

# Rudy Van Gelder in Hackensack: Defining the Jazz Sound in the 1950s

By Dan Skea

## Introduction

To many jazz aficionados, the name Rudy Van Gelder is virtually synonymous with jazz recording. Still active today, this reclusive self-taught craftsman is by far the most prolific and accomplished sound engineer in the history of jazz, recording many of the music's most acclaimed albums. In a career that has now spanned half a century and has paralleled developments in both modern jazz and recording technology, Van Gelder has contributed to advances in both areas, simultaneously shaping and being shaped by these new developments.

Although not a creator of new equipment or technology, Van Gelder has consistently positioned himself at the forefront of technological advances and been among the first to embrace and fully exploit innovations as they appeared. His ability to adapt each new technology effectively to the recording of jazz has been an important factor in capturing stylistic changes in the art form over the last fifty years. It can also be argued that his skill in making the music more sonically attractive helped record companies sell more product, thus providing them with a financial incentive to carry on their activities. Greater record sales also increased audiences for modern jazz, while more widely disseminating important new musical developments.

Van Gelder is perhaps most famous for his role in establishing what is commonly referred to as the "Blue Note Sound." Not long after they first began appearing in the early 1950s, his recordings for that label, distinguished by their warmth, clarity, and sonic precision, set a new standard for the sound of small group jazz on record, a standard against which almost all subsequent efforts were measured. Whereas earlier jazz recordings seemed to come at the listener from a distance, Van Gelder found ways to approach and capture the music at closer range, and to more clearly convey jazz's characteristic sense of immediacy.

Although his signature sound was originally developed primarily with Blue Note recordings, over the years Van Gelder has engineered thousands of sessions for numerous other labels including Prestige, Savoy, Bethlehem, Impulse, Verve, CTI, and Muse. The sheer volume of his output is astounding, as is the number of his recordings that have come to be regarded as "classic" jazz recordings. (For a select list of albums recorded by Van Gelder in the 1950s, see the appendix following this article.)

Van Gelder's expertise has not been limited to the confines of his studio. He was one of the first of his era to accept the challenge of remote recordings, taking his equipment to numerous nightclubs, concert halls, college campuses, and other venues to preserve some of the most historic and treasured live jazz performances, including those by the Art Blakey Quintet (*A Night at Birdland*), John Coltrane ("*Live*" at the *Village Vanguard*), Jimmy Smith (*Groovin' at Small's Paradise*), Stanley Turrentine (*Up at Minton's*), and Wes Montgomery with the Wynton Kelly Trio (*Smokin' at the Half Note*).

By virtue of his accomplishments, Van Gelder occupies a unique position in the history of modern jazz recording. Yet he remains an enigma to both jazz fans and fellow engineers. Notoriously secretive about his working methods and personal life, he has long been the subject of curiosity in both camps, and has thus earned the sobriquet "The Phantom of Englewood Cliffs" (Griffith 1988).

#### **"There was no profession known as recording engineer"**

Rudy Van Gelder was born in Jersey City, New Jersey, on November 2, 1924. His family lived in nearby Hackensack, where he grew up and went to school. When he was about twelve years of age, Van Gelder spotted an ad on the back of a comic book ("Make Your Own Records At Home!") and with his parents' permission he sent away for the \$2.98 "Home Recordo," a device for making short recordings using a turntable and a supply of small blank disks.

A perfectionist by nature, Van Gelder, dissatisfied with the poor sound capabilities of the Home Recordo, began to try to figure out how to make more accurate recordings. Although his first recorder was a simple toy-like device, more professional versions of home recorders had been available in the United States since the early 1930s, and by 1935 the novel idea of making records at home had become something of a fad. In 1931, the Presto Corporation had introduced the Presto Record Maker, calling it "the greatest advance in home entertainment since radio."<sup>1</sup> The eighty-five dollar price included a microphone and a "beautiful, compact, portable, leatherette case."

Before long, Van Gelder obtained a disk recording machine and a few microphones, and began recording in earnest, first family members and other relatives, then school friends and neighbors. Mothers brought their sons and daughters to the Van Gelder home to be recorded—singing, reciting poetry, playing the violin—and Rudy would make them acetate copies to take home to impress their relatives.

Van Gelder came from a musical family. His father had played cornet in a Navy band during World War I, and two of his uncles were professional

musicians. Rudy himself took trumpet lessons from Bertram Russell, a former member of the John Philip Sousa band, and played in school ensembles from junior high through college. Along with a number of school friends, he became interested in ham radio, a hobby that led him to seek further knowledge of electronics. He also took up photography and learned to develop his own pictures.

While still a teenager, Van Gelder carted his heavy disk recording gear down to Lombardo's Used Furniture Store on Bergen Street in Hackensack to record a twelve-piece band that included many of his high school classmates. Nominal bandleader Sal Lombardo was not an outstanding drummer, but the band used the building owned by his parents as a rehearsal space because there were always one or two pianos in the back.

In high school Van Gelder became an avid jazz fan. Though still underage, he and his friend Marvin Malk visited jazz clubs on New York's 52nd Street to hear Roy Eldridge, Billie Holiday, Art Tatum, and his personal favorite Coleman Hawkins, whom Van Gelder would eventually record on twenty-seven different occasions. By the time he graduated high school in 1942, Van Gelder had already gained a significant amount of experience in sound recording. However, at the time, no full degree course in recording technology was available. So, in the fall of 1942, with his simultaneous interest in photography, cameras, and lenses, he enrolled in the Pennsylvania College of Optometry.

Throughout his college years Van Gelder continued to record amateur soloists and groups on weekends and during the summer months. Some of his friends from high school would come over for jam sessions and bring along other musicians with whom they had become acquainted. During at least one summer Van Gelder worked at Nola Studios in New York City, where he was able to observe a professional studio operation. A visit to another studio in Philadelphia made an especially strong impression.

When I was in college, I was going to school in Philadelphia, and I was in a professional school learning a profession, and on our off hours we used to go to various clubs in Philadelphia to hear music. Then, I don't remember exactly why, we ended up going to a radio station—WCAU in Philadelphia. I walked into their control room, and the environment there gave me a very strong feeling. It was that "this was the sort of place that I'd like to be." I felt strongly attracted to the sort of things that were happening in this beautiful new studio, as compared to the kind of activities I would be engaged in in the profession I was studying. It was a very strong feeling, and I do remember it. But that didn't result in "Now I'm going to do that," because at that time there was no profession known as recording engineer. (quoted in Forlenza 1993:57)

While the studio atmosphere at WCAU was strongly appealing to him, because the career of a sound recordist was less well-defined at the time, Van Gelder carried on with his optometry studies, committed to pursuing a career in that profession. His recording activities remained essentially a hobby. Still, he was determined to continue learning as much as he could about recording technology in order to improve the results he was able to achieve.

