

United States of America
Department of Transportation -- Federal Aviation Administration
Supplemental Type Certificate

Number ST02540AK

This certificate issued to Aero Twin, Inc.
2403 Merrill Field Drive
Anchorage, AK 99501

certifies that the change in the type design for the following product with the limitations and conditions therefore as specified hereon meets the airworthiness requirements of Part 25 of the Federal Aviation Regulations.

Original Product – Type Certificate Number: A43EU
Make: Airbus Defense and Space S. A.
Model: C-212-CB, CC, CD, CE, CF, DF, DE

Description of Type Design Change:

Fabrication and installation of Aero Twin, Inc., Rudder Gust Lock Kit No. 4111-212 on Airbus Defense and Space S. A. C-212 aircraft in accordance with Aero Twin, Inc., Master Data List No. 4111-212-MDL, Original Issue, dated May 8, 2020, or later FAA approved revision.

Limitations and Conditions:

1. The compatibility of this design change with previously approved modifications must be determined by the installer.
2. If the holder agrees to permit another person to use this Certificate to alter the product, the holder shall give the other person written evidence of that permission.
3. Instructions for Continued Airworthiness, Aero Twin, Inc. document number 4111-212-ICA, Original Issue, dated May 8, 2020, or later FAA accepted revision is a required part of this modification.
4. Airplane Flight Manual Supplement (AFMS), Aero Twin Doc. No. 4111-212-AFMS, Original Issue, dated August 27, 2020, or later FAA approved revision is a required part of this modification.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: November 20, 2017
Date of issuance: September 8, 2020

Date reissued:
Date amended:



By direction of the Administrator

(Signature)

August A. Asay
Manager, Anchorage Aircraft Certification Office

(Title)

INSTRUCTIONS: The transfer endorsement below may be used to notify the appropriate FAA Regional Office of the transfer of this Supplemental Type Certificate.

The FAA will reissue the certificate in the name of the transferee and forward it to him.

TRANSFER ENDORSEMENT

Transfer the ownership of Supplemental Type Certificate Number _____

to *(Name of transferee)* _____

(Address of transferee) _____
(Number and street)

(City, State, and ZIP code)

from *(Name of grantor) (Print or type)* _____

(Address of grantor) _____
(Number and street)

(City, State, and ZIP code)

Extent of Authority (if licensing agreement):

Date of Transfer: _____

Signature of grantor *(In ink)*: _____

Aero Twin, Inc
2403 Merrill Field Dr
Anchorage, AK 99501
(907)274-6166

CASA C-212
4111-212 Rudder Gust Lock
Airplane Flight Manual Supplement
4111-212-AFMS

FAA-APPROVED
Airplane Flight Manual Supplement
for
CASA C-212 Aircraft
Equipped with
Rudder Gust Lock P/N 4111-212

Document No. 4111-212-AFMS

Reg. No. _____

Serial No. _____

This airplane flight manual supplement must be made available to the pilot when operating CASA C-212 aircraft equipped with rudder gust lock 4111-212 per STC ST02540AK. This manual supplements CASA Pilot's Operating Handbook and FAA Approved Airplane Flight Manual for the C-212, which must also be made available to the pilot.

The information contained herein supplements or supersedes the information of the basic Pilot's Operating Handbook and FAA Approved Flight Manual only in those areas listed herein. For limitations, procedures, and performance information not contained in this Supplement, consult the basic Pilot's Operating Handbook and FAA Approved Flight Manual.

FAA Approved: _____

For: Manager, Northwest Flight Test Section, AIR-715
Federal Aviation Administration
Seattle, Washington

Date: August 27, 2020

REVISIONS

Changes and/or additions to this supplement will be covered by revisions published by Aero Twin, Inc. To determine the most current revision of this document, see the listing on Aero Twin’s website, www.aerotwin.com.

NOTE

It is the responsibility of the owner/operator to maintain this handbook in a current status.

A revision bar will extend the full length of new or revised text and/or illustrations added on new or presently existing pages. This bar will be located adjacent to the applicable revised area on the outer margin of the page.

All revised pages will carry the revision number and date on the applicable page.

The following Log of Effective Pages provides the dates of issue for original and revised pages, and a listing of all pages in the supplement. Pages affected by the current revision are indicated by an asterisk (*) preceding the pages listed.

