FLIGHT PATH

ALTITUDE 6,000 FT

-1.610V

-1.800V

-1.235V

-0.990V

-0.893V

-1.087V

-1.150V

-1.652V

-1.148V

-1.170V

-0.850V

-0.940V

clearGRID

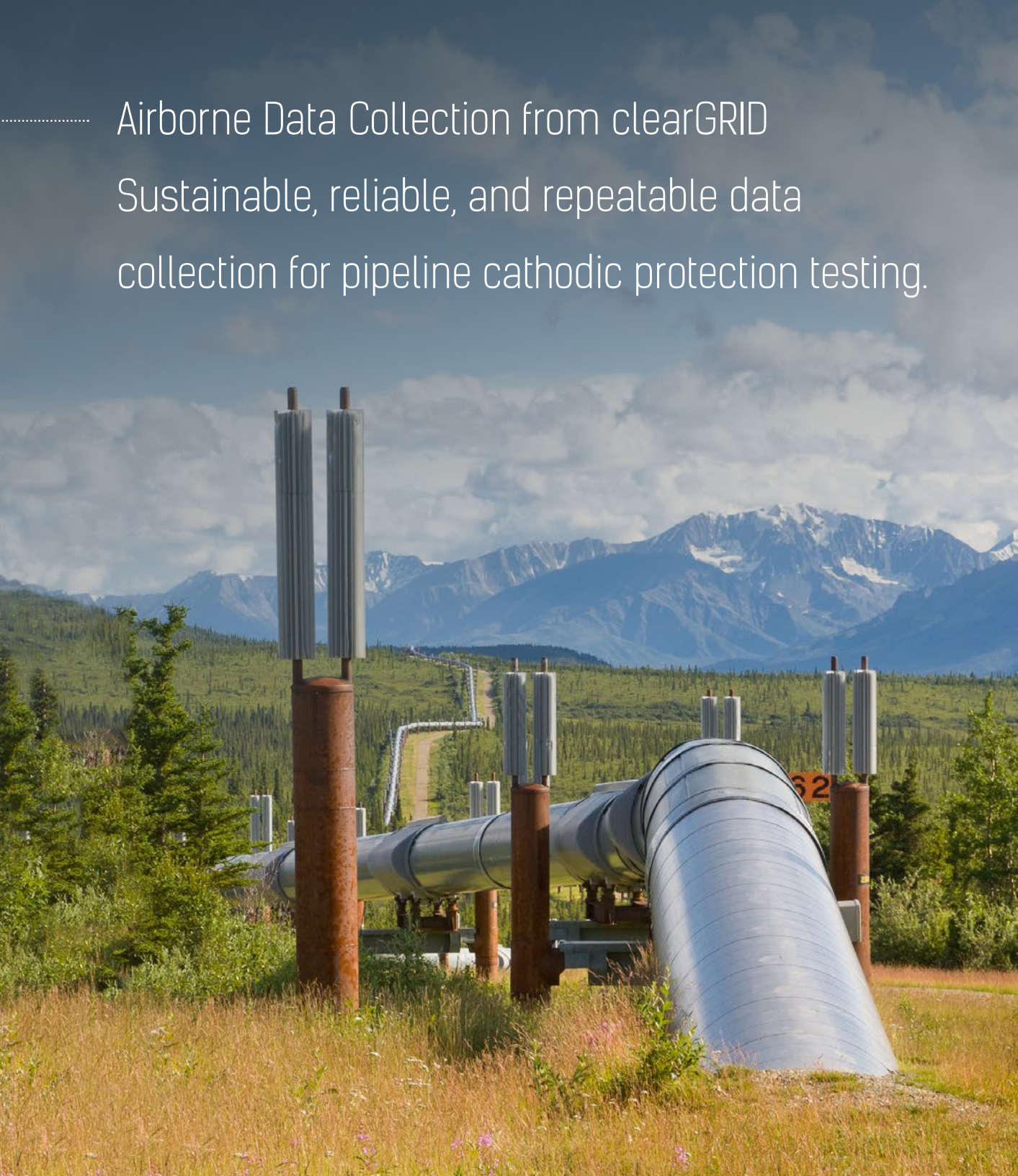aeroFlow

DON'T WALK BY. FLY BY!

Airborne Data Collection from clearGRID

Sustainable, reliable, and repeatable data collection for pipeline cathodic protection testing.

The Problem

Pipeline leaks are expensive and damaging to the environment, as well as to your reputation. Cathodic protection is the leak prevention system for your pipeline; therefore, regular testing is important.

Unfortunately, conventional data collection methods are:

1. **Expensive and infrequent**

2. **Slow**

3. **Difficult and often dangerous**

4. **Prone to human error**

The Solution

We provide a complete package that allows us to collect the necessary information from the air at any time.

1 **SENSOR INSTALLATION**

We can provide the necessary equipment and specialized sensors to get set up for aerial data collection.

2 **MISSION PLANNING**

Our Operations Control Centre notes the sensors to be collected and uploads flight plans to the aircraft.

3 **SENSOR READING**

Aircraft with specialized equipment read the sensors from the air; eliminating the need to access property or right of ways.

4 **MULTIPLE SENSORS**

Data collection for various types of sensors can occur in the same flight, thereby increasing the efficiency of collection.

5 **DATA TRANSMISSION**

Sensor data is transmitted to the Operations Control Centre from the aircraft where quality control is performed. This can be done near real-time to greatly reduce time lags for results.

6 **ANALYSIS**

Cathodic protection test data is analyzed and recommendations made.

