

Labels Strive to Rectify Past Archival Problems

BY BILL HOLLAND_ Today, catalog preservation is more of a priority for the major U.S. record companies than at any time in the history of the century-old industry. But these efforts come too late for untold numbers of recordings, old and not so old, that have been thrown away, mislaid, left behind in warehouses, and even sold for scrap.

Seventy one vault-wise sources who agreed to discuss the issue with Billboard--sometimes on request of anonymity-- said that while most of the 3 million-plus heritage U.S. recordings owned by the major labels are secure in vaults, enough legacy material has been lost over the years to be disturbing.

Further, although it is difficult to estimate, they said that maybe as many as a million more recordings from long-defunct or inactive small indie labels lie unattended and gather dust in storage rooms, basements, and garages all over the country--or have been destroyed or buried in landfills.

Material in all genres of music has been affected, they said: rock, r&b, jazz, country, blues, classical, pop, "ethnic," spoken-word, and others--the entire gamut of this century's sound recordings.

Sometimes luck is on the side of the heritage material. Sony Music Columbia reissues producer Michael Brooks tells the story about saving never-released Louis Armstrong and His Allstars master tapes from the trash bin.

"I was in the studio supervisor's office--this was 1980-- and there were a pile of tapes, so I started looking through them. They all had a big S on them, including boxes clearly labeled 'Louis Armstrong--Unreleased Concert.' I said, 'What is this?' The guy said, 'All that's old stuff getting thrown out to make room in the vault.' The S was for Scrap."

Brooks saved the tapes. His story is retold by veteran Columbia producer George Avakian in the liner notes of the just-released, magnificent, 2-CD Columbia/Legacy release, "Louis Armstrong--The Legendary Chicago Concert, 1956," released in May.

"Pick any label," said a vault-wise source. "Your whole article could be stories just about recordings owned by that one company that have been thrown out or missing. It's one of the industry's dirty little secrets."

Lost catalogue recording materials in the pre-tape era include metal record manufacturing parts, disc acetates, test pressings and disc copies, said the sources. In the tape era, the losses include both monaural and stereo tape masters of singles and albums, safety copies, alternate takes and multi-track session tapes.

Storage Costs, Short Memory

In past years, sources said, the biggest impediment to proper archiving of older material has been constant administrative pressures at all companies to economize on storage costs.

"In the '70s, there was an order at MCA to the upstate New York vault to destroy all the metal parts of the classic pre-1950 Decca, Vocalian and Brunswick sides," said a source. "But the order was quietly ignored by people at the vault who knew better, who later explained that there was plenty of space and no reason to do a systematic meltdown."

Most of those interviewed said that in recent years Sony has led the industry in its fullscale efforts to update its archives, but past stories about short-sighted decisions at the label clearly illustrate why such efforts were initiated by the new software-conscious Japanese owner of the CBS family label.

"I was working at CBS in the mid-70s," said another former producer. "One day we got the word that some administrator had decided that because of storage concerns, the mono tapes in the vault should be thrown out. This meant not just mono mixes of stereo sessions, but throwing out masters cut before the advent of stereo, okay?"

"So the word gets out, and at lunchtime, there's all sorts of people from the building out standing around the dumpsters on East 52nd. St., and there are tapes, acetates, track sheets, session notes, you name it, all over the street, and people trying to save this or save that. Acetates don't like asphalt streets. Somebody finally cancelled the order."

Pre-Sony CBS wasn't alone; similar measures at Liberty and ABC, before those labels were acquired, respectively, by EMI and MCA (now Universal Music Group) resulted in many mono-era tapes being thrown out or destroyed, according to sources. Some pre-tape items were so badly stored in the past at EMI's Capitol as to be useless.

"I was doing a big band series for Time-Life Records in 1984 and we were doing Stan Kenton," Michael Brooks recalled. "Capitol's transfer tapes were horribly distorted, so I wanted to go back and use the original 16" lacquers (fragile acetate first pressings). The lacquers were stored in a room in huge piles, hundreds of them stacked flat on top of another, squashed, the piles so high you'd have to use a ladder. All ruined."

Another major factor at all labels that impeded proper care of older recordings, they said, was the pre-CD-era perception that they were of negligible value and not viewed as ever producing revenue again.

"Nobody knew there'd be this interest in old recordings," said a source. "So there was this view that if they kept one copy, any kind of copy, then they figured they were cool. So it was like, 'Why keep those old metal parts? Why keep the mono when we've got reprocessed stereo? Why keep these bulky multitrack session reels?' They just didn't know any better."

"I saw CBS employees in the late '80s actually using a band saw on tape reels, multitracks and masters of major artists," said Bob Irwin, a Sony producer and also owner of Sundazed Records. "They were sawing the tapes off and saving the metal reels for scrap. I argued with them and eventually got 30 or 40 reels away from those people and brought them to someone who knew better."

Irwin said that the employees had been instructed to destroy the tapes because "for every tape they got off the shelves, they saved the company a nickel a month--that was the attitude."

All of those interviewed said such occurrences don't happen anymore. "It's a different climate now," said a source. Because when you get down to it, all a record company has of value, really, are its artist contracts, its current release inventory, and its catalogue.

"And a corollary of that means taking care of the catalogue by keeping and archiving the best original source material."

Why is these best source material so important? "The answer is simple," said an industry vet. "The others, copies and such, don't sound as good. Copies sound duller. If you use the wrong tape, like one equalized for the characteristics of vinyl format, forget it. Or one where they used too much noise reduction on a disc-era reissue, it's going to sound plain lousy."

A related reason for the self-inflicted seepage is the turnover of company personnel, and the loss of "corporate memory."

"Well into the '60s and 70s, said an industry vet, "most of the big companies had one person who'd been in charge of the vault for eons, and that person knew where everything was. This was before computers.

"Well, those people retired. And they sort of took most of their knowledge with them, and many people remaining were just basically just clerks who wouldn't know Otis Redding from Otis Elevators."

"The turnover is unbelievable," said Joanne Feltman, BMG VP, Business Affairs, and the executive primarily responsible for BMG's vault updates. "That's one of the reasons for this project: otherwise, you're just taking your chances that the person who knows about your assets today knows about your assets tomorrow. Knows where it is, knows it's in good shape, understands what product it's been on."

Sometimes there have been people working not just in the vault library but also in the front line of company reissue programs who didn't know their own label's heralded artists.

