these occupations 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 technicians in 2000 were $26,950. The middle 50 percent earned between $18,060 and $44,410. The lowest 10 percent earned less than $13,860, and the highest 10 percent earned more than $63,340.

Median annual earnings of sound engineering technicians in 2000 were $39,480. The middle 50 percent earned between $24,730 and $73,720. The lowest 10 percent earned less than $17,560, and the highest 10 percent earned more than $119,400.

Median annual earnings of audio and video equipment technicians in 2000 were $30,310. The middle 50 percent earned between $21,980 and $44,970. The lowest 10 percent earned less than $16,630, and the highest 10 percent earned more than $68,720.

Median annual earnings of radio operators in 2000 were $29,260. The middle 50 percent earned between $23,090 and $39,830. The lowest 10 percent earned less than $17,570, and the highest 10 percent earned more than $54,590.

**Related Occupations**
Broadcast and sound engineering technicians and radio operators 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, electrical and electronics installers and repairers, and communications equipment operators.

**Sources of Additional Information**
For information on careers for broadcast and sound engineering technicians and radio operators, write to:
- Society of Broadcast Engineers, 9247 North Meridian St., Suite 305, Indianapolis, IN 46260. Internet: [http://www.sbe.org](http://www.sbe.org)
- Society of Motion Picture and Television Engineers (SMPTE), 595 West Hartsdale Ave., White Plains, NY 10607. Internet: [http://www.smpte.org](http://www.smpte.org)

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**News Analysts, Reporters, and Correspondents**
(O*NET 27-3021.00, 27-3022.00)

**Significant Points**
- Most employers prefer individuals with a bachelor’s degree in journalism and experience.
- Competition will be keen for jobs at large metropolitan newspapers and broadcast stations and on national magazines; most entry-level openings arise on small publications.
- Jobs often are 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 also are 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 atmospheric scientists elsewhere in the *Handbook.*) Sportscasters 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 also may take photographs or shoot videos. At their office, they organize the material, determine the focus or emphasis, write their stories, and 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 often investigate and write long articles on subjects not reported on in the news. Some work in public relations or public information offices and write articles or books promoting a company or an event. Columnists contribute regular columns, which may be syndicated and distributed to other newspapers and magazines.

**Earnings**
Median annual earnings of broadcast technicians in 2000 were $26,950. The middle 50 percent earned between $18,060 and $44,410. The lowest 10 percent earned less than $13,860, and the highest 10 percent earned more than $63,340.

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In covering a story, news analysts, reporters, and correspondents investigate leads and tips, observe events at the scene, and interview people.
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.

News correspondents report on news occurring in the large U.S. and foreign cities where they are stationed. Reporters on small publications cover all aspects of the news. They take photographs, write headlines, lay out pages, edit wire service copy, and write editorials. Some also solicit advertisements, sell subscriptions, and perform general office work.

Working Conditions
The work of news analysts, reporters, and correspondents usually is hectic. They are under great pressure to meet deadlines and broadcast sometimes are made with little time for preparation. Some work in comfortable, private offices; others work in large rooms filled with the sound of keyboards and computer printers, as well as the voices of other reporters. Curious onlookers, police, or other emergency workers can distract those reporting from the scene for radio and television. Covering wars, political uprisings, fires, floods, and similar events often is dangerous.

Working hours vary. Reporters on morning papers often work from late afternoon until midnight. Those on afternoon or evening papers generally work from early morning until early afternoon or mid afternoon. Radio and television reporters usually are assigned to a day or evening shift. Magazine reporters usually work during the day.

Reporters sometimes have to change their work hours to meet a deadline, or to follow late-breaking developments. Their work demands long hours, irregular schedules, and some travel. Many stations and networks are on the air 24 hours a day, so newscasters can expect to work unusual hours.

Employment
News analysts, reporters, and correspondents held about 78,000 jobs in 2000. Nearly half worked for newspapers—either large city dailies or suburban and small town dailies or weeklies. About 28 percent worked in radio and television broadcasting, and others worked for magazines and wire services. About 12,000 news analysts, reporters, and correspondents were self-employed.

