

# ICUAS Association eUAM

## The Unmanned Aviation eMagazine

ISSN: 2835-8171

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## EDITORIAL

### *Dear colleagues:*

It is with great pleasure that I write this editorial sharing with you great news. I would like to inform you that our *eMagazine*, effective with this first issue of 2025, is the official *ICUAS Association Unmanned Aviation eMagazine*, the *eUAM*. It is now a peer reviewed publication, and authors may submit their work through <https://controls.papercept.net>. You may submit your paper online after you create your account if you do not have one, already - the steps are straightforward. A major advantage of submitting to the *eUAM* is that every accepted paper may be presented at the corresponding annual conference, the *International Conference on Unmanned Aircraft Systems*, following the established registration process. Details about the *eUAM* and instructions for authors are provided next. Moreover, updates about the annual conference on May 14-17 in Charlotte, NC, are provided, which also include details about the UAS Competition. Last, but not least, a technical paper on "UAS Island Logistics Operation in China: Recent Practices and Regulatory Developments" concludes the issue.

### Launching the eUAM

#### Overview

The *ICUAS Association eMagazine*, the Unmanned Aviation Magazine, *eUAM*, is now the official peer-reviewed publication of the ICUAS Association. Inc., focusing on all aspects of unmanned aviation in general, and Unmanned Aircraft Systems (UAS) in particular. It is open to contributions from educators, scientists and engineers,

# ICUAS Association eUAM

## The Unmanned Aviation eMagazine

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researchers, developers, manufacturers, end-users and practitioners, lawyers and economists, all having an interest in unmanned aerial vehicles and systems, and unmanned aviation.

The *eUAM* is published quarterly. It provides a fast, free of charge, efficient and valuable dissemination channel that brings together and connects with the unmanned aviation community and the ICUAS followers, worldwide. *eUAM* issues will be available free of charge to authors and readers, and will also be posted on the Association's web, [www.icuas.com](http://www.icuas.com).

***eUAM* topics of interest include, but they are not limited to:**

- Research and development in aerial robotics
- Collaborative aerial manipulation
- UAS Navigation and control
- Air mobility
- UAS autonomy
- UAS design for resilience
- Next-generation UAS designs
- Bio-inspired UAS
- Prototyping
- Tools and support technologies
- Education
- Experimental demonstrations
- Applications
- Standards development
- Integration into the national airspace
- Legal, ethical, privacy, and security challenges
- Regulatory issues

**Paper submission deadlines and *eUAM* publication dates quarterly:**

ISSUE	PAPER SUBMISSION DEADLINE	PUBLICATION DATE
WINTER	September 1	February 15
SPRING	January 1	May 15
SUMMER	April 1	August 15
FALL	July 1	December 15

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## Instructions to Authors

Authors of submitted papers are requested to include on the front page up to five keywords reflecting the specific research area(s) the paper relates to. Keywords facilitate and accelerate the review process, and they will be used for indexing purposes. Authors may choose from the following list of topics and keywords:

Aerial Manipulation	Integration into the National Airspace	Reliability of UAS
Airspace Control	Interoperability	Risk Analysis
Airspace Management	Learning-based Perception and GNC	See-detect-and-avoid Systems
Airworthiness	Legal Challenges	Security
Air Vehicle Operations	Levels of Safety	Sensor Fusion
Autonomy	Manned/Unmanned Aviation	Simulation
Bio-inspired UAVs	Micro- and Mini- UAS	Smart Sensors
Certification	Multi-mode and Hybrid UAS	Standards Development
Design for Resilience	Navigation	Technology Challenges
Flight Control Architectures	Networked UAVs	Training
Energy Efficient UAVs	NextGen UAV Designs	UAS Applications
Environmental Issues	Payloads	UAS Communications
Fail-Safe Systems	Path Planning	UAS – Human Interaction
Frequency Management	Privacy Issues	UAS Testbeds
Guidance, Navigation & Control (GNC)	Reconfigurable UAVs	
Human Factors and Ethical AI for UAS	Regulations	

## Online Submission and Paper Format

Paper submission will be online through <https://controls.papercept.net>. Papers should be prepared following the standard two-column IEEE conference template using an editable format, LaTeX (.tex) or MS Word (.docx). Original

pictures must be of good quality (with a minimum size of 1000 pixels, width or height) formatted as JPEG, PNG, or EPS for plotted data, tables, etc.

