



Back in the early 1920's a handful of men met in informal gatherings at the homes or offices of members of the group in New York City to share a mutual interest in model building. Keep in mind that ready-to-run models, kits, and even commercial parts for model building of any kind (boats, railroads, airplanes, live steam, etc.) were unknown. This group of pioneers gathered to aid each other in their model building problems.

News of this group spread during the early 1920's throughout the model-making fraternity in the New York area. More men joined the group at the informal gatherings until the group was too large to hold these meetings at the various member's homes or offices.

In April 1926, the New York Society of Model Engineers was formally organized in the offices of Messrs. A.A. Singer and T.E.R. Singer in New York City. Arrangements were made for meetings to be held once a month in the United Engineering Societies Building at 29 West 39th Street in New York City. In 1927 the Society's First Exhibition of "Model Engineering Craftsmanship" took place at the Engineering Societies Building. This exhibition was by invitation and closed to the public; even so, the turn-out of people to the exhibition was enormous. Due to the response to the first exhibition, the members of the Society decided to open the second exhibition to the public. Arrangements were made during the following year (1928) to hold the "First Public Exhibition of Model Engineering Craftsmanship" in the exhibition hall of the Bush Terminal Building on West 42nd Street from January 21 through January 26, 1929. About 3000 people attended, quite a crowd for that era.

The original group of model builders were primarily interested in live steam railroad locomotives, stationary steam engines and model steam ships. As a result of the public exhibition at the Bush Terminal Building, model railroaders (with electrically operated equipment) and model racing boat builders began to take a more active part in the Society's activities.

The Second Public Exhibition was held

in the Knickerbocker Building (later the Newsweek Building) at Broadway and 42nd Street in mid-December 1929. That exhibition resulted in permanent quarters being acquired in February 1930 on the third floor of that building right at Times Square in the heart of New York City. This choice location was acquired through the efforts of then-new member Vincent Astor, who owned the building and almost everything else in New York City at that time. Fortunately he was a model railroader as well.

Within two months, the first kidney-shaped O scale railroad was started, but frequent delays were encountered due to financial troubles. With these money-raising problems, the railroad progressed rather slowly, but by December a main line loop was completed and a resolution was adopted restricting the speed of models to 100 scale m.p.h.

It should be pointed out that in the early years of the Society, it was not mainly a railroad-oriented club. In fact the first president, Walter Elliott, was a marine builder. The first public activity of the Society had been a power boat race held on Conservatory Lake in Central Park in September 1926, only six months after the Society was formalized.

The Union Connecting, as the O scale railroad was named, developed into the predominant activity of the Society during the 1930's. It is interesting to note that, except for the original kidney-shaped loop, there was no formal track plan to follow—the layout developed through constant and steady work towards a "perfect" model railroad. Much of this work was trial-anderror development, as there were no standards or examples to follow.

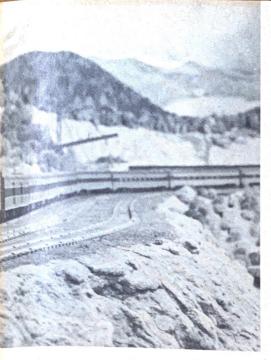
One of the first problems realized by the members was the need for standards. Many hours were spent in discussion and outright dispute because of this. The main obstacle to the development of standards was the large amount of rolling stock brought in by the over 60 members to operate on the railroad. Much of this equipment, whether scratchbuilt or made from manufactured components, varied greatly.

The following standards were finally agreed upon in early 1931: track gauge 1¼" on straightaways, increasing by ½2" on curves; guard and wing rails spaced ¾2"; wheels 1¾2" back-to-back of flanges; flanges ¾4" deep, ½6" wide, tapered to ½2" and rounded. Third-rail distance and height were also set. One standard was not set and is still disputed at the Society even today: Is O scale ¼" or ½4" to the foot? Fortunately, all agreed upon the O gauge standard of ½4" rail spacing.

Another problem: At that time there was no commercial rail available. A form of tinplate rail was used in the first loop, but for a scale railroad it would not do. A committee was appointed to develop "a scale rail suitable for model operations." They developed the first true-to-prototype scale rail in 1932. This rail, known as "NYSME standard" scale rail, became widely known among O scalers in the 1930's. The Society had to order one ton of the rail in 12-foot lengths, so they made half of the order available to other O scale modelers. Special miniature tooling dies were made so that the rail could be drawn. This rail, cold drawn steel, is still used on the Society's present layout. It has excellent tractive qualities and shows no wear after over 40 years of use.

