RSI

DRONE FLIGHT SERVICES

Powered by **ConnexiCore**

ENERGY, UTILITY & TELECOMMUNICATIONS
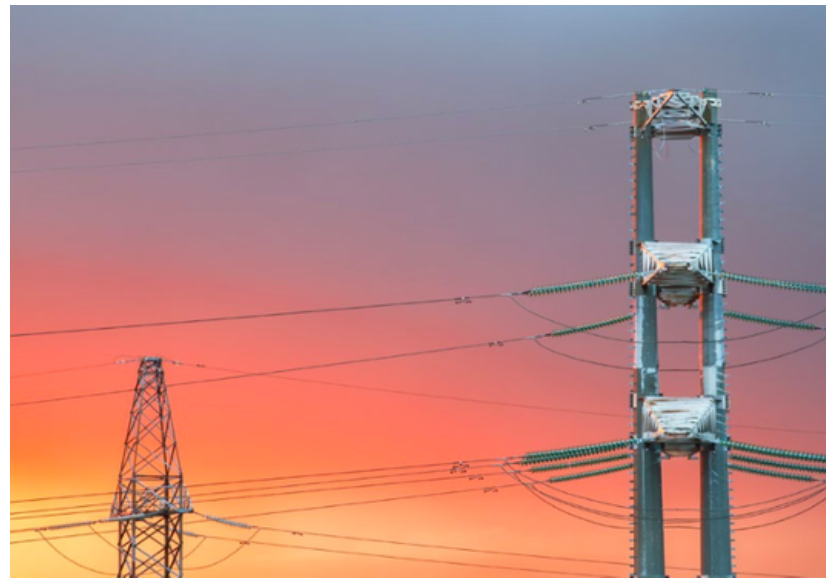

PROBLEMS THAT DRONES CAN SOLVE

- Improve Real Time Monitoring
- Enable Faster Tracking of Assets
- Catch Conflicts Sooner
- Mitigate Dirty, Dangerous & Dull Jobs

- Improve Workflow Efficiency
- Communicate Progress Faster
- Identify Hazards & Enhance Safety
- Identify Trends — Good or Bad

Utilities, Telecommunications, and Energy inspections have become much more complex. The telecommunications industry is one of the first industries to benefit from the use of Drones. Climbing communication towers and other high structures is one of the most dangerous jobs, and telecommunication asset owners can avoid these risks by using drones for these inspections. Commercial drones are changing the way operators are auditing and inspecting wireless infrastructure, by enabling a safer collection of high-resolution images, video, and 3-D renderings of tower assets.

HIGH VOLTAGE POWER LINE INSPECTIONS

Power lines spanning vast distances are a key component in the distribution of today's modern power grids. They also present unique maintenance challenges due to their geographical distribution, as well as their high elevations and limited accessibility.

Traditionally inspected by helicopter-based methods, they can be more easily and efficiently inspected using sUAV Inspection specialists equipped with Drones. Specialized cameras and highly efficient sensors are used to capture images and video footage that is detailed enough for ultra-fine post-inspection analysis, while telepresence can allow operators to see streamed video in real-time or from a tele-operator control point.

At RSI, our Data Engineering team is made up of GIS experts with years of experience in processing, analyzing, and delivering drone data into our clients' existing data infrastructure so that they can easily make the most of their drone inspections.

AERIAL DRONE SERVICES FOR ENERGY, UTILITIES & TELECOMMUNICATIONS

Powered by ConnexiCore

CELLULAR TOWER INSPECTIONS AND AUDITS

The deployment of aerial intelligence using Drones now allows the industry to greatly improve operational efficiencies by having reliable and accurate aerial data of their assets. Drones also reduce the need for workers to climb towers, high tension arrays, and service poles to perform routine audits and inspections. Drones used for tower inspections also allow operators to quickly identify and verify equipment specifications and/or damage, thereby allowing a more proactive approach to maintenance and repair.

OBSERVATIONS & MEASUREMENTS

TOWER MEMBERS	CONNECTIONS
LADDER & SAFETY DEVICES	GUYS & HARDWARE
FOUNDATIONS	ANTENNAS & MOUNTS
TRANSMISSION LINES	GROUNDING
CONDUIT & LIGHTING	PAINT
GALVANIZING	TOWER ALIGNMENT

At RSI, our pilots and data analysis team work hand-in-hand to create detailed data collection flight plans and to confirm data quality before pilots leave the job site.

PANEL DRONE INSPECTIONS ON SOLAR FARMS AND ARRAYS

Drone cameras offer many advantages for rooftop solar panel inspectors as well as operators of expansive solar farms. In addition to being able to clearly view temperature anomalies on a crisp thermal image, drones can be used to scan installed solar panels during normal operation across large areas within a short time frame, allowing problem or suspect panels to be isolated quickly, and readying them for remedial action to keep energy production at optimum levels.