

Low-Altitude Government Platform Empowering Governance from New Heights

Traffic Control Technology Co., Ltd.

2026.6

Contents

01 Background

02 Case Study

03 Future Outlook

PART 1

Background



Low-altitude Economy: Rapid Development

Since being designated as a **new strategic industry** in 2023, China's low-altitude economy has been catalyzed by a multi-pronged national strategy. This comprehensive policy push is systematically guiding the sector from **pilot stages** toward scaled, **commercial development**.



Passenger Transportation



Agricultural Operations



Infrastructure Inspection



Food Delivery Logistics



Fire-fighting



Public Security & Surveillance



Regional Logistics Hub

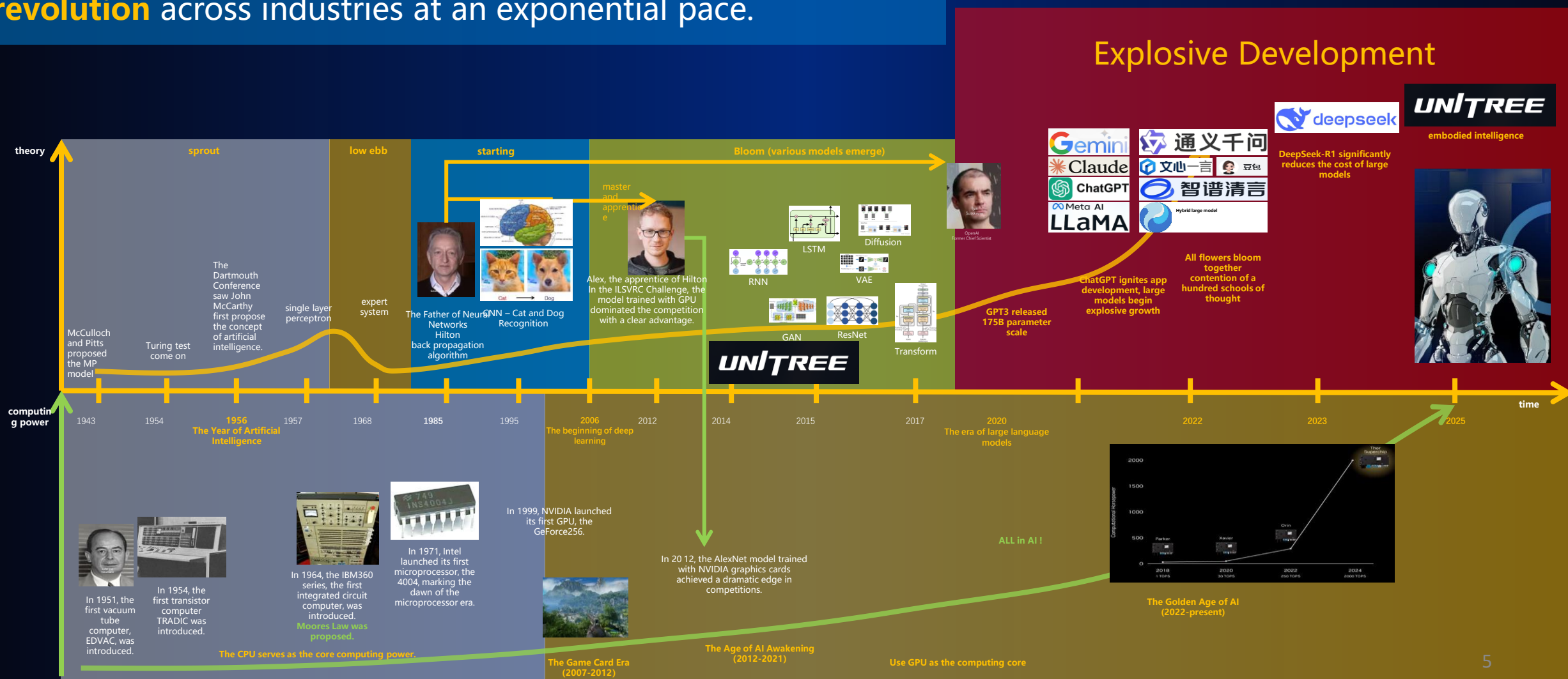


Emergency Rescue



Artificial Intelligence: Explosive Growth

The explosive growth of AI is driven by a **powerful convergence of large models, computing power, and Bigdata**. Evolving from a tool into a fundamental productivity infrastructure, AI is triggering an **efficiency revolution** across industries at an exponential pace.