When Van Gelder graduated from college in 1946, his parents had just built a new home in Hackensack at 25 Prospect Avenue, on the corner of Thompson Street. Among the unusual features of the house, a one-story ranch style that would soon become fashionable throughout the country, were its cinder block construction and central air conditioning. In planning their new home, Van Gelder's parents were mindful of Rudy's keen interest in recording. In the space that might otherwise have been an additional bedroom or study, they had architect Sidney Schenker design a control room instead. This room was separated from the living room by a large glass window set into the concrete block wall. The window was double-paned for greater sound insulation, with one pane angled slightly off the vertical to eliminate reflective glare. Under this window, a hole through the wall served as a conduit for microphone cables.

As it happened, this particular living room turned out to be an ideal venue for recording small-group jazz. The ten-foot-high ceiling made the room seem more spacious than it actually was, while the wide archway opening into the adjoining dining room, in which sound waves could reverberate, offered an added dimension. Corridors leading off toward the kitchen and the bedrooms provided additional air columns of varying proportions. "Acoustically it sounded nice," said Rudy. The room "had little hallways and little nooks and crannies going off. It was really nice. Nice place to record. I made some good records there" (quoted in Sidran 1995:313). In the end, due to a combination of factors that no one could have foreseen or predicted, the Hackensack living room's uniquely favorable physical configuration and acoustical properties helped Van Gelder achieve a sound that would eventually be heard, recognized, and widely emulated.

### **"We used to jam in his living room"**

Not long after graduating from college, Van Gelder established his optometry practice, opening an office at 447 Cedar Lane in the neighboring town of Teaneck, a short ten-minute drive from Hackensack. In his off hours, at night, on weekends, and on Wednesdays—his regular day off—he continued his amateur recording activities. With the increased capabilities afforded him by the new living room studio setup, he was able to gain much greater control over each phase of the recording process. At the time, he was still using a disk recorder, a machine which captured sound

by cutting spiral grooves in lacquer-coated aluminum disks; professional recording consoles were not then commercially available. Those that did exist were to be found in the studios of the major radio networks, such as RCA and Columbia, where they had been designed and constructed by staff engineers. Therefore, in order to upgrade further, Van Gelder had to build a lot of his own equipment, sending away for kits and parts, building his own amplifier, and adapting a radio console for recording.

There were no commercial companies making recording consoles as they are today. The major record companies all built their own, and if you wanted to do anything you had to do it yourself. Which I did. That's how I started. How much did I end up designing? Of course, it was everything. The only commercial designs were available through radio equipment manufacturers. They had consoles for radio purposes and that was my first console, which was actually a modified radio console. (quoted in Hovan 1999)

The fine thread of lacquer that the disk-cutting machine disgorged was a constant nuisance to Van Gelder as he was recording. His inventive younger brother Leon came up with a solution.

It was an Electrolux vacuum—the grey and chrome job. It looked like a long tube with rails that you pulled it on. In the basement, directly under the room that my father built for Rudy, where the console was, and the recording equipment, I mounted it to a concrete wall. And then the tube that you would normally use for vacuuming, I drilled a hole in the floor and ran the tube up. And then I had to adapt various hoses. I remember running around to auto parts stores getting different size hoses to convert it down so that it was a small tube mounted next to the actual cutting head, and it sucked up the chips. (Leon Van Gelder 2000)

In the first few years at 25 Prospect Avenue, Van Gelder mainly recorded amateur musicians and singers in the neighborhood. His musician “clients” were primarily friends from his high school days, who paid nothing for the privilege of recording and only a dollar or so for each acetate copy Van Gelder made for them. Knowing he still had a lot to learn, Van Gelder encouraged musicians to come to the Hackensack living room so that he could gain experience by recording them. In the late 1940s, as word of his increasing skill spread, professional musicians began to show up at his door. One of the first of these was a pianist from Westwood, New Jersey named Bill Triglia.

Somebody told me that there was a place where you could record. He lived in Hackensack at the time. So we went down there, I think to jam. I asked Rudy if we could go down there, and we would like to make a tape. At that time I was beginning to play with Tony Fruscella, who was a talented trumpet player. We were the best musicians around; there was nobody else playing that kind of jazz in New Jersey. We knew [Rudy] was a good engineer, and he liked jazz. We pushed him, because he was a nice guy, and he did have a love for jazz. And he respected us. (Triglia 1999)

Triglia began passing the word to other musicians, including his friend, drummer Sonny Igoe.

We used to jam in his living room when he was still experimenting, and he didn't even have a tape machine yet. It was all those wax disks, and all that stuff was going on the floor. But we had some great players—Red Mitchell, Tony Fruscella. Somebody said, “Hey, there's a guy who will record us—you want to go play?” And it might have been Bill Triglia. He was like the big organizer of that kind of stuff. And some of it was late at night. And then he'd play it back for us. I can remember playing at some joint with all those guys, and then somebody said, “Hey, I just called up Rudy Van Gelder—he wants us to come over.” And so we'd go over there and play some more. (Igoe 1999)

A long-time jazz lover himself, Van Gelder was especially interested in recording jazz music and in learning how to best capture its unique nuances. Luckily, most of the musicians now getting the word through the Bill Triglia grapevine were jazz players, and as time went on more and more of them came to Hackensack to record. Some of the top jazz artists of the era wound up serving as guinea pigs for Van Gelder's experimentations. Among these were saxophonists Lee Konitz, Warne Marsh, Zoot Sims, Gerry Mulligan, Phil Urso, and Ted Brown; trumpeter Tony Fruscella; guitarist Al Casamenti; pianists Sal Mosca and Lennie Tristano; bassists Red Mitchell, Bill Anthony, and Mort Pell; and drummers Harold Granowsky, Sonny Igoe, and Howie Mann.

Pianist Billy Taylor, one of the earliest artists to record for the Prestige label in Hackensack, worked with Van Gelder to develop a method of microphone selection and placement that would best capture the full range of the piano keyboard.

I took some [Art] Tatum records out and some other pianists' records that I thought would help me explain what I was trying to

get at. And we listened to them. He was the first engineer that I worked with who was that sensitive, and really just took time and cared about mike placement and all that sort of stuff. And I was just knocked out because here was a guy who was willing to take that kind of time on his own to listen and to, you know, say, "Well, okay—play something." And I'd play something, and he'd put a mike in one place and go back in the other room. And then say, "Okay, let's try that again," and put a mike somewhere else. I mean, he was really just kind of making some comparisons and coming up with what he thought would get closest to what we were talking about. And he actually captured the sound that I was looking for, and ultimately that seemed, to my ear, to be the basis of his piano sound. (Taylor 1999)

Because improvisation is such an essential part of the art form, jazz music presented special challenges to the recording engineer. In recording classical or popular pieces, because of notation or a (mostly) preconceived product, an engineer might follow a score and thereby anticipate the dynamics of specific passages in order to make appropriate adjustments to input levels. In jazz, however, where the playing of soloists and the interaction of the rhythm section is spontaneously improvised, volume levels change dramatically and unpredictably with the emotion of the moment. Jazz engineers, therefore, had to be particularly attentive and be able to make lightning adjustments "on the fly."

