

Ace Frehley Album

**KissFAQ Interview with Rob Freeman
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KissFAQ: Rob, what do you recall about getting the invitation to participate as the recording engineer on Ace Frehley's 1978 solo album?

Rob Freeman: I got the call to work on Ace's solo album sometime in June 1978. I'm not sure if it came directly from Eddie Kramer, with whom I had previously worked, or from someone in the KISS organization. Either way, I was thrilled to get that call because I had a sense that recording that album was going to be a big step forward both for me and for Plaza Sound, the studio I had been working so hard to advance. By the summer of '78, I had already recorded some noteworthy albums at Plaza Sound with a variety of artists—among them, The Ramones' first album, "Ramones"; Blondie's first two albums, "Blondie" and "Plastic Letters"; and Richard Hell and the Voidoids' "Blank Generation"—but these were mostly "downtown" New York artists, and, at least back then, my work with them hardly garnered the kind of worldwide recognition that a KISS album would.

KF: Was this your first KISS-related project?

RF: Yes, Ace's album was the first. I guess the other KISS band members and the rest of their organization liked what I did for Ace because after that they called me to work on the "Music from the Elder" and "Lick It Up" albums as well as to put a number of radio and television commercial spots together for them. I also designed and installed a home recording system in Paul Stanley's uptown NYC condo.

KF: You said you had worked with Eddie Kramer prior to Ace's solo album. What projects did you do with him?

RF: I first worked with Eddie on some tracks by a great Brooklyn band called The Laughing Dogs. I think that was sometime in late '77 or early '78. Unfortunately, those recordings were never released, even though we put a lot of effort into them. After that, Eddie and I worked together on a singer-songwriter's project. Then sometime after doing Ace's solo album, I worked with Eddie again on some early Twisted Sister tracks.

KF: Having worked in the trenches along side him, what do you think are the strengths that Eddie Kramer brings to a project?

RF: Eddie is a studio renaissance man. He could produce wonderful records, engineer innovative and exciting sounds, and even perform musically. He was comfortable on either side of the control room glass and, while cutting tracks, would often spend time out in the studio with his artists, leaving me to man the recording console on my own. I loved hearing this somewhat edgy veteran of rock 'n' roll sit down at a piano and begin tapping out sensitive, classical melodies. He played just beautifully. Eddie drove his sessions with a hard-nosed sense of purpose, but he was never too self-absorbed to *not* listen to someone else's suggestions or to handle a note of worthy criticism. When I first started working with him, I was well aware of his legendary career (The Beatles, Led Zeppelin, Jimi Hendrix...I mean, come on!!) so I considered myself very fortunate to be sitting next to someone with his level of experience and success. I kept my eyes and ears open and learned a lot from him.

Socializing with Eddie outside the studio I discovered him to be a very gracious host. He had a terrific sense of humor and could be hysterically funny. So between Eddie's joking around and Ace's twisted, relentless humor, there were always sources of comic relief if things ever started to get tense in the studio.

KF: The album was recorded at the Colgate Mansion in Connecticut and Plaza Sound in New York. Were you present for all of the recording sessions?

RF: The basic tracks for the bulk of Ace's album (Anton Fig's drums and Ace's first round of guitars) were recorded at the mansion in Sharon, Connecticut. Unfortunately, I wasn't there for that part of the project. Eddie recorded those tracks on his own using a remote truck. I wish I had been there though, because it sounded like it was an awesome experience and loads of fun. They placed Anton's drum kit on the top landing of a sweeping, wooden staircase and recorded its ambiance from several vantage points. There were plenty of ballroom-sized rooms in the mansion with wonderful-sounding wooden floors and walls in which to record Ace's guitar amps and acoustic guitars. And they all stayed right in the house so they must've had a blast, sonically and otherwise.

Although I wasn't at the mansion, I got to experience the majesty of those drum recordings every time I brought up the console faders. They were amazing and, needless to say, very well recorded by Eddie. After cutting basic tracks at the mansion, Eddie and Ace moved the project to Plaza Sound Studios in New York City. They didn't travel light as they brought with them some thirty reels of 2" master tapes weighting almost 400 pounds. So to answer the second part of your question, yes, I was present at all of the Plaza Sound recording sessions, which consisted of two to three weeks of overdubbing and about ten or so days of mixing.



Plaza Sound Studio as seen from the control room. Photo by George A Le Moine. Courtesy of Don Hunerberg

KF: What was Plaza Sound like, and why do you suppose Eddie chose it for overdubbing and mixing Ace's album?

RF: To give you a sense of what Plaza Sound was like, I'll start off with some of Plaza's amazing history. The studio room, with its incredible dimensions—65' wide by 100' long with 30' ceilings—was constructed in the 1930's by NBC at tremendous cost (I've heard as much as \$2.5 million in equivalent dollars today). It was originally designed as an orchestral space for the Toscanini Orchestra to do live radio broadcasts. A legacy from those days was a wealth of classic orchestral instruments such as tympanis, tubular chimes, glockenspiel, harpsichord, and, most notably, an exquisite 9-foot Steinway concert grand piano. Amazingly, there was a fully functional Wurlitzer three-manual pipe organ installed right in the studio that had been used as a practice organ for the theater below. In the '50s and '60s, Plaza Sound was the busy hub for Riverside Records and many of the major jazz artists of the day; Wes Montgomery, Milt Jackson, Bill Evans, Cannonball Adderley, Art Blakey, Pharoah Sanders, and many more recorded there.