Smart Cities: Now Is the Time

According to IBM, a Smart City utilizes **technological solutions and data** to **achieve the goals of enhanced quality of life**, greater sustainability, and improved operational efficiency. Key enabling technologies include ICT and IoT.



ICT



IoT



Automation



Smart Energy



Smart Transportation



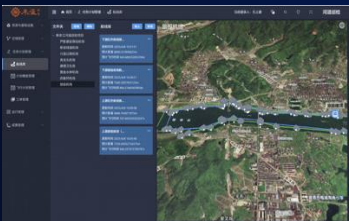
Artificial Intelligence⁶



Low-altitude+AI: Empowerment Smart City

"Low-altitude+AI" uses drones to **collect real-time urban data**, which AI analyzes to build a smart aerial network. This enables **precise 3D management of city resources**, driving the evolution of smart cities.

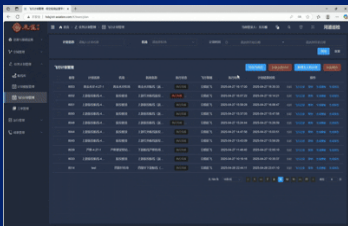
Low-altitude
+
"AI"



Autonomous
Route Planning



Large Model
Video
Annotation



Intelligent
Report
Generation

Low-altitude
Hardware
Equipment



DJI Airport



Lightweight
UAV



Small UAV

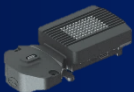


Diverse
Payloads

AI Computing
Terminal



Cloud Box M2

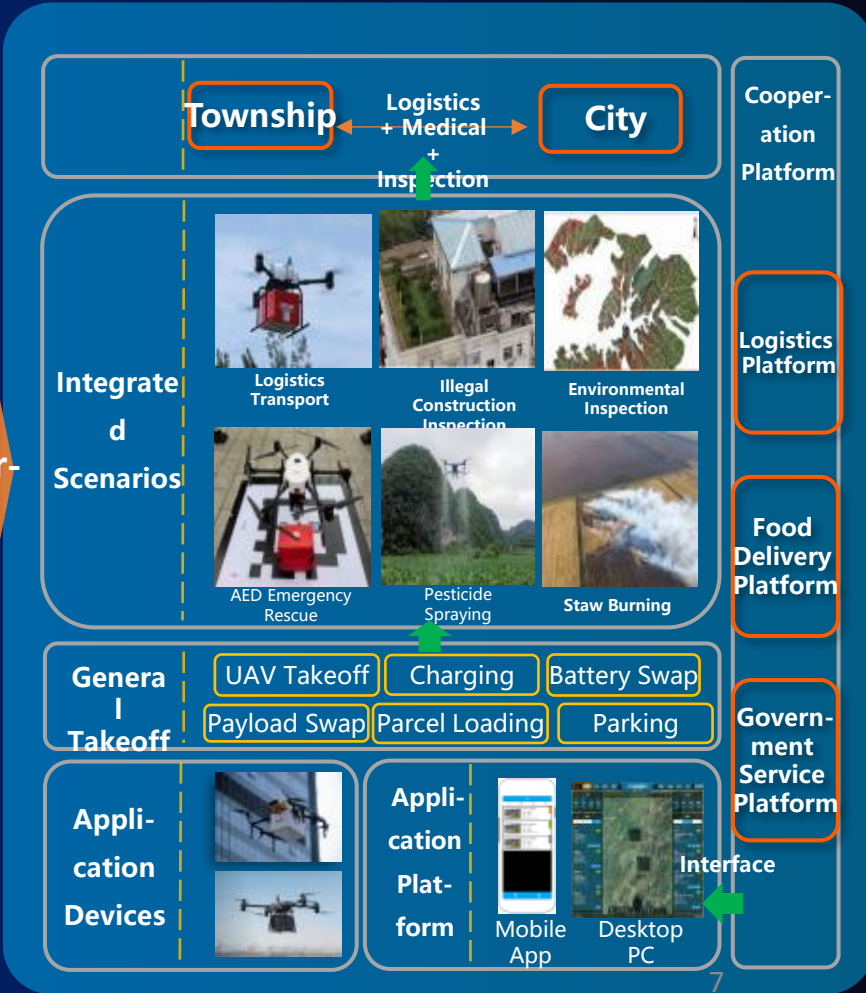


