

## WDBJ ENGINEER BEGAN JOB EARLY

### Robert D. Avery Has Had Life Interest in Radio

WDBJ's chief engineer, Robert D. Avery, was seated at the test bench in a back room at the transmission building, where he spends a good deal of his time. The setting was the only natural one for Mr. Avery, a radio technician practically all his life. "If you like your job you don't care how much time you spend on it," is the way he puts it.

When not tinkering with WDBJ's 5,000-watt transmitter and testing its various parts on the test bench of his own design, he can probably be found upstairs in the apartment occupied by himself and his wife, the former Miss Frances Snyder, of Roanoke, playing some of the 1,000 or more records in his collection.

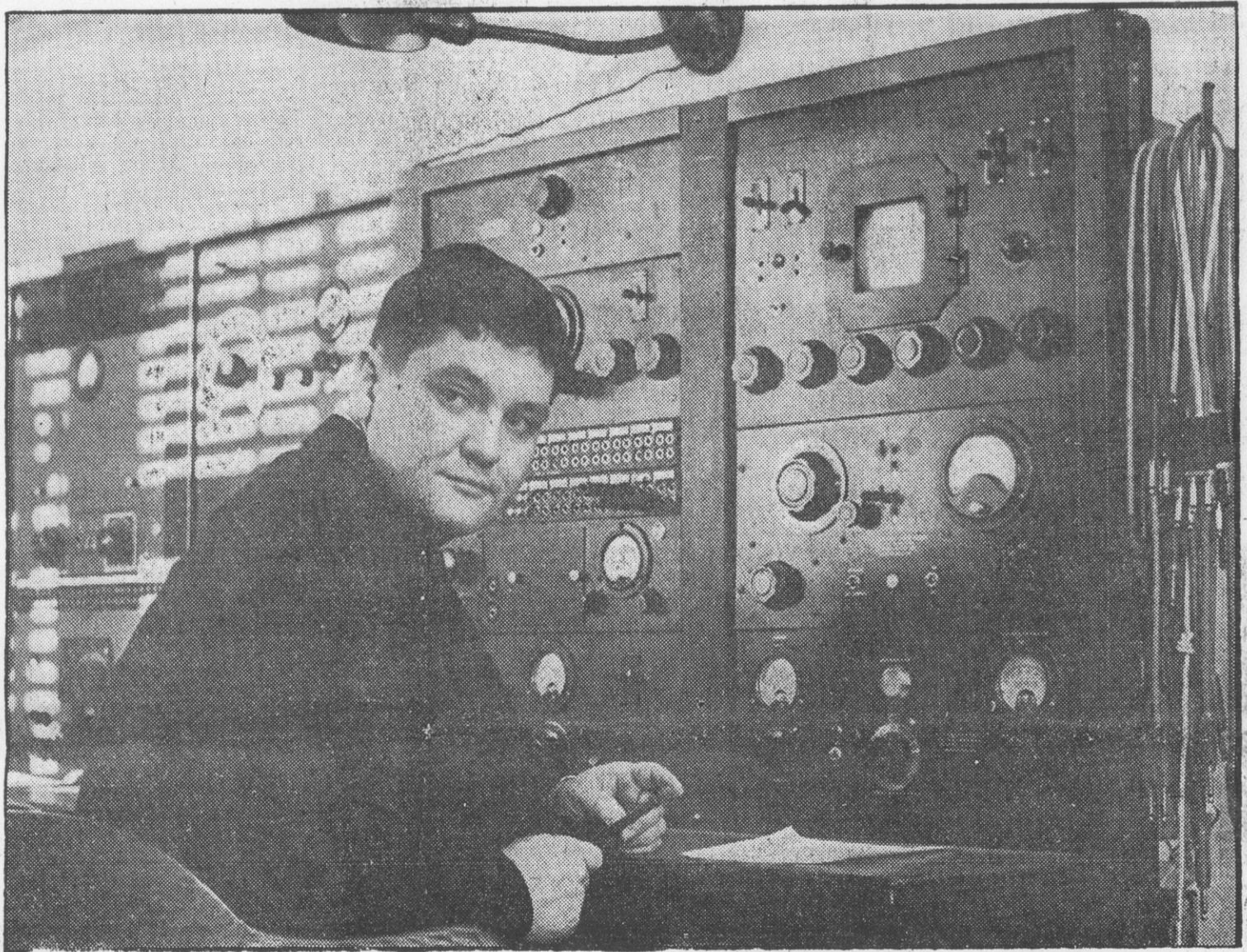
#### Got First Job

Nearly 20 years ago, not long after WDBJ first went on the air and while the transmitter was still in the rear of the Richardson-Wayland electric store, young Bob Avery hung about the radio and electric shop so constantly that (according to his story) the proprietor finally inquired of F. E. Mattox, operator of the transmitter, if Avery was on the company's payroll.

