Announcers often work within tight schedule constraints, which can be physically and mentally stressful. For many announcers, the intangible rewards—creative work, many personal contacts, and the satisfaction of becoming widely known—far outweigh the disadvantages of irregular and often unpredictable hours, work pressures, and disrupted personal lives.

Employment

Announcers held about 60,000 jobs in 1998. Nearly all were staff announcers employed in radio and television broadcasting, but some were freelance announcers who sold their services for individual assignments to networks and stations, or to advertising agencies and other independent producers. Many announcing jobs are part time.

Training, Other Qualifications, and Advancement

Entry to this occupation is highly competitive. Formal training in broadcasting from a college or technical school (private broadcasting school) is valuable. Station officials pay particular attention to taped auditions that show an applicant's delivery and—in television—appearance and style on commercials, news, and interviews. Those hired by television stations usually start out as production assistants, researchers, or reporters and are given a chance to move into announcing if they show an aptitude for "on-air" work. Newcomers to TV broadcasting also may begin as news camera operators. (See the statement on photographers and camera operators elsewhere in the *Handbook*.) A beginner's chance of landing an on-air job is remote, except possibly for a small radio station. In radio, newcomers usually start out taping interviews and operating equipment.

Announcers usually begin at a station in a small community and, if qualified, may move to a better paying job in a large city. They also may advance by hosting a regular program as a disc jockey, sportscaster, or other specialist. Competition is particularly intense for employment by networks, and employers look for college graduates with at least several years of successful announcing experience.

Announcers must have a pleasant and well-controlled voice, good timing, excellent pronunciation, and must know correct grammar usage. Television announcers need a neat, pleasing appearance as well. Knowledge of theater, sports, music, business, politics, and other subjects likely to be covered in broadcasts improves chances for success. Announcers also must be computer-literate because programming is created and edited by computer. In addition, they should be able to ad-lib all or part of a show and to work under tight deadlines. The most successful announcers attract a large audience by combining a pleasing personality and voice with an appealing style.

High school and college courses in English, public speaking, drama, foreign languages, and computer science are valuable, and hobbies such as sports and music are additional assets. Students may gain valuable experience at campus radio or TV facilities and at commercial stations while serving as interns. Paid or unpaid internships provide students with hands-on training and the chance to establish contacts in the industry. Unpaid interns often receive college credit and are allowed to observe and assist station employees. Although the Fair Labor Standards Act limits the work unpaid interns may perform in a station, unpaid internships are the rule; sometimes they lead to paid internships. Paid internships are valuable because interns do work ordinarily done by regular employees and may even go on the air.

Persons considering enrolling in a broadcasting school should contact personnel managers of radio and television stations as well as broadcasting trade organizations to determine the school's reputation for producing suitably trained candidates.

Job Outlook

Competition for jobs as announcers will be keen because the broadcasting field attracts many more jobseekers than there are jobs. Small radio stations are more inclined to hire beginners, but the pay is low. Interns usually receive preference for available positions. Because competition for ratings is so intense in major metropolitan areas, large stations will continue to seek announcers who have proven that they can attract and retain a large audience.

Announcers who are knowledgeable in business, consumer, and health news may have an advantage over others. While specialization is more common at large stations and the networks, many small stations also encourage it.

Employment of announcers is expected to decline slightly through 2008 due to the lack of growth of new radio and television stations. Openings in this relatively small field will arise from the need to replace those who transfer to other kinds of work or leave the labor force. Job openings also arise because of high turnover within the occupation. Changes in station ownership, format, and ratings frequently cause periods of unemployment for many announcers. Many announcers leave the field because they cannot advance to better paying jobs.

Increasing consolidation of radio and television stations, new technology, and the growth of alternative media sources will contribute to the expected decline in employment of announcers. Consolidation in broadcasting may lead to increased use of syndicated programming and programs originating outside a station's viewing or listening area. Digital technology will increase the productivity of announcers, reducing the time spent on off-air technical and production work. In addition, all traditional media, including radio and television, may suffer losses in audience as the American public increases its use of personal computers.