## Paper Submission Requirements and Permissions

Submitted papers must include research work that is: original; it has not been previously published; it has not been submitted, nor is it under review in any other publication venue. Should the submitted paper have more than one author, all co-authors must approve submission. When needed, authors must get approval from the responsible authorities of the venue (institute, etc.) in which the research work has been performed. The ICUAS Association, Inc., will not be held legally responsible should there be any claims for compensation.

If the submitted paper includes figures, tables, or any text passages from already published work, then, during paper submission: i.) author(s) must provide detailed text or caption referencing the original source; ii.) author(s) must obtain permission from the copyright owner(s) to use such information, and they must provide proof that such permission has been granted. Otherwise, all material and information in the submitted paper, without evidence, will be assumed to originate from and belong to the authors.

## Paper Submission Classification

Submitted papers must be classified by the authors as

- Regular Paper
- Short Paper
- Technical Note
- Position Paper



## Paper Review Process

Papers must be submitted online. All submitted papers will be processed by the Editor-in-chief (EIC), who will assign the paper to a Handling Editor. The Handling Editor is responsible to coordinate the peer review process and make a recommendation once all requested reviews are received. The EIC and the Handling Editor will oversee and coordinate the whole process, from initial submission to the final decision, and the publication phase.

Authors will receive a decision with a Review Report with detailed comments within 30-40 days from the submission date. The decision may be: Accept, Revisions, Reject. When revisions are requested, the authors must address all provided comments in the revised version of the paper. Revised papers must be submitted within thirty days after the decision has been communicated to the authors. The

final version of accepted papers must be submitted within fifteen days after the decision has been communicated to the authors.

Submitted papers will be evaluated based on the following criteria:

- Relevance and impact of the addressed topic to the unmanned aviation and UAS community.
- Originality, novelty and scientific contributions of the reported research.
- Validation and verification through simulations, or simulated experiments, or experimental studies.
- Quality and clarity of the paper. Note that use of generative AI tools should be limited to revision of English, avoiding its use for the writing.

## Paper Layout Recommendations

Authors are encouraged to consider the following when preparing their manuscript.

- Organize the content of the paper such that contents flow in a natural, easy to read and understand way: Introduction and rationale, research question/problem that is addressed, relevant literature, proposed approach of solution, results and contributions.
- Provide a short Abstract that summarizes the presented research work, main results, and contributions.
- In the Introduction section, include an overview of the state-of-the-art and related work, stating limitations and shortcomings that are addressed and solved in the submitted paper.
- For clarity, you may include a Table with all contributions, which will attract the readers' attention when reading the paper.
- Provide good quality figures with detailed captions. You may use Microsoft Power Point or any other software tool to edit pictures, embedding text and forms. For MATLAB figures, use EPS (Encapsulated Postscript) files in LaTeX, or copy the figure from the plot window and paste it in the MS Word file to preserve quality.
- Include an Acknowledgement indicating funding sources and support from institutions or people that have contributed to the reported work.
- Proof-read the paper checking English, grammar and syntax. This allows for better understanding and appreciation of the contents of the work.

## ICUAS 2025 UPDATE

This year's conference will take place on the campus of the University of North Carolina, Charlotte. In response to the Call for Papers we have received 207 contributed and invited session papers, which are currently under review. The conference includes three keynote lectures, in addition to three planned Workshops. Logistics and conference details may be found on the conference web, [www.uasconferences.com](http://www.uasconferences.com). We strongly encourage you to proceed with hotel accommodation to secure the best possible rates.