Cloud Box M3
Airport Edition



Cloud Box T3

Em-
power-
ment



PART 2

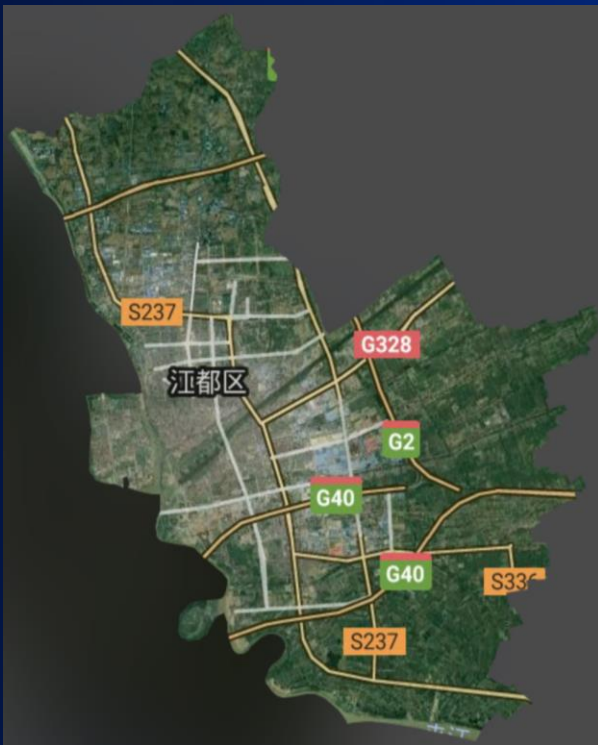
Case Study: Integrated Applications of LAE+AI in Smart Governance



Introduction to Jiangdu District, Yangzhou City

Top 100 District Nationally

Jiangdu District, Yangzhou City, its regional GDP was approximately 138.12 billion RMB, consistently ranking 37th among the Top 100 National Comprehensive Strength Districts and 33rd among the Top 100.



On August 5, 2025, the CCID Top 100 Districts list was released, with Jiangdu listed as the only district from Yangzhou, rising from 73rd in 2024 to 69th.

Challenges in Urban Governance



Water Resources Bureau

Manual efforts struggle to cover vast water areas comprehensively.



Natural Resources Bureau

Illegal activities are concealed and traditional stakeout enforcement has yielded very little effect.



Urban Management Bureau

Ground perspective makes it difficult to grasp the entire area.



Housing and Urban-Rural Development Bureau

Manual verification is time-consuming.



