

PART 915—AVOCADOS GROWN IN SOUTH FLORIDA

1. The authority citation for 7 CFR part 915 continues to read as follows:

Authority: 7 U.S.C. 601–674.

2. In § 915.305, paragraph (a)(1) is revised to read as follows:

§ 915.305 Florida Avocado Container Regulation 5.

(a) * * *

(1) Containers shall not contain less than 33-pounds net weight of avocados, except that for avocados of unnamed varieties, which are avocados than have not been given varietal names, and for Booth 1, Fuchs, and Trapp varieties, such weight shall be not less than 31 pounds. With respect to each lot of such containers, not to exceed 10 percent, by count, of the individual containers in the lot may fail to meet the applicable specified weight, but no container in such lot may contain a net weight of avocados exceeding 2 pounds less than the specified net weight; or

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Dated: December 8, 1999.

James R. Frazier,

Acting Deputy Administrator, Fruit and Vegetable Programs.

[FR Doc. 99–32230 Filed 12–10–99; 8:45 am]

BILLING CODE 3410–02–P

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 25**

[Docket No. NM166; Special Conditions No. 25–155–SC]

Special Conditions: CASA Model C–295 Airplane; Automatic Takeoff Thrust Control System

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final Special Conditions; request for comments.

SUMMARY: This notice proposes special conditions for the CASA Model C–295 airplane. This airplane will have an unusual design feature associated with an Automatic Takeoff Thrust Control System (ATTCS), for which the applicable airworthiness regulations do not contain appropriate safety standards for approach climb performance using an ATTCS. These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

DATES: The effective date of these special conditions is November 30, 1999. Comments must be received on or before January 12, 2000.

ADDRESSES: Comments on these special conditions may be mailed in duplicate to: Federal Aviation Administration, Transport Airplane Directorate, Attn.: Rules Docket (ANM–114), Docket No. NM166, 1601 Lind Avenue SW., Renton, Washington 98055–4056; or delivered in duplicate to the Transport Airplane Directorate at the above address. Comments must be marked “Docket No. NM166.” Comments may be inspected in the Rules Docket weekdays, except Federal holidays, between 7:30 a.m. and 4:00 p.m.

FOR FURTHER INFORMATION CONTACT: Rosanne Ryburn, International Branch (ANM–116), FAA Transport Airplane Directorate, 1601 Lind Avenue SW, Renton, WA 98055–4056, telephone (425) 227–2139, or facsimile (425) 227–1149.

SUPPLEMENTARY INFORMATION: The FAA has determined that notice and opportunity for prior public comment hereon are impracticable because these procedures would significantly delay issuance of the approval design and thus delivery of the affected aircraft. In addition, the substance of these special conditions has been subject to the public comment process in several prior instances with no substantive comments received. The FAA therefore finds that good cause exists for making these special conditions effective upon issuance.

Comments Invited

Interested persons are invited to submit such written data, views, or arguments as they may desire. Communications should identify the regulatory docket or notice number and be submitted in duplicate to the address specified above. All communications received on or before the closing date for comments will be considered by the Administrator. The special conditions may be changed in light of the comments received. All comments submitted will be available in the Rules Docket for examination by interested persons, both before and after the closing date for comments. A report summarizing each substantive public contact with FAA personnel concerning this rulemaking will be filed in the docket. Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must include a self-addressed, stamped postcard on which the following statement is made: “Comments to Docket No. NM166.” The postcard will

be date stamped and returned to the commenter.

Background

On March 13, 1997, Construcciones Aeronauticas, S.A. (CASA), located in Getafe, Spain, applied to the FAA for an amendment to Type Certificate No. A21NM in the transport airplane category for the Model C–295 airplane. CASA Model C–295 is a derivative of the Model CN–235 currently approved under Type Certificate No. A21NM. The CASA Model C–295 is a medium-sized airplane powered by two Pratt & Whitney Canada PW127G turbopropeller engines mounted on the wings. Each engine is equipped with a Hamilton Standard Model 568F–5 six-blade propeller and will be capable of delivering 2,645 shaft horsepower (SHP) at the normal takeoff power setting. The airplane will be capable of operation with a minimum of 2 flight crewmembers and cargo.

