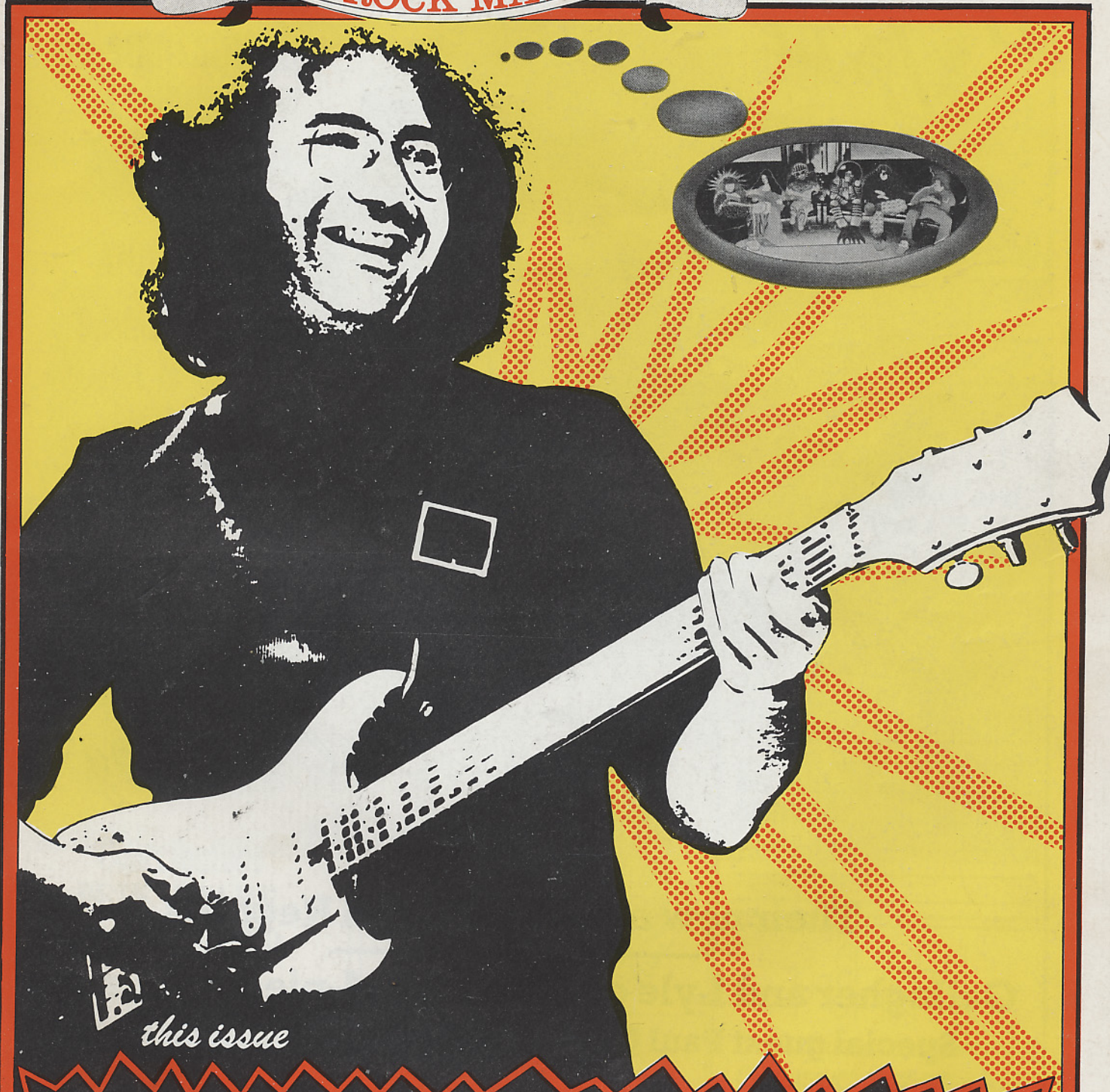


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THE ROCK MAGAZINE



this issue

GRATEFUL DEAD

BERT JANSCH RICK NELSON
RUSS BALLARD BRUCE SPRINGSTEEN

NEW RIDERS OF THE PURPLE SAGE

An abbreviated history of that group of illustrious pickers known collectively as THE NEW RIDERS OF THE PURPLE SAGE.

