JOB DESCRIPTION: Imagery and Photography

A career as an Aerial Survey Technician

It would be impossible to build a suburban housing subdivision without doing any land surveying research, aerial surveying or design work. Sometimes it helps to get a "bird's eye view" on a plot of land to help a designer grasp the land he or she is working with. Aerial survey technicians conduct and participate in aerial field surveys for future building projects such as shopping malls in order to determine exact locations and positions of natural features and other fabricated land structures. For example, if a developing company is about to build a shopping center near a lake, the aerial survey technicians will analyze the lake in proportion to the land for the proposed building site from aerial photographs.

Aerial surveying is a great way of inspecting work in progress on a large development or construction site. Viewing it from the air brings the whole project into perspective in a way that is impossible using ground tours alone. Aerial surveying takes a series of precision GPS controlled high and low altitude aerial photographs, which are used for many applications, including county mapping, highway mapping, topographic surveys, and emergency and disaster response.

Aerial survey technicians attempt to determine the exact locations and relative positions of natural features and fabricated structures, on the Earth's surface, underground and underwater. They also must determine the points of elevation in the land, contours and other important surveying features. By studying aerial photography and satellite imagery, they provide information related to the exploration of geophysics, geology and resource management. Aerial survey technicians conduct surveys and information studies for many reasons, one being that they can monitor volcanic activity and check for earthquake probabilities.

Aerial survey technicians in large companies usually work with a team of designers, cartographers, engineers and other professionals in related industries. Those who work in smaller companies tend to meet with clients and contractors and perform a variety of tasks. In accordance with rapidly changing technology, aerial survey technicians are required to update their computer and general knowledge skills and become experts in GIS.

Aerial survey technicians should have an aptitude for mathematics, including the ability to think visually about geometric forms. They should have good problem solving skills and enjoy analyzing information and finding innovative solutions to aerial surveying questions and problems.

Technicians should have acute observation skills, be able to work and communicate with a number of different workers and also possess the ability to perceive pertinent detail in objects and drawings. Aerial survey technicians also need to know about airborne surveying methods, the laws relating to land use and aerial survey regulations.

Education

Completion of a one- or two-year college program in geomatics or aerial surveying engineering technology is usually required for aerial survey technicians. A certification in survey engineering technology or a related field is available through associations of engineering or applied science technologists and technicians and may be required for some positions. A supervised, two-year period of work is required for employment.
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 Courtesy: Colorado.edu, Austin, TX

Courtesy: [schoolsintheusa.com, colorado.edu/geography]