To get to Plaza Sound, you entered the Radio City Music Hall building through the 51st Street stage door entrance. Plaza Sound occupied a large portion of the seventh floor of the building. The rest of it was used for rehearsal spaces and storage rooms. In order to acoustically isolate it from the Music Hall below, the entire seventh floor was "floating," suspended on felt-covered steel springs and cork. Even the elevator shafts were isolated and only went up to the sixth floor. That meant there was always that last full flight of stairs to climb while carrying heavy amps and other things. Once you made it up the stairs, you still had a long walk ahead through a labyrinth of grey painted hallways before arriving at Plaza Sound's door, but it was always worth the trek!

One side note: just down the hall from Plaza Sound were two enormous rehearsal rooms used by Radio City's famous Rockette dancers. Sometimes when they rehearsed, you could actually feel a gentle swaying sensation in the studio as the steel springs holding up the seventh floor of the building compressed and expanded with the dancers' movements. Whenever *they* took a break, a bevy of sweaty dancers headed straight for the water cooler stationed right outside Plaza's control room door. This would invariably lead to *our* taking a break so that Ace and others could spend a little time schmoozing with the ladies.

Plaza Sound's control room was fairly long and narrow—maybe 40' by 20'—but wide enough to set the main monitor speakers back from the console. The console, with a sofa right in front of it, occupied the bulk of the main area while the outboard rack, tape machines, and a large storage closet took up the space at the back end of the room. Compared with many studios of the day, Plaza had a relatively small control room, but with its effective acoustic treatment, you could definitely get the job done in there.

Why did Eddie choose Plaza? As I mentioned, Eddie had recorded other projects at Plaza Sound prior to doing Ace's album there so he was familiar with Plaza's wondrous eccentricities and spectacular acoustics. He knew that overdubs recorded in Plaza's room would nicely complement the basic tracks recorded at the mansion. Also, I'm sure all of Plaza's prized, classic microphones and other equipment added to the allure Eddie felt when he decided to book the studio. But it might only have been after spending time with Ace's tracks at Plaza Sound and hearing how great rough mixes were sounding outside the studio that Eddie decided to stay and mix the album there.

KF: What console, tape machines, microphones, and other gear were used for the sessions at Plaza Sound?

RF: By the time Eddie Kramer walked into Plaza Sound in late '77-early '78, the studio proudly sported a top-of-the-line Studer A-800 2" 24-track machine. That was the Rolls-Royce of multi-track tape machines, with a price tag to match. We had Studer and MCI ½" 2-track mixdown machines and a fabulous API 32-input recording console, one of the first APIs installed in NYC. Although API consoles like the one at Plaza Sound are no longer made, the heart of the board, its distinctive-sounding inboard modules—equalizers, compressors and gates—are still in high demand today and can be purchased as outboard "lunchboxes."

The control room had a pair of enormous Urie 813 Time Aligned Studio Monitors sitting on custom-designed pedestals on either side of the studio-viewing window. I really wasn't a fan of large studio monitors; though they may have offered superior fidelity, they just weren't representative of what most people listened to in their home or in their car. Besides, extended listening with large speakers could cause ear fatigue. Still, it was always a kick to crank up the 813s and blast ourselves out every now and then. For more down to earth referencing of what we were doing, I preferred the popular Yamaha NS-10s (with the legendary Kimwipe over the tweeter, of course!) and the even smaller Auratones that sat atop the console.

Plaza Sound's outboard rack featured a museum's-worth of classic vacuum tube devices such as Pultec equalizers, Pultec filters, and Teletronix LA-2A compressors. There was also a nice assortment of solid-state gear including Eventide DDL (Digital Delay Line), Eventide harmonizer, Eventide flanger, Urie LA-3A and 1176 compressors, DBX compressors and noise gates, and more.

A lot of the top studios had this sort of high-quality gear in their control rooms. But one of Plaza's strongest and most unique assets remained hidden from sight...until you unlocked the doors of the studio microphone closet. Plaza possessed a treasure trove of vintage mics, many dating back to the '30s and '40s. There were warm-sounding vacuum tube condenser mics such as Neumann U47s (with original tubes), Neumann U67s, and Neumann KM-56s, and a pair of AKG C-12s, that rare and most precious breed of orchestral mic. There were plenty of Neumann U87s, the transistor condenser workhorses of the day; AKG 414s, another popular go-to mic; as well as a variety of dynamic mics such as Sennheiser 421s, AKG D-12s, and some Shure mics. There were also delicate vintage ribbon mics such as RCA 77s and RCA 44s. I spent many thoughtful moments staring into the abyss of the open mic closet deciding whether to reach for tried-and-true standards or to experiment with some new and exotic mic combination. There were always plenty of inviting options.

Befitting the studio's expansive size and ceiling height, Plaza Sound had enormous, old-style roll-around microphones boom stands as well as plenty of "gobos" ("go between" that were sound-deadening baffles) and sizable moveable walls. There was a huge movable vocal booth that could be placed anywhere in the room and a good-sized vocal/drum booth with a large window at the far end of the studio.

Plaza concealed even more hidden treasures. Down the hall from the studio, housed in a small storage room, Plaza had two vintage EMT reverb plates with vacuum tube electronics that were kept impeccably tuned. They were a joy to splash onto almost any kind of tracks. Their reverb decay times could be modified remotely in the control room using small antique-looking wheels. Further down the hall was a magnificent live echo chamber consisting of a large, highly reverberant chamber, an Altec Big Red speaker

cabinet (to send sounds out into the chamber) sitting in one corner, and a microphone (to pick up the sound of the room's reverberations and return it to the control room) in another corner. These days, "reverb" is a plug-in found on a laptop. By any standards, Plaza's glorious analog reverbs were truly jewels.