With his musical background and love of jazz, Van Gelder had an advantage over most other engineers in this area. His intuitive understanding of the music and familiarity with the players allowed him to anticipate what was coming and to react accordingly. In addition, his grasp of jazz forms, conventions, and terminology enabled him to communicate more effectively with the artists (and later, producers), making sessions go more smoothly and productively.

#### **"If something good went in, it came out that way"**

Van Gelder's commitment to capturing the sounds musicians were looking for led him to modify emerging technologies for the ideal recording of jazz. During the late forties and early fifties, several significant technological developments occurred in the field of sound recording. The most important of these was the advent of magnetic tape technology, which first became widely available after World War II. This system had been advanced in Germany during the 1930s and came to America by way of two returning servicemen, Jack Mullin and Richard Ranger, who brought back several of the German machines called the Magnetophon. The German design, not protected by standard patent regulations, was

quickly copied by several American manufacturers, the most successful of which was the Ampex Corporation. In 1948 Ampex introduced the model 200, a large, heavy unit first used by the ABC radio network, and in 1949 the Ampex 300, a more streamlined machine that swiftly became the industry standard. The arrival of magnetic tape represented a major breakthrough in the recording industry. Not only was it the first recording medium to be reusable, but it also allowed for the recording of much longer selections than disk machines.

Van Gelder was among the first American recording engineers to obtain an Ampex 300, which he promptly installed in his Hackensack control room. Not long thereafter he obtained a second Ampex, essentially the same machine, but in a portable carrying case. These machines recorded on quarter-inch plastic tape at speeds of thirty or fifteen inches per second. The expanded capacity of magnetic tape was especially appreciated by jazz musicians, who were now able to more freely extend their improvisations. The long-playing 12-inch microgroove record had been introduced by Columbia in 1948, making it possible to fit these longer selections onto commercial albums.

Shortly after magnetic tape, another piece of German technology arrived in America: the Neuman U-47 condenser microphone, an instrument vastly superior to previous models. Sold in the United States under the name Telefunken, it soon became a universal favorite among recording engineers. Once again, Van Gelder was among the first engineers to utilize this new innovation. "I had, I believe, the second or third one in this country. The first one went to a studio called Reeves Sound in New York which used to do film recording."<sup>2</sup> The Telefunken was originally designed to be used as microphones had been up to this time: with a single microphone placed at a significant distance from an orchestra. But Van Gelder, seeking an immediacy more conducive to the recording of small group jazz, adapted the Telefunken to his own purposes, using multiple microphones and placing them closer to the individual instruments. When the microphone was used in this manner, however, the result was unacceptable levels of distortion.

At about this time, Van Gelder was fortunate to have made the acquaintance of a man named Rein Narma, an Estonian who had settled in Bergenfield, New Jersey in 1951. Narma, a specialist in audio engineering, discovered a way to modify the Telefunken's amplifier by making a change in its circuitry, thereby rendering the microphone far more usable at close range. Narma performed this conversion on Van Gelder's Telefunken, and also visited the Hackensack studio on quite a few occasions and offered help with a number of other technical problems Van Gelder encountered in modifying his equipment for the recording of jazz.



There was a while where Rudy used me as a sort of consultant, and a time when he called me quite frequently about lots of little things, things that he would come across. I was handy, I was nearby. And these were things that he learned to do himself, because he was good about that. He would call me and say, you know, "I have this kind of problem." Or, "What do you do about this and that?" So anyway, there were a lot of little questions that he asked me. In retrospect, I think he would have known the answers himself, but I was handy. (Narma 1999)<sup>3</sup>

Being able to use more microphones and place them closer to the instruments allowed Van Gelder to get a more intimate sound in the living room studio. A prime example of this is the sound of Miles Davis's muted trumpet, which Van Gelder would later record with the Telefunken microphone almost touching the metallic Harmon mute, thereby permitting Miles to achieve great intensity without having to play at a high volume level. The piercing, icy-blue tone Davis was thus able to achieve became one of the trumpeter's trademarks, a sound that critic Martin Williams called, "one of the most personal and effective musical sonorities in jazz history" (Williams 1968).

Since his first experience with the Home Recordo, Van Gelder had steadily sought to learn as much as he could about the recording process, and tried to discover whatever methods and equipment might help to improve the results. In the new living room studio, he was able to exercise a much greater degree of control than ever before and to experiment freely with various techniques.

Among the musicians who found their way to Hackensack in the late 1940s was Joe Mooney, a blind accordionist from Paterson, New Jersey, who also played the organ and sang. Mooney had already enjoyed a modicum of success in the music business as the leader of a swing quartet that made several recordings for the Decca label in 1947 and 1948. As early as 1949 Mooney made some demonstration recordings in Hackensack, and two years later, for the Carousel label, recorded the track that became Van Gelder's first commercial release. Mooney's vocal on "We'll Be Together Again" caught the ear of disk jockey Al "Jazzbo" Collins, who began to play the song regularly on his WNEW radio show, "Collins on a Cloud." The record became quite popular. "[Collins] just loved that record, and he was on from, I think, four to six on WNEW every day," Van Gelder recalled. "So he played that thing over and over again."<sup>4</sup>

With the added confidence following the release of Mooney's record, Van Gelder began to take on even more projects. He was now spending more and more time with his recording activities and less and less working

at his optometry practice. He also began to spend more time investigating some of the new techniques that had become possible with the introduction of tape recording. One of these was the process known as overdubbing, a method whereby multiple tracks could be recorded or “stacked” on the same tape, one after another. This was done by playing back the first track on one machine while a second part was added, with both signals being recorded onto a second machine. In other words, an engineer might (as guitarist Les Paul did) record a single guitar part first, then record that track plus a second guitar part onto another machine, repeating the process until the desired number of parts had been accumulated. The downside of this process was that with each added track a degree of fidelity was sacrificed, since the original track now became a second generation. Tape “hiss” also increased proportionately. To compensate somewhat for this, Paul learned to record the least important parts first, and the most important parts last, so as to have the finished product retain the greatest degree of sonic freshness (Paul 1999).