Traditional UAV Solutions - by operator

Redundant Equipment Procurement



Delayed Data Processing, Data Silos



High Risk of Unauthorized Flights



Ineffective Problem Identification

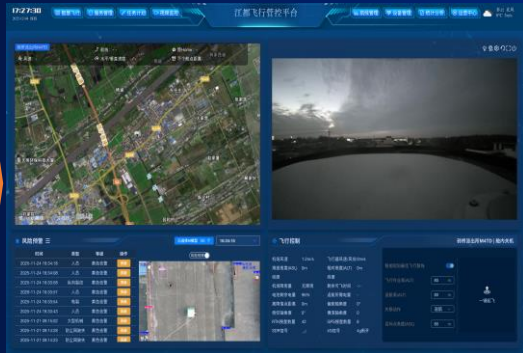
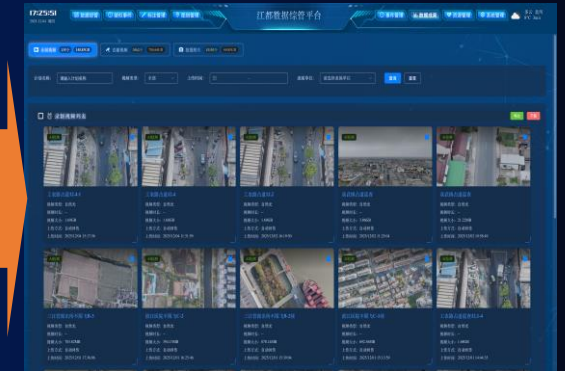


Traditional Model Urgently Needs Upgrading

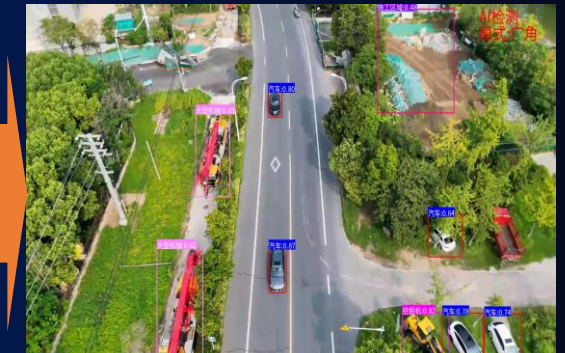
Redundant Procurement -> Unified Deployment



Data Silos -> Data Interconnection



Unauthorized Flights -> Unified Operations



Hard to Identify Problems -> AI Inspection



Integrated LAE+AI Smart Governance Solution

The Jiangdu Smart Low-Altitude Governance Integration Project deploys an **AI, 5G, and big-data powered system** to build district-wide **integrated low-altitude service capabilities**.

