



United Aircraft

# 联合飞机集团

无人先于时代 智造赢取未来

Unmanned Frontier Intelligent Future





**Group Overview**

**Core Products**

**Use Case**



An aerial photograph of a modern architectural complex, featuring a large building with a curved, glass-enclosed section and a taller, more rectangular structure with a grid-like facade. The entire image is overlaid with a semi-transparent blue filter. In the background, there are green hills and several high-voltage power line towers. The foreground shows a road and some landscaping.

# 01 Group Overview



# Development History



**National Leader in Low-Altitude Economy**

**2024 and Beyond**

Supported by

- ✓ technological advantages
- ✓ capital financing
- ✓ supply chain capabilities

**Outstanding Private Enterprise in National Defense**

**2013-2023**

- ✓ China's First Unmanned Helicopter R&D Project (2015)
- ✓ China's Only Privately Owned Weapon System Prime Contractor (2015)
- ✓ Developer of China's First Unmanned Helicopter Industry Standard (2018)
- ✓ China's Sole Certified Developer of Military-Deployable Unmanned Helicopters (2019)
- ✓ Completed D+ Round Financing (2023)

**Technological Accumulation: Mastering multiple key core technology**

**2008-2012**

- ✓ H $\infty$  Algorithm Iteration Completed – Our flight control systems are used by over 80% of national research institutes.
- ✓ Founded in 2012 – Successfully conducted China's maiden flight of an electronically controlled coaxial unmanned helicopter.





## 2 Headquarters

Shenzhen  
Group  
Headquarters

Beijing  
Military Products  
Headquarters

## 3 Industrial Bases

Wuhu  
Production &  
Manufacturing Base

Harbin  
Production, Manufacturing &  
Application Demonstration  
Base

Beihai  
Maritime R&D &  
Test Flight Base

## 3 R&D Centers

Xi'an  
Flight Control &  
Avionics R&D Center

Chengdu  
Tiltrotor System R&D  
Center

Singapore  
Overseas Research  
Institute

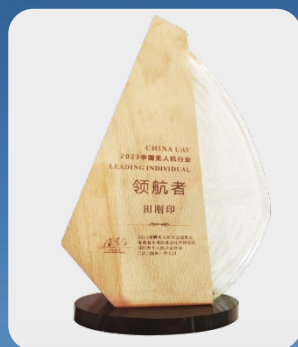
## 2 Low-Altitude Demonstration Zone

Dongtai

Shiyan



# Honor and Qualification



## Qualif.

### Military Certifications:

GJB 9001 Military Quality Management System Certification, Weapons & Equipment Research & Production License, Class II Confidentiality Certification for Weapons & Equipment R&D/Production Units (Note: No finalized Zhi-1 model mentioned).

### National Certifications:

National-Level "Specialized, Refined, Unique, and New" SME, National High-Tech Enterprise, Beijing Municipal Enterprise Technology Center, Anhui Commercial UAV Industry Innovation Center.

### Operational Qualifications:

Civil Unmanned Aircraft Operator Certificate, Civil UAV Pilot Training Organization Certificate, Class A UAV Enterprise Service Capability Certification, Class A SME UAV Operations & Maintenance Capability Certification, CMMI Maturity Level 3 Certification, Information System Construction & Service Capability Certification, Pesticide Business License.

## Honor

Top 10 in Aerospace Category – 2024 Global Unicorn List (Hurun Research)

Top 4 in China Aerospace – China Unicorn Index 2024

Top 10 Innovative UAV Brands (Emergency Response Category) 2023

2023 Low-Altitude Economy Benchmark UAV Enterprise (China)

2023 UAV Industry Pioneer Award (Tian Gangyin, Chairman)

"Industry Leadership Award" – 4th Unmanned Systems Gold Wings Awards

"Leading Figure Award" (Tian Gangyin) – 4th Unmanned Systems Gold Wings Awards

Outstanding Contribution to Low-Altitude Economy Award

Best Technological Innovation Award



# Intellectual Property



**600+**

Intellectual Property Assets

**260+**

Patents

**50+**

Software Copyrights

**40+**

Trademarks

Global Strategic  
Footprint: China, United  
States, Russia,  
European Union & Key  
Markets



