Comments in Response to
"Final rule; request for comments"

Docket: FAA-2023-0024
Project Identifier AD-2022-01492-A

Comments have been received in response to: **"*Final rule; request for comments,"*** Airworthiness Directive (AD) Docket and Directorate Identifier entered above.

The FAA has reviewed 30 comments related to the above FAA. Disposition of these comments are as follows:

1 Comment ID: FAA-2023-0024-0003; Commenter: Anonymous; Received Date: 26-Jan-23 This AD should not be applicable to M20C, M20D, and M20E aircraft. The weights installed on these aircraft are not the affected part number. These aircraft should not be subject to this AD just because someone could have installed parts from another model of aircraft (M20F) with the affected part number.

FAA response:
The FAA disagrees. Models M20C, M20D, and M20E, serial numbers 680170 or earlier, are applicable. It is possible that the hybrid elevator balance weight P/N 430018-1 has been installed on the affected airplanes.

2 Comment ID: FAA-2023-0024-0004; Commenter: Anonymous; Received Date: 26-Jan-23 No accidents have occurred in relation to this issue. This AD should allow for a comment period prior to becoming active. FAA response:

FAA response:
The FAA disagrees. As communicated in the AD, an unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because corrosion on the elevator balance weight could lead to cracks that, if not addressed, could result in elevator flutter leading to elevator failure with consequent loss of control of the airplane. Because undetected corrosion could have developed over time and therefore the cracks can develop quickly and without warning, the affected elevator balance weights must be inspected before further flight.

3 Comment ID: FAA-2023-0024-0007; Commenter: Anonymous; Received Date: 26-Jan-23 This AD or related SB should contain more details about how to determine if the affected part is installed.

FAA response:
The hybrid weight has a steel sleeve at its center plug. The FAA determined that, based on the airplane type design holder's (Mooney International Corporation (MIC)) findings, the prescribed inspection method adequately detects the steel sleeve.

4 Comment ID: FAA-2023-0024-0005; Commenter: Anonymous; Received Date: 26-Jan-23 This AD should allow the inspection to be performed at the next scheduled inspection. Any corrosion serious enough to cause an issue would be visible during normal inspection of the elevator and serious corrosion is unlikely to develop prior to a scheduled inspection.

FAA response:
The FAA disagrees. As communicated in the AD, an unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because corrosion on the elevator balance weight could lead to cracks that, if not addressed, could result in elevator flutter leading to elevator failure with consequent loss of control of the airplane. Because undetected corrosion could have developed over time and therefore the cracks can develop quickly and without warning, the affected elevator balance weights must be inspected before further flight.

5 Comment ID: FAA-2023-0024-0006; Commenter: Anonymous; Received Date: 26-Jan-23 The AD is based on a SB that is overly broad and unreasonably written for corrective action. The parts having a corrosion problem are very visibly obvious. The corrosion products expand in volume and will cause bulging and cracking easily seen even if painted over. The extensive requirements to disassemble and reassemble a critical control system can risk maintenance induced failure needlessly.

FAA response:
The FAA has determined that the method required by the AD addresses the unsafe condition. An alternative method of compliance (AMOC) can be requested by following paragraph (h) of the AD and 14 CFR 39.19.

6 Comment ID: FAA-2023-0024-00017; Commenter: Anonymous; Received Date: 29-Jan-23 This AD should allow the inspection to be performed at the next scheduled inspection. Any corrosion serious enough to cause an issue would be visible during normal inspection of the elevator and serious corrosion is unlikely to develop prior to a scheduled inspection.

FAA response:
The FAA disagrees. As communicated in the AD, an unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because corrosion on the elevator balance weight could lead to cracks that, if not addressed, could result in elevator flutter leading to elevator failure with consequent loss of control of the airplane. Because undetected corrosion could have developed over time and therefore the cracks can develop quickly and without warning, the affected elevator balance weights must be inspected before further flight.

