

## CASE STUDY

# International Drone Services Provider Enhances Operations with Program Management Software

## Introduction

Measure is an aerial intelligence company that provides world-class drone services and software to companies across the U.S. and the Americas.

Measure manages a team of up to 30 pilots, including in-house and outsourced resources, to perform a wide range of operations such as inspections of solar and wind farms, utility lines, power generation equipment, buildings, and construction sites, just to name a few.

They were using four different programs plus some manual processes to schedule flights, assign pilots, enforce safety regulations, track equipment, store data, and report on their activity.

Yet, despite efforts, they could not find a tool on the market that provided an effective end-to-end solution for drone operations at scale.

So, Measure put together an expert Digital Products team and, in collaboration with Flight Ops, they created the tool themselves.

The result?



**Cost savings**

**Efficiency gains**

**Improved compliance**

Let's see how they did it.

## Business Challenges

The first thing Measure did was take an inventory of the issues they were having with their existing systems. This provided a high-level roadmap for what they would call Ground Control™.

Here are a few of the business challenges Measure was facing:

- The cost and complexity of using four different software tools
- Flight logs and compliance data not uploaded
- Inconsistent equipment tracking due to manual process
- Pilots frustrated by cluttered flight apps and switching between apps
- Difficulties in confirming proper data collection while pilot team is on-site
- Miscommunication regarding logistics and data collection plans
- Excessive data transfer time and uploaded data not associated to mission
- Manually creating reports for leadership in Excel and PowerPoint

Having flown 10,000 commercial flights, Measure had the direct experience to create the platform they were looking for. In early 2018, they launched Ground Control 1.0, a web portal and integrated flight app, and then spent the next 11 months flying, testing, and enhancing the product to where it is today: Ground Control 2.0.

## CASE STUDY

# Our Solution

Measure Ground Control was created to be an end-to-end software product for organizations in industries such as wind, solar, utilities, construction, and public safety that are running internal drone programs.

Ground Control 2.0 combines the flight application with a comprehensive program management portal, allowing drone program operators to manage and scale their operations through one system.

The flight app was designed for commercial use, without distracting consumer features, and integrates necessary functions like weather and airspace checks and LAANC authorization.

The program management portal was created to replace scheduling tools, flight log trackers, and equipment tracking processes. The portal was designed to integrate well with ERP systems and GIS tools, and the team added features to make flight planning and data management more efficient.

# Business Benefits

## **COST SAVINGS**

Measure Ground Control provides immediate financial return in the form of technology cost savings, as it can replace up to four different different 3rd party software systems. For Measure, Ground Control provides \$19,400 in annual software cost savings.

## Mobile Flight Application Features

### Fly & Collect Data:

- *Check weather & airspace conditions*
- *Request LAANC authorization*
- *Retrieve and apply DJI Geo Unlock*
- *Fly with GPS-aided manual control or automated grid and waypoint patterns*
- *Use active track modes including spotlight, POI, trace, orbit, and profile*
- *Block data sharing with local data mode*
- *Automatically upload flight logs, screen captures, and completed checklists*

## Program Management Portal Features

### Manage People & Equipment:

- *Track the activities, certifications, & training of your team*
- *Setup user profiles with location, credentials, experience, and status*
- *Control user permissions with pre-defined roles*
- *Manage equipment with automatic usage tracking and maintenance recommendations*
- *Store equipment details, create kits, and disable or quarantine equipment*
- *Get reports of pilot and equipment activity*

### Schedule & Plan Flights:

- *Schedule missions; manage the program calendar*
- *Assign pilots, equipment, and other resources to missions*
- *Check airspace*
- *Design & upload flight plans*
- *Set company-wide flight parameters*

### Track & Report Activity

- *Access automatically uploaded flight logs, including flight playback & screen captures*
- *Check automatically flagged incidents for activity outside of safety best practices*
- *Review pre- and post- flight checklists*
- *View interactive dashboards of program metrics*
- *Create and export reports and flight data*

### Analyze & Store Data

- *Store unlimited flight logs, imagery, and uploaded files*
- *Add inspection results and review mission & portfolio-level summaries*
- *Upload completed data products to each mission*
- *Integrate GIS tools for data delivery*

## CASE STUDY

| Software  | Cost              |
|---|-------------------|
| Flight logging tool (such as Skyward)           | \$10,000 annually |
| Scheduling tool (such as Wrike)                 | \$12,000 annually |
| Equipment management tool (such as Current RMS) | \$1,000 annually  |
| Data storage & transfer system (such as Box)    | \$9,000 annually  |
| <b>Total</b>                                    | <b>\$32,000</b>   |

**Ground Control, 35 users** **\$12,600 annually**

---

**Cost Savings** **\$19,400**

### EFFICIENCY GAINS

Ground Control also provides significant efficiency gains by improving workflows and reducing data collection errors. Measure saves 2 hours per mission and has further reduced the frequency of repeated flights.

#### AUTOMATIC SCREEN GRAB

*Reduces number of repeat data collection on flights by making it easier to confirm data collection while pilots are in the field*

#### INTEGRATED AIRSPACE CHECK

*Reduces mission planning time*

#### DESKTOP FLIGHT PLANNING

*Reduces time in field for pilot flight planning  
Reduces instances of error since plan is created by data team directly*

#### DATA TRANSFER & STORAGE

*Saves 2-3 hours per week on data download and transfer*

#### AUTOMATED FLIGHT LOG UPLOAD

*Saves 25 minutes per day of pilot time in the field uploading flight logs*

#### REPORTING TOOLS

*Satisfies needs of reporting without having to reformat or rebuild graphs and charts, maximizing program management*

#### SENSOR DATA UPLOADER

*Reduced errors associated with improper data management  
Saves time for data transfer - 200 hours per year*

### IMPROVED COMPLIANCE

Measure has experienced improved safety outcomes when using Ground Control.

