



American Helicopter Society International, Inc.

The Vertical Flight Technical Society

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Mr. Lance Gant, Director Compliance & Airworthiness
Federal Aviation Administration
Southwest Region Headquarters
2601 Meacham Blvd
Fort Worth, TX 76137

cc: Mike Kaszycki, Acting Director Policy & Innovation

Re: PS-ASW-27-15, "Safety Continuum for Part 27 Normal Category Rotorcraft Systems and Equipment"

Dear Mr. Gant,

As the co-chair of the joint industry-government International Helicopter Safety Team (IHST), you are well aware that the rotorcraft industry is intently focused on safety, particularly on ways to reduce fatal accidents.

As a result of request in March 2014 from the FAA Aircraft Certification Service Director, Ms. Dorenda Baker, during an industry dialogue, four industry associations — AHS International, Aircraft Electronics Association, General Aviation Manufacturers Association and Helicopter Association International — worked for more than a year to develop a comprehensive white paper to address the unacceptable number of lives lost due to IIMC or CFIT accidents in single-engine helicopters that resulted from low-level flight to avoid weather. These accidents could have been avoided if affordable and practical IFR solutions were permitted for these rotorcraft; wider adoption of IFR operations would also promote a culture of increased IFR use in rotorcraft operations that would go beyond single-engine rotorcraft. The simplest way to get this is to provide the same considerations allowed for equivalent-sized Part 23 airplanes when it comes to certifying the systems and avionics equipment. Unfortunately, since 1999, these systems for Part 27 rotorcraft have had the same redundancy and certification requirements as a Part 25 airliner, with sometimes fatal consequences.

The industry white paper addressing single-engine IFR — posted and circulated for public comment in July 2015 — was officially submitted to you in November 2015 (see details and chronology at www.vtol.org/se-ifr). Industry was very encouraged by your response dated July 25, 2016, stating the "Rotorcraft Directorate has begun the process of adopting some of the concepts and recommendations of the whitepaper into a proposed Safety Continuum for Part 27 Systems and Equipment Policy Statement." Most promising to me was your statement that the "purpose of this safety continuum concept is to facilitate a more rapid incorporation of advances in technology for systems and equipment by recognizing a balanced approach between the risk

and safety benefits for installing such technology." Your letter also noted the Rotorcraft Directorate had "given this proposed policy statement high priority and has set a goal to release the proposed policy by November/December 2016 for public review and comment."

As a result of the promises that the safety continuum would both adopt some of the recommendations of the white paper on single-engine IFR certification and that the Rotorcraft Directorate was interested in our feedback and would allow for the rapid incorporation of advances technology, we logically expected that the proposed policy was going to address the recommendations of the single-engine IFR white paper.

I'm not sure when the undated proposed policy was officially distributed, but AHS obtained the file on March 9, 2017. On a personal note, I was disappointed that the FAA failed to adequately publicize the publication of the proposed policy, and did not notify all of the signatories or points of contact at the four associations who submitted the white paper. When we received the draft policy third hand, we were a bit baffled as to why the document avoided addressing the key issues in the white paper, and why it was not in keeping with prior FAA correspondence quoted above. Nonetheless, our experts studied the document and developed an extensive set of suggestions to modify the proposed policy to permit the use of available technology to improve safety (e.g. IFR equipment for single-engine rotorcraft). I emailed the AHS response directly to you and Jorge Castillo on March 16 with the comment: "We very much appreciate the opportunity to provide feedback, and believe that the Safety Continuum approach holds great promise for improved safety. We look forward to further dialogue with the Rotorcraft Directorate" (though I never received any acknowledgement). After the draft policy was officially posted on the FAA website with the official point of contact, Andy Shaw, I re-submitted our comments on April 18, and specifically requested acknowledgement of receipt (but again received no response). Indeed, only 9 organizations/individuals provided feedback; perhaps more would have also provided similar comments had the draft policy been better circulated for review by industry.

The draft policy itself was very puzzling to us, our association partners, and to our industry experts since it did not actually address IFR, with the only mention coming on page 3 stating that "The application of the safety continuum concept under this policy statement is not limited to any specific type of operation, such as under visual flight rules or instrument flight rules..."

The final Policy Statement PS-ASW-27-15, dated June 30, 2017 (but again not adequately publicized or promulgated and only received by AHS second hand on July 17), failed to make any substantive changes to the draft policy, despite the 50 comments submitted. Most of industry's comments were essentially dismissed. Four non-substantive comments were agreed with, while four were stated as "Partially Agreed," but the crux of the comment was actually dismissed.

Three of the four comments that were "Partially Agreed" with — two from AHS and one from Leonardo — specifically addressed the request to reduce the failure conditions classifications probabilities for Class III rotorcraft to 10^{-6} (Hazardous) and 10^{-7} (Catastrophic). The FAA's response was as follows:

PARTIALLY AGREE. While we do not agree with lowering the probabilities for class III rotorcraft, we do agree that this requirement may be met by a dual system. We have added a NOTE 5 clarifying this issue.

We believe the FAA's response is in error. There is not a dual-system technological solution that we know of that can be adequately installed on an aircraft today or in the foreseeable future that meets these probabilities. **Please provide supporting information regarding this statement so that it can be evaluated and considered.**

However, most instructive in the approach of the Rotorcraft Directorate to PS-ASW-27-15 was in the repeated statements that "The comment [about single engine IFR] is beyond the scope of this policy. Although, the policy may be expanded in the future, this policy currently only addresses an acceptable means of compliance for 27.1309".

So, something apparently changed between the timeframe of your July 2016 letter and the March 2017 proposed policy. PS-ASW-27-15 provides no safety improvement for using modern technology to save lives due to IIMC or CFIT accidents. Today's ubiquitous glass cockpits have so much more safety potential than did the federated steam gauges of the 1990s when the FAA last facilitated single-engine IFR certifications. PS-ASW-27-15 now codifies and strengthens the dangerous regulatory situation that kills pilots and passengers during bad weather and similar situations.

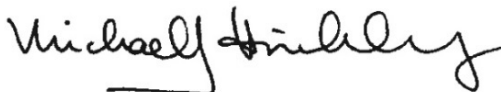
Over the period of 2001 to 2013, there were 194 accidents worldwide for Part 27 single-engine helicopters — with 326 fatalities — related to IIMC or CFIT during low-level flight to avoid weather. None of these aircraft were IFR equipped. **We urge the FAA to redouble its efforts and address the issues that were presented in the 2015 industry white paper.**

We also request that the FAA re-open a dialogue with industry and concerned associations. The above personal and other comments about the unfulfilled promises, the lack of responses and inadequate publicization of the proposed and final policy statement are not meant to be petty, but rather to urge the FAA to be more transparent, open and focused on allowing technologies to make a significant, positive impact on reducing accidents and saving lives — particularly low hanging fruit as described in the white paper.

We would very much like to speak with you and the Part 27 Safety Continuum team to understand what the plans are for the next step in expanding the policy to address single-engine IFR, or how the FAA plans to allow industry to address weather-induced IIMC and CFIT accidents and fatalities.

Please contact me at hirschberg@vtol.org or +1-703-684-6777 x111.

Very respectfully,



Michael J. Hirschberg
Executive Director