



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

**Aircraft Certification Service  
System Oversight Division**  
Phoenix MIDO Section  
17777 N. Perimeter Dr. Suite 103  
Scottsdale, AZ 85255

January 16, 2018

Mitchell PMA, LLC  
Attn: Lynn Biagiotti  
2220 S. Country Club Dr., Suite 104  
Mesa, Arizona 85210

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

Dear Ms. Biagiotti:

In accordance with the provisions of Title 14, Code of Federal Regulations (14 CFR), part 21, Certification Procedures for Products, Articles, and Parts, subpart K, the Federal Aviation Administration (FAA) has found that the design data, based on test and computations, submitted by Mitchell PMA, LLC, with your letter dated December 8, 2017, meets the airworthiness requirements of the regulations applicable to the products on which the articles are to be installed. Additionally, the FAA has determined that Mitchell PMA, LLC has established the quality system required by § 21.307 at 2220 S. Country Club Dr., Suite 104, Mesa, Arizona 85210. Accordingly, Parts Manufacturer Approval (PMA) is hereby granted for production of the replacement articles listed in the enclosed amended Supplement No. 22.

You are reminded that the provisions of 14 CFR, parts 21 and 45, apply to the enclosed PMA Listing-Supplement No. 22. The enclosed supplement should be retained with the original PMA letter as evidence of approval to produce the articles concerned.

Sincerely,

John P. Rigg  
Manager, Phoenix MIDO Section

Enclosure:  
Amended Supplement No. 22

**FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL**

**MITCHELL PMA, LLC  
2220 S. COUNTRY CLUB DR., SUITE 104  
MESA, AZ 85210**

**PMA NO: PQ05312NM  
SUPPLEMENT NO: 22  
DATE: SEPTEMBER 12, 2017  
AMENDED: JANUARY 16, 2018**

<b>ARTICLE NAME</b>	<b>ARTICLE NUMBER</b>	<b>APPROVED REPLACEMENT FOR ARTICLE NUMBER</b>	<b>APPROVAL BASIS AND APPROVED DESIGN DATA</b>	<b>MAKE/TCH ELIGIBILITY</b>	<b>MODEL/SERIES ELIGIBILITY</b>
Stud	103675-1MIT	103675-1	Test and Computations per 14 CFR: § 21.303 DWG No.: 103675-1MIT <u>REV.:</u> I/R <u>Date:</u> 01/20/2017 or later FAA approved revisions.	Boeing	737-300 Series, 737-400 Series, 737-500 Series, 737-600 Series, 737-700 Series, 737-700C Series, 737-800 Series, 737-900 Series, 737-900ER Series, 737-8, 747-100 Series, 747-200B Series, 747-200F Series, 747-200C Series, 747SR Series, 747SP Series, 747-100B Series, 747-300 Series, 747-100B SUD Series, 747-400 Series, 747-400D Series, 747-400F Series, 767-200 Series, 767-300 Series, 767-300F Series, 767-400ER Series, 777-200 Series, 777-300 Series.

**FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL**

MITCHELL PMA, LLC  
 2220 S. COUNTRY CLUB DR., SUITE 104  
 MESA, AZ 85210

PMA NO: PQ05312NM  
 SUPPLEMENT NO: 22  
 DATE: SEPTEMBER 12, 2017  
 AMENDED: JANUARY 16, 2018

ARTICLE NAME	ARTICLE NUMBER	APPROVED REPLACEMENT FOR ARTICLE NUMBER	APPROVAL BASIS AND APPROVED DESIGN DATA	MAKE/TCH ELIGIBILITY	MODEL/SERIES ELIGIBILITY
Wedge	130447-1MIT	130447-1	Test and Computations per 14 CFR: § 21.303 DWG No.: 130447-1MIT <u>REV.:</u> I/R <u>Date:</u> 01/20/2017 or later FAA approved revisions.	Boeing	737-300 Series, 737-400 Series, 737-500 Series, 737-600 Series, 737-700 Series, 737-700C Series, 737-800 Series, 737-900 Series, 737-900ER Series, 737-8, 747-100 Series, 747-200B Series, 747-200F Series, 747-200C Series, 747SR Series, 747-100B Series, 747-300 Series, 747-100B SUD Series, 747-400 Series, 747-400D Series, 747-400F Series, 767-200 Series, 767-300 Series, 767-300F Series, 767-400ER Series, 777-200 Series, 777-300 Series, 777-200LR Series, 777-300ER Series, 777F Series.
Stud	130469-1MIT	130469-1	Test and Computations per 14 CFR: § 21.303 DWG No.: 130469MIT <u>REV.:</u> I/R <u>Date:</u> 01/20/2017 or later FAA approved revisions.	Boeing	737-300 Series, 737-400 Series, 737-500 Series, 747-100 Series, 747-200B Series, 747-200F Series, 747-200C Series, 747SR Series, 747-100B Series, 747-300 Series, 747-100B SUD Series, 747-400 Series, 747-400D Series, 747-400F Series, 767-200 Series, 767-300 Series, 767-300F Series, 767-400ER Series, 777-200 Series, 777-300 Series, 777-300ER Series, 777F Series.

**FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL**

**MITCHELL PMA, LLC**  
**2220 S. COUNTRY CLUB DR., SUITE 104**  
**MESA, AZ 85210**

**PMA NO: PQ05312NM**  
**SUPPLEMENT NO: 22**  
**DATE: SEPTEMBER 12, 2017**  
**AMENDED: JANUARY 16, 2018**

<b>ARTICLE NAME</b>	<b>ARTICLE NUMBER</b>	<b>APPROVED REPLACEMENT FOR ARTICLE NUMBER</b>	<b>APPROVAL BASIS AND APPROVED DESIGN DATA</b>	<b>MAKE/TCH ELIGIBILITY</b>	<b>MODEL/SERIES ELIGIBILITY</b>
Stud	130469-3MIT	130469-3	Test and Computations per 14 CFR: § 21.303 <u>DWG No.:</u> 130469MIT <u>REV.:</u> I/R <u>Date:</u> 01/20/2017 or later FAA approved revisions.		737-300 Series, 737-400 Series, 737-500 Series, 737-600 Series, 737-700 Series, 737-700C Series, 737-800 Series, 737-900 Series, 737-900ER Series, 737-8.
Spring	131901-1MIT	131901-1	Test and Computations per 14 CFR: § 21.303 <u>DWG No.:</u> 131901-1MIT <u>REV.:</u> I/R <u>Date:</u> 01/20/2017 or later FAA approved revisions.	Boeing	737-300 Series, 737-400 Series, 737-500 Series, 737-600 Series, 737-700 Series, 737-700C Series, 737-800 Series, 737-900 Series, 737-900ER Series, 737-8, 747-100 Series, 747-200B Series, 747-200F Series, 747-200C Series, 747SR Series, 747-100B Series, 747-300 Series, 747-100B SUD Series, 747-400 Series, 747-400D Series, 747-400F Series, 767-200 Series, 767-300 Series, 767-300F Series, 767-400ER Series, 777-200 Series, 777-300ER Series, 777F Series.

**FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL**

**MITCHELL PMA, LLC**  
**2220 S. COUNTRY CLUB DR., SUITE 104**  
**MESA, AZ 85210**

**PMA NO: PQ05312NM**  
**SUPPLEMENT NO: 22**  
**DATE: SEPTEMBER 12, 2017**  
**AMENDED: JANUARY 16, 2018**

<b>ARTICLE NAME</b>	<b>ARTICLE NUMBER</b>	<b>APPROVED REPLACEMENT FOR ARTICLE NUMBER</b>	<b>APPROVAL BASIS AND APPROVED DESIGN DATA</b>	<b>MAKE/TCH ELIGIBILITY</b>	<b>MODEL/SERIES ELIGIBILITY</b>
Spring	139255-1MIT	139255-1	Test and Computations per 14 CFR: § 21.303 <u>DWG No.:</u> 139255-1MIT <u>REV.:</u> I/R <u>Date:</u> 01/20/2017 or later FAA approved revisions.	Boeing	737-300 Series, 737-400 Series, 737-500 Series, 737-600 Series, 737-700 Series, 737-700C Series, 737-800 Series, 737-900 Series, 737-900ER Series, 737-8, 747-100 Series, 747-200B Series, 747-200F Series, 747-200C Series, 747SR Series, 747-100B Series, 747-300 Series, 747-100B SUD Series, 747-400 Series, 747-400D Series, 747-400F Series, 777-200 Series, 777-300ER Series, 777F Series.
Cap Stud	140210-1MIT	140210-1	Test and Computations per 14 CFR: § 21.303 <u>DWG No.:</u> 140210-1MIT <u>REV.:</u> I/R <u>Date:</u> 01/20/2017 or later FAA approved revisions.	Boeing	737-600 Series, 737-700 Series, 737-800 Series, 737-900 Series, 737-900ER Series, 737-8, 777-200 Series, 777-300 Series, 777-300ER Series, 777-200LR Series, 777-F Series.

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**FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL**

**MITCHELL PMA, LLC  
2220 S. COUNTRY CLUB DR., SUITE 104  
MESA, AZ 85210**

**PMA NO: PQ05312NM  
SUPPLEMENT NO: 22  
DATE: SEPTEMBER 12, 2017  
AMENDED: JANUARY 16, 2018**

<b>ARTICLE NAME</b>	<b>ARTICLE NUMBER</b>	<b>APPROVED REPLACEMENT FOR ARTICLE NUMBER</b>	<b>APPROVAL BASIS AND APPROVED DESIGN DATA</b>	<b>MAKE/TCH ELIGIBILITY</b>	<b>MODEL/SERIES ELIGIBILITY</b>
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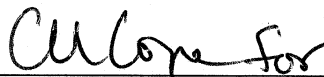
**GENERAL NOTES:**

Provide minor design changes in a manner as determined by the ACO. Handle major design changes to drawings and specifications in the same manner as that for an original FAA-PMA.

