



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

Aviation Safety

2200 South 216<sup>th</sup> Street  
Des Moines, WA 98198

October 16, 2019

AeroLEDS LLC  
Attn: Mr. Mark McCormack  
8475 West Elisa Street  
Boise, ID 83709

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

Dear Mr. McCormack:

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 Computation with your letter dated August 1, 2019 meet the airworthiness requirements of the regulations applicable to the products on which the articles are to be installed. Additionally, the FAA has determined that AeroLEDS LLC has established the quality system required by § 21.307 at 8475 West Elisa Street Boise, ID 83709. Accordingly, Parts Manufacturer Approval (PMA) is hereby granted for production of the replacement articles listed in the enclosed Supplement No. 15.

You are reminded that the provisions of 14 CFR, Parts 21 and 45, apply to the enclosed PMA Listing-Supplement No. 15. The enclosed supplement should be retained with the original PMA letter as evidence of approval to produce the articles concerned.

Sincerely,

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James Hampton  
Aviation Safety  
Aviation Safety Inspector Seattle,  
MIDO Section

Enclosure



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

**FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL**

**AeroLEDs LLC  
8475 West Elisa St.  
Boise, ID 83709**

**PMA No. PQ5259NM  
Supplement No. 15  
Date: October 16, 2019**

ARTICLE NAME	PART NUMBER	APPROVED REPLACEMENT FOR PART NUMBER	APPROVAL BASIS AND APPROVED DESIGN DATA	MAKE ELIGIBILITY	MODEL ELIGIBILITY
Polaris 12VDC	11-7512-12	A7512-12 W1290-14 T7512-12 CMA7512-12 ML7512-12 UA-7512-12	Test and Computation per 14 CFR 21.303 <u>DWG No:</u> 11-7512-12 <u>Rev:</u> A <u>Dated:</u> 6/17/2019 or later FAA-approved revisions	Textron Aviation Inc.	19A, B23, B19, C23, M19A, A24, 23, A24R, A23, B24R, A23A, C24R, A23-19, A23-24  35, 35R, A35, B35, C35, D35, E35, F35, G35  35-33, J35, 35-A33, K35, 35- B33, M35, 35-C33, N35, 35- C33A, P35, E33, S35, E33A, V35, E33C, V35A, F33, V35B, F33A, 36, F33C, A36, G33, A36TC, H35, B36TC, G36  50 (L-23A), D50E-5990, B50 (L-23B), E50 (L-23D, RL-23D), D50 (L-23E), F50, D50A, G50, D50B, H50, D50C, J50, D50E  B95A, D55, D95A, D55A, E95, E55, 95-55, E55A, 95-A55, 56TC, 95-B55, A56TC, 95- B55A, 58, 95-B55B (T-42), 58A, 95-C55, 95, 95-C55A, B95, G58  120, 140  140A  150, 150J, 150A, 150K, 150B, A150K, 150C, 150L, 150D, A150L, 150E, 150M, 150F, A150M, 150G, 152, 150H, A152  170, 170A, 170B  172, 172I, 172A, 172K, 172B, 172L, 172C, 172M, 172D, 172N, 172E, 172P, 172F (USAF T-41A), 172Q, 172G, 172R, 172H (USAF T-41A), 172S  175, 175A, 175B, 175C, P172D, R172E (USAF T-41B) (USAF T-41C or D), R172F (USAF T- 41D), R172G (USAF T-41C or D), R172H (USAF T-41D), R172J, R172K, 172RG

ARTICLE NAME	PART NUMBER	APPROVED REPLACEMENT FOR PART NUMBER	APPROVAL BASIS AND APPROVED DESIGN DATA	MAKE ELIGIBILITY	MODEL ELIGIBILITY
					177, 177A, 177B
					177RG, F177RG,
					180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J, 180K
					182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, 182S, 182T, T182, T182T, R182, TR182
					185, A185E, 185A, A185F, 185B, 185C, 185D, 185E
					188, 188A, 188B, A188, A188A, A188B, T188C
					200, A100-1 (U-21J), 200C, A200 (C-12A), 200CT, A200 (C-12C), 200T, A200C (UC-12B), B200, A200CT (C-12D), B200C, A200CT (FWC-12D), B200CT, A200CT (C-12F), B200T, A200CT (RC-12D), 300, A200CT (RC-12G), 300LW, A200CT (RC-12H), B300, A200CT (RC-12K), B300C, A200CT (RC-12P), B300C (MC-12W), A200CT (RC-12Q), B300C (UC-12W), B200C (C-12F), 1900, B200C (UC-12M), 1900C, B200C (C-12R), 1900C (C-12J), B200C (UC-12F), 1900D, B200GT, B200CGT
					190 (LC-126A,B,C), 195, 195A, 195B
					206, U206B, TP206D, P206, U206C, TP206E, P206A, U206D, TU206A, P206B, U206E, TU206B, P206C, U206F, TU206C, P206D, U206G, TU206D, P206E, TP206A, TU206E, U206, TP206B, TU206F, U206A, TP206C, TU206G, 206H, T206H
					207, 207A, T207, T207A
					210, 210K, 210A, T210K, 210B, 210L, 210C, T210L, 210D, 210M, 210E, T210M, 210F, 210N, T210F, P210N, 210G, T210N, T210G, 210R, 210H, P210R, T210H, T210R, 210J, 210-5 (205), T210J, 210-5A (205A)
					310, 310J, 310A (USAF U-3A), 310J-1, 310B, E310J, 310C, 310K, 310D, 310L, 310E