# Core Business

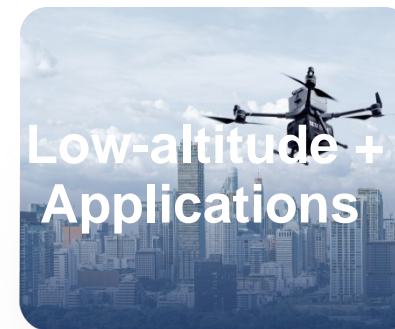
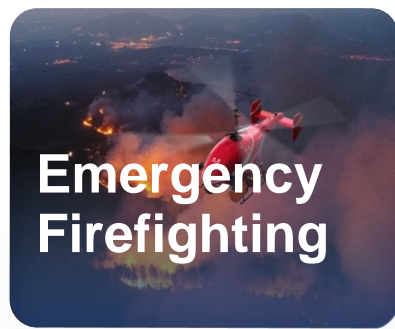


## Full Range of UAV Products

Multi-rotor UAVs | Large-scale UAVs | Aviation-grade UAVs

## Full-scenario Solutions

Providing UAV equipment and comprehensive solutions for governments, military, and partners.



## Full-industry-chain R&D Services



R&D Design



Production &  
Manufacturing



Sub-assembly &  
Final Assembly



Testing &  
Verification



Solution  
Development



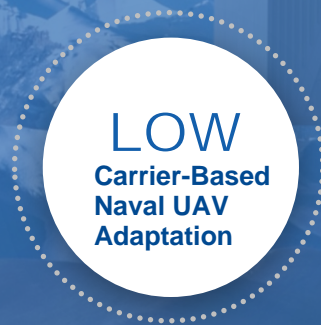
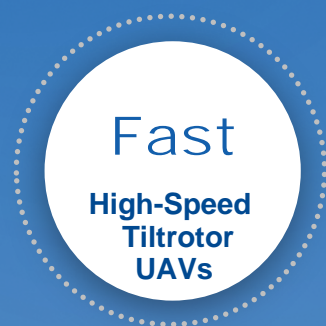
Service & Support



# Strategic Direction



## Ten Core Technological Advantages



02

# **Core Products**



## Full Coverage of Industrial-grade UAV Market Demands

### Multi-rotor UAVs



LEIYING Q20



Q100 Agricultural Drone

### Large-scale UAVs



350kg-class  
Unmanned  
Helicopter  
**TD220**



600kg-class  
Unmanned  
Helicopter  
**TD550**

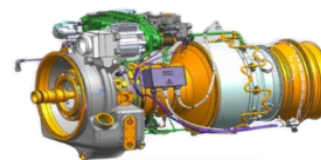


1.2-ton Tandem  
Unmanned  
Helicopter  
**T1400**

### Aviation-grade UAVs



Lanying R6000 Tiltrotor Aircraft



Liantai Cloud

Aviation Turboshift Engine



# Lineage-Based Development

## 电动多旋翼 quadrotor drones



Q20无人机

Q20 quadrotor platform



Q100农业无人机

Q100 agricultural drone

## 无人直升机 unmanned helicopters



TD220无人直升机

TD220 unmanned helicopter



TD550无人直升机

TD550 unmanned helicopter



T1200纵列式无人直升机

T1200 tandem unmanned helicopter

## 倾转旋翼飞行器 tiltrotor aircraft



R6000倾转旋翼飞行器

(油动版本 油电混动 纯电)

R6000 tiltrotor aircraft (Aviation kerosene version, Hybrid Gas-Electric version, All-Electric version)



# LANYING R6000

World ' s First Tiltrotor Aircraft

## Product Advantages :

Large Payload | High Cruise Speed | Long Range  
All-terrain | Multi-mission | Strong Environmental  
Adaptability