"Well, either get rid of him or put him on," Mr. Richardson said, and Avery went on the next week at a salary of \$12.50 and with a job repairing electric irons.

Already interested in radio from the days of the earliest commercial broadcasts in this country, Avery had constructed a crystal receiving set several years before WDBJ began broadcasting, but all he could get was lightning flashes, for there was no commercial station near enough to be picked up. About 1924 he built his first tube set—with a single tube purchased second-hand for about \$4—to get the first broadcasts from WDBJ. An earlier set he had built to hear Arlington time signals, and also succeeded in picking up ship broadcasts in code.

## WDBJ's Chief Engineer at His Testing Panel



Robert D. Avery, chief engineer for station WDBJ, spends most of his time at the panel shown above, equipped with devices for testing the various parts of the transmitter which puts the station "on the air". The panel was designed by Mr. Avery, and portions of it constructed by him. At the extreme right are the "modulation monitor," which keeps the volume within the prescribed limit, a device to measure distortion and noise, and the "cathode ray oscillograph," which will give a visual indication of any sort of electrical wave, and can be attached to any part of the transmitter.

Behind Mr. Avery's head are volume meters which register the maximum volume put out by the station, a measuring meter of Mr. Avery's own design which can be hooked up to every other piece of equipment on the board for reading at a glance, and a generator for testing the transmitter. Beyond are a wave analyzer which will break up a sound wave into the fundamental and the overtones, and register any distortion, and a generator for frequencies of any pitch for testing. The far bank on the left contains a receiving set and amplifier. (Times Staff Photo—C. W. Martin.)

# Today's Radio Programs

## 322.4—Station WDBJ—930-K

ROANOKE TIMES-WORLD-NEWS

At about the time he got his commercial operator's license, he also secured an amateur license for "ham" broadcasting, but had little time to give to it. That was in 1929, when he began as an operator for WDBJ, and a few months later he did his first construction work on a radio transmitter in assisting Mattox in changing the frequency from 1,310 to 930 kilocycles, in accordance with a new federal license.

### Helped Build WLVA

About the same time, he and Mattox constructed the transmitter for station WLVA in Lynchburg, Avery building the "audio" portion—that part of the apparatus which picks up the sound and transforms it into radio waves. He still is more interested in this end of the work.

A goodly portion of his first pay check, Avery recalls, went into several records of the voice of Richard Crooks, for he had already begun to develop a decided taste for "good music" through listening to it while working around the transmitter. Out of that beginning has come a collection of records totalling more than a thousand selections, now cross-filed four ways and including a dozen or more complete symphonies, a great many shorter orchestral numbers, and a large number of operatic arias and other vocal selections. In the early days, he says, he realized he "couldn't afford both gigs and hobbies (radio and music), so I took hobbies!" Now he has a wife and can't afford the records," came the retort—perfect from Mrs. Avery, nearby.

One record he is particularly anxious to add to the collection, and has been unable to find since his own was borrowed and never returned, is Hipolito Lazaro's recording of an aria from "The Pearl Fishers" by Bizet. His favorites include Tchaikovsky's Fifth Symphony, Schubert's Unfinished, and Revel's "Bolero." With the latter, he has conducted an interesting experiment with his guests, recording their pulse beats as the tempo of the music varies, and he has found the pulse of the listener almost invariably keeps pace with the tempo of the music.

He has constructed a loud-speaker in the living room of his apartment, which can be connected to the automatic phonograph, to the WDBJ or CBS telephone lines carrying programs to the transmitter, or to a receiving set picking up the broadcasts from the transmitter, and has wired it for remote control from any room in the apartment.

As chief engineer for the local station, a position he has held since 1931 when the station was purchased by The Times-World corporation, Avery has designed and supervised the construction and installation of much of the equipment, and is now ready to begin work on an auxiliary transmitter, having already completed the design. Under the supervision of Mr. Mattox, he built the transmitter used by the station when operating from the top of the Shenandoah Life building, and the testing bench now in use to keep the transmitter operating properly is of his design—much of it of his construction.