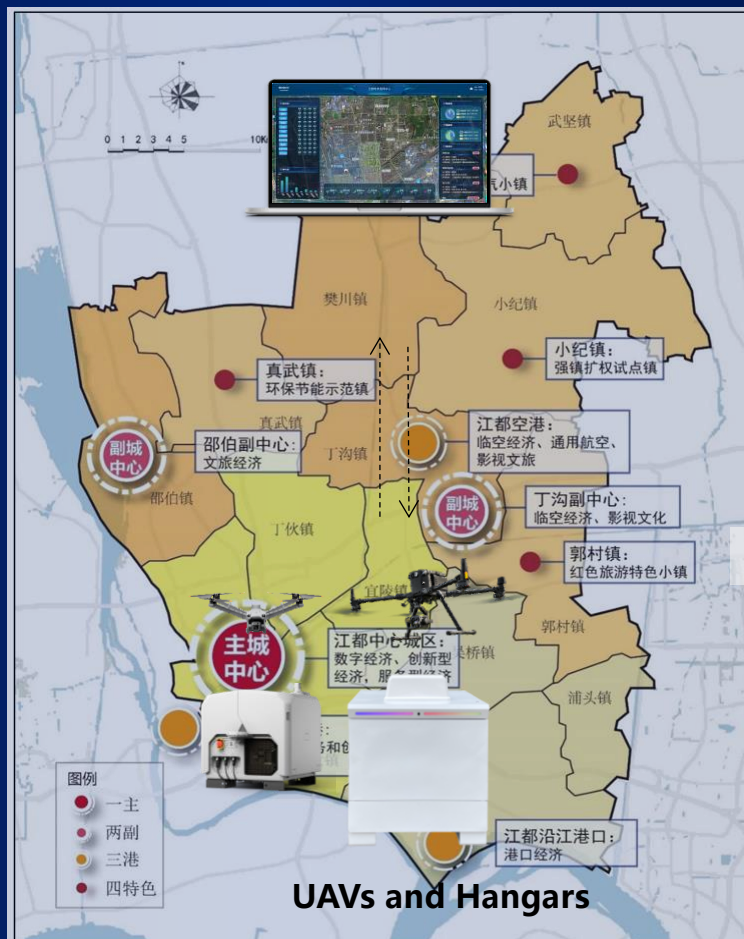
Project Basic Information

Establishment of 1 unified LAE+AI smart governance platform

Grid-deployed Drone Dockers
18 sets (Phase I); 37 sets (Phase II)

Achieves coordinated coverage across the entire district

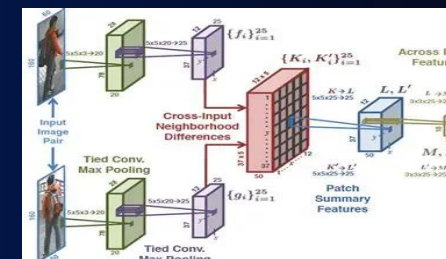
Goal: Unified Flight Network, Intensive Sharing, Holistic Planning



Jiangdu LAE+AI Smart Governance System

Technology

Empowerment



Artificial Intelligence



5G Communication



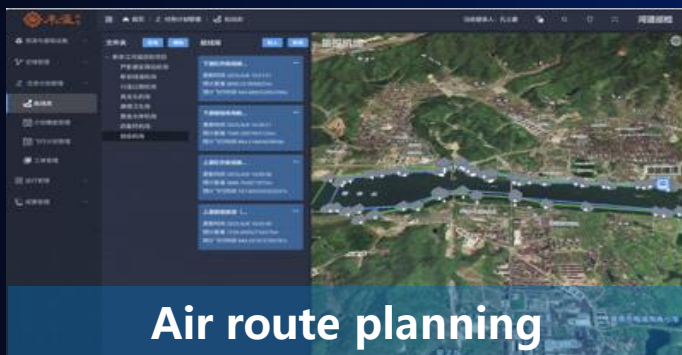
Big Data 12



Application Effectiveness: Automated Flight System

Auto Flight Operations

The system automatically plans drone flights based on requests from different Bureaus



Air route planning



Live patrol video streaming

Intelligent Data Analysis

Includes statistical analysis, AI module and digital reports, enabling smart processing and insights.



Automated report generation



AI algorithm selection

Digitalized Workflow

A closed-loop process includes task assignment, execution, analysis and feedback.



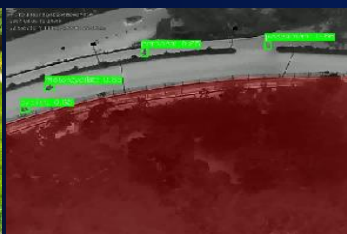


AI Algorithm Library

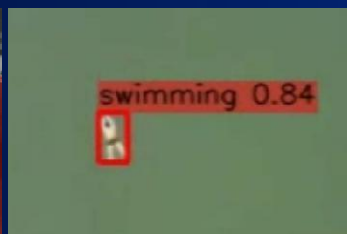
Focusing on various government application scenarios, it has developed AI models for over 50 targets. These models have been validated with 500,000 aerial images and are continuously refined using data from regular flight operations.



