

RADIO CITY MUSIC HALL

"The Show Place of a Nation"

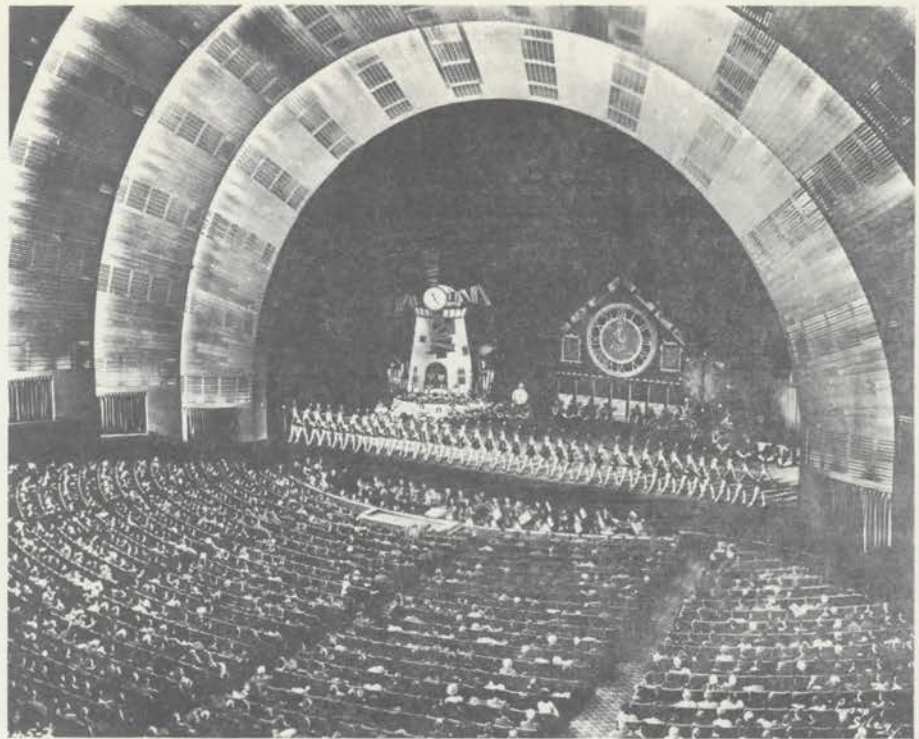
by Lloyd E. Klos

"A theater which astounds the imagination, in a center of culture unsurpassed anywhere in the world." That briefly sums up the stature enjoyed by Radio City Music Hall, located in Rockefeller Center in New York City. It is extremely doubtful if anyone who describes the Music Hall can refrain from being carried away by superlatives, because the Radio City Music Hall is in a class by itself—nothing like it exists anywhere in the world.

In 1930, the Rockefeller interests announced plans for a business and entertainment center in New York City on the 1 1/2 acres bounded by Fifth Ave., the Avenue of the Americas, 48th Street and 52nd Street. More than 75,000 men were engaged in construction of the 15 buildings after work started in September 1931. Included in the plans were two theaters - the International Music Hall, and a smaller theatre, named the RKO Roxy. In deference to NBC, the larger theater became Radio City Music Hall. The grand opening of the Music Hall took place on December 27, 1932.

The Music Hall has remained the one theater which has adhered to the policy of spectacular entertainment, whether it be on the screen or on the stage. It is one of the last citadels of the Theater Organ, its 58-rank instrument being played before every show, four times a day, and frequently as accompaniment to the symphony orchestra. Since its opening, the theater has been visited by more persons than the entire population of the United States. About 8,500,000 people a year are accommodated.

The word "big" is applicable to all facets of the Music Hall. The Grand Foyer, measuring 150 ft. in length and 60 ft. in height, extends through four levels. The ceiling is of gold leaf. The promenade of the three mezzanines opens into a room through mirrors on the east wall. The mirrors are of 1/4" glass, backed with a gold deposit, making more subdued reflections than those given by silvered glass mirrors. The draperies on either side of the mirrors weigh approximately 300 pounds each. Each of the 29-foot chandeliers, designed by Edward Caldwell, weighs two tons, half of which is glass. Total wattage for each fixture is 2,900. A 30' x 60' mural by Ezra Winter is located on the north wall above the grand stairway, and the subject is based on an Oregon Indian Legend. The doors leading to the auditorium are of stainless steel, and contain bronze pla-



The striking auditorium of the Radio City Music Hall, Rockefeller Center, New York, the world's largest theatre, with 60 foot high proscenium arch, and stage a full city block in width. Shown in the picture is part of a capacity audience of 6,200 persons watching one of the theatre's celebrated stage spectacles featuring the Rockettes, Ballet, and guest artists. In the pit can be seen the Radio City Music Hall Symphony Orchestra.

ques, designed by Rene Chambellan, representing scenes from various types of entertainment.