ARTICLE NAME	PART NUMBER	APPROVED REPLACEMENT FOR PART NUMBER	APPROVAL BASIS AND APPROVED DESIGN DATA	MAKE ELIGIBILITY	MODEL ELIGIBILITY
					(USAF U-3B), 310N, 310F, 310P, 310G, T310P, 310H, 310Q, E310H, T310Q, 310I, 310R, T310R
					320, 320F, 320-1, 335, 320A, 340, 320B, 340A, 320C, 320D, 320E
				Piper Aircraft Inc.	J3C-40, J3C-50, J3C-50S, J3C-65, J3C-65S, PA-11, PA-11S
					PA15
					PA-16, PA-16S
					PA-17
					PA-18, PA-18S, PA-18 "105" (Special), PA-18S "105" (Special), PA-18A, PA-18 "125" (Army L-21A), PA-18S "125", PA-18AS "125", PA-18 "135" (Army L-21B), PA-18A "135", PA-18S "135", PA-18AS "135", PA-18 "150", PA-18A "150", PA-18S "150", PA-18AS "150", PA-19 (Army L-18C), PA-19S
					PA-20, PA-20S, PA-20 "115", PA-20S "115", PA-20 "135", PA-20S "135"
					PA-22, PA-22-108, PA-22-135, PA-22S-135, PA-22-150, PA-22S-150, PA-22-160, PA-22S-160
					PA-23, PA-23-160, PA-23-235, PA-23-250, PA-23-250(Navy UO-1), PA-E23-250
					PA-24, PA-24-250, PA-24-260, PA-24-400
					PA-28-140, PA-28-151, PA-28-150, PA-28-161, PA-28-160, PA-28-181, PA-28-180, PA-28R-201, PA-28-235, PA-28R-201T, PA-28S-160, PA-28-236, PA-28S-180, PA-28RT-201, PA-28R-180, PA-28RT-201T, PA-28R-200, PA-28-201T
					PA-30, PA-39, PA-40
					PA-32-260, PA-32R-301 (SP), PA-32-300, PA-32R-301 (HP), PA-32S-300, PA-32R-301T, PA-32R-300, PA-32-301, PA-32RT-300, PA-32-301T, PA-32RT-300T, PA-32-301FT, PA-32-301XTC
				FS 2003 Corp.	PA-12, PA-12S
				FS 2002 Corp.	PA-14

ARTICLE NAME	PART NUMBER	APPROVED REPLACEMENT FOR PART NUMBER	APPROVAL BASIS AND APPROVED DESIGN DATA	MAKE ELIGIBILITY	MODEL ELIGIBILITY
				American Champion (Bellanca) (Champion) (Aeronca)	7AC, 7ACA 7EC, 7GCB, S7AC, S7EC, 7GCBA, 7BCM (L-16A), 7ECA, 7GCBC, 7CCM (L-16B), 7FC, 7HC, S7CCM, 7GC, 7JC, 7DC, 7GCA, 7KC, S7DC, 7GCAA, 7KCAB  8GCBC, 8KCAB  11AC, S11AC, 11BC, S11BC  402  11CC, S11CC
				Mooney	M20, M20A, M20B, M20C, M20D, M20E, M20F, M20G, M20J, M20K, M20L, M20M, M20R, M20S, M20TN, M20U, M20V
				Mooney	CC46M-2, CC46M-2A
				Mooney	M22
				Monocoupe	90AF-100, 90AF, 90AL-115, 90A, 90  Lambert R-266
				Aviat Aircraft Inc.	A-1, A-1A, A-1B, A-1C-180, A-1C-200  S-1S, S-1T, S-2A, S-2B, S-2C, S-2S, S-2
				Air Tractor	AT-250, AT-300, AT-301, AT-302, AT-400A, AT-400  AT-401, AT-401A, AT-401B, AT-402, AT-402A, AT-402B, AT-501, AT-502, AT-502A, AT-502B, AT-503, AT-503A, AT-504  AT-602, AT-802A, AT-802
Polaris 24VDC	11-7512-24	W1290-28 T7512-24 CMA7512-24 A7512-24 ML7512-24 972.72.54.508 MIL-L-6363/2 6240-01-390-4921	Test and Computation per 14 CFR 21.303 <u>DWG No:</u> 11-7512-24 <u>Rev:</u> A <u>Dated:</u> 6/17/2019 or later FAA-approved revisions	Textron Aviation	19A, B23, B19, C23, M19A, A24, 23, A24R, A23, B24R, A23A, C24R, A23-19, A23-24  35, 35R, A35, B35, C35, D35, E35, F35, G35  35-33, J35, 35-A33, K35, 35-B33, M35, 35-C33, N35, 35-C33A, P35, E33, S35, E33A, V35, E33C, V35A, F33, V35B, F33A, 36, F33C, A36, G33, A36TC, H35, B36TC, G36  50 (L-23A), D50E-5990, B50 (L-23B), E50 (L-23D, C50 RL-23D), D50 (L-23E), F50, D50A,