CASA Model C–295 will incorporate an unusual design feature, an “Autofeather/Automatic Power Reserve” (AF/APR) system, to show compliance with the engine failure takeoff path requirements of part 25 and the approach climb requirements of § 25.121(d). The functional intent of this AF/APR system is the same as the Automatic Takeoff Thrust Control System (ATTCS) described in Appendix I to part 25, which limits the application of performance credit for such a system to takeoff only. Since the airworthiness regulations do not contain appropriate safety standards for approach climb performance using ATTCS, special conditions are required to ensure a level of safety equivalent to that established in the regulations.

Type Certification Basis

Under the provisions of 14 CFR 21.101, CASA must show that the Model C–295 meets the applicable provisions incorporated by reference in Type Certificate No. A21NM or the applicable regulations in effect on the date of application for the change to the Model C–295.

The regulations incorporated by reference in the type certificate are commonly referred to as the “original type certification basis.” The regulations incorporated by reference in Type Certificate A21NM are as follows: part 25, effective February 1, 1965, including Amendments 25–1 through 25–89. The certification basis may also include later amendments to part 25 that are not relevant to these special conditions. In addition, the certification basis for the Model C–295 includes part 34, effective September 10, 1990, including

Amendment 34–3 effective February 3, 1999, plus any amendments in effect at the time of certification; and part 36, effective December 1, 1969, including Amendments 36–1 through 36–21 and any subsequent amendments that may be applicable on the date the type certificate is issued. These special conditions form an additional part of the type certification basis. In addition, the certification basis may include other special conditions that are not relevant to these special conditions.

If the Administrator finds that the applicable airworthiness regulations (i.e., 14 CFR part 25, as amended) do not contain adequate or appropriate safety standards for the CASA Model C–295 because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

In addition to the applicable airworthiness regulations and special conditions, the Model C–295 must comply with the part 25 fuel vent and exhaust emission requirements of 14 CFR part 34 and the part 25 noise certification requirements of 14 CFR part 36.

Special conditions, as appropriate, are issued in accordance with § 11.49, as required by §§ 11.28 and 11.29, and become part of the type certification basis in accordance with § 21.101(b)(2).

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same novel or unusual design feature, or should any other model already included on the same type certificate be modified to incorporate the same novel or unusual design feature, the special conditions would also apply to the other model under the provisions of § 21.101(a)(1).

Novel or Unusual Design Features

The Model C–295 will incorporate the following novel or unusual design feature: the ATTCS (referred to by CASA as “Autofeather/APR”), to show compliance with the approach climb requirements of § 25.121(d). The Model C–295 is a medium-sized airplane powered by two Pratt & Whitney Canada PW127G turbopropeller engines equipped with Electronic Engine Controls (EEC) that, in part, protect against exceeding engine limits. The Model C–295 is also equipped with Hamilton Standard 568F–5 six-blade propellers as part of the propulsion package. The Model C–295 engine and propeller control system allows the pilot to select an Autofeather/APR control position on the overhead panel that

will, in the result of an engine failure, automatically feather the propeller on the failed engine and increase the power output of the operating engine to the Maximum Takeoff Power (MTO) setting (2,920 SHP at sea level).

The Model C–295 incorporates a power setting system that includes a center pedestal-mounted rotary switch, referred to as the Power Rating Selector (PRS), that allows the pilot to select the desired torque and propeller speed combination for the phase of flight. After selecting the appropriate position on the PRS, the corresponding level of thrust is obtained by moving a single Power Lever (PL) for each engine to a detent position that is referred to as MAX AUTO.

With the PRS set to the takeoff and go-around (TOGA) position, the power levers in the MAX AUTO position, and the AF/APR selected to the ON position, the applicable one-engine-inoperative performance requirements of part 25 will be met without requiring any action by the crew to increase power.

For takeoff, the PRS is set to TOGA and the power levers are advanced to MAX AUTO, resulting in Normal Takeoff Power (NTO) being obtained, which is 90 percent of the Maximum Takeoff Power (MTO) available. In the event of an engine failure during takeoff, operation of the Model C–295 AF/APR system will result in the EEC automatically increasing the power on the operating engine to Maximum Takeoff Power (MTO). (Note that for this engine installation, the MTO level of power automatically obtained with AF/APR operation may be manually obtained by placing the PRS in the Maximum Continuous Power (MCT) position and the power levers at MAX AUTO (maximum takeoff and maximum continuous power ratings and limits are the same)). Similarly, if both engines are operating when the approach is initiated, the AF/APR and power setting controls must be set to the same positions as for takeoff to ensure obtaining the approach climb (ref. § 25.121(d)) performance presented in the Airplane Flight Manual (AFM) in the event of an engine failure during the approach or go-around.