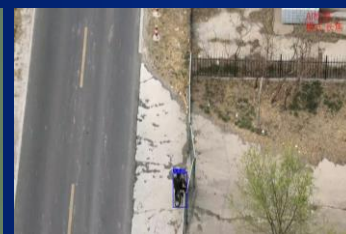
Person



Person at Night



Swimmer



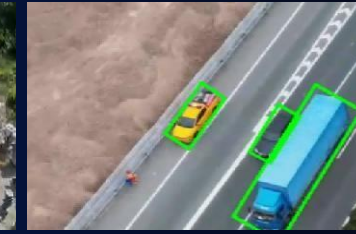
Intruder



Animal



Motor



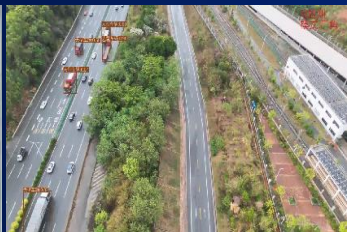
Car



Excavator



Crane



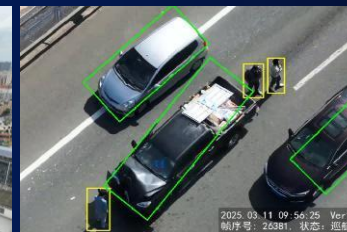
Construction Vehicle



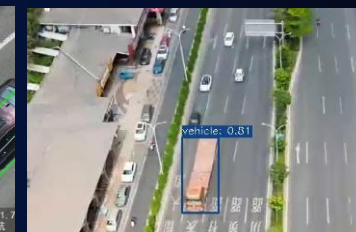
Dust Screen



Barrier



Traffic Accident



Large Vehicle



Fire & Smoke



Soil Pile



Floating Garbage



Sewage Outlet



Ship



Cracks



Foreign Object



Bearing Fastener



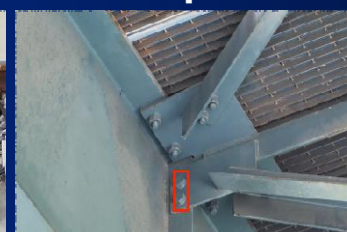
Strip



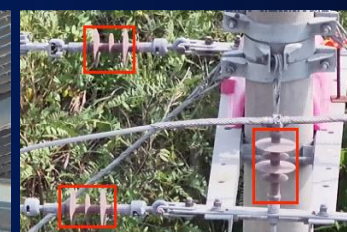
Surface Damage



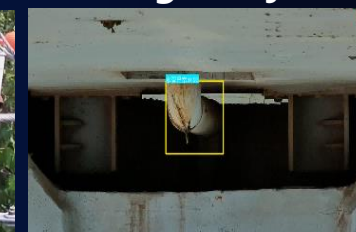
Rail Fastener



Bolt



Insulator



Water Pipe Defect



Application Effectiveness: Water Resources Bureau

Since trial operation, 187 river patrol flights have been conducted, covering 1,520 km. Provided 89 data services including riverbank garbage detection and sewage outlet inspection. Identified and transferred 32 cases of issues such as the “Four Chaos” in rivers/lakes illegal sand mining, and black, odorous water bodies.



Gantang Airport



Inspection Route Path



Riverbank Garbage Accumulation



Swimmer Identification



Sewage Outlet Identification



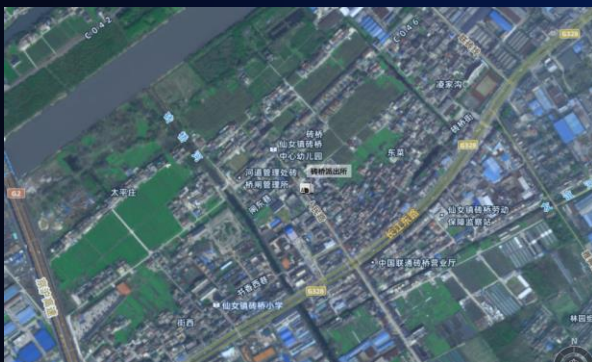
Illegal Vessel Identification

Route Planning Strategy: Combines “Riverside Belt Scanning” and “Key Area Orbiting.” Main routes extend along the river centerline or shoreline, with preset orbiting monitoring points for key nodes like sewage outlets, dams, and sensitive waters.



