DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 23

Special Conditions: Honda Aircraft Company (Honda) Model HA–420, HondaJet; Cruise Speed Control System

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed special conditions.

SUMMARY: This action proposes special conditions for the Honda Aircraft Company HA–420 airplane. This airplane will have a novel or unusual design feature(s) associated with the use of a cruise speed control system. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These proposed 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: Send your comments on or before October 23, 2015.

ADDRESSES: Send comments identified by docket number FAA–2015–3880 using any of the following methods:

• Federal eRulemaking Portal: Go to http://www.regulations.gov and follow the online instructions for sending your comments electronically.

• Mail: Send comments to Docket Operations, M–30, U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE., Room W12–140, West Building Ground Floor, Washington, DC 20590–0001.

• Hand Delivery of Courier: Take comments to Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m., and 5 p.m., Monday through Friday, except Federal holidays.

• Fax: Fax comments to Docket Operations at 202–493–2251.

Privacy: The FAA will post all comments it receives, without change, to http://regulations.gov, including any personal information the commenter provides. Using the search function of the docket Web site, anyone can find and read the electronic form of all comments received into any FAA docket, including the name of the individual sending the comment (or signing the comment for an association, business, labor union, etc.). DOT’s complete Privacy Act Statement can be found in the Federal Register published on April 11, 2000 (65 FR 19477–19478), as well as at http://DocketsInfo.dot.gov.

Docket: Background documents or comments received may be read at http://www.regulations.gov at any time. Follow the online instructions for accessing the docket or go to the Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m., and 5 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Jeff Piotz, Federal Aviation Administration, Small Airplane Directorate, Aircraft Certification Service, 901 Locust, Room 301, Kansas City, MO 64106; telephone (816) 329–3239; facsimile (816) 329–4090.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite interested people to take part in this rulemaking by sending written comments, data, or views. The most helpful comments reference a specific portion of the special conditions, explain the reason for any recommended change, and include supporting data. We ask that you send us two copies of written comments...

Background

On October 11, 2006, Honda Aircraft Company applied for a type certificate for their new Model HA–420. On October 10, 2013, Honda Aircraft Company requested an extension with an effective application date of October 1, 2013. This extension changed the type certification basis to amendment 23–62.

The HA–420 is a four to five passenger (depending on configuration), two crew, lightweight business jet with a 43,000-foot service ceiling and a maximum takeoff weight of 9963 pounds. The airplane is powered by two GE-Honda Aero Engines (GHAE) HF–120 turbofan engines.

The HA–420 airplane will use a cruise speed control system (CSC), which is part of the automatic flight control system (AFCS), to reduce pilot workload during cruise flight only. The intended function is automatic airplane speed control during altitude hold AFCS mode by adjustment of the engine thrust within a narrow authority band utilizing the existing engine synchronization control. The CSC system does not back drive the throttles. The command authority is limited to values used for engine synchronization and can only be engaged when the throttle is positioned in a pre-determined range typically used for cruise power. This significantly reduces the CSC authority such that failure modes of the system should be minor. The proposed CSC system functions in a manner similar to an auto-throttle system, but has significantly less authority when compared to a traditional auto-throttle system.

Type Certification Basis

Under the provisions of 14 CFR 21.17, Honda Aircraft Company must show that the HA–420 meets the applicable provisions of part 23, as amended by amendments 23–1 through 23–62, thereto.

If the Administrator finds that the applicable airworthiness regulations (i.e., 14 CFR part 23) do not contain adequate or appropriate safety standards for the HA–420 because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

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 or similar novel or unusual design feature, the special conditions would also apply to the other model under §21.101.

In addition to the applicable airworthiness regulations and special
conditions, the HA–420 must comply with the fuel vent and exhaust emission requirements of 14 CFR part 34 and the noise certification requirements of 14 CFR part 36. In addition, the FAA must issue a finding of regulatory adequacy pursuant to section 611 of Public Law 92–574, the “Noise Control Act of 1972.”

The FAA issues special conditions, as defined in 14 CFR 11.19, in accordance with § 11.38, and they become part of the type certification basis under § 21.17(a)(2).

Novel or Unusual Design Features
The HA–420 will incorporate the following novel or unusual design features: Cruise Speed Control system.

Discussion
As defined in the summary section, this airplane makes use of a CSC system, which is a novel design for this type of airplane. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. Mandating additional requirements, developed in part by adapting relevant portions of 14 CFR 25.1329, Automatic pilot systems, applicable to auto-throttle systems along with FAA experience with similar autothrust systems, mitigates the concerns associated with installation of the proposed CSC system.