Training, Other Qualifications, and Advancement
Most employers prefer individuals with a bachelor’s degree in journalism, but some hire graduates with other majors. They look for experience on school newspapers or broadcasting stations and internships with news organizations. Large city newspapers and stations also may prefer candidates with a degree in a subject-matter specialty such as economics, political science, or business. Large newspapers and broadcasters also require a minimum of 3 to 5 years of experience as a reporter.

Bachelor’s degree programs in journalism are available at over 400 colleges or universities. About three-fourths of the courses in a typical curriculum are in liberal arts; the remainder are in journalism. Journalism courses include introductory mass media, basic reporting and copy editing, history of journalism, and press law and ethics. Students planning a career in broadcasting take courses in radio and television newscasting and production. Those planning newspaper or magazine careers usually specialize in news-editorial journalism. Those planning careers in new media, such as online newspapers or magazines, require a merging of traditional and new journalism skills. To create a story for online presentation, they need to know how to use computer software to combine online story text with audio and video elements and graphics.

Many community and junior colleges offer journalism courses or programs; credits may be transferable to 4-year journalism programs.

About 120 schools offered a master’s degree in journalism in 2000; about 35 schools offered a Ph.D. degree. Some graduate programs are intended primarily as preparation for news careers, while others prepare journalism teachers, researchers and theorists, and advertising and public relations workers.

High school courses in English, journalism, and social studies provide a good foundation for college programs. Useful college liberal arts courses include English with an emphasis on writing, sociology, political science, economics, history, and psychology. Courses in computer science, business, and speech are useful, as well. Fluency in a foreign language is necessary in some jobs.

Although reporters need good word-processing skills, computer graphics and desktop publishing skills also are useful. Computer-assisted reporting involves the use of computers to analyze data in search of a story. This technique and the interpretation of the results require strong math skills and familiarity with databases. Knowledge of news photography also is valuable for entry-level positions, which sometimes combine reporter/camera operator or reporter/photographer responsibilities.

Experience in a part-time or summer job or an internship with a news organization is very important. (Most newspapers, magazines, and broadcast news organizations offer reporting and editing internships.) Work on high school and college newspapers, at broadcasting stations, or on community papers or U.S. Armed Forces publications also helps. In addition, journalism scholarships, fellowships, and assistantships awarded to college journalism students by universities, newspapers, foundations, and professional organizations are helpful. Experience as a stringer or freelancer, a part-time reporter who is paid only for stories printed, also is advantageous.

Reporters should be dedicated to providing accurate and impartial news. Accuracy is important, both to serve the public and because untrue or libelous statements can lead to costly lawsuits. A nose for news, persistence, initiative, poise, resourcefulness, a good memory, and physical stamina are important, as well as the emotional stability to deal with pressing deadlines, irregular hours, and dangerous assignments. Broadcast reporters and news analysts must be comfortable on camera. All reporters must be at ease in unfamiliar places and with a variety of people. Positions involving on-air work require a pleasant voice and appearance.

Most reporters start at small publications or broadcast stations as general assignment reporters or copy editors. Large publications and stations hire few recent graduates; as a rule, they require new reporters to have several years of experience.

Beginning reporters cover court proceedings and civic and club meetings, summarize speeches, and write obituaries. With experience, they report more difficult assignments, cover an assigned beat, or specialize in a particular field.

Some news analysts and reporters can advance by moving to large newspapers or stations. A few experienced reporters become columnists, correspondents, writers, announcers, or public relations specialists. Others become editors in print journalism or program managers in broadcast journalism, who supervise reporters. Some eventually become broadcasting or publications industry managers.

Job Outlook
Employment of news analysts, reporters, and correspondents is expected to grow more slowly than the average for all occupations through the year 2010—the result of mergers, consolidations, and closures of newspapers; decreased circulation; increased expenses; and a decline in advertising profits. Despite little change in overall employment, some job growth is expected in radio and television
stations, and even more rapid growth is expected in new media areas, such as online newspapers and magazines. Job openings also will result from the need to replace workers who leave these occupations permanently. Some news analysts, reporters, and correspondents find the work too stressful and hectic or do not like the lifestyle, and transfer to other occupations.