"There was this person who worked in the EMI/Capitol reissues department--this is absolutely true--who asked me who Ricky Nelson and Jan and Dean were," said a producer. How can you deal with that?"

One way to deal with the industry's inevitable turn of the generational page was to bring in experts who did know the the company's history and its artists.

Vault Detectives

In the mid-'80s. companies began hiring outside consultants to scour and search their vaults. Often studio-wise and always passionately knowledgeable about particular musical genres (and even particular artists), the freelancers would spend days and weeks searching company files, combing through filthy warehouses checking out tape boxes--and often coming up with the goods.

"One of the major problems to quick access," said a vault expert, "is that nobody at any company can possibly know what's on every tape. If it isn't written accurately on the tape box, you either forget it or play detective. That means getting down on your hands and knees."

Given time, commitment and a narrowed-down universe of tape reels that expert knowledge brings, sometimes the work can pay off.

"That's how RCA found an alternate take for 'That's All Right, Mama,' Elvis's first single for Sun Records. Lost for, what, 33 years?" said a source. "They finally figured to check the (matrix) numbers on tapes close to those of the released recordings, and started searching. Believe me, none of the boxes had 'Elvis' written on them, just numbers. Finally they found it."

Because of their knowledge and tenacity, and their successes, many vault experts are now respected reissue producers; others have become part of the New Guard at label libraries.

The Losses are Industrywide

The historically largest and oldest companies, Sony's CBS/Columbia and BMG's RCA/Victor, founded in 1908 and 1901, have huge cornerstone collections as well as later acquisitions--and have the largest and most complete storage vaults of all the majors. BMG has an estimated 1.3 million items (tapes, acetates, metal parts); Sony, more than 600,000, according to sources.

Both have held onto the majority of their catalogue holdings because of their sheer bulk. Sony's main vault is now in a state-of-the-art Iron Mountain storage facility in upstate New York; BMG's is in a similar underground facility near Slippery Rock in Western Pennsylvania.

Both companies have given over sizable budgets to complete their computer-smart vault programs.

In addition to the size and age of their core inventory, the holdings in two companies' vaults have been fairly intact because no buyout deals over the decades have resulted in their vaults being moved around and haphazardly stored--thus more vulnerable to attrition--although they face the same problems as younger companies with their acquired labels. Buyouts and catalogue moves have become the achilles heel of all companies, but especially smaller companies.

The vaults of Universal Music Group (500,000 pre-tape and tape items), EMI/Capitol (250,000 pre-tape and tape items) and PolyGram (275,000 pre-tape and tape items), have also been greatly updated and are also held now at modern, hi-tech storage facilities.

These three companies' holdings form more of a mosaic of both their older core labels and the absorbed catalogues of smaller companies they have bought.

Their older labels, such as Universal's Vocalion (1922) (shared with Sony) and Decca (1934), EMI's Capitol (1942) and Polygram's Mercury (1947) are also fairly intact. Polygram's vault, by the way, holds the catalogue of more acquired companies--with more than 70 labels--than any other major.

However, there is a downside to purchased catalogue--the holdings of some of their acquired '50s-'60s-era rock and roll and r&b labels, such as Universal/MCA's Chess family labels, show comparatively more instances of missing or lost items, according to sources.

Warner Brothers Records (180,000 items, almost all tapes) can also boast of a stable and temperature-controlled archive--but one, unlike all the other majors, that has been in place almost since the founding of the label in 1958.

Though part of the WEA family, the Atlantic Records catalogue (120,000 items, mostly tapes), has always been stored separately from its newcomer relative. Its famous catalogue dates back to 1948. Atlantic has been the slowest of the companies to update its vault, which up until last year was stored in conditions called "appalling" by many sources.

Old and New

"By and large, the older a recording is," said one source, "the more likely the original source material is gone or can't be found." Sometimes the reasons for consciously throwing away material strain credulity.

"CBS used to employ one infamous person who had bizarre reasons for scrapping things," recalled reissue **producer Brooks. "For example, she was shelving historic 16"** test pressings. But she was also heaving all of the **smaller 11" pressings into the trash. I asked her why. "I don't keep little records,"** she told me.

The woman no longer works for the company.

Because of other decisions at pre-Sony CBS, usually based on storage concerns, many of the company's metal manufacturing parts for old Columbia and Okeh records are also gone, although many of the fragile lacquer disc acetates remain. "Columbia scrapped a lot of metal parts," explained a vet, "especially during the war years. RCA Victor did too, but not as much. They have many more metal parts."

"RCA had their own storage buildings, so they didn't have to worry about storage costs as much as other companies," said a source. "That meant it was easier to just keep things."

However, there are a lot of fairly recent recordings at all the companies that are also missing or lost, according to the sources. "It's not just the 78 rpm-era things that are missing," said one veteran of vault searches. "There are missing tapes by '60s and '70s and even '80s artists too.

"Most things are there, you know. You can find them if you search long enough, but some things are just gone. It depends on how organized a vault library is. Archiving systems aren't keyed to true or complete tape content."

On source familiar with the EMI-Capitol libraries admitted that "there are probably 10,000 reels that nobody **knows what's on them. And probably won't know--it isn't** cost-effective. You know how much it would cost to play all **those tapes and pay experts to find out what's there?"**

The same goes for other labels. "Oh, yeah, there are thousands and thousands of mystery reels at just about any company you can name," said another vault expert. "I mean, most stuff is there, but if the (tape) boxes are in piles, or unmarked, or mismarked, who knows?"

BMG vault officials are among those new breed archivists who have developed a meticulous inventory system involving bar codes, with each item and matrix number notated. "But," added a source, "even that's dependent on what's written on a tape box, you know, the input. There's no way to know if there's an unlisted tune on a tape. There's no way to know if the Dolby tape is Dolby until you call for it and play it."

Sometimes the archivists and producers know of tapes, but the company just chooses to sit on them. "Exploitation is a whole other part of this," said a producer. "I know one label that has 40 reels of Sonny Rollins tapes recorded live in clubs in the Village during the '60s. They (the jazz division) know they're there. And Rollins has told people about them. But they're still sitting there."

Lost and Not Found

The Motown vault, now owned by PolyGram, is estimated to be about 30,000 tapes, and is "typical of a smaller company of that era," said one veteran whose first-hand observations were corroborated by other sources. A peek at the Motown vault serves also as a description of the holdings of other once-small labels that came to prominence in the '60s.

