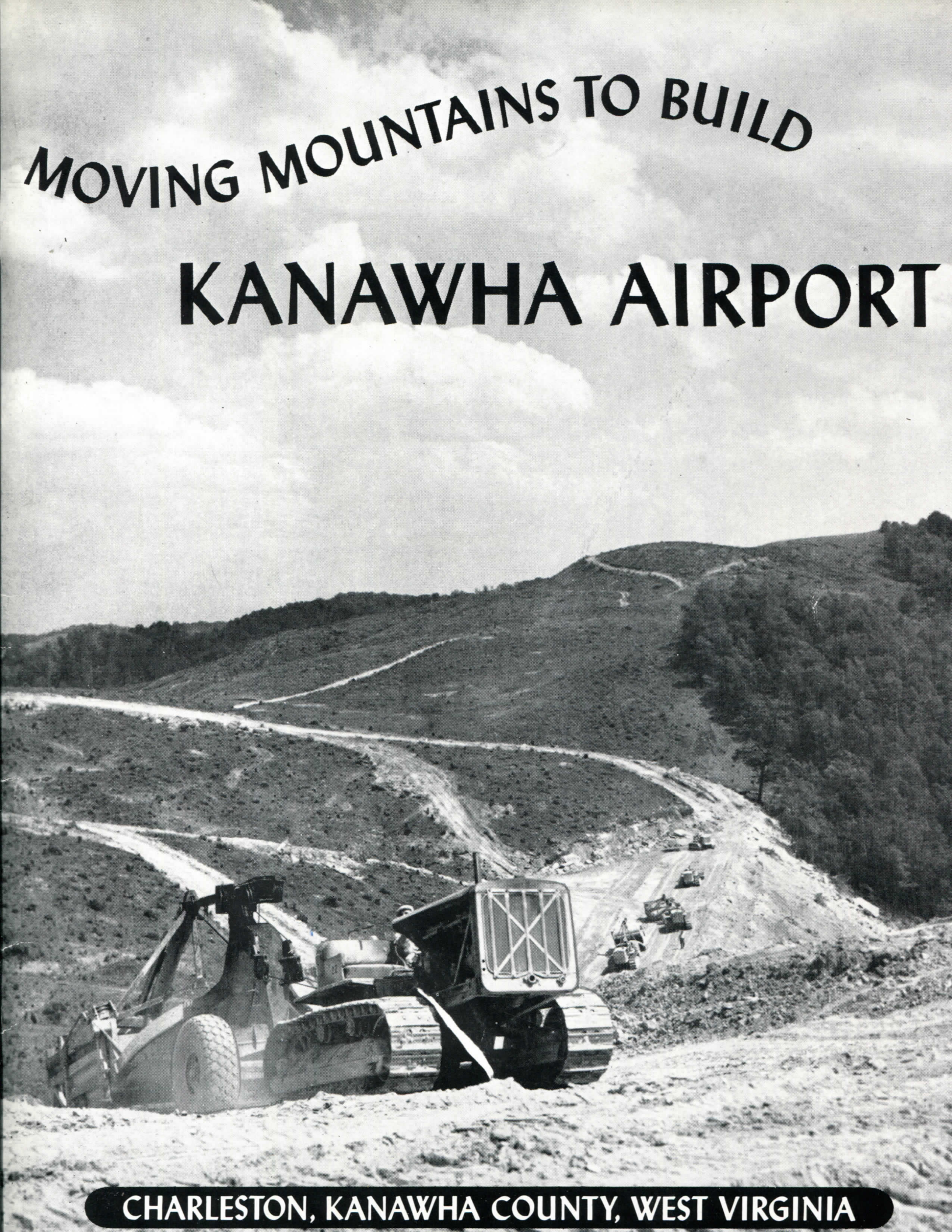
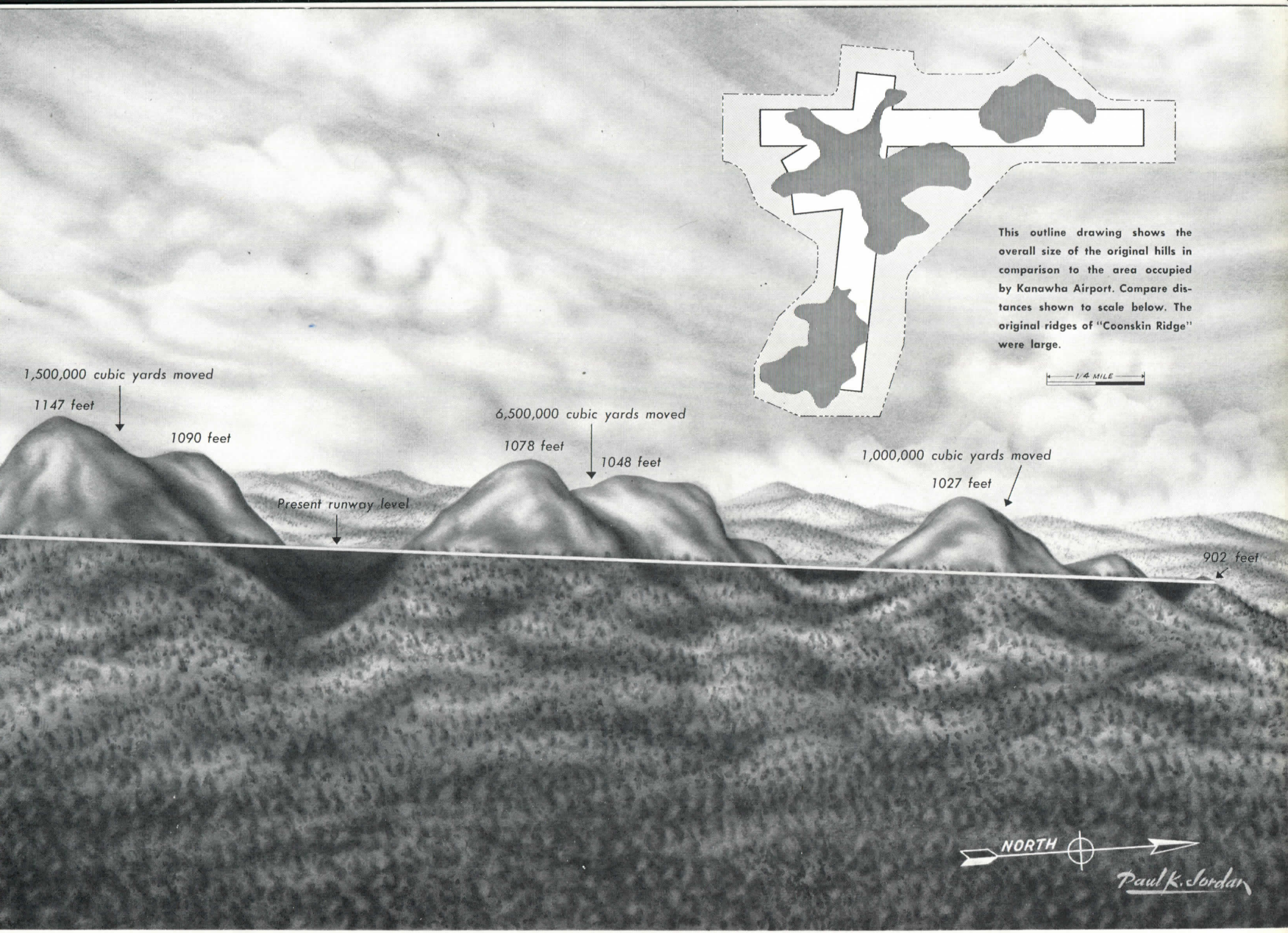
MOVING MOUNTAINS TO BUILD

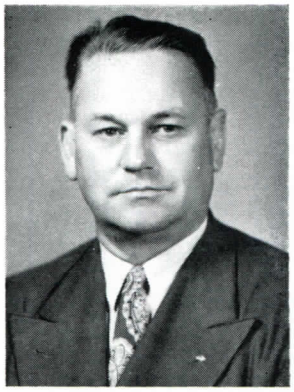
KANAWHA AIRPORT



CHARLESTON, KANAWHA COUNTY, WEST VIRGINIA



ccurately drawn from original maps by Louis Hark, airport engineer, this awing by Paul K. Jordan portrays the original profile of Coonskin ridge sea level." Note the gradual slope of the runway which extends over a mile in length. The inset drawing shows the great extent of the projecting hills



CARL C. CALVERT

A MESSAGE FROM THE PRESIDENT OF THE

COUNTY COURT OF KANAWHA COUNTY WEST VIRGINIA

Have you ever thought of the significance of mountains to West Virginia, and to those of us here in Kanawha County!

When the first early settlers pushed their way through the wilderness as they came from the east, the mountains, though an obstruction to movement, provided them with food and raiment.

When settlements were made the timber of the mountains provided the logs for shelter, and in the valleys between with their clear-flowing streams, the pioneer raised his crops, his cattle grazing on the nearby hills.

It was West Virginia's mountains that brought development and wealth, for in them were coal, oil and gas, which were tapped to serve those at home, and the industries and people of the nation.

How significant, then, it was that the mountains should be chosen for the site of an airport, to serve the capital city of the Mountain State.

Kanawha Airport is a story of smoothing out mountains and, where they once impeded movement, making of them an airport from which one might go with speed wherever his inclination or his need required.

Kanawha Airport is a tribute to all the people of the Mountain State, but particularly those who made it possible — the people of Kanawha County.

CARL C. CALVERT

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Kanawha Airport, 400 feet above the city, is 12 minutes from downtown Charleston. Kanawha County's hills spread out in all directions.
Bollinger

FORMED IN 1789, KANAWHA COUNTY IS NOW 'THE MAGIC VALLEY'

Kanawha County, of which Charleston is the county seat, is the center of West Virginia's largest segment of population, business and industry. It contains approximately one-eighth of the state's population and nearly one-fifth of the state's economy in terms of business and industry. The 1950 census figures show a population of 236,945 for the county, of which 72,818 reside in the restricted city limits of Charleston itself.

Kanawha County was created by an act of the Virginia Assembly in 1789. Daniel Boone, who resided near the eastern limits of present-day Charleston, represented it in the Virginia Assembly in 1791. The town of "Charlestown" was created by an act of the Virginia Assembly in 1794. The name was changed to "Charleston" in 1818, although the post office, established in 1801, was officially designated "Kanawha Court House" and so remained until 1879, when it was changed to conform to the name of the town.

Capitol Building Outstanding

There are many things of interest to a visitor, notably the State Capitol building which is ranked among the top five of the United States. Completed in 1932 at an over-all cost of more than $10 million, it has won the admiration of thousands of visitors in the intervening years. Its riverfront esplanade with its stone stairways descending from Kanawha Boulevard to the water's edge is a unique landscaping feature.

Public Enjoys Many Things

Cultural and civic resources are numerous. Among these are the Charleston Symphony Orchestra, Community Music Association, The Charleston Chamber Music Players, Kanawha Players, Inc. (little theatre), ballet and esthetic dancing schools, riding academies, public and private swimming pools, golf courses and tennis clubs, the Charleston Open Forum, more than 50 churches representing all the established denominations, numerous presentations of New York theatre productions on the stage of the 3,500 capacity Municipal Auditorium, the Charleston Boat Club centering a large program of recreational facilities, and 29 playgrounds operated by the Charleston Parks and Recreation Commission. The 5,000-acre Kanawha State Forest, a secluded picnicker's paradise, is located in the wooded hills a short

distance southwest of the city. Coonskin Park is being developed into a magnificent public park with recreational facilities on a large acreage at the eastern approaches of the Airport.

Economically Important

The foundation upon which all these facilities have been erected is the unusual economy of the Great Kanawha Valley. It is one of the nation's centers for the production and manufacture of natural resources (coal, oil, natural gas, limestone, lumber, vitreous clay, salt brines).

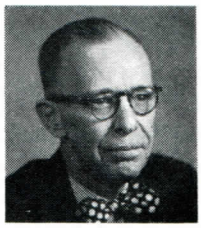
Upon this combination of natural resources and excellent transportation has been erected a great base chemical manufacturing industry which has caused the magazine Fortune to describe the Charleston area as the "Ruhr of the U. S. chemical industry" and the Saturday Evening Post to designate the Great Kanawha as "Magic Valley."

This is the home of nylon, the "Vinylite" resins, lucite, the polyethelene resins, and many other base organic chemicals from which are fabricated plastics and synthetic products used around the world.

The hydrocarbons of coal and natural gas are the basis from which these well known plastic intermediates are made synthetically and shipped to other plants for transformation and fabrication into thousands of consumer products. A score or more of large and small chemical plants range themselves up and down the Kanawha Valley east and west of Charleston. Elsewhere in the valley are produced ferro alloys essential to steel making. Approximately one-fourth of the nation's steel industry depends upon this output. The industrial community also boasts the world's largest plant for the production of rayon staple fiber, accounting for 50 per cent of the nation's production.

The Charleston area possesses the largest flat glass plant (window and plate glass) in the world, the largest axe factory in the world, and one of the nation's largest bottle and container plants. Charleston is the largest center of natural gas production east of the Mississippi River. The scale of commercial enterprise required to service this enormous industrial activity is proportionate. Charleston is the principal center for the distribution of goods and services to approximately 650,000 people comprising the population of all or a major part of 18 counties surrounding Kanawha to the north, east and south.

The trading area of Charleston is served by two daily papers, the Charleston Gazette (morning) and Charleston Daily Mail (evening) and so prosperous is the trading zone that five radio stations, unusual for a city of less than 75,000 population, operate in Charleston. In alphabetical order, they are WCAW, WCHS, WGKV, WKNA, and WTIP. Charleston ranks 26th in family income in the nation's first 200 cities. This fact and the large population area dependent upon Kanawha Airport account for the phenomenal air traffic at Charleston and resulted in the award to the port, in the first year of its operation, of the Haire Trophy, recognizing Kanawha Airport as the outstanding commercial port of the year (1948).



CHARLES E. HODGES

The above article was prepared by Charles E. Hodges, managing director of the Charleston Chamber of Commerce. Representing the business and professional groups of Charleston, the work of Mr. Hodges was invaluable to all phases of Kanawha Airport's development, its beginning, construction and completion.

KANAWHA AIRPORT IS ON THESE ROUTES

AMERICAN AIRLINES

Between New York and Chicago, serving the intermediate cities of Washington, Baltimore, Philadelphia, and connecting service from New York to Boston and other New England points. To the west, Cincinnati, Indianapolis, Chicago, and connecting service to all West Coast points. American Airlines links the capital city of West Virginia with Elkins and Parkersburg.

CAPITAL AIRLINES

Between New York and New Orleans, serving intermediate cities of Pittsburgh, Knoxville, Chattanooga, Birmingham, and Mobile. Also Rochester, Buffalo, and Atlanta. Direct service to Clarksburg, Morgantown, Wheeling, and Erie, and south bound, Bristol and Asheville.