The Wildwood (Black Mountain) Boys, based in Palo Alto, California, were a folk-cabaret act playing at the Jabberwock in Berkeley, the Tangent in Palo Alto, and coffee houses in San Francisco's North Beach. Also did several bluegrass/folk festivals.

The Wildwood Boys, later The BLACK MT BOYS around 1962

ERIC THOMPSON gtr/vocals
 PETER ALBIN bass/guitar
 DAVID NELSON gtr/vocals
 JERRY GARCIA banjo/vocals
 BOB HUNTER gtr/vocals

When the Pine Valley Boys split up, Butch Waller went on to form High Country, Jeff Levin was in People (a one-hit pop group), and Herb Pederson joined the Dillards and was in Country Gazette too.

In 1959, Jerry Garcia was thrown out of the Army and, together with friend Hunter, began to discover the joys of bluegrass and folk music - particularly old-timey country and jug band music. He helped to found several groups; the Wildwood Boys (later the Black Mountain Boys), then the Thunder Mountain Jub Thumpers, then (in 1963) The Hart Valley Drifters, The Asphalt Jungle Mountain Boys, and his last acoustic group - Mother McCrees Uptown Jug Champions.

NEW YORK RAMBLERS Spring '64 to late '65

DAVID GRISMAN mandolin
 GENE LOWINGER fiddle
 FRED WEISS bass
 WINNIE WINSTON banjo
 ERIC THOMPSON guitar

Initially formed for fun - to compete in the Union Grove Fiddle Contest... they won! Presented with cup declaring them World Champion String Band! David Grisman later founded EARTH OPERA and is now in OLD & IN THE WAY (also on the new 'MULESKINNER' album with Richard Greene & Clarence White).

The HART VALLEY DRIFTERS

DAVID NELSON guitar
 JERRY GARCIA banjo
 BOB HUNTER string bass
 KEN FRANKEL mandolin

The Asphalt Jungle Mountain Boys, later MOTHER MC CREES UPTOWN JUG CHAMPIONS

JODY STECHER mandolin
 ERIC THOMPSON guitar
 PETER ALBIN bass/guitar
 DAVID NELSON guitar/vocals
 JOHN DAWSON vocals/guitar
 JERRY GARCIA banjo/vocals
 BOB WEIR jug/guitar/vocals
 RON MCKERNAN (PIG PEN) harmonica/piano/vocals
 BOB MATTHEWS guitar/vocals

This group, formed in 1963 (they changed their name in late 1964) had a very fluid line-up.

Left the field of performing (but later played in the New Riders), and now runs Akmbic Studios & Electronics.

BIG BROTHER AND THE HOLDING COMPANY 1965

JANIS JOPLIN vocals
 JAMES SURLLEY lead guitar
 SAM ANDREW guitar
 DAVID GETZ drums
 PETER ALBIN bass
 DAVID NELSON guitar

David Nelson was in the emerging Big Brother for only the first few weeks. It wasn't until after he'd left and Janis Joplin had joined that they began to get any national acclaim. (Listen to the groups, and Janis's solo, albums on CBS)

The WARLOCKS - later THE GRATEFUL DEAD (changed name in Feb 1966)

JERRY GARCIA
 BOB WEIR
 PIGPEN
 PHIL LESH
 BILL SOMMERS

Became a solo folksinger for a while

THE NEW DELHI RIVER BAND, which included all sorts of itinerant musicians at various times in its relatively short life span, played mostly at a club called The Barn - "out on Route 17". Dawson left after a while ("it didn't work out") but Torbert, formerly in various blues and R&B bands, stayed till the end.

