Petition for Exemption

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5 State Helicopters, Inc.
Part 133 Operator (LDUL599B)
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5 State Helicopters, Inc. (5 State) has been in business performing Part 133 External Lift operations for over 40+ years with no incidents, accidents or infractions. 5 State currently operates three (3) Sikorsky S-58Ts, one (1) Airbus MBB BK-117 B2 and one (1) Sikorsky UH-60A rotorcraft with the intention of bringing additional UH-60 Series rotorcraft onboard in the future to further modernize our fleet. Our sister company, Centerpointe Aerospace, Inc. (formerly known as California Helicopter International Airways is a Part 145 Repair Station which performs all maintenance, overhaul and repair activities for 5 State. Centerpointe Aerospace is also the entity which owns the Type Certificates for the Sikorsky S-55, S-58 and S-62 series rotorcraft.

Currently the issue that we face is that while flying to a Part 133 operations jobsite, 5 State operates our UH-60 with an FAA-issued Certificate of Waiver (CoW) from FAA CFR Part 91, §91.313, paragraph (a) which allows us to fly the UH-60 rotorcraft to the jobsite over densely populated areas as necessary. However, upon reaching the jobsite, we immediately switch from operating under Part 91 to operating under Part 133 where we encounter the possibility of being restricted from operating due to the conditions (congested area / densely populated area) at a particular jobsite.

It is important to note that following guidance from FAA Order 8900.1, Flight Standards Information Management System, as well as our own Safety Management System, that 5 State submits Congested Area Plans for 100 percent of our Part 133 external load operations to ensure we maintain visibility/transparency with numerous FAA FSDO's that we are required to partner with in numerous states around the country at all times. This process also provides the

applicable FSDO of our comprehensive plan for mitigating risks including, but not limited to the removal of all personnel, vehicles, property, etc. from within our Operational Area during the external lift operation. By managing our jobsite and operating in such a transparent manner with the applicable FSDO's, 5 State ensures that an adequate level of safety has been met or exceeded to what is required under Part 133 and 8900.1.

5 State is seeking an exemption for relief for our UH-60A (N60A) (Serial Number 85-24441) from FAA regulation 14 CFR Part 133, §133.45, paragraph (d) which states that:

> *"No person may conduct an external-load operation under this part with a rotorcraft type certificated in the restricted category under Sec. 21.25 of this chapter over a densely populated area, in a congested airway, or near a busy airport where passenger transport operations are conducted."*

Based on a search for past precedence, 5 State is aware of three (3) previous attempts by other entities to gain the same exemption to 133.45(d):

- Exemption No. 6934, JBI 1997 (See attachment 1)
- Exemption No. 8137, Brainerd Helicopters 2003 (See attachment 2)
- Exemption No. 10742, Firehawk Helicopters 2012(See attachment 3)

All three (3) petitions were denied with the following statement from the FAA:

> *"....cannot ensure an equivalent level of safety will be maintained with a rotorcraft not type certificated under Part 27 or Part 29. The civil rotorcraft certification process itself provides the FAA with a measure of the level of safety such an aircraft possesses. In contrast, the petitioner's restricted category helicopter did not undergo such a process and thus, the FAA is not convinced that an equivalent level of safety can be achieved."*

So, it would seem that the key element to the argument of restricted category versus standard category for former military use aircraft would be the FAA concern over maintaining an "equivalent level of safety."

Additionally, Federal Register Operations Review Program Amendment No. 2 dated May 12, 1977, puts forth the following argument to clarify the differences in certifying former military aircraft in restricted versus standard category:

> *"Restricted Category rotorcraft do not comply with all the airworthiness standards in Part 27 for normal category rotorcraft or in Part 29 for transport category rotorcraft. They are type certificated to airworthiness standards that are less stringent than those applicable to a standard category rotorcraft. Under Part 21.25, an applicant is entitled to a type certificate for rotorcraft in the restricted category for special purpose operations if he shows that no feature or characteristic makes the rotorcraft unsafe when it is*