The Music Hall like all other buildings of Rockefeller Center, is air-conditioned. Heating the theater requires 27,600,000 pounds of steam annually.

When one enters the auditorium, he is immediately overcome by the huge proscenium arch—60 feet in height and 100 feet in width. The semi-circular design is carried through the entire auditorium, in a series of arches, and this effect represents a sunrise. The steel truss supporting the proscenium weighs 300 tons, the largest ever used in a theater. There are three mezzanine's cantilevered from the rear of the auditorium, including the famous "First Mezzanine" reserved section.

The proscenium opening is closed by a contour curtain of gold fabric. Largest in the world, requiring more than 2,000 yards of fireproof lining and a mile of bronze cable, the finished weight is about 3 ton. It was so heavy that, during its installation, it was carried to the Music Hall in five sections and stitched together on the stage. Thirteen motors control the cable sewn in the curtain fabric, so that when the cables are shortened, the curtain folds can be arranged in hundreds of contours.

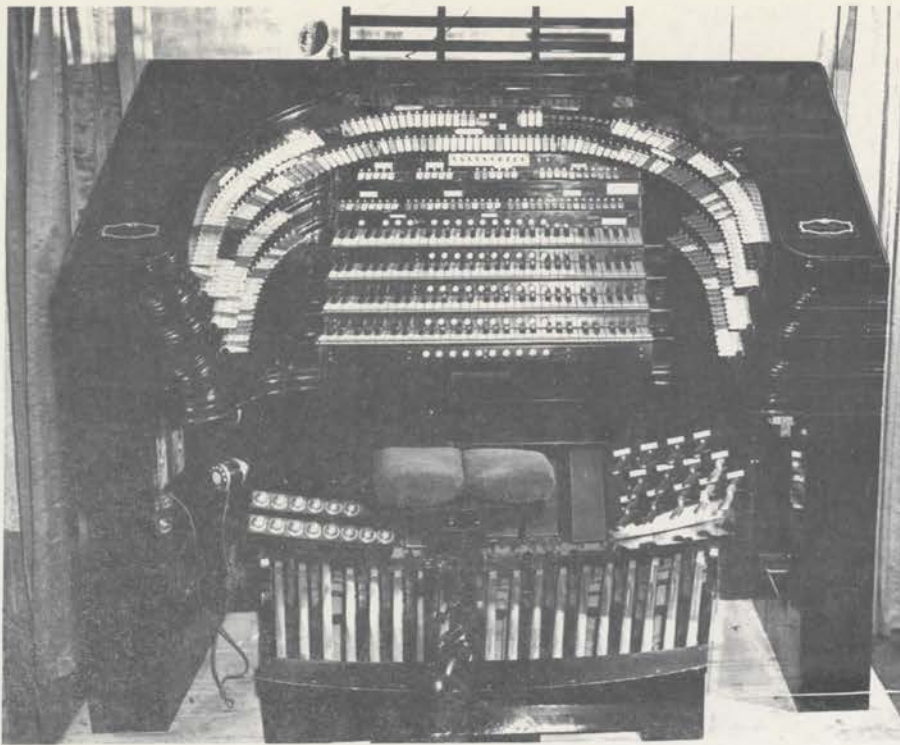
Immediately in front of the orchestra seats is the Light Control Console, which controls the light effects on the stage and throughout the theater. It contains 4,305 various-colored handles which control the amber, green, red and blue lights. The device includes Selsyn

automatic color-change control, which eliminates an attendant's having to operate each spotlight. One electrician at this console can do the work of several.

A mechanical control board on stage controls the disappearing footlights, which, when not in use, are covered by a hood which becomes a part of the stage floor.