The NEW DELHI RIVER BAND 1966

DAVID NELSON guitar/vocals
 JOHN DAWSON guitar/vocals
 DAVE TORBERT bass/gtr/voc
 CHRIS HERALD guitar

THE GRATEFUL DEAD went their merry way and, until Garcia got a pedal steel guitar, had no connection with the New Riders - except that Dawson played a few gigs with Weir's occasional group BOBBY ACE AND THE CARDS FROM THE BOTTOM

THE JEFFERSON AIRPLANE formed in August 1965 after founder Marty Balin had seen the Beatles. One of the earliest rock groups in San Francisco - only the Mystery Trend & Charlatans pre-date them.

SIGNE TOLY ANDERSEN replaced in Autumn '66 by GRACE SLICK vocals
 JORMA KAUKONEN guitar
 PAUL KANTNER guitar/vocals
 SKIP SPENCE drums
 JACK CASADY bass
 SPENCER DRYDEN drums (previously in The Ashes - later The Peanut Butter Conspiracy). Left the Airplane in March 1970

Despite various personnel changes, the Airplane still flies today (though, some say, fading gracefully after a long and illustrious career spanning almost 9 years).

The Mescaline Rompers (1968)

JOHN DAWSON guitar/vocals
 DAVE TORBERT bass/gtr/voc
 MATTHEW KELLY gtr/banjo/vocals/harmonica

was a very short-lived group; their only gig appears to have been at Pinnacles National Monument. Following its demise, Dawson did solo gigs at 'The Underground Cafe' in Menlo Park and Torbert retired to Oahu Hawaii to lie in the sun.

The NEW RIDERS of the PURPLE SAGE #1

DAVID NELSON vocals/acoustic & electric guitars
 JOHN DAWSON acoustic guitar/vocals
 JERRY GARCIA pedal steel and banjo
 MICKEY HART drums/percussion
 PHIL LESH or BOB MATTHEWS bass

Spring 1970 to Spring 1971. The first New Riders (including 3 members of the Dead) played as guests on Grateful Dead gigs & remained very much under their wing. The personnel changed largely by accident and at convenience. According to the group's "biographical transcription" from their old name (the New Delhi River Band)! Hardly likely, considering the Zane Grey novel and Gene Autrey's song.

THE GREAT SPECKLED BIRD

A Canadian based group which (with different line-ups) also worked as Ian & Sylvia's backing band. Recorded with Ian & Sylvia and made solo album on Ampex

KEN KALMUSKY bass
 AMOS GARRETT guitar
 N.D. SMART drums
 BUDDY CAGE pedal steel guitar

Joined Paul Butterfield's Better Days and does sessions - he's a fabulous guitarist... amazing.

The NEW RIDERS of the PURPLE SAGE #2

Spring 1971 until November 1971. In June 1971, the group signed with CBS and subsequently released their first album 'NEW RIDERS OF THE PURPLE SAGE' (CBS 64657) on 3-12-71 (England). Still toured with the Dead, doing support and intermission spots - and Jerry Garcia continued to play in both groups.

SPENCER DRYDEN drums/percussion
 DAVID NELSON lead guitar/vocals
 DAVE TORBERT bass/vocals/guitar
 JOHN DAWSON vocals/rhythm guitar
 JERRY GARCIA pedal steel guitar

Having launched and nurtured their off-spring, Jerry Garcia and the rest of his cohorts were able to concentrate fully on THE GRATEFUL DEAD once more. After various changes of personnel and some dozen or so albums, the current line-up is as follows:

THE BYRDS #7

Skip was in the most stable Byrds line-up, and flew with them from Oct 69 to Feb 73. Also made solo album (Signpost).