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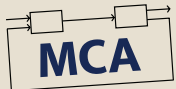
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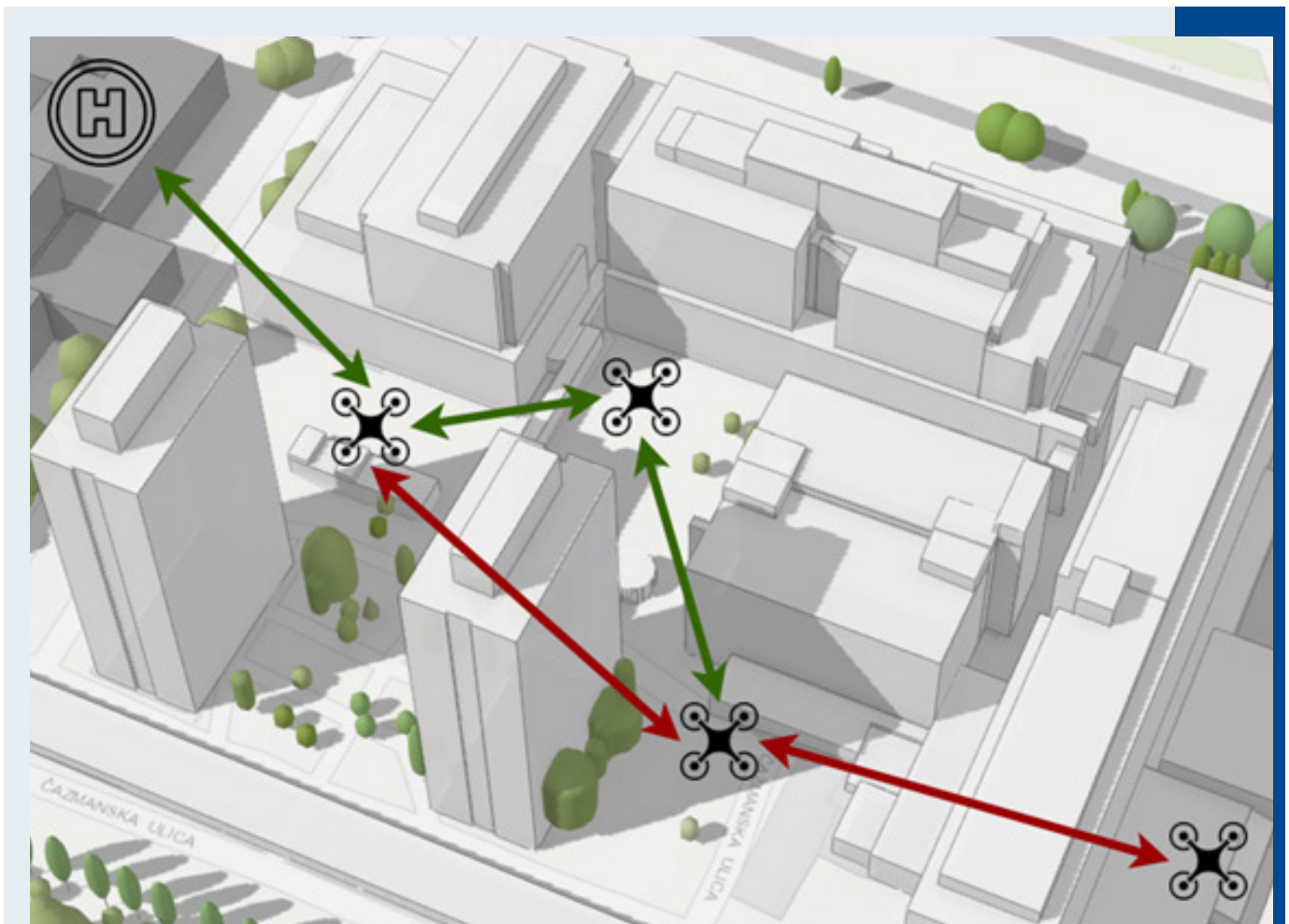


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HALL OF FAME



## ICUAS 2025 UAV COMPETITION

In this year's edition of the UAV Competition, the teams need to deploy a team of UAVs in an urban environment to locate and identify threats. The UAVs deploy from the base and need to find and identify several targets in a known environment. Since some of the threats may interfere with communication links between agents, the team is required to keep constant communication between the base and all agents in the system (as shown in Fig. 1).



**Figure 1: ICUAS'25 UAV Competition scenario: Multi-UAV team for search and identification of threats in urban environments**

The team of UAVs is required to locate and identify an unknown number of targets and report the location of the threat to the base. While searching, the battery of each UAV is draining and each UAV can go back to base to recharge, but the system needs to remain connected even with one or more UAVs charging. The UAVs to be used are Bitcraze Crazyflies, running through SITL paradigm to facilitate easier transfer to the finals in the arena at ICUAS'25.