"The good news in the case of Motown is that they have most of the masters and most of the multitrack reels, but engineers and producers taped over a lot of sessions. Tape was expensive. They'd get a master and then use the rest of the reel for the next session. So there aren't many alternate takes. There never were.

"Also, there are safeties or copies of probably everything on so-called DM (lesser quality, backup) reels. They'd copy these copies off when they sent the production masters to the pressing plant. Some are on standard 1/4" tape, but 300 or so mono tracks are stripped onto three-track reels, like 36 songs, 12 squeezed on one track, end to end.

"Some of the mixed masters are missing or hard to find--I wouldn't say gone," said another source. "A lot of them have been recovered over the years, those left stored at outside mastering labs. Most acetates and metal parts (not as necessary in a tape-era vault) are long gone, though."

"Other masters are just worn from use, so to get the best sound, you have to remix," said a source. "And the problem of remixing from the multitracks is that it's very hard to duplicate the 'Motown mix' sound--they had their own custom EQ boards, custom reverb.

"If you look hard enough, though, you can find a substitute (of the era). Take Stevie Wonder's 'Fingertips': there might be like 20 mixes, done at five sessions, all stored different places. They'd do a song until they got it right. The problem is finding the right version."

All the sources said that the Motown vault has many unreleased masters of both well-known and lesser-known artists, and many reels of live shows. "They used to bring a three track machine down to the Twenty Grand Club in Detroit to record on weekends for years."

Overall, the various sources said, the Motown vault is in good shape. "But trying to find the definitive master can be a problem," said a source. "Remember, the label has gone **through four owners, three cities, and seven addresses, if you include Detroit.**"

"Other indies, especially smaller companies, had the same 'tape-over-it' policy to keep costs down," said another source. "But even RCA, Capitol, ABC, Mercury-Smash and Philips-Mercury had policies in place throughout the '60s and '70s of reusing, scrapping or not storing store multitrack session tapes, and just keeping mixed masters.

"Sometimes, tapes just end up missing," said a vault vet.. "They're either mislabeled, or they just can't be found, like Bob Dylan's 'Nashville Skyline' album--Sony's still searching for it. They have safety, but it's a copy. The good news is that they've found (Dylan's) 'Blood on the Tracks' master now. It had been mislabeled when it was shipped years back from Nashville to New York."

Occasionally, companies buy labels and then later discover that the recordings were never delivered.

"After Island was sold to PolyGram in 1989," recalls an insider, "somebody finally said, 'well, where are the tapes? We can't find them.' These were tapes from the famous Compass Point studios in the Bahamas.

"So PolyGram called Compass and were told they'd been shipped to New York. Eventually they discovered they'd been held up at U.S. customs in Miami. Boxes and boxes of reels, stored somewhere at the docks--for a year. Some major '70s and '80s albums too: Grace Jones, Black Uhuru, Third World, B-52s, the aborted album project with James Brown and Sly and Robbie. They finally got them back, and luckily, they played alright."

"It happens all the time. At PolyGram, there are missing multitracks by Cream--lost somewhere along the line between when Atlantic sold them to Polydor, apparently," another source said. "MCA can't find masters by Three Dog Night, The Grass Roots. Sony can't find some Bang label multitrack masters. On the other hand, somebody opened a mystery box at BMG the other day and found some unreleased Hot Tuna. It happens all the time in the industry."

The engineers who worked with Steely Dan on transferring the group's "Royal Scam" album tapes to digital in 1982 for eventual CD release says that MCA couldn't find the analog master for one whole LP side of the album..

"These guys searched and searched and finally had to use an (earlier) backup digital copy for that side of the album. They barely got the tape to play--some clown had apparently tried to play it on an analog machine. The edges were all wrinkled There's a photo somewhere of the engineers holding the tape down on the recording heads with a Q-Tip so it would track properly."

Horror stories

One of the most devastating vault losses in modern industry history occurred in February, 1978 in a fire in a non-air-conditioned Atlantic Records storage facility in Long Branch, N.J.

The warehouse fire destroyed virtually all of Atlantic's unreleased masters, alternate takes and sessions tapes by **artists who had recorded for the label and its offshoots** throughout its classic 1948-1969 first golden era.

Thousands of performances by nearly a hundred of America's most acclaimed r&b, soul, pop and jazz artists were lost in the fire. According to several sources, between 5,000 to 6,000 reels of tape were destroyed or damaged. Just a handful of the artists names reads like a short-form Who's Who in Mid-Century American Music.

To compound the dimension of the losses, most of the material--all but the first few years--had been recorded in stereo. Atlantic was an industry leader in recording in the new mode as early as 1952.

Several former senior executives and staffers at Atlantic told Billboard that news of the fire was kept quiet. "It was very hush-hush; I'd ask for tapes and they'd just say 'they're not there,'" remembered one producer. "I didn't find out until a year later."

In a few instances, reissue producers and archivists have discovered a few of the lost tapes, reels that had been removed years before from the warehouse and not returned or perhaps consciously squirreled away.

"When we were doing the (Rhino-Atlantic) John Coltrane box set," said industry veteran and former Atlantic producer Joel Dorn, who now runs 32 Records, "they told us all the session reels and outtakes were gone, supposedly destroyed in the fire. I'd heard the stories. But I came over to the old warehouse to look anyway. Eventually, some young man who'd been watching me grumble said, ' You know, I think I might have seen something in that area over there,' pointing to high shelf. Up on the shelf were reels piled up, semi-alphabetical.

"So I searched through all these boxes and finally found what I was hoping for--supposedly destroyed alternate takes from (the seminal 1959 Coltrane album) 'Giant Steps.'

"Now, by all rights, they should have been stored in that warehouse," Dorn said. "I found other amazing things, like Bobby Darin's first Atco demo of 'Dream Lover' (circa 1957), with Fred Neil playing guitar."

Some of the other recovered lost treasures since recovered by Atlantic archivists include unreleased masters, alternate takes and rehearsals by Ray Charles, tunes by R&B Foundation awardee Van "Piano Man" Walls, and outtakes by jazz legends Ornette Coleman, Lenny Tristano and Lee Konitz.

Luckily, Atlantic had stored its master tapes in New York at the time of the '76 fire.