For both the takeoff and go-around case, the operating procedures require the flightcrew to turn the system on by pressing the “ARM/ON” button on the overhead panel; this will result in the “ON” portion of the button remaining illuminated. When Autofeather/APR is selected ON, the PRS is set to TOGA, and both power levers are beyond 49 degrees with both engines producing power above the 48 percent Torque (%TQ) level, the “ARM” portion of the

button will illuminate. This will indicate to the pilot that the system is “armed” and will perform autofeather and power increase functions without any further action by the crew if an engine fails. If one engine fails after initiating a go-around, before the 48 percent TQ level is reached, the APR/Autofeather system will not function.

The engine operating limits Torque (%TQ), Inter-Turbine Temperature (ITT), Engine RPM (%NH), and Propeller RPMs (%NP) are set such that the engine red line limits are not exceeded when the APR system operates.

If the torque on one engine drops below 19 percent, the Autofeather Unit (AFU) on the failed engine sends a signal to increase the power to the MTO/MCT level on the remaining engine. The power levers will continue to function normally should the ATTCS fail. The MTO can also be obtained by selecting the MCT position at the Power Rating Selector.

To deactivate the power increase provided by operation of the APR system, the power levers should be moved out of the MAX AUTO detent to a position less than 49 degrees (PL angle not high) or the Autofeather/APR should be selected OFF.

For both the takeoff and approach power setting cases, the power levers may be pushed forward beyond the MAX AUTO position to the MAX MANUAL position. This will result in the engines producing slightly more power than MTO/MCT levels. This power setting is limited to 20 seconds of application in the AFM limitations; operation for periods slightly beyond 20 seconds will result in a maintenance (NEW EXCEEDENCE) message being recorded on the Integrated Engine Display System (IEDS), which requires a maintenance check, but will not result in an engine failure. In the extremely improbable event that the APR system fails to operate in combination with an engine failure, the all-engines operating approach and go-around procedures in the Model C–295 AFM instruct the pilot to both feather the propeller on the operating engine using the Fuel Feather Levers (FFL), immediately adjacent to (on the pilot side) the aft end of the power levers, and advance the power levers to the MAX MANUAL position. This provides a subsequent level of performance greater than that presented in the AFM for the approach climb configuration of § 25.121(d). Following this action, as cockpit workload permits, MCT may be selected on the PRS followed by retarding the power levers to the MAX AUTO position, which will

provide the APR level of power for the extent of time required.

The part 25 standards for ATTCS, contained in § 25.904 and Appendix I, specifically restrict performance credit for ATTCS to takeoff. Expanding the scope of the standards to include other phases of flight, including go-around, was considered at the time the standards were issued, but flightcrew workload issues precluded further consideration. The preamble to Amendment 25–62 states:

“In regard to ATTCS credit for approach climb and go-around maneuvers, current regulations preclude a higher thrust for the approach climb (§ 25.121(d)) than for the landing climb (§ 25.119). The workload required for the flightcrew to monitor and select from multiple in-flight thrust settings in the event of an engine failure during a critical point in the approach, landing, or go-around operations is excessive. Therefore, the FAA does not agree that the scope of the amendment should be changed to include the use of ATTCS for anything except the takeoff phase.” (52 FR 43153, November 9, 1987)

The ATTCS incorporated on the Model C–295 allows the pilot to use the same power setting procedure during an all-engines operating approach and go-around, regardless of whether or not an engine fails. In either case, the pilot obtains go-around power by moving the power levers into the MAX AUTO detent. Since the ATTCS is armed, it will function automatically following an engine failure, and increase the power on the remaining engine to the ATTCS thrust level. Therefore, this design adequately addresses the pilot workload concerns identified in the preamble to Amendment 25–62. Accordingly, these special conditions will require a showing of compliance with those provisions of § 25.904 and Appendix I that are applicable to the approach climb and go-around maneuvers.

The definition of a critical time interval for the approach climb case, during which time it must be extremely improbable to violate a flight path based on the § 25.121(d) gradient requirement, is of primary importance. The § 25.121(d) gradient requirement implies a minimum one-engine-inoperative flight path capability with the airplane in the approach configuration. There are three engine failure cases that must be considered for the approach climb: (1) The engine may have been inoperative before initiating the go-around, (2) the engine may become inoperative at the point of go-around initiation, or (3) the engine may become inoperative during the go-around. For the Model C–295, the

definition of a critical time interval for the first case is not relevant since the operating procedures require selection of the MCT position on the PRS, thus enabling the pilot to manually obtain the APR level of power by advancing the power levers to the MAX AUTO position. The definition of the critical time interval must, however, be defined in accordance with the following special conditions for the second and third cases.