## Application Fields :

Manned Transportation  
Cargo Transportation

Point-to-point, Long-distance Future Air Transport



## Performance Specifications

Maximum Takeoff Weight

**6100 kg**

Maximum Payload Capacity

**2000 kg**

Maximum Range

**4000 km**

Service Ceiling

**7620 m**

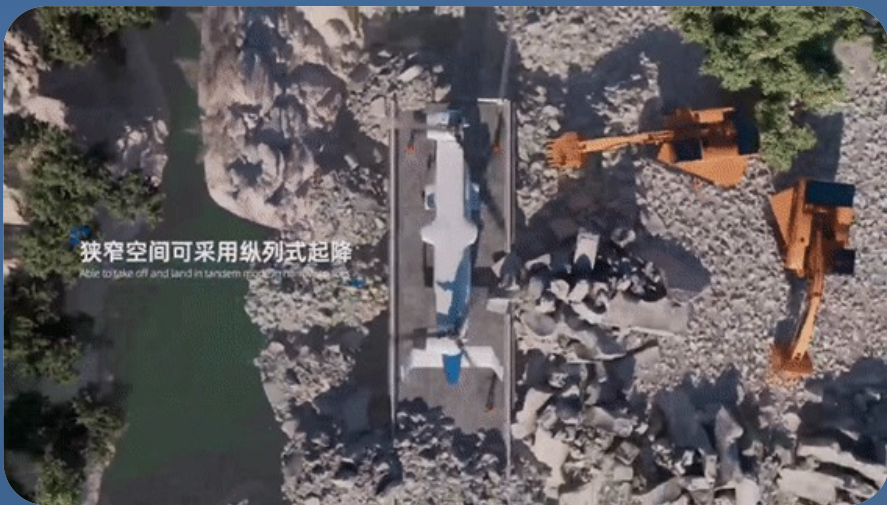
Cruise Speed

**550 km/h**

Hover Ceiling (Out of Ground Effect)

**2000 m**







# 7.6m<sup>3</sup> storage space

Meeting the Cargo Transport Needs of Most High-Value Products



Cargo Transportation



Passenger Travel

Travel for **6-12** people

Creating a Comfortable Business Space



# T1400

## Product Advantages:

The T1400 can carry electro-optical pods, fire-fighting equipment, cargo delivery systems, and agricultural spraying gear, with a 650kg mission payload to meet most on-site task requirements.

## Main Missions :

- Emergency Rescue
- Urban & Forest Firefighting
- Cargo Delivery to Islands & Mountainous Areas
- Agricultural & Forestry Spraying



## Performance Specifications

Maximum Takeoff Weight

**1400 kg**

Maximum Payload Capacity

**650 kg**

Endurance :

**≥ 8 h** Payload 200kg | **≥ 2 h** Payload 500kg

Maximum Level Flight Speed

**180 km/h**

Service Ceiling

**6500 m**

Typical Mission Radius

**200 km** extendable

# TD550

## 550kg-class Unmanned Helicopter

### Product Advantages :

- Excellent High-altitude Performance, Adaptable to Harsh Climates
- High Payload, Speed & Endurance
- Precise Control & High Stability
- Simple Structure, Low Manufacturing & Maintenance Costs
- Autonomous Capabilities: Takeoff/Landing & Obstacle Avoidance

### Application Fields :

- Emergency Firefighting
- Transportation & Delivery
- Communication Relay
- Forest & Grassland Inspection
- Agricultural & Forestry Plant Protection
- Industrial & Chemical Detection