MGM Records also suffered the ravages of a vault fire, according to several sources. The fire broke out in the MGM's Hollywood, Cal. warehouse in 1972 . Although most master tapes were spared, again,

many session reels, alternate takes and most master acetates for many MGM recordings, as well as those for the Verve Records family (MGM had bought the jazz label in the '60s), were destroyed or badly damaged due to water damage incurred in extinguishing the the fire. The damage was then exacerbated by emergency storage of the material for a period of months in an open shed.

"It was kind of one plague after another," said Verve research archivist Ben Young, "for some of those tapes that (because of ownership changes) had to go from the Verve East Coast holdings to the West Coast and then back to White Plains, N.Y. in the '70s and '80s and now are staged in Edison (N.J.).

"Sometimes it's a desperate search for every little scrap that sometimes pays off in full," Young said, "but more often has no payment at all."

A prime example of the problems a reissue producer faces in the face of such a disaster appears in the award-winning 1992 "The Complete Billie Holiday on Verve." Producer Phil Schaap's audio notes list more than 30 damaged or missing Holiday tracks (for which disc dubs or airchecks were used) and writes of "the absence over time from the vaults of more than 90% of the original session reels."

The most spectacular case of wholesale vault trashing is the decision by RCA in the early '60s to demolish its warehouse in Camden, N.J. The warehouse, according to collectors and industry veterans, held four floors of catalogue product, pre-tape-era material ranging from metal parts, acetates, shellac disc masters and alternate takes to test pressings, master matrix books and session rehearsal recordings.

Several days before the demolition, officials from French RCA gained permission to go through the building and withdraw whatever material they could carry for their vinyl "Black and White" jazz reissue series. A few American collectors were also allowed in the building to salvage any items they could carry out.

A few days later, as dozens of RCA officials and collectors stood on a nearby Delaware Bridge, demolition experts **ignited the dynamite charges. Eyewitnesses said they saw** "clouds of debris, black and metal chunks flying out the **windows**" **of the collapsing building.**

The building wreckage was then bulldozed into the Delaware River. A pier was built on top of the detritus.

"Was it a case of literally dynamiting away our cultural heritage, or was it nobody's business but a private property of a company that had made a business decision that made sense to them at the time?" asked a young archivist, one of several who have confirmed the story with older collectors who were present at the demolition. "The problem is, it was both. There's always that tug."

In a more recent example of vault abuse, employees at a major label received storage boxes containing hundreds of tapes apiece shipped from a closed-down older storage facility. They then discovered that unfortunately, the tapes had spent "some time" soaking in water. "The boxes," notes the observer, "bore obvious high tide lines, high water mark lines."

"There are those kind of stories at all the labels," said one veteran who has prowled the vaults of large and small companies. "Things thrown out, sold for scrap, just mislaid, lost. And that 'tape over it' policy to save a few bucks."

Other sources told of watching company personnel grabbing a recorded tape off the shelf in lieu of a blank tape to make a quick copy of something else.

"They'd grab a box, and go, 'hmm, so-and-so,' and because they were lazy or didn't know any better, would use it," said one producer. "I've seen it happen more than once."

Several sources said that in the early '80s, they witnesses MCA employees, under a directive to make vault tape **copies, actually taped over master tapes by artists such as** Patsy Cline and Roy Orbison.

Said another source: "Somebody needed some spare tape to make a dub, okay? So they got this box off the shelf and spooled off tape and started copying on it. I look at the box later and it was labeled 'Gary Usher--Outtakes.' I'm thinking, Jeez...."

PART TWO

This is the second installment of the industry's first **published overlook of record company vaults. In this final** episode, writer Bill Holland, after interviews with more than **70 industry experts, reveals more vault horror stories of the** past, then focuses on the concerns of archivists, engineers and **producers facing an uncertain future in the digital-format** storage era.

Erasing Elvis, Pitching Out Presley

Elvis may have been the king, but for RCA bean counters in the days before BMG took over the company, he was just a name on pesky tape reels taking up valuable space.

"In the '70s, they just threw out some Elvis material." said a source. "A storage issue, apparently. They were multitrack session reels from his '60s movies. Those ended up on a (counterfeit) bootleg."

Presley's first sessions in Los Angeles, cut in 1957, also went missing, but this time, enterprising BMG reissue execs, 30 years later, tracked down copies by contacting Bones Howe, one of the recording engineers who taped the sessions at Radio Recorders along with Thorne Nogar. Luckily for the label, they'd stored them away in the studio library.

And even more luckily, Howe saved them after finding them in the trash after a "studio cleanup" three years later.

"I walked in the back door of the studio one day," Howe recalled. "It was in 1960. The dumpster was filled with tapes. I went, 'my God, I worked on a lot of these things.'

"I asked the supervisor, and he said that the studio had cleaned out the library, and they had called the record companies but there was no response. So he said, 'go ahead, take 'em before the dumpster truck pulls up.'

"I went through all these tapes and got all the things I'd recorded, and digging through them, I found the Elvis reels, and sealed them all up in boxes and stored them in my garage. They were with me through the '80s.

Even better, in addition to several mono reels, Howe had found tapes of the entire session cut on a two-track stereo machine that served as a backup tape recorder rolling at the sessions. (There were thought to be no pre-Army, Elvis stereo recordings).

"Now, RCA had the mono EQ'd masters, but even back in the late '60s, things at the vault had gotten way out of control, tapes piled everywhere, so they couldn't really find anything. After Elvis died, all these compilations started coming out," Howe explained.

"Finally in the mid'80s, RCA called and said 'we hear you've got these tapes,' and I said, 'yes, I do.' In the end we negotiated a price and I sold the tapes back to RCA. The (audio tapes for) the 1968 TV 'Comeback Special' too."

Perhaps the most amazing Found Elvis Tapes story is how a record company boss in Germany discovered the long-missing tapes of Presley's first 1956 RCA recording session in Nashville. For decades, they were thought to no longer exist.

A few years back, Bear Family Records in Hambergen, Germany licensed tons of RCA Hank Snow material from BMG for one of its admirable multi-volume, multi-CD sets for the European market.

As Bear Family owner Richard Weize and his engineer sat in the studio listening to one of the many Snow tapes, **they could hear something "annoying" running backwards.** When they flipped the reel over, they were astounded. **They'd stumbled upon a previously-unknown alternate** take of the 1956 RCA Elvis hit, "I Want You, I Need You, I Love You."