KF: Generally, it seems that basic tracks were cut at Colgate Mansion and guitar overdubs and vocals were recorded at Plaza Sound. Does this sound accurate?

RF: Well, it's accurate with the exception of "New York Groove" which was re-cut from scratch—and then re-cut *again!*—at Plaza Sound and "Rip It Out" with its amazing double-tracked drum solo. There might have been one more basic track cut at Plaza, possibly "What's On Your Mind," but I'm not positive about that.

Eddie and Ace arrived at Plaza Sound with a version of "New York Groove" recorded at the mansion. But there was something about the overall feel of it that wasn't sitting quite right with them. Ultimately a decision was made to re-cut the song from the ground up, starting with a new basic track consisting of drums and rhythm guitar. So one day we cleared the studio, set up Anton's drum kit, and recorded a second version of "New York Groove" utilizing Plaza's nice open room for drum ambiance while Ace played along in the control room. We may have also cut drum tracks for "Rip It Out" on that same day. But after careful analysis of Russ Ballard's original songwriting demo (a cassette tape they kept playing over and over for comparison to what we were doing), it was decided to re-record "New York Groove" yet again with further subtle changes to the tempo and/or drum feel. So on another day we set up the drums again and recorded a third basic track for "New York Groove." The third one was the charm and became the final version of the song.

At the time I thought all this re-recording of "New York Groove" a bit nitpicky. I suggested a much easier approach to changing the tempo of the song utilizing the Studer 2" machine's VSO (variable speed oscillator). Varying tape speed was common practice back then even though it altered the sonic and pitch characteristics of already recorded tracks to one degree or another depending how much speed variation was applied. I think Ace and Anton were game for that approach as well. But Eddie had other thoughts on the matter. He insisted that the tempo and recorded sounds remain "pure," so we ended up re-recording the entire track...twice. They had the time, the budget, and the willingness to do it, so why not? Besides, in the end, whatever they did, and for whatever reasons, was certainly justified, as "New York Groove" became a big hit for Ace. It sounds as fresh and exciting today as it did when we recorded it in 1978.

KF: Eddie has described a special technique for recording Ace's vocals that involved a bottle of beer and Ace lying on his back while singing. What do you remember about recording Ace's vocals and would you say Ace had a case of "vocal fright"?

RF: I suppose it's true that Ace wasn't too keen on recording vocals, at least not at first. I remember being somewhat baffled (so to speak) by his vocal reluctance, blindly assuming that his vast experience recording and touring the world with KISS should have given him every confidence. I wasn't aware that Ace had sung only two lead vocals on KISS records prior to doing his solo album. Perhaps he viewed singing more as a chore than a chance at self-expression, just a part of the process he'd have to get through in order to realize his vision of the album. Ace knew he could make his guitars "sing," but now he also had to do it with his voice, and he had to carry an entire solo album in doing so. I suppose that kind

of pressure could get to *anyone*, so it's not surprising that Ace may have developed a touch of "vocal fright," as you call it.

So, for whatever reasons, Ace wanted to sing while lying down on the studio floor. I figured, okay, he's the artist and that's how he wants to do it. I was all for doing whatever it took to get those vocals on tape. We dragged a large piece of carpet into the middle of the studio, dimmed the lights, and Ace began singing vocals lying on his back on the studio floor. I did what I could to help him get situated there and remember taking a bit of time to tweak his headphone monitoring balance so he would feel as comfortable as possible singing with "cans" on. The lying-on-the-floor method probably only lasted a couple of songs. Once Ace felt assured that his vocals were in good hands with Eddie and I caring for them, he stood up and sang confidently on mic.



Ace Frehley recording a vocal on a vintage Neumann U47 tube mic at Plaza Sound Studio in 1978. Courtesy of Rob Freeman

From that point on, Ace's confidence grew by leaps and bounds. He began to approach his vocals in a positive way, always wanting to better himself. By the end of the project, Ace became as productive and enthusiastic about his vocals as he was about his guitar tracks. Although he may not have admitted it at the time, I suspect Ace really enjoyed the experience of singing out in the open space of Plaza's studio room. That room had character...it had history.

Now, as to Eddie's account of the lying-on-the-floor technique, I recall a couple of things slightly differently (not that it makes any real difference at this point in time). Eddie has stated that Ace held a bottle of beer in one hand, and that most surely did happen at some point. But what you may not have heard about is that Ace had arranged for a small refrigerator to be brought into the studio that he kept well stocked with bottles of champagne in addition to beer and other refreshments. So it's just as likely that Ace was holding a bottle of champagne as a bottle of beer when he sang. Eddie's and my

recollections also differ regarding what Ace might have held in his other hand. Eddie has said that Ace held a Shure SM-57 (dynamic) mic in his hand while singing lying down. I'm sure we tried recording that way at least once or twice. But Ace relied on seeing his lyrics in front of him as he sang (not an unusual method) so he would have needed at least one free hand to hold a lyric sheet. I recall hanging a bulky, heavy Neumann U47 microphone right over Ace's face enabling him to lie down and sing without holding a mic. No matter whose details are correct, Ace's methods for recording vocals in the studio were truly unique and, for the most part, quite memorable.

KF: Vocals were certainly not Ace's strong suit, though he does have a unique voice. Do you remember the general process in organizing his final vocal tracks? Were there multiple takes recorded, and were they compiled together?

RF: Yeah, a unique voice, to be sure, but one that honestly expressed what Ace was about at the time. You hear pure Ace in those vocals—*his* earnest singing of *his* lyrics. You can even hear his great sense of humor in places.