Applicability

As discussed above, these special conditions are applicable to the CASA Model C–295. Should CASA apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design feature, these special conditions would apply to that model as well under the provisions of § 21.101(a)(1).

Conclusion

This action affects only certain novel or unusual design features on the CASA Model C–295 airplane. It is not a rule of general applicability and affects only the manufacturer who applied to the FAA for approval of these features on the airplane.

The substance of these special conditions has been subjected to the notice and comment period in several prior instances and has been derived without substantive change from those previously issued. It is unlikely that prior public comment would result in a significant change from the substance contained herein. For this reason, and because a delay would significantly affect the certification of the airplane, which is imminent, the FAA has determined that prior public notice and comment are unnecessary and impracticable, and good cause exists for adopting these special conditions upon issuance. The FAA is requesting comments to allow interested persons to submit views that may not have been submitted in response to the prior opportunities for comment described above.

List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

The Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type

certification basis for the CASA Model C–295 airplane.

1. *General.* An Automatic takeoff thrust control system (ATTCS) is defined as the entire automatic system, including all devices, both mechanical and electrical, that sense engine failure, transmit signals, actuate fuel controls or power levers, or increase engine power by other means on operating engines to achieve scheduled thrust or power increases and furnish cockpit information on system operation.

2. *ATTCS.* The engine power control system that automatically resets the power or thrust on the operating engine (following engine failure during the approach for landing) must comply with the following requirements:

a. *Performance and System Reliability Requirements.* The concurrent existence of an ATTCS failure and an engine failure between the time at which the flightcrew last verifies that the ATTCS is in a condition to operate until the end of the critical time interval must be shown to be extremely improbable.

b. *Thrust Setting.* The ATTCS thrust or power level for go-around must be obtained in accordance with the following criteria:

(1) The maximum thrust or power attainable on each engine prior to ATTCS operation may not be less than 90 percent of the thrust or power level set by the ATTCS (the maximum takeoff thrust or power approved for the airplane under existing ambient conditions);

(2) It must be shown that the operating engine will be free of hazardous engine response characteristics when the thrust or power is increased from any level between flight idle and the maximum level attainable without ATTCS to the maximum approved takeoff thrust or power.

c. *Powerplant Controls.* In addition to the requirements of § 25.1141, no single failure or malfunction, or probable combination thereof, of the ATTCS, including associated systems, may cause the failure of any powerplant function necessary for safety. The ATTCS must be designed to:

(1) Apply thrust or power on the operating engine(s), following any one engine failure during go-around, to achieve the maximum approved takeoff thrust or power without exceeding engine operating limits; and

(2) Provide a means to verify to the flightcrew before beginning an approach for landing that the ATTCS is in a condition to operate.

3. *Critical Time Interval.* The definition of the Critical Time Interval

in Appendix I, Section I25.2(b) shall be expanded to include the following:

a. When conducting an approach for landing using ATTCS, the critical time interval is defined as follows:

(1) The critical time interval *begins* at a point on a 2.5 degree approach glide path from which, assuming a simultaneous engine and ATTCS failure, the resulting approach climb flight path intersects a flight path originating at a later point on the same approach path corresponding to the part 25 one-engine-inoperative approach climb gradient. The period of time from the point of simultaneous engine and ATTCS failure to the intersection of these flight paths must be no shorter than the time interval used in evaluating

the critical time interval for takeoff beginning from the point of simultaneous engine and ATTCS failure and ending upon reaching a height of 400 feet.