Although by no means the first engineer to begin exploring the possibilities of overdubbing, Van Gelder was certainly among the earliest in the field of jazz recording to make practical application of this new methodology.<sup>5</sup> As early as 1951, he started making sound-on-sound recordings by “ping-ponging” signals from one tape recorder to another. In that year, pianist Lennie Tristano overdubbed multiple piano tracks onto Van Gelder’s Ampexes in Hackensack. Tristano, later noted for experimenting with the possibilities of recording and playing back at different speeds, subsequently made many other recordings in this vein elsewhere. At about the same time, guitarist Billy Bauer, a frequent collaborator of Tristano’s, recorded a series of Bach two-part inventions at Hackensack, playing both parts himself through overdubbing. “Rudy was just starting to do double tracks at that time. I mean, it was comparatively new” (Bauer 2000).

Saxophonist Teo Macero recalls a session in 1953 where he overdubbed multiple parts on his composition “Explorations.”

It was crazy, a hilarious experience . . . there were five lines in there, and I played tenor and alto. I don’t think I played baritone on that. But five lines—you know, you put the tape on one machine, you record on one, you take that out, put it on another tape recorder—ping-pong, more or less—until you get the five tracks down. Oh, I was busy. (Macero 1999)

In April 1954, Bobby Sherwood recorded as a one-man band in Hackensack by playing trumpet, guitar, piano, bass, and drums in separate passes—fourteen in all—with Van Gelder bouncing the accumulated

tracks from machine to machine. For good measure, Sherwood then added four vocal parts in the same manner. The two tunes recorded, "Yes, Indeed" and "Brown Eyes, Why Are You Blue?" were released as a single on the Coral label under the name of Bobby Sherwood and his All-Bobby Sherwood Orchestra. Van Gelder later said of this session, "I didn't use any special equipment—just standard equipment used by all good recording studios today" (quoted in Feather 1956:31).

The introduction of magnetic tape made possible another means of manipulating recorded material: editing by cutting apart and splicing together passages from two or more different takes. Van Gelder quickly developed extraordinary skill with a razor blade, making precise cuts on the diagonal to produce a smoother transition when the splice ran back over the play head.<sup>6</sup> His adeptness at precision splicing would later stand him in good stead when editing tracks for many labels, for which he would frequently patch together the best sections of various takes to produce a more "perfect" final performance. Although seemingly antithetical to jazz, an art form that prizes the uniqueness of each performance for its qualities of spontaneous improvisation, the practice of producing more polished recordings through splicing and other tape manipulations quickly became an accepted practice in many quarters of the jazz world.

Having a portable version of the Ampex tape recorder gave Van Gelder the capability of making recordings at remote locations more easily than he could with the older disk machines. In the fall of 1950 he made one of his first remote recordings when he took his equipment to Frank Daley's Meadowbrook Inn in Cedar Grove, New Jersey to capture a few sets by the Woody Herman Band. Of the music Van Gelder recorded that day, a highlight was a bass solo by Red Mitchell on a tune called "Bass-ic Lady." Says guitarist Bucky Pizzarelli: "The bass sounded so good for a recording that all the bass players would buy it from him" (quoted in Kanzler 2001:25). Red's brother Whitey Mitchell remembers that after the Meadowbrook session "we went to [Rudy's] house and he played us some of these things. [It was] the first good recording of anything I ever heard" (Mitchell 1999). Unfortunately, neither this vintage Woody Herman material nor a later recording Van Gelder made of the band in 1953 was ever commercially released. "I got Woody to let him come into Carnegie Hall and record a whole concert," Herman drummer Sonny Iggoe recalled. "It was never released, though" (Iggoe 1999).

Van Gelder had begun to make connections with several other big band leaders, for whom he sometimes made on-location recordings. These performances were generally recorded for demonstration purposes only, and were not intended to be finished products. Van Gelder made such demo recordings of the Larry Elgart Band in Atlantic City and New York.

When we first met Rudy, I decided to make a demo in New York. Rudy and myself and Charlie Epstein carried his gear out to his car, and we found a room in New York City in the Ansonia Hotel, on the balcony. It had a really nice sound. The first demo was just part of what became *Sophisticated Swing*. When Columbia took them they said they wanted to re-record them in their own studio. So I had Rudy come along as advisor. (Elgart 2000)

This was the period when the Elgart band developed its innovative and lightly swinging guitar-but-no-piano rhythm section. Elgart remembers that the new sound actually came into being “because that first recording we did at the Ansonia with Rudy, there was no piano there. And then we loved the concept, so we just built around that” (ibid.).

As important as Van Gelder’s skills in other aspects of recording were, many feel his greatest genius lay in the ability he quickly developed in cutting lacquer masters, the first and most critical step in producing the final record. Obtaining a Scully lathe in the early 1950s, he taught himself the precision-demanding process of transferring the music from tape to disk. Whereas recording engineers in many major studios turned their session tapes over to others to be mastered, from very early on Van Gelder mastered virtually all of his own recordings, and was later sought out for that purpose by outside clients as well.

By mastering his own recordings, Van Gelder was able to retain a much greater degree of control over the entire process. Having been at the console during the original session, he knew far better than any technician in a mastering lab what to expect when the session master tape began to roll. Although it was then common practice for recording engineers to add “test tones” to the start of each tape so that the person doing the mastering later could properly calibrate their equipment, Van Gelder never bothered with this step; he knew that he himself would be doing the mastering, most likely using the very machine that had recorded the tape in the first place, and so there seemed to be no need for recalibration. (In more recent years, this lack of test tones has presented problems to engineers faced with the task of remastering some of these original tapes for digital CDs.)

The postwar introduction of polymer plastic, with a molecular structure much finer than that of the previous lacquer disks, made it possible to reduce the width of each groove on a record and thus allow a greater amount of music to fit on a disk. The mastering process, however, now demanded even greater finesse to prevent the recorded signal from “overpowering” the narrow groove and knocking the needle out of its path. The meticulous and delicate procedure had to be carefully monitored with a microscope to ensure that the proper pitch (the distance between grooves) was achieved, and the gain (degree of volume) not allowed to

exceed acceptable levels. As a cutter of lacquer masters, Van Gelder soon earned a reputation for being able to “put more level on an LP than anyone else in the business” (Porter 2000). The hotter he was able to record to tape by close-miking, and the more level he could then obtain on his lacquer masters, the less tape hiss and background noise Van Gelder would have on the finished record, a factor which helped him achieve the clear and tightly-defined sound for which he first established his name.