### Performance Specifications

Maximum Takeoff Weight

**640 kg**

Sea Level

**550 kg**

Altitude 5000m

Maximum Payload Capacity

**200 kg**

Sea Level

**120 kg**

Altitude 5000m

Endurance

**6.5 h**

Payload 200kg  
Sea Level

**2 h**

Payload 120kg  
Altitude 5000m

Service Ceiling

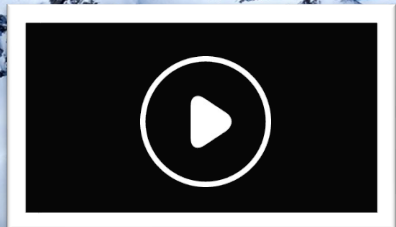
**6500 m**

Maximum Level Flight Speed

**180 km/h**

Typical Mission Radius

**200 km**





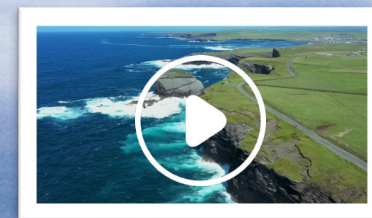
# Q20

## Product Advantages:

- 73-Minute Endurance | 10kg Max Payload | 20km Communication Range
- SDK Development Kit | Six-Direction Obstacle Avoidance | Multi-Mission Payload
- Built-in High-Performance Onboard Computer | Integrated High-Definition Bright Display & Control
- Custom Development Support | Satellite Communication Compatible

## Application Fields :

- **Low-Altitude Logistics:** Urban Food Delivery, Rural Express Transport, Perishable Agricultural Product Transport, Emergency Cargo Delivery, Medical Supply Transport
- **Agriculture & Forestry Patrol:** Growth Analysis, Crop Pest Monitoring, Forest & Grassland Inspection
- **Inspection & Surveying:** Power Grid Patrol, Firefighting Reconnaissance, River Patrol, Traffic Monitoring



## Performance Specifications

Max Mission Payload

**5.5 kg** | **10 kg**

Standard | Custom

Max Level Flight Speed

**27 m/s**

Endurance

**73 min**  
No Payload

**50 min**  
5kg Payload

Communication Range

**20 km** No Interference

Max Range

**60 km**

Max Withstandable  
Wind Speed

**15 m/s**

Max Flight Altitude

**7000 m** High-altitude  
Power

Operating Temperature  
Range

**-40°C~60°C**



# Q100 Agricultural Drone

## Product Advantages :

Efficient Operation | Multi-Purpose | High Safety & Reliability | Precision Operations  
Terrain-Following Autonomy | Powerful Propulsion | Higher Protection Grade | Rapid Battery Swap

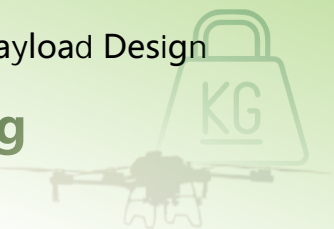
## Application Fields :

- Agriculture Pesticide Spraying, Fertilization, Sowing for Croplands & Orchards
- Forestry Pest Control in Forest Regions
- Fishery Feed Delivery, Aquaculture Pest Control
- Logistics Agricultural Product Transport, Rural Logistics

## Performance Specifications :

Max Payload Design

**65 kg**



Max Flow Rate

**20 L/min**



Obstacle Avoidance System  
Dual-Vision + 5-Direction Radar Avoidance



Max Flight Speed

**13.8 m/s**



Max Sowing Takeoff Weight

**126 kg** Sea Level



IP Rating

**IPX6**





An aerial photograph of a dense urban area, likely a city center, with numerous high-rise buildings and a complex street grid. The image is overlaid with a semi-transparent blue filter. In the center, the number '03' is displayed in a large, white, sans-serif font.

03

Use Case



# Five Major Industries



Emergency Firefighting

01



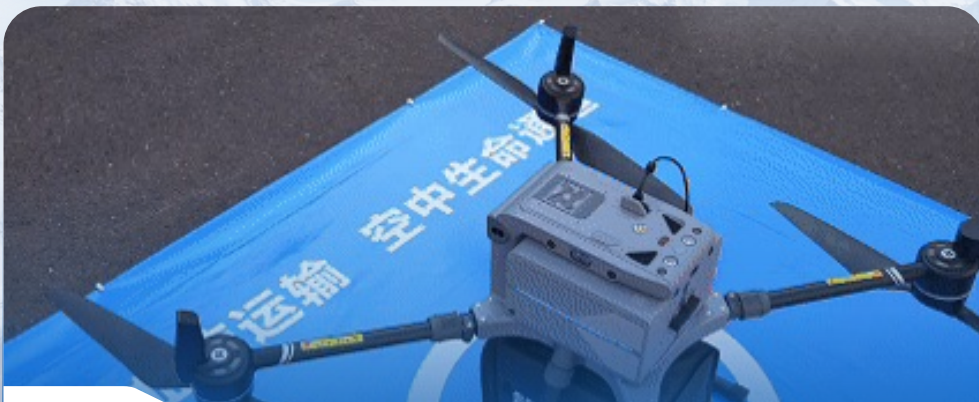
Agricultural&Forestry  
Plant Protection