The fourth edition of the ICUAS UAV Competition has drawn interest of 26 teams from India, Hong Kong, China, Brazil, USA, Mexico, Armenia, Saudi Arabia, Pakistan, Czechia, Poland, Italy, Croatia, and South Korea. Following the

January 29th deadline for submitting a proof-of-concept solution, 15 teams have committed to the simulation stage of the competition, which ends on February 28th, 2025. Alongside the teams and their UAVs, the LARICS group at the University of Zagreb is working on preparing evaluation scenarios and point scoring scheme that will be used to decide the finalist teams. As is now a long-standing ICUAS tradition, top teams from the simulation stage will be invited to Charlotte to showcase their work in the arena at the Conference. While the competitors and the University of Zagreb crew are busy with the simulation stage of the competition, the group led by Artur Wolek at the University of North Carolina at Charlotte is already working on the competition arena at the conference venue.

# UAS ISLAND LOGISTICS OPERATION IN CHINA: RECENT PRACTICES AND REGULATORY DEVELOPMENTS

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## 1. THE EMERGING UAS ISLAND LOGISTICS IN CHINA

Unmanned Aircraft Systems (UAS) – also known as drones – have been rapidly developing in recent years. China has developed various policies to foster the development of UAS, including a new industrial development scheme called “low-altitude economy”. It is described as one of the nation’s “strategic emerging industry”, a “new growth engine”, and was included in the Government Work Report in 2024 for the first time. The key aspect of building a “low-altitude economy” is to establish a “Smart Civil Aviation Industry”, which serves as an “innovation engine” that ensures “high-quality development of civil aviation”. “Smart Civil Aviation Industry” aims to expand UAS applications in various scenarios, such as low-altitude transportation, emergency rescue, aerial photography, land surveying and mapping, agriculture and plant protection, etc. Among these applications, cargo delivery has emerged as a promising sector. UAS can effectively address delivery needs that conventional transportation methods struggle to meet in a timely manner due to challenging geographical conditions, thereby enhancing accessibility in hard-to-reach area. Island logistics, in particular, represents a significant application in this regard, and has become a reality in China.

In September 2024, the Chinese UAS company Phoenix-Wings launched a regular inter-island UAS logistics delivery

service in Zhoushan City, Zhejiang Province. The city is known for its 141 inhabited islands – more than any city in China – and has traditionally relied on inter-island shipping for cargo delivery. The first UAS delivery took place between the Gouqi Island and Manjishan Island, where the UAS successfully executed a seafood delivery of roughly five kilograms. It took the UAS just over 25 minutes to cover the 30-kilometre distance over water. Compared to the fastest ship delivery that usually takes over an hour, the UAS reduced delivery time by roughly 60 percent.

In addition to the inter-island delivery within Zhoushan City, Phoenix-Wings also launched a route between Zhoushan islands and Shanghai City. Fresh seafood from the islands can be supplied to restaurants and supermarkets in Shanghai in just three hours. The start of regular UAS delivery services between Zhoushan islands and Shanghai also marks the beginning of regular UAS logistics operations in China. Customers can now order delivery services for cargo under 20 kilograms between designated locations by simply scanning a QR code.

The first night operation for UAS island logistic services in China also took place in Zhoushan. At 23:00 on 1 December 2024, a UAS took off from the Putuo District, carrying plasma, medicines and other emergency medical

supplies, landed on Dongji Island. It travelled 40 kilometres in just 21 minutes. Upon arrival, the emergency supplies were unloaded and handed over to the local health centre. Two live yellow croakers - previously packed - were then loaded onto the UAS. By 23:29, eight minutes after landing, the UAS took off again and landed back in Putuo District at 23:59. The UAS service is superior to conventional shipping services because shipping services cannot operate beyond their scheduled times. Urgent deliveries late at night are usually not available as shipping services cease after sunset. In emergencies such as life-threatening illnesses or natural disasters, UAS, however, can still deliver supplies in a timely manner as long as meteorological conditions permit, which ensures the safety and well-being of island residents.

Similarly, on 30 July, in Zhuhai City, Guangdong Province, a UAS took off from Tangjia Ferry Terminal and successfully delivered latest newspapers and magazines to Guishan Island. It transited the 37-kilometre route in 25 minutes, and reduced delivery time by 80 percent compared to

conventional ship delivery. On 22 August, in Zhangzhou City, Fujian Province, a UAS took off from Yushu Island and delivered 80-kilogram seafood to Yushu Island within 5 minutes. It saved 20 minutes compared to ship delivery.