The FAA accepted ICA for the above articles with their designs. These ICA may refer to those of the respective articles from the holders of type certificates. Otherwise, provide supplemental ICA for differences in the replacement articles. Make referral statements or supplemental ICA readily available per 14 CFR 21.50.



**Gregory S. DiLibero  
Airframe Section  
Los Angeles ACO Branch**



**John P. Rigg  
Manager, Phoenix MIDO Section**



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Aviation Safety

2300 East Devon Ave., Room 238  
Des Plaines, IL 60018

November 15, 2018

Mr. Douglas R Sebion  
Mitchell PMA, LLC  
1160 Alexander Court  
Cary, IL 60013

Dear Mr. Sebion:

FEDERAL AVIATION ADMINISTRATION – PARTS MANUFACTURER APPROVAL

In accordance with the provisions of Title 14, Code of Federal Regulations (14 CFR), Part 21, Certification Procedures for Products, Articles, and Parts, subpart K, the FAA has found that the design data, based on test and computation submitted by Mitchell PMA, LLC, with your letter dated July 5, 2018, meets the airworthiness requirements of the regulations applicable to the product for which the articles are to be installed. Additionally, the FAA has determined that Mitchell PMA, LLC, has established the quality system required by § 21.307 at 1160 Alexander Court, Cary, IL 60013. Accordingly, Parts Manufacturer Approval (PMA) is hereby granted for production of the replacement articles listed in the enclosed Supplement No. 7, dated November 13, 2018.

You are reminded that the provisions of 14 CFR, Parts 21 and 45, noted in our PMA letter of approval dated April 17, 2018, also apply to the enclosed PMA Listing-Supplement No. 7. The enclosed supplement should be retained with the original PMA letter as evidence of approval to produce the articles concerned.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy L. Bonderer".

 Timothy L. Bonderer  
Aviation Safety  
Manager, MSP/CHI MIDO, AIR-891

Enclosure: PMA Supplement No. 7



U.S. Department of Transportation  
**Federal Aviation Administration**

FEDERAL AVIATION ADMINISTRATION – PARTS MANUFACTURER APPROVAL

Mitchell PMA LLC  
 1160 Alexander Court  
 Cary, IL 60013

PMA No.: PQ04379CE  
 Supplement No.: 7  
 Date: November 13, 2018

Article Name	Article Number	Approved Replacement For Article Number	Approval Basis and Approved Design Data	Make/TCH Eligibility	Model/Series Eligibility
Stud	103675-1MIT	103675-1	Test and Computations per 14 CFR § 21.303 <u>DWG No:</u> 103675-1MIT <u>Rev:</u> IR <u>Date:</u> 01/20/2017 or later FAA-approved revisions	Boeing	737-300 Series, 737-400 Series, 737-500 Series, 737-600 Series, 737-700 Series, 737-700C Series, 737-800 Series, 737-900 Series, 737-900ER Series, 737-8, 747-100 Series, 747-200B Series, 747-200F Series, 747-200C Series, 747SR Series, 747SP Series, 747-100B SUD Series, 747-400 Series, 747-400D Series, 747-400F Series, 767-200 Series, 767-300 Series, 767-300F Series, 767-400ER Series, 777-200 Series, 777-300 Series
Wedge	130447-1MIT	130447-1	Test and Computations per 14 CFR § 21.303 <u>DWG No:</u> 130447-1MIT <u>Rev:</u> IR <u>Date:</u> 01/20/2017 or later FAA-approved revisions	Boeing	737-300 Series, 737-400 Series, 737-500 Series, 737-600 Series, 737-700 Series, 737-700C Series, 737-800 Series, 737-900 Series, 737-900ER Series, 737-8, 747-100 Series, 747-200B Series, 747-200F Series, 747-200C Series, 747SR Series, 747SP Series, 747-100B SUD Series, 747-400 Series, 747-400D Series, 747-400F Series, 767-200 Series, 767-300 Series, 767-300F Series, 767-400ER Series, 777-200 Series, 777-300 Series
Stud	130469-1MIT	130469-1	Test and Computations per 14 CFR § 21.303 <u>DWG No:</u> 130469-1MIT <u>Rev:</u> IR <u>Date:</u> 01/20/2017 or later FAA-approved revisions	Boeing	737-300 Series, 737-400 Series, 737-500 Series, 737-600 Series, 737-700 Series, 737-700C Series, 737-800 Series, 737-900 Series, 737-900ER Series, 737-8, 747-100 Series, 747-200B Series, 747-200F Series, 747-200C Series, 747SR Series, 747SP Series, 747-100B SUD Series, 747-400 Series, 747-400D Series, 747-400F Series, 767-200 Series, 767-300 Series, 767-300F Series, 767-400ER Series, 777-200 Series, 777-300 Series