Weize immediately called the well-known Elvis reissue expert Ernst Jorgensen, who confirmed Weize's guess. Further, the alternate take was not known to exist. Jorgensen immediately called BMG in New York, and ordered from the vaults all Nashville tapes bearing subsequent matrix numbers recorded soon after the Presley session.

After a thorough search, he found five more lost Presley items from the sessions--unreleased, alternate-take performances sessions of "I Was the One," "I've Got a Woman" and "I'm Counting On You," as well as two alternate takes of "Heartbreak Hotel," his first 1956 breakthrough single.

Some of the discoveries were included in the recent BMG "Elvis '56" release; the others will appear in a new four-CD "Platinum--A Life in Music" box set that includes recently unearthed Presley material--sessions, TV shows, rehearsals and even a pre-Sun Records acetate--to be released June 17 (Billboard, May 24).

In a case still making headlines, a '70's-era directive of now-closed Columbia Records studio in Nashville led to the label giving away a small audio gold mine.

The studio had a policy allowing employees to cheaply purchase reels of tape "not used in the production of specific albums." An employee at the studio thought he'd gotten a good deal on a lot of what he thought was simply bulk used tape--2,200 reels, to be precise.

Ownership of the stash has passed through several hands. Amid the detritus on the tapes, according to the current owners, are unreleased studio and live masters, alternate takes and safety masters by icons such as Louis Armstrong, Buddy Holly, Frank Sinatra, Hank Williams, Sr., Johnny Cash, Elvis Presley, Patsy Cline, Tony Bennett, Bob Dylan and several dozen other well-known artists (see separate story).

Missing In Action

Occasionally producers or engineers in the past have snipped out a master for use and forgot to log the change, causing problems. Sometimes a crook snips out a master. Years later, archivists and vault searcher reissue experts discover that a master has been removed. One source said he'd seen masters by Buddy Holly, Jackie Wilson and others "cut right out of the three-track masters reel."

In the digital age, sometimes missing tapes means even bootlegging the bootleggers. "Some of the original three and four track masters by the Byrds were missing, probably stolen," a source said. "So when Sony put out its (recent) Byrds collection, they used the tapes they could find, but then ended up transferring the tracks they were missing from an Italian bootleg CD box set that contained the very material that had been stolen from them. And there are many more examples."

Tales of the 80s & 90s

The closing of many New York recording studios and mastering labs such as Bell Sound, Allegro, Belltone, Sigma Sound and the Record Plant added to the lore of lost tape stories. Most companies left session tapes and even masters at these studios.

"Sony bought the late Bert Berns' label Bang in the early 80s, but it wasn't until about 1990 that they realized they had not taken delivery of the masters," recalled Bob Irwin, a producer for Sony and owner of Sundazed Music. "The McCoy's 'Hang on Sloopy' masters, things like that, you know."

"So they called me and I said, well, first of all, try calling Ilene Berns, the widow, down in Nashville or Memphis," Irwin said. "So they did, and she said, 'Oh, sure, it's all in my basement. You want me to send it up?'" Mrs. Berns had responded to the call from Bell to pick up tapes.

When The Record Plant went out of business, CBS (now Sony) was one of a number of major labels that had kept tapes there and never took delivery of their masters, according to Irwin.

"Eventually, a couple of guys from Wehauken, N.J. bought the studio and everything that was left--thousands of reels--including all these masters and multi-tracks," he said. "Now, they didn't have any interest in selling the tapes illegally; instead, they called the companies and said, okay, come get your stuff; you can buy it back. Price was something like \$20 a reel, storage fees really, because they'd put up money to buy it all and then they had to haul it and store it.

"So Sony sent us and we drove to Wehawken and were shown a loft with thousands of multitrack session reels on **shelves," Irwin recalled. "From Springsteen on** down...Heart, Ted Nugent, on and on. We went back to the **label and convinced them to buy them back because, you** know, some of the tapes were priceless.

"But while I was there at this loft, I kept seeing all these tapes from other companies," said Irwin. "Artists on every single major label. I even called a guy at a label and told him, hey, all so-and so's multi-tracks, all the mixdown reels, they're all here! He never showed.

"Here's the kicker though." Irwin added. "Years later, I ran across one of the guys who'd bought the tapes out of the Record Plant and he told me that only a few other labels other than Sony had ever responded to his calls. Nobody else came. So he told me that all those masters and multi-tracks went unclaimed and went into the dumpster."

A source at Warner Brothers Records also told Billboard: "Oh, we flew to New York and went out to New Jersey where these new owners had stored all these tapes. They just asked us for storage fees. We took possession of a lot of tapes that belonged to us. Things like Madonna tapes on Sire."

However, former Record Plant co-owner Chris Stone, now head of the pro-audio association World Studio Group, said that he doesn't believe record companies were unresponsive--at least when the New York studio was still operational. "We did store a lot of tapes, but in most cases, the labels were meticulous (about retrieving tapes) and if they didn't want something back, it was because it was a copy or a safety they already had and they didn't need a fourth copy. So I don't believe in the premise."

Stone said he was not aware of the instances mentioned above. "Don't tell me because I don't think I want to know," he said. "I'd be real cautious about telling these stories. The companies won't like it."

Advent of the CD Brought Changes

In the case of the major label companies, especially those which bought out smaller companies, the importance of a coherent storage and preservation policy didn't become clear until the advent of the CD and the economic advantage of properly reissued material.

EMI officials took their modernizing plan very seriously.

Three and a half years after the company modernized its Los Angeles vault and updated Capitol's vault database, the master plan also meant a move of all post-'70s session reels and alternate take tapes last summer to a custom-built vault facility in New Jersey, far from possible L.A. earthquake damage, according to Peter Brooks, EMI-Capitol's Senior VP Logistic Development.

The moving day scenario of the EMI-Capitol session tapes was reminiscent of the film "Road Warrior." According to Brooks: "We loaded 50 refrigerated, articulated trucks, sent them in four convoys across the nation, using different routes, staggered eight hours apart, along with chaser cars with guards. They only made gasoline stops."

In the years before the update, however, Capitol stored many of their tapes not only in the Capitol Tower building and a distribution warehouse but in un-airconditioned little rooms under the stage of the nearby Pantages Theater at Hollywood and Vine, according to several sources. "They were there until 1987," said a former employee, "until we got them out. No one at the company knew what was there, because it had been done a decade before."