7 Comment ID: FAA-2023-0024-00011; Commenter: Anonymous; Received Date: 29-Jan-23 The primary means being used to locate the hybrid weights is to use a magnet. This apparently works fine on a weight with the inner steel tube in good condition but may not work with a hybrid weight having a seriously corroded steel inner tube. It has been noted that many of the corrosion products are weakly magnet or not magnetic at all. I suggest

an immediate delay in implementing this AD until this inspection issue can be resolved. But I also think a visual inspection for visible degradation is really all that is necessary in the short term until more discussion of this SB can be had by this regulatory input process.

FAA response:
The FAA and MIC have not any received report of a seriously corroded steel inner tube of the affected hybrid balance weights. The FAA disagrees on the suggestion that the implementation of this AD to be delayed. As communicated in the AD, an unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because corrosion on the elevator balance weight could lead to cracks that, if not addressed, could result in elevator flutter leading to elevator failure with consequent loss of control of the airplane. Because undetected corrosion could have developed over time and therefore the cracks can develop quickly and without warning, the affected elevator balance weights must be inspected before further flight.

8 Comment ID: FAA-2023-0024-0016; Commenter: Anonymous; Received Date: 29-Jan-23 There have been no accidents or incidents of flutter of controls so why rush the process and not allow comments prior to this rule? A few examples if inadequate maintenance and inspection should not have caused this to be moved this fast. Too much hypothesizing of possible accidents.

FAA response:
The FAA disagrees. As communicated in the AD, an unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because corrosion on the elevator balance weight could lead to cracks that, if not addressed, could result in elevator flutter leading to elevator failure with consequent loss of control of the airplane. Because undetected corrosion could have developed over time and therefore the cracks can develop quickly and without warning, the affected elevator balance weights must be inspected before further flight.

9 Comment ID: FAA-2023-0024-0014; Commenter: Anonymous; Received Date: 29-Jan-23 We have an AD driven by a Mooney Factory SB that will require replacement of counter weights on some aircraft or they will be immediately grounded. The problem is the parts are not available as Mooney claimed they would be. Since there have been no accidents in 55 years why not let the aircraft be immediately visually inspected by the owner and continue to fly until next annual or until parts are available?

FAA response:
MIC stated that the part was available as of March 17, 2023.
The FAA disagrees on the suggestion that the implementation of this AD to be delayed. As communicated in the AD, an unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because corrosion on the elevator balance weight could lead to cracks that, if not addressed, could result in elevator flutter leading to elevator failure with consequent loss of control of the airplane. Because undetected corrosion could have developed over time and therefore the cracks

can develop quickly and without warning, the affected elevator balance weights must be inspected before further flight.

10 Comment ID: FAA-2023-0024-0020; Commenter: Anonymous; Received Date: 29-Jan-23 In the justification for the AD not allowing a comment period, there is lots of theorizing and postulating about things like accelerated degradation of the hybrid weights but nothing to support them actually being on a fast track to failure. In fact it seems to be a slow track to failure given the weights are all 50 years old.

FAA response:
The FAA disagrees. As communicated in the AD, an unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because corrosion on the elevator balance weight could lead to cracks that, if not addressed, could result in elevator flutter leading to elevator failure with consequent loss of control of the airplane. Because undetected corrosion could have developed over time and therefore the cracks can develop quickly and without warning, the affected elevator balance weights must be inspected before further flight.

11 Comment ID: FAA-2023-0024-0009; Commenter: Anonymous; Received Date: 29-Jan-23 Lots of problems with the SB the AD is tied directly too but if not much gets fixed to keep people from being grounded then why not include the ability to get a special flight permit?

FAA response:
The local Flight Standards District Office of the FAA may issue a special flight permit in accordance with 14 CFR 39.23. This AD does not prohibit the aircraft flight to a repair facility to do the work required by the AD.