The stage of the Music Hall is, in the opinion of technical experts, the most perfectly-equipped in the world. It is 144 feet wide and 66 1/2 feet deep. Stage equipment was designed by Peter Clark, noted equipment expert. The stage is equipped with a circular turntable of three sections, and there is a section of the turntable in each one of three elevators. Each elevator section is 70 feet long. These elevators, largest of their kind, may be set at any level from the sub-basement to a position 13 feet above the stage, a vertical trip of 40 feet. They are so arranged that they can be adjusted in step formation above the stage at various levels. These three elevators together with their orchestra elevator weigh 190 tons.

The orchestra elevator will lower or raise the entire orchestra to or from the sub-basement level, 27 feet below the stage. When the orchestra elevator is at stage level, it forms an extension to the main stage and increases its depth to a total of 84 feet. The orchestra carriage, of bandwagon, at stage level can be propelled backstage 60 feet, moving under its own power, supplied by seven huge batteries which run a 5HP motor.



Console for one of the two large Wurlitzer organs in Radio City Music Hall, New York the world's largest theatre. Both consoles are on wheeled platforms which may be moved back into alcoves in the proscenium arch, with hangings closed in front so as to be invisible unless in use.

A fully-equipped sound studio, using the most modern and complete techniques, is located in the theater building. The acoustically-perfect studio is the source for recording and taping the Music Hall's theatrical sound effects, and is also used for rehearsals of the Symphony Orchestra and vocal groups.

There are two rehearsal halls in the theater, a large and a small one, both situated above the auditorium. The large hall is approximately the same size as the stage of the theater, and is equipped with mirrors so that dancers may follow their movements while rehearsing.

Facilities for the convenience of performers and other employees include a 20-bed dormitory where the Rockettes and Corps de Ballet may rest between shows, a fully-equipped hospital under supervision of registered nurses, a cafeteria, library lounge, reception rooms, and two film preview rooms which are miniature theaters.

The Music Hall has its own Costume Department. Almost all of the costumes used in the stage productions are made at the theater in this department. The head of the department has a card file containing over 4,000 costume sketches. More than 2,000 different patterns are on file as are 50,000 samples of cloth. The largest number of costumes used in one show was 425 in a production of "Scherazade".

There are approximately 600 persons employed at the Radio City Music Hall. This number includes the artists on the stage, the management, the operating section, etc. Immediately after the last

show in the evening, a crew of 100 cleaners goes to work. A central vacuum cleaning system with 140 outlets helps speed the job.

The Music Hall Symphony Orchestra, conducted by Raymond Paige, is a group which ranges between 50 to 90 musicians. It is the largest and finest permanent theater orchestra in the world. Mr. Paige is proud of this, also the fact that many alumnus of his aggregation is a member of some concert orchestra elsewhere. The Music Hall is the only remaining movie house in the country which maintains a live orchestra. What's more, the orchestra operates a full season of 52 weeks a year. One thing Mr. Paige insists on is a "pool" of alternate musicians, and that each man be a well-rounded player, capable of playing symphony, opera, jazz, musical comedy, ballet--the works. The quality of the orchestra, therefore, is always high.

Every piece of music used is especially arranged and orchestrated by the Music Hall's own staff. Copyists and music librarians are at work constantly to meet the demands of each new production. The annual payroll for the Music Hall musicians, arrangers, copyists and such is \$750,000. Since the Hall's opening \$21,000,000 has been spent on live music.

There are usually three staff organists at the Hall. They and the organ are discussed in a separate article elsewhere in this issue.

The most famous dancing troupe is the world-renowned Rockettes of the Music Hall. There are 46 girls in the en-

semble, but only 36 appear on the stage at one time. According to schedule, each girl works three weeks, then gets a fourth week off with pay. Their ages run from 18 to 25.

The Corps de Ballet is composed of 32, 24 of whom appear at one time. Frequently augmented by additional dancers, the group is directed by Margaret Sande. It is the only residential ballet group in the country, and has probably danced before more people than any other similar organization.

The Music Hall has four shows a day, five during Christmas and Easter weeks. The Christmas and Easter shows are sellouts months ahead.

Without a doubt the Radio City Music Hall stands as one of our most successful amusement enterprises.