Ace's lead vocal tracks were recorded pretty much the same way his guitar solos were. Ace would sing through a song or part of a song, laying down as many as eight or ten tracks in some cases. If needed, we might "punch in," re-recording a word or a phrase on a particular track, or we might decide to wait to look for "fixes" on alternate take tracks. When Ace was done singing, Eddie and I would painstakingly sift through all the tracks and create one solid "comp" (compiled) track while Ace took off for parts unknown. Sometimes we'd finish a comp session when, after playing the result for him, Ace would be duly inspired to go out on mic and sing some more in an effort to top his previous performances. Then we'd do some more comping, adding in whatever new and improved vocal sections Ace might have given us. We hopped from song to song, not always bothering to complete one before working on another. Working that way, Ace's vocals for any particular song could have been recorded over a span of several days.

Singing sections of a song one at a time, punching in words or phrases, and comping tracks were hardly unusual techniques; they were done all the time by all kinds of artists. Using any or all of those tricks didn't necessarily mean you couldn't sing well or that you couldn't make it all the way through a song. They were simply more weapons in the studio arsenal intended to help artists get their best performances down on tape (as it was at the time). Truthfully, and ironically, of the many, many singers I've worked with over the years, only one comes to mind as being truly capable of laying down a great lead vocal track in one uninterrupted pass of a song, and that was Ace's own band mate, Paul Stanley.

KF: Anton Fig's drum work has been praised not only by KISS fans, but by Ace and Eddie as well. Though the album is guitar-heavy, Anton's drums are surely a key component. What do you think about Anton's drum work on the album? And do you recall the microphone set up to capture his drums?

RF: Anton totally rocked Ace's album! But remember, I wasn't at the mansion when they recorded most of the drum tracks, so I couldn't tell you which mics were used. I did have the pleasure of working with Anton on a number of other projects, including Link Wray's awesome "Bullshot" album and some recordings with Robert Gordon, so I can tell you first hand that he was a recording engineer's dream. He was a studio-savvy drummer who delivered crisp, consistent drum hits with just the right ratio of cymbals to skins, had great feel and erupted with explosive, exciting fills.

Eddie had his favorite go-to mics for recording drums, and I had mine. Some of the microphone techniques used for recording tracks, including guitar tracks, throughout Ace's album were an amalgam of both of our favorites. As a result, it's really not possible for me to recount exactly which mics were placed on Anton's kit or anywhere else for that matter. Maybe Eddie knows, but I surely don't. For "New York Groove" and "Rip It Out," Anton's kit was set up in the middle of the open studio with no baffles or walls around it. I can only guess that there might have been an AKG D-12 in or near the bass drum, a Neumann KM-56 pencil mic on the top snare head, a Sennheiser 421 on the high hat, Neumann U87s on each tom, and a couple of AKG C-12s overhead, hung high above the kit. But don't quote me on that.

KF: Ace played bass on a majority of the album's tracks. Would he have cut his bass tracks live with Anton or did he overdub the bass later?

RF: Ace played mostly rhythm guitar parts while cutting basic tracks with Anton at the mansion. One of Ace's first tasks when he got to Plaza Sound was to lay down a round of bass tracks for all of the songs on the album. I remember being really impressed with Ace's bass playing. He nailed his bass parts with a strong, aggressive attack, playing in perfect sync to his rhythm guitar tracks. I was about to get even more impressed once Ace started burning guitar solos!

KF: Will Lee was brought in to play bass on "Ozone," "Wiped-Out" and "Fractured Mirror." Do you remember Will coming in to play at Plaza Sound?

RF: Do I remember Will coming in to Plaza Sound?...like it was yesterday! Will was such a trip—funny and outrageous—and the sessions I did with him (for Ace and other artists) were always memorable. I think he might have come in twice for Ace's album, possibly on consecutive days. As I said, Ace tried bass parts for each song on the album before he and Eddie decided which songs could benefit most from the Lee touch. Will was (and still is) the consummate professional. Despite having never heard Ace's songs prior to coming to the studio, he seemed to instinctively know every progression and nuance of the arrangements, even on his first run-through.

At one point Will asked if I wanted to hear his bass talk. I said, "Sure," and he proceeded to scrape the pick along the high end of the fret board in a way that somehow made the instrument clearly say, "Hel-lo!" He repeated this a couple of times and then made the bass deliver another two-syllable utterance that I won't repeat here. It was incredible! One time I saw Will casually reach over and partake of some "refreshment"...*while* the red (recording) light was on and he was in the middle of laying down a bass track. When he saw me observing him, he just smiled and continued his flawless playing without skipping so much as a beat. He was truly one with his instrument. What a guy!

KF: Do you remember some of the specific guitars and amps Ace utilized on the album?

RF: When it came to guitars and amps, Ace was king. He had arranged for his substantial collection of guitars and amps to be brought in for the project and had them all lined up along the studio wall. Ace would choose a guitar he thought best suited for the part about to be recorded. Then he'd walk the line, plugging from amp to amp looking for a particular sound. It never took him very long to find just the right combination. Once the right amp was chosen and set, we'd run a long guitar line so Ace could play the instrument in the

control room while his amp spewed out in the studio where it would be mic'd and recorded.

With Ace knowing exactly what guitar sounds he wanted and how to get them, I didn't get as involved in setting instruments or amps as I normally might have. I was more concerned with the acoustic placement of the amps and with the choosing and placement of microphones. I remember being pleasantly surprised by Eddie's level of involvement in guitar and amp choices for Ace to use. I don't know why I was surprised, you know...the Jimmys (Hendrix and Page). On occasion, Ace would go for a particular combination and Eddie would suggest another one. But they always came to an easy agreement.

