



MEMORANDUM FOR FCC EXHIBIT

SUBJECT: Operational Description

1. **Introduction:** The nature of this operation is to perform unmanned aircraft flight acceptance, pilot training, and research.
2. **Operational Description:** This operation will be utilizing the Navmar Applied Sciences Corp. TigerShark Block 3 XP Unmanned Aircraft System (UAS). The TigerShark is a Medium-Altitude Long Endurance (MALE) aircraft. The aircraft has a Gross Takeoff Weight of approximately 525 lbs., can operate up to 100 Nautical Miles (NM) from the originating location, and has a maximum altitude of 16,000 feet Mean Sea Level (MSL). The TigerShark has multiple variations, but only two variations will be used for this operation. The TigerShark will be operated at each location as follows:
 - a. **Greenwood-Leflore Airport:** This location is the primary facility for flight acceptance, pilot training, and UAS research. The aircraft will primarily be flown within the air traffic pattern at or below 1,500 feet Above Ground Level (AGL) for both flight acceptance and pilot training. However, to complete the functions for acceptance, training, and research, the aircraft must be flown at a maximum altitude of 4,500 feet MSL (approximately 4,500 feet AGL), and at a maximum range of 28 kilometers (km). The higher altitude and longer range flights will be a small portion of the overall operation.
 - b. **Ackerman Choctaw County Airport:** This location will be used solely for UAS research. The aircraft must be flown to an altitude of 9,999 feet MSL (approximately 9,599 feet AGL), and at a maximum range of 18km.
3. **Licensing requirement:**
 - a. **TigerShark Variation 1:** This variation will be utilized for pilot training. The aircraft requires an Analog FM L-Band video stream to perform takeoffs and landings.
 - b. **TigerShark Variation 2:** This variation will be utilized for UAS research. The aircraft requires a Digital L-Band data stream for command and control of the vehicle, and an Analog FM C-Band video stream to perform takeoffs and landings.

Kyle Cantrell, Chief of Flight Operations

10-Dec-2018

Date