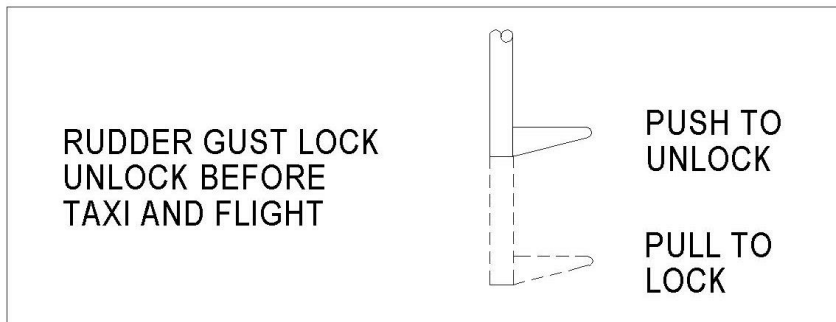
LOG OF REVISIONS AND EFFECTIVE PAGES

Revision		Description	Approval Signature	Approval Date
No.	Date			

Section 1. GENERAL: Unchanged

Section 2. LIMITATIONS:

PLACARDS: On the left side of the tailcone, affixed halfway up and near the front of the tailcone:



Section 3. EMERGENCY PROCEDURES:

Unchanged

Section 4. NORMAL PROCEDURES:

PREFLIGHT INSPECTION (EMPENNAGE section):

Rudder Lock – Unlock by pushing up on handle on bottom side of tailcone.

BEFORE TAKEOFF: After disengaging aircraft control lock, pull elevator control FULL UP to trip fail-safe rudder lock release. Then return elevator control to FULL DOWN and release. Operate the rudder pedals to ensure the rudder is free.

SHUTDOWN AND SECURING AIRPLANE: Engage Rudder Lock at empennage by holding rudder straight and pulling down on rudder lock

handle on underside of the tailcone until lock pin engages the bottom of the rudder. Note: Engaging aircraft control lock prior to the rudder lock will ensure rudder is centered prior to locking and will prevent accidental disengagement of the rudder lock if order is reversed.

Section 5. PERFORMANCE: Unchanged

Section 6. WEIGHT AND BALANCE/ EQUIPMENT LIST:

The installed equipment list is hereby supplemented by adding Aero Twin, Inc.'s CASA C-212 Rudder Gust Lock Kit No. 4111-212. The aircraft weight and balance records have been updated to add 2.23 kg (4.9 lbs) at fuselage station 14478mm (570in) for a total moment change of 32.3 kg-m (2793 lb-in).

Section 7. SYSTEMS DESCRIPTION

CONTROL LOCKS:

This airplane has been modified by installing an Aero Twin, Inc. Rudder Gust Lock Kit No. 4111-212, which consists of a lock mechanism bolted under the rudder. A doubler plate and bracketry have been installed at this location to attach the lock mechanism to the aircraft. When engaged, the lock holds the rudder in the neutral position. The operation of the rudder gust lock is described on the placard located on the left side of the tailcone. Linkage has been installed inside the tailcone to provide a handle for engaging and disengaging the lock. To engage the lock, the rudder is held in the neutral position while the handle on the bottom of the tailcone is pulled down to engage the lock. The lock is manually disengaged by pushing up on the handle. The rudder gust lock also has a fail-safe connection to the elevator control system to ensure that it will always be disengaged before the airplane becomes airborne. This fail-safe connection automatically disengages the lock when the elevator is deflected upward past neutral. The rudder gust lock should be manually disengaged during the preflight inspection, but the pilot should also operate the fail-safe disengagement mechanism by momentarily deflecting the elevator full

Aero Twin, Inc
2403 Merrill Field Dr
Anchorage, AK 99501
(907)274-6166

CASA C-212
4111-212 Rudder Gust Lock
Airplane Flight Manual Supplement
4111-212-AFMS

up prior to takeoff, after disengaging the aircraft control lock. In the event that the engagement of the rudder gust lock still goes completely unnoticed and the pilot commences a takeoff run with the rudder inoperative, initiation of rotation to take off will deflect the elevator upward sufficiently to disengage the rudder gust lock.

Section 8. AIRPLANE HANDLING, SERVICE AND MAINTENANCE:

GROUND HANDLING, PARKING:

Engage Aero Twin's Rudder Gust Lock at the bottom side of the tailcone.

Section 9. SUPPLEMENTS:

This supplement is added to the basic Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.

-----END-----