

A CareerZone Occupational Brief for:

Broadcast Technicians

An occupation in Engineering and Technologies

New York State Department of Labor

David A. Paterson, Governor

Job Description

Set up, operate, and maintain the electronic equipment used to transmit radio and television programs. Control audio equipment to regulate volume level and quality of sound during radio and television broadcasts. Operate radio transmitter to broadcast radio and television programs.

Interests

Realistic - Realistic occupations frequently involve work activities that include practical, hands-on problems and solutions. They often deal with plants, animals, and real-world materials like wood, tools, and machinery. Many of the occupations require working outside, and do not involve a lot of paperwork or working closely with others.

Tasks

1. Maintain programming logs, as required by station management and the Federal Communications Commission.
2. Control audio equipment to regulate the volume and sound quality during radio and television broadcasts.
3. Monitor strength, clarity, and reliability of incoming and outgoing signals, and adjust equipment as necessary to maintain quality broadcasts.
4. Regulate the fidelity, brightness, and contrast of video transmissions, using video console control panels.
5. Observe monitors and converse with station personnel to determine audio and video levels and to ascertain that programs are airing.
6. Preview scheduled programs to ensure that signals are functioning and programs are ready for transmission.
7. Select sources from which programming will be received, or through which programming will be transmitted.
8. Report equipment problems, ensure that repairs are made, and make emergency repairs to equipment when necessary and possible.
9. Record sound onto tape or film for radio or television, checking its quality and making adjustments where necessary.
10. Align antennae with receiving dishes to obtain the clearest signal for transmission of broadcasts from field locations.
11. Substitute programs in cases where signals fail.

Skills

Operation Monitoring - Watching gauges, dials, or other indicators to make sure a machine is working properly.

Reading Comprehension - Understanding written sentences and paragraphs in work related documents.

Operation and Control - Controlling operations of equipment or systems.

Troubleshooting - Determining causes of operating errors and deciding what to do about it.

Active Listening - Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

Active Learning - Understanding the implications of new information for both current and future problem-solving and decision-making.

Critical Thinking - Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Knowledge

Telecommunications - Knowledge of transmission, broadcasting, switching, control, and operation of telecommunications systems.

Communications and Media - Knowledge of media production, communication, and dissemination techniques and methods. This includes alternative ways to inform and entertain via written, oral, and visual media.

Computers and Electronics - Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.

English Language - Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Engineering and Technology - Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.

Education and Training - Knowledge of principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.

Mechanical - Knowledge of machines and tools, including their designs, uses, repair, and maintenance.

Education

Job Zone Three: Medium Preparation Needed

Education: Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.

Training: Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

School Programs

Communications Technology/Technician. - A program that generally prepares individuals to function as workers and managers within communications industries. Includes instruction in business economics; basic management; principles of interpersonal and mediated communications; radio, television, and digital media production; and related aspects of technology and communications systems.

Radio and Television Broadcasting Technology/Technician. - A program that prepares individuals to apply technical knowledge and skills to the production of radio and television programs, and related operations, under the supervision of broadcast and studio managers, directors, editors, and producers. Includes instruction in sound, lighting, and camera operation and maintenance; power and feed control; studio operations; production preparation; broadcast engineering; related computer applications; and specialized applications such as news, entertainment, live talk, sports, commercials, and taping.

Audiovisual Communications Technologies/Technicians, Other. - Any instructional program in audiovisual communications technologies not listed above.

Wages

In NY the average wage for this occupation was:

\$33,030 for entry level workers, and \$65,350 for experienced workers.

Job Outlook

Based on the total number of annual openings and its growth rate, the employment prospects for this occupation are described as Favorable.

In 2006, employment for Broadcast Technicians in NY was: 3,630.

It is anticipated that in the year 2016, employment in this area will number 3,930. There will be an increase of 30 new positions annually (0.01%). In addition, 120 jobs per year (0.03%) will become available due to employee turnover.

Similar Jobs

Computer Support Specialists - Provide technical assistance to computer system users. Answer questions or resolve computer problems for clients in person, via telephone or from remote location. May provide assistance concerning the use of computer hardware and software, including printing, installation, word processing, electronic mail, and operating systems.

Network Systems and Data Communications Analysts - Analyze, design, test, and evaluate network systems, such as local area networks (LAN), wide area networks (WAN), Internet, intranet, and other data communications systems. Perform network modeling, analysis, and planning. Research and recommend network and data communications hardware and software. Includes telecommunications specialists who deal with the interfacing of computer and communications equipment. May supervise computer programmers.

Radio Operators - Receive and transmit communications using radiotelegraph or radiotelephone equipment in accordance with government regulations. May repair equipment.

Sound Engineering Technicians - Operate machines and equipment to record, synchronize, mix, or reproduce music, voices, or sound effects in sporting arenas, theater productions, recording studios, or movie and video productions.

Film and Video Editors - Edit motion picture soundtracks, film, and video.

Telecommunications Equipment Installers and Repairers, Except Line Installers - Set-up, rearrange, or remove switching and dialing equipment used in central offices. Service or repair telephones and other communication equipment on customers' property. May install equipment in new locations or install wiring and telephone jacks in buildings under construction.

Electronic Home Entertainment Equipment Installers and Repairers - Repair, adjust, or install audio or television receivers, stereo systems, camcorders, video systems, or other electronic home entertainment equipment.

Telecommunications Line Installers and Repairers - String and repair telephone and television cable, including fiber optics and other equipment for transmitting messages or television programming.

Nuclear Power Reactor Operators - Control nuclear reactors.