Among all the beautiful instruments, electric and acoustic, that Ace presented, I certainly remember his amazing double neck guitar. I don't think I had been up close and personal with one of those before working on Ace's album. It was the coolest thing, a six-string electric and a twelve-string electric together in the same body. For "Fractured Mirror," Ace re-tuned the 12-string neck so it would ring sympathetically while he played only on the 6-string neck, much like a sitar with its underlying sympathetic strings. The result was brilliant, a sound I had never heard before. When it came to guitars and amps, Ace sure knew his stuff.



Eddie Solan, credited with "inspiration" on the album, surveys an amp setup in the Rockette's rehearsal room. Courtesy of Rob Freeman

KF: Do you recall what recording techniques you used when recording Ace's guitar tracks?

RF: Well, because of the vastness of Plaza's room and the uniqueness of its acoustic design, even "usual" recording techniques would often yield distinctive results. It was a pleasure to experiment there, and both Eddie and I played around with mic and amp placements quite a bit. It was common to place at least two mics on an amp setup, one fairly close to the amp, maybe one to two feet away, and another farther back, maybe eight

to ten feet away, depending on the volume of the amp.

The type of sound that was desired for a particular part of a song would determine just how an amp would be set up acoustically and recorded. For example, rhythm parts tended to be more immediate, more in-your-face. So they would usually be recorded with the amp baffled around with gobos or the large moveable walls in order to contain the sound and minimize room ambiance leaking into the mics. On the other hand, guitar lines and solos might have been recorded with the amp left out in the open room, capturing its ambiance at a distance, giving it a more open, live concert sound.

On occasion, for something different, we'd haul Ace's amps down the hall into one of the Rockettes' rehearsal rooms. These were large, empty rooms with some type of composite flooring and room-length mirrors on the walls. They were not acoustically deadened in any way so when the dancers rehearsed with their tap shoes on in there, the sound was thunderous, almost deafening. Sonically, the rehearsal rooms were very bright and reverberant so any guitar amp recorded in there would tend to take on those characteristics as well. Vintage tube mics worked great in that environment as they colored the sound with their own warmth.

KF: Ace is credited with playing a guitar synthesizer on the album. I believe he has mentioned it was an ARP Avatar that he used. What do you remember about this instrument and what track(s) was it featured on?

RF: Ace brought an amazing array of pedals and effects boxes to the sessions at Plaza Sound. He had all the toys that produced effects most guitarists of the day might use (delay, fuzz, distortion, chorus, phasing, flanging, wah-wah, etc.). He'd bring them all into the control room and hook up whichever he needed when we were recording guitar lines, solos, or certain rhythm parts.

I should mention that many, though not all, of the guitar effects that can be heard throughout the album—long, swooping delays, flanging, and the like—were produced with pedals and committed to tape right along with Ace's performances. This was advantageous for a couple of reasons: Ace could play his parts using the feel and timing of "live" effects, and Eddie and I saved a lot of time and effort by not having to recreate those kinds of effects in the final mix.

At one point Ace brought out this large box and plunked it down on the producer's desk next to the console. I had never seen anything like it before, at least not for use with a guitar. It was the ARP Avatar and it resembled an oversized drum machine or a synthesizer module (without a keyboard) more than a guitar effects box. They were relatively rare and quite expensive, with a price tag around \$3,000. Ace was one of the first musicians in the New York area to have one.

Basically, the Avatar took the guitar output signal and modified it in many of the same ways a regular synthesizer might; it had banks of oscillators, LFOs (low frequency oscillators), gates, triggers, filters, ADSR (attack, decay, sustain, release) envelope controllers, and more. The difference between the Avatar and other synths was that it was specifically designed to be responsive to the unique expressiveness of a guitar as a controller. It could track string bends, vibrato, harmonics, etc., making it capable of producing unique guitar-oriented sounds and effects. The Avatar added some really interesting colors to many of Ace's parts.

Considering the Avatar's "cool" factor, I thought Ace used it very tastefully throughout the album, maximizing its effectiveness when it was used. It was subtly peppered throughout tracks like "Ozone" but can be notably distinguished in a few key places on some of the other tracks. One example can be found behind the solo on "Snow Blind" where the Avatar sounds very much like a high organ part and then plays the rising line under the end of the solo starting at around 2:21. It can also be heard drifting in and out throughout "Fractured Mirrors" before appearing very distinctly as the high arpeggio line that comes in at 2:34.

KF: Ace has described some songs as having four guitar tracks, with all the parts blended together. Would you say there was a lot of thought put into layering guitar tracks?

RF: If Ace said four guitar "tracks" he probably meant four guitar "parts," because there were way more than four tracks used for guitars on many of the songs. You should have seen the track layout sheets—some would have made a great addition to the album liner notes for those interested in that kind of thing. There were the usual eight or nine drum tracks (close mic'd tracks for each drum plus stereo room ambiance tracks), a few tracks for lead vocal, harmonies, and background vocals, and the remaining twelve or more tracks could have been filled up with *all* manner of guitar tracks. There were track sheet notations like "rhy git" (rhythm guitar), "git dbl" (double), "git lines," "git harm" (harmony), "intro git," "end git," "solo comp," "solo harm," "drone git," "bell git," "ac git" (acoustic guitar), "ARP lines" (ARP Avatar guitar synthesizer), "ARP chords," "git FX (effects), etc. Some of those sheets, like the one for "Fractured Mirror," read like a buried treasure map that only the select few—Eddie, Ace, and I—could possibly decipher.