operated under the operating limitations prescribed for its intended use. In addition, Part 21.27 allows certain surplus military aircraft to be certificated in the standard category if the applicant shows compliance with the applicable airworthiness certification standards.
Some restricted category rotorcraft brought under Part 133 are surplus military helicopters which have no civil counterpart. The Armed Services specify aircraft requirements and performance capabilities when soliciting aircraft construction bids that are directly and uniquely related to a particular military mission. The mission for a military rotorcraft (and particularly for external-load operations) may be quite similar to the mission of a civil rotorcraft. Other military requirements, however, specify equipment and structural changes that are not appropriate in an aircraft designed for civil use. These requirements may or may not improve the reliability or increase the safety aspects of the aircraft. Thus, while safety is a consideration in designing an aircraft manufactured for military use, it is not an over-riding determinant. Therefore, some items must be changed when converting a surplus military rotorcraft to meet the civil requirements……." (see attachment 4).

The above argument was true with respect to surplus military rotorcraft of that era, such as the OH-6, whereby the original C18 engine did not track/record start cycles as well as other aspects of the engine which did not allow the aircraft to meet civil requirements. Other aircraft of the day such as the UH-1 also did not track times/cycles/calendar limits on certain aspects of the aircraft. So, the argument in 1977 was true and accurate for the time.

However, the above stated argument is not true for most modern military rotorcraft. In January 1972, the U.S. Army released a Request for Proposal (RFP) for what was coined a "Utility Tactical Transport Aircraft System (UTTAS)". As the project was completed, the UTTAS became the UH-60 Black Hawk built by Sikorsky Aircraft. The rotorcraft had to meet and/or exceed a new standard set forth by the U.S. Army referred to as MIL-Spec 1290A (see attachment 5). The standards set forth in that specification meet or in some cases far exceed the Part 29 standards of today as well as those same standards when the rotorcraft was designed. At the time of its design development and subsequent manufacturing, a complete flight report was published titled "Airworthiness and Flight Characteristics Evaluation UH-60A (Black Hawk) Helicopter" (see attachment 6). This document clearly shows that the requirements set forth by Part 29 were easily met and in some cases exceeded. Based on the design data, it is obvious that 5 State's UH-60 meets and exceeds the Category B Rotorcraft requirements under Part 29, as well as supporting the statement from the Federal Registry that states:
"Part 21.27 allows certain surplus military aircraft to be certificated in the standard category if the applicant shows compliance with the applicable airworthiness certification standards".

The Army Material Command Engineering Design Handbook Part 1-3 (see attachments 7, 8 and 9) clearly states the higher standards that were utilized in modern military rotorcraft such as the UH-60 as opposed to design guidance from the 1950's.

In addition to the above-stated argument, 5 State follows an FAA approved Maintenance Program whereby all components of our UH-60 are tracked for either time/cycle/calendar limited items/components and inspection-based programs (see attachment 10), AND all components that cycle through for replacement are done so with civilian Type Certificated, TSO or PMA rotorcraft parts.

5 State also follows the Type Certificate Data Sheet "R00019AT" (Delta Enterprise) (see attachment 11) which spells out the use of DE-TM 1-1520-237-23 for our maintenance procedures (see attachment 12), and 5 State follows TM-1-1500-328-23 Maintenance Management Procedures (see attachment 13) as well as operating the rotorcraft in accordance with TCDS direction of utilizing the DE-TM 1-1520-237-10 as the Operator's Manual / Pilot Operating Handbook (see attachment 14).

5 State complies with the Instructions for Continual Airworthiness (ICA) (see attachment 15).

In summary and based on the above stated discussion, 5 State feels that our UH-60, and on behalf of the other UH-60 operators in the United States which follow the same type of guidance, demonstrates an adequate level of safety that meets or exceeds Part 29 by the original design, and the FAA granting this exemption would be in the public interest to better serve the public by easing the restrictions thus allowing and recognizing the UH-60 series rotorcraft as a proven, safe, reliable, modern rotorcraft to replace antiquated rotorcraft produced in the 1950/1960/1970s such as the UH-1 series, S-58 series and S-61 series rotorcraft to name a few.

In closing, should the FAA deny this petition for exemption, it is incumbent upon the FAA to spell out exactly what paragraphs of Part 29 that the UH-60 series aircraft does not meet or demonstrate an adequate or comparable level of safety. The above standard answer from the FAA when denying a petition *"....cannot ensure an equivalent level of safety...."* paragraph is not definitive enough and does not provide any type of guidance to the UH-60 operators.

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