02



Power Applications

03



Low-Altitude+ N

04

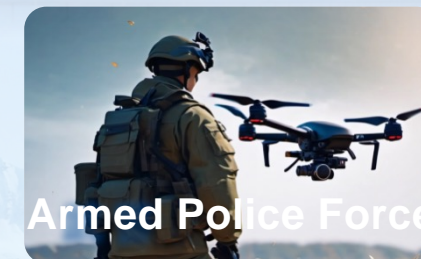


Defense&Military Solutions

05



# Military



Reconnaissance, Fire Correction & Damage Assessment	Artillery Fire Adjustment	Manned-Unmanned Teaming (MUM-T)	Nuclear Radiation Detection
Shipborne Multi-Mission	Electronic Warfare (EW)	Red-Blue Wargame & Target Practice	Manned-Unmanned Teaming (MUM-T)
Communication Relay Support	Strategic & Operational Airlift	Reconnaissance-Strike Integration	Cross-Domain Heterogeneous UAS Collaboration



# Industry 1:Emergency Firefighting



Emergency Rescue |  
Cargo Delivery

## Participate in Emergency Rescue/ Transport Across Provinces

Rescue & Delivery System Passed  
Third-Party Testing (Shenyang Fire  
Research Institute) – Meets  
Specifications



Emergency Communication

## Three-Cut Scenarios (No Power/ Water/Communication) – Emergency Communication Support

Emergency Communication  
System Passed Third-Party  
Testing – Exceeds Specifications



Urban Firefighting

## High-Rise Firefighting System Passed Third-Party Testing – Exceeds Specifications

High-Rise Firefighting System  
Passed Third-Party Testing –  
Exceeds Specifications



Firefighting

## Forest Firefighting

Completed Live Firefighting  
Tests in Forest & Urban Areas  
(Heilongjiang, Anhui, Suzhou)



# UseCase: TD550 Emergency Communication Relay

**Airborne “ Communication  
Command Station”**

**Outcome: Communication Restoration  
& Disaster Reconnaissance**

**Efficiency: Establishes 2-Hour UAV  
Rescue Network**

**Benefit: Breaks Information Isolation  
in “ Three-Cut Scenarios ”**



**Public Network Restoration**

01



**Private Network Support**

02



**Disaster Detection**

03



# UseCase: TD550 Fire Extinguishing

## Airborne "119"

Outcome: Precision Firefighting,  
Firefield Reconnaissance, Fire Intensity Assessment

Efficiency: Unaffected by Ground Traffic,  
Rapid Deployment

Benefit: Early Detection,  
Rapid Response, Complete Suppression



Urban High-Rise Firefighting

01



Forest Firefighting

02



## Innovative Application: T1400 Emergency Rescue

Airborne “120”

Rescue Cabin: Manned Rescue –  
1 casualty, 2 medical staff, plus rescue equipment



01



02



# Industry 2: Agriculture, Forestry and Plant Protection

Three Pillars of Agriculture: Farmland Inspection, Crop Monitoring, Spraying, Sowing, Agricultural Cargo Transport



LEIYING Q20

01



Q100 Agricultural Drone

02



T1200 Heavy-Lift Unmanned Helicopter

03

Outcome	Farmland Inspection, Pest & Disease Monitoring, etc.	Precision Fertilization, Pesticide Spraying, Sowing	Precision Fertilization, Pesticide Spraying, Sowing
Efficiency	6,000 mu/sorties	400 mu/hour (1 operator)	≥2,000 mu/hour (FullyAutonomous)
Benefit	Precision Monitoring, Agricultural Prescription Mapping	Precision Operations, Low-Carbon Emission	300% Comprehensive Benefit Increase
Payload	10kg	65kg	650kg