ARTICLE NAME	PART NUMBER	APPROVED REPLACEMENT FOR PART NUMBER	APPROVAL BASIS AND APPROVED DESIGN DATA	MAKE ELIGIBILITY	MODEL ELIGIBILITY
					G50, D50B, H50, D50C, J50, D50E
					B95A, D55, D95A, D55A, E95, E55, 95-55, E55A, 95-A55, 56TC, 95-B55, A56TC, 95- B55A, 58, 95-B55B (T-42), 58A, 95-C55, 95, 95-C55A, B95, G58
					120, 140
					140A
					150, 150J, 150A, 150K, 150B, A150K, 150C, 150L, 150D, A150L, 150E, 150M, 150F, A150M, 150G, 152, 150H, A152
					170, 170A, 170B
					172, 172I, 172A, 172K, 172B, 172L, 172C, 172M, 172D, 172N, 172E, 172P, 172F (USAF T-41A), 172Q, 172G, 172R, 172H (USAF T-41A), 172S
					175, 175A, 175B, 175C, P172D, R172E (USAF T-41B) (USAF T-41C or D), R172F (USAF T- 41D), R172G (USAF T-41C or D), R172H (USAF T-41D), R172J, R172K, 172RG
					177, 177A, 177B
					177RG
					F177RG, 180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J, 180K
					182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, 182S, 182T, T182, T182T, R182, TR182
					185, A185E, 185A, A185F, 185B, 185C, 185D, 185E
					188, 188A, 188B, A188, A188A, A188B, T188C
					200, A100-1 (U-21J), 200C, A200 (C-12A), 200CT, A200 (C-12C), 200T, A200C (UC- 12B), B200, A200CT (C-12D), B200C, A200CT (FWC-12D), B200CT, A200CT (C-12F), B200T, A200CT (RC-12D), 300, A200CT (RC-12G), 300LW, A200CT (RC-12H), B300, A200CT (RC-12K), B300C, A200CT (RC-12P),

ARTICLE NAME	PART NUMBER	APPROVED REPLACEMENT FOR PART NUMBER	APPROVAL BASIS AND APPROVED DESIGN DATA	MAKE ELIGIBILITY	MODEL ELIGIBILITY
					B300C (MC-12W), A200CT (RC-12Q), B300C (UC-12W), B200C (C-12F), 1900, B200C (UC-12M), 1900C, B200C (C-12R), 1900C (C-12J), B200C (UC-12F), 1900D, B200GT, B200CGT
					190 (LC-126A,B,C), 195, 195A, 195B
					206, U206B, TP206D, P206, U206C, TP206E, P206A, U206D, TU206A, P206B, U206E, TU206B, P206C, U206F, TU206C, P206D, U206G, TU206D, P206E, TP206A, TU206E, U206, TP206B, TU206F, U206A, TP206C, TU206G, 206H, T206H
					207, 207A, T207, T207A
					210, 210K, 210A, T210K, 210B, 210L, 210C, T210L, 210D, 210M, 210E, T210M, 210F, 210N, T210F, P210N, 210G, T210N, T210G, 210R, 210H, P210R, T210H, T210R, 210J, 210-5 (205), T210J, 210-5A (205A)
					310, 310J, 310A (USAF U-3A), 310J-1, 310B, E310J, 310C, 310K, 310D, 310L, 310E (USAF U-3B), 310N, 310F, 310P, 310G, T310P, 310H, 310Q, E310H, T310Q, 310I, 310R, T310R
					320, 320F, 320-1, 335, 320A, 340, 320B, 340A, 320C, 320D, 320E
				Piper Aircraft Inc.	J3C-40, J3C-50, J3C-50S, J3C-65, J3C-65S, PA-11, PA-11S
					PA15
					PA-16, PA-16S
					PA-17
					PA-18, PA-18S, PA-18 "105" (Special), PA-18S "105" (Special), PA-18A, PA-18 "125" (Army L-21A), PA-18S "125", PA-18AS "125", PA-18 "135" (Army L-21B), PA-18A "135", PA-18S "135", PA-18AS "135", PA-18 "150", PA-18A "150", PA-18S "150", PA-18AS "150", PA-19 (Army L-18C), PA-19S

