What is Drone Surveying?

Drone surveying (also known as the unmanned aerial vehicle (UAV) surveying) is the use of drones, either for mapping and data acquisition or to take measurements. Simply said, a drone survey is an aerial survey done by a drone and it is growing in popularity.

Drones can acquire a large amount of data fast by using downward-facing sensors such as RGB or multispectral cameras or LiDAR payloads.

According to one study, drones can collect data 97 percent faster than conventional techniques.

This data may be used to generate a variety of products, including 3D maps and elevation models, as well as extract critical information such as very accurate measurements and volumetric computations.

The drones take photos either from the sky or from a controlled height. The drones are equipped with cameras that can produce high-resolution images. When taking photos, the drones must be checked for maintenance and alignment.

A computer program then analyzes the photos taken by the drone and creates a 3D model from them.

The photos are orthorectified, meaning that images are aligned and corrected, and any camera distortion is removed.

The images are then stitched together to create the 3D model.

The drone can also carry sensors that measure the height of objects so surveys can be conducted accurately. This allows for a more precise survey than satellite surveys, which use cameras with a lower resolution.

The benefits of Drone Surveying are:

- 1. Drones can get closer to the subject than satellites and other aerial vehicles.
- 2. Images captured with drones are in high resolution and allow for a more accurate survey than satellite surveys.
- 3. Drone surveying allows for capturing images from angles that are not possible to take from the ground and can cover large areas quickly.

- 4. The aerial view helps give a better understanding of the properties of the land being surveyed, like the distance between two buildings, or the distance between a building and road.
- 5. Aerial surveys help reduce the time and cost of surveys.
- 6. The use of drones can reduce the risk of damage to sensitive resources because the focus is on areas that are most likely to be disturbed.
- 7. Drones reduce the risk for human injury by removing humans from hazardous areas, like landing zones and survey sites where people could be endangered.
- 8. Drones can be used to capture images of areas that are not accessible by hand, like mountain tops.
- 9. Aerial surveys help maintain awareness of environmental threats and agricultural land use because the ability to see what is happening on the ground becomes more accurate.

Call to schedule your Drone Surveying today!

Now that you know what Drone Surveying is and its benefits, give us a call at Ford, Armenteros & Fernandez, Inc.

(786) 530-3591 / galmeida@fordco.com

We will be happy to assist you with your Drone Surveying, as well as with any of your other Land Survey and Consulting needs.