During 1931, the first kidney-shaped loop developed from a single-track to a double-track loop with a few sidings. In 1932 two Scherzer rolling-lift bridges were added, "closing" the bottom of the layout. The beginning of an engine terminal also appeared at this time. 1934 and 1935 saw the addition of a Mountain Division and two new control towers. The layout reached its maximum development during 1936 and 1937. The Mountain Division was lengthened and turned from a stub-end line to a complete loop. New double-end storage tracks in the yard and a number of crossovers were built to add to operation.

Most model railroaders consider the electical system of their layout the most complicated area of model building. This is often multiplied many times over on a large club layout. Now go back almost 50 years



NYSME's first half-century

Founded in 1926, the New York Society of Model Engineers has survived the trauma of several moves and today dramatically reflects the excitement of big-time Eastern railroading in two major scales as it continues to grow and thrive/Andrew J. Brusgard

PHOTOGRAPHY: JIM BOYD

VISUALIZE a room large enough to offer vistas of trains seeming to extend to infinity in both HO (left) and O (below) scales, and the grandeur of the NYSME layouts begins to sink in. While periods and prototypes are often mixed, and private road name equipment is common, these photos dramatically depict how lost eras of prototype railroading are often recaptured on the NYSME layouts.



with no commercial parts for model railroad controls, no handbooks on wiring. Much of this work was thus trial-and-error development. The Society was fortunate in having two members who worked for Union Switch and Signal Company-who helped develop the Union Connecting Railroad's control system along actual prototype lines. The model control towers were almost duplicates of actual towers. These two members also did considerable experimenting on the layout and developed the early form of "N-X" interlocking. Until the development of this system, railroads (especially at terminals) would throw one lever for each switch. With this entry-exit system, one lever at the entrance and one at the exit would set up all switches between the two points. The Union Connecting's "SK" interlocking initiated the first use of this system three years before its use on a real railroad.

Many prominent and nationally-known model railroaders were involved in the Society at that time: Fred Icken, Carl Auel and Ed Alexander to name a few. The Society had grown to almost 100 members when in 1938 it became apparent that the physical limitations of the premises had been reached. Because of the rapid development of model railroading in the early years, the Union Connecting Railroad was also badly in need of modernization.

Larger quarters were obtained in the basement of the same building. On July 18, 1938, all operations on the first Union Connecting Railroad discontinued at 12:01 a.m. It was decided by the railroad group that the entire railroad would be scrapped with as much equipment as possible to be salvaged. Demolition of the old line was then begun, and floor plans of the new quarters were distributed to members interested in developing track plans for the new layout. The new quarters acquired in the basement had about four times the floor area of the old club rooms. After many suggestions were received and examined for their practicality, a new line incorporating the best points of each design was laid out.

Working along strictly engineering lines, all work was designed from the ground

up and drawings were prepared showing each step to be followed during the construction. Work was coordinated so that as framework was set up, track work followed close behind; wiring was in place even before the rail was laid on the ties. Rail used was the special NYSME steel rail. All track work was put in following the O scale standards that had been adopted by the then-new National Model Railroad Association.

On January 24, 1939, before a distinguished gathering of railroad officials and invited guests, the Golden Spike was driven by President William Williamson of the New York Central System, marking the completion of the first loop of 180 feet of track. Imitating a then-progressive Eastern railroad, the entire loop was without a joint, the rail ends being silver-soldered and ground down to represent welded rail. Work progressed on the new layout during 1939 and 1940 and was about finished when World War II broke out. Work slowed down at first, then almost came to a complete stop as more and more members

entered the service of their country in the armed forces. Then in 1944 the roof fell in; because of the war-time need for space by larger tenants in the building, the society was asked to vacate the basement. World War II was in full blast. Space in New York City was at a premium. Finally, after scouting the New York area from one end to the other, space was located on West 35th Street which, while it was not very satisfactory, would at least meet temporary needs. After considerable time and money had been spent in rehabilitating these quarters, the building was sold and the new owner, desiring our quarters for other purposes, ordered us to vacate in

Once again the search was on for new quarters. Although World War II was over, space was still at a premium. Because of the discontinuance of ferry service between 23rd Street in New York and Hoboken, New Jersey, the Society was able to obtain from the Lackawanna Railroad's space in the concourse-waiting room of the ferry terminal in Hoboken. This space was

more than ten times the area the Society had had up until that time.

The new UCON was especially designed to fit the location and give the best view possible of the system to visitors. While there were minor changes in the detail plan as construction progressed, the basic plan adopted in 1947 by vote of the membership was not changed.