EASTERN AIRLINES

Between Boston and St. Louis, serving intermediate cities of New Haven, Hartford-Springfield, Providence, New York, Atlantic City, Philadelphia, Wilmington, Baltimore, Washington, Louisville, Lexington-Frankfort, Evansville. Between Detroit and Miami, serving Cleveland, Akron-Canton, Roanoke, Greensboro-High Point, Winston-Salem, Charlotte, Columbia, Savannah, Brunswick, Charleston, South Carolina, Jacksonville, Daytona Beach, Orlando, Vero Beach, West Palm Beach.

PIEDMONT AIRLINES

Between Norfolk and Cincinnati, serving Newport News, Richmond, Lynchburg, Roanoke. Also to Danville, Greensboro, Winston, Raleigh, Fayetteville, Myrtle Beach, Wilmington, Goldsboro, New Bern, and Morehead City.

AIRPORT HISTORY OF KANAWHA COUNTY

1929—City of Charleston purchased site at Institute, W. Va., six miles downriver from city limits, named it Wertz Field.

1930—City lacked funds to develop and operate field so leased tract to group of business men who formed West Virginia Airways, Inc. West Virginia Airways, Inc., was able to provide aviation facilities for the next 12 years.

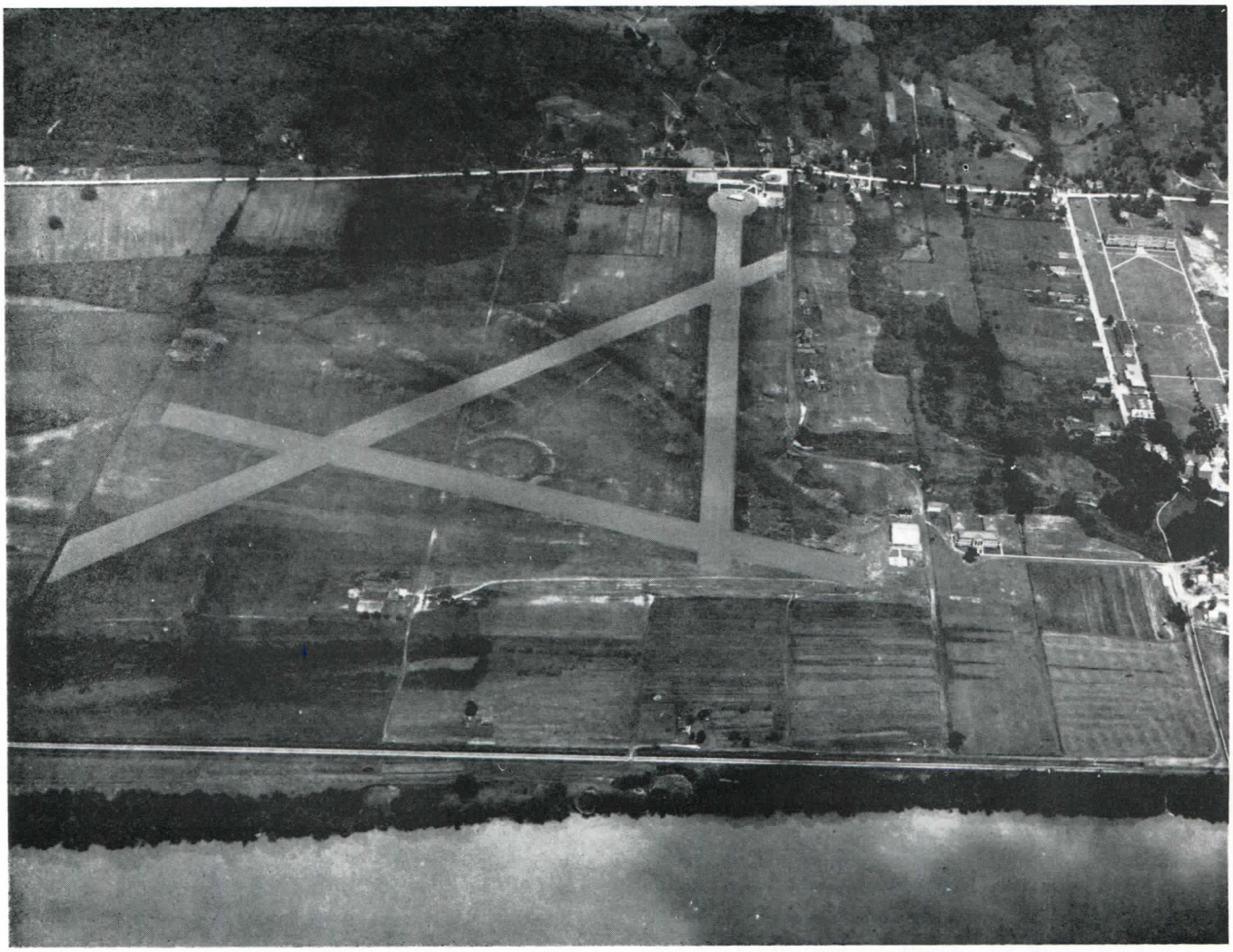
July 4, Wertz Field was dedicated. Later, with help of federal funds, a large administration building was completed.

1933—West Virginia up to this time was one of but two states which did not have airmail services. In October American Airlines was awarded an airmail contract route, and opened passenger service between Washington and Chicago, via Charleston, serving intermediate cities of Elkins, Huntington, Cincinnati, and Indianapolis.

1935—Pennsylvania Central Airlines (now Capital Airlines) established a branch route passenger service between Charleston and Pittsburgh.

1937—Larger passenger planes having been put into service by air carriers, Wertz Field began showing its inadequacy. American Airlines notified City of Charleston that it would be forced to discontinue service because Wertz Field was too limited for landing of larger planes. City's aviation enthusiasts prevailed on American Airlines to continue service, using smaller DC-2 planes.

Leaders in Charleston Chamber of Commerce realized that site for a new airport must be found. Committee appointed consisted of D. M. Giltinan, D. N. Mohler, D. C. Kennedy, Charles E. Hodges, Fred Alley, J. B. Pierce. This committee was asked to make survey of airport needs and to study all possible airport sites within 25-mile radius.



Charleston's first commercial airport was Wertz Field. The area it occupied was taken over by the government for the erection of a great synthetic rubber plant in the early days of World War II.

1938—After a year examining on foot, by car and topographical maps every possible site, committee reported that the valley floor offered no suitable site large enough to meet area's growing needs. Even Wertz Field did not permit expansion. Committee decided that "We must build on the hilltops."

1940—Harry Campbell, City Engineer, and Fred Alley, a committee member and airport manager for West Virginia Airways at Institute, suggested site known as "Coonskin Ridge," a series of hills not far from Charleston's city limits. Fred Alley, after studying topographic maps, had made the first visit to the location on Saturday, September 12. From this visit all later developments stemmed. Committee approved location after examining it, and requested preliminary surveys and sketches to show possibilities. Sketches were made by Louis Hark, assistant city engineer; aviation consultants were called in for consultation. The "upstairs" airport met with general approval, though all agreed that the undertaking would be expensive.

City engineers prepared plans for construction of three 4,000-foot runways, and a fourth of 3,400 feet, submitted them to WPA, with the proposal that the site would be provided by the City of Charleston, the building costs be borne by the WPA. The offer was rejected because the contribution of the City was disproportionate to the estimated cost.

Because Charleston had no levies to support a bond issue, the Charleston Chamber of Commerce proposed to the County Court of Kanawha County that the project be made a county project. The County Court agreed to the proposal.

1941—Bond issue of $1,000,000 was ratified by overwhelming majority. (This issue, however, was never used.) An active program to enlist Federal Aid was begun. Federal government, however, was engaged in huge national defense program, and aid was restricted to projects certified as essential to national defense. Pearl Harbor intensified this situation.

1942—Charleston lost its airport on May 12, 1942, when Wertz Field, after 12 years of operation, was closed when approaches were blocked by the erection of the government's synthetic rubber plant. Efforts to obtain federal aid were continued.

1943—The president of the County Court, W. T. Brotherton, proposed a new bond issue of $3,000,000, which would enable the project to go ahead without waiting for federal assistance. Charleston and Kanawha County had become a highly important defense area, and air transportation was needed greatly.

In November the larger bond issue was approved by an overwhelming ratio of 22 to 1. The firm of Whitman, Requardt & Associates, Baltimore, was retained to prepare a master plan. The County Court proceeded in ensuing months to acquire by negotiation and condemnation the title to the Coonskin Ridge area.

1944—In June of this year the bonds were sold, bids were advertised for such portion of the work within available funds. Bids were opened in September and the "first stage" contract was awarded to Harrison Construction Co., of Pittsburgh. This "first stage" included approximately five-eighths of the total grading, sufficient to permit two runways and their completion to a point where commercial air service could be resumed.

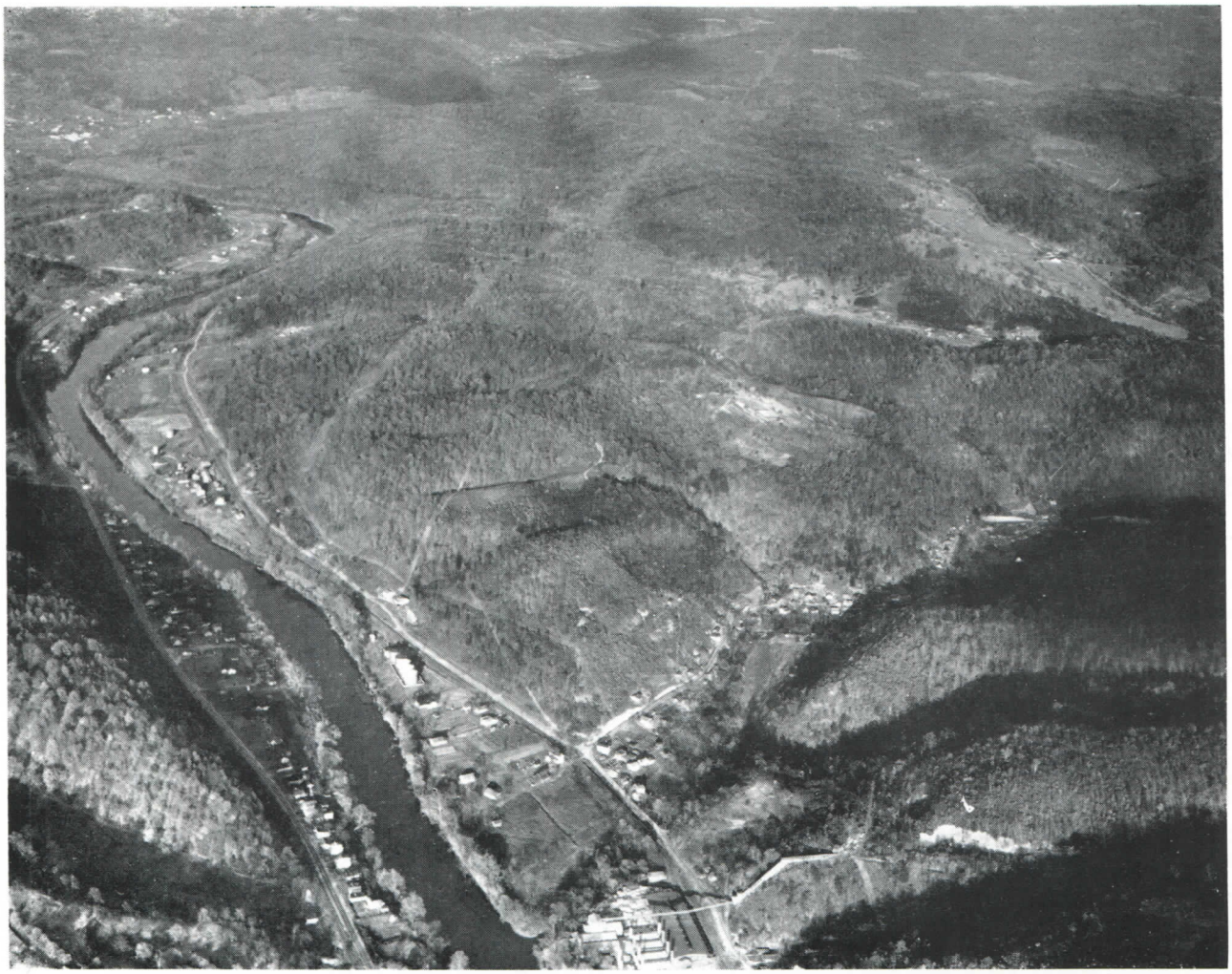
On October 18, ground for the construction of Kanawha Airport was broken, and work proceeded continuously thereafter until grading was completed in May 1947.

1945—Charleston Chamber of Commerce representatives appeared before a U. S. Senate Appropriations sub-committee, and with able assistance from its two senators, Harley Kilgore and Chapman Revercomb, obtained a recommendation for an appropriation of $2,750,000 to supplement money raised by Kanawha Countians. This appropriation was subsequently approved by Congress and the remainder of the original contract for grading added to the original contract awarded the Harrison Company. The government's contribution was based on the fact that Charleston's airport had been made useless by the erection of a synthetic rubber plant, which, during the war years, was the nation's largest producer of that essential product.

1947—In January the 167th Fighter Squadron, West Virginia National Guard, was established, activated three months later. This squadron began with 13 officers and 30 enlisted men, Col. James K. McLaughlin, commanding officer. The 167th made an outstanding record as a fighter group in World War II.