CLARENCE WHITE guitar/vocals
 SKIP BATTIN bass
 ROGER MCGUINN guitar/vocals
 GENE PARSONS drums

The NEW RIDERS of the PURPLE SAGE #3

November 1971 to February 1974. With Garcia's commitments restricting their activities, they decide to separate from the Dead and survive independently. Having met Buddy Cage during the notorious Trans Canadian Festival Express of 1970, they invite him to join on pedal steel.

BUDDY CAGE pedal steel guitar
 SPENCER DRYDEN drums/percussion
 DAVID NELSON lead guitar/vocals
 JOHN DAWSON vocals/guitar
 DAVE TORBERT bass/vocals

JERRY GARCIA guitar/vocals
 PHIL LESH bass/vocals
 BOB WEIR guitar/vocals
 KEITH GODCHAUX keyboards
 BILL KREUTZMANN drums
 DONNA GODCHAUX vocals

This line-up (New Riders #3) cut 4 albums: 'POWERGLIDE' CBS 64843, released 19.5.72; 'GYPSY COWBOY' CBS 65008, released 16.2.73; 'PANAMA RED' CBS 65687, released 16.11.73 and their new one, released here on 21.6.74, 'HOME HOME ON THE ROAD' CBS 80060

The NEW RIDERS of the PURPLE SAGE #4

February 1974 to the present. With the arrival of Skip Battin we see the beginning of a new era for the New Riders - look out for them when they tour here later this year.

SKIP BATTIN bass/vocals
 BUDDY CAGE pedal steel guitar
 SPENCER DRYDEN drums/percussion
 DAVID NELSON guitar/vocals
 JOHN DAWSON vocal/guitar

"Once upon a time, when things had fallen apart but not quite everyone knew it, some few hundred entities who lived and moved upon the San Francisco peninsula did there establish between themselves obscure bands of understanding, decision and hope. Within this particular stream of life, events came to pass and phenomena flowered... and much music was played. From this age, the 1960s, came forth THE NEW RIDERS OF THE PURPLE SAGE"



alone

K59301



The new album from Jerry Garcia on Round Records.



together

K59302



The new album from The Grateful Dead on Grateful Dead Records.

Distributed by Atlantic.



**The Grateful Dead
in concert at Alexandra
Palace 9, 10, 11 September.**

THE GRATEFUL DEAD'S A SOUND SYSTEM

Warning! This is not the sort of feature you've come to expect from ZigZag by now. The technological aspects of the music business aren't usually our cup of tea, but for once we're going to delve into the world of speakers, equalisers, frequency ranges, and angles of dispersion and present the workings of what is universally considered to be the biggest, most sophisticated and advanced sound system used by any electric band. The technical details, I think you'll agree, are staggering, and when Alan Trist, the Dead's copyright and publishing manager gave me all the grist that's printed below, I thought it would make an eye-opening and unusual spread in the mag. I hope you'll agree, so here it is.

Recently there have been major changes made in the Dead's sound system, bringing it a big step closer to the ancient ideal of the perfect sound system. This is a technical report; from the standpoint of the ideas on sound reproduction incorporated into its design, and with a description of its sub-systems.

The system is unusual in that all the speakers are arrayed behind the musicians. Conventionally, vocal systems occupy the front corners of the stage. There are two disadvantages to this. It creates a blind spot: for people sitting in potentially good seats, and the musicians themselves don't really know how they sound. They have monitors, but these are not very effective, nor are the echoes which ricochet around the hall. With the speakers behind them, in integral array with the instrument speakers, the band is in a much better position to hear what the audience hears, and to adjust accordingly.

With the new set-up there is no need for a mixing console to adjust the various sound levels. Each microphone has a volume control on it, enabling the band to mix the vocal sound from the stage. Each musician has control of his own local sound environment, being able to adjust his stage monitors of other instruments as well as his own instrument.