The system followed the Lackawanna Railroad from Hoboken to Scranton. The main line was over 500 feet long, being double-tracked all the way and having three and four tracks in heavy traffic areas at the east end. A 400-foot single-track main line with passing sidings gave an alternate route. One unusual feature in the railroad was a 200-foot double-track commuter branch which obtained all of its power from overhead catenary.

On January 22, 1948, before the membership, invited guests and the press, President William White of the Delaware, Lackawanna & Western Railroad laid the last tie and spiked it into place with four gold spikes.

The Union Connecting Terminal at Hoboken was a highly-regarded example of model building. Modeled after the Lackawanna Terminal Building in which the Society was located, it was a scaled-down replica measuring almost 15 feet wide and 25 feet long and had ten tracks. The model had wood framing, but the rest of the structure was fabricated from Strathmore board. It was a fine example of the care, patience, skill and detail required to produce an outstanding model; almost three and a half years of labor went into its building. Adjoining the terminal were a number of models of Lackawanna marine equipment-car floats, tug boats and two complete models of Lackawanna ferry boats, all in 1/4" scale.

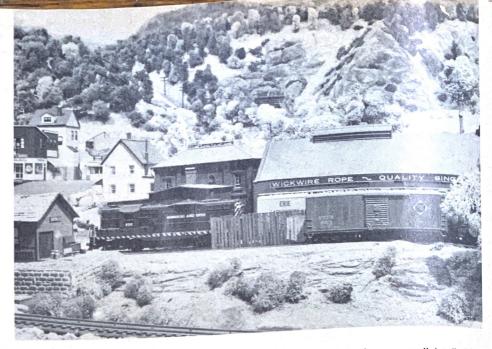
A backdrop separated most of the mountain country, the major portion of the railroad, from the waterfront area of the terminal. This mountain region included a scaled-down representation of the famous Delaware Water Gap, which was about 12 feet wide and 15 feet deep; it reached a height of over six feet from the river bed. The late artist Manville Wakefield, a Society member, spent over two years detailing the area.

The Union Connecting Railroad attained national prominence when it was used as a set for a number of commercial ads, and Warner Brothers filmed parts of it for a movie.

The Hoboken layout followed railroad prototype practice so exactly in signaling and operation that for a few years before and during the Korean War, United States Army cadets at West Point were brought in to learn the operation of real railroads on the model.

The Lackawanna Terminal at Hoboken was also the location of the Society's first HO railroad, the Union, Hoboken & Overland. The original UH&O was constructed as a portable HO scale model railroad. Because of the expanding interest in this smaller scale after the war, a permanent UH&O was started in May 1950.

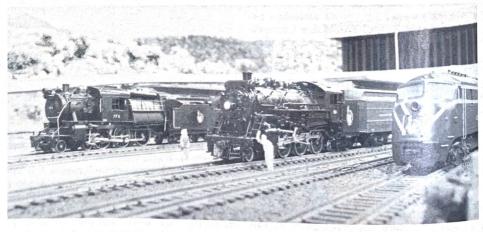
The first permanent HO layout was built in an area 12 feet by 20 feet and featured a double-track main line approximately 100 feet long with two double-track loop terminals at each end. The main terminal



THE SUCCESS of the HO layout's scenery is to a large extent due to the many well-detailed vignettes that combine to make up great vistas. Industry provides a reason for being, as does the new passenger terminal (bottom) which, despite the vintage power that often pauses there, stands new passenger terminal (bottom) which, despite the vintage power that often pauses there, stands a monument to the NYSME's efforts to stay abreast of modern modeling techniques. Expert scenery as a monument to the NYSME's efforts to stay abreast of modern modeling into a painted backdrop (oppowork, such as multiple levels in a town scene (above) or hills blending into a painted backdrop (oppowork, such as multiple levels in a town scene (above) or hills blending into a painted backdrop (oppowork, such as multiple levels in a town scene (above) or hills blending into a painted backdrop (oppowork, such as multiple levels in a town scene (above) or hills blending into a painted backdrop (oppowork, such as multiple levels in a town scene (above) or hills blending into a painted backdrop (oppowork, such as multiple levels in a town scene (above) or hills blending into a painted backdrop (oppowork).







consisted of a four-track island passenger terminal, a nine-track freight yard, an engine terminal and a four-track passengerholding yard. The entire layout could be controlled by one person.