Kanawha Airport was formally dedicated on November 3. President Truman sent his plane, the "Independence," the presidents of all the participating airlines were on hand and many governmental officials. Though a cold, rainy day, the event was attended by thousands. Kanawha Airport was presented ready to go, representing one of the most unusual construction jobs in aviation

(Continued on Page 19)



An air photo of Co
Ridge, looking eastwar
taken when first sug
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with two others, camp
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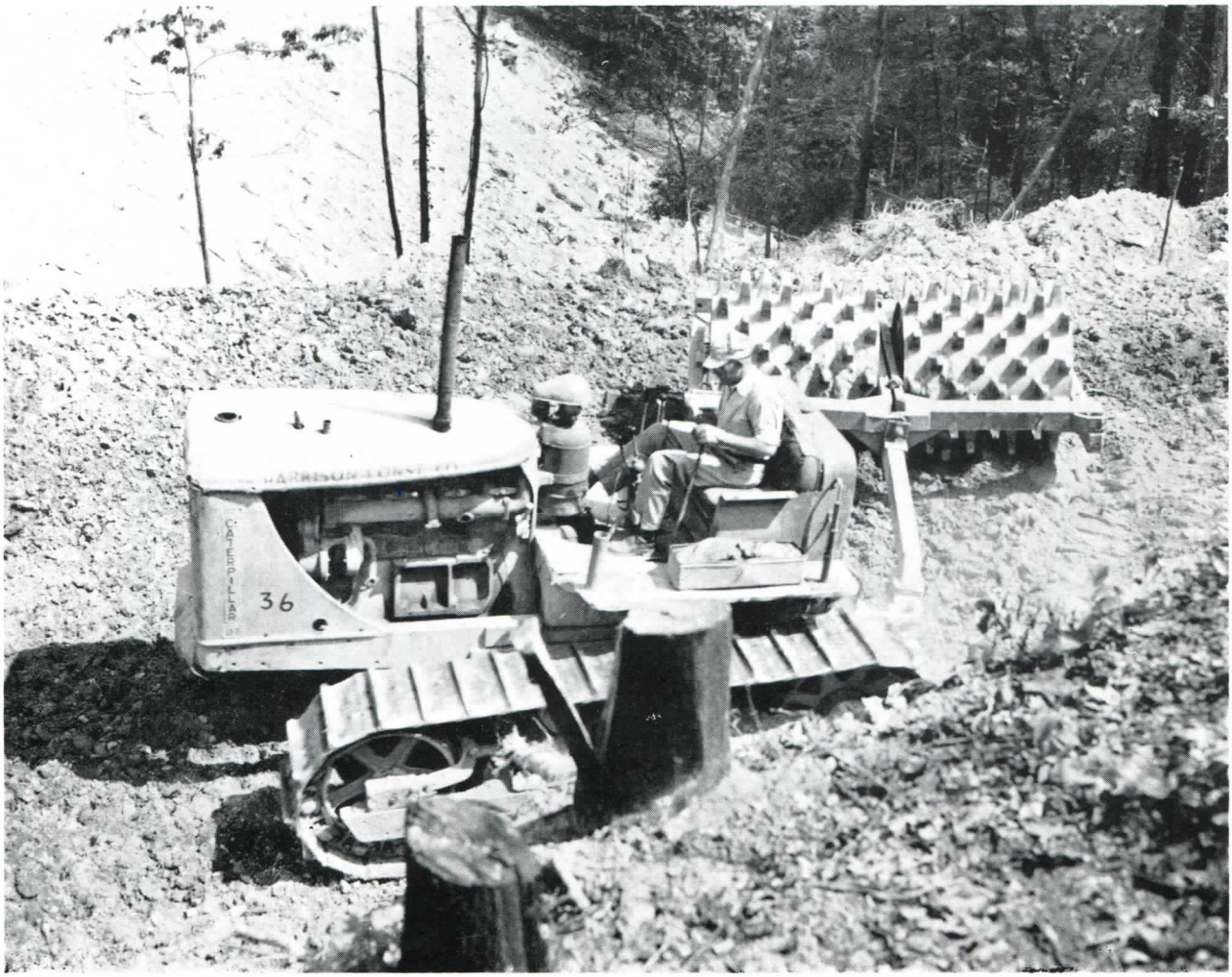

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River side of the
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West V
Tractor & Equ

By August 5, 1944, the timber had been cleared off and the ridges made ready for the start of operations. This photo looks northward. Part of the area was once an orchard.

Bollinger

On January 5, 1945, Coonskin Ridge looked like this. Cutting and filling had begun on a large scale. The rectangular area in the foreground is the site of the present administration building. The far leveled off area is the southwest end of runway number 1.

Bollinger

This photo shows what
men on the job
"Grandpappy Fill." T
alone required 2,2
yards of earth, nearl
fourth of all the
moved on the project

West V
Tractor & Equ

Work went on duri
winter months, with
interruptions due t
weather. This air pho
taken April 5, 1945
the northern approac
extremes of heigh
depth show clearly
picture.

Bo

By June 1945, "Coonskin" first began to take its ultimate form as an airport. There were still many high spots and fills. The road at lower left is from the Elk River side. Slightly discernible is the Ruffner Hollow access road under construction by the State Road Commission. During these months visitors first began flocking to the site in large numbers.

Bollinger

Heavy equipment was used. Slightly more than 40 per cent of the material moved was rock. The rock was handled by nine 1¾-yard to 2½-yard shovels, which loaded a fleet of 23 ten-yard rear dump trucks and eight 11-yard and 12-yard dump trailers. Ten 25-yard tractor-drawn scrapers and sixteen 12-yard scrapers handled the earth. The contractor's equipment moved from 20,000 to 27,000 cubic yards of earth and rock per working day.

West Virginia Tractor & Equipment

Looking north in the su
mer of 1945, this air ph
shows extensive area o
which grading and fill
was spread out. The M
dowbrook road is at righ

Bollin

By fall of 1945, approxima
ly one year after grou
breaking, the project h
this appearance. Incredi
though it may seem wh
viewing this picture or t
airport today, shovels,
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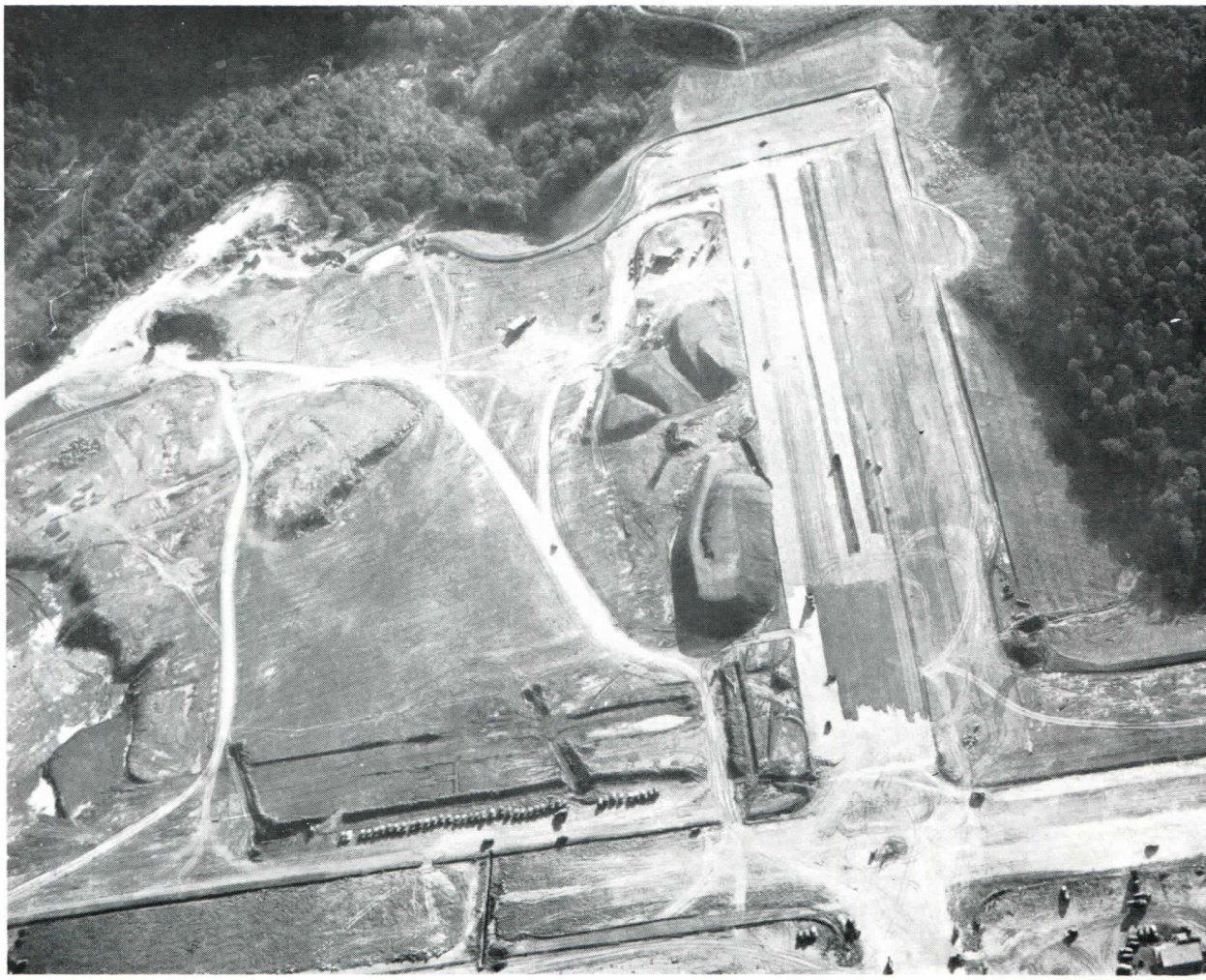
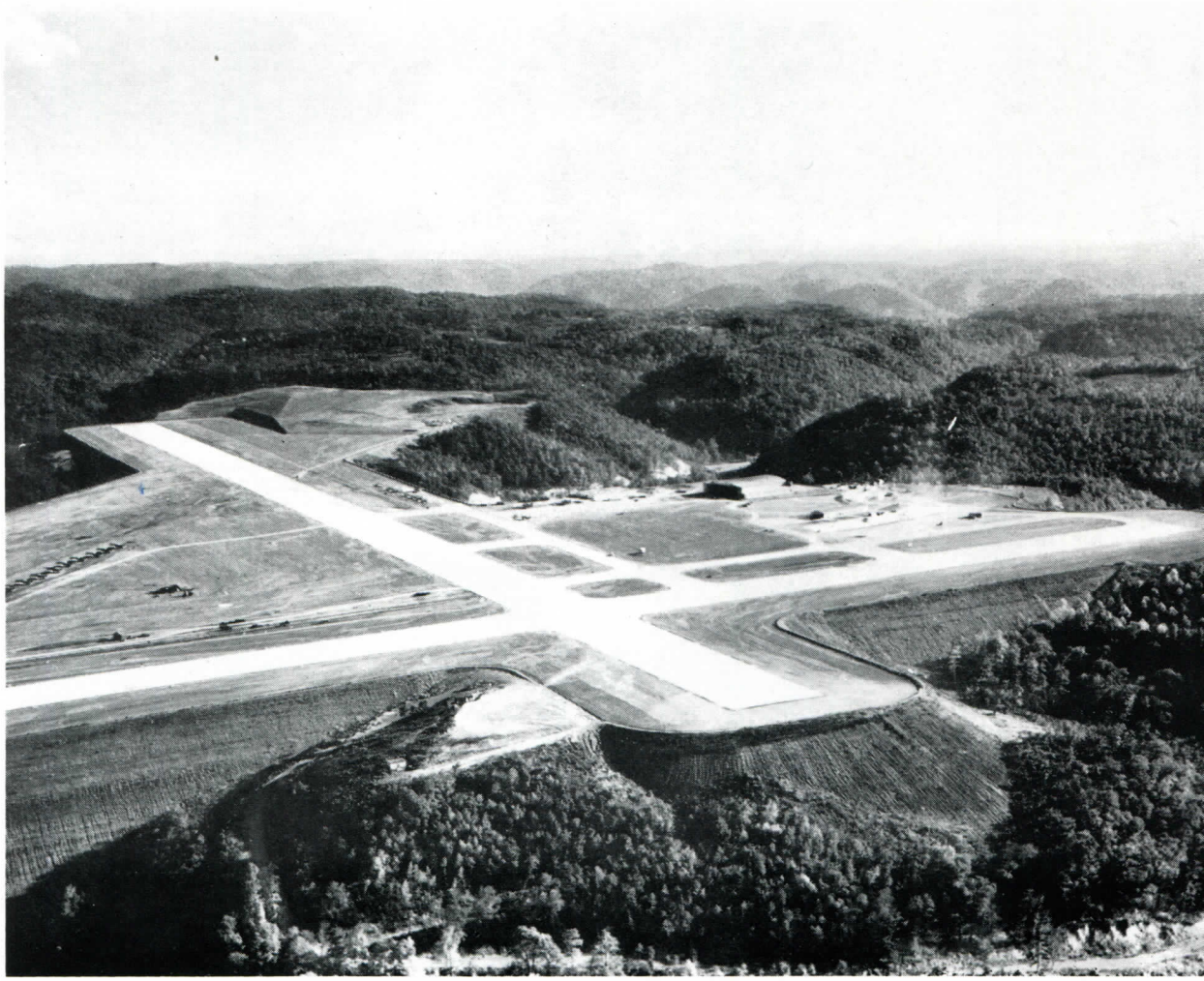
Bollin



In the early fall of 1946, paving began at the intersection of number 1 and 2 runways. Altogether 87,000 cubic yards of sub-base material were used; 51,000 cubic yards of aggregate; and 22,420 tons of asphaltic concrete. Most of the crushed stone was material taken from the hills on the job, and the sand came from the area near the administration buildings of today. The drainage system installed required approximately 40,000 feet of pipe, from 6" metal to 30" concrete.

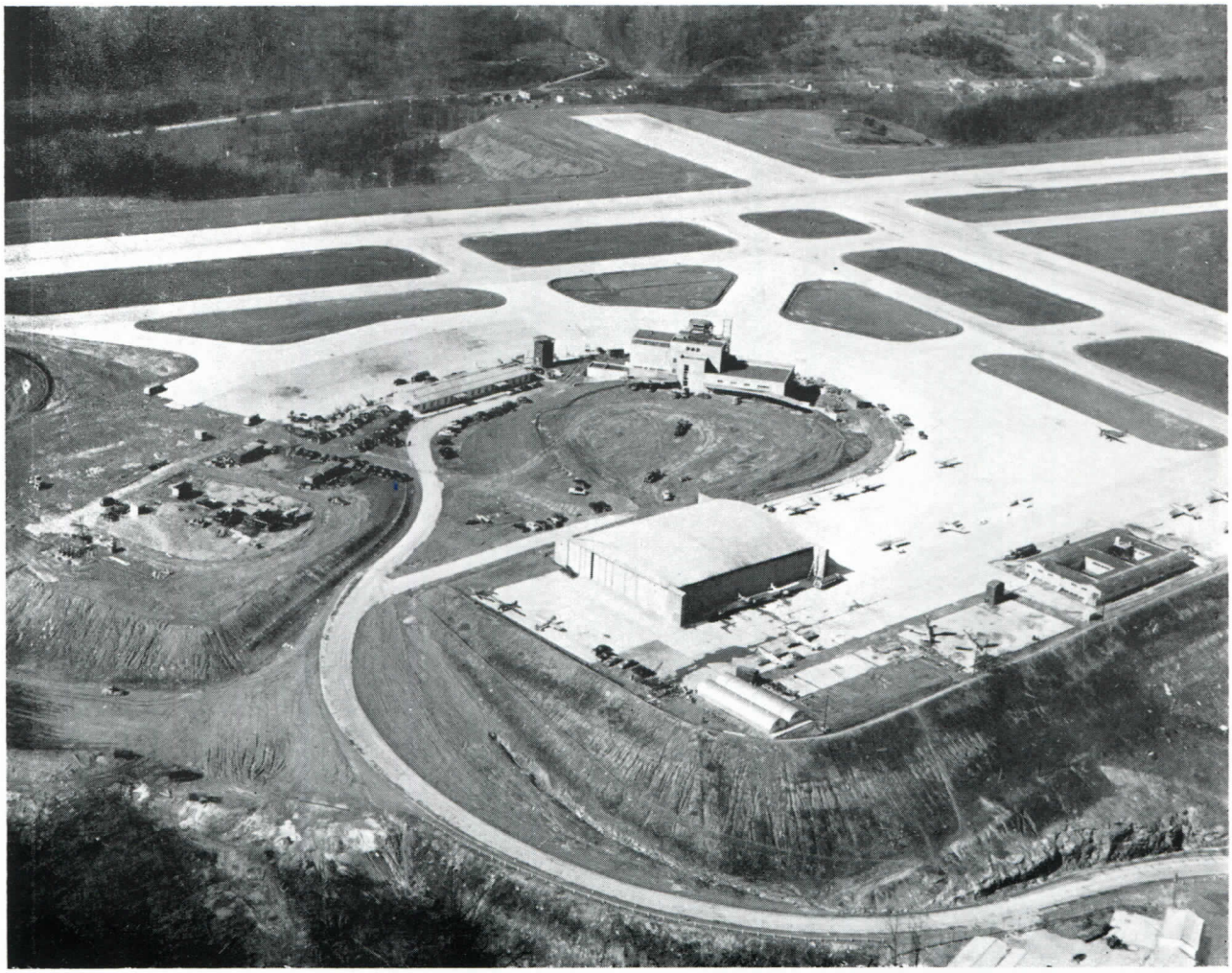
Bellinger



This air photo was taken shortly before Kanawha Airport was dedicated, November 3, 1947. The temporary administration building had been erected along with the hangar. Much yet remained to be done, but Kanawha Airport looked like this when it opened for operation December 1, 1947.