As demonstrate by the operation examples above, UAS logistics operations in island scenarios have saved considerable time and such operations are not limited by schedules comparing to conventional ship deliveries. Despite the benefits, island operational scenario has raised new regulatory concerns. As a result, the Civil Aviation Administration of China (hereinafter CAAC) adopted the “General requirements for civil unmanned aircraft system logistics operation Part 1: Island scenario” (hereinafter Island Scenario Rules) in 2023. The Island Scenario Rules set out the operational and technical standards that UAS operators must observe in conducting island scenario operations. It is the first volume in an industrial standard series which will cover four UAS operation scenarios— island, urban, mountain, and plateau—though the other three have not yet been released.

## 2. THE CURRENT LANDSCAPE OF CHINESE UAS REGULATION

China has established a legal framework to regulate UAS operations through two leading legal documents, namely the Interim Regulation on Unmanned Aircraft Flight Management (hereinafter UAFM Regulation) and the Provisions on the Administration of Civil Unmanned Aircraft Operation Safety (hereinafter UAOS Provisions). Both regulations entered into force in 2024, and provided general requirements for UAS manufacture and operations regarding airworthiness certification, UAS pilot licencing, UAS registration, etc.

CAAC must conduct risk assessment for UAS operation as to decide which category does the UAS operation in question falls under. Such assessments are tailored to the operation scenario of the UAS, and supported by risk-based analysis: low-risk operations with comparatively lower safety standards, and high-risk operations with more stringent safety requirements. UAS operations are classified into three categories: Open Category, Specific Category, and Certified Category. Each category entails different levels of operational requirements. The Open Category requires compliance only with general operational requirements, while the Specific Category requires compliance with both general operational requirements and scenario-specific requirements. Such specific requirements are attached to the Air Operation Certificate (AOC) granted to the UAS operator. The UAS operator is thus obliged to perform its operations pursuant

to the requirements under the AOC. The Certified Category imposes the most stringent requirements as it involves the highest risk. Along with general operational requirements and scenario-specific requirements, UAS of the Certified Category must meet the operation requirements specific for Certified Category addressed in the UAOS Provisions. Island logistics operations fall under the Certified Category, and relevant requirements will be analysed accordingly.

Island Scenario Rules sets out industrial standards required for island operation scenario. It applies to the use of Small, Medium and Large UAS in China that conduct beyond visual line of sight (BVLOS) operations in island scenario. The categories of UA are regulated in the UAFM Regulation – Micro UA, Light UA, Small UA, Medium UA and Large UA – based on the ‘performance indicators’ including weight, flight height and speed. A scenario is an “island scenario” if during its operation, a UA has its: (i) route over an island or coastal area, and (ii) at least one of the take-off points or landing points is located on or near an island (including peninsulas) or a fixed facility at sea. Island Scenario Rules set out various requirements including: aspects of operator responsibilities, UAS performance specifications, personnel qualifications, operation environment, emergency procedures, etc. The following sections will examine the unique characteristics of Island Scenario Rules after outlining relevant general provisions in UAFM Regulation and UAOS Provisions in each session.



### 3. THE ISLAND SCENARIOS UAS RULES

#### 3.1 Specific UAS Requirements

UAFM Regulation and UAOS Provisions set out general requirements for UAS. First, all UAS engaged in island operations shall complete real-name registration and nationality registration. Medium and Large UAS shall obtain appropriate airworthiness certificate. For any UAS operation, third-party liability insurance surface damage is mandatory.

Second, the UAS in operation must be in a safe and functional condition, with all installed instruments and equipment maintained in working order. It shall be equipped with sensors monitoring aircraft status information, and flight data recorders that can replay and analyse flight processes. The recorded data should include key information such as position, altitude, speed, attitude, yaw angle, energy source and flight path. This allows the pilot to effectively control the UAS's flight path and monitor essential flight status information.

Third, the UAS should be well equipped to detect and avoid, automatically respond and perform landings in emergencies. The UAS carrying passengers or cargo must be outfitted with emergency or life-saving equipment

suitable for the specific operational scenario.

To address the specific needs of island logistic operations, Island Scenario Rules provide additional requirements:

- Environment Adaptability: UAS must have adaptability against environment factors including temperature and humidity, solar radiation, heat and moisture, salt spray, and mould. For UAS equipped with an airspeed indicator (ASI), the device should include heating and atomization functionality to ensure accurate readings.