The sound system is actually a combination of six individual systems, each being electronically separate and having a specific purpose and function. No two musical "voices" go through the same system. Thus the vocals, piano, drums, lead guitar, rhythm guitar and bass each have their own channel(s) of amplification (see Table). This separation is designed to produce an undistorted sound, a clean sound in which qualities like "transparency", "brilliance", "presence", and "clarity

are substantially musical dimensions.

The whole system operates on 26,400 Watts of continuous (RMS) power, producing in the open air an acceptable sound at a quarter of a mile and a fine sound up to five or six hundred feet, where it begins to be distorted by wind. A sound system could get the same volume from half as much power, but it wouldn't have the quality.

THE VOCAL SYSTEM. The signals from each of the vocal microphones are brought together by a Differential Summing Amp, where phase purity can be regulated and hence the transparency of the sound maintained. From there the combined signal goes to a Crossover which divides the frequency range into four bands (High, Upper, Mid, Lower Mid, Low). The signal in each band is then separately amplified by McIntosh 2300 amps fed to JBL 15 inch, 12 inch or 5 inch speakers or Electrovoice tweeters.

The centre cluster of the vocal system, consisting of high and midrange speakers, is curved so as to disperse sound cylindrically; there is not much vertical dispersion, and horizontal dispersion is ideally between 140 and 180 degrees. The vocal low range speakers are arranged in a col-

umn. Each type of speaker is designed to have the same horizontal and vertical angle of dispersion so that all frequencies are heard equally well.

The speaker cones are arranged together as close as possible so that the whole surface of the cluster acts as one working surface. In this way a large mass of air is moved at once which doesn't require very high pressures from any individual speaker.

A major improvement in the quality of the vocal sound is due to the use of differential microphones. Each singer has a perfectly matched pair of Bruel and Kjaer microphones hooked up out of phase, only one of which he sings into. Any sound which goes equally into both microphones is cancelled out when the two signals are added together. Therefore leakage of instruments and background noise into the vocal channel is minimised.