Wheeler

The administration c
it looked in late s
1947. Note that ro
are being paved.



For comparison wi
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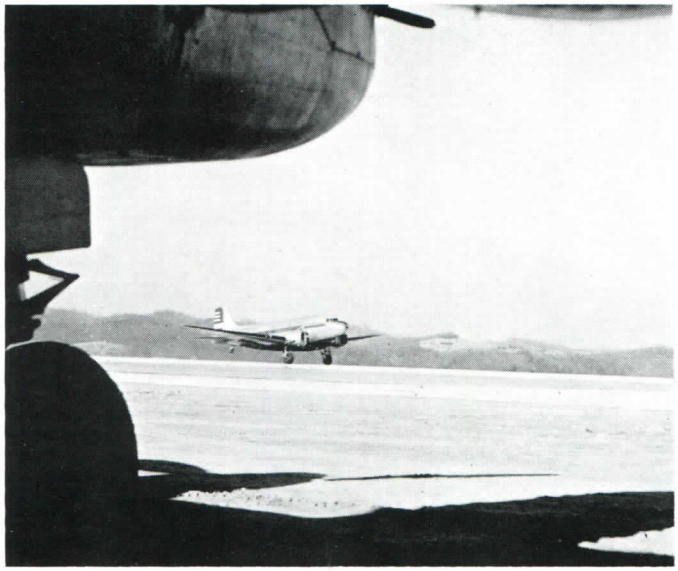


One of earliest flights. Note unpaved taxi strips.

BRIEF HIGHLIGHTS ON KANAWHA AIRPORT

People from all over the United States, from Sweden, England, Cuba, South America and other foreign countries visited Kanawha Airport during its construction. In many instances they were part of commissions sent to make studies of the most modern methods of moving earth.

An excellent safety record was made during construction. In moving more than nine million cubic yards of earth there were only three injuries, each caused by falling stones.

Detailed stories, excellently illustrated, appeared in many business publications and in national advertisements. Contractor & Engineer published two stories on the airport; other stories appeared in Roads & Streets, County Officer, Engineering News Record, and American City.

Forty feet from the top, or at the 1030-foot elevation, workmen uncovered millions of fossilized fern leaves, which disintegrated shortly after exposure. Just below this was a deposit of large boulders and petrified tree trunks. Under this was a two and a half foot seam of coal, in a bed 100 feet in diameter. All of which, the workmen concluded, indicated that the spot at one time was a pond, and one of the low places of the area.

An idea of the magnitude of the Airport project may be gathered from the following facts: 360 acres of mountainous land were cleared and grubbed before the excavation was started. The county purchased over 760 acres, and the airport proper takes up about 365 of this amount.

The paving on taxi-ways, runways and aprons, if converted into 20-foot roadways eight inches thick, would approximate 30 miles of highway.

A special 1½-inch pipe line, extending 4,000 feet from a rail siding up to the hill-top site, was used by the contractor to bring in the 2,500 gallons of diesel fuel needed daily to operate the more than 200 pieces of equipment. As a consequence, one fuel truck was needed only half-time on the project, instead of two large trucks steadily plying up and down hill.

When opened in 1947 the airport had approximately 225,000 square yards of paving on runways, taxi-ways and loading ramps; 27,000 linear feet of electric cable for field lighting; 60,000 linear feet of drainage pipe ranging from 6 to 30 inches; 15,000 feet of telephone conduit.

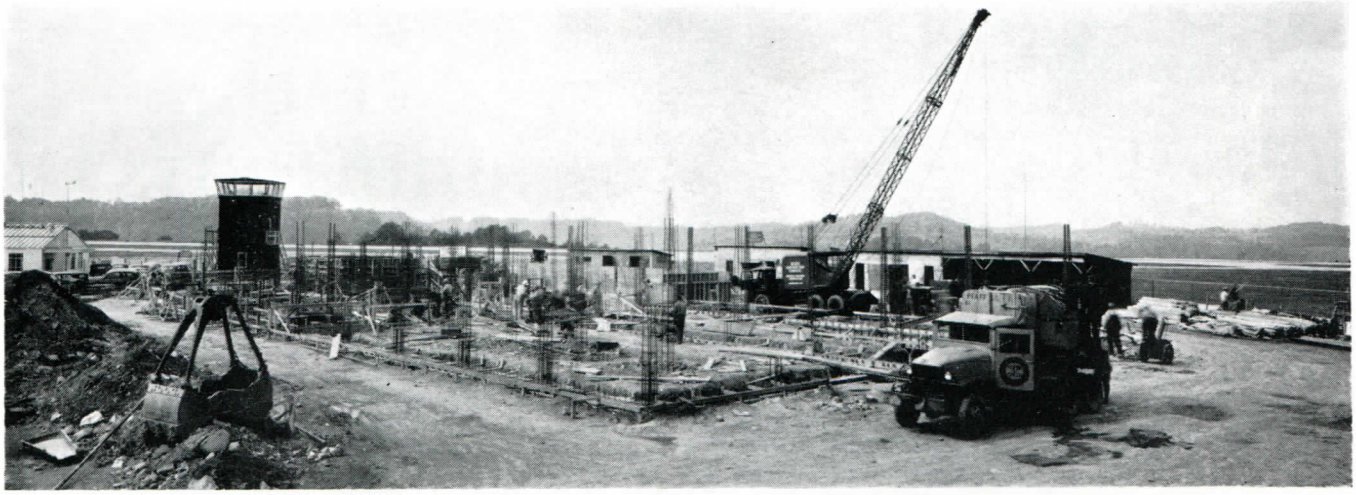
The access road to the new airport was constructed as a project of the State Road Commission. The road is 1.061 miles in length from the intersection with the Ruffner Hollow road. The paving is 22 feet wide on a 36-foot graded right-of-way. Grading and draining of the road was itself a major project, requiring removal of 300,000 cubic yards of earth.

The grading alone, on this big project, cost approximately $4½ million, or 34 times the cost of the site.

When the bill providing a $2,750,000 special appropriation directly allocated to the new Kanawha Airport came before Congress in 1945, all of West Virginia's Senators and Representatives "went to bat" to obtain its passage. Those who shared in this outstanding achievement were United States Senators Chapman Revercomb and Harley M. Kilgore, and Representatives Jennings Randolph, M. M. Neely, E. H. Hedrick, Cleveland Bailey, John Kee, and Hubert Ellis.

In moving the more than 9,000,000 cubic yards of earth and rock, 2,000,000 pounds of explosives were required.

KANAWHA AIRPORT TERMINAL BUILDING



Construction on Terminal Building was begun summer 1948. By October 1, 1948, work had progressed to this point. *Bollinger*

The Terminal Building at Kanawha Airport, where ground and air traffic meet, is a building of unusual beauty in design and color. Architecturally it is modern and practical in concept.

The air-conditioned building is constructed of architectural concrete for floor, roof, and wall, has aluminum windows and doors. The interiors are finished in plain plaster. Simple light domes, coves and strip lighting develop the architectural effects.

Mural is Colorful

The entrance is framed in colorful granite. The floor finish is terrazzo. A mural extends the length of the concourse ceiling, by the artist, Robert Lepper. The color tones in the mural, which is 85 feet long and 22 feet wide, are: carrot, aqua, blue, lemon yellow, pastel green, peach, gray, brown, beige, tan, cream and white. These colors appear again in the interior decorations throughout the building.

The coffee shop and the open air deck which overlook the field are entered from the waiting room. Over the coffee shop kitchen, a half story above the foyer, reached by stair or elevator, is a club diner-lounge with a large glazed bay window which opens onto a paved deck. This deck forms the roof of the coffee shop and affords a private view of the airport activities.

Dining Room Floor

On the main stairway to the dining room is a two-story window which lights the stair well. The stairs rise in easy stages. A broad platform at the top gives access to a check-room and a handsomely furnished lounge with adjoining rest rooms, make-up tables, phone-booth, and lounge furniture. Another door, in an alcove off the east wall, provides access to a paved deck. Twelve feet of glass doors give one a view into the dining room.

North, east, and west walls of the dining room are largely of glass, giving a marvelous view of the port and the lights beyond of down-town Charleston. The wall and ceiling color here is of soft yellow. The south wall is blond flexwood to match the furniture frames. The upholstery is yellow and the drapes are cream.

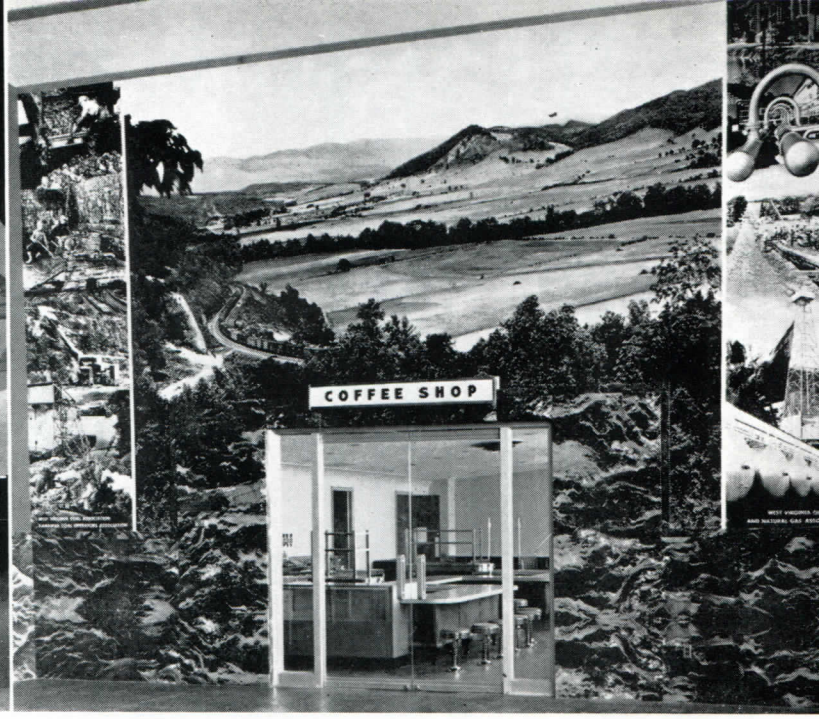
The Terminal has every modern convenience for the efficient handling of passengers, sight-seers, and office personnel. By a variety of levels the Terminal completely separates the service areas for the airlines, mail and freight traffic from those areas used by the public.

"Nerve-System" Headquarters

Above the dining room, space is available for offices of the air communication services, and for weather service. Weather charts and schedules are integrated by radio and teletype service. Here begins the nerve system of the airport's control. Adjacent to this space, and at a higher level, is the real nerve center of the entire airport, the control tower.

The airlines have three levels of office space, behind, above, and below the ticketing concourse. Service rooms for airline employees are separate from those used by the food concessionaires and building service employees. Airline hostesses have a quiet lounge and first aid station.

There are check rooms, recessed baggage lockers, newsstands, information centers, and other service features required for public convenience.



Slater

THE TICKET CONCOURSE. All but the right-hand side of the ticket concourse is shown in this photo. Note the mural, and the counters for the airlines. Opposite the counters are one or two shops, luggage checking room, and at the far end the passenger entrance.

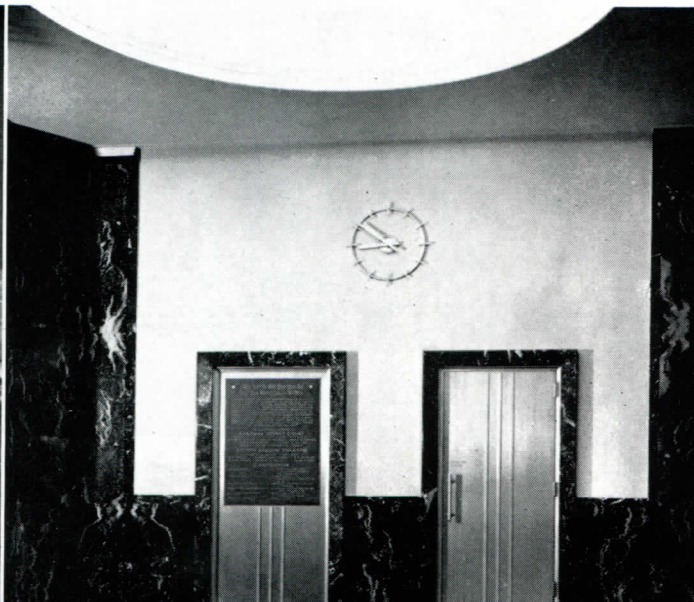
WAITING ROOM MURAL. Framing the coffee shop en trance in the waiting room is this magnificent mural, whic shows a beautifully colored West Virginia scene. On eac side are enlarged panels of the coal industry and the oil an natural gas industries.

THE STRIKING INTERIOR

THE WAITING ROOM. Here with its modern furniture is the passenger waiting room, which leads to the loading apron at the runway side of the new Terminal Building. The far wall shows the other mural with a typical West Virginia scene and panels of the chemical industry. The steps lead to the foyer. Near window in background is the stairway to upper levels.

THE FOYER. Here in the foyer, at the western en of the ticket concourse, and leading to the waitin room, a visitor gets the full impression of the beaut of the building. Note the compass points inlaid i the floor. In the background is the plaque repro duced on the back cover.