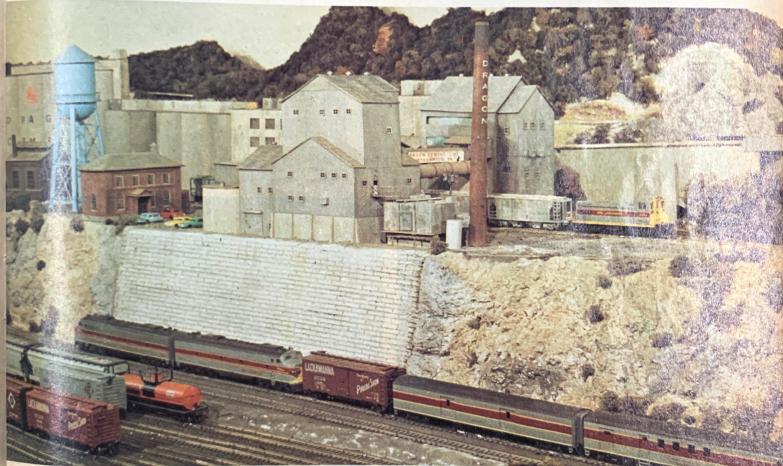
The Union Connecting Railroad in Hoboken was refined and added to during the years 1950 through 1955, but the basic plan was never changed. In 1955 the Lackawanna Railroad, in need of space for an expanding post office facility, asked the Society to vacate their area. The years at Hoboken had been good to the Society. With close to 35,000 paying visitors a year, the Society was able to purchase their fourth home.

The Society finally located a building in

Carlstadt, N.J., that would meet the requirements of two large model railroads, one O and one HO. It was a small vacant paper warehouse of about the same size as the area occupied in the Lackawanna Terminal. One third of the area was set aside for the shop, office-meeting room and an exhibition area. The other two-thirds of the area was divided between the new HO and O scale railroads.

Incorporated into these layouts were ideas and theories that had been learned over the first 30 years of the Society. The first major idea incorporated was that no group the size of ours could exist without the public; the layouts had to be designed to offer the public the greatest viewing





pleasure. This developed into four "dioramas," two in O and two in HO scale. These dioramas were to take in the North Jersey area's mountains, towns and cities with no visitor being more than 20 feet from the most distant area of the layout. The two layouts developed were 45 feet by 70 feet for O scale and 28 feet by 45 feet for HO scale.

Another facet to be incorporated was that the railroads could not be just viewing layouts. They had to be "alive" for the members, layouts that could be operated for years by the members and still be a source of continuing pleasure.

All this done, the original designs were considered to be fine examples of model

railroad engineering. The only major change made on either of the layouts was on the HO system. It was changed from an out-and-back loop to point-to-point with terminals and loops at both ends.

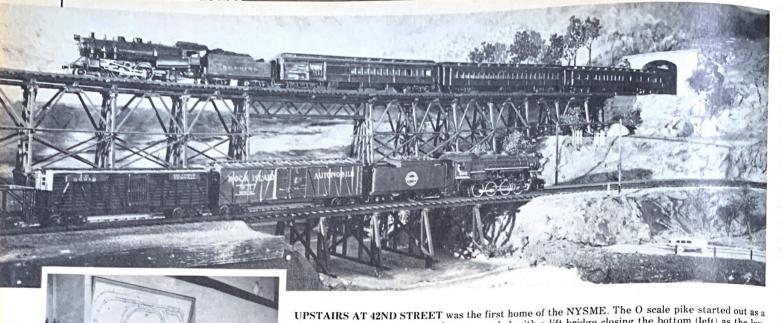
Today's HO railroad

As already stated, one of the design points of both railroads was to offer the public the greatest possible viewing pleasure. In the HO Union, Hoboken & Overland Railroad, this developed into two dioramas split between two rooms (refer to the trackplan). One is about 45 feet wide and 15 feet deep, the other 26 feet wide and 12 feet deep (the rear room). The scenery follows that of

northern New Jersey and Pennsylvania.

This HO railroad has about 49 scale miles of track and almost four scale miles of traction lines. The main line (a point-to-point operation) is a run from Newark west to Philadelphia with terminals and turning loops at both ends. The entire run is double-track with some areas having three or four tracks. A form of Twin-T transistorized detection is in use along the entire main line which permits bi-directional operation on both east- and westbound mains. The system also locates all trains for the main line operator on his control panel, gives rear-end protection, and operates signals.

The main line operator may have the



out - and the hobby of model railroading - grew in sophistication. While a greater proportion of total modeling time was of necessity expended on the construction of locomotives and rolling stock at that time as compared to today, the O scale pioneers still found time to build credible scenes, complete with painted backdrops (above). Note rakishly streamlined auto at lower right.