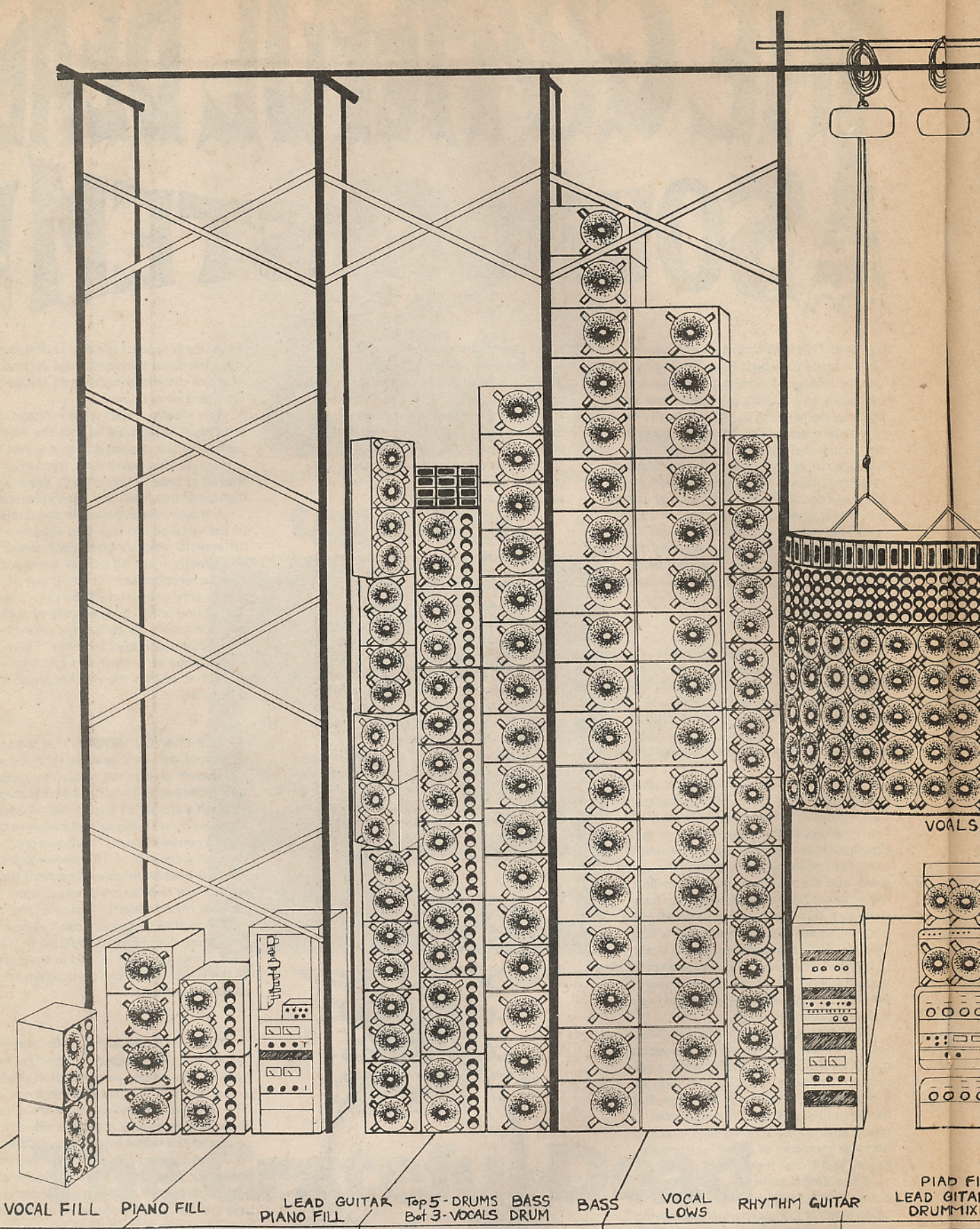
THE PIANO SYSTEM This is a small version of the vocal system. In this case a crossover divides the frequency range into three parts. The Highs and Mids go through a cluster of 5 inch and 12 inch speakers built in the same fashion as the vocal's centre cluster. The Lows go through a column of 15 inch speakers. There is a separate volume control for each of the five Countryman custom pickups (one for each division of the frame) so that Godchaux can balance the sound. Garcia and Kreutzmann both have piano monitors or fills in their areas of the stage, which can be independently adjusted by them.

THE DRUM SYSTEM The drum system has two independent parts. The bass drum uses one amplification channel and sixteen 15 inch speakers in a column. The other drums and cymbals are miked through a three-way crossover which separates the signal into Highs, Upper Mids and Lower Mids and feeds them to Tweeters, 5 inch and 12 inch speakers. This second part of the drum system uses two channels as it is stereo with identical speaker columns on both sides.

THE GUITARS Both guitars use columns of twenty 12 inch speakers: Garcia's guitar has extensions beside Godchaux and behind Kreutzmann,

Garcia is using a Doug Irwin/Alembic custom guitar. It has a Gibson/Les Paul type body with a Fender Stratocaster