Competition will continue to be keen for jobs on large metropolitan newspapers and broadcast stations and on national magazines. Talented writers who can handle highly specialized scientific or technical subjects have an advantage. Also, newspapers increasingly are hiring stringers and freelancers.

Most entry-level openings arise on small publications, as reporters and correspondents become editors or reporters on larger publications or leave the field. Small town and suburban newspapers will continue to offer most opportunities for persons seeking to enter this field.

Journalism graduates have the background for work in closely related fields such as advertising and public relations, and many take jobs in these fields. Other graduates accept sales, managerial, or other nonmedia positions, because of the difficulty in finding media jobs.

The newspaper and broadcasting industries are sensitive to economic ups and downs, because these industries depend on advertising revenue. During recessions, few new reporters are hired, and some reporters lose their jobs.

Earnings
Salaries for news analysts, reporters, and correspondents vary widely but, in general, are relatively high, except at small stations and small publications, where salaries often are very low. Median annual earnings of news analysts, reporters, and correspondents were $29,110 in 2000. The middle 50 percent earned between $21,320 and $45,540. The lowest 10 percent earned less than $16,540, and the highest 10 percent earned more than $69,300. Median annual earnings of news analysts, reporters, and correspondents were $33,550 in radio and television broadcasting and $26,900 in newspapers in 2000.

According to a 1999 survey conducted by the National Association of Broadcasters and the Broadcast Cable Financial Management Association, the annual average salary, including bonuses, was $83,400 for weekday anchors and $44,200 for those working on weekends. Television news reporters earned an average salary of $33,700. Weekday sportscasters typically earned $68,900, while weekend sportscasters earned $37,200. Weathercasters averaged $68,500 during the week and $36,500 on weekends. According to the 2001 survey, the annual average salary, including bonuses, was $55,100 for radio news reporters and $53,300 for sportscasters in radio broadcasting.

Related Occupations
News analysts, reporters, and correspondents must write clearly and effectively to succeed in their profession. Others for whom good writing ability is essential include writers and editors, and public relations specialists. Many news analysts, reporters, and correspondents also must communicate information orally. Others for whom oral communication skills are vital are announcers, interpreters and translators, sales and related occupations, and teachers.

Sources of Additional Information
For information on careers in broadcast news and related scholarships and internships, contact:

General information on the broadcasting industry is available from:
- Dow Jones Newspaper Fund, Inc., P.O. Box 300, Princeton, NJ 08543-0300. Internet: http://www.dowjones.com
- Newspaper Guild, Research and Information Department, 501 3rd St. NW., Suite 250, Washington, DC 20001. Internet: http://www.newsguild.org

For a list of schools with accredited programs in journalism, send a stamped, self-addressed envelope to:
- Accrediting Council on Education in Journalism and Mass Communications, University of Kansas School of Journalism and Mass Communications, Stauffer-Flint Hall, Lawrence, KS 66045. Internet: http://www.ukans.edu/~acejmc

Names and locations of newspapers and a list of schools and departments of journalism are published in the Editor and Publisher International Year Book, available in most public libraries and newspaper offices.

Photographers
(0*NET 27-4021.01, 27-4021.02)

Significant Points
- Technical expertise, a “good eye,” imagination, and creativity are essential.
- Only the most skilled and talented who have good business sense maintain long-term careers.
- More than half of all photographers are self-employed, a much higher proportion than the average for all occupations.

Nature of the Work
Photographers produce and preserve images that paint a picture, tell a story, or record an event. To create commercial quality photographs, photographers need both technical expertise and creativity. Producing a successful picture requires choosing and presenting a subject to achieve a particular effect and selecting the appropriate equipment. For example, photographers may enhance the subject’s appearance with lighting or draw attention to a particular aspect of the subject by blurring the background.

Today, many cameras adjust settings like shutter speed and aperture automatically. They also let the photographer adjust these settings manually, allowing greater creative and technical control over the picture-taking process. In addition to automatic and manual cameras, photographers use an array of film, lenses, and equipment—from filters, tripods, and flash attachments to specially constructed lighting equipment.