Benefits of aeroFlow

Reduce leaks and spills

Remove personnel and vehicles from right of ways
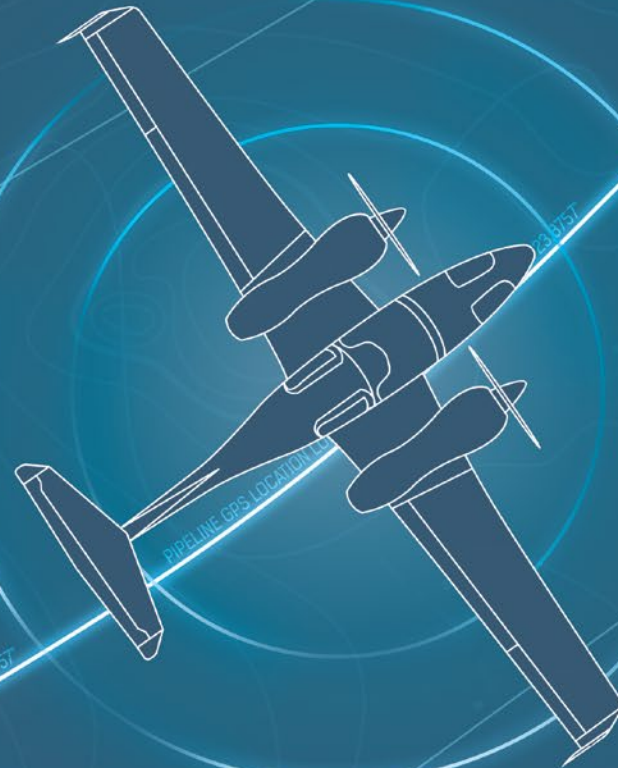
Eliminate disruption to land owners

Reduce human error

Decrease costs

Increase speed and frequency of data collection

About Us

Sustainable, Reliable, Repeatable

clearGRID is a leading North American technology company serving the energy and utility industries. We specialize in aerial data collection and analysis. clearGRID uses technology solutions to replace manual activities and tasks with automation.

Our Values

Safety is the Highest Priority - clearGRID has years of experience working with aviation regulators to develop emerging industries with the highest standards. clearGRID is focused on using technology to change the way aerial data collection is done: no more multi-tasking and distractions for pilots!

We Value You - Solving problems from the ground up starts with strong industry partnerships. We encourage feedback from you, the client, to constantly improve our service offerings. We regularly consult with industry experts to ensure our solutions best meet the needs of the client.

Best in Class Technology - The value of the right tools for the right job cannot be emphasized enough. In this case, the right tools (aircraft, software, control systems) greatly enhance the safety, efficiency and reliability of the solution. clearGRID's team has over 10,000 hours of in-the-air experience with aerial data collection and are setting the standard in using the technology to get things done right.

Environmental Stewardship - Looking after our environmental footprint is important to us. Using high-tech, fuel efficient aircraft and surpassing aviation industry standards by using lead-free fuel, we are setting an example in protecting the environment not only on the ground but also in the air.

Other Services by clearGRID

Right of Way Inspections	Aerial Meter Reading	Automated Cutting and Clearance Analysis (ACCA)
Using airplanes and unmanned aerial vehicles, clearGRID offers services in visual right of way inspections and leak detection.	Aerial smart meter data collection for utilities, for both AMR and AMI networks.	Fully automated inspection, analysis and maintenance planning for powerline right-of-ways.

Frequently Asked Questions

Q: Do I need to change any infrastructure?

A: You will need to have certain equipment and specialized sensors installed. We help put together a package of all the necessary infrastructure to convert your system to aerial data collection: permanent reference cells, remote current interrupters and sensors for remote voltage readings. We're happy to discuss your needs.

Q: How reliable is aerial data collection?

A: Collection Dates are set in advance so everyone knows when readings will be collected. clearGRID has technology, equipment and processes that allow us to meet your requirements, even with the impacts of weather. Our technology is able to collect 99.9-100% of sensors every time. Resolution of 1mV can be achieved.

Q: How soon can I get the results?

A: Our aircraft are connected to our ground-based Operations Control Centre at all times. Data can be relayed back to make results available for clients near real-time.

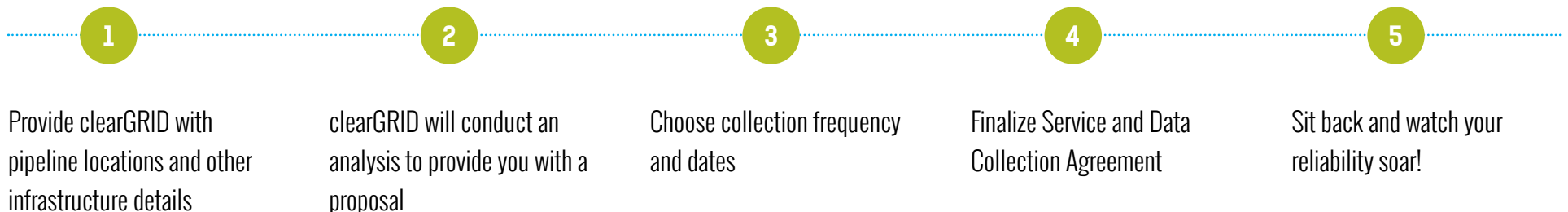**Q: Does clearGRID have experience reading sensors from the air?**

A: Yes, we read well over a million sensors every month.

Q: What other sensors can you read?

A: We can modify many industrial sensors to work with our technology. Contact us to inquire more about potential use cases.

How Do I Sign Up?

5 simple steps to having your meters read by clearGrid:

1	2	3	4	5
Provide clearGRID with pipeline locations and other infrastructure details	clearGRID will conduct an analysis to provide you with a proposal	Choose collection frequency and dates	Finalize Service and Data Collection Agreement	Sit back and watch your reliability soar!

clear**GRID**

Contact us for more details!

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