12 Comment ID: FAA-2023-0024-0010; Commenter: Anonymous; Received Date: 29-Jan-23 The following is a technical analysis of what I consider to be a significant error in the Mooney M20-345A service bulletin that appears to be the sole basis for this AD 2023-02-04. I have an advanced degree in Chemical Engineering with extensive industrial experience in dealing with corrosion and electrochemistry. The following was taken from my previous post on a Mooney Space discussion of this AD:I have not been able to find the referenced section X1 in the M20F service manual. It appears to have been left out and I have confirmed that with another person who says it was left out of his also. The Mooney SB-345A step 2.3 sounds like they are telling us to chemically “strip corrosion sensitive” part? This appears to be ignoring the later guidance in M20J Service and Maintenance Manual section 20-00-02 on Corrosion Detection and Prevention. (They are looking for microscopic cracks which must be a new standard for condemning counter weights.) From my knowledge of corrosion and as indicated in the M20J manual you should not get solvents into cracks and locations where they are hard to either neutralize or wash out. Using a stripping solvent with a chlorinated hydrocarbon component has damaged a number of aircraft in the past too. They don’t say that directly but I have seen this and have a background dealing with this type of corrosion.In any case these hybrid corrosion sensitive weights were likely manufactured with microscopic seam cracks between the steel tube and the lead. You can see this area in my previous posting of photos of two hybrid weights that had been in service for 55 years. I was asking if

anybody knew why one was still in perfect shape and one was totally destroyed to see if anybody understood the mechanisms at work here. Nobody answered so here is what I think based on my background. The round seam on the side is a microscopic crack that if not adequately sealed will allow water and contaminates and paint stripper in when exposed to that. The liquids essentially become electrolytes allowing a galvanic cell and the resulting corrosion. The key here is you can have dissimilar metals in contact but if you eliminate the electrolyte there will be no corrosion. You can see in the photo the good weight has had paint and a sealant covering the crack between the steel and the lead. The airplane also has been well maintained and kept in a good dry environment. It has not been tied down near the ocean which can be an extreme hazard for galvanic corrosion over time. I believe the hybrid weights are a risky design, which obviously fail much easier if not properly maintained. But I think the hybrid weights can last indefinitely if the side seams are kept sealed. I know this thinking is contrary to some who think all hybrid weights are a ticking time bomb. But I don't think they have an adequate understanding on the mechanisms at play here. Bottom line, in my opinion if the factory is calling for a chemical strip of the corrosion sensitive weights, which would be a mistake which is likely to cause new galvanic corrosion. Haven't we normally just scraped select locations with a knife probing for corrosion? That would be adequate in my mind plus negate the need for removing and balancing the elevator.

FAA response:
12.1 The first comment was that the commenter had not been able to find the referenced information. Paragraph (j)(3) of the AD provided contact information to MIC, which can provide a copy of the service bulletin. Paragraphs (j)(4) and (j)(5) of the AD provide additional means by which to view the referenced service information. It is also available at regulations.gov by searching for and locating Docket No. FAA-2023-0024.
12.2 The second comment was that the paint stripping procedures would damage the aircrafts. The FAA has determined that a licensed mechanic doing this procedure correctly will not damage the aircraft.
12.3 The third comment was an AMOC for corrosion inspection. An AMOC can be requested by following paragraph (h) of the AD and 14 CFR 39.19.

13 Comment ID: FAA-2023-0024-0019; Commenter: Russell Savory; Received Date: 29-Jan-23 1. The AD is overly broad. It applies to models (CDE) where the problematic part number was not installed at the factory. 2. The AD was issued with insufficient notice. Two weeks to get a sign-off from a certified mechanic is unreasonable, especially when the vast majority of aircraft affected by this AD do not have the suspect weights. 3. A corroded elevator weight is likely to be found during an annual inspection, especially since a Service Bulletin was issued several months ago.

