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Industrial Plants Are Inspected by Skypersonic Drone Piloted From Across the Atlantic Ocean Via Cellphone Connection – A World First

Skypersonic's Trans-Atlantic Inspection of Iren Utility Plant in Italy Portends Era of Quick, Safe and Cost-Effective Inspections of Industrial Facilities Across the Globe

ORLANDO, Fla. and TURIN, Italy, June 28, 2022 (GLOBE NEWSWIRE) -- Relying only on an internet connection from a normal cellphone, industrial drone company [Skypersonic](#) — part of publicly traded drone company [Red Cat Holdings](#) (NASDAQ: RCAT) — visually inspected the interior of a fully operational utility plant in Turin, Italy, using a drone controlled from Orlando, Fla., 4,800 miles away.

To see a video of this historic transoceanic remote flight, click here:

<https://www.youtube.com/watch?v=cq8ftbUyBu8>.

The Orlando-based pilot — Drew Camden, president of Red Cat subsidiary Rotor Riot — had no advance knowledge of the [Iren](#) district heating-network plant in Turin through which he piloted the Skypersonic “[Skycopter](#)” drone. This special drone can be piloted without the aid of GPS, a fundamental system for piloting conventional drones outdoors but that is not available indoors, under bridges, in tunnels and other enclosed spaces.

Pilot Camden had never visited the Italian plant, nor seen any drawings or photos of the floor plan or the layout of the many staircases, stacks, ducts, conduit, joists and other obstacles through which he guided the Skycopter from across the Atlantic Ocean. All he could go by was the video feed from the drone, which allowed him — thanks to Skypersonic's technology minimizing signal lag across oceanic distances — to see and react to the building's interior in near-real time, with a reception lag, or “latency,” of only 68 milliseconds, i.e., less than a tenth of a second.

“We learned much from this historic flight controlled from an ocean away, which is actually our third trans-Atlantic flight,” said Giuseppe Santangelo, Skypersonic CEO. “Most importantly, we learned that an internet connection via a mobile phone in the vicinity of the drone is all that is needed to remotely pilot a drone from virtually anywhere – in fact, up to 8,000 miles away. The previous two flights had relied on a more sophisticated, non-mobile internet connection. We also learned that it is possible to navigate a very dense and complex interior environment from another continent using this easily configurable set-up.”

This demonstration in the Iren plant was promoted by the Turin House of Emerging Technologies with the collaboration of the University of Turin. Iren is the leading multi-utility

company in northwest Italy in the fields of electricity, gas, thermal energy for district heating, energy efficiency and of the management of integrated water, environmental and technological services.

Santangelo noted that the possibilities are enormous for this advanced yet easy-to-use and extremely portable remote-piloting technology:

“We had already proven, through a [two-year inspection program with General Motors](#), that using drones flown by on-site pilots to inspect industrial facilities brings significant savings in time and money over the traditional method of erecting scaffolding and hoisting personnel in the air – as well as being immeasurably safer, of course. These time- and money-saving benefits are exponentially greater when the drone pilot – always the most expensive component of using drones – never needs to leave his office to inspect any building virtually anywhere in the world. Travel expenses are eliminated completely and, because no travel is involved, the pilot’s time commitment drops from days to hours, which also means that a pilot can conduct several inspections on the same day with drones operating thousands of miles away while remaining in the same place.”

Santangelo said that the invention of Skypersonic’s remote-piloting technology was prompted by the travel restrictions imposed by the COVID pandemic:

“Pre-COVID, our normal procedure was to send a pilot to a customer to train them in using the Skycopter for interior inspections. But the lockdowns imposed by COVID made this impossible, so we had to come up with an alternative and I tasked our software engineers to develop a way to remotely pilot drones over the internet. When this was accomplished, our customers were able to begin practicing flying their new drone before it even arrived by remotely flying a similar drone located in our offices in Detroit or Turin. The customer needs just a radio controller connected to the internet and our remote piloting software. And then when the customer receives their drone, our pilot in Detroit or Turin can show them how to fly it by taking over control of the drone from thousands of miles away. The necessities imposed by COVID have created a new world of opportunities and fundamentally transformed our business model. In fact, ‘Remotely Flying Drones Anywhere™’ has become the core business strategy for Red Cat Holdings’ enterprise segment, of which Skypersonic is a part.”

About Skypersonic

Headquartered in Detroit with a European office in Turin, Italy, Skypersonic is a leader in the use of drones for industrial inspections and first response emergency situations, as well as in “Remotely Flying Drones Anywhere™” via its ground-breaking internet-based piloting system. Skypersonic’s flagship is the Skycopter: a drone with a tiltable video camera that is designed to work in extreme conditions and ultra-tight spaces. It is enclosed and protected by an external aerodynamic, ultra-light and ultra-resistant cage to ensure safety and avoid damage to inspected structures and to the airframe itself. It is also fitted with an ultra-bright 360° LED lighting system for applications in complete darkness, and sensors to detect gases and radiation can also be added. Skycopter uses Skyloc technology: a real-time location and monitoring system able to control and track with extremely high accuracy the movements of the drone in indoor scenarios or where GPS is not available. Skypersonic also invented the first-ever worldwide civil real-time remote piloting system that allows piloting in FPV (first-person view) any drone (not just the Skycopter) located anywhere from a generic internet

station located anywhere.

About Red Cat Holdings

Red Cat Holding, a publicly traded company (NASDAQ listing: RCAT) provides drone products, technologies and services to the fastest growing market segments in the drone industry through four operating subsidiaries: [Skypersonic](#) (providing drones for industrial inspections and first response emergencies that can be piloted from anywhere in the world), [Teal Drones](#) (military grade drones), [Fat Shark](#) (headsets for FPV drones that allow for an incredibly immersive experience) and [Rotor Riot](#) (a leader in providing product, services and support to the high performance drone market).

About Iren

Iren is the leading multi-utility company in the Northwest of Italy in the fields of electricity, gas, thermal energy for district heating, energy efficiency and of the management of integrated water, environmental and technological services. Present in Piedmont, Liguria, Emilia Romagna and Tuscany, but projected into a wider multi-regional catchment, the Group operates in the territories with a multiplicity of services such as: the production of electricity (already today 75% derived from renewable sources) and thermal energy for district heating, a sector in which Iren is the national leader; the implementation of technological solutions for energy efficiency and smart cities to support the Public Administration; the management of the integrated waste cycle (where it boasts percentages of separate collection with peaks of 80%); the development of circular economy solutions thanks to over 40 waste treatment plants; the management and enhancement of the integrated water cycle and electricity and gas distribution networks with high-efficiency performance; the strengthening of a support and sales network for the benefit of the 2 million customers through physical branches, call centres and apps. Iren delivers its services thanks to approximately 9,000 employees and with a portfolio of approximately 2 million customers in the energy sector, 2.8 million inhabitants served in the integrated water cycle and 3.1 million inhabitants in the environmental cycle. Thanks to a high technological know-how, a long-term vision and a significant investment capacity, Iren is a reference partner for communities and public administrations in projects to enhance the territories, projecting them into a path of sustainable growth. With these objectives, in 2021 Iren approved a ten-year strategic plan, the most ambitious in the history of the multi-utility company, with 12.7 billion in investments by 2030, which is based on three fundamental pillars: ecological transition, attention to the territory and quality of the service.

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