THE MOVE DOWNSTAIRS afforded much larger quarters for a new O scale layout (below left), and the members lost no time in erecting benchwork and laying track. Longer ties supported outside third rail, a feature of the current NYSME O scale layout as well. As HO scale began to make its presence felt, a small layout was constructed (below right). It became the forerunner of the

simple water-wings, which was later expanded with a lift-bridge closing the bottom (left) as the lay-

larger Union, Hoboken & Overland layout at Hoboken, and the massive UH&O HO layout in Carlstadt.



toughest job on the railroad. In theory he could be operating 12 trains at one timesix in each direction, all moving. We consider a good main line operator as one who can keep at least six trains moving, three in each direction. It should be noted that three-quarters of the main line is out of view of the operator; he must rely on his control board detection lights and signals for setting train speeds and movements. Six crossovers permit trains to switch back and forth between east- and westbound main lines. In a way, the main line is thus a real C.T.C. operation. We have one member who has made a name for himself by operating the main line for a number of hours during an exhibition without having once looked at the layout; he prototypically worked from control panel signal light indicators. The main line operator also controls any entry or exit from the main line

to the freight yards and Mountain Division.

A run west on the main line starts at Newark station, the main passenger terminal of the railroad. Located in the depot is the home office of the Union, Hoboken & Overland Railroad, a new and modern building built to show that here in Carlstadt railroading is indeed alive and well. During an open house this station is always alive with action. At the entrance to the station from the main line is a scratchbuilt double-crossover which permits trains to enter or leave any of the eight station tracks. Tracks One to Six are passenger train tracks with covered platforms, Track Seven is for freight runthrough, and Track Eight is an approach track for the waterfront development. All tracks in the station have bi-directional control, are protected with transistorized detection and have operating signals. It

is possible to have four trains moving in the station at one time. The large main building of the station, located above and spanning the eight tracks, features a completely detailed interior.

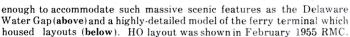
Just east of the station is the 12-track passenger yard and a three-track loop and freight by-pass track. Ten of the tracks are run-through for long-distance passenger trains. The other two are stub-end tracks for servicing m.u. and Budd RDC

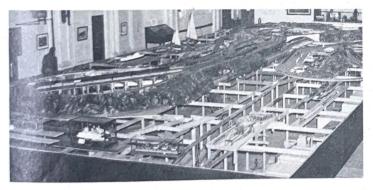
equipment.

During public exhibitions the passenger terminal is dispatching trains at the rate of one or two a minute. It may also be receiving trains at the same rate. Because of this, there are two operators controlling the area; one operates the passenger terminal, while the other operates the passenger yard, turning loop tracks and does any area switching at the waterfront.



O SCALE'S POTENTIAL was first revealed to many by published accounts of the NYSME's massive UCON railroad at Hoboken, N.J., in the Lackawanna Terminal. Measuring 35 by 98 feet, the layout was large







Upon leaving the station a train headed west goes through West Newark Junction and then into a tunnel. Coming out of the tunnel in the rear room diorama the line snakes around past the freight yards, tunnels under the mountains of the Allegheny Division, climbs and curves around to cross over itself and enter back into the front room diorama. In the front room it comes out of the tunnel and passes through a small valley and under a trolley bridge and two railroad bridges. It is in this valley that the Mountain Division breaks away from the main line and heads into the hills. Passing out of the valley, the main line curves around the front of some mountains and crosses over the passenger yards on a four-track bridge. It then dives into another tunnel under the front room control towers, curves around and heads down into the hidden yards of Philadelphia.

Philadelphia, the western terminal of the railroad, is an enormous 12-track through hidden storage yard under the front room scenery. Tracks are long enough to store complete trains of up to 40 cars in length. Tracks also have block control, permitting storage of two or three shorter trains per track. A single-track loop is used to turn trains for the eastbound run. This loop runs into the open in the rear room diorama and then back into the front room. Also a double-track main line bypass permits trains to run directly from the west end of the hidden yard through a tunnel and into Newark Station by way of West Newark Junction.

The Mountain Division breaks away from the main line about half the distance between Newark and Philadelphia. This line heads northwest towards Easton, Pa., as a double-track, heavy-traffic secondary

line. Grades run to a maximum of 2%. At Easton, there is a passenger-freight terminal with five through tracks and a stubend siding at the depot. There are also two sidings at industries. Easton is the terminal for most passenger trains from Newark to the mountains, but some passenger trains do run through and go up the branch to Carbondale and Wilkes-Barre. Easton is also the end of the line for long freights. Here they are split up and lighter engines put on for the run up the branch line. A large-radius wye is used to turn trains for the run east from Easton. Now under construction is an interchange with the interurban part of the trolley line. The Mountain Division, from the main line up to Easton, is under the control of one tower operator.