Application Effectiveness: Transportation Bureau

Accumulated 215 road network inspection flights, covering 1,810 km. Provided 112 data services for road condition monitoring and construction supervision, successfully identifying 41 cases including road occupation for construction, damaged traffic safety facilities, and freight vehicle violations.



Huangqiao Airport



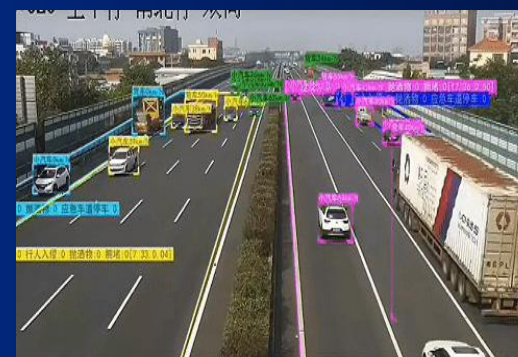
Inspection Route Path



Road Violation Identification



Construction Area Identification



Vehicle Behavior Identification



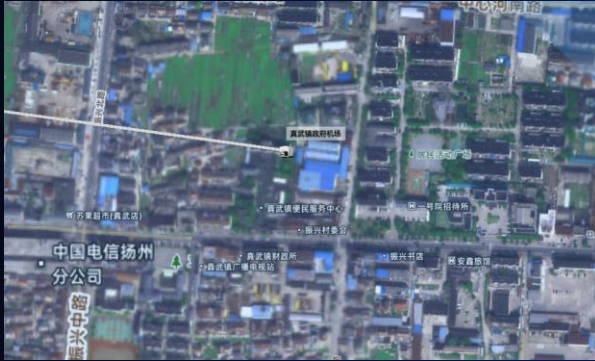
Traffic Quality Inspection

Route Planning Strategy: Employs "Arterial Road Linear Cruise" and "Hub Node Grid Inspection" modes. Sets bidirectional routes along key roads and deploys dense grid routes for construction zones, accident-prone areas, and hubs.



Application Effectiveness: Housing and Urban Bureau

Accumulated 156 construction site inspection flights, covering 1,245 km. Provided 78 data services for dust monitoring and project progress, discovering 28 issues including uncovered earthwork, illegal nighttime construction, and safety hazards with barriers.



Zhanggang Airport



Inspection Route Path



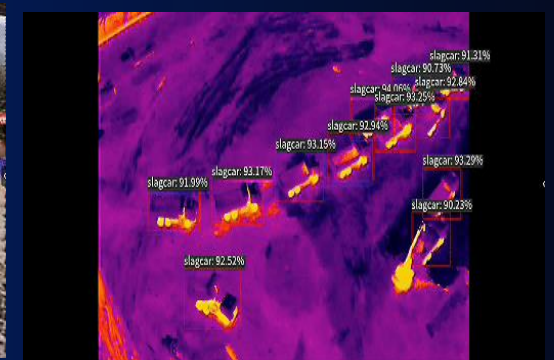
Construction Progress Detection



Missing Manhole Cover Identification



Construction Safety Hazard Identification



Illegal Nighttime Construction Identification

Implements dual coverage of "Site Perimeter Inspection" and "Internal Grid Scanning." Routes plan closed paths around the exterior of construction barriers, while also conducting internal checkerboard-style full-coverage scans for large sites.

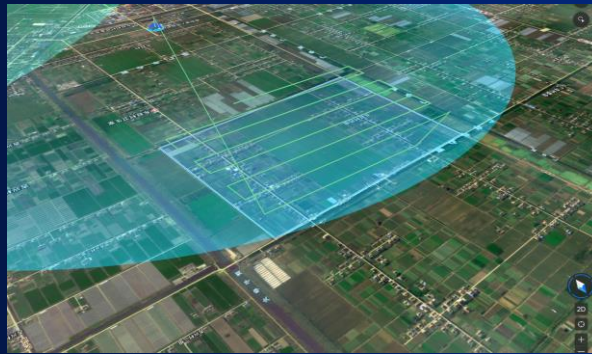


Application Effectiveness - City Management Bureau

Accumulated 278 city appearance inspection flights, covering 2,368 km. Provided 162 data services for illegal construction inspection and city appearance/sanitation, identifying 54 cases including open burning, exposed garbage, illegal advertisements, and shared bicycle clutter.