FAA response:
13.1 The FAA disagrees. Models M20C, M20D, M20E and M20G, serial numbers 680170 or earlier, are applicable. It is possible that the hybrid elevator balance weight P/N 430018-1 has been installed on the affected airplanes.
13.2 The FAA disagrees. Special flight permit could be obtained in accordance with 14 CFR 39.23.
13.3 As communicated in the AD, an unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA found that the risk to the flying public justifies foregoing notice and comment prior to

adoption of this rule because corrosion on the elevator balance weight could lead to cracks that, if not addressed, could result in elevator flutter leading to elevator failure with consequent loss of control of the airplane. Because undetected corrosion could have developed over time and therefore the cracks can develop quickly and without warning, the affected elevator balance weights must be inspected before further flight.

14 Comment ID: FAA-2023-0024-0018; Commenter: Anonymous; Received Date: 29-Jan-23 The AD effectively grounds a fleet of aircraft (until they can find a roving mechanic) on the effective date of the AD, because they MIGHT have had one of a very limited number of components installed inappropriately. The FAA should consider that the immediate concern should be those aircraft that have a direct effectivity of those parts. Those aircraft that may have had a doner part are likely less of a risk and should not be held to the same level of urgency. In addition, a severely deteriorated weight, should have already been caught at an annual, preflight, or paint job. It seems that an at-risk weight can be identified by preflight inspection. Can this provide for limited operations after the effective date? There seems to be concern that a damaged weight might be hidden by paint and or filler. I would argue that this is due to improper maintenance and can exist anywhere on an aircraft. It may also be beneficial to include the critical inspection information in the AD itself. The AD references the Mooney SB, which relies exclusively on the health of the Mooney organization, their web site and the health of said web site. It is not immediately clear how to find the referenced bulletin on the web site. A generic Google search typically pulls up the previous version. The service bulletin refers to a Neodymium Magnet. I assume that this is considered stronger than a typical magnet, but just calling out a Neodymium Magnet does not guarantee a level of performance of said magnet. Does one simply procure that from Amazon and call it good? Are the half dozen magnetic pick up tools in my shop not adequate? Perhaps it would be helpful to quantify the strength of the magnet in terms of its ability to pick up some standard weight or standard aviation hardware (like a specific size bolt, nut or washer). I suspect that most shop magnets capable of picking up a dropped wrench would be adequate, even if they weren't Neodymium and I bet some available small Neodymium magnets could not lift said wrench…and perhaps not penetrate layers of paint and bondo (assuming that is the concern).

FAA response:

14.1 The commenter's first comment was to propose an AMOC to address the unsafe conditions. An AMOC can be requested by following paragraph (h) of the AD and 14 CFR 39.19.

14.2 The commenter's second comment was the difficulties to find the service bulletin referenced in the AD. Paragraph (j)(3) of the AD provided contact information to Mooney International Corporation (MIC), which can provide a copy of the service bulletin. Paragraphs (j)(4) and (j)(5) of the AD provide additional means by which to view the referenced service information. It is also available at regulations.gov by searching for and locating Docket No. FAA-2023-0024.

14.3 The commenter's third comment was that a Neodymium Magnet does not guarantee a level of performance of said magnet. For the close proximity to the steel sleeve, the FAA has determined that, based upon MIC's finding, an inspector with Neodymium Magnet could adequately detect the steel sleeve in the hybrid balance weights.

15 Comment ID: FAA-2023-0024-0012; Commenter: Anonymous; Received Date: 29-Jan-23 Rather than immediately require over 3000 aircraft owners to find, schedule and pay an inspector for a log book entry this AD should have allowed owners to do a simple visual inspection for serious corrosion. They could have been guided by photos and info in the Service Bulletin. Then at the next annual inspection and when parts are available from Mooney complete the rest of what needs to be inspected and replaced. There have been no accidents and this would be adequate insurance.