I'm sure Ace put a lot of forethought into designing the layering of all those guitar parts. But each time he recorded a new track, the parts just flowed out through his fingers so naturally and effortlessly that it seemed like they were made up on the spot.

KF: "Speedin' Back To My Baby" is a fun tune. The solo is actually backwards, a tip of the hat to Hendrix, if you will. Today, one punch in Pro Tools will flip a guitar solo. Who had the idea to flip this guitar solo and can you explain how that was accomplished with 1978 technology?

RF: I couldn't tell you for sure whose idea that was...Ace's?...Eddie's?...mine? It probably wasn't mine because Ace's solos were hallowed ground and that was such a drastic alteration of one of his performance. But you never know. In any case, it was a great idea and made for a fantastic backwards solo ala Hendrix's "Castles Made of Sand" or The Beatles' "I'm Only Sleeping," which, with all due respect, predates that.

There were two main ways of accomplishing backwards tracks back then. One was to take the multi-track master tape and flip it over on the 2" machine. This method was done often enough, but had a couple of potential pitfalls. For one thing, you *really* had to be careful about which tracks you arming for record and punching in on. Think about it: when you flip over a 24-track tape, what was on track twenty-four is now on track one, what was on track seven is now on track eighteen, and so on. So if you're not super careful, you could easily erase something you really intended to keep. Also, while you're recording that way, you're listening to all the other tracks playing backwards so it's not always easy to find the tempo of a song or where you are in the arrangement or even where the punch in and punch out points are supposed to be. It can be quite a challenge.

For “Speedin’ Back,” I employed a much easier and more controlled method. Ace overdubbed his solo normally, doing any number of takes until he was satisfied with what he played. After Eddie and I comped a track, I copied the solo onto a piece of ½” tape on another machine and marked the head and tail of the solo with paper leader tape. Then I flipped over the ½” tape and “flew” the solo back onto the multi-track, recording it forwards on the 24-track tape as it played backwards on the ½” machine. You may ask, how can this be accomplished with any accuracy. Well, with both tape machines running at 30ips (inches per second), it was simple enough to physically measure and mark a point on the ½” tape that was thirty inches (one second) from the beginning of the piece (which was actually the end of what Ace played forwards). Then all that remained to turn a bit of technical studio wizardry into a magical musical moment was to hit record on the 24-track and play back on the 2-track at precisely the right moment...and voila!

I read somewhere years later that Ace said I flew that backwards solo in on the very first attempt. It’s certainly possible that it may have happened that way, but what’s more likely is that it took a couple of warm up shots and compensating adjustments to drop the solo in at just the right spot to make it work musically. Still, Ace’s words were most kind and I thank him for his vote of confidence.

KF: The song also features some Ferrari motor sounds, which I have read were actual tapes. Is this true?

RF: Oh, boy, the Ferrari tape! For weeks I had been hearing about some car recordings that Eddie had ordered from somewhere that would be delivered at some point. I don’t know if they were recordings commissioned specifically for Ace’s project or just pulled from a sound effects library. When I heard that they wanted to “fly” car effects in to “Speedin’ Back to My Baby,” I offered to find some in Plaza’s extensive sound effects library. But Ace and Eddie wanted no part of that. They said the sound had to be that of a specific year Ferrari with a specific type of engine, a sound so specific, I imagined, that only the most discerning Ferrari connoisseurs could possibly recognize it. I remember how excited Eddie and Ace were when those tapes finally arrived and I “flew” the car effects in to the multi-track master tape at the end of the song. Then we all drove off into the sunset and broke for dinner.

KF: “What’s on Your Mind?” is a fan favorite on Ace’s album. This song features an acoustic tucked neatly behind Ace’s electric guitar. Do you remember what microphone was employed to capture Ace’s acoustic?

RF: It’s always a joy to hear a musician who is known primarily as a hard-rockin’ electric guitarist pick up an acoustic guitar and start playing it delicately and beautifully. So it was with Ace who had obvious mastery over *all* his instruments, electric guitars, acoustic guitars, and basses alike.

As to which particular mics may have been used to record Ace’s acoustic guitar on that song, I can only tell you there was a plethora of vintage tube mics at Plaza Sound; there were also two extreme tube mic enthusiasts (Eddie and I) there to appreciate and use them. Eddie’s mic preferences for acoustic guitar were probably different than my own “usual” choices. As a result, I have only vague recollections about which mics were used for which instruments throughout the project. I wish I could recall those particulars better for you. But I do know we had a choice of anything from a warm Neumann U47 to a wonderful AKG C-12 to a crisp Neumann KM-56 to place on Ace’s acoustic guitar. It could have been any of those or even some combination that was used.

KF: At first listen, the key single-note guitar part on “New York Groove” sounds like a wah-wah pedal, but Ace has revealed it was actually a talk box. What do you remember about capturing this signature sound on this song?

RF: It was a talk box, another of Ace’s toys. A talk box is an electronic box that splits the guitar output signal and sends it out through a long plastic tube that you stick in your mouth. Then you modulate the sound with mouth movements and it all gets sent out to an amp or through a DI (direct input) to the console. As far as I’m concerned, that talk box part *made* “New York Groove.”

KF: Interestingly, the recorded version does not contain a guitar solo, though when performed live, Ace did add a solo section. Do you remember if a guitar solo was discussed for “New York Groove”?