ARTICLE NAME	PART NUMBER	APPROVED REPLACEMENT FOR PART NUMBER	APPROVAL BASIS AND APPROVED DESIGN DATA	MAKE ELIGIBILITY	MODEL ELIGIBILITY
					PA-20, PA-20S, PA-20 "115", PA-20S "115", PA-20 "135", PA-20S "135"
					PA-22, PA-22-108, PA-22-135, PA-22S-135, PA-22-150, PA-22S-150, PA-22-160, PA-22S-160
					PA-23, PA-23-160, PA-23-235, PA-23-250, PA-23-250(Navy UO-1), PA-E23-250
					PA-24, PA-24-250, PA-24-260, PA-24-400
					PA-28-140, PA-28-151, PA-28-150, PA-28-161, PA-28-160, PA-28-181, PA-28-180, PA-28R-201, PA-28-235, PA-28R-201T, PA-28S-160, PA-28-236, PA-28S-180, PA-28RT-201, PA-28R-180, PA-28RT-201T, PA-28R-200, PA-28-201T
					PA-30, PA-39, PA-40
					PA-32-260, PA-32R-301 (SP), PA-32-300, PA-32R-301 (HP), PA-32S-300, PA-32R-301T, PA-32R-300, PA-32-301, PA-32RT-300, PA-32-301T, PA-32RT-300T, PA-32-301FT, PA-32-301XTC
				FS 2003 Corporation	PA-12, PA-12S
				FS 2002 Corporation	PA-14
				American Champion Aircraft Corp.	7AC, 7ACA 7EC, 7GCB, S7AC, S7EC, 7GCBA, 7BCM (L-16A), 7ECA, 7GCBC, 7CCM (L-16B), 7FC, 7HC, S7CCM, 7GC, 7JC, 7DC, 7GCA, 7KC, S7DC, 7GCAA, 7KCAB
					8GCBC, 8KCAB
					11AC, S11AC, 11BC, S11BC
					402
					11CC, S11CC
				Mooney International Corporation	M20, M20A, M20B, M20C, M20D, M20E, M20F, M20G, M20J, M20K, M20L, M20M, M20R, M20S, M20TN, M20U, M20V
				Mooney Aircraft Inc.	CC46M-2, CC46M-2A
				Mooney Aircraft Corporation	M22




ARTICLE NAME	PART NUMBER	APPROVED REPLACEMENT FOR PART NUMBER	APPROVAL BASIS AND APPROVED DESIGN DATA	MAKE ELIGIBILITY	MODEL ELIGIBILITY
				Monocoupe Corporation	90AF-100, 90AF, 90AL-115, 90A, 90  Lambert R-266
				Aviat Aircraft Inc.	A-1, A-1A, A-1B, A-1C-180, A-1C-200  S-1S, S-1T, S-2A, S-2B, S-2C, S-2S, S-2
				Air Tractor, Inc.	AT-250, AT-300, AT-301, AT-302, AT-400A, AT-400  AT-401, AT-401A, AT-401B, AT-402, AT-402A, AT-402B, AT-501, AT-502, AT-502A, AT-502B, AT-503, AT-503A, AT-504  AT-602, AT-802A, AT-802
				Pilatus Aircraft LTD.	PILATUS PC-12, PILATUS PC-12/45, PILATUS PC-12/47, PILATUS PC-12/47E

-----END OF LISTING-----

NOTE: The procedures that have been accepted by the type certificate or TSO authorization holder and their cognizant FAA Aircraft Certification Office, for minor changes to original articles used on type-certificated products, are also acceptable for incorporating the same minor changes on identical PMA replacement articles. The PMA holder must be able to show traceability relating to the TC, STC, or TSO authorization holder on all minor changes incorporated by this procedure. When these procedures are no longer applicable because of completion of the production contract, or termination of the licensing agreement or business relationship, all subsequent minor design changes to the PMA articles must be submitted in a manner as determined by the ACO. Major design changes (reference 14 CFR §§ 21.319 and 21.619) to drawings and specifications are to be handled in the same manner as that for an original PMA.

\_\_\_\_\_/Signature on File/\_\_\_\_\_  
 Ross Landes  
 Aviation Safety  
 Compliance & Airworthiness Division  
 Aircraft Certification Service

  
 James Hampton  
 Aviation Safety  
 Aviation Safety Inspector Seattle,  
 MIDO Section