Drone Operations & UAS Oversight Specialist

Department: Aerodrome Safety and Security **Employment Type:** Full-Time

About the Role

We are recruiting a Drone Operations & UAS Oversight Specialist to assume a critical role within our national aviation safety and security framework. You will be entrusted with comprehensive authority to develop and enforce regulations for the rapidly growing drone activities across the Kingdom, ensuring safe UAS integration into controlled airspace while maintaining seamless coexistence with conventional aviation operations. This position involves direct evaluation of UAV registration applications, conducting systematic surveillance and compliance audits, coordinating with national security agencies, and ensuring robust protection of civil aviation infrastructure against unauthorized unmanned aircraft operations. Your expertise will be fundamental to our commitment to regulatory excellence, directly contributing to the safe integration of expanding UAS operations while maintaining the highest standards of aviation safety, security and comprehensive airspace management in both controlled and uncontrolled environments.

Key Responsibilities

1. Regulatory Development, Implementation & Oversight:

- Develop, review, and amend comprehensive national UAV/UAS regulations, advisory circulars, and guidance material to address the rapidly growing drone activities across all sectors, ensuring alignment with ICAO Annex 2 (Rules of the Air), ICAO Doc 10019 (Manual on Remotely Piloted Aircraft Systems), ICAO Circular 328 (Unmanned Aircraft Systems), and National Civil Aviation Regulation 006.
- Establish regulatory frameworks that facilitate safe UAS integration into controlled airspace while maintaining operational efficiency and safety of conventional air traffic operations.
- Provide authoritative technical interpretation of UAS-related Standards and Recommended Practices (SARPs) for the expanding community of UAV operators, importers, and aviation stakeholders.
- Conduct systematic surveillance, audits, and inspections to verify compliance with evolving UAV registration requirements, operational limitations, and safety management systems as drone activities proliferate.
- Ensure implementation of provisions outlined in ICAO Doc 10088 (Guidance on the Protection of Civil Aviation Infrastructure Against Unmanned Aircraft) to address security challenges posed by growing UAS operations.

2. UAV Registration & Certification Management:

• Review, evaluate, and process UAV registration applications (Type A, B, and C classifications) in accordance with CAR/006 requirements.

- Conduct comprehensive assessment of applicant competence, operational procedures, safety management systems, and insurance coverage.
- Coordinate with Ministry of Interior and Bahrain Defense Force for security clearance verification as required by regulation 2.3.1.8.
- Issue, amend, suspend, or withdraw UAV registrations based on compliance assessment and safety considerations.
- Maintain comprehensive UAV registry database and ensure proper documentation management.

3. Controlled Airspace Integration & Traffic Management:

- Develop and implement procedures for safe UAS integration into controlled airspace, ensuring seamless coordination with conventional air traffic management systems and ATC operations.
- Establish protocols for UAV operations in controlled airspace including radio communication requirements, flight plan procedures, and traffic separation standards.
- Coordinate with Air Traffic Services providers to develop and maintain UAS integration procedures that accommodate growing drone activities while preserving aviation safety and efficiency.
- Monitor and evaluate the effectiveness of controlled airspace integration measures, implementing improvements as drone traffic volumes increase.
- Assess and approve special authorization requests for UAV operations above 400 feet AGL and in controlled airspace environments.

4. Operational Compliance & Safety Oversight:

- Monitor and enforce compliance with operational restrictions while developing adaptive regulatory approaches to accommodate the growing diversity of drone activities including commercial, recreational, and specialized operations.
- Conduct field inspections and surveillance activities to verify adherence to operational procedures, with particular emphasis on controlled airspace integration compliance and traffic separation requirements.
- Evaluate UAV operator competency certification programs and maintenance standards, ensuring they meet the demands of increasingly complex drone operations in integrated airspace environments.
- Assess and approve amendments to UAV operations, performance modifications, and operational procedure changes.
- Investigate violations, incidents, and non-compliance issues, implementing appropriate enforcement actions.

5. Security & Infrastructure Protection:

- Implement and oversee measures for protection of civil aviation infrastructure against unauthorized UAV operations in accordance with ICAO Doc 10088.
- Coordinate with national security agencies to identify and mitigate security risks posed by unmanned aircraft systems.

- Develop and maintain restricted area mapping (Appendix D) and ensure compliance with no-fly zones around critical infrastructure.
- Establish protocols for detection, identification, and response to unauthorized UAV operations near airports and sensitive facilities.
- Participate in threat assessment activities and security risk management processes.

Stakeholder Coordination & Multi-Agency Liaison:

- Serve as primary BCAA representative for UAV-related matters with Ministry of Interior, Bahrain Defense Force, and other government agencies.
- Facilitate safe integration of growing UAS operations with conventional air traffic management systems, ensuring coordinated approach to airspace utilization and traffic flow management.
- Foster coordination between the expanding UAV operator community, air traffic service providers, airport operators, and emergency response agencies to address integration challenges.
- Represent the Authority in international forums and working groups related to UAS regulation and oversight.
- Coordinate with customs authorities regarding UAV importation requirements and compliance verification.

Incident Response & Investigation Support:

- Lead investigations into UAV-related incidents, accidents, and security breaches affecting aviation safety.
- Provide expert technical support during emergency response involving unmanned aircraft systems.
- Conduct post-incident analysis and recommend corrective actions to prevent recurrence.
- Prepare comprehensive incident reports and coordinate with relevant authorities as required.
- Support accident investigation activities in accordance with ICAO Annex 13 principles.

Qualifications & Experience

- Bachelor's degree in Aerospace Engineering, Electronics Engineering, Aviation Safety, or related field.
- Minimum of 7 years of experience with at least 5 years directly in unmanned aircraft systems operations, regulation, or oversight.
- Regulatory Knowledge Expert knowledge of:
 - o ICAO Annex 2 (Rules of the Air)
 - o ICAO Doc 10019 (Manual on Remotely Piloted Aircraft Systems RPAS)
 - o ICAO Circular 328 (Unmanned Aircraft Systems UAS)
 - ICAO Doc 10088 (Guidance on the Protection of Civil Aviation Infrastructure Against Unmanned Aircraft)
 - o ICAO Doc 9859 (Safety Management Manual)

 National Civil Aviation Regulation CAR/006 (Unmanned Aerial Vehicle Regulations)

Proven Skills - Demonstrated experience in:

- O Developing and implementing adaptive UAS/UAV regulatory frameworks that accommodate growing drone activities across diverse sectors
- Managing controlled airspace integration challenges and traffic coordination procedures
- Conducting technical assessments of increasingly complex unmanned aircraft systems and operations
- o Risk assessment and safety management system evaluation
- o Multi-agency coordination and stakeholder engagement
- o Technical writing of regulations, compliance reports, and policy documents
- o Surveillance and audit activities in aviation regulatory environment

Preferred Qualifications

- Advanced certifications such as ICAO Aviation Safety Management, Remote Pilot Certification, Certified UAV Professional, or equivalent UAS industry credentials.
- Former experience in military or commercial UAV operations, air traffic management, or aviation security is highly desirable.
- Experience working with ICAO USOAP audit teams or other national aviation authorities on UAS oversight matters.
- Knowledge of counter-UAS technologies and detection systems.
- Proficiency in Arabic is a strong advantage.
- Understanding of cybersecurity principles related to unmanned aircraft command and control systems.

Key Competencies

- Ability to understand the complex interactions between unmanned and manned aviation
 systems, comprehending how rapidly growing UAS operations integrate within controlled
 airspace while maintaining safety and efficiency of all aviation operations. Must
 demonstrate capability to develop regulatory approaches that accommodate expanding
 drone activities without compromising conventional air traffic management.
- Capable of exercising state regulatory authority with confidence, providing clear, definitive guidance during high-stakes compliance assessments and enforcement actions relating to growing drone activities, while independently identifying emerging risks in controlled airspace integration and proactively addressing evolving regulatory challenges.
- Strong ability to evaluate complex UAV systems, operational procedures, and safety management frameworks, identifying potential vulnerabilities and mandating effective, risk-based solutions that ensure regulatory compliance while enabling safe UAS integration.
- Exceptional skills in building consensus and coordination among diverse stakeholder groups including defense forces, law enforcement, airport operators, and UAV industry representatives to achieve comprehensive oversight objectives while representing the Authority's interests at the highest levels.

- Demonstrates unwavering integrity, transparency, and impartiality in all oversight activities, maintaining the highest ethical standards essential for regulatory authority roles. Ensures all actions enhance the credibility and mission of the Civil Aviation Authority while promoting fair and consistent application of regulations.
- Applies and continuously improves technical knowledge related to rapidly evolving UAS technologies, regulatory frameworks, and international best practices, ensuring oversight capabilities remain current with industry developments and emerging threats.
- Analyzes complex technical and operational information to make sound regulatory decisions, ensuring all oversight activities maintain the highest standards of safety management while enabling responsible growth of the UAS sector.

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Note: This position requires security clearance and may involve coordination with sensitive national security matters related to unmanned aircraft systems oversight and civil aviation infrastructure protection.