addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12998 requires Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, the final rule meets the relevant standards of Executive Order 12998.

J. Treasury and General Government Appropriations Act, 2001

The Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note) provides for agencies to review most disseminations of information to the public under guidelines established by each agency pursuant to general guidelines issued by OMB.

OMB’s guidelines were published at 67 FR 8452 (February 22, 2002), and DOE’s guidelines were published at 67 FR 62446 (October 7, 2002). DOE has reviewed this final rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

K. Executive Order 13211

Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use,” 66 FR 28355 (May 22, 2001) requires Federal agencies to prepare and submit to the OMB, a Statement of Energy Effects for any proposed significant energy action. A “significant energy action” is defined as any action by an agency that promulgated or is expected to lead to promulgation of a final rule, and that: (1) Is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the energy supply, distribution, or use of energy, or (3) is designated by the Administrator of OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

This regulatory action, which is intended to streamline the application and approval process for small-scale natural gas exports, will not have a significant adverse effect on the supply, distribution, or use of energy, and therefore is not a significant energy action. Accordingly, DOE has not prepared a Statement of Energy Effects.

L. Congressional Notification

As required by 5 U.S.C. 801, DOE will report to Congress on the promulgation of this rule prior to its effective date. The report will state that it has been determined that the rule is not a “major rule” as defined by 5 U.S.C. 804(2).

IV. Approval of the Office of the Secretary

The Secretary of Energy has approved the publication of this final rule.

List of Subjects in 10 CFR Part 590

Administrative practice and procedure, Exports, Natural gas, Reporting and recordkeeping requirements.

Signed in Washington, DC, on July 19, 2018.

Steven E. Winberg,
Assistant Secretary, Office of Fossil Energy.

For the reasons stated in the preamble, DOE amends part 590, chapter II of title 10, subchapter G, Code of Federal Regulations as set forth below:

PART 590—ADMINISTRATIVE PROCEDURES WITH RESPECT TO THE IMPORT AND EXPORT OF NATURAL GAS

1. The authority citation for part 590 continues to read as follows:


2. Section 590.102 is amended by redesignating paragraph (p) as paragraph (q) and adding new paragraph (p) to read as follows:

§ 590.102 Definitions.

(p) Small-scale natural gas export means an export of natural gas to nations with which there is not in effect a free trade agreement with the United States requiring national treatment for trade in natural gas and with which trade is not prohibited by U.S. law or policy, provided that the application for such export authority satisfies the following two criteria:

1. The application proposes to export natural gas in a volume up to and including 51.75 billion cubic feet per year, and

2. DOE’s approval of the application does not require an environmental impact statement or an environmental assessment under the National Environmental Policy Act, 42 U.S.C. 4321 et seq.

§ 590.208 Small volume exports.

(a) Small-scale natural gas exports. Small-scale natural gas exports are deemed to be consistent with the public interest under section 3(a) of the Natural Gas Act, 15 U.S.C. 717b(a). DOE will issue an export authorization upon receipt of any complete application to conduct small-scale natural gas exports. DOE’s regulations regarding notice of applications, 10 CFR 590.205, and procedures applicable to application proceedings, 10 CFR part 590, subpart C (10 CFR 590.303 to 10 CFR 590.317), are not applicable to small-scale natural gas exports.

(b) Scientific, experimental, or other non-utility natural gas exports. Any person may export up to 100,000 cubic feet of natural gas (14.73 pounds per square inch at 60 degrees Fahrenheit) or the liquefied or compressed equivalent thereof, in a single shipment for scientific, experimental, or other non-utility gas use without prior authorization of the Assistant Secretary.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 23

[Doc No. FAA–2018–0078; Special Conditions No. 23–290–SC]

Special Conditions: TCW Technologies, LLC; Piper Aircraft PA–32 Series Airplanes; Installation of Rechargeable Lithium Batteries

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued for the Piper Aircraft Model PA–32-series airplanes. These airplanes, as modified by TCW Technologies, LLC, will have a novel or unusual design feature associated with the installation of a rechargeable lithium battery. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature.
These special conditions contain the additional safety standards 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 July 25, 2018. We must receive your comments by September 10, 2018.

ADDRESSES: Send comments identified by docket number FAA–2018–0678 using any of the following methods:

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


• 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, before 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

• Fax: Fax comments to Docket Operations at 202–493–4850. 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 website, 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 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: Ruth Hirt, Federal Aviation Administration, Aircraft Certification Service, Small Airplane Directorate, AIR–694, 901 Locust, Room 301, Kansas City, MO; telephone (816) 329–4108; facsimile (816)–329–4000.

SUPPLEMENTARY INFORMATION: The FAA has determined that notice and opportunity for prior public comment are unnecessary because the substance of these special conditions has been subjected to the public comment process in several prior instances with no substantive comments received. It is unlikely that prior public comment would result in a significant change from the substance