RF: I never heard any discussions about putting a guitar solo on “New York Groove.” I remember just expecting there would be one, but it never materialized. The guitar parts, sans solo, consisted of the talk box, the funky R&B style rhythm, the downward “shoots” and plucky lines between vocals (recorded, I believe, at the same time on one track), and the chorus power notes. That was pretty much it. In putting the production together, Ace and Eddie stuck faithfully to the arrangement on Russ Ballard’s original demo, which sounded very much like the demo of a hit song, which it turned out to be, but which didn’t include a solo.

KF: “New York Groove” proved to be the lone big hit from the four KISS solo albums. The song climbed to No. 13 on the Billboard Hot 100. Do you recall listening back to the final version and thinking there was something special there?

RF: Something special? You bet! It was simple...solid...catchy...well produced...it had everything it takes to be a hit. But hits aren’t just made in the studio. They’re made after the fact through promotions, airplay, fan response, and sales. Listening in the studio, it was too early to think about any of that. But it was an exciting track, and it really came to life once Ace put his vocals on it. Then it reached a whole other level with the addition of those great background vocals. It was one of those rare tracks that sounded “finished” way before the final mix. I never tired of listening to it outside the studio, too, in my car—ah, cassettes, how quaint!—or on the train on my way into the city. That was always a good sign.

One fun recollection I have is going into the studio to help Ace sing those “oo-oo” vocals right before each chorus. They needed to be sung in a semi-falsetto and I guess Ace was a bit weak in that range of his voice. So I offered to go out and sing the part together with him. The height difference between us was so great that I had to stand on a box so I could reach the mic at the same level as Ace. Singing with Ace was a fond highlight of the project for me.

KF: In guitar circles, Ace influenced many guitar players to pick up an instrument. Yet when, say Rolling Stone, runs a best-of guitar player list, Ace doesn’t seem to make the grade alongside peers such as Angus Young and Joe Perry. What is your take on Ace Frehley’s guitar style and his musical sensibilities?

RF: Ace’s level of talent blew me away. I don’t know about Rolling Stone’s list, but on my

list, he'd be right up there with the great guitarists of rock 'n' roll. He was musically focused and technically capable throughout the entire project. He never wavered or had moments when he wasn't sure what to play or what to do. He'd just pick up one of those amazing instruments of his, plug into an amp, and off he went.

I thought Ace's rhythm playing was phenomenal. He had a great feel and he knew lots of studio tricks like double-tracking parts or breaking parts up onto different tracks with different sounds. But when it came to laying down solos, Ace was on fire. I'd watch him wailing a solo and sometimes his gaze would sort of drift off, as if he was playing by instinct with no conscious thought and he'd finish the pass with a shrug of his shoulders and an inquisitive look as if to say, "I wasn't quite here for that one...how was it?" I don't think there was ever really a "bad" solo on any of the tracks he recorded—every one was amazing. Sure, there might have been a clam (bum note) here or there, but those were rare and could easily be fixed.

Here's how it went: Ace would play around until we got a great guitar sound for the solo. Then he'd start laying down a string of solos, each one recorded on a separate track of the multi-track tape. After he'd given his all, Ace would disappear for a while—maybe he'd walk outside or drift down into Radio City Music Hall to watch the show—while Eddie and I would go to work on the solo. The ultimate solo was *somewhere* on those tracks; we just had to find it by putting together all the right pieces. We'd begin the process by making a detailed "map" of each track's strengths and weaknesses throughout the solo. Like I said, there were plenty of great moments on each track to choose from, but decisions had to be made that would result in one incredible, coherent solo. We'd chip away at it, building phrase by phrase, measure by measure, even note by note sometimes until we had a totally smoking solo.

This process of comping tracks, using bits and pieces from various tracks and combining them onto one track, was common practice back then and is still used today for creating "best of" guitar, vocal, or other tracks. It was tedious work but it often resulted in amazing moments of studio magic. The greatest reward was seeing Ace's face light up when he listened to the fruits of our labors.

KF: All signs point to Ace being extremely motivated during the making of his solo album. How would you describe his frame of mind during the sessions?

RF: As I mentioned, Ace remained focused and on point throughout the project. He had a great mindset and was very personable and hysterically funny. His only shortcoming, if you consider it that, was that he often arrived to the Plaza Sound sessions quite late after the commute from his home in Connecticut to New York City. The distance...the traffic...it was understandable to a degree, but it did happen a lot. On the positive side, it gave Eddie and me a chance to listen to the previous day's work and to strategize a game plan and begin setting up for the day's session. When Ace finally arrived, usually with his pal Bobby McAdams in tow, it was with such a burst of laughter, good energy, and readiness to plug in and work that his tardiness was immediately forgotten.

Ace had a singular vision for his album and seemed hell-bent on achieving it. It took a lot of work to make that album, but as I saw it, Ace remained positive and fully motivated at all times. He exhibited necessary amounts of patience—things don't always zoom along in the studio and occasionally get bogged down—but he also knew how to keep the sessions moving forward at a good pace.

He and Eddie seemed to really hit it off as well. They joked around quite a bit, and we all laughed a lot. They had a type of shorthand between them that enabled quick, efficient communications sometimes with very few words. By the end of the project, I was right there with them, and no one was talking to anyone else...just kidding.



Ace Frehley, Bobby McAdams, Anton Fig, and Rob Freeman (at door) in Plaza Sound's control room. On the wall are console labeling tapes with 24-track layouts for each song. Courtesy of Rob Freeman

KF: Sonically, Ace's album is arguably the most powerful of the four solo albums. In scanning the album with fresh ears, what is your opinion of it and is there anything you would change?