The late 1950s also saw the advent of stereophonic recording, made possible by the introduction of two- and three-track tape recorders. Because at first it was uncertain whether or not this new technology would catch on with the general public, most record labels approached the idea with a degree of caution. Would people readily convert to stereo, a move requiring them to buy a second loudspeaker, two-channel amplifier, stereo cartridge, etc.? The initial stereo releases of several labels were issued on quarter-inch reel-to-reel tape, a format marketed primarily to dedicated audiophiles. For most consumers the transition to stereo was neither swift nor smooth.

Stereo recording required a greater degree of skill on the part of the engineer than was necessary in the simpler monaural method. In mono, the signals from all of the microphones were funneled onto a single track and played back through a single loudspeaker. Once a basic balance had been established, and the levels of the various instruments set, the only on-the-fly adjustment the engineer needed to make was to perhaps raise the volume of a specific microphone to better capture a solo passage.

In these early days of stereo, before the development of consoles capable of “panning” signals from right to left, engineers had only three choices of where they could route a given signal: they could place a trumpet, for example, on the left channel only, the right channel only, or both channels simultaneously. This latter option would make it appear on playback that the trumpet was in the physical center of the sound stage. The choices made at the recording stage could not be altered later, since this process was essentially the “direct to two-track” method.

Further complicating the transition from mono to stereo was the fact that record companies began to issue new releases in both formats, since consumers opting to stick with mono had no use for stereo disks, while those moving to the new technology would no longer purchase mono. This meant that sessions had to be recorded in both mono and stereo simultaneously, which required that separate recording machines be run at the same time. Needless to say, this presented engineers with an awkward situation: they could not monitor both versions at once during a session. Savoy producer Ozzie Cadena recalls dealing with this problem in Hackensack.

In '58 or so we started doing stereo. I had to talk Savoy into it because they wouldn't pay the five bucks a goddam hour more. I asked Rudy, or we agreed, that we listen to the mono monitors. You know, like the stereo thing, I gotta listen, I gotta jump back and forth to find out what the hell's going on? That may have happened for a couple of sessions, but in the long run we did our monitoring in mono, whether we recorded in stereo or not. It's being recorded in stereo, but the monitors are saying mono. And we got a balance that way. Later on they had variations of what goes left and what goes right. But I say it's all gotta be heard on each channel to a certain degree. And that's how Rudy recorded the stuff. He recorded a very tight kind of thing, up close recording kind of scene. And he got separation without slam separation. It wasn't like they told the guys, "You get over there forty feet away." They were all tight. Everybody was like close together. He just did it electronically. All the folks in the world weren't great jazz enthusiasts—Rudy was. That's the difference. A lot of engineers didn't care. (Cadena 1999)

Unlike some engineers who went overboard with stereo effects, Rudy used the new technology judiciously. Recording pioneer Les Paul admired Rudy's restraint.

The most impressive thing about Rudy—which is very much a compliment—is that Rudy was conservative and not being radical with any equalization or extreme experiments. He was one to remain stable. And the musicians respected that, knowingly or unknowingly. Whether they technically knew what Rudy was doing, they knew that if something good went in, it came out that way. Where, in a lot of other cases it came out radically different. (Paul 1999)

In addition to Van Gelder's recording skills, there were a number of other reasons why his Hackensack operation attracted clients in the early 1950s. The first of these was purely financial: his hourly rates were lower than those charged by the established New York City studios. Since he worked alone and had no assistant to pay, Van Gelder was able to keep his prices within reach of the smaller independent labels. Producers also liked the fact that Van Gelder wasted no time setting up for a session. Extremely methodical and well-organized, he was always prepared in advance and spent none of the client's clock time setting up equipment or testing microphones. Prestige producer Esmond Edwards recalls that when musicians arrived, all they had to do was "walk in, unpack the horn and start playing" (Edwards 1999).

Hackensack clients also always had the benefit of state-of-the-art equipment. Highly attuned to evolving technology and able to afford the latest innovations as they became available,<sup>7</sup> Van Gelder consistently provided his customers with the newest and best microphones, tape recorders, reverberation devices, and other apparatus.

Furthermore, the Hackensack living room provided a comfortable, relaxed setting. Musicians liked the intimacy of the relatively small space; being physically close to one another helped rhythm sections jell. At the same time, the warm, dry sound of the room made it easier to play in than some larger commercial spaces where reverberations bouncing off walls could disturb sonic cohesiveness.

Ultimately, producers appreciated Van Gelder's dedication and the seriousness with which he approached each recording session. His business-like, no-nonsense approach told them that he considered the music important. Prestige label owner Bob Weinstock remembers:

There was always mutual respect—the musicians for him and him for the musicians . . . See, the main thing about him—he wasn't a bullshitter. He loved the music. Even before he recorded it, he loved the music. And he loved the musicians, like I did. So it wasn't some guy just doing it for the money. He put his heart and soul into it. (Weinstock 1999)

#### **“I would like to hear the details”**

In January 1953, Van Gelder engineered his first recording session for Blue Note Records, the leading independent label in the jazz field on the East coast. By the following year, two of that label's chief competitors—Prestige and Savoy—had also become steady clients at the Hackensack studio. Over the next decade, the hundreds of jazz albums Van Gelder recorded for these three labels served as one of the major pathways along which the art form developed and was disseminated.

A young engineer trying to learn his craft could hardly have been in a better position than Van Gelder found himself at this stage of his career. He was recording with ever-greater frequency for three of the most important labels in jazz, working with some of the music's biggest stars. Miles Davis, Thelonious Monk, Milt Jackson, Sonny Rollins, Horace Silver, and John Coltrane were all recording in Hackensack on a regular basis, and the albums they turned out were filling the bins at record stores. For both musicians and audiences alike, Van Gelder's recordings of these artists became central documents in the ongoing development of their individual and collective styles.

Van Gelder was also gaining valuable experience with every new session. Blue Note owner Alfred Lion, especially particular about sound, offered guidance and encouragement to help Rudy sharpen his own already keen aural sensitivity.

Rudy had a good ear for jazz, you know, and a good feeling. He wasn't just a man who sat around the controls and looked at the needles . . . He listened, you know . . . every time I listened to the records from bigger companies, the drum sound was kind of pushed in the back. You didn't hear the details. And Rudy and I discussed it all the time, and I said, "I would like to hear the details. I'd like to hear the sock cymbal. You know, that . . . [snaps fingers] . . . and, cymbals on the top, and the ring. Really get this out, you know, and make it lively." Rudy mastered that after a while, and very well. And so we went from instrument to instrument—the bass—and we developed a sound which was the Blue Note sound. The records sound different from other people's.<sup>8</sup>

By experimenting with the various elements of the recording process—the choice of microphones, where they were placed, the physical distribution of musicians within the studio, the volume level at which each player was recorded—Van Gelder was able to increasingly achieve a full, yet transparent sound in which each individual instrument could be distinctly heard within the overall mix.<sup>9</sup> Horns were close-miked for greater presence and enhanced with a touch of echo. Basses became less boomy or muddy, their lines more cleanly defined. The piano was slightly attenuated to keep it behind the horns in the mix. Perhaps most tellingly, Van Gelder's developing sonic sensibilities, coupled with the favorable acoustics of the Hackensack living room, enabled him to control and contain the busy and explosive styles of percussionists like Art Blakey, Philly Joe Jones, Art Taylor, and Max Roach, and to successfully capture the drum set "details" Alfred Lion was after. Van Gelder was grateful for Lion's expert guidance.