RADIO CITY ORGANS AND ORGANISTS

There are two organs located in the Music Hall Building--the 4M 58R instrument in the auditorium, and the 3M 14R in the sound studio on the fifth floor. Both organs were designed and built by Wurlitzer.

The organ in the auditorium was especially designed for the Music Hall. The chambers are located on either side of the proscenium opening and above the stage. Each of the two shiny black consoles is situated in an alcove on either side of the proscenium behind curtains. At the press of a button, the draperies before the alcove part, and the console rolls several feet into view. Each console weighs 5,700 pounds. A blower, containing 60 fans, supplies the wind to the pipes. All the air used is cleaned and deodorized before it reaches the pipes, preventing any obnoxious odors from reaching the theater auditorium. It has been said that if there were 3,000 musicians in the orchestra pit, they could not produce the variety of instruments, tones etc. which the organ is capable of producing.

There have been some famous organists employed by the music hall since its opening. Oldest point of service is Dick Leibert. According to legend, Dick was thirteenth of a group of organists who auditioned for the position when the hall was ready to be opened. Instead of playing something original, he played his version of the numbers the previous hopefuls had played. He got the job immediately. Dr. Casimir A. J. Parmentier, who had presided over one of the triple consoles at the Roxy, was assistant organist for a time. Dezso Von d'Antalfy of Roxy and New York Philharmonic organ fame, Alexander Richardson, and Jimmy Rich added their names to the I-Played-At-The-Music-Hall list. Dr. Edward J. Bebko (Eddie Baker) served as organist in the 1939-1941 period. Ashley Miller served as organist at the Hall for seven years, and turned out some fine recordings for Columbia. Present organists are Dick Leibert, Jack Ward and Raymond Bohr.

The studio organ is the one which has been used for many Music Hall organ recordings and auditions sessions. The studio is large enough to adequately

accommodate a 110-piece symphony orchestra plus guests. The 1,100 pipes of the organ are situated in two chambers. The main chamber contains eight ranks--diapason, concert flute, clarinet, tuba, vox, humana, saxophone, viol d'orchestre and viol celeste. The solo chamber houses six ranks--tibia clausa, oboe horn, trumpet, quintadena, solo string and krumet. Like the former Paramount Studio Wurlitzer, the Music Hall studio organ has been heard by more people than those who have seen it. It is another gem in a jewel box.

**RADIO CITY MUSIC HALL AUDITORIUM
ORGAN RANKS OF PIPES BY CHAMBERS**

Chamber No. 1

Melophone
Harmonic Flute
Cello Violone
Cello Celeste
Saxophone
English Horn (Cor Anglais)
Kinura
Basset Horn (clarinet)

Chamber No. 2

Tuba Sonora
Tibia Clausa
English Port Horn
Tuba Mirabilis
Diaphonic Diapason

Chamber No. 3

Violin Diapason
Tibia Minor
Wald Horn (Cornocean)
Horn Diapason
Spitz Flute Celeste (2 ranks)
Gamba
Gamba Celeste
Salicional
Voix Celeste
Muted Violin (2 ranks)
Mixture (6 ranks)
Brass Trumpet
Oboe Horn
Vox Humana
Vox Humana (2 ranks)

Chamber No. 4

Contra Bass
Open Diapason No. 1
Open Diapason No. 2
Gedeckt
Muted Diapason
Viola
Trombone
French Horn
Octave
Twelfth & Fifteenth (2 ranks)
Mixture (4 ranks)
Concert Flute
Violins (2 ranks)
Dulciana
Unda Maris
Clarinet
Orchestral Oboe

Percussion Chamber

Harp & Marimba, 49 notes
Xylophone, 49 notes
Glockenspiel & bells, 37 notes
Bass Drum
Special Bass Drum
Special Bass Drum
Snare Drum
Special Snare Drum
Special Chinese Gong
Special Triangle

Chrysoglott w/dampers located in Chamber No. 4 Bird No. 2 in Chamber No. 4

Chinese Block
Ca-tenets
Tambourine
Special Tom Tom
Shuffle
Crash Cymbal
Persian Cymbal
Bird
Single note Sleigh Bells of different pitches



Richard Leibert (seated) and Raymond Bohr, organist, at one of the twin consoles of the Grand Wurlitzer Organ in Radio City Music Hall.

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theatre organ