Employment in this occupation is not significantly affected by downturns in the economy. If recessions cause advertising revenues to fall, stations tend to cut "behind-the-scenes" workers rather than announcers and broadcasters.

Earnings

Salaries in broadcasting vary widely but in general are relatively low except for announcers in large stations in major markets or who work for a network. They are higher in television than in radio and higher in commercial than in public broadcasting.

Median hourly earnings of announcers in 1998 were \$8.62. The middle 50 percent earned between \$6.17 and \$12.76. The lowest 10 percent earned less than \$5.63 and the highest 10 percent earned more than \$21.28. Median hourly earnings of announcers in 1997 were \$8.20 in the radio and television broadcasting industry.

Related Occupations

The success of announcers depends upon how well they communicate. Others who must be skilled at oral communication include interpreters, sales workers, public relations specialists, and teachers. Many announcers also must entertain their audience, so their work is similar to other entertainment-related occupations such as actors, directors and producers, dancers, and musicians.

Sources of Additional Information

General information on the broadcasting industry is available from: • National Association of Broadcasters, 1771 N St. NW., Washington, DC 20036. Internet: http://www.nab.org

Broadcast and Sound Technicians

(O*NET 22599A, 34028B, and 34028C)

Significant Points

• Job applicants will face strong competition for the better paying jobs at radio and television stations serving large cities.

- Beginners need formal training in broadcast technology to obtain their first job at a smaller station.
- Evening, weekend, and holiday work is common.

Nature of the Work

Broadcast and sound technicians install, test, repair, set up, and operate the electronic equipment used to record and transmit radio and television programs, cable programs, and motion pictures. They work with television cameras, microphones, tape recorders, lighting, sound effects, transmitters, antennas, and other equipment. Some broadcast and sound technicians produce movie sound tracks in motion picture production studios, control the sound of live events, such as concerts, or record music in a recording studio.

In the control room of a radio or television broadcasting studio, these technicians operate equipment that regulates the signal strength, clarity, and range of sounds and colors of recordings or broadcasts. They also operate control panels to select the source of the material. Technicians may switch from one camera or studio to another, from film to live programming, or from network to local programming. By means of hand signals and, in television, telephone headsets, they give technical directions to other studio personnel.

Broadcast and sound technicians in small stations perform a variety of duties. In large stations and at the networks, technicians are more specialized, although job assignments may change from day to day. The terms "operator," "engineer," and "technician" often are used interchangeably to describe these jobs. Transmitter operators monitor and log outgoing signals and operate transmitters. Maintenance technicians set up, adjust, service, and repair electronic broadcasting equipment. Audio control engineers regulate volume and sound quality of television broadcasts, while video control engineers regulate their fidelity, brightness, and contrast. Recording engineers operate and maintain video and sound recording equipment. They may operate equipment designed to produce special effects, such as the illusions of a bolt of lightning or a police siren. Sound mixers or rerecording mixers produce the sound track of a movie, television, or radio program. After filming or recording, they may use a process called dubbing to insert sounds. Field technicians set up and operate broadcasting portable field transmission equipment outside the studio. Television news coverage requires so much electronic equipment, and the technology is changing so rapidly, that many stations assign technicians exclusively to news.

Chief engineers, transmission engineers, and *broadcast field supervisors* supervise the technicians who operate and maintain broadcasting equipment.



Broadcast and sound technicians install, operate, and maintain a variety of sophisticated equipment.

Working Conditions

Broadcast and sound technicians generally work indoors in pleasant surroundings. However, those who broadcast news and other programs from locations outside the studio may work outdoors in all types of weather. Technicians doing maintenance may climb poles or antenna towers, while those setting up equipment do heavy lifting.