Automated flight incident tracking has improved safety oversight, promotes pilot adherence to policy, and acts as a warning system for possible malfunctioning equipment.

Automatically uploaded flight data means 100% tracking, and easily exported reports makes meeting reporting and compliance requirements easier and quicker. Reports can be generated on-demand and include detailed flight information.

Ground Control's in-app checklists have ensured Measure pilots always have access to proper safety documentation and protocols in the field, catching errors that otherwise may have been overlooked due to lack of information.

**“Operating in today’s aviation environment can be incredibly complex,” states Measure’s VP of Flight Operations, Brendon Conroy. “Measure Ground Control has simplified my program management needs into one cohesive platform. By streamlining planning and management, we are**

## CASE STUDY

reducing errors in the field and operating more efficiently, effectively, and safely.”

### Ready for the next step?

Measure Ground Control is helping enterprise companies like AES scale their drone programs. AES is a Fortune 500 energy company with more than 150 drone pilots as part of their global drone program. Measure has been there to help AES set up the program from the ground up, utilizing Measure's services for training, inspections, and advisory. As the program began to scale, more services shifted in-house and a greater need was on program management. Subsequently, Ground Control was introduced to the entire organization. In the program's first full year, it realized more than \$4.6M in financial benefit to the company.

“We see great value in Ground Control's worldwide flight management, starting with in-flight safety risk notifications and mapping of restrictive areas. Our pilots enjoy its ease of use and our

operators appreciate the automatic uploads of imagery which they use to extract valuable insights to improve our operations and safety.”

-Evaristo Leonardi, VP Global Operations Support at AES

To get started with Ground Control, sign up for a 30-day free trial:

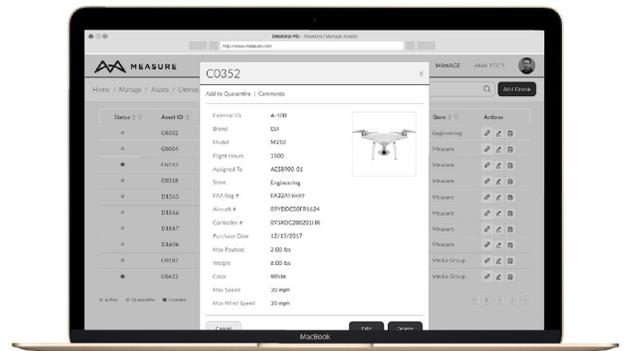
<https://www.measure.com/ground-control>

## CASE STUDY

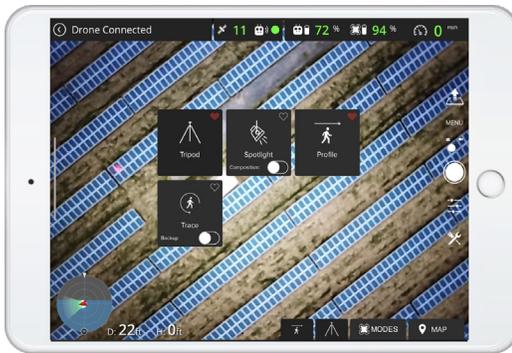
# Screenshots



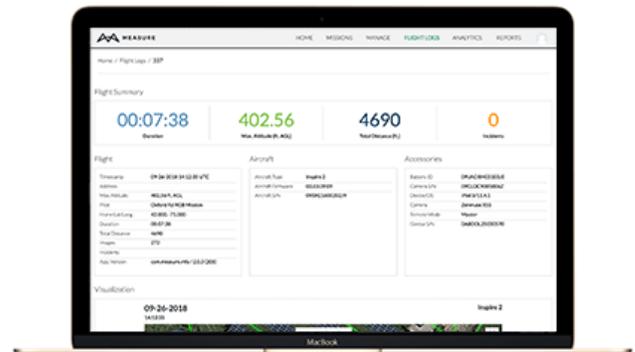
*Grid and waypoint flight features presented on iPhone and iPad.*



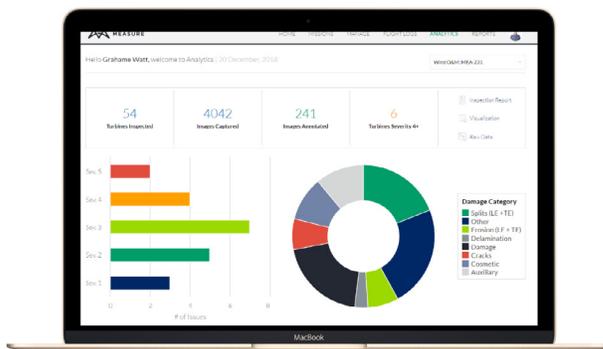
*Detailed equipment tracking.*



*Track modes that you can toggle on and off.*



*Automatic, detailed flight logs.*



*Real-time reporting in the web management portal.*

Ground Control is available for iOS on iPhone and iPad and is available for Android and Crystal Sky.

To view a quick video of the features, go to <https://www.measure.com/measure-ground-control-features-video>.

To watch a high-level, recorded demo, go to <https://www.measure.com/measure-ground-control-demo-video>.

To get started, request a 30-day free trial at <https://www.measure.com/ground-control>.