FAA response:
The FAA disagrees. As communicated in the AD, an unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because corrosion on the elevator balance weight could lead to cracks that, if not addressed, could result in elevator flutter leading to elevator failure with consequent loss of control of the airplane. Because undetected corrosion could have developed over time and therefore the cracks can develop quickly and without warning, the affected elevator balance weights must be inspected before further flight.

16 Comment ID: FAA-2023-0024-0008; Commenter: Anonymous; Received Date: 29-Jan-23 One added difficult step in doing the elevator removal for the 100 hour inspection for anyone with good hybrid weights is if you have the Laser hinge gap seals mod. Each hinge seal has four rivets to remove and replace every time the inspection is done! Yes the smart thing to do is just replace the weights and do the removal only one but no weights are currently available new or used so grounding the airplane may be the only realistic option! Unless the AD is changed to allow inspection with out removing the elevator.

FAA response:
16.1 Deviations to the AD corrective action could be approved via AMOCs. An AMOC can be requested by following paragraph (h) of the AD and 14 CFR 39.19.
16.2 According to MIC, the balance weight replacements have been available since March 17, 2023.

17 Comment ID: FAA-2023-0024-0013; Commenter: Anonymous; Received Date: 29-Jan-23 Some feel disassembly of the elevator control system to inspect the hybrid weights is not necessary and creates additional risk. The Factory SB seems say removal of the counter weight is necessary to inspect One person who said why not remove the weight and not remove the elevator. That could be done by weighing the weight upon removal then strip inspect and repaint but make sure the weight was the same as when removed when reinstalling it. This could be a possible AMOC or change to the SB.

FAA response:
Deviations to the AD corrective action could be approved via AMOCs by following paragraph (h) of the AD and 14 CFR 39.19.

18 Comment ID: FAA-2023-0024-0015; Commenter: Anonymous; Received Date: 29-Jan-23 The AD is written because of a part that was built of two dissimilar metals was not being maintained properly resulting in galvanic corrosion. Had the exposed ends of this

part been kept painted and sealed there would have been no corrosion. I have attached a photo of one that has been in service for 55 years. Corrosion can and does happen at many places on aircraft but we normally utilize inspections to find and correct These bad corrosion examples should have been caught earlier during annual inspections. We should use service alerts and bulletins to alert inspectors of potential problem areas not ADs that affect thousands of aircraft and cause some completely airworthy airplanes to be grounded or go through needlessly and risky disassembly and inspection.

FAA response:
The FAA disagrees. Unsafe conditions existed in the affected airplanes. The AD corrective actions or approved AMOCs are required to address the unsafe conditions.

19 Comment ID: FAA-2023-0024-0022; Commenter: Anonymous; Received Date: 29-Jan-23 There are a few modifications that I recommend for this AD. 1.) For C,D,E model aircraft where the problematic part number was not installed at the factory, allow the pilot/owner to perform the initial weight inspection with the specified magnet. This check is a very simple check and within the capabilities of the pilot. There is a similar precedent in AD 76-07-12. 2.) Implement a provision regarding special flight permits for affected aircraft. The change was implemented without much notice and there will surely be operators who become aware of this after the fact. 3.) Extend the compliance time for C,D,E model aircraft to the next scheduled inspection or 1 year from the date of implementation. These aircraft are over 50 years old and there have been no incidents related to this issue.

FAA response:
19.1 The FAA partially agrees. Inspection with magnet should be straight forward. However there are also concerns about the variations in hybrid weight surface conditions and the variation in the magnet strength, which may affect the outcome. Having a licensed inspector is a good assurance that the non-hybrid balance weights are identified.
19.2 Special flight permit could be obtained in accordance with 14 CFR 39.23.
19.3 Unsafe conditions of the hybrid weights, whether they are in models C, D, E or F, are the same. The corrective actions are the same for all affected models.