At Easton the line splits and enters the Allegheny Section of the division. This



branch line is an operator's dream. It has single-track with passing sidings, steep grades, height and weight restrictions, and enough sidings to lose over a hundred freight cars. It snakes around and through the mountains, passing through five tunnels, until reaching Wilkes Barre. Two secondary branch lines break off from the main branch line. One, a short logging line to Ricketts Glen, serves a lumber mill there;

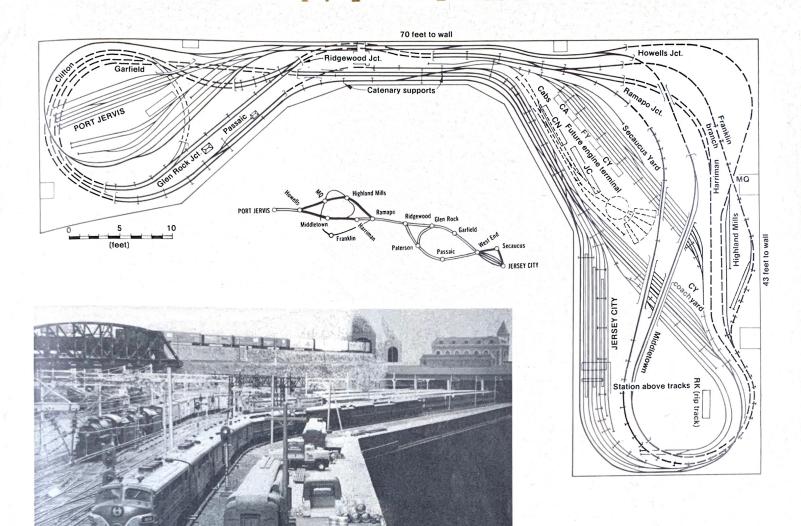
the other is a longer line serving Northampton and its industries. Northampton is also the location of the second largest industry on the branch line, a large cement factory. Three smaller industries are located there as well.

Carbondale, located about three-quarters of the distance to Wilkes-Barre on the branch, is a small mining town and home of the Mountain Division's largest shipper,

the Black Gold Coal Company's mine. Also located at Carbondale are a large quarry and two smaller industries.

At the end of the branch line is Wilkes-Barre with a small freight terminal and yard. It is also the end of the line for branch line passenger traffic. A small turn-of-the-century depot now under construction will serve this traffic. A small engine-house and a number of sidings are also in





STUDY IN CONTRASTS is the keynote of the two NYSME layouts. Both the HO (opposite below) and the O scale layouts (above and opposite above) feature room to operate long trains, and steam, diesel and even electric equipment is abundant. Some members favor prototype paint schemes, such as DL&W F3's, while others have their own theme.

UNION CONNECTING RAILROAD

The present NYSME
O scale layout

Overall size: 43x70 feet

service. The Lehigh cut-off through Ashley Tunnel permits direct running of trains from Wilkes-Barre into Easton, giving the line looping capability. Control of this section is from an operating tower in a balcony overlooking the area. Sectional-block control is used with an unusual twin-cab system that permits two locomotives to operate at any location in the section at the same time independent of each other. One or two operators can operate the tower.

The freight yards are a major part of the rear room diorama, filling an area of about seven feet wide and 20 feet long. The yards are divided into a large flat yard with ten tracks and a six-track hump yard. Action is the theme here, and continuous movements are a must: making and breaking trains, switching cars and moving engines. The hump yard is a major feature of the area. Cuts of cars are pulled up a 4% grade to the top of the hump, a switch is thrown and the cars are pushed over the hump. The use of Kadee couplers permits automatic uncoupling so that one car at a time rolls down into the yard. Each of the six tracks has air retarders to slow down the moving cars. The six tracks have a capacity of about 90 cars,

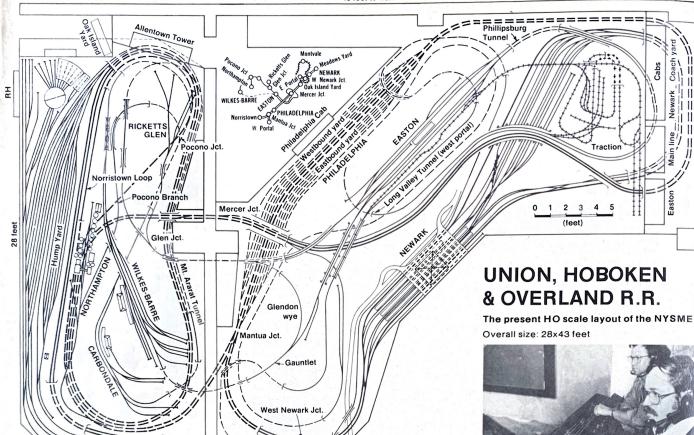
and the entire yard will hold almost 300 cars. Entry and exit to the yard is by double-track connections with the main line east and west of the yard. It is possible to divert both east- and westbound main line traffic through the yard. The freight yard control tower has two operators' panels—one for the flat yard and one for the hump yard.