Benton



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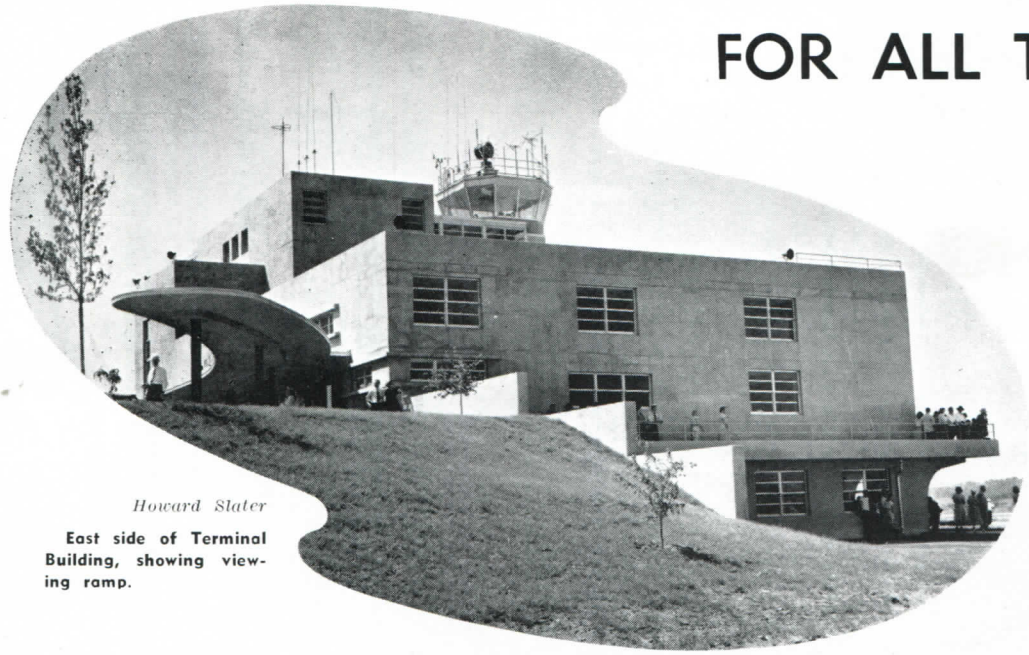
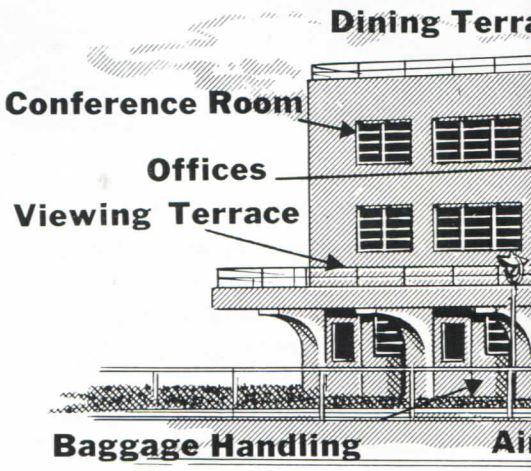


Howard Slater

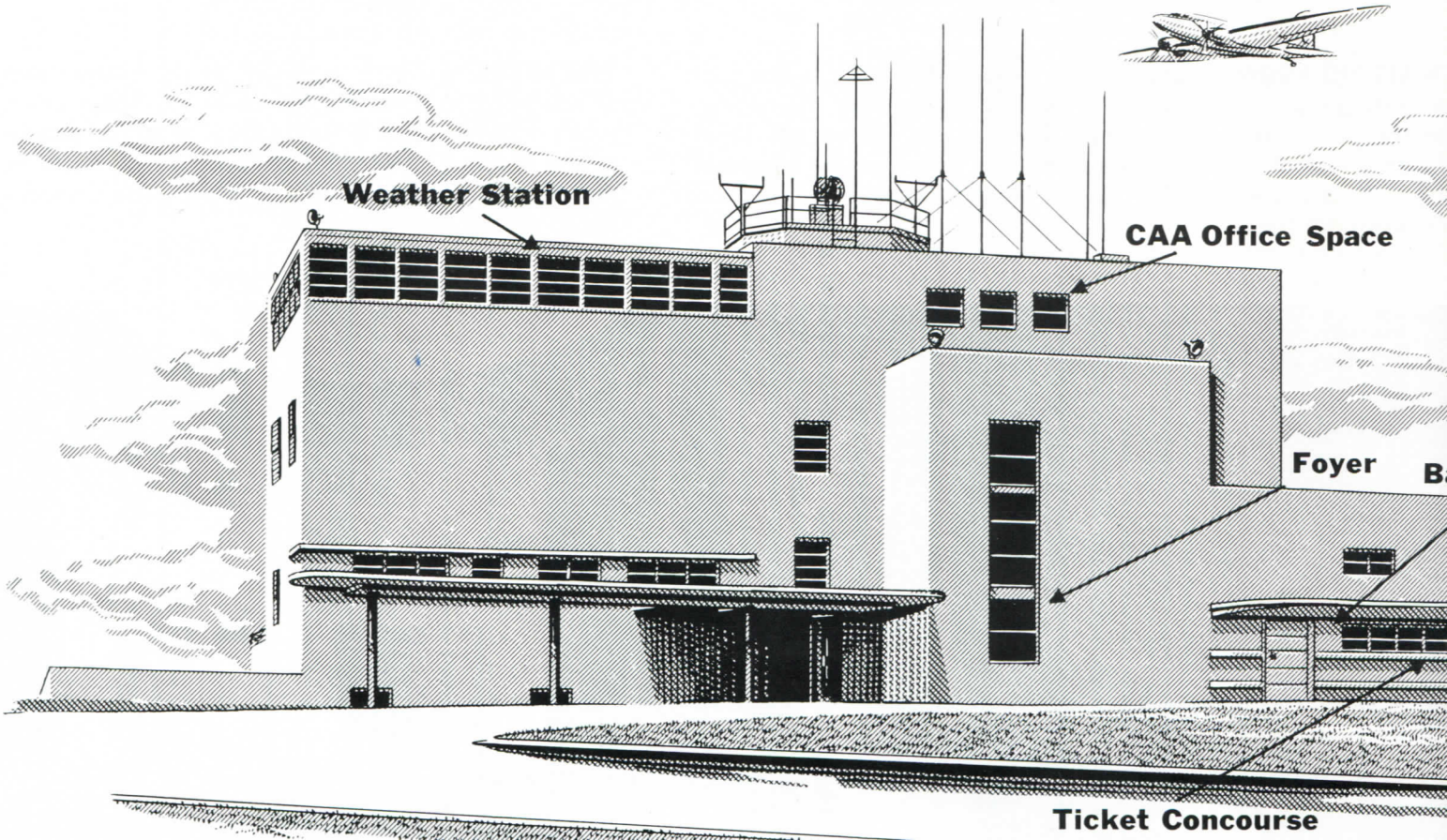
East side of Terminal Building, showing viewing ramp.



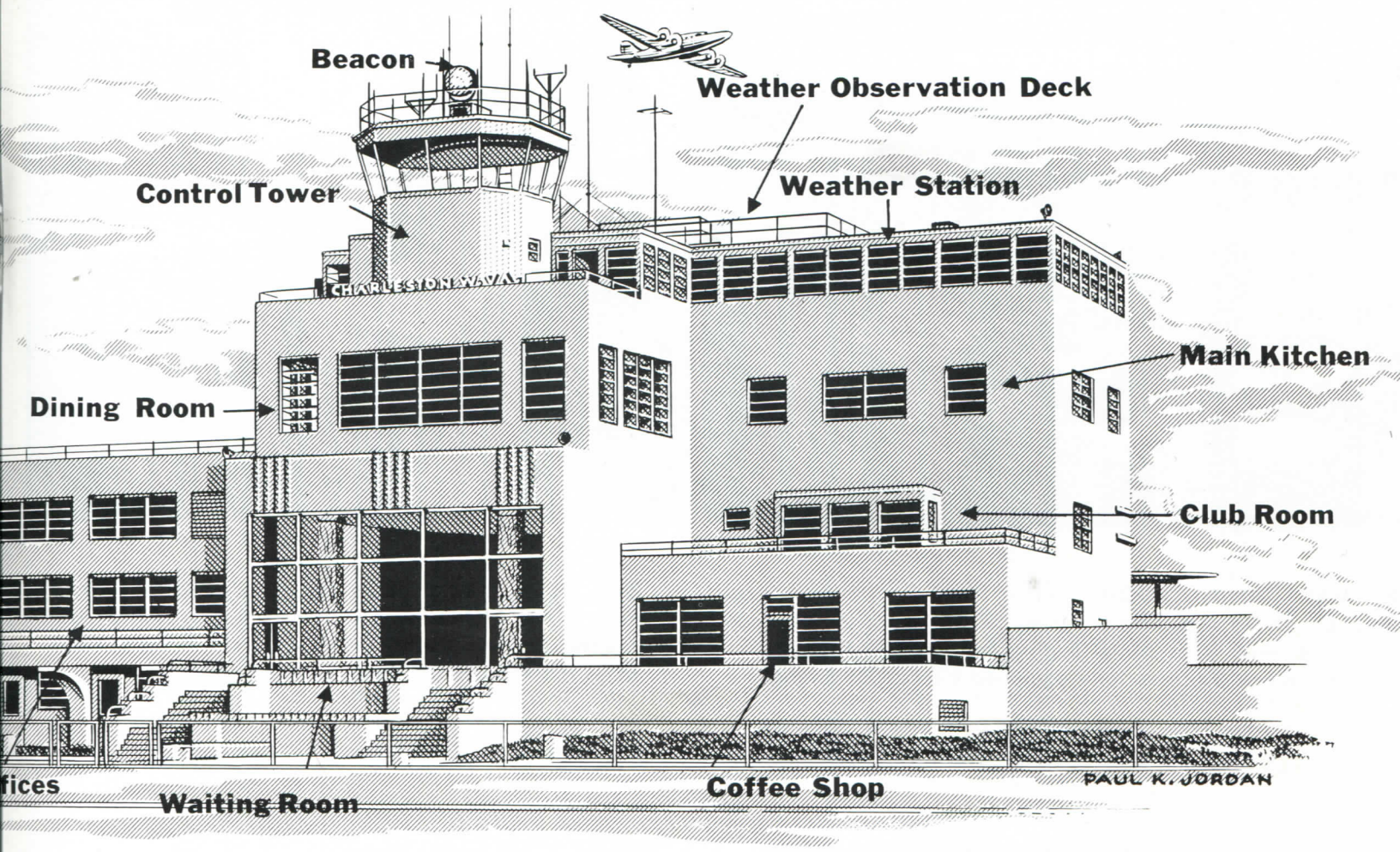
These drawings graphically show how well the Terminal Building has been designed for all essential service facilities, and for the use and enjoyment of the public and visitors. A casual glance at the various parts of the building indicates how the two features have been incorporated and kept separate for the utmost efficiency and convenience in operation. The top illustration shows how the building appears from the loading ramp, or runway side, the lower one shows the building from the car approach.

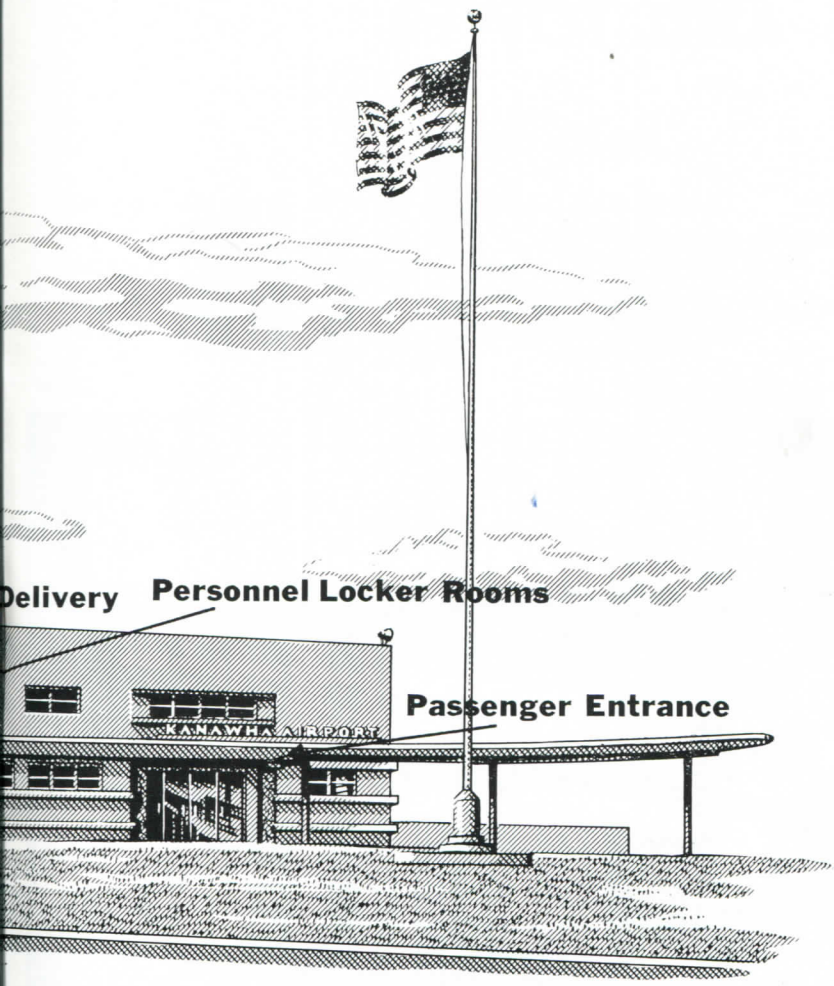
The entrance under the west marquee is for direct passage to the waiting room, dining room and so forth. It is also the exit for passengers and visitors to the building.

Because it embodies so many outstanding features, the building has been described as one of the most unusual and beautiful terminal buildings in the nation.



A MAGNIFICENT AIRPORT TERMINAL . . . .





Howard Slater

Where this control tower stands today the sloping and wooded top of one of Coonskin Ridge's mountains once stood. Occupying almost the identical

Slater

THE MAIN DINING ROOM. Taken from the dining terrace, this photo shows the distinctiveness of the main dining room, which is entered from stairs leading from the first floor. This dining room has a wonderfully equipped kitchen adjoining.

THE CLUB ROOM. Intended for dinners for sr groups, the Club Dining room is one of the most tractive in the Terminal Building. The window at r faces a terrace which overlooks the airport.

DINING ROOMS AND TOWER

THE COFFEE SHOP. Right off the passenger waiting room is the coffee shop. In addition to the seating arrangements shown, there are several booths along the west wall. The kitchen serving the coffee shop is at the right. Every convenience for quick service has been incorporated.

