

# SURVEYOR OVERVIEW

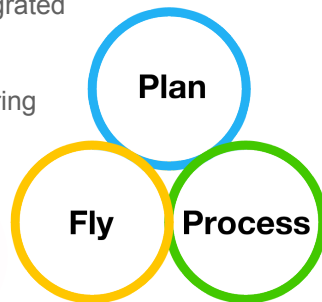
Draganfly Innovations Surveyor, flight planning software transforms your system into a powerful mapping and 3D modeling solution.



Draganfly Surveyor flight planning software is an intuitive, easy to use, application that enables you to quickly plan, fly, and process meaningful data. Based on the project to be flown, camera type, optics, and altitude, the software determines the appropriate camera shutter interval and aircraft speed to capture the optimum required photo overlap for the powerful Pix4D Pro, 2D and 3D aerial mapping and modeling solution. The software can be used stand-alone or as a fully integrated solution with Pix4D Pro for survey grade results.

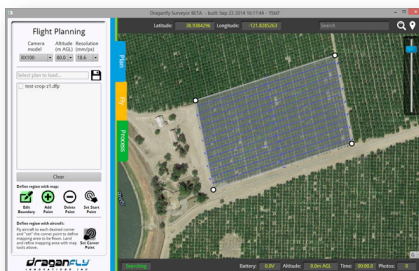
## Intuitive workflow:

Surveyor workflow guides you through the process to safely plan, fly, and process your work. The software is integrated and optimized for use with Pix4D Pro to deliver professional results and bring immediate value to your aerial data. And even though much of the process is automated, Draganfly provides the pilot-in-command (PIC) with tools to immediately resume manual flight of the aircraft at anytime.



## Plan:

Start your project with a clear and concise plan by entering information about the payload, providing a project name, and define the area to be flown.



The flight planning process is a visual one, making it easy to collaborate with your customer or

team to collect high quality data the first time. As you complete the planning process, the flight plan is uploaded to the aircraft over the wireless network.

## Fly:

Get your aircraft in the air safely by running through a simple checklist before executing the flight plan. Once airborne and at an operational altitude, the PIC is allowed to execute the flight plan. As the aircraft carries out the mission the PIC and observer monitor both the airspace and real-time aircraft telemetry.

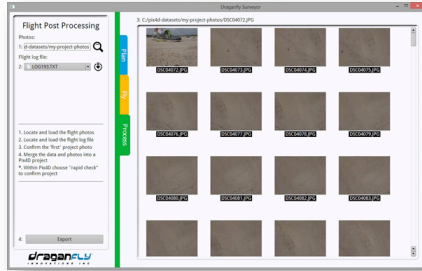


At the end of the mission, the aircraft will return home for landing by the PIC. At anytime during the mission if needed, the PIC can resume control of the aircraft or automatically return the aircraft to the designated home point.

After the pilot-in-command lands the aircraft, the flight data log is saved to the system, is saved on the handheld controller, and the Surveyor system is ready for the final processing phase before launching Pix4D.

**Process:**

The processing step merges flight data with the photos taken, then automatically launches Pix4D on the tablet or laptop while you're out in the field to rapid check the aerial data. The rapid check process is a fast, simple step, to insure the data collected is of the quality and overlap required to run the Pix4D mapping or 3D aerial modeling project.



After reviewing the Pix4D quality report you either make corrections as needed, fly the next project or at this point, your field work is completed.

Surveyor, from Draganfly Innovations is an easy to use visual flight planning tool that transforms the aircraft system into a high quality data acquisition tool.

**Pix4D Processing:**

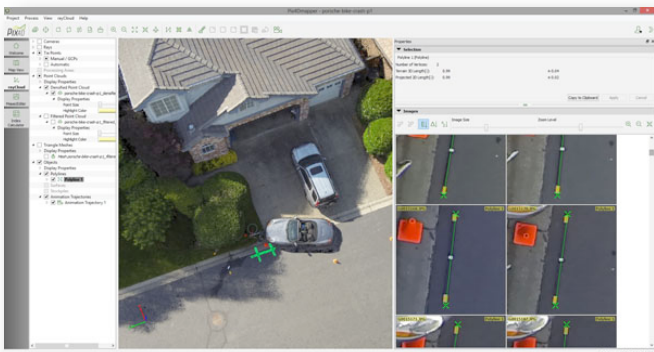
Surveyor can be purchased separately or comes bundled with the professional version of the powerful mapping and 3D aerial modeling package from Pix4D.

Pix4D transforms the aerial photographic data collected into geo-referenced 2D orthomosaic images, Digital Surface Model (DSM), Digital Terrain Model (DTM), contour lines and 3D models. Pix4D creates highly accurate models to be used within Pix4D to measure, evaluate, and visually review the data. Data can also be exported for use in GIS and CAD software.

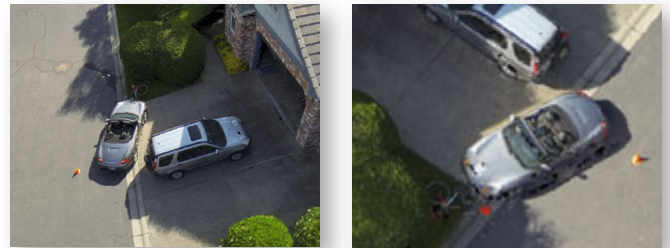
**So many applications:**

Applications such as agriculture, surveying, detailed mapping, 3D terrain modeling, measuring stock pile storage, and forensic documentation.

For example, by flying the system over a crime or accident scene you have the ability to capture the incident in 3D, to later study from any angle, point of view, and take highly detailed measurements. The following sequence of images illustrate a simulated accident scene captured using the system and



processed with Pix4D. And although the project was flown at only 12 meters, once it is processed and modeled in 3D investigators can virtually step back and view the scene from any distance, perspective, and measure the relationship of objects, skid marks etc. to less than centimeter accuracies. Keep in mind these graphic images are not photographs.



The graphics are created from 3D point cloud data comprised of millions of 3D points in space calculated from the aerial photographic data captured over the scene.

**Summary:**

Whether you're documenting an accident scene or determining crop health, technology from Draganfly Innovations and our many business partners provides a complete, integrated solution, to delivery high quality data.

Over 15 years in the Unmanned Systems business Draganfly provides state-of-the-art aircraft and now combined with the unique capabilities of Surveyor, gathering high quality aerial data has never been so easy.

Seamless integration to powerful, professional tools such as Pix4D, transforms this aerial data into survey grade accurate 2D mosaic, DSM, DTM or interactive 3D point cloud data models for further analysis. With Draganfly Plan, Fly, and Process, to realize high quality results.