Adjacent to the freight yards is the engine facility with complete service for both steam and diesel engines. Depending on the size of engines, 18 diesels and 12 steam locomotives can be serviced or stalled at the same time. A larger turntable (capable of turning a Big Boy) is now being installed.

The trolley line started four years ago as a large loop for interurban cars running from Newark to Easton. In the coming year, the trolley line will be the greatest development area of the layout. An interchange has already been added to bring freight to the line. Street operation is planned for a large area. Interurban trackage has a minimum radius of 18" and city trackage will have a minimum of 9".

Operation on the Union, Hoboken & Overland is in two categories. One is show

operation during the public exhibitions. Each year the Society has almost 15,000 people visit it during the three weeks of open house. For the most part these people are not model railroaders; they simply come to see trains running. This is when, as mentioned earlier, the main line will have three or four trains operating in both directions, with two trains a minute being dispatched from the station. This hectic pace goes on for three hours a night on week nights, six hours on Sunday and ten hours straight on Saturday. No real railroad runs to this pace even during rushhour. During these sessions we try to follow prototype operation for public interest but concessions are made for ease of operation, the main one being that trains are run without any set schedule or routing. It is up to the operators to keep the trains moving and determine their routing. Also there is no restriction as to equipment: the steam powered Broadway Limited of 1920 may be followed by a Metroliner followed by a Civil War era freight. Any equipment type may be run as long as it meets Society standards and passes inspection. We do try not to mix equipment of one period with that of another, but it can



ENOUGH SPACE for some spectacular Eastern scenery was not wasted by members when they built the HO layout's scenery (opposite above); area shown corresponds to that to the right of dividing wall in trackplan. Long runs and trains tax the ability of even super power like Pennsy Duplex (opposite below). Elevated cabs (right) are a must on the UH&O.

happen and you may see steam pulling a string of TOFC (trailers on flat cars). All rolling stock and engines on the layout belong to the different Society members and are operated in pool service. Many model railroaders may frown on this type of an operation, but please remember that this is for the public. They like to see trains run, and they provide the financial support.

The second category of operation is, well—"operation." This is when the members operate for our own pleasure. Prototype operation is followed as closely as possible. Trains are run to set routes and schedules with a definite purpose. Period equipment is not mixed as during a show.

The entire railroad is controlled from "towers," or operating panels. Seven of these "towers" are located in three balconies overlooking the railroad. The front room balcony has four towers: the main line, Newark Station, coach yard-loop, and the Easton section of the Mountain Division. The tower for the trolley line will also be added here. The rear room has two balconies, one with two towers for the flat yard and hump yard, the other one tower for the Allegheny section of the Mountain Division. Two other towers at bench level control Philadelphia yard and the west loop. The last tower controls the engine facility.

Scenery is built up from open benchwork using ½" plywood on edge in a grid pattern. Rough terrain contours are cut in the edges. Over this framework wire

screen is applied. A mixture of one part concrete and five parts fiber filler is then applied. Its slow setting time permits easy shaping and carving. The fiber filler gives good texture, is porous for coloring and lightweight. The concrete makes it solid. After setting, the rough scenery is colored or stained with oil colors. To this, other scenic materials and zip-texturing are used to finish the scenery.

Most of the structures on the layout have been scratchbuilt by members of the Society and in most cases were built for the particular area.

The present O scale UCON

The O scale railroad has the same designing parameters as its HO counterpart. It must offer the public the greatest possible viewing pleasure and also be a pleasure for members to operate. The O scale railroad developed into two dioramas split between two rooms. It is roughly L-shaped (see the plan), measuring 43 feet by 70 feet, and has about 18 scale miles of track of which about eight are under catenary.