### A. M.

- 8:30—Lyric Serenade.
- 8:45—Sidney Raphael, Pianist.
- 9:00—Sunday Morning at Aunt Susan's.
- 9:55—Press-Radio News.
- 10:00—Church of the Air.
- 10:30—W. Brown—Strings.
- 11:00—First Presbyterian Church Service—Dr. R. A. Lapsley, Jr., Pastor.
- 12:00—Noon—Major Bowes' Capitol Theater Family.

### P. M.

- 12:30—"Old Songs of the Church"—with Ruth and Mary—Local Studio.
- 12:45—Salt Lake City Tabernacle Choir and Organ.
- 1:00—Church of the Air.
- 1:30—Poet's Gold—David Ross and Orchestra.
- 1:45—Romany Trail.
- 2:00—National Negro Congress Program.
- 2:30—Lew White Entertains.
- 2:45—St. Louis Serenade.
- 3:00—Special Concert of Columbia Composers' Commission—Howard Barlow Composers' Orchestra and Chorus.
- 5:00—"Phyl" Coe Radio Mysteries—Local Studio.
- 5:15—Gems of Melody—Local Studio.
- 5:30—The Sacred Hour—Vinton Methodist Church—Local Studio.
- 6:00—Music in a Sentimental Mood—Local Studio.
- 6:15—Associated Press News—Local Studio.
- 6:25—Sports Review—Local Studio.
- 6:30—Romantic Rhythms—Seymour Simon's Orchestra.
- 7:00—The Comedy Stars of Broadway—Local Studio.
- 7:15—The Witching Hour—Local Studio.
- 7:30—"Phil Baker, the Great American Trouper."
- 8:00—Columbia Workshop.
- 8:30—Birthday Party.
- 9:00—The Sunday Evening Hour.
- 10:00—Hollywood Showcase—Lud Gluskin and Guest.
- 10:30—"Headlines and Bylines."
- 11:00—Glen Gray and His Orchestra.
- 11:30—Cab Calloway and His Orchestra.

### MONDAY, OCT. 18

### A. M.

- 7:00—The Musical Clock—Local Studio.
- 8:00—Morning Devotions—Rev. N. B. Harmon, Jr.—Local Studio.
- 8:15—Musical Grab Bag—Local Studio.
- 8:25—Associated Press News—Local Studio.
- 8:30—Fiddler's Fancy.
- 9:00—Mary Daily, the Personal Shopper—Local Studio.
- 9:15—Richard Maxwell.
- 9:25—Press-Radio News.
- 9:30—Morning Moods.
- 9:45—The Monticello Party Line—Local Studio.

- 10:00—Organ Melodies—Local Studio.
- 10:15—Myrt and Marge.
- 10:30—The Melody Weavers—Local Studio.
- 10:35—Tonic Tunes—Local Studio.
- 10:45—Ruth Garhart, Songs.
- 11:00—"Extra! Extra!"—Local Studio.
- 11:15—"Linda's First Love"—Local Studio.
- 11:30—"Big Sister."
- 11:45—"Aunt Jenny's Real Life Stories."
- 12:00—Noon—V. P. I. Program—from Blacksburg Studio.

### P. M.

- 12:15—"Your News Parade"—Edwin C. Hill.
- 12:30—"Ma Perkins"—Local Studio.
- 12:45—Associated Press News—Local Studio.
- 12:58—Stock Market Reports—Local Studio.
- 1:00—Associated Press News—Local Studio.
- 1:15—"Refreshment Time, with Singin' Sam"—Local Studio.
- 1:30—Dixie Serenaders.
- 2:00—The Bulletin Board—Local Studio.
- 2:15—Milton Charles, Organist.
- 2:30—American School of the Air.
- 3:00—Dalton Brothers.
- 3:15—Elsie Thompson at the Organ.
- 3:30—Broadway Matinee.
- 4:00—Ted Malone's Between the Bookends.