1 mu≈ 0.0667 hectares



## Industry 3: Smart Power

### Power Inspection: Q20 Meets New Power Grid Patrol Requirements

### Power Construction: T1200/T D550 Meets New Power Hoisting Challenges



**Wind Turbine Blade &  
Photovoltaic Inspection**

01



**Power Transmission &  
Distribution Channel  
Inspection**

02



**Precision Power  
Grid Inspection**

03



**Power Construction  
& Cargo Delivery**

04



# Industry 4: Logistics and Transportation

## Three Pillars of Transportation

Large UAV



- T1400 ——650Kg
- **Cross-region Transport (Cargo & Manned)**

Medium UAV



- TD550——200Kg
- **Cross-domain Transport ,Efficient Transfer**

Small UAV



- Q100——65Kg
- **Rural Logistics ,Heavy-load Transfer**
- Q20——10Kg
- **Urban logistics ,Ultra-fast Delivery**

## Takeoff & Landing Facilities



**Unmanned Helicopter Landing Site Development**



**Small UAV Landing Site Development**

## Command & Control Platform



**Route Planning**

**Mission Management**

**Flight Monitoring**

**Equipment Management**



# UseCase: Low Altitude Logistics



## Harbin, Heilongjiang

First Low-Altitude Logistics  
Delivery in Remote Areas

01



## Shiyan, Hubei

First Low-Altitude Logistics Route in  
Hubei Province

02



## Wushan, Chongqing

First 21-UAV Collaborative  
Transport in China

03



**Nanshan, Shenzhen** Regular Low-  
Altitude Medical Transport Service

**Shenzhen Longgang** First "Mobile  
Clinic + UAV Transport" Model

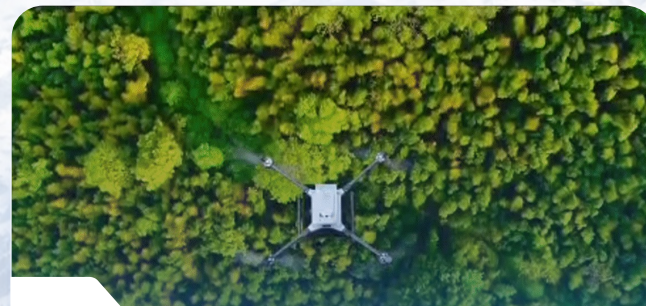
04



## Wuhu, Anhui

Liantai Express Officially Launched  
China's First Long-Distance Low-Altitude  
Logistics Route

05



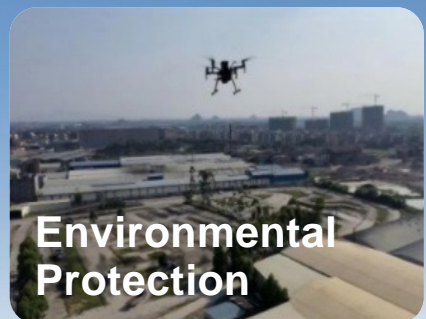
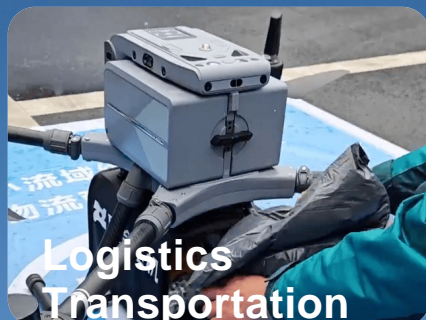
**Greater Khingan Mountains,  
Heilongjiang**

Party Newspaper Delivery to Forest  
Regions — Same-Day Arrival

06



# Innovative Applications: Top 10 Application Scenarios for "Low Altitude+"





**Become the Defining Leader in Autonomous  
Systems Worldwide**

**Enable Frictionless Mobility for Cargo and  
Humans**

**Drive the Next Mobility Revolution**



Wechat  
Official Account



Wechat  
Video Channel