Technicians in large stations and the networks usually work a 40-hour week under great pressure to meet broadcast deadlines, but may occasionally work overtime. Technicians in small stations routinely work more than 40 hours a week. Evening, weekend, and holiday work is usual, because most stations are on the air 18 to 24 hours a day, 7 days a week.

Those who work on motion pictures may be on a tight schedule to finish according to contract agreements.

Employment

Broadcast and sound technicians held about 37,000 jobs in 1998. About 2 out of 3 worked in radio and television broadcasting. Almost 10 percent worked in the motion picture industry. About 10 percent worked for cable and other pay television services. A few were self-employed. Television stations employ, on average, many more technicians than do radio stations. Some technicians are employed in other industries, producing employee communications, sales, and training programs. Technician jobs in television are located in virtually all cities, whereas jobs in radio are also found in many small towns. The highest paying and most specialized jobs are concentrated in New York City, Los Angeles, Chicago, and Washington, DC—the originating centers for most network programs. Motion picture production jobs are concentrated in Los Angeles and New York City.

Training, Other Qualifications, and Advancement

The best way to prepare for a broadcast and sound technician job is to obtain technical school, community college, or college training in broadcast technology or in engineering or electronics. This is particularly true for those who hope to advance to supervisory positions or jobs at large stations or the networks. In the motion picture industry people are hired as apprentice editorial assistants and work their way up to more skilled jobs. Employers in the motion picture industry usually hire experienced freelance technicians on a picture-by-picture basis. Reputation and determination are important in getting jobs.

Beginners learn skills on the job from experienced technicians and supervisors. They often begin their careers in small stations and, once experienced, move on to larger ones. Large stations usually only hire technicians with experience. Many employers pay tuition and expenses for courses or seminars to help technicians keep abreast of developments in the field.

The Federal Communications Commission no longer requires the licensing of broadcast technicians, as the Telecommunications Act of 1996 eliminated this licensing requirement. Certification by the Society of Broadcast Engineers is a mark of competence and experience. The certificate is issued to experienced technicians who pass an examination. By offering the Radio Operator and the Television Operator levels of certification, the Society of Broadcast Engineers has filled the void left by the elimination of the FCC license.

Prospective technicians should take high school courses in math, physics, and electronics. Building electronic equipment from hobby kits and operating a "ham," or amateur radio, are good experience, as is work in college radio and television stations.

Broadcast and sound technicians must have manual dexterity and an aptitude for working with electrical, electronic, and mechanical systems and equipment.

Experienced technicians can become supervisory technicians or chief engineers. A college degree in engineering is needed to become chief engineer at a large TV station.

Job Outlook

People seeking beginning jobs as radio and television broadcast technicians are expected to face strong competition in major metropolitan areas, where the number of qualified job seekers exceeds the number of openings. There, stations seek highly experienced personnel. Prospects for entry-level positions generally are better in small cities and towns for beginners with appropriate training.

The overall employment of broadcast and sound technicians is expected to grow slowly through the year 2008. An increase in the number of programming hours should require additional technicians. However, employment growth in radio and television broadcasting may be tempered somewhat because of slow growth in the number of new radio and television stations and laborsaving technical advances, such as computer-controlled programming and remote control of transmitters. Technicians who know how to install transmitters will be in demand as television stations replace existing analog transmitters with digital transmitters. Stations will begin broadcasting in both analog and digital formats, eventually switching entirely to digital.

Employment in the cable industry should grow because of new products coming to market, such as cable modems, which deliver high speed Internet access to personal computers, and digital settop boxes, which transmit better sound and pictures, allowing cable operators to offer many more channels than in the past. These new products should cause traditional cable subscribers to sign up for additional services.

Employment in the motion picture industry will grow as fast as the average for all occupations. Job prospects are expected to remain competitive, because of the large number of people attracted to this relatively small field.

Virtually all job openings will result from the need to replace experienced technicians who leave the occupation. Turnover is relatively high for broadcast and sound technicians. Many leave the occupation for electronic jobs in other areas, such as computer technology or commercial and industrial repair.