Alfred knew exactly what he wanted to hear. He communicated it to me and I got it for him technically. He was amazing in what he heard and how he would patiently draw it out of me. He gave me confidence and support in any situation. (quoted in Cuscuna and Ruppli 2001:xiv)

An important element of the evolving "Blue Note Sound" was its consistency.



Every session [Lion] made I recorded for him, so that label got a distinctive sound that way. There was a certain consistency and the people who bought those records would look forward to what was coming next because they knew the record would have a good sound. The musicians were all of a certain caliber and he would get a good performance out of them. (quoted in Hovan 1999)

In 1956, Blue Note presented Rudy with a new challenge. Alfred Lion had just discovered and signed a dynamic young organist from Pennsylvania whose innovative approach to the instrument would soon spark a wave of disciples and imitators who embraced the exciting new possibilities of the jazz organ combo. While the electric organ had been recorded in jazz before, not until Jimmy Smith came roaring onto the scene with his thundering Hammond B-3 had anyone so fully tested the instrument's potential. Smith fired off savagely swinging improvisational lines with his right hand, while comping chords with his left hand and pumping out ferocious bass lines with his feet. Lion's Blue Note partner Frances Wolff first encountered Smith at Small's Paradise. "The air was filled with waves of sound I had never heard before," Wolff remembered. "The noise was shattering" (quoted in Cuscuna and Ruppli 2001:xv).

But hearing Smith in person and capturing him on tape were two different things. Produced by a series of rotating tone generators, the B-3's unique sound contained many harmonic overtones and partials, which were difficult for recording engineers to deal with. The problem was complicated by the fact that Smith amplified the organ's output through a Leslie speaker cabinet, which featured spinning rotor horns on top and a revolving drum on the bottom. In other words, the organ's sound was not only a difficult target for an engineer to hit, but a moving one as well.

Although it took several sessions of experimenting with various microphones and their placements to achieve the organ sound Lion wanted, Van Gelder eventually managed to do so, in the process becoming the first recording engineer to unveil the Hammond's full potential and capture the breadth of Smith's creative genius. Smith's early Blue Note albums, combining his innovative playing style with Van Gelder's improved recording methods, made a significant impact in the jazz world, spawning a generation of Smith disciples and making the organ trio one of the most popular instrumental configurations in jazz for the next fifteen years.<sup>10</sup>

Van Gelder's association with the Blue Note label was unique in several ways. For one thing, Alfred Lion employed a much more hands-on approach than other producers, who typically gave Van Gelder free rein to do as he wished in the studio. Lion had firm ideas about what each record should sound like, and was determined to help Van Gelder achieve the re-

sults he desired. Secondly, unlike other independent label owners, Lion paid musicians for a day or two of rehearsals prior to the actual recording date. Blue Note artists were thus able to attempt material of a more ambitious nature than they otherwise could in a typical three-hour session, and their albums tended to be more polished and structured than those put out on other labels. In contrast, Prestige and Savoy dates were usually more casually assembled “blowing sessions” done with little preparation. Trumpeter Joe Wilder remembers:

The way we did [it] at Savoy, we didn’t even know who the leaders would be until the session was over. They would say, “Well, you know, play some tunes, you guys pick some tunes,” or something, and the guys would do that. And when we’d get through, they’d say, “Well, okay Joe, you were the leader on this one.” Or, “Frank Wess, you were the leader.” (Wilder 1999)

Lion was also willing to go to greater lengths at the session itself to achieve the best possible recording, permitting Van Gelder to tape multiple versions of a given selection from which the best performance would later be selected for release. Both the Prestige and Savoy operations were more cost-conscious, urging musicians to record the maximum number of titles in the time allotted, and saving money by taping over unwanted takes. Weinstock recalls:

In my recordings, I had a thing with Rudy. I’d say, “Rudy, once it’s stopped and it’s no good, erase it.” I didn’t keep outtakes . . . It was an automatic rule. Once it was no good, and once you went to do another, he can go right back and take it away. (Weinstock 1999)

If Van Gelder benefited greatly from his association with Alfred Lion, he learned a lot by working with other producers as well. While Lion’s close supervision provided specific goals to strive for, Van Gelder also improved his skills through trial-and-error experiments he was able to employ more freely in the looser sessions run by other labels.

When I experimented, I would experiment on Bob Weinstock’s projects. Bob didn’t think much of sound . . . So if I got a new microphone and I wanted to try it on a saxophone player, I would never try it on Alfred’s date. Weinstock didn’t give a damn, and it worked out great. Alfred would benefit from that. (quoted in Rozzi 1995:45)

Although he achieved his first recognition in the jazz world as the creator of the “Blue Note Sound,” Van Gelder did not limit the technical skills

honed at Blue Note to projects for Lion's label alone. Just as he made all of his physical equipment available to every client, he also afforded each the full extent of his expanding technical expertise. While a certain amount of unevenness is evident on some earlier recordings, for the most part Van Gelder achieved the same "sound" for all of his clients. Variations from album to album were due more to the way the music was played than to how it was recorded. Indeed, comparisons of contemporaneous albums released on Blue Note, Prestige, and Savoy from 1954 onward reveal that the great majority share remarkably similar sonic characteristics.<sup>11</sup> For all intents and purposes, the "Blue Note Sound" actually became the "Rudy Van Gelder Sound"—the most distinctive sonic signature in the history of recorded jazz.

### Conclusion

The 1950s were a seminal period in the development of modern American jazz, and a time during which landmark recordings by leading artists were routinely made in Van Gelder's Hackensack living room. While he also recorded a limited number of non-jazz sessions over the years, Van Gelder was essentially a jazz specialist.<sup>12</sup> Jazz was his preferred medium and the musicians and producers who worked with him knew it. When they came to the Hackensack studio for a session, they felt appreciated, not merely tolerated. Van Gelder spoke the jazz players' language and treated the music they created as high art.