Applicability
As discussed above, these special conditions are applicable to the HA–420. Should Honda Aircraft Company apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design feature, the special conditions would apply to that model as well.

Conclusion
This action affects only certain novel or unusual design features on one model HA–420 airplane. It is not a rule of general applicability and affects only the applicant who applied to the FAA for approval of these features on the airplane.

List of Subjects in 14 CFR Part 23
Aircraft, Aviation safety, Signs and symbols.

The authority citation for these special conditions is as follows:
Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

The Proposed Special Conditions
Accordingly, the Federal Aviation Administration (FAA) proposes the following special conditions as part of the type certification basis for Honda Aircraft Company HA–420 airplanes.

1. Cruise Speed Control
In addition to the requirements of §§ 23.143, Controllability and Maneuverability—General; 23.1309, Equipment, systems, and installations; and 23.1329, Automatic pilot system; auto throttle systems of limited authority that do not back drive the throttles and for which all failure modes are shown to be no greater than minor, the following requirements apply:
(a) Quick disengagement controls for the autothrust functions must be provided for each pilot. Quick disengagement controls must be readily accessible to each pilot while operating the thrust control levers.
(b) The effects of a failure of the system to disengage the autothrust functions when manually commanded by the pilot must be assessed in accordance with the requirements of § 23.1309.
(c) Engagement or switching of the flight guidance system, a mode, or a sensor may not cause the autothrust system to effect a transient response that alters the airplane’s flight path any greater than a minor transient, as defined in paragraph (l)(1) of this section.
(d) Under normal conditions, the disengagement of any automatic control function of a flight guidance system may not cause a transient response of the airplane’s flight path any greater than a minor transient.
(e) Under rare normal and non-normal conditions, disengagement of any automatic control function of a flight guidance system may not result in a transient any greater than a significant transient, as defined in paragraph (l)(2) of this section.
(f) The function and direction of motion of each command reference control (such as CSC) must be plainly indicated on, or adjacent to, each control, if necessary to prevent inappropriate use or confusion.
(g) Under any condition of flight appropriate to its use, the flight guidance system may not produce hazardous loads on the airplane, nor create hazardous deviations in the flight path. This applies to both fault-free operation and in the event of a malfunction, and assumes that the pilot begins corrective action within a reasonable period of time.
(h) When the flight guidance system is in use, a means must be provided to avoid excursions beyond an acceptable margin from the speed range of the normal flight envelope. If the airplane experiences an excursion outside this range, a means must be provided to prevent the flight guidance system from providing guidance or control to an unsafe speed.

(i) The flight guidance system functions, controls, indications, and alerts must be designed to minimize flightcrew errors and confusion concerning the behavior and operation of the flight guidance system. Means must be provided to indicate the current mode of operation, including any armed modes, transitions, and reversions. Selector switch position is not an acceptable means of indication. The controls and indications must be grouped and presented in a logical and consistent manner. The indications must be visible to each pilot under all expected lighting conditions.

(j) Following disengagement of the autothrust function, a caution (visual and, unless there are no misleading or hazardous consequences associated with its absence, auditory) must be provided to each pilot.

(k) During autothrust operation, it must be possible for the flightcrew to move the thrust levers without requiring excessive force. The autothrust may not create a potential hazard when the flightcrew applies an override force to the thrust levers.

(l) For purposes of this section, a transient is a disturbance in the control or flight path of the airplane that is not consistent with response to flightcrew inputs or environmental conditions.

(1) A minor transient would not significantly reduce safety margins and would involve flightcrew actions that are well within their capabilities. A minor transient may involve a slight increase in flightcrew workload or some physical discomfort to passengers or cabin crew.

(2) A significant transient may lead to a significant reduction in safety margins, an increase in flightcrew workload, discomfort to the flightcrew, or physical distress to the passengers or cabin crew, possibly including non-fatal injuries. Significant transients do not require, in order to remain within or recover to the normal flight envelope, any of the following:

(i) Exceptional piloting skill, alertness, or strength.

(ii) Forces applied by the pilot which are greater than those specified in § 23.143(c).

(iii) Accelerations or attitudes in the airplane that might result in further hazard to secured or non-secured occupants.
Endangered and Threatened Wildlife and Plants: Proposed Threatened Status for Island Grouper (Mycteroperca fusca) and Endangered Status for Gulf Grouper (Mycteroperca jordani) Under the Endangered Species Act (ESA)

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; 12-month findings; request for comments.