FEDERAL AVIATION ADMINISTRATION – PARTS MANUFACTURER APPROVAL

Mitchell PMA LLC  
 1160 Alexander Court  
 Cary, IL 60013

PMA No.: PQ04379CE  
 Supplement No.: 7  
 Date: November 13, 2018

<b>Article Name</b>	<b>Article Number</b>	<b>Approved Replacement For Article Number</b>	<b>Approval Basis and Approved Design Data</b>	<b>Make/TCH Eligibility</b>	<b>Model/Series Eligibility</b>
Stud	130469-1MIT	130469-3	Test and Computations per 14 CFR § 21.303 <u>DWG No:</u> 130469-1MIT <u>Rev:</u> IR <u>Date:</u> 01/20/2017 or later FAA-approved revisions	Boeing	737-300 Series, 737-400 Series, 737-500 Series, 737-600 Series, 737-700 Series, 737-700C Series, 737-800 Series, 737-900 Series, 737-900ER Series, 737-8, 737-9
Spring	131901-1MIT	131901-1	Test and Computations per 14 CFR § 21.303 <u>DWG No:</u> 131901-1MIT <u>Rev:</u> B <u>Date:</u> 01/18/2018 or later FAA-approved revisions	Boeing	737-300 Series, 737-400 Series, 737-500 Series, 737-600 Series, 737-700 Series, 737-700C Series, 737-800 Series, 737-900 Series, 737-900ER Series, 737-8, 747-100 Series, 747-200B Series, 747-200F Series, 747-200C Series, 747SR Series, 747SP Series, 747-100B SUD Series, 747-400 Series, 747-400D Series, 747-400F Series, 767-200 Series, 767-300 Series, 767-300F Series, 767-400ER Series, 777-200 Series
Spring	139255-1MIT	139255-1	Test and Computations per 14 CFR § 21.303 <u>DWG No:</u> 139255-1MIT <u>Rev:</u> B <u>Date:</u> 01/18/2018 or later FAA-approved revisions	Boeing	737-300 Series, 737-400 Series, 737-500 Series, 737-600 Series,, 737-700 Series,, 737-700C Series,, 737-800 Series, 737-900 Series, 737-900ER Series, 737-8, 747-100 Series, 747-200B Series, 747-200F Series, 747-200C Series, 747SR Series, 747SP Series, 747-100B SUD Series, 747-400 Series, 747-400D Series, 747-400F Series
Cap Stud	140210-1MIT	140210-1	Test and Computations per 14 CFR § 21.303 <u>DWG No:</u> 140210-1MIT <u>Rev:</u> IR <u>Date:</u> 01/20/2017 or later FAA-approved revisions	Boeing	737-300 Series, 737-400 Series, 737-500 Series, 737-600 Series, 737-700 Series, 737-700C Series, 737-800 Series, 737-900 Series, 737-900ER Series, 737-8, 737-9, 777-200 Series, 777-300 Series, 777-300 ER Series, 777-200LR Series, 777-200LR Series, 777-F Series

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GENERAL NOTES:

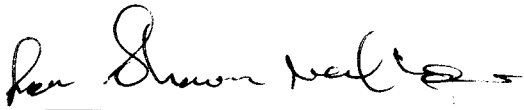
Provide minor design changes in a manner as determined by the ACO. Process major design changes to drawings and specifications in the same manner as that for an original FAA-PMA.

FEDERAL AVIATION ADMINISTRATION – PARTS MANUFACTURER APPROVAL

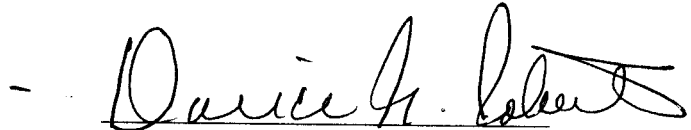
Mitchell PMA LLC  
1160 Alexander Court  
Cary, IL 60013

PMA No.: PQ04379CE  
Supplement No.: 7  
Date: November 13, 2018

The FAA accepted the ICA approach for the above articles with their designs. These ICA may refer to those of the respective articles from the holders of type certificates. Otherwise, provide supplementary ICA for differences in the replacement articles. Make referral statements or supplemental ICA readily available per 14 CFR § 21.50.



Timothy P. Smyth  
Manager, Chicago ACO Branch,  
Compliance & Airworthiness Division



Timothy L. Bonderer  
Manager, MSP/CHI MIDO Section,  
System Oversight Division