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Aeriel Photography

Introduction of Aerial Photography:

Photographing from air is basically known as aerial photography. The word ‘aerial’ derived in early 17th century from Latin word aeries, and Greek word aeries . The term "photography" is derived from two Greek words phos meaning "light" and graphien meaning "writing" means "writing by light". Aerial photography comes under the branch of Remote Sensing. Platforms from which remote sensing observations are made are aircraft and satellites as they are the most widespread and common platforms. Aerial photography is a part of remote sensing and has wide applications in topographical mapping, engineering, environmental science studies and exploration for oil and minerals etc. In the early stages of development, aerial photographs were obtained from balloons and kites but after the invention of aircrafts in 1903 aircrafts are being used widely for aerial photographs. The sun provides the source of energy (electromagnetic radiation or EMR) and the photosensitive film acts as a sensor to record the images. Diversifications observed in the images of photographs shows the different amount of energy being reflected from the objects as recorded on the film. Now a days aerial photography also becomes digital where values of reflected electromagnetic radiation is recorded in digital numbers.

Aerial photographs are used in topographical mapping and interpretation. These two different uses have led to the development of photogrammetry and photo/image interpretation as two independent but related sciences. Photogrammetry: It refers to the science and technology of making reliable measurements from aerial photographs. The principles used in photogrammetry facilitate precise measurements related to the length, breadth and height from such photographs. Hence, they are used as the data source for creating and updating topographic maps.

Aerial Photographs in India:

Aerial photography in India goes back to 1920 when large-scale aerial photographs of Agra city were obtained. Subsequently, Air Survey Party of the Survey of India took up aerial survey of Irrawaddy Delta forests, which was completed during 1923–24. Subsequently, several similar surveys were carried out and advanced methods of mapping from aerial photographs were used. Today, aerial photography in India is carried out for the entire country under the overall supervision of the Directorate of Air Survey (Survey of India) New Delhi. Three flying agencies, i.e. Indian Air Force, Air Survey Company, Kolkata and National Remote Sensing Agency, Hyderabad have been officially authorised to take aerial photographs in India. The procedure for indenting aerial photographs for educational purposes could be made with APFPS Party No. 73, Directorate of Air Survey, Survey of India, West Block IV, R. K. Puram, New Delhi.