20 Comment ID: FAA-2023-0024-0021; Commenter: Anonymous; Received Date: 30-Jan-23 This AD is based on an accident scenario hypothesizing a piece of elevator counter weight falling off during flight resulting in immediate flutter causing the control surface to fail resulting in an accident. No data or history has been presented to support this. No weight has failed in flight. No aerodynamic analysis has been done to analyze if flutter failure would be likely to happen. GA aircraft are relatively slow speed aircraft when operated below their VNE (Never exceed design speed). Flutter is a larger concern with higher speed aircraft. I have studied GA accident history for years and can not remember a single accident attributed to elevator flutter in any type of GA airplane. There have been accidents involving airplanes losing tails and control services during high G abrupt maneuvers like penetrating thunder storms or extreme aerobatic maneuvers. I have not seen flutter accidents during normal flight. I am sure there have been airplanes operated with miss rigging or mistakes in control surface balancing over the years but apparently it is not easy to cause a flutter accident in slower speed GA aircraft. It would be reasonable to get that aerodynamic analysis telling how much of a piece of a counter weight failure could cause the scenario envisioned that is basis of this overly broad ad prescriptive AD.

FAA response:
The FAA disagrees. The hybrid elevator balance weights were found to have developed galvanic corrosion and visible signs of cracking. This condition, if not addressed, could result in partial or total separation of the elevator balance weight during flight, which could lead to elevator flutter and consequent loss of control of the airplane.

21 Comment ID: FAA-2023-0024-0023; Commenter: Anonymous; Received Date: 30-Jan-23 This AD stops at serial 680170 but includes previous aircraft where the weight was not factory installed due to concerns that control surfaces from affected aircraft could have been installed on those aircraft. By this logic, this AD should be updated to include all serial numbers of all aircraft models where the control surfaces could have been transferred.

FAA response:
The FAA disagrees. Airplane models M20C, M20D, and M20E with serial number 680170 and later used a different elevator that could not accept the hybrid balance weights.

22 Comment ID: FAA-2023-0024-0024; Commenter: Anonymous; Received Date: 31-Jan-2 There seems to be a difference in the elevator balance weight specified in the service manual and in Service Bulletin the AD is based on. It is not clear why this is but there is an urgent need for checking and correcting and explaining. Several owners have been able to locate used weights and have installed or are in the process of installing them. Hopefully they are using the correct weight and balance numbers.

FAA response:
The FAA agrees there is a difference. The elevator using 430016-7 (non-hybrid) balance weights and the elevator using hybrid balance weights referenced in the service bulletin have different weight balance requirements.

23 Comment ID: FAA-2023-0024-0027; Commenter: Anthony Dercole; Received Date: 1-Feb-23 AD needs to be bounded. The way this AD is written it affects all M20C, M20D, M20E, M20F, and M20G models. Yet the Service Bulletin from the OEM limits the inspection to only those models with smooth skinned elevators. The AD needs to be revised so the effected inspections are for only smooth skinned elevators.

FAA response:
The FAA disagrees. The FAA determined that the only reliable way to find the hybrid balance weights was though inspection of the affected airplane serial numbers and their elevators.

24 Comment ID: FAA-2023-0024-0025; Commenter: Anthony Dercole; Received Date: 1-Feb-23 To immediately ground the fleet for a condition that has existed for 60 years is excessive. Unless the FAA has an analysis from the OEM that the probability of a catastrophic failure in the next two weeks is one, I respectfully request that the time of compliance be changed to the next 100 hours or annual inspection, whichever occurs first.

FAA response: The FAA disagrees. As communicated in the AD, an unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public

comments prior to adoption. The FAA found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because corrosion on the elevator balance weight could lead to cracks that, if not addressed, could result in elevator flutter leading to elevator failure with consequent loss of control of the airplane. Because undetected corrosion could have developed over time and therefore the cracks can develop quickly and without warning, the affected elevator balance weights must be inspected before further flight.