INSIDE THE CONTROL TOWER. Since but very people will ever get to visit the control tower an elaborate equipment, the photographer sugge this picture so that all might know what the looks like from the Terminal Building's highest p

Benton

AIRPORT HISTORY OF KANAWHA COUNTY

(Continued from Page 5)

history. The first night landing at the port was made shortly after 10 the evening before by the president of American Airlines.

On December 1 Kanawha Airport began operations with 10 daily scheduled flights.

1948—In March an additional $1,100,000 in bonds was voted by Kanawha County citizens for the completion of the airport, including the administration building, paving remainder of taxi strips, and so forth. Approximately $800,000 of federal matching funds was obtained to supplement the local financing.

Kanawha Airport at the end of its first calendar year of operation handled a total of 98,733 passengers, 179,029 pounds of airmail, 325,154 pounds of air express and 459,099 pounds of air freight, and operated within its own income.

Ground for the new administration building was broken July 7.

1949—Kanawha Airport is awarded the Haire trophy as the outstanding airport in the U. S. for the year 1948.

National Guard hangar is completed.

By the end of the year Kanawha Airport had broken its first year's amazing records. From January 1 through December 31, 132,932 passengers were handled, 223,384 pounds of airmail, 417,191 pounds of air express, 808,435 pounds of air freight, again operating within its own income.

1950—On June 27-28 "Operation Coonskin" transformed the area to the southeast of the airport into a public park. The total area is 850 acres. This outstanding operation, detailed elsewhere in this booklet, was carried out as a public service by the cooperative enterprise of scores of individuals and firms who constructed roads, shelters, game areas, ponds, picnic sites, and other appointments. This work supplemented $200,000 in bond funds voted by the Kanawha County citizens to provide a recreational park in the lower areas of the airport site.

The federal government made a grant of $370,000 for the construction of an administration-operations building, and a warehouse for the 167th Fighter Squadron.

In September, the beautiful new administration building was visited by thousands, and formally dedicated.

Passengers waiting to go aboard from temporary building. This was a customary scene before new building was erected. The airport has 43 flights per day, averaging 500 passengers coming and going during each 24 hours.

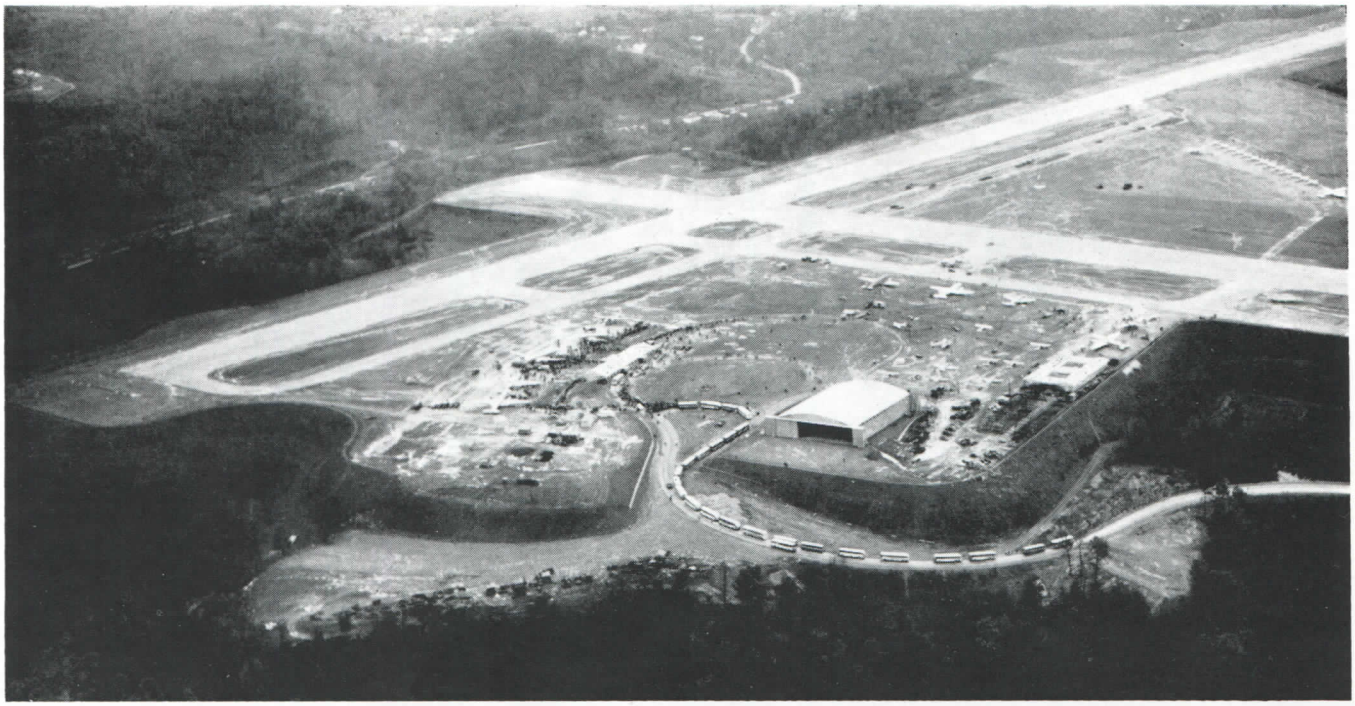
Harold Benton

At the end of its first year of operation Kanawha Airport was awarded the Haire Airport Trophy for Outstanding Achievement. This trophy, given for the year 1948, was presented for being "the outstanding airport in the United States," which included operating within its own income.

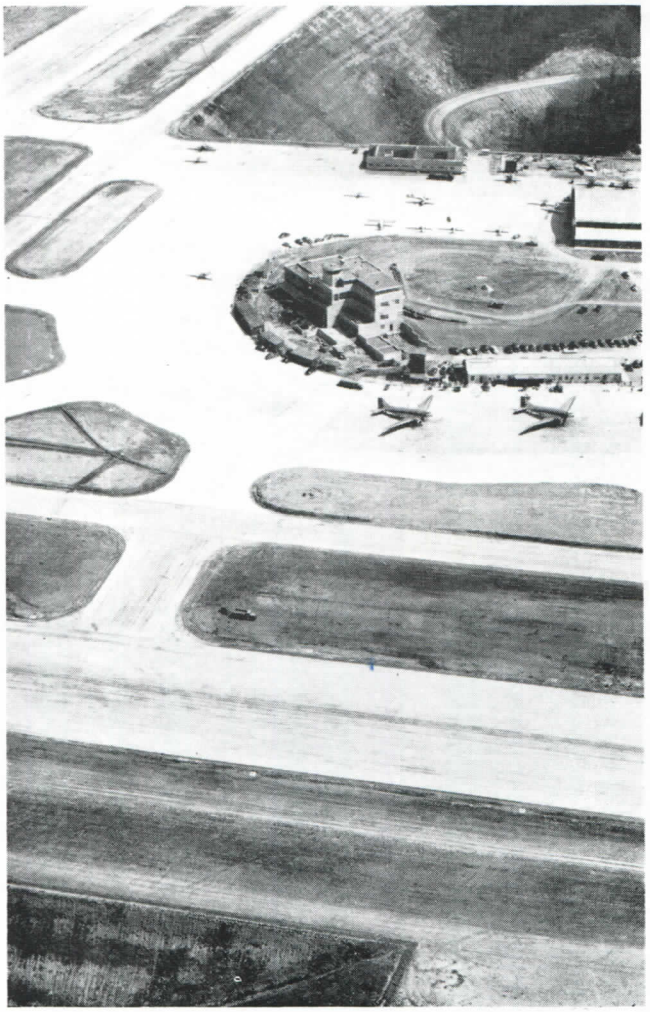
After bulldozing a road up Coonskin Ridge as the first part of the operation, the contractor moved in heavy equipment. On October 18, 1944, three years before the final opening, ground breaking ceremonies were held, the first truckload of earth moved as interested spectators looked on. Kanawha Airport is under way.

Kanawha Airport's first official flight — airmail. The plane landed October 1, 1947, as County officials, post office officials, representatives of the Chamber of Commerce and the City of Charleston are on hand to mark the long awaited occasion.

"Fastest-Man-In-The-World," Captain Charles Yeager, whose home at Hamlin, W. Va., is near Charleston, visited Kanawha Airport with a jet plane. Captain Yeager, credited with being the first to travel faster than sound, took part in a bond drive while in the city, as shown at left. At right, the forepart of his jet plane which brought thousands of visitors to the 'port. (All photos courtesy Charleston Gazette.)



Dedication Day, Nov. 3, 1947. It was cold, raining, yet thousands came to see the airport built in the skies, including many notables. A special travel pattern was essential, involving the use of many buses, a number of which are shown in the photo.



Early spring, 1950, new terminal nearing completion.

Access road, during days of its construction

"OPERATION COONSKIN"

A community can also build a park

If Kanawha County and its people performed a miracle in building the airport, no less a one was performed on June 27 and 28, 1950, when more than a half million dollars in equipment and hundreds of skilled workmen and volunteers began the two-day blitz on the slopes and valleys to the east of Coonskin Ridge, transforming them into "Coonskin Park." What could not be purchased because of the tremendous expense involved, was given to the children and adults of Kanawha County for nothing in the unparalleled effort.

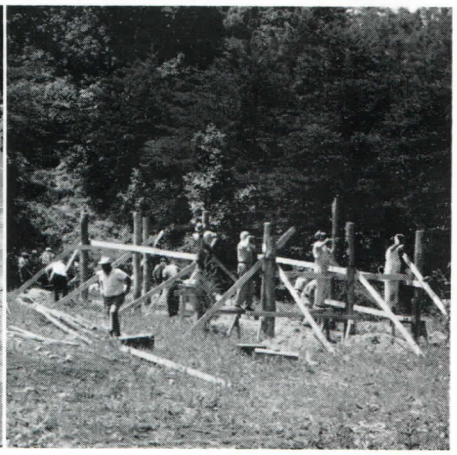
The park contains a dance pavilion, picnic tables, shelters, ovens, two lakes, playground equipment, baseball diamonds, and roads, all as a result of "Operation Coonskin." Governor Okey L. Patteson, Carl Andrews, Mayor of Charleston, officials of the County Court, and thousands of people were on hand to take part. At the conclusion of the second day, completion of the "blitz" was signaled with fireworks.

Eight weeks of preliminary planning preceded "Operation Coonskin." A public service of the Charleston Gazette, the superb effort was made possible by the Associated General Contractors of West Virginia, Kanawha County members of the West Virginia Contractors Association, Associated Equipment dealers, the Charleston Building Contractors Association, many other business, labor and civic organizations.

People came by special train

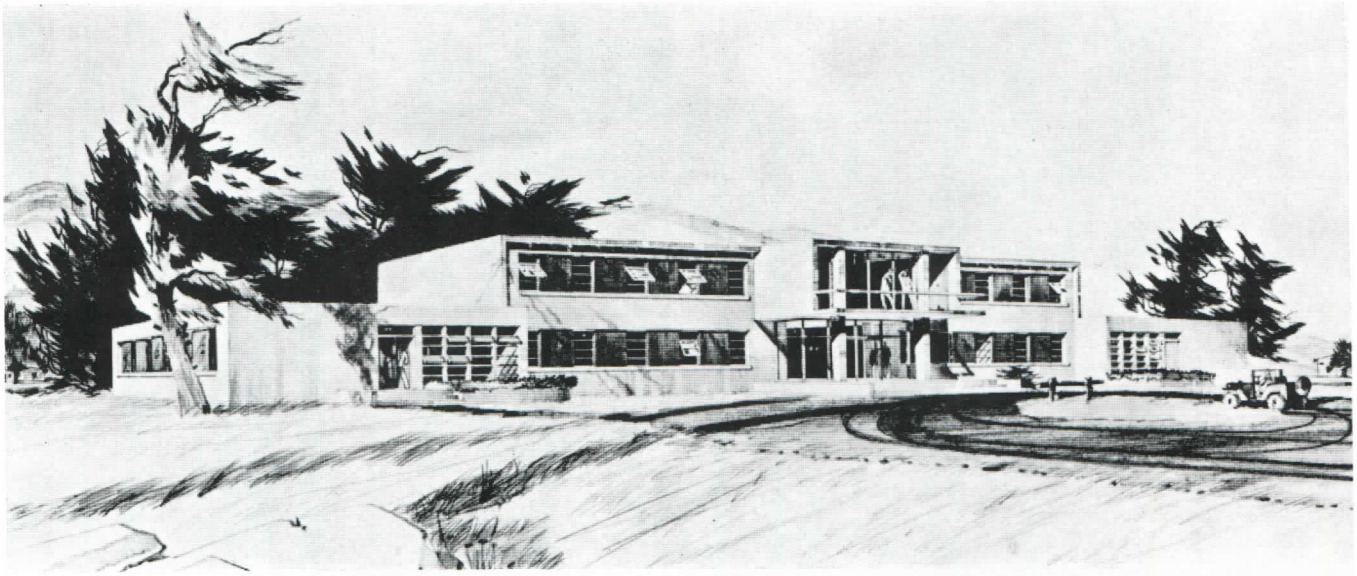
The army provided a pontoon bridge

Shelters went up quickly



These photos were taken during the two-day "blitz" on Coonskin Park, and show the diverse activities carried on during the operation. At top, left, a road is constructed, right, a lake is built. At center, left, drainage ditches are dug. The photo at right shows the variety of equipment provided for the huge task. In the lower panel, left, workmen sand floors of the dance pavilion, right, an example of the carpentry part of the blitz. In other areas of the park hundreds of other volunteers were preparing meals, manning first-aid stations, doing chores. It is estimated that at the end of the second day the park represented an expenditure of $1,000,000. The whole operation was a spontaneous movement by private and personal interests as a gift of the people to the people. (All photos Charleston Gazette.)

167th FIGHTER SQUADRON, U. S. NATIONAL GUARD



Architect's sketch of the new 167th Fighter Squadron's administration building, construction of which will soon begin.

On the northeast corner of Kanawha Airport is located the 167th Fighter Squadron of West Virginia's Air National Guard, 337 officers and men. Under control of the U. S. Air Force, through the office of West Virginia's adjutant general, Brig. Gen. Charles R. Fox, the 167th functions as a part of the State's national guard set-up, has been commanded since its inception in 1947 by Col. James K. McLaughlin.

Housed for the most part in temporary war surplus buildings, the squadron is acquiring a modern hangar with engineering and operation facilities. An administration building and a storage structure have been authorized to cost $370,000.

Equipped principally with conventional piston-engine type fighter aircraft, the squadron undergoes intensive practice in combat formations, gunnery and all-weather flying, and tactical problems. In the latter the "Coonskin Boys" have joined forces with those from Ohio and Kentucky, operating along an imaginary line of thousands of miles. Young men from all sections of West Virginia make up the Fighter Squadron, which compiled an enviable record as a fighter group in World War II.