- Positioning Accuracy: UAS that use GNSS as the sole means of navigation must achieve low positioning error of less than 10 metres in the take-off and landing area. For UAS using multiple high-precision positioning technologies—such as differential augmentation, ground-based augmentation, or vision-aided navigation—the positioning error must be under 1 metre.

- Wind Resistance: The UAS must resist wind levels higher than Level 6 during cruise and wind levels higher than Level 4 during take-off and landing phases.

#### 3.2 Personnel

UAFM Regulation and UAOS Provisions set out general requirements for necessary personnel involved in UAS operations, including operator, management personnel and pilot. First, the operator is responsible for UAS operation control, who exercises control over the initiation, continuation, and termination of a flight using corresponding systems and procedures. UAS operation control includes acquiring real-time information about flight status and condition using automatic systems. It also involves reporting and handling abnormal conditions that may impact safety.

Second, the operator shall appoint a team of management personnel, including an operations supervisor, authorized to oversee all activities are in line with the AOC, scenario-specific requirements and relevant legislation. Such activities may include UAS operation, continuing airworthiness, crew training, and safety management. To meet continuing airworthiness requirements, the operator shall also appoint a qualified and experienced individual from its management team to oversee UAS maintenance.

The operations supervisor should possess the necessary experience and be responsible for organizing and implementing flight operations. He/she must ensure that the flight operations comply with the relevant regulations and the standards set forth in relevant manuals. Operations control personnel are responsible for submitting flight activity applications to the air traffic management (ATM) authority and maintaining timely communication with operational support units. They are also obliged to monitor the status of UAS operations in real time. In certain

cases, operations control personnel may also serve as pilots, provided that the personnel can adequately fulfil the responsibilities of both roles throughout the entire flight.

Third, the pilot is responsible for controlling UAS and ensuring safe operation. A pilot must hold a license of the corresponding UAS category, class and type. The pilot responsible for distributed operation shall hold a license, while other personnel involved do not need to hold a license but shall complete relevant training. Distributed operation refers to a type of UAS operation divided into several sub operations and can be deployed at multiple stations for cooperative operations. Such operation pattern possesses a high level of automation, which reduces the need for the pilot to have full control of UAS.

In addition to operator, management personnel and pilot, Island Scenario Rules specifies other personnel roles required in UAS operation:

- Route Survey Personnel: Conduct surveys of proposed operation sites and routes, ensuring adequate preparation for flight operations.

- Take-off and Landing Point Operators: Responsible for tasks at the take-off and landing points, including cargo loading, unloading, cargo bay trimming, and performing pre-take-off and post-landing inspections.

- Observers/Safety Officers: Appointed as needed to assist the pilot in maintaining safety of take-off and landing points and ensuring safe flight operations.

All personnel involved must possess the necessary professional knowledge and skills and must be trained and certified by the operator.

### 3.3 Operating Procedures

As a general requirement, the operator shall establish operating procedures essential for safety operation and ensure continuous and effective implementation of these procedures.

For operators who engage in general aviation activities involving cargo delivery, they shall develop service standards, operations manuals, cargo delivery management manuals, and dangerous goods handling manuals. The operation manual must be adhered to by the operator and all relevant personnel, including pilot, maintenance staff and other ground personnel.

Island Scenario Rules also provide content that must be included in the operations manual. These include:

- Safety and Emergency Procedures: Including incident reporting procedures and emergency response procedures. Operation manuals must also outline the distribution of responsibilities for relevant personnel during emergency evacuation.

- Minimum Equipment List (MEL): Operators must include a MEL for all UAS types in operation, so that the management personnel can determine whether to dispatch the UAS when there is malfunctioned components that cannot be immediately fixed.

- Operational Compliance: Extracts from key parts of the operations specifications; airworthiness inspections procedures; airspace application procedures; flight plan filing procedures; procedures for conducting UAS pre-flight, in-flight, and post-flight inspections; requirements for pilots of different categories of UAS.

- Logistics and Maintenance: Procedures for the transport and storage of UAS; procedures for performance measurement, considering condition factors such as take-off, landing, and flight paths.

- Environmental and Technical Standards: Weather standards required for UAS operation and the methods for obtaining meteorological information.