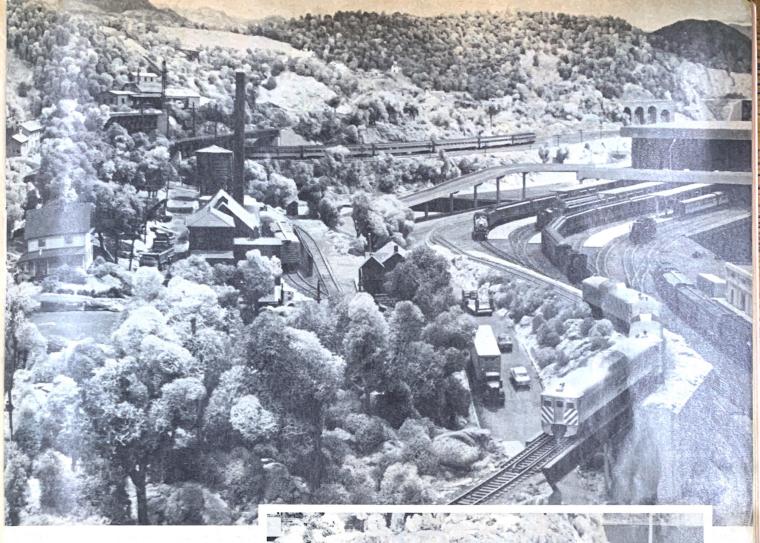
The Union Connecting is a railroad that operates from Jersey City, N.J., to Port Jervis, N.Y., through northern New Jersey. A run to Port Jervis starts at the main terminal at Jersey City which is comprised of eight tracks: six through tracks and two stub-end tracks. Five of the eight tracks at Jersey City have catenary strung for heavy electrics (mostly Pennsylvania prototype) and m.u. commuter equipment. The main building of the station is located

directly above the tracks. The six through tracks disappear into tunnels under the station. These tunnels are lighted and give the appearance of subway operation. The station building itself is a large granite block structure typical of railroad construction of the 1920's.

Upon leaving Jersey City there are eight scratchbuilt slip-switches giving all trains the option of heading westbound on any of the tracks of the five-track main line to Carlstadt. Upon reaching Carlstadt the main line narrows to four tracks and splits. Two tracks head off to the left, with all electric locomotives engines (catenary equipment) and m.u. commuter equipment taking that route. These tracks head towards Passaic and Paterson. The other two tracks go straight toward Garfield. Long-distance passenger and heavy freight traffic use this line, thus by-passing the heavy Passaic-Paterson commuter traffic.

The two entities of the main line join back at Ridgewood and run as double track until Ramapo Junction. Upon reaching Ramapo Junction, A.T.C. ends. Train movements to this point are controlled by the Jersey City Tower.

Ramapo Junction is the divergence point of three routes. Two different routes head to Port Jervis, one of which is a low-grade line for heavy freight. Catenary ends here on the lines to Port Jervis. The third line is a route with catenary to Franklin and Highland Mills. It is used for m.u. commuter equipment and electric locomotives. At Highland Mills this line joins the east-



bound main line for the return run to Jersey City.

The different routes to Port Jervis come together at Howells Junction a short distance outside Port Jervis. Trains run from here into Port Jervis on a double-track line. Trains at this point are controlled by the Port Jervis operator and are brought into downtown Port Jervis Station. Port Jervis is a terminal stop for all long-distance passenger and freight trains. It is also the end of the line for all steam and diesel commuter runs from Jersey City. Port Jervis has a five-track stub-end terminal downtown and a three-track through-train terminal engine and passenger car servicing facilities

Secaucus is the center for freight operation on the railroad. The freight yard located here has six tracks and is open at both ends. Three of the tracks are under catenary. One track is normally left open for through freights. This track may also be used by passenger trains when the passenger yard is blocked. Capacity of the yard is about 65 freight cars, but four additional tracks are now under construction; these tracks are extra long so that complete trains of up to 35 cars may be held over

Passenger equipment is services at the Grove Street Coach Yard. This yard has six tracks open at both ends, with two under catenary. One track is normally left open for through passenger trains; an occasional freight may sneak through at times

Public exhibitions and membership

During our annual exhibitions, the public is also treated to special displays which focus on various aspects of model railroading and historical data on American railroading. These displays are set up in the showcases in the lobby of our building. Exhibits recently have ranged from models of trolleys in various scales to a display about the American Freedom Train. This year, our exhibits will show the accomplishments of past and present members of the Society. Also on display is our large collection of American Railroad Memorabilia. Much of this collection has been

donated by the country's leading railroads and includes railroad lanterns, a bell, signals, and the largest private collection of illuminated tail signs from the observation cars of famous name trains of the glory days of American passenger railroading.

The membership of the Society is made up of people from all walks of life, bonded together by a common interest in model building and its application toward recreating in miniature the romance, the excitement and the historical significance of railroading in America. Membership in the Society is open to all persons 21 years old or over who share these same interests.