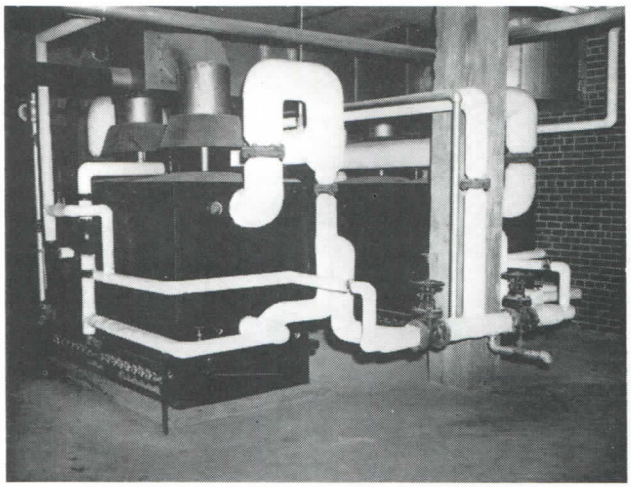
Want to Be a "Coonskin Boy"?

For information on enlistment or commissioning in the 167th Fighter Squadron, apply at squadron headquarters, Kanawha Airport.

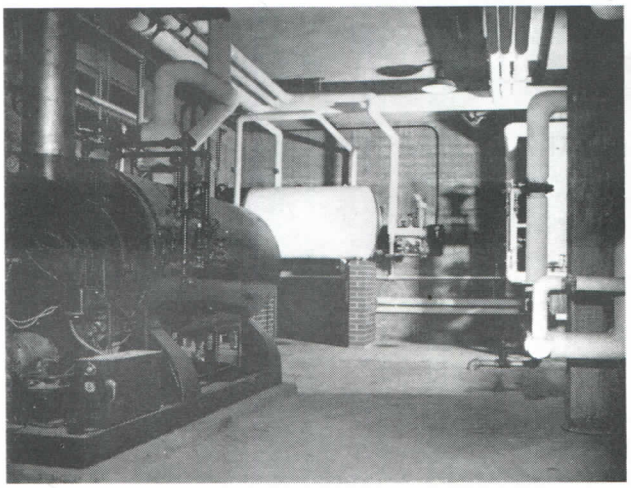
167th's planes lined up near headquarters

"Hot Rocks" of the 167th in close formation over Charleston

THE TERMINAL BUILDING IS COMFORTABLE



American Standard gas boilers to heat Terminal building



Above, a high pressure generator supplying steam to kitchen for cooking purposes. White tank in background supplies ample hot water for kitchen use, thus insuring high degree of cleanliness.

There are many outstanding attractions in Kanawha Airport's beautiful new Terminal building. Contributing to the comfort of the thousands who will visit it, and to the excellence of the structure itself are the many heating and plumbing features which have been embodied. West Virginia Heating and Plumbing Co. installed **CRANE PREFERRED PLUMBING** fixtures, the plumbing and heating, and piping for the air conditioning system. Once more, as we have done at other times in our **62 years of operation**, we congratulate our fellow citizens on a magnificent community achievement.

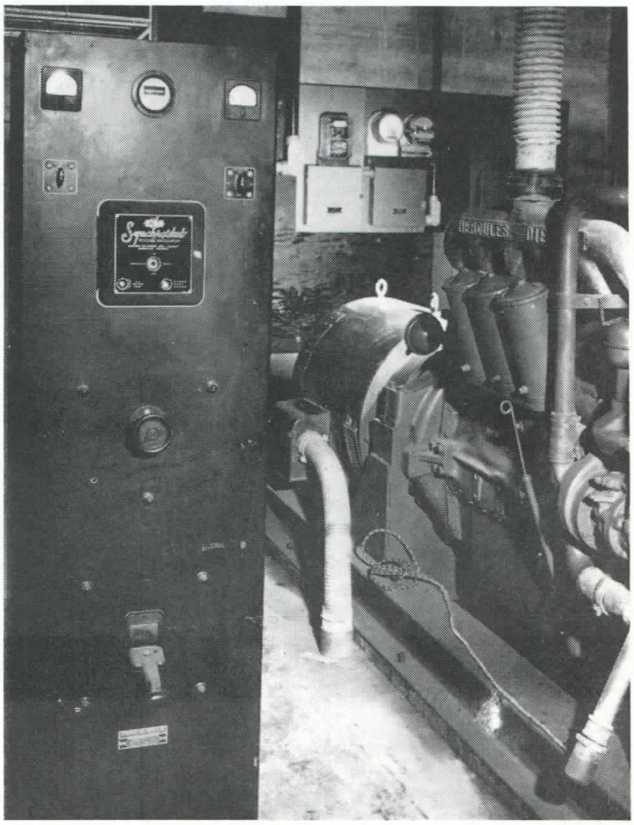
WEST VIRGINIA HEATING & PLUMBING CO.

Founded 1888

HEATING AND PLUMBING CONTRACTORS

233 Hale Street Charleston, W. Va.

With this Automatic Emergency System, Kanawha Airport Will Never Lack Electric Power



The oil and water of this diesel and the equipment itself are automatically kept at operating temperature so that starting will be instantaneous. At left is control board; right, diesel engine.

If for any reason there is ever a power failure at Kanawha Airport this equipment takes over automatically and instantaneously. Power for the instrument landing system, runway, signal and taxi strip lights, the control tower, in short, all the electricity used by the airport will be supplied, for when power goes off this equipment goes on. It is an installation similar to that of the great airports of the world.

Schoolfield-Harvey installed this equipment, as well as the runway lighting system, obstruction and signal lights, public address system, all the Terminal building's wiring and fixtures. (Incidentally there is 100,000 feet of underground wiring at the airport.)

This is another outstanding installation by the Kanawha Valley's best known electrical firm. Whether your needs are for industrial or residential electrical work call

SCHOOLFIELD-HARVEY ELECTRIC COMPANY

Electrical Contractors

1016 QUARRIER ST. CHARLESTON, W. VA.

"CATERPILLAR" FLEET ON THE JOB

This memo is pasted on the back of this photo:

CATERPILLAR TRACTOR CO.
Peoria, Ill.

Rec'd from TEEN BECKSTED, Photographer
Date Taken 5/28/45
Model DW10
Owner Harrison Construction Company
Pittsburgh, Pa.

DESCRIPTION OF WORK

Construction of Kanawha Airport in the sandstone hills near Charleston, W. Va., 9,100,000 cu. yds. of excavation. "Caterpillar" Diesel DW10 tractors and 10 cu. yd. capacity wagons hauling mixed yellow clay and shale on 1800' haul, averaging 5.5 trips per hour working 8 hours a day. Each tractor uses 3½ gals. 10¢ fuel per hour. A large fleet of "Caterpillar" diesel tractors, engines and minor graders are also in use on this job.

"CATERPILLAR" DIESEL TRACTORS & ROAD EQUIPMENT
West Virginia Tractor and Equipment Co. – Charleston – Clarksburg

A New Kuhn Landmark In The Magic Valley!

KANAWHA AIRPORT takes second place to none in the matter of terminal facilities. There may be larger terminal buildings, but certainly no finer in the matter of construction and the use for which the building was planned — the comfort and convenience of the public and the operating airlines.

Completed, the Kanawha Airport Terminal building is another in the growing number of Kuhn-built structures representing the skill, integrity and versatility of this organization. It is a matter of pride to have served as general contractors for this ultra-modern structure. Building for public use, industrial, institutional and business, the Kuhn organization has the experience and facilities to do the job to the letter as planned and specified.

Kuhn Construction Company

Incorporated

General Contractors and Consulting Engineers

18th Floor, Kanawha Valley Building, Charleston, W. Va.

MEMBER, ASSOCIATED GENERAL CONTRACTORS OF AMERICA

THE RUNWAYS LOOKED LIKE THIS IN THE SPRING OF '47

AIR SERVICE BEGINS AND ENDS ON PAVEMENT

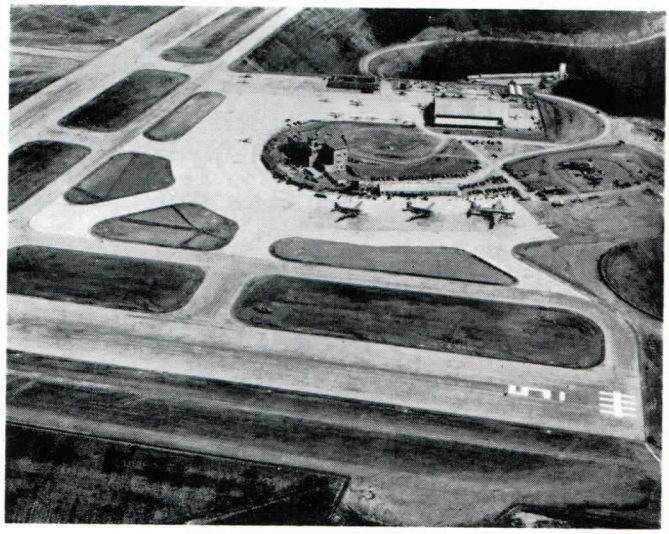
Elam

At Kanawha Airport there are approximately 300,000 square yards of paving (exclusive of the national guard installation area). If this were stretched out into a 20-foot wide strip of roadway it would extend from Charleston almost to Gauley Bridge. The runways, as the close-up photo of paving operations in '47 shows, are wide so that planes taking off and landing might have ample room.

There were two separate paving contracts. The first was for the runways and taxi strips to prepare the airport for the opening to traffic. Paving on the first contract began in the fall of 1946, was completed early summer 1947. The second contract for additional taxi strips, terminal area apron, etc., began in July 1949, was completed in May 1950.

These Companies furnished the materials and did the paving for the County Court of Kanawha County, including concrete curb, gutter and sidewalks of the Terminal building, airport side, also the roadway approaches on the opposite side. The runways are asphaltic concrete, the parking areas Portland cement concrete. All the materials were mixed in our plant and hauled to the site. This paving job received considerable publicity and attention in roadway publications.

For countless purposes asphaltic concrete makes an ideal surface. Though we have done numerous large jobs, there are many uses and applications for the home owner and for businesses. We would be glad to answer inquiries. For an example of our work we point with pride to the nation's most unusual airport on Coonskin Ridge in Kanawha County.



Bollinger

This photo was taken before completion of Terminal building. Note the paving which surrounds entire Terminal area.

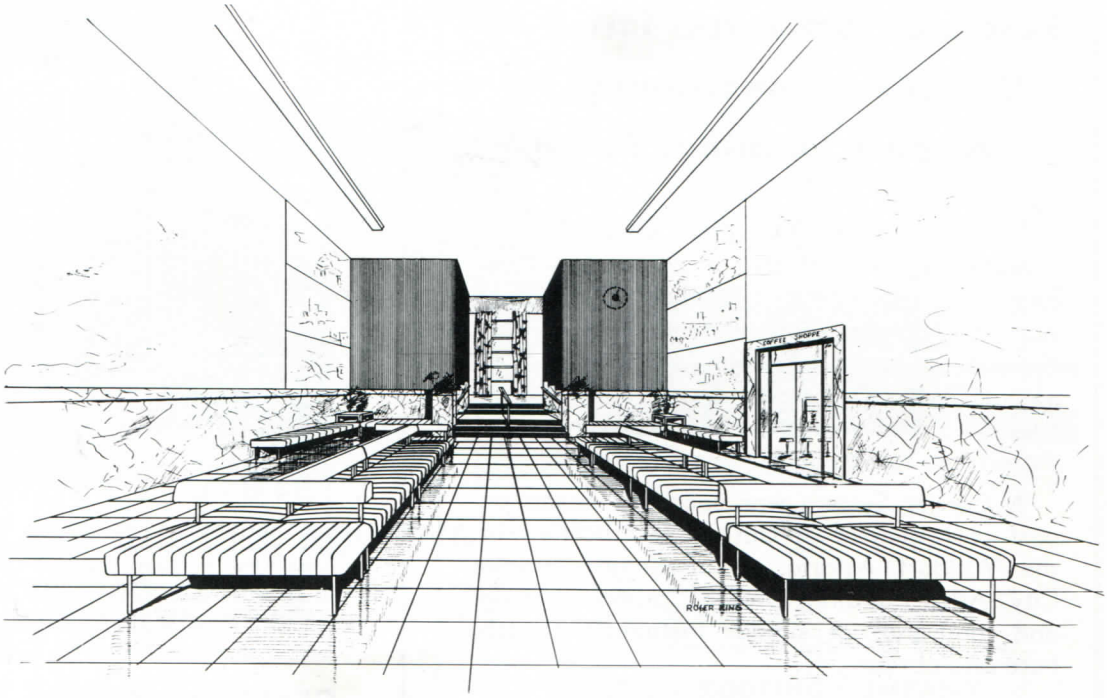
WEST VIRGINIA BLACK ROCK CO.

8 SPRING STREET, W. — MANUFACTURERS

ANDERSONS, INC.

1500 PENNSYLVANIA AVE. — CONTRACTORS

The latest in CONTEMPORARY DESIGN....



Pen sketch of waiting room, Kanawha Airport Terminal

Since Kanawha Airport Terminal building is modern in concept and was built for a medium of swift travel, the interior furnishings in the beautiful structure were chosen to harmonize with the "modern" idea, and are the very latest in contemporary design.

And since the building itself and its facilities are meant for all people, travelers as well as visitors and sightseers, the interior has been given color and beauty that it may be enjoyed by everyone.

Five colors have been used — natural colors, so to speak, giving the interior a fresh, pleasing atmosphere. Red, yellow, green, blue, and brown in their mellowness and intensity have been applied to the various sections of the building in a manner that is unique in public interiors.

The club dining room features a mural, "A Piece of My Workshop," by Calder, also folding tables by Herman Miller Furniture Company, pedestal tables by Thonet Industries, Inc., and sofas, love seats, stacking stools and impregnated molded plywood dining chairs by Knoll Associates.

The main dining room done all in yellow has similar tables, and small plywood foam rubber dining chairs, designed by Saarinen.

The waiting room has red and white plastic covered benches, which were especially designed for Kanawha Airport's Terminal building by Knoll Associates. There is one brown wall opposite a full glass wall, which looks out onto the apron, taxi strip and landing field area. On either side of this are pictorial murals of familiar scenes.

The foyer leading into the main dining room is made very colorful by a large mural called "El Sol" by Miro. Furnishings here are also by Knoll Associates, with the exception of two Italian chairs made of pipe and canvas by Paolo Chessa and manufactured by the J. F. Furniture Company.