### 3.4 Operational Environment and Take-Off and Landing Points

Island Scenario Rules provide that the operator shall evaluate the operational environment and implement effective risk mitigation measures to address environmental factors that may impact flight safety. Such factors should include, for instance,

- Geographic environment: Physical characteristics of the operating area, including the seas, islands, mountains, waterways, and low-altitude obstacles such as lighthouses and wind farms; noise impacts; the surrounding natural bio-environment and the habitat and migration paths of birds.

- Human environment: Locations of residential areas, governmental organizations, gas stations and other densely populated areas or important buildings and facilities; avoidance of military areas and vessels at sea.

- Meteorological environment: Wind speed, wind

direction, precipitation, humidity, fog, sea conditions, and other weather-related elements affecting UAS flight safety. Factors that may impact the UAS's performance, such as temperature, solar radiation, salt spray and mould.

- Electromagnetic environment: Electromagnetic radiation sources in the area, including offshore radio communication systems, large electronic equipment on offshore drilling platforms, and other sources that could interfere with navigation and communication.

- Air traffic environment: Expected type of operation, type of cargo, mode of take-off and landing, and volume of operation; supporting infrastructure; limitations of the airspace and other flight activities occurring within, including general aviation activities, civil aviation transport, UAS flights etc.

These factors should also be considered when selecting and constructing a take-off and landing point.

### 3.5 Emergency Handling

As a general requirement, operators shall address flight emergency plans, which should be known by all personnel directly involved in flight operation. Such flight emergency plans should include distribution of responsibilities, reporting procedures, emergency response to man-made crashes and the locations of emergency landing sites. For Certified Category operation, the pilot should plan or choose emergency landing sites, and establish the appropriate procedures for flight termination.

Island Scenario Rules provides situations that should

be covered in emergency plans:

- Equipment and flight abnormalities: Crash, major malfunction, emergency landing, fire or explosion while landing, non-cooperative UAS intrusion into operation airspace, air route conflict, airspace occupation and avoidance.

- Cargo transportation issues such as accidental dropping or emergency recall.

- Illegal interference with the UAS control station and crew abnormality.

- Severe weather or natural disasters.

## 4. THE OUTLOOK

Island Scenario Rules provide rules tailored to the unique operational scenario of island logistics. By refining the general guidelines outlined in the UAFM Regulation and UAOS Provisions, it addresses the specific characteristics of island logistics operations. While it offers practical and scenario-specific solutions to ensure safe UAS operations, certain key challenges remain unaddressed.

One of the primary challenges is determining liability in cases of personal injury and property damage to third parties. UAS can cause surface damages due to human error, mechanical failure, or natural factors such as bird strikes or extreme weather. The potential parties liable for UAS-related damages may include operators, pilots, or manufacturers in cases of product liability, maintenance personnel for errors during servicing, and ground personnel at take-off or landing points in cases of improper cargo management. Questions arise regarding the attribution of responsibility, the rules applicable, the specific responsibilities borne by each party, and whether limits on liability should be established.

While referring to conventional manned aviation regulations can provide some guidance, UAS operations still present significant differences. For distributed operation that is highly automated, for example, the pilot's role differs significantly from a traditional pilot-in-command as the pilot does not directly control the UAS in flight.

Regulating the transport of goods, dangerous goods in particular, presents another challenge. While regulations intended for transporting dangerous goods with manned aviation can serve as reference, island logistics scenarios pose unique considerations. First, the operating risk is high with UAS, especially those utilizing sling-load systems. The swinging load under the air frame may negatively impact UAS flight dynamics. Second, accidentally dropped cargo may have significant risks falling into the sea, raising environmental concerns about water pollution. This necessitates examining whether new categories of dangerous goods should be defined for this island scenario and whether updated packaging standards are required.

## 5. CONCLUDING REMARKS

While recognizing potential regulatory challenges, this article does not attempt to provide answers to them, as the rules for regulating UAS and their operations in China are expected to develop rapidly and will continue to evolve for the foreseen future. The Island Scenario Rules serve as an example of regulating a specific operation

scenario while applying general legal framework such as UAFM Regulation and UAOS Provisions. As the first in a series of such documents, it is expected to contribute to establishing a UAS regulation framework and fostering industrial development in a safe and orderly manner.

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