Capitol wasn't the only label to store its holdings in dubious storage facilities. Until last year, the master tapes of Atlantic's valuable family of labels spent years in several different locations, including one described by a half-dozen industry insiders as a dirty, unorganized, and unsecured warehouse on New York's West Side.

"The front door emergency exit on 16th. Street was propped open with a brick," said a source. "I walk in and I **don't see a soul. Just shelves and shelves of reels of Atlantic** artists. I go, 'Hello? Hello?' Finally I find a guy sitting with **his feet up who didn't see me come in. I thought, what if I** was a bootlegger?"

Atlantic finally initiated reforms last year, but it has taken until this spring to move the library to its new modern vault.

New guardianship by conglomerates has helped the updating, but it also has its downside. "People have to remember that the 'Recorded Music Division' is just one part of what a big multinational company is about. Most of the money that gets to the music division goes where the revenue stream is the biggest, which is current releases," explained another veteran of the vaults. "So you constantly have to fight to make them understand the importance of their holdings."

Pilferage: Liberating or Stealing?

Pilferage of the vaults prior to the updated vault programs, has also been a problem at all labels over the years.

While there are isolated cases of ripped-off recordings going directly to bootleggers, much of the pilferage has come from passionate music fans who felt (in some cases, with good reason) that unless they "liberated" material they'd be thrown out, destroyed or left to gather dust.

The sources were not in agreement on the pilferage issue.

"You can call it whatever you want, but it's stealing, period," said one. "The point is not that a label was sitting **on an artist's material or not. Even if they choose to ignore** it or throw it out, it's their decision. It all belongs to them. **That's the point.**"

All of the sources for this article said they were surprised there hasn't been more pilferage over the years. One suggested that "there isn't a (collector) market for multi-tracks. Most people don't have or can't afford the equipment at home to play them back. Even 1/2" or half-track 15 ips masters. That's why a lot of the theft has been acetates or test pressings. Test pressings are big in the collector market. People can show 'em off, play 'em at home."

Several sources confirmed that years back, near-complete runs of 78-era test pressings by '20s and '30s jazz and blues artists on the Brunswick, Vocalian and Decca label were stolen out of the MCA warehouse in upstate N.Y. by someone who bribed a night guard.

"There's another case," said an insider, "where a guy stole the actual metal parts of an old Columbia classical recording, got a few records pressed somewhere, then destroyed the metal parts to insure the value of his 'collectible.' Nice, huh?"

Most bootleggers in the LP and CD era haven't been vault plunderers. Instead, by and large they released albums of material taped at live shows or off the radio.

While there are instances of "boots" that are actually counterfeits of unreleased material recorded by labels--artists such as the Beatles, Bruce Springsteen, Bob Dylan, the Beachboys and Prince are the most popular--much of the unauthorized material used by the bootleggers came not directly from the vaults but from other loophole sources such as dubs made--and often left behind--at mastering labs for someone within the artist's organization. "All it takes is a friend to pass one on to a friend who passes it on," explained a source.

Some reissue producers have connection to the collector community, and call on them when the vaults come up empty on tracks for a project.

"There are people all over who have tapes that were thrown out in the trash," said the source. "They're not **making boots; just holding on to them.. You can lay your** hands on a lot of things. It just takes time. Companies **don't have the time; they can't be bothered.**"

Often reissue producers and library archivists develop Sherlock Holmes deductive powers and follow the trail of clues and rumors about a missing track back to a suspect who has actually stolen tracks, and confront them.

"Sometimes they'll contact us; they'll want to sell it back to us; othertimes, they'll give it back," said one veteran. "A few of them getting up in years approach us, bring them back--guilty consciences."

Said another: "We know there are some collections (of stolen material) belonging to older people that were sold or even given to places like the Library of Congress for a tax credit, collections that have rare stuff in it--masters, acetates."

For a number of reasons, record companies have chosen not to prosecute those they believe have stolen material, say insiders, even though in some cases, they know the alleged culprit, even when that the person is or was in possession of the recordings.

Why no prosecutions? According to those interviewed, they say that it is difficult for prosecutors to prove theft. Second, a court case might well reveal that vault security at the time was insufficient or non-existent.

CDs Changed Corporate Thinking

As the first inkling of a new consumer interest in catalogue material emerged in the years of initial CD reissues, companies initially began producing CDs that were often haphazardly produced. Observant listeners and music writers discovered that some of the packages had poor audio and sometimes did not even include the hits or the music they remembered.

"There was a bit of a consumer revolt," said one veteran, "because many vaults were disorganized and stuff was missing, so on some of these first reissues they often used whatever people could easily find--wrong takes, butchered, edited versions, introductions chopped off, second and third generation copies, all kinds of travesties. All of a sudden, fans and audiophiles were complaining to the companies, 'Hey, what the hell is this?' That's when things began to change for the better."

More Lost and Found

Said one vault detective. "Like in any business, there are guys who do the same basic thing as I do, which is finding tapes and preparing reissues, and we're always on the phone to each other--'you have any idea where such and such might be?' Lots of times, they'll find tapes in a warehouse of one record company that belong to another company."

According to a source, a tape believed to be the master to Billy Joel's first album, "Cold Spring Harbor," recently turned up in the Excello vault, owned by AVI, in Nashville. The tape was sent back to Billy Joel's people.

One veteran said that in the 1950s and '60s, when a now-deceased employee from the defunct Chess label (now at Universal's MCA) would collect Chess tapes mastered at Chicago's Universal Recording Studio, "he would also grab any other tape that wasn't nailed down.

"When the Chess vault been moved to Nashville, I saw rows and rows of these unmarked tapes, and I asked the guy what they were. 'That's the 'Universal file,'" he said. God only knows how many tapes that belong to other small **Chicago companies of that era that might be in the Chess vault.**"

Said another vault-hound: "I've found tapes in every imaginable place, not just vaults. In basements, even unheated garages. Unmarked boxes, no track sheets, the works.

"We found the tapes for Leiber and Stroller's indie labels, Daisy, Red Bird, Tiger, Blue Cat masters, in the old Brill Building. In an unoccupied room on top of a file cabinet by an open window. Exposed to New

York summers and winters since probably 1963. They were like linguini in the boxes. Believe it or not, once we re-wound them and worked on them, the tapes played fine."

Scrapping for the war effort, and throwing out "junk".