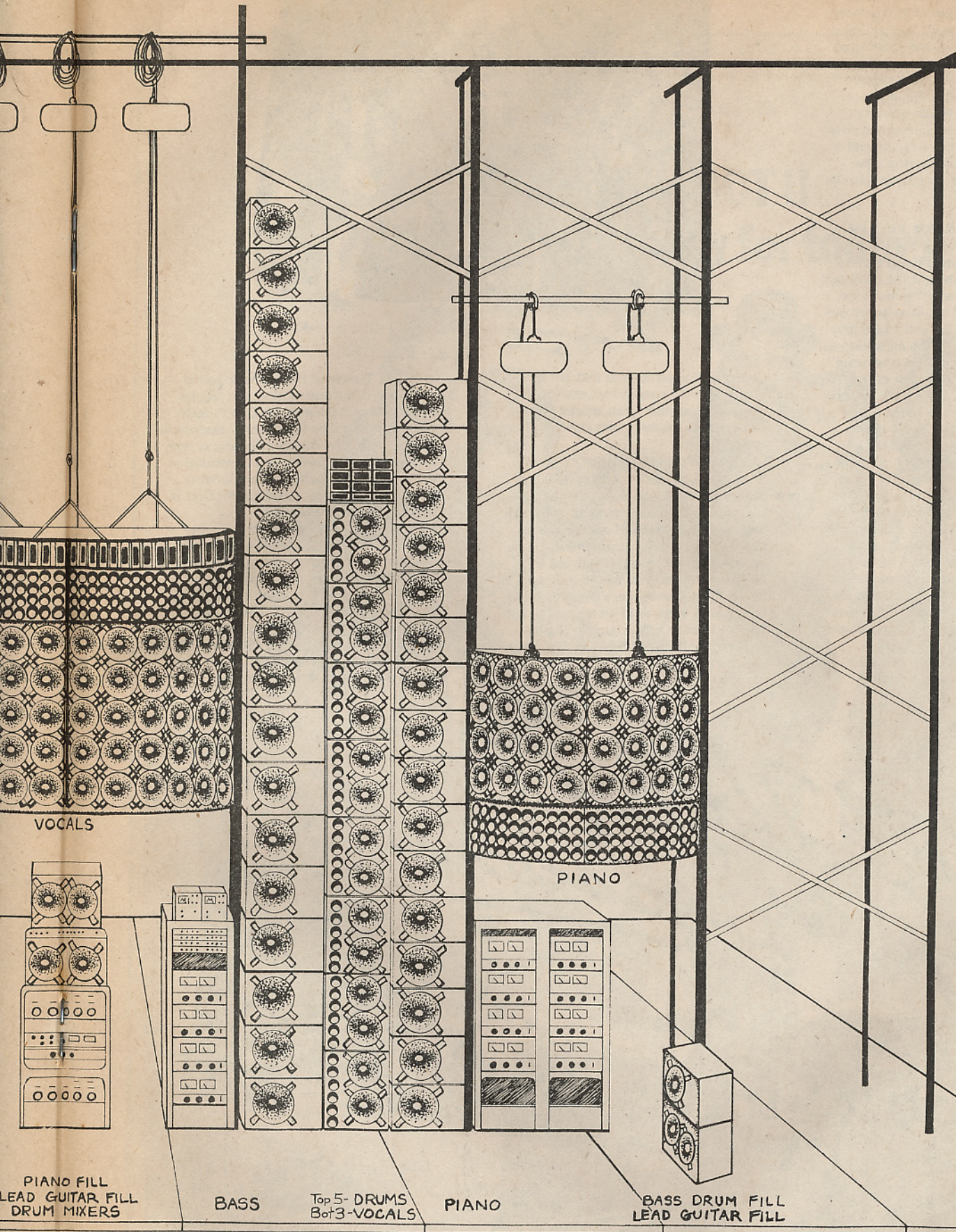




VOCAL FILL PIANO FILL LEAD GUITAR PIANO FILL Top 5-DRUMS Bot 3-VOCALS BASS DRUM BASS VOCAL LOWS RHYTHM GUITAR PIANO FILL LEAD GUITAR DRUMMIXE

GRATERFU

SCALE: 1/4" = 1'



GRATEFUL DEAD

pickup.

Weir currently plays a Gibson 335 guitar. He uses such special instruments as an Eventide Clockwork Digital Delay unit for repeating notes and creating an echo-like delay of different sound colorations and textures. Another accessory is an Alembic Parametric Equaliser (a flexible tone circuit) which gives him complete control of frequency response by enabling boost or cut adjustments at any or all of three band-widths. The sharpness of the boost or cut can also be controlled.