I sort of had a rapport with the musicians, and I tried to understand what they were trying to do. I always felt that jazz musicians should be treated in a way that was a little more as if it were a major effort than the way they had been treated in other places. But that was a strong feeling on my part—that I could allow certain types of clients who came to me and had faith in me—to allow them to compete on a quality level with the biggest companies. And particularly with jazz. (quoted in Forlenza 1993:58)

In 1959, as stereo increasingly became the norm, Van Gelder built a new studio and home in Englewood Cliffs, New Jersey. He then closed his optometry practice and thereafter devoted himself entirely to his activities as a recording engineer. But from the start of his career, Van Gelder's intuitive empathy for jazz, combined with his technical skills, perfectionist temperament, and dedication to tailoring recording technology to the unique conditions of jazz performance enabled him to deal with the music at a level most other recording engineers were unable to match. He was not so much a technical innovator as a chronicler of artistic inno-

vations, whose sensitivity and diligence in documenting the forward-reaching explorations of artists like Miles Davis, Thelonious Monk, and John Coltrane aided these musicians and others in freely expanding and reinventing musical boundaries. Still sounding fresh and lively today, the recordings Rudy Van Gelder made during the 1950s comprise a vital part of the music's sonic history.

#### Notes

1. Advertisement for the Presto Record Maker in *Radio Retailing* (April 1931): 70.
2. Rudy Van Gelder, quoted on John Coltrane's *The Ultimate Blue Train*, released in 1996 (Blue Note CD 53428). This multi-media compact disc contains an interview with Van Gelder conducted on December 16, 1995.
3. When Narma later designed and built four custom-made multi-channel recording consoles, Van Gelder was the first to receive one. The other three went to Olmstead Studios, Les Paul, and Gotham Studios, in that order.
4. Van Gelder discussed the Moody recording at a videorecorded panel in Van Gelder's honor at the annual conference of the International Association of Record Collectors (August 7, 1993, Teaneck, N.J.).
5. The earliest employment of this technique in jazz occurred on April 18, 1941, when Sidney Bechet became a one-man band by overdubbing clarinet, soprano sax, tenor sax, piano, bass, and drum parts on his recording of "The Shiek of Araby."
6. Van Gelder once gave guitarist Bucky Pizzarelli a demonstration of this expertise by playing a tape on which he had spliced together the ID announcements of a dozen different radio stations. "It was very funny when you heard them. It kept getting funnier and funnier, you know. You would hear every one. He had a whole gang of them" (Pizzarelli 1999).
7. A combination of factors—family wealth, a successful optometry practice, and supplementary income from recording—enabled Rudy to afford the latest innovations. He worked lean and clean, had no assistant to pay, paid no rental on the studio, and earned substantial additional money from his clients by cutting the disc masters for all his recordings. While his optometry practice brought significant income in the early years, as time went on the money earned through recording activities became far greater.
8. Alfred Lion, quoted in the documentary *Blue Note*, produced by Kim Evans for LWT Television, Ltd. (London). First telecast in Britain on February 16, 1986.
9. Compare, for example, *The Eminent Jay Jay Johnson, Volume 1* (Blue Note CDP 7-81505-2) with *The Eminent Jay Jay Johnson, Volume 2* (Blue Note CDP 7-81506-2). Both were recorded for Blue Note, the first at WOR Studios in New York City in 1953, the second in Hackensack in 1954 and 1955.
10. While it is not entirely known how Van Gelder was initially able to record Smith so successfully, several organists (including Joey DeFrancesco) have guessed that part of his secret involved miking the B-3's bass tones directly (i.e., hard-wiring them, without a microphone). This technique is standard procedure today,

and Van Gelder was apparently the first to do it, although one can only speculate if and when he employed the procedure with Jimmy Smith as early as the mid-1950s.

11. An example can be heard by comparing the sonic qualities of sessions recorded for three different labels within the space of four days: Phil Woods, *Pot Pie* (Prestige New Jazz 8291), February 4, 1955; Horace Silver, *Horace Silver and the Jazz Messengers* (Blue Note 1518), February 6, 1955; and Kenny Clarke, *Telefunken Blues* (Savoy 12006), February 7, 1955.

12. Unlike Van Gelder, who concentrated almost exclusively on jazz, most recording engineers of the period dealt with a wider variety of musical styles. There were, however, a number of important engineers of the era who did significant work in the jazz field. These include Irv Greenbaum, Tom Dowd, Harry Smith, and Ray Fowler in New York, and Roy DuNann and Wally Heider in California.

**Appendix A:** Select discography of 1950s recordings engineered by Rudy Van Gelder. Original recording date is in brackets, where applicable.

- Adderley, Julian "Cannonball." [1958] 1999. *Somethin' Else*. Blue Note CD 95329.
- Ammons, Gene. [1958] 1991. *The Big Sound*. Prestige Original Jazz Classics CD 651-2.
- Bert, Eddie. [1955] 1992. *Musician of the Year*. Savoy Jazz CD SV-0183.
- Blakey, Art. [1954] 2001. *A Night at Birdland*, vols. 1 and 2. Blue Note CD 32146/32147.
- Blakey, Art, and the Jazz Messengers. [1958] 1999. *Moanin'*. Blue Note CD 95324.
- Burrell, Kenny. [1956] 2000. *Introducing Kenny Burrell*. Blue Note CD 24561.
- Clark, Sonny. [1958] 1987. *Cool Struttin'*. Blue Note CD 46513.
- Clarke, Kenny. [1954-55] 1992. *Telefunken Blues*. Savoy CD SV-0106.
- Coltrane, John. [1958] 1987. *Soultrane*. Prestige Original Jazz Classics CD 021-2.
- . [1957] 1985. *Blue Train*. Blue Note CD 46095.
- Davis, Miles. [1954, 1956] 1989. *Miles Davis and the Modern Jazz Giants*. Prestige Original Jazz Classics CD 347-2.
- . [1954] 1987. *Walkin'*. Prestige Original Jazz Classics CD 213-2.
- . [1956] 1993. *Cookin'*. Prestige Original Jazz Classics CD 128-2.
- . [1956] 1987. *Relaxin'*. Prestige Original Jazz Classics CD 190-2.
- . [1956] 1989. *Steamin'*. Prestige Original Jazz Classics CD 391-2.
- . [1956] 1987. *Workin'*. Prestige Original Jazz Classics CD 296-2.
- Farmer, Art. [1954-55] 1994. *When Farmer Met Gryce*. Prestige Original Jazz Classics CD 072-2.
- Fuller, Curtis. [1959] 1991. *Blue-sette*. Savoy Jazz CD SV-0127.
- Garland, Red. [1957] 2001. *All Mornin' Long*. Prestige CD 7130-2.
- Griffin, Johnny. [1957] 1999. *A Blowing Session*. Blue Note CD 99009.
- Hawkins, Coleman. [1958] 1984. *Soul*. Prestige Original Jazz Classics CD 096-2.
- Jackson, Milt. [1955] 1992. *Opus De Jazz*. Savoy Jazz CD SV-0109.
- Johnson, J. J. [1954-55] 1989. *The Eminent Jay Jay Johnson, Volume 2*. Blue Note CD 81506.
- Johnson, J. J., and Kai Winding. [1956] 1996. *Jay and Kai*. Savoy CD CY-78818.
- Mellé, Gil. 1998. *The Complete Blue Note Fifties Sessions*. Blue Note CD 95718.

- McLean, Jackie. [1959–60] 1987. *Jackie's Bag*. Blue Note CD 46142.
- Mingus, Charles. [1955] 1990. *Mingus at the Bohemia*. Debut Original Jazz Classics CD 045-2.
- Mobley, Hank. [1957] 1996. *Hank*. Blue Note CD TOCJ-1560.
- Modern Jazz Quartet. [1953] 1987. *Django*. Prestige Original Jazz Classics CD 057-2.
- Monk, Thelonious. [1953–54] 1999. *Thelonious Monk with Sonny Rollins*. Prestige CD 7075-2.
- . [1956] 1987. *The Unique Thelonious Monk*. Riverside Original Jazz Classics CD 064-2.
- Newborn, Phineas, Jr. [1956] 1986. *The Piano Artistry of Phineas Newborn, Jr.* Atlantic CD 90534.
- Nichols, Herbie. 1997. *The Complete Blue Note Recordings*. Blue Note 3-CD box set 59352.
- Rollins, Sonny. [1956] 1987. *Saxophone Colossus*. Prestige Original Jazz Classics CD 291-2.
- . [1956] 1987. *Tenor Madness*. Prestige Original Jazz Classics CD 124-2.
- Silver, Horace. [1954–55] 1995. *Horace Silver and the Jazz Messengers*. Blue Note CD TOCJ-1518.
- Smith, Jimmy. [1957] 2000. *House Party*. Blue Note CD 24542.
- . [1958] 1987. *The Sermon*. Blue Note CD 46097.
- Taylor, Billy. [1954] 1991. *The Billy Taylor Trio with Candido*. Prestige Original Jazz Classics CD 015-2.
- Wallington, George. [1955] 1992. *Live! at Café Bohemia*. Prestige Original Jazz Classics CD 1813-2.
- Woods, Phil. [1954–55] 1996. *Pot Pie*. New Jazz (Prestige) Original Jazz Classics CD 1881-2.
- . [1956] 1991. *Pairing Off*. Prestige Original Jazz Classics CD 092-2.

### References

- Cuscuna, Michael, and Ruppli, Michel. 2001. *The Blue Note Label: A Discography, Revised and Expanded*. Westport, Conn., and London: Greenwood Press.
- Feather, Leonard. 1956. A Sound Test. *Down Beat* (October 31): 31.
- Forlenta, Jeff. 1993. Rudy Van Gelder: Jazz's Master Engineer. *Mix Magazine* (October): 54–64, 254.
- Fox, Ted. 1987. Lion's Pride: 30 Years at Blue Note. *Audio* (June): 62–73.
- Gitler, Ira. 2001. Van Gelder's Studio. *Jazz Times* (April): 24–25.
- Griffith, Joseph P. 1988. Phantom Studio Turns Out Jazz Classics. *New York Times* (May 22): sec. 12, p. 2.
- Hovan, Chris. 1999. Rudy Van Gelder Interview. *All About Jazz* (June). <http://www.allaboutjazz.com/iviews/vangelder.htm/> [July 25, 2002].
- Kanzler, George, Jr. 1973. Sweetest Sounds are Captured between Four World-famous Walls. *Newark Star-Ledger* (June 13): 38–39.
- . 2001. The House That Jazz Built. *Newark Star-Ledger* (January 9): 21–25.
- Korall, Burt. 1956. Rudy Van Gelder: The Well-Tempered Engineer. *Metronome* (January): 24.
- Levitin, Daniel J. 1992. Interview with Rudy Van Gelder, Engineer. *Recording-Engineer Producer Magazine* (April): n.p.

- Rozek, Michael. 1980. Jazz Mirror: Rudy Van Gelder. *New York Jazz* (December): n.p.
- Rozzi, James. 1995. Rudy Van Gelder: Capturing the State of the Art. *Audio* (November): 42–46.
- . 2000. Hangin' with Rudy Van Gelder. *Audio* (January): n.p.
- Sidel, Mitchell. 1988. Recording Engineer Finds Darkroom is His "Natural Habitat." *Newark Star-Ledger* (June 12): n.p.
- . 1990. '90 Special Achievement Award: Rudy Van Gelder. *Down Beat* (September): 33.
- Sidran, Ben. 1995. *Talking Jazz: An Oral History*. New York: Da Capo Press.
- Stewart, Zan. 1999. Rudy's Return. *Stereophile* (August): 60–65.
- Van Gelder, Rudy. 1999. Liner notes to *The RVG Album: Jazz from Rudy Van Gelder*. Blue Note CD TOCJ-66060.
- Williams, Martin. 1968. Liner notes to reissue of Miles Davis, *Walkin'*. Prestige LP 7076.

#### *Radio Broadcasts*

- Sidran, Ben. 1985. Interview with Rudy Van Gelder. *Sidran on Record*. National Public Radio broadcast (December).
- Stamberg, Susan. 1993. Profile of Rudy Van Gelder. *Weekend Edition*. National Public Radio broadcast (February 20).

#### *Interviews*

- Bauer, Billy. 2000. Telephone interview with the author, March 7.
- Cadena, Ozzie. 1999. Telephone interview with the author, December 31.
- Edwards, Esmond. 1999. Telephone interview with the author, April 10.
- Elgart, Larry. 2000. Telephone interview with the author, January 23.
- Igoe, Sonny. 1999. Telephone interview with the author, May 12.
- Macero, Teo. 1999. Telephone interview with the author, December 19.
- Mitchell, Whitey. 1999. Telephone interview with the author, May 6.
- Narma, Rein. 1999. Telephone interview with the author, December 8.
- Paul, Les. 1999. Telephone interview with the author, November 17.
- Pizzarelli, Bucky. 1999. Telephone interview with the author, May 12.
- Porter, Bob. 2000. Telephone interview with the author, November 11.
- Taylor, Billy. 1999. Telephone interview with the author, December 8.
- Triglia, Bill. 1999. Telephone interview with the author, May 12.
- Van Gelder, Leon. 2000. Telephone interview with the author, February 2.
- Weinstock, Bob. 1999. Telephone interview with the author, May 3.
- Wilder, Joe. 1999. Telephone interview with the author, June 11.