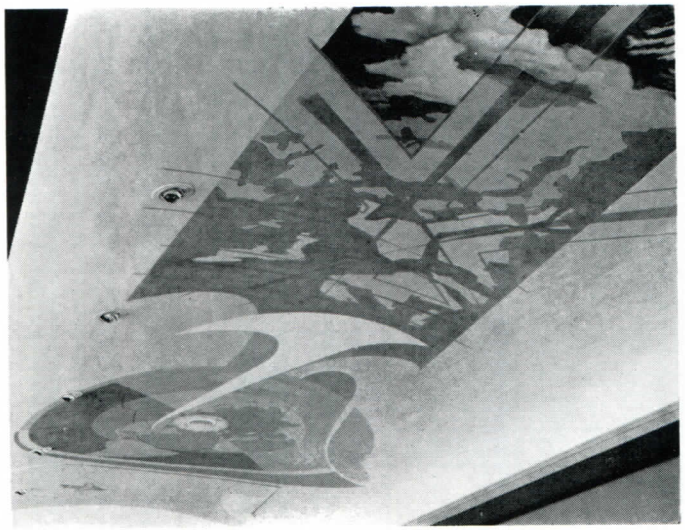
This is not a complete resume of the interior decorating, but will give on idea to what extent the County Court of Kanawha County has gone to make a building beautiful and interesting.

The interior decorating required a lot of research work and many sketches, and was handled completely by Woodrums' interior decorating department.

We feel sure that Kanawha Airport's Terminal building will provide much pleasure to all visitors to the airport, whether they come from near or far — that word of it and the airport on the mountain tops will be carried to all points of the globe.

Woodrums

TERMINAL BUILDING MURAL

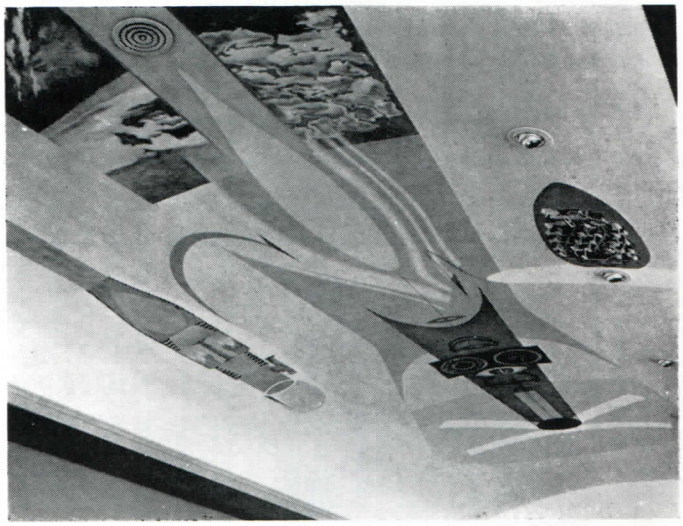


Photos by Capitol Aero

Visitors entering the ticket concourse of Kanawha Airport's terminal building will see, upon looking upward, a beautiful display of color in the mural painted by the renowned artist, Robert Lepper. Work on the mural required more than a year in planning and execution.

Beginning with a 12-foot conical projection of the world (photo at top, far end) on which appears a pin point designation for Charleston, Lepper's mural in successive sections symbolizes aerial travel, the theory of aerodynamics, methods of plane propulsion and safety devices. Blue, reds, greens and yellows predominate in the mural but other colors increase attractiveness of the entire scene.

Overlaying the hemispherical map is a network of thin black lines showing areas touched by airlines serving the local airport — next follows an 11-foot long rectangle, depicting an aeronautical chart. Markings indicate air courses, topographic land and water landmarks, elevations and other flying "keys." The scene dissolves into a cloud formation — almost the halfway point of the mural (photo at left) — and changes to another showing the testing phase of the aviation industry. This part of the mural is prominently identified by a plane wing section surrounded by symbolical "swish" lines denoting air currents. The scene is a portrayal of airfoil section demonstrating principle of lift. On either side of this panel is shown methods of air propulsion — one square being devoted to the present radial engines and the other the jet engines. There follows a layout of a landing field, the air strips, radar screen, landing lights and symbols of the instrument landing system which now have become a part of Kanawha Airport's operation.



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Member
County Court

J. M. Slack, Jr.
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County Court

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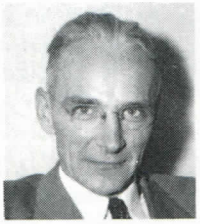


Dale G. Casto
Attorney
County Court

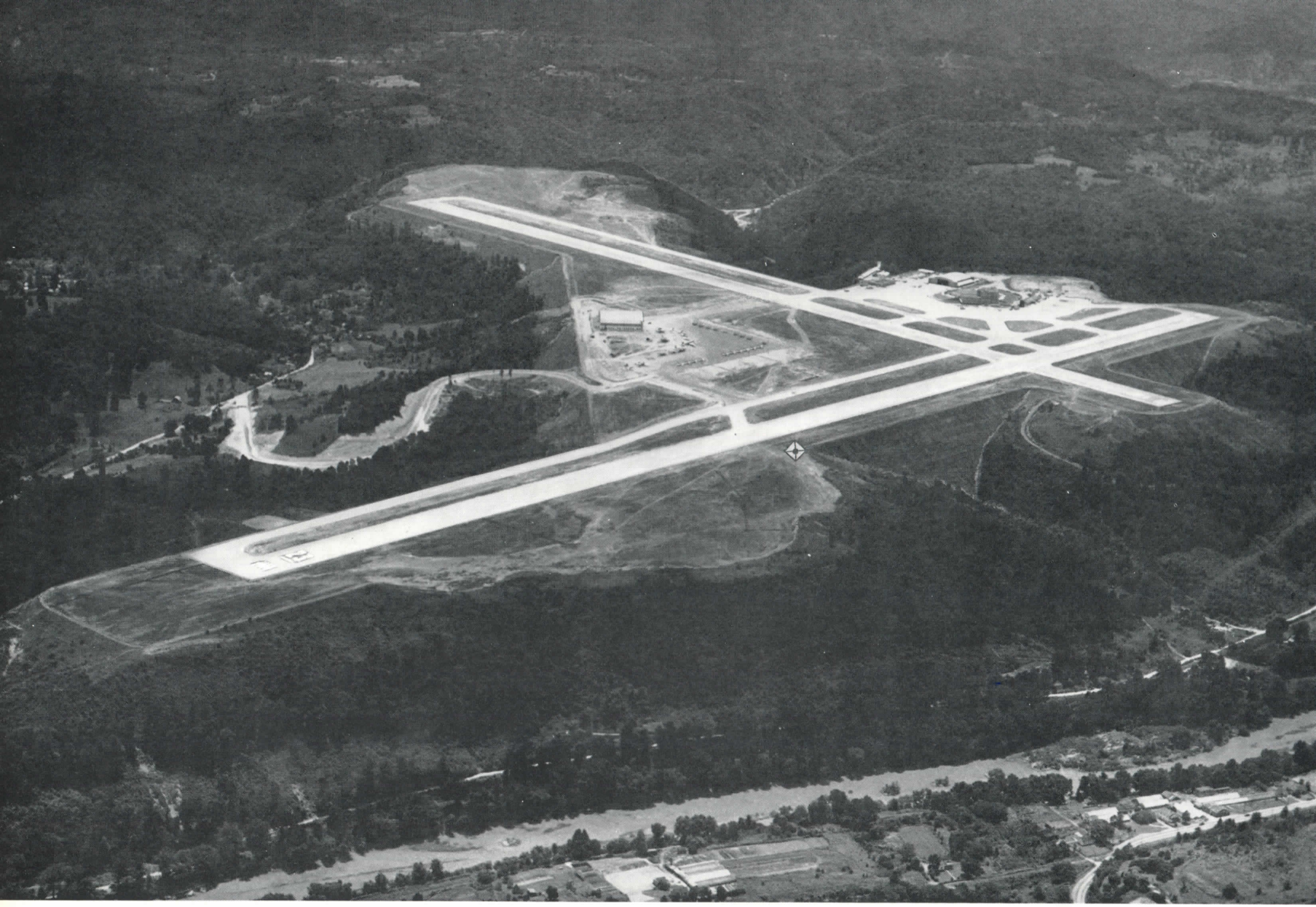
Fred C. Alley
Manager, Kanawha
County Airport

James G. Carper
Former Member
County Court

ACKNOWLEDGMENTS

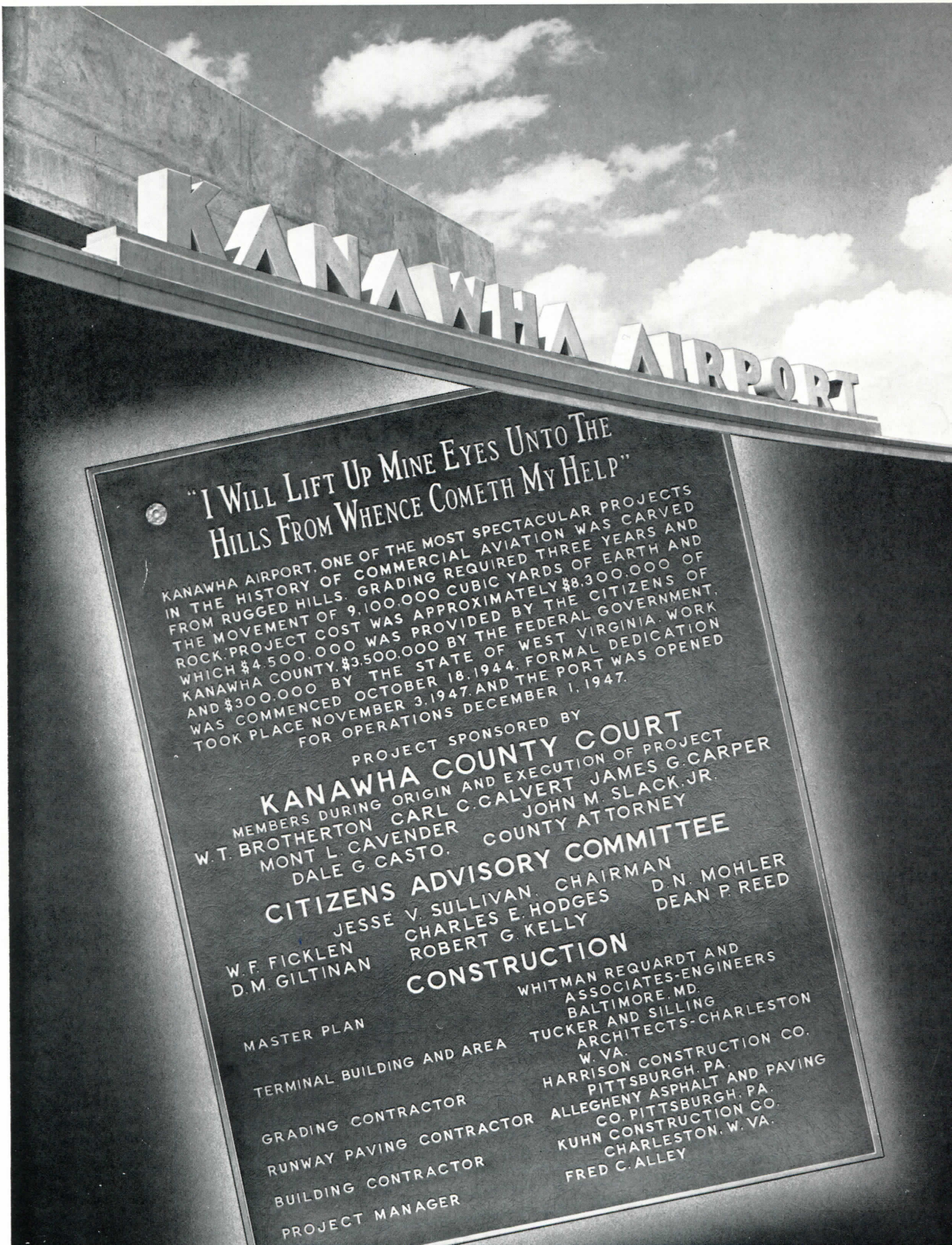
Front cover, taken May 15, 1945, West Virginia Tractor & Equipment Co. Back cover, Harold Benton, (the plaque shown is inside Terminal Building). Inside back cover, Lon Hutchinson. Printing, Charleston Printing Co. Cover plates, Charleston Engraving Co. Research, Mrs. Irene Hambrick. Design and layout of booklet, Douglass C. Crummett; artwork, Paul K. Jordon; both of Art Studios Division, Advertising, Inc. Editor, Charles A. Williamson. Produced under direction of County Court of Kanawha County, with invaluable assistance from Charles E. Hodges, Fred Alley, Louis Hark, and the architects, Tucker & Silling.

W. T. Brotherton
Former Member
County Court



Hutchins

This aerial photo shows Kanawha Airport in its entirety, as it appeared at the time of completion of the new terminal building. The squared "X" has been placed approximately at the point where the front cover picture was taken in 1945. This, then, completes the story of "Moving Mountains to Build Kanawha Airport." Today, this unusual airport is a useful monume to a great community effort and has more than fulfilled all that was e pected of it. On the leveled ridges, thousands of people from a radius of 1(miles arrive and depart on journeys to and from all points of the compas


KANAWHA AIRPORT
"I WILL LIFT UP MINE EYES UNTO THE HILLS FROM WHENCE COMETH MY HELP"
KANAWHA AIRPORT, ONE OF THE MOST SPECTACULAR PROJECTS IN THE HISTORY OF COMMERCIAL AVIATION WAS CARVED FROM RUGGED HILLS. GRADING REQUIRED THREE YEARS AND THE MOVEMENT OF 9,100,000 CUBIC YARDS OF EARTH AND ROCK. PROJECT COST WAS APPROXIMATELY $8,300,000 OF WHICH $4,500,000 WAS PROVIDED BY THE CITIZENS OF KANAWHA COUNTY, $3,500,000 BY THE FEDERAL GOVERNMENT, AND $300,000 BY THE STATE OF WEST VIRGINIA. WORK WAS COMMENCED OCTOBER 18, 1944. FORMAL DEDICATION TOOK PLACE NOVEMBER 3, 1947, AND THE PORT WAS OPENED FOR OPERATIONS DECEMBER 1, 1947.
PROJECT SPONSORED BY
KANAWHA COUNTY COURT
MEMBERS DURING ORIGIN AND EXECUTION OF PROJECT
W. T. BROTHERTON CARL C. CALVERT JAMES G. CARPER
MONT L. CAVENDER JOHN M. SLACK, JR.
DALE G. CASTO. COUNTY ATTORNEY
CITIZENS ADVISORY COMMITTEE
JESSE V. SULLIVAN, CHAIRMAN
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TERMINAL BUILDING AND AREA TUCKER AND SILLING ARCHITECTS-CHARLESTON W. VA.
GRADING CONTRACTOR HARRISON CONSTRUCTION CO. PITTSBURGH, PA.
RUNWAY PAVING CONTRACTOR ALLEGHENY ASPHALT AND PAVING CO. PITTSBURGH, PA.
BUILDING CONTRACTOR KUHN CONSTRUCTION CO. CHARLESTON, W. VA.
PROJECT MANAGER FRED C. ALLEY