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Docket Operations, M-30
US Department of Transportation (DOT)
1200 New Jersey Avenue SE, Room W12-140
West Building Ground Floor
Washington, DC 20590-0001

To whom it may concern,

Thank you for the opportunity to comment on the FAA's Modernization of Special Airworthiness Certification (MOSAIC) proposal as listed in the Federal Register Docket No. FAA-2023-177; Notice No. 23-10.

Air Tractor, Inc. is an aircraft manufacturer located in Olney, Texas that manufactures Restricted Category aircraft for the FAR Part 21.25(b) special purpose operations of Agricultural, Forest and Wildlife Conservation, Aerial Surveying, and Patrolling. In addition, Air Tractor aircraft have been approved for use in multiple other special purposes approved under 21.25(b)(7) including oil spill response, geophysical survey, and northern fuel hauling. Air Tractor is a leading manufacturer of single-engine turboprop aircraft and our mission is to produce aircraft that safely help feed and protect the world.

In our review of the MOSAIC NPRM, we have the following comments:

1. Air Tractor supports the FAA's effort to clarify 21.25(a)(2) regarding type certificates of former military aircraft. The NPRM language of 21.25(a)(2)(i) refers to aircraft types that have *"been manufactured in accordance with the requirements of, and accepted for use by, the U.S. Armed Forces."* We are aware of aircraft that have been produced under an FAA TC/PC and then subsequently modified to meet the requirements of, and accepted for use by a U.S. Armed Force.

The U.S. Armed Forces have shown increasing interest in modifying/adapting "off-the-shelf" civil aircraft for military use. In these cases, it is not clear if the wording of 21.25(a)(2) would allow for a type certificate to be issued for these aircraft after being released from military service. With their FAA Type Certificate pedigree, these aircraft

should have a clearer path to a Restricted Category Type Certificate than an aircraft developed exclusively for the military, even though they no longer meet the type design of their original Type Certificate.

To include these aircraft, we would propose modifying the language of 21.25(a)(2)(i) to read:

“(i) Has been manufactured or modified in accordance with the requirements of, and accepted by, the U.S. Armed Forces;”

2. In the proposed revision to 21.25(b), the FAA is proposing to codify special purpose operations that have traditionally been granted under the catchall regulation of 21.25(b)(7). While this proposal has merit and promise, it creates some potential implementation issues that need to be addressed and/or understood.
 - a. Multiple Type Certificates have already been issued for Restricted Category aircraft models that already list the approved special purpose operations per 21.25(b). For example, the TCDS of a current production agricultural aircraft lists the special purposes of:
 - agricultural spraying, dusting, and seeding per FAR 21.25(b)(1),
 - forest and wildlife conservation (fire fighting) per FAR 21.25(b)(2),
 - aerial surveying per FAR 21.25(b)(3),
 - patrolling per FAR 21.25(b)(4), and
 - drug eradication with the application of herbicides per FAR 21.25(b)(7).

Under the proposed revision to 21.25, which special purpose operations would this aircraft be approved for? Experience would show that it would be some mixture of the sub-purposes listed under the proposed 21.25(b)(1), (b)(2), (b)(3), (b)(4), and (b)(7)(ix). Alternately, as written in the TCDS, it could be argued that all of the sub-purposes of 21.25(b)(1), (b)(2), (b)(3), and (b)(4) are now applicable. When these questions on interpretation arise, who will be the arbitrator to decide what was intended?

Or is it the FAA's intention to require each holder of a Restricted Category Type Certificate to update these TCDS to specific the new 21.25(b) special purposes? If the TCDS is changed, the Airworthiness Certificates issued for these aircraft would no longer match.

- b. As mentioned in Table 10 of the NPRM, FAA Form 8130-6 “*Application for U.S. Airworthiness Certificate*” will be updated to add the newly codified special purpose operations. For the aircraft described above in our comment 2(a), what boxes will the applicant check when applying for a new Airworthiness Certificate. Again who will be the arbitrator who has the final decision of the appropriate sub-purposes?

One solution we may suggest is that the FAA Form 8130-6 be updated to allow a tiered structure where a single check box could be used for 21.25(b)(1), (b)(2), (b)(3), (b)(4), (b)(5), and (b)(6) that would include all sub-operations or, alternately, sub-operations could be applied for independently by checking the sub-tier boxes. An example is included below:

RESTRICTED (<i>Indicate operation(s) to be conducted</i>)	<input type="checkbox"/> Agricultural Use (21.25(b)(1)) - ALL <input type="checkbox"/> Crop spraying, dusting, and seeding <input type="checkbox"/> Livestock and predatory animal control <input type="checkbox"/> Insect control <input type="checkbox"/> Dust control <input type="checkbox"/> Fruit drying and frost control
	<input type="checkbox"/> Forest and wildlife conservation (21.25(b)(2)) - ALL <input type="checkbox"/> Aerial dispensing of firefighting materials <input type="checkbox"/> Fish spotting <input type="checkbox"/> Wild animal survey <input type="checkbox"/> Oil spill response
	<input type="checkbox"/> Aerial Survey (21.25(b)(3)) - ALL <input type="checkbox"/> Aerial imaging and mapping <input type="checkbox"/> Oil, gas, and mineral exploration <input type="checkbox"/> Atmospheric survey and research <input type="checkbox"/> Geophysical and electromagnetic survey <input type="checkbox"/> Oceanic survey <input type="checkbox"/> Airborne measurement of navigation signals

- c. We are concerned that the creation of the specific sub-operations will create an interpretation that many current agricultural operations are no longer approved.

For example, the current 14 CFR 21.25(b)(1) lists “Agricultural (spraying, dusting, seeding, and livestock predatory animal control)”. Under this definition, there are many possible missions that may be performed, such as rangeland vegetation control, fungus control, fertilizer applications, sprout planting, plant growth control, crop health monitoring, aquatic pest control, and terrestrial pest control. These types of specific agricultural operations do not clearly fit under the proposed 14 CFR 21.25(b)(1)(i) “crop spraying, dusting, and seeding” because

they are not treating a specified crop. Instead, they could be supporting agricultural needs of livestock or forestry production.

We believe the intent of the proposed revision to 14 CFR 21.25 is not to limit current operations, but the new wording can be interpreted in a limiting way.

We do propose that 14 CFR 21.25(b)(1)(i) be reworded to “Any agricultural aircraft operation per 14 CFR 137.3”. This would unify wording between 14 CFR 21.25, 14 CFR 36.1, and 14 CFR 137.3.

3. In the NPRM, the FAA requests comment on whether any categories of aircraft should or should not be subject to part 36 noise requirements. We urge the FAA to continue supporting the exclusion of all agricultural and firefighting aircraft as written in 14 CFR 36.1(a)(2) and 36.1(a)(4). The operation of these aircraft for the protection of property, food, and fiber is in the public interest. Operating limitations per 14 CFR 91.313(e) are in place that restrict operation over a densely populated area, in a congested airway, or near busy airports with passenger transport operations. These operating limitations effectively limit the impact of aircraft-produced noise for these aircraft.

Again, thank you for the opportunity to provide comments on this NPRM. We welcome any opportunity to answer questions or clarify any points we have made in these comments.

Thank You,



Kyle Schroeder
Director of Engineering