The stories of labels dumping or junking material considered extraneous or worthless extend back into the Depression era. Many metal parts in the catalogues of such now-famous 1920s blues labels as ARC, Paramount and Vocalion were tossed even before the companies were bought by the larger companies.

During World War II, Columbia and RCA both donated metal parts to scrap drives to help defeat the Axis powers.

Even before World War II, according to those familiar with the company's past,, RCA masters by blues giants such as Charlie Patton, Blind Blake, Ma Rainey, Skip James and Bukka White were destroyed. In some cases, the matrix numbers of those tossed-away sides were assigned to new, Chinese-language records.

"After the War," one historian also said, "an RCA executive came upon a number of unissued sides by Blind Willie McTell, virtually unknown and forgotten at that time. He ordered the sides thrown out. The official was later fired--not because he'd destroyed unreleased records by a blues master, but because he dumped company property 'without approval.'"

Although the historians said that hundreds and hundreds of unreleased masters by blues and folk artists--Blind Lemon Jefferson and Charlie Poole among them--are gone, junked or sold for scrap during the depression even before those labels went belly up, some recordings of that era survived through the years because they were not of interest to anyone and were stored and uncatalogued until they were stumbled upon decades later.

Scrapping isn't relegated to the the old days. According to source, there was also wholesale metal parts scrapping at Columbia's old Bridgeport, Conn. warehouse during the late '50s, until the late Columbia executive John Hammond got wind of it and put a stop to it.

Buyouts Equal Seepage

Most of those interviewed agreed that there is also more loss of vintage material on smaller labels that released singles originally aimed at '50s and '60s era teens, especially those which have been bought and sold throughout the years, and their vaults moved from one or more cities.

The vaults of modern jazz labels of the '50s and '60s, originally aimed at a more sophisticated LP listeners, have been luckier. The famous modern jazz vaults of Blue Note, Prestige, Riverside, Pacific Jazz and others are mostly intact, a condition largely due to the beliefs of the original owner of the importance of the music, and the respect accorded the material by the companies which later bought the catalogue.

"You can overdo being kind to jazz labels, though," said veteran jazz producer and former Riverside Records co-owner Orrin Keepnews, who said he knew that when he was in session with Theolonious Monk, he knew he was in the presence of "someone and something" important..

"This did not necessarily lead me to think I'd better preserve every scrap of tape with this man's sound on it, **because number one, not only weren't we thinking of CDs** (in the '50s) but we were not thinking particularly of **reissues--we did not think of what we were doing as having** immortality."

Even among the tapes of the well-cared-for Prestige label, now owned by Fantasy, there are few alternate takes. "Maybe there's five or six alternate takes in the whole catalog," said a source. There are masters missing, according to producer Ed Michel, who spent two years working at Fantasy, cataloguing the 12,000-plus reels in the multi-label Prestige/Milestone/Riverside/Galaxy jazz section of the vault.

"I know some of the early Miles Davis masters are gone," Michel said. "Prestige had been using (record) dub tape sources for some of those tracks for years.

What About Tomorrow?

Most of the 65 experts interviewed for this article expressed concern about the future of archiving recorded sound. First, they were concerned that with the CD reissue boom of the late '80s and early '90s apparently leveling off, funding for archiving and preservation efforts at some companies are already becoming a lesser priority. And they are also worried about reliable preservation in a digital universe.

Deteriorating Digital?

Ominously, there are already examples throughout the industry of digital masters that are showing signs of deterioration to add to the preservation problem, sources told Billboard, especially when the companies have not "backed up" their digital tapes with analog tape safety masters, as recommended by engineering and archival groups such as AES and NARAS.

A recent random sample conducted by a major label of more than 100 digitally stored tapes, transferred a recently as three years ago, indicate that there is deterioration--dropouts or mechanical breakdowns -- in 10% of the sampled tapes.

Because of a "suggestion" at Sony, in place until the mid-'80s when it was challenged, that recommended scrapping analog tape masters once they'd been transferred to digital, such news about deterioration is of particular concern. For the analog recordings that remain, Sony is using both the digital format to back up its analog recordings and also continuing to make analog to analog copies

"We know discs can last 100 years. We know (analog) tapes so far have lasted nearly 50 years," said one well-known engineer. "But we don't know how long recordings stored in digital format will last."

Said another engineer: "We're beginning to discover that the way digital tapes transport mechanisms are constructed, some are prone to curl or crease or not track correctly. In analog, you can correct some of that. In digital, you've got a real problem. You can't edit-- the information is just gone."

Another concern is that in many cases, the digital format has created a situation where there might not be anything a producer in the future can lay hands on other than the production master handed in to companies today.

"Right now, in many cases, there's no such thing as a master and a session reel as we knew it in the analog days. What's handed to the record company is a so-called production master, a digital U-Matic. A final two-track that you can't remix. That's bad enough, but in many cases, that production master was culled from tracks done by a number of individual producers at studios all across the country. Nobody hands in all the (digital) session tapes. Well, what happens in 10 or 20 years and you want to go back to the session tapes?"

The Right Stuff

Another problem concerning archivists is the need for label execs to recognize that a lot of hard-to-find, now-obsolete recording and playback equipment of previous eras is often needed for quality remastering and reissue projects.

"Vaults and studios need all kinds of vintage equipment, and the knowledgeable staff to run all of it," said one engineer. "If you don't have trained people who care, and you put a tape on a machine that hasn't been cleaned or correctly aligned, what you're doing is helping to ruin the tape."

Another engineer rattled off a long but important list of necessary items in an industry that has had to change formats to keep up with technology that began a century ago with primitive platters and never looked back.

"Just to mention a few things--starting with pre-tape material, you need 78 rpm turntables with variable speed, a dozen different styli, because companies didn't cut the same.

"From the tape era, you need to have-- or have the budget to lease-- a tube-driven, mono, full track machine, and also the half track and quarter track machines that were used through the years. And you'll need good 45 rpm and 33 rpm turntables and styli.

"For the very early stereo, you need a staggered-head, two-track binaural stereo machine. Then there were the in-line-head, two-track machines. Then the more recent 4, 8, 16 and 24 track machines from the '60s, '70s and '80s. You've got to have this equipment. Otherwise, how are you going to be able to play the stuff?" he said. "It's useless to have these space age vaults if you don't have the gear to play the stuff.