Earnings

Television stations usually pay higher salaries than radio stations; commercial broadcasting usually pays more than public broadcasting; and stations in large markets pay more than those in small ones.

Median annual earnings of broadcast and sound technicians in 1998 were \$25,270. The middle 50 percent earned between \$16,940 and \$40,310. The lowest 10 percent earned less than \$12,620 and the highest 10 percent earned more than \$67,020. Median annual earnings of broadcast and sound technicians in 1997 were \$21,700 in the radio and television broadcasting industry.

Related Occupations

Broadcast and sound technicians need the electronics training and hand coordination necessary to operate technical equipment, and they generally complete specialized postsecondary programs. Similar occupations include engineering technicians, science technicians, health technologists and technicians, and electronic equipment repairers.

Sources of Additional Information

For information on careers for broadcast and sound technicians, write to:

National Association of Broadcasters Employment Clearinghouse, 1771

N St. NW., Washington, DC 20036. Internet: http://www.nab.org For information on certification, contact:

☞ Society of Broadcast Engineers, 8445 Keystone Crossing, Suite 140, Indianapolis, IN 46240. Internet: http://www.sbe.org

For information on careers in the motion picture and television industry, contact:

 Society of Motion Picture and Television Engineers (SMPTE), 595 West Hartsdale Ave., White Plains, NY 10607.

News Analysts, Reporters, and Correspondents

(O*NET 34002A, 34011, and 34014)

Significant Points

- Employment is expected to grow little and there should be keen competition for job openings.
- Less competition is expected for jobs with suburban and weekly newspapers and small radio and television stations.
- Jobs are often stressful because of irregular hours, frequent night and weekend work, and pressure to meet deadlines.

Nature of the Work

News analysts, reporters, and correspondents play a key role in our society. They gather information, prepare stories, and make broadcasts that inform us about local, State, national, and international events; present points of view on current issues; and report on the actions of public officials, corporate executives, special interest groups, and others who exercise power.

News analysts examine, interpret, and broadcast news received from various sources, and are also called *newscasters* or *news anchors*. News anchors present news stories and introduce videotaped news or live transmissions from on-the-scene reporters. Some newscasters at large stations and networks usually specialize in a particular type of news, such as sports or weather. *Weathercasters*, also called weather reporters, report current and forecasted weather conditions. They gather information from national satellite weather services, wire services, and local and regional weather bureaus. Some weathercasters are trained *meteorologists* and can develop their own weather forecasts. (See the statement on meteorologists elsewhere in the *Handbook*.) Sports*casters* select, write, and deliver sports news. This may include interviews with sports personalities and coverage of games and other sporting events.

In covering a story, *reporters* investigate leads and news tips, look at documents, observe events at the scene, and interview people. Reporters take notes and may also take photographs or shoot videos. At their office, they organize the material, determine the focus or emphasis, write their stories, and can edit accompanying video material. Many reporters enter information or write stories on laptop computers, and electronically submit them to their offices from remote locations. In some cases, *newswriters* write a story from information collected and submitted by reporters. Radio and television reporters often compose stories and report "live" from the scene. At times, they later tape an introduction or commentary to their story in the studio. Some journalists also interpret the news or offer opinions to readers, viewers, or listeners. In this role, they are called *commentators* or *columnists*.

General assignment reporters write news, such as an accident, a political rally, the visit of a celebrity, or a company going out of business, as assigned. Large newspapers and radio and television stations assign reporters to gather news about specific categories or beats, such as crime or education. Some reporters specialize in fields such as health, politics, foreign affairs, sports, theater, consumer affairs, social events, science, business, and religion. Investigative reporters cover stories that take many days or weeks of information gathering. Some publications use teams of reporters instead of assigning specific beats, allowing reporters to cover a greater variety of stories. News teams may include reporters, editors, graphic artists, and photographers, working together to complete a story.