### 8:30—Sunday Children Concert.

- 9:00—Harold Nagel's Orchestra.
  - 9:30—Harry Gilbert and Organ.
  - 10:00—Dr. Sockman's Pulpit.
  - 10:30—Madrigal Singers Program.
  - 11:00—Press-Radio News Period.
  - 11:05—Ernest and Muzzy, Pianos.
  - 11:15—Ernest and Muzzy, Drama.
  - 11:45—Henry Busse's Orchestra.
  - 11:59—Arlington Time—also w/z.
  - 12:00—Dorothy Dreslin, Soprano.
- ### P. M.
- 12:30—U. of Chicago Roundtable.
  - 1:00—Paul Martin and Music.
  - 1:30—Tuskegee Singers.
  - 2:00—Sunday Drivers, Variety.
  - 2:30—The Widow's Sons; Serial.
  - 3:00—Tapestry of Melody Concert.
  - 3:30—Bill Slater's Party.
  - 4:00—Romance Melodies, Orchestra.
  - 4:30—World Is Yours, Dramatic.
  - 5:00—Marion Talley Songs.
  - 5:30—Time of Your Life.
  - 6:00—Catholic Program.
  - 6:30—"A Tale of Today."
  - 7:00—Jack Benny, Mary and Cast.
  - 7:30—Recital from the Fireside.
  - 7:45—Jerry Belcher's Neighbors.
  - 8:00—W. C. Fields, etc.
  - 9:00—Merry Go Round.
  - 9:30—Album of Music.
  - 10:00—Rising Musical Stars.
  - 10:30—To Be Announced.
  - 11:00—Russ Morgan's Orchestra.
  - 11:30—Press-Radio News Period.
  - 11:35—Sandy Williams Orchestra.
  - 12:00—Barney Rapp's Orchestra.
  - 12:30—Earl Hines and Orchestra.

### CBS-WABC NETWORK

### A. M.

- 8:00—Reveille of Organ.
- 8:30—Serenade.
- 8:45—Michel Roscoe at the Piano.
- 9:00—Sunday with Aunt Susan.
- 9:55—Press-Radio News Period.
- 10:00—Sermon in Church of Air.
- 10:30—Walberg Brown Strings.
- 11:00—Texas Rangers.
- 11:30—Major Bowes Family.

### P. M.

- 12:30—Salt Lake Choir and Organ.
- 1:00—Sermon in Church of Air.
- 1:30—David Ross Poet's Gold.
- 2:00—Lew White, Organ, and Romany Trail.
- 2:30—Lloyd Pantages on Hollywood.
- 2:45—The St. Louis Serenaders.
- 3:00—Everybody's Music, Orchestra.
- 4:00—To Be Announced.
- 5:00—Conrad Nagel's Theater.
- 5:30—Guy Lombardo.
- 6:00—Joe Penner and Cast.
- 6:30—Romantic Rhythms.
- 7:00—Jeanette MacDonald.
- 7:30—Phil Baker and Bottle.
- 8:00—CBS Workshop, Dramatic.
- 8:30—Your Birthday Party.
- 9:00—Detroit Symphony.
- 10:00—The Hollywood Showcase.
- 10:30—Headlines and Bylines.
- 11:00—Glen Gray and Orchestra.
- 11:30—Cab Calloway and Orchestra.
- 12:00—Henry King Orchestra.
- 12:30—Red Norvo and Orchestra.

### NBC-WJZ (BLUE) NETWORK

### A. M.

- 8:00—Melody-Hour Orchestra.
  - 8:30—Pictures in Tone, Vocals.
  - 9:00—Coast to Coast on a Bus.
  - 10:00—Kirchhoff Russian Melodies.
  - 10:30—The Dreams of Long Ago.
  - 11:00—Press-Radio News Period.
  - 11:05—Alic Remsen's Contralto.
  - 11:15—Nellie Revell's Interviews.
  - 11:30—Chopin Anniversary Program.
  - 12:00—The Southernaires Quartet.
- ### P. M.
- 12:30—Radio City Symphony.
  - 1:30—Back Home Music Drama.
  - 2:00—Magic Key of Radio.
  - 3:00—On Broadway, Dramatic.
  - 3:30—Popular Melodies, Dance.
  - 4:00—Dr. Fosdick and Vespers.
  - 4:30—To Be Announced.
  - 4:45—Dog Heroes, Dramatic.

- 5:00—Opera Auditions.
- 5:30—Smiling McConnell.
- 6:00—Ernest Gill and Orchestra.
- 6:30—Ted Wallace Sing Band.
- 7:00—Music from the Masters.
- 7:30—Feg Murray, Nelson Orchestra.
- 8:00—Sunday Symphony.
- 9:00—Tyrona Power, Dramatic.
- 9:30—George Fischer Comment.
- 9:45—Irene Rich and Her Drama.
- 10:00—Mental Telepathy Test.
- 10:30—Cheerio on the Radio.
- 11:00—Judy and Bunch in Song.
- 11:10—Press-Radio News Period.
- 11:15—The Choir Symphonette.
- 11:30—Tyrona Power.
- 12:00—Henry Busse's Orchestra.
- 12:30—Jesse Hawkins Orchestra.