Zhanggang Airport



Inspection Route Path



Illegal Construction Rectification Identification



Shared Bicycle Identification



Open Burning Identification

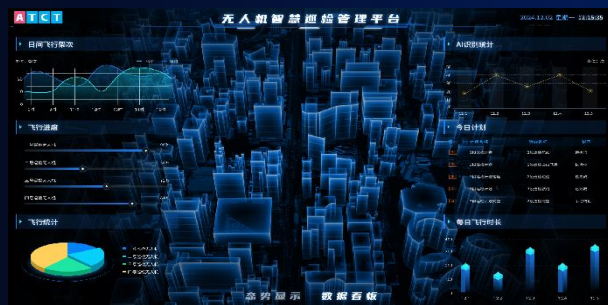


Solid Waste Identification

Routes are designed with safe flight altitudes according to regulations. Risk points along the route, such as power lines, transmission towers, lamp posts, and trees, are strictly considered during planning.

Application Effectiveness - Empowering Smart Cities

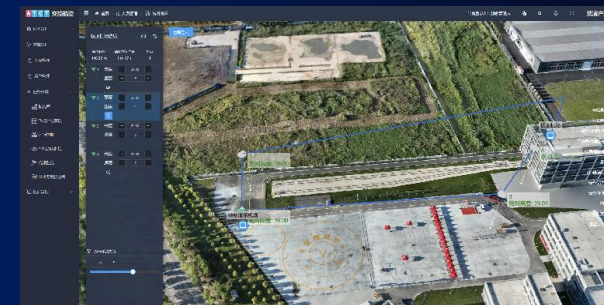
The platform deeply integrates core capabilities to build a “Perception-Analysis-Decision” closed loop. Through unified intelligent scheduling, it empowers the digital transformation of urban governance with automated, grid-based aerial data flows, fundamentally restructuring the traditional inspection model.



Air Route Management



Automated Execution



Flight Monitoring



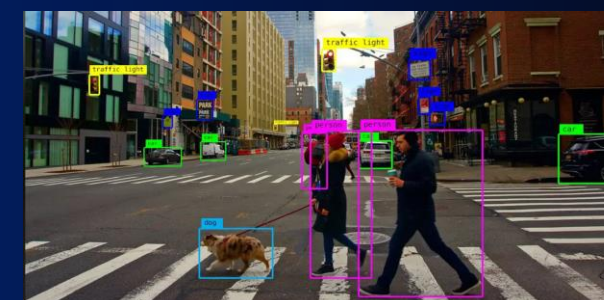
Artificial Intelligence

AI automatically plans routes, accurately identifying obstacles, making route management safer and more scientific.



Big Data Dashboard

Big data empowers the data dashboard, providing decision-makers with analytical insights alongside basic data.



AI Recognition

AI recognition combined with flight monitoring enabling real-time identification of urban governance issues.

PART 3

Future Outlook



Future Outlook

The integration of low-altitude economy and AI enables grid-deployed automatic flights to consolidate needs across different government bureaus, achieving precise event detection and location. Through an integrated platform, it unifies operations, data, and algorithms, providing essential support for smart city development.

Integrated LAE+AI Smart Governance Platform



Serving the Client



Task Dispatch



Video Monitoring



Digital Results

Operation Side



Task Execution



Route Management



Flight Monitoring

Overview Viewing



Service Event



Data Results



Task Execution

Result Data Filtering



Suspected Event



Task Execution



Problem Reporting

Thanks!



Guardian of Low-Altitude Flight Safety