

January 14, 2025

Kawasaki Heavy Industries, Ltd.
Japan UAS Industrial Development Association

Unmanned Helicopter “K-RACER” Demonstrates Automated Cargo Transport without Human Intervention at “Nankai Rescue 2024”



“K-RACER” cargo transport demonstration at the Shima Total Sports Park in Mie Prefecture

Tokyo, January 14, 2025 — Kawasaki Heavy Industries, Ltd. announced today that it has participated in “Nankai Rescue 2024*1” (conducted on January 13, 2025, organized by the Japan Ground Self-Defense Force Middle Army), a practical training exercise simulating the occurrence of a Nankai Trough earthquake, in collaboration with the Japan UAS Industrial Development Association (hereinafter “JUIDA”).

In this exercise, Kawasaki conducted a demonstration using its unmanned helicopter “K-RACER” with support from JUIDA, which has extensive expertise in operating unmanned aircraft (drones) during disasters, simulating the transport of relief supplies to isolated areas affected by disasters.

The demonstration successfully achieved “automated cargo transport*2,” performing the entire process without human intervention.

Kawasaki aims to contribute to establishing a safe and innovative logistics network using “K-RACER” for both normal and emergency situations. During normal times, it will be used for transporting supplies to mountain lodges, delivering equipment to power transmission tower construction and maintenance sites, and maintaining public infrastructure primarily in mountainous areas. In the event of a disaster, it can be quickly deployed to affected areas for various support activities, including delivering relief supplies to isolated regions and transporting materials for restoration work.

Moving forward, Kawasaki will continue developing “K-RACER” while leveraging the experience gained through participation in this training exercise to realize push-type support that can swiftly deliver essential supplies necessary for sustaining the lives of disaster victims. We will strengthen cooperation with stakeholders including the Japan Ground Self-Defense Force, local governments, and JUIDA to contribute to improving response capabilities for increasingly severe natural disasters, which represent a significant societal challenge.



Japan Ground Self-Defense Force inspecting supplies transported by “K-RACER”

- *1 A large-scale disaster prevention training exercise conducted by the Japan Ground Self-Defense Force Middle Army, which is responsible for defense, security, and disaster deployment in 19 prefectures and 2 metropolitan areas across the Tokai, Hokuriku, Kinki, Chugoku, and Shikoku regions. It is the largest disaster response training exercise by the Middle Army, aimed at improving disaster response capabilities in preparation for a Nankai Trough mega earthquake and sharing training results with relevant local governments.

(Japan Ground Self-Defense Force Middle Army Nankai Rescue 2024 Special Website)

<https://www.mod.go.jp/gsdf/mae/contents/nankairesukyu/nankairesukyu2024.html>

- *2 Refers to cargo transport that requires no human intervention, utilizing a remote release system. Take-off and landing operations can be performed easily using PC or tablet devices, with automatic flight following GPS waypoints.

<Basic Specifications of “K-RACER” (K-RACER X2)>



- Main rotor diameter: 7m
- Maximum payload: 200 kg
- Maximum speed: Approximately 140km/h
- Drive system: Reciprocating engine
- Fuel type: high-octane gasoline
- Range: 100km or more
- Continuous operation time: 1 hour or more
- Wind resistance: Approximately 18m/s

<Reference Links>

- Unmanned Helicopter K-RACER
<https://global.kawasaki.com/en/groupvision2030/K-RACER.html?wovn=zh-CHT>
- K-RACER-X2, the latest prototype for unmanned VTOL aircraft
<https://www.youtube.com/watch?v=1Gu8Yr3MWck>
- “K-RACER” Demonstrates Automated Cargo Transport without Human Intervention
https://youtu.be/3zRKw4NuR_g

<Related Releases>

- K-RACER-X2 Unmanned Helicopter Demonstrates Top Useful Load Capacity of 200kg (January 12, 2024)
https://global.kawasaki.com/en/corp/newsroom/news/detail/?f=20240112_4742