SUMMARY: We, NMFS, announce 12-month findings and listing determinations on a petition to list the gulf grouper (Mycteroperca jordani) and the island grouper (Mycteroperca fusca) as threatened or endangered under the Endangered Species Act (ESA). We have completed comprehensive status reviews for these two marine fish species in response to a petition submitted by WildEarth Guardians. After reviewing the best scientific and commercial data available, we have determined that the gulf grouper is currently in danger of extinction throughout its range and, therefore, meets the definition of an endangered species. After reviewing the best scientific and commercial data available, we have also determined that the island grouper is not currently in danger of extinction throughout all or a significant portion of its range, but is likely to become so within the foreseeable future. Therefore, we conclude that the island grouper meets the definition of a threatened species. We are soliciting information that may be relevant to inform the final determinations for these two species.

DATES: Comments on this proposed rule must be received by November 23, 2015. Public hearing requests must be made by November 9, 2015.

ADDRESS: You may submit comments on this document, identified by the code NOAA–NMFS–2015–0071, by either of the following methods:
- Electronic Submission: Submit all electronic public comments via the Federal eRulemaking Portal. Go to www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2015-0071. Click the “Comment Now” icon, complete the required fields. Enter or attach your comments.
- Mail: Submit written comments to, Ron Salz, NMFS Office of Protected Resources (F/PR3), 1315 East West Highway, Silver Spring, MD 20910, USA.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered. All comments received are a part of the public record and will generally be posted for public viewing on http://www.regulations.gov without change. All personal identifying information (e.g., name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. We will accept anonymous comments (enter “N/A” in the required fields if you wish to remain anonymous). Attachments to electronic comments will be accepted in Microsoft Word, Excel, or Adobe PDF file formats only.

You can obtain the petition, status review reports, proposed rule, and list of references electronically on our NMFS Web site at http://www.nmfs.noaa.gov/pr/species/petition81.htm.

FOR FURTHER INFORMATION CONTACT: Ronald Salz, NMFS, Office of Protected Resources (OPR), (301) 427–8171 or Marta Nammack, NMFS, OPR, (301) 427–8403.

SUPPLEMENTARY INFORMATION:

Background

On July 15, 2013, we received a petition from WildEarth Guardians to list 81 marine species or subpopulations as threatened or endangered under the Endangered Species Act (ESA). This petition included species from many different taxonomic groups, and we prepared our 90-day findings in batches by taxonomic group. We found that the petitioned actions may be warranted for 24 of the species and 3 of the subpopulations and announced the initiation of status reviews for each of the 24 species and 3 subpopulations (78 FR 63941, October 25, 2013; 78 FR 66675, November 6, 2013; 78 FR 69376, November 19, 2013; 79 FR 9880, February 21, 2014; and 79 FR 10104, February 24, 2014). This document addresses the 12-month findings for two of these species: Gulf grouper (Mycteroperca jordani) and island grouper (Mycteroperca fusca). The status of the findings and relevant Federal Register notices for the other 21 species and 3 subpopulations can be found on our Web site at http://www.nmfs.noaa.gov/pr/species/petition81.htm.

We are responsible for determining whether species are threatened or endangered under the ESA (16 U.S.C. 1531 et seq.). To make this determination, we consider first whether a group of organisms constitutes a “species” under the ESA, then whether the status of the species qualifies it for listing as either threatened or endangered. Section 3 of the ESA defines a “species” to include “any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature.” On February 7, 1996, NMFS and the U.S. Fish and Wildlife Service (USFWS; together, the Services) adopted a policy describing what constitutes a distinct population segment (DPS) of a taxonomic species (the DPS Policy; 61 FR 4722). The DPS Policy identified two elements that must be considered when identifying a DPS: (1) The discreteness of the population segment in relation to the remainder of the species (or subspecies) to which it belongs; and (2) the significance of the population segment to the remainder of the species (or subspecies) to which it belongs. As stated in the DPS Policy, Congress expressed its expectation that the Services would exercise authority with regard to DPSs sparingly and only when the biological evidence indicates such action is warranted. Based on the scientific information available, we determined that the gulf grouper (Mycteroperca jordani) and the island grouper (Mycteroperca fusca) are both “species” under the ESA. There is nothing in the scientific literature indicating that either of these species should be further divided into subspecies or DPSs.

Section 3 of the ESA defines an endangered species as “any species which is in danger of extinction throughout all or a significant portion of its range” and a threatened species as one “which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” We interpret an “endangered species” to be one that is presently in danger of extinction. A “threatened species,” on