as everything miraculously was falling into place. Dino spent most of his time in the now airtight ceiling as Daniel skillfully maneuvered bunches of wire through a tiny crevice in the closet. These wires led to a pre-constructed wood tunnel that somehow came out in the airtight ceiling. I'm informed that most of these wires were then passed down another channel on the other side of the room that came out near the Harrison console. Some of these wires were pushed through yet another tunnel—in the floor, this time—that came out in back of the MCI 24-track. A few of these wires were then filtered over to the Studer 2-track and still more wires managed to find their way over to a rack that held the Dolby units, Revox tape deck, Harrison power supply and the Dolby remote unit. Michel was not around at all on the 18th and 19th. He was busy working on the video end of an A.V. project that was to begin audio recording at ten a.m. on Friday morning in our new studio. Bill spent most of his time on the phone speaking with important people.

August 20th and 21st, 1982

Now that all the wires that had to be passed anywhere were finally there, Michel could put up the dark brown cloth that would cover the base trap ceiling and wall.

Michel: I tell you, darlings, this fabric is going to bring out the true flesh tones of our music.

Dino spent a good deal of time in the power amp closet installing wires and a cooling fan. Daniel was permanently riveted to the back of the console with his soldering gun and his V.O.M. Every once in a while, Daniel could be heard muttering, "Tabernaec! This is getting serious." Bill, as usual, was on the phone. I spent most of my time trying to dodge Paul, who was running around with a can of furniture polish, spraying and cleaning everything in sight.

Well, folks, believe it or not, this task that once seemed impossible at best came to a victorious conclusion at 12:04 a.m., Friday, August 20th. The result wasn't official until two a.m., when Daniel emerged from the control room with a big smile on his face and an armful of graphs to back it up. He couldn't resist tossing a dirty look my way as he held up a slightly used piece of bubblegum that he had allegedly found stuck under the console. It had taken fourteen 16-hour work days to attain victory, but it was finally ours. The victory did have its casualties, though. The hardest hit was Bill's wallet and the joint bank account he shared with his wife. Wait till she finds out! The final tab on the new control room was \$8,500.00 Canadian—still an outright steal. Paul, Michel, Dino and Daniel were both mentally and physically exhausted. For sure, they wouldn't be much good at anything for at least the next few days... sorry, girls. What, you're all asking, was Bill Hill doing at this ugly hour of two-thirty in the morning? Well, Bill was frantically searching for a 24-track tape that he could remix. As Bill sat down behind the console of his new "perfectly acoustically designed and constructed control room," that child-like gaze I had seen way back when this project was conceived returned to his eyes once more. As the anticipation of seeing and hearing his "impossible dream" for the first time became too much to hold in, the ever-widening grin on his face broke into a naughty laugh as Bill said, "Okay, kiddies, now it's time to play."

Well, folks, believe it or not, this task that once seemed impossible at best came to a victorious conclusion at 12:04 a.m., Friday, August 20th. The result wasn't official until two a.m., when Daniel emerged from the control room with a big smile on his face and an armful of graphs to back it up. He couldn't resist tossing a dirty look my way as he held up a slightly used piece of bubblegum that he had allegedly found stuck under the console. It had taken fourteen 16-hour work days to attain victory, but it was finally ours. The victory did have its casualties, though. The hardest hit was Bill's wallet and the joint bank account he shared with his wife. Wait till she finds out! The final tab on the new control room was \$8,500.00 Canadian—still an outright steal. Paul, Michel, Dino and Daniel were both mentally and physically exhausted. For sure, they wouldn't be much good at anything for at least the next few days... sorry, girls. What, you're all asking, was Bill Hill doing at this ugly hour of two-thirty in the morning? Well, Bill was frantically searching for a 24-track tape that he could remix. As Bill sat down behind the console of his new "perfectly acoustically designed and constructed control room," that child-like gaze I had seen way back when this project was conceived returned to his eyes once more. As the anticipation of seeing and hearing his "impossible dream" for the first time became too much to hold in, the ever-widening grin on his face broke into a naughty laugh as Bill said, "Okay, kiddies, now it's time to play."

THE END.