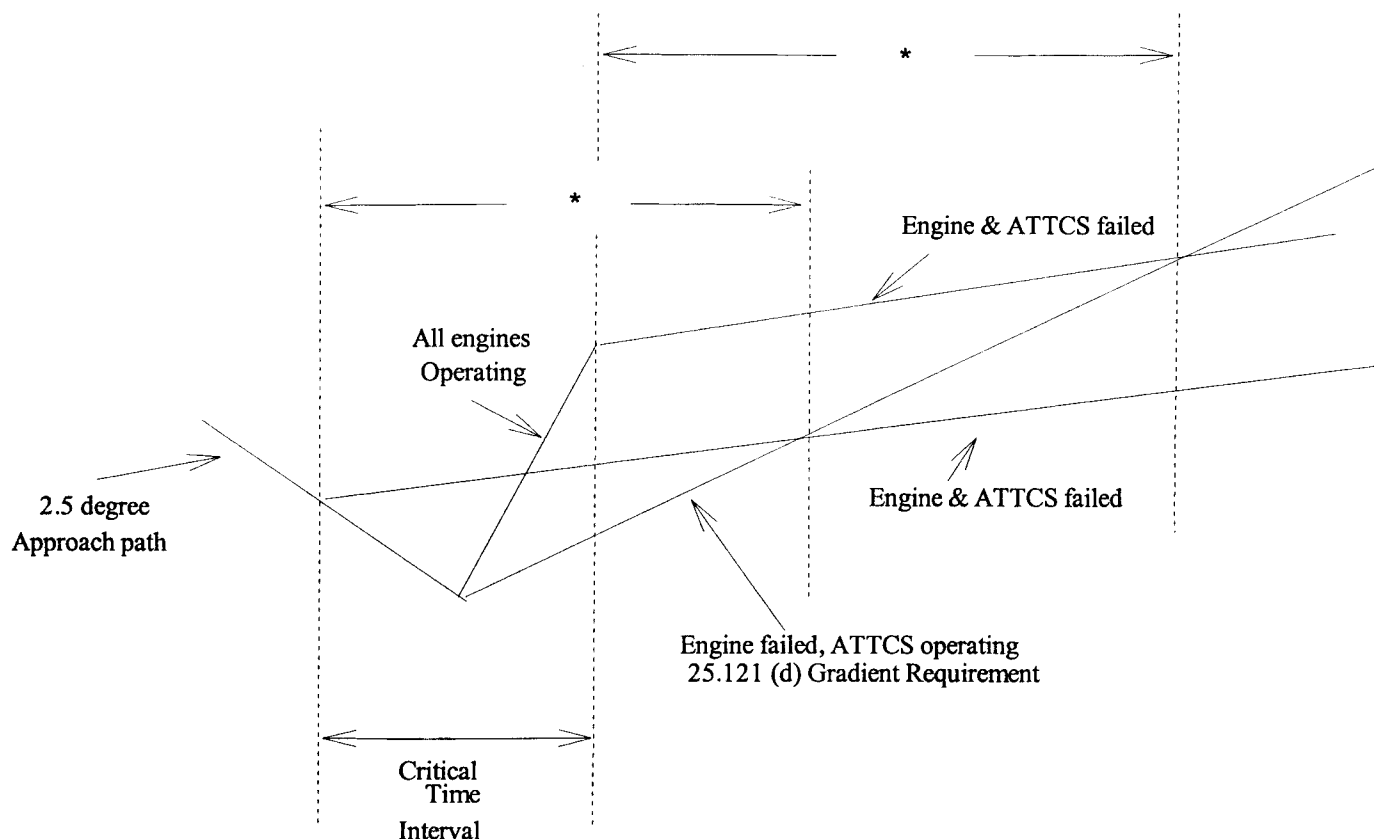
(2) The critical time interval *ends* at the point on a minimum performance, all-engines-operating go-around flight path from which, assuming a simultaneous engine and ATTCS failure, the resulting minimum approach climb flight path intersects a flight path corresponding to the part 25 minimum one-engine-inoperative approach climb gradient. The all-engines-operating go-around flight path and the part 25 one-engine-inoperative approach climb gradient flight path originate from a common point on a 2.5

degree approach path. The period of time from the point of simultaneous engine and ATTCS failure to the intersection of these flight paths must be no shorter than the time interval used in evaluating the critical time interval for the takeoff beginning from the point of simultaneous engine and ATTCS failure and ending upon reaching a height of 400 feet.

b. The critical time interval must be determined at the altitude resulting in the longest critical time interval for which one-engine-inoperative approach climb performance data are presented in the Airplane Flight Manual.

c. The critical time interval is illustrated in the following figure:

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* The engine and ATTCS failed time interval must be no shorter than the time interval from the point of simultaneous engine and ATTCS failure to a height of 400 feet used to comply with I25.2(b) for ATTCS use during takeoff.

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Issued in Renton, Washington, on November 30, 1999.

Vi L. Lipski,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service, ANM-100.

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 98-NM-303-AD; Amendment 39-11458; AD 99-25-15]

RIN 2120-AA64

Airworthiness Directives; Airbus Model A300, A310, A300-600 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.