THE ELECTRIC BASS Phil Lesh is using a new quadrophonic bass, the electronics of which were designed and built by George Mundy and the body and pickups by Rick Turner. The new bass has the same versatile qualities as the old bass: three pickups (bass and treble low-impedance pickups covering all the strings, and a quad pickup which has a separate signal for each string); on each of the bass and treble pickups there are five controls which enable him to select 1) the band width of the filter, 2) the centre frequency of the filter, 3) the kind of filter being used, 4) how much of the filtered sound reaches the speakers and 5) mix the unequalised unfiltered direct sound. The variety of sounds which can be achieved on the bass is to do with the many different combinations of these variables which can be used. The new bass has a higher frequency response with a crisper tone. Lesh can get a different tone for each of the bass and treble pickups. The new bass has two quad pickups instead of one, the new one being a frequency-detector pickup. The main addition to the new bass is a Digital



Decoding Circuit such as that ten push buttons on the bass allow Lesh to select any one of sixteen quad spacial arrangements of his speakers, and eight in the stereo mode.

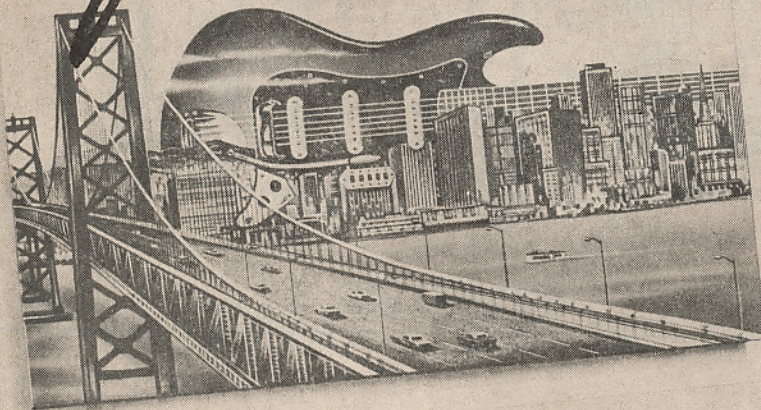
DESIGNERS AND WORKSHOPS

The Grateful Dead's sound system has evolved over the last eight years as a technical and group enterprise, a sort of logical accumulation of speakers and people. Changes have been made continuously in all directions which aid in improving the quality of the sound, both which the audience hears and which the band has to work with on stage. The concept and design of the current system/level was worked out by Bear, Dan Healy and Mark Razine of the Dead's sound & equipment crew, and by Ron Wickersham

and Rick Turner of the Alembic sound company. The construction and regular maintenance is done at the Dead's technical workshops by the people responsible for managing and transporting the system on the road. The design and construction of some special electronic components was done at Alembic, where John Curl is a consultant to the project.

The number of people going on the road to handle all the sound equipment, lights, scaffolding and staging varies, but a typical configuration is: band—6, sound—10, lights—4, staging and trucking—7, road management—3. The sound system travels in a 40 foot semi, and staging and scaffolding on two flatbed semis and the lights in a twenty-four foot van. All of this weighs about 75 tons.

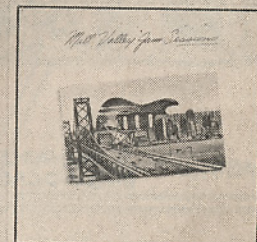
Mill Valley Jam Sessions



Golden State Recording Studios is the favourite recording studio of many of San Francisco's Mill Valley musicians. This album is a miniature of their sounds and ideas. With Mike Bloomfield as 'official' co-ordinator, personnel was as follows.

Drums: Spencer Dryden (Jefferson Airplane)
Rick Jagger, Mike Shrieves (Santana)
Guitar: Fred Burton

Bass: Mark Ryan (Quicksilver Messenger Service), Rick Dey ('Fish')
Congas: Dino Cuba
Vocals: Chicken Billy Thornton, Ray Stallings (Southern Comfort)
Rhythm guitar: Rick Dey ('Fish')



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