"Look, even the early digital machines, they're obsolete now," he added. "Will companies be smart enough to have the outmoded machines around in ten years? I hope so. Without it, in the future, you're going to be in deep doodoo."

There is also the separate issue of remastering, according to preservation experts, and the requirements of educated and informed employees. "Maybe you've got the right machine, but some people out there,

I'll tell you, they know what they're doing, but some--you can't believe they let them near a studio--don't have a clue what a mess they're making.

"To get a good sound on a reissue, you also have to keep in mind all kinds of factors. You should know the characteristics of the original tape stock, how it performed. You have to factor in things like the different rolloff EQ they used in the early days of hi-fi, like the RIAA and NAB settings, all of that '50s mumbo-jumbo.

"If you play back a '70s analog 16-track tape on a modern machine, it won't sound the same as on a machine from the era. Say you have a late '50s classic like Miles Davis's 'Kind of Blue.' If you don't transfer (in the remastering process) using an old tube three-track machine, it won't sound right. If you use the wrong A to D (analog to digital) converters, it won't sound right. But sometimes people at labels trying to keep on schedule are like, 'whatever.'

"Unknowledgable staff is sometimes a problem," admitted another engineer. "Some are making decisions to use flat transfer masters for reissues and they don't realize that flat means flat, and that the new master has to be tweaked and punched up, you know, like the word says, 're-mastered,' and done in a manner so hopefully they sound like the era. Appropriate.

"For example, I've seen people who should have known better using the wrong tapes for CD reissues," he added. "Using tapes that were EQ'd for vinyl. Said so right on the box. The results, of course, sound like garbage."

Examples of this kind of malappropriation are the Jimi Hendrix CD releases by both Reprise and MCA that were on the market until recently, according to engineer Ed Kramer, who worked on Hendrix recording dates in the '60s and '70s and was instrumental in the two-year project of tracking down Hendrix masters for the series of landmark remastered albums in versions approved by the Hendrix estate. That series has received high acclaim for sound quality of most of the material--

"When we were doing research for the project, we checked (company) records and went, 'oh, no, look here, good lord, it can't be--they've been using EQ-d copies!' he said. "Of course, they sounded bloody awful--dull, pinched, no high end. Unnatural."

Kramer also says that one of the MCA releases (apparently cut from a copy made on a machine that ran slow) was one-eighth of a tone from true pitch.

He also said many of the masters were missing from the vault. Most were eventually tracked down and, in some cases, "bought back from individuals," who had ended up with tapes left behind at recording studios.

As a result of the detective work and the long hours of careful remastering, Kramer was able to make sure that the new releases sounded better than any previous Hendrix reissues--"like a veil had been lifted from the speakers."

Nevertheless, about 15% of the material still had to be taken from sources other than the master tapes. "We just took the time to make them sound good--something that record companies don't bother to do."

Another veteran engineer said that he knew of several labels that recently had mistakenly used an analog master for a digital release and a digital master for a premium vinyl release destined for "hi-end vinyl junkies." The result? "They both sounded awful and they had to be completely redone. So you've got to use your head. And you've got to know some history."

Back Up Digital with Analog

Some sources are worried that some vault executives with otherwise admirable plans for archiving might not be proceeding cautiously enough when dealing with the new-generation methods of digital storage.

"You've got to remember that digital tapes, DATs and especially the U-Matic tapes that are common now for production masters, have real thin tape--like the tape in your VCR-- that's apt to curl or warp and get misaligned over time. So they might not track in a straight line. So what happens--knock on plastic--if all these R-DATS and U-Matics don't work so hot in a few years? What if they haven't been transferred to CD Rom or some other backup?

"So some are thinking about a new system now where everything will be automatically copied robotically every two years on a rotating basis. That's great, but say there's just a dust speck of distortion introduced. Sometime up the line, say, tenth generation, God knows what they might find on those tapes--maybe they'll be okay or maybe the distortion's magnified or encrypted something beyond what their computers can deal with. Could be fine, could be half-shot, could be all gibberish."

Another engineer argued that such systems will have built-in safeguards, even allowing changes of carriers (formats) as they become standardized and are replaced--say from U-Matic to disc to even some version of hard drive storage.

The three main recording/archivist groups still say the safest storage format for modern tape-era recordings is not digital, but analog tape.

The American Engineering Society (AES), the Assn. For Recorded Sound Collections (ARSC) and the National Academy of Recording Arts and Sciences (NARAS), in their recommendations for storage and preservation of sound recordings, all conclude that because analog tape has been proven to last, generally, and because the shelf life of digital tape is unknown, recordings should be stored--or backed up, at least-- in the analog tape format.

"Anybody who doesn't back up their digital masters with analog could be making a big mistake," said one leading archivist, "At least you know for sure analog tape has lasted 30, 40 years."

At this writing, the major label companies have taken different approaches to archival storage, but most have programs to back up heriotage material in both digital and analog formats.

At BMG, for example, a spokesman said that "we're starting out by archiving with digital and analog on 'fragile material' first." Sony, according to a vault official, makes digital and analog safeties "only on post-tape era recordings," with the reasoning that acetate (or metal parts) transfers to digital are preferable to a three step process that includes a tape copy.

Warner Brothers archives its mostly-tape library only in the digital domain, but in two configurations--U-Matic and CDR (recordable CD).

One label, PolyGram, however, made a decision nearly two years ago to back up its entire archive on analog tape alone, rather than both digital and analog, based on the concern that digital storage and format choices are volatile, and that digital copies could turn out not to have a long shelf life. Blank tape cost for the ongoing project is estimated at \$4 million (Billboard, Sept. 3, 1994).

There is also a feeling throughout the engineering side of the industry that the future manufacture and availability of high quality analog tape is itself an open question, according to sources. Several well-known tape manufacturers have already gone out of the tape business.

Overall, archivists at the major labels face what they see as an uncertain future.

"It's been shown that the best system doesn't always win the marketplace approval," said a source. "Take the Beta vs. VCR race. The same thing applies to some digital storage format choices already, the Sony U-Matic vs. the Mitsubishi system, for example. And no matter what the salesmen say, they can't tell you for sure what's going to happen in the future with any of these things."

"We know only one thing for sure," said a veteran archivist. "We know that discs, vinyl and shellac discs have lasted a long, long time. Remember, those Caruso records have been around since the turn of the century. Basically, they're inert. They ain't going anywhere. I'm not sure about anything else--nobody can be."