RF: In preparing for this interview, I listened to the Ace Frehley album a lot. Simply put, I liked it back when I made it, and I still like it today. The songs are fun to listen to, and the album as a whole has great energy and sounds really good. Do I hear things I'd change? Sure. I could listen to almost any of the records I've made over the years and, now with fresh ears, invariably find things that might have been done a bit differently. But that's just me. I liken it to dressing up for a special occasion and having your picture taken. Years later, you might look at that photograph and notice a button wasn't buttoned or your hair wasn't quite right. When others look at the same photo, most don't see those kinds of things as problems, if they notice them at all; only you do. It's kind of like that with records. You dress them up and take the "snapshot." People get familiar with them and, hopefully, like them the way they are; they're not looking for flaws.

KF: What was it like mixing the album with Eddie?

RF: Mixing Ace's album with Eddie was a great experience. I remember feeling elated at that point in the project, partly because we were about to finish a *KISS* album but also because I would be mixing alongside Eddie Kramer, who had recorded and mixed many

great albums I'd revered over the years.

In 1978 recording console automation systems were still in their infancy. They were expensive and, in my opinion, rather cumbersome to operate. Some studios had installed automation systems by then, but the API console at Plaza Sound was not equipped with any automation. That meant final mixing of Ace's album had to be done the *old-fashioned* way, by hand, not computer. Maybe it's because we had no automation at Plaza Sound, but at the time, I preferred mixing by hand anyway. It offered one final opportunity to *perform* the record, *playing* the console and peripheral equipment almost like you would an instrument. Each pass of the song could be significantly different from the last as you took spontaneous chances, discovering new ways to add fresh excitement to a record you'd been living with so closely for weeks on end. Of course, you can always create excitement with automation, too, but mixing by hand yielded so many unexpected moments—explosions of too much reverb, overzealous panning, things popping out where not expected—all pleasant surprises that helped keep the creative juices flowing.

We started each mix by setting instrument and vocal balances, stereo placements, reverbs, delays, and other effects for the whole song before recording anything on the ½" mixdown machine. Once set, we may have tried to nail a complete mix from top to bottom in a single pass, but more often than not, mixing for each song was accomplished in sections. We'd mix just the intro, working on it over and over until what we committed to ½" tape sounded just right. Then we'd move on to the first verse, the first chorus, the solo, and so on, mixing and listening over and over until each section was just how we wanted it. We'd often go back and remix sections out of sequence as needed. And of course, special attention was always given to endings, especially if they incorporated a delicate, manually executed fadeout. We'd mix the endings again and again until we hit that ever-elusive, magical moment when a fade crests and slowly begins to ebb. Once all the mix pieces were committed to tape, I would sit down in front of the ½" tape machine and begin editing the "best of" pieces together, physically cutting the tape and splicing it back together using a white grease pencil (to mark the cut points), a splicing block (to hold the tape in place), a demagnetized single edge razor blade (to make the cuts), and special Scotch splicing tape (to put the edit pieces together). There was no slick cross-fade editing like in Pro Tools; there was no Pro Tools.

There were plenty of precision mix moves that needed to be executed throughout the various sections of each song. Many of Ace's songs were quite complex with lots of guitar tracks and effects to deal with. There were also some specific vocal effects that needed to be crafted during mixdown, like shaving the "sp" off the word space so that whenever Ace sang "lost in space" at the end of each "Snow Blind" chorus, the delay would echo back "Ace...Ace...Ace"—or at least that's what I was trying for. Certain mix moves required more than the four hands Eddie and I could provide. In those cases, Ace would be recruited to lend a hand (or two), punching a button, tweaking a knob, swishing a pan pot from one side to the other, or riding faders up or down an exact amount at precisely the right moment in a song. Mixing 24 tracks without automation could get really crazy at times but we got it done with a great sense of fun and, of course, lots of laughter. "Fractured Mirror," with its oozing, constantly evolving guitar parts was particularly challenging with lots of mix moves throughout. That one could easily have taken a couple of days to mix. Only after each song's mix was declared finished would we allow ourselves to take a deep breath, sit back, and take in what we had accomplished. Working long hours well into the night—night after night—mixing the album was an exhausting but satisfying part of the project.

KF: Any funny stories come to mind from those sessions?

RF: Lots of wacky stuff went on. Ace loved to laugh and would crack us (and himself) up telling funny stories and jokes at every opportunity. Champagne and other “refreshments” flowed throughout the project helping to keep spirits high. There were times when Ace arrived at the sessions—it didn’t matter what hour of the day—having imbibed the better part of a bottle or two of champagne in the limo on the way into the city. Eddie and I would be quietly talking in the control room, when suddenly the door would burst open and Ace would stumble in, laughing and hitting the floor in hysterics. It was actually a pretty effective way to set the mood for the day’s recording session.

There’s one thing that always brings a smile when I think about those sessions. As I mentioned earlier, Plaza Sound was situated on the seventh floor of the Radio City building. Just down the hall from Plaza’s control room was a “secret” access way that led to the executive elevator, which went down to a private viewing box overlooking the theater. That box was strictly reserved for Music Hall VIPs and was normally off limits to Plaza Sound’s clients unless special arrangements were made. Not being one to bow to formalities, Ace would, from time to time, while Eddie and I were busy comping tracks or editing something, grab a bottle or two and stealthily make his way down to the private box to watch the show. We’d have no idea where he had gone. But invariably, after a while, the in-house phone would ring and a voice at the other end of the line would say something to the effect of, “Plaza?...we think one of *yours* is down here sleeping in the executive box. Kindly come and retrieve him.” You gotta love Ace!