25 Comment ID: FAA-2023-0024-0028; Commenter: Anthony Dercole; Received Date: 1-Feb-23 The iron rivets described in the Service Bulletin for installing the new weights are hard to install and seem to be hard to find. Mooney implemented a better method on the more recent airplane models involving a threaded insert and screws. It would be good if the owners could use this simpler method as an option when replacing the weights?

FAA response:
An AMOC can be requested by following paragraph (h) of the AD and 14 CFR 39.19.

26 Comment ID: FAA-2023-0024-0026; Commenter: Anthony Dercole; Received Date: 1-Feb-23 The AD states that there were 3,098 aircraft produced by the OEM with smooth skinned elevators and only 137 aircraft effected. That indicates that a significant amount of owner operators will be subjected to an unnecessary expense along with the loss of use of their aircraft until this inspection is performed. The OEM's production certificate required that the actual as built configuration for each airframe by serial number was recorded as it left the factory. The OEM bears the responsibility of making this data available to the FAA. Putting this responsibility solely on the owner operators is an undue burden. The FAA needs to bound this inspection to only those airframes affected.

FAA response:
The FAA disagrees. The AD identified affected part using airplane models and serial number that MIC believed may have the hybrid balance weights. The FAA determined that the most reliable way to find the hybrid balance weights was through the affected airplane serial numbers and an inspection on their elevators.

27 Comment ID: FAA-2023-0024-0029; Commenter: Anonymous; Received Date: 8-Feb-23 There appears to be confusion in the SBM20-345A step 4.1 which calls out different elevator balance moment limits from the original Service Manual for the smooth skin elevators on the M20F. The same elevator should have the same moment requirement which it does not. There is no explanation of why this could be that we can understand. This needs to be resolved before new or used weights are installed.

FAA response:
The FAA agrees that the same elevator configuration should have the same moment requirement. However, the FAA disagrees that an elevator using the 430018-1 hybrid balance weight must have the same balance requirements of the elevator using the 430016-7 (non-hybrid) balance weight. They are considered different configurations and have different weight balance requirements.

27 Comment ID: FAA-2023-0024-0027; Commenter: Anonymous; Received Date: 8-Feb-23 The only way to keep using a hybrid weight is every 100 hours to remove the elevator, strip the paint on the weights, inspect with a magnifying glass, rebalance the elevator and

reinstall the elevator. The elevator does not need to be removed to strip and inspect it. Why not allow the weight to both remain bare or painted with a clear coat paint and eliminate the repetitive need to remove the elevator which is a maintenance induced safety risk. Actually I think cracks and corrosion will show up with any paint but leaving bare or clear coating eliminates the argument that some have that paint hides the problems.

FAA response:
An AMOC can be requested by following paragraph (h) of the AD and 14 CFR 39.19.

28 Comment ID: FAA-2023-0024-0031; Commenter: Anonymous; Received Date: 21-Feb-23 The difference between the new weight and the problematic weight is approximately 1lb. Has testing been done to verify that this difference in balance weight will not cause any flutter issues near VNE?

FAA response:
The balance requirements reference in the AD are different between an elevator using the 430018-1 hybrid balance weight and an elevator using the 430016-7 (non-hybrid) balance weights. The mass balance requirements are FAA approved.

29 Comment ID: FAA-2023-0024-0032; Commenter: Robert P. Clayton; Received Date: 5-Mar-23 The commenter indicated that his aircraft has been inspected and the aircraft does not have hybrid weight. Therefore the aircraft fulfilled the AD requirements.

FAA response: The FAA acknowledges that there is no further action required by this AD for this operator, except for following the installation prohibition for installing hybrid balance weights.

(Please check one)

☒ These comments **have not** been found to contain any information to warrant reconsideration or change of this AD.

☐ These comments **have** been found to contain information that warrants consideration of additional regulatory action. ***(SEE Airworthiness Directives Manual FAA-IR-M-8040.1 FOR ADDITIONAL ACTION.)***

Bang Nguyen — *Name:*
4/20/2023 — *Date:*

(This form is part of the official docket file for this AD action.)