

Policies and Procedures Governing the Use of Union Pacific Unmanned Aircraft Systems (UAS's)

- 1) All Union Pacific pilots must be certificated and current under the FAA Part 107 of the Federal Aviation Regulations. All employees must complete the required RMUS virtual training course and complete the FAA **Part 107 exam within 30 days of completing the course.**
 - a. All pilots are required to complete the Computer- Based Training (CBT), replacing the In-Person Hands on Training (IHOT) training prior to flying their UAS. Individuals are required to complete the UASCB1, UASOFT and module specific to the UAS they will be flying. Once the pilot completes their CBT training, it's encouraged that the pilot reaches out to a senior pilot to get familiar with the aircraft.
- 2) UAS Equipment:
 - a. Only Union Pacific trained and qualified UAS Pilots may fly a company owned UAS.
 - b. All Union Pacific pilots are required to fly their UAS's monthly. If a pilot does not fly their UAS for **60 days**, the UAS will need to be removed from the pilot and reassigned.
 - c. The use of personal UAS's by employees on or over Union Pacific property is prohibited.
 - d. The use of Union Pacific UAS's for personal use is prohibited, however a pilot can utilize their UAS on personal time to practice flying off company property. The individual practicing must comply with FAA regulations, Union Pacific procedures, and all other applicable and appropriate standards during the duration of the flight. Practicing off property shall occur when a pilot needs to practice and doing so on Union Pacific property while on duty is not feasible. Union Pacific expects pilots to maintain Union Pacific ethical standards while practicing off property while off duty.
 - e. The pilot must ensure the aircraft is airworthy prior to flying UAS.
 - f. All pilots are required to comply with the Part 107 regulation requiring the installation of Remote IDs on their assigned UAS (required if using a DJI Enterprise, DJI M200,). Pilots must attach Remote ID's on UAS upon receipt to enhance safety and security within in the National Airspace System (NAS). Union Pacific pilots are required to have the Remote ID's charged and installed prior to each use starting March 16th, 2024. After March 16th, Remote IDs should be powered on, and in-flight mode (*3 white lights should be flashing*) during all UAS flights when operating a UAS that does not have Remote IDs integrated into the UAS from the manufacturer or listed previously.
 - g. Pilots should not add any additional aftermarket equipment to their UP (Union Pacific) issued drones. Pilots should only add on items such as speakers and lights that were authorized and issued with their assigned drone. Use of non-authorized equipment add-ons could result in unintended issues that may result in damage to the UAS, property and or persons.
 - h. If a UAS pilot changes work locations, please send an email to UAS@up.com within 30 days of relocating so the UAS team can update the location of the UAS device.
- 3) Waivers and airspace authorizations:
 - a. Waivers, including emergency airspace authorization will be coordinated through the UAS Committee or their designee.
 - b. The role of the UAS Pilot is to conduct the operation in compliance with all Union Pacific and FAA regulations and policies.
 - i) Obtaining the required airspace authorization utilizing the FAA's LAANC system or determining if a waiver is required.
 - ii) If the operation must be conducted under an approved waiver.
 - (1) Ensuring the FAA has the correct pilot certificate numbers(s) for the waiver.
 - (2) Ensuring the conditions of the waiver are met.
 - iii) Ensuring that the required documentation and registration is available, and the aircraft is properly marked.

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- 4) All Union Pacific Pilots are required to download and use the (Aloft) software to ensure flight information is accurately captured. Union Pacific drones are to be used for Union Pacific business only and no employee should accept payment for the use of company equipment. There is no requirement to notify RMCC before or after flight. Notification to RMCC is mandatory if there is damage to an UAS or if there is a safety incident during flight.
- 5) When flying a UAS:
 - a. Operations will be governed by the applicable FAA regulations, Union Pacific Safety Rules, GCOR, General Orders, Superintendent Bulletins, Special Instructions, and Union Pacific UAS procedures.
 - b. The UAS pilot will consider the following:
 - i) Determining whether one or more VO are required.
 - ii) Determining if the operation will be safe.
 - iii) Determining if the operation will be within weather limitations; and
 - iv) Determining if the operation will be approved in airspace.
- 6) If the pilot determines a VO is required, the pilot will need to comply with the following standards:
 - a. If VO's are utilized, the flight team will consist of a Union Pacific trained and qualified pilot. The VO will be responsible for:
 - i) Isolating the UAS Pilot from all distractions.
 - ii) Assisting the UAS Pilot in ensuring that the aircraft is always in visual line of sight of the UAS Pilot.
 - iii) Assisting the UAS pilot with:
 - (1) Any required coordination with FAA Air Traffic Control.
 - (2) Any required coordination with field personnel.
 - (3) Any required coordination with Service Unit, Regional, and/or General Headquarters in:
 - (a) Arranging and managing live feed.
 - (b) Processing aircraft and sensor positioning
- 7) All data gathered using Union Pacific UAS's, including, but not limited to, photographs, sensor data, and flight information, and livestream link is the property of Union Pacific and shall not be shared outside of the Company without proper authority.
 - a. Company issued Raptors have live stream capabilities. Pilots utilizing the live stream functionality need to ensure that the livestream video link and or photos are not shared outside of the Union Pacific. This also includes ensuring that no one takes screen shots or pictures from the livestream. All data collected should be saved and protected by the Union Pacific pilots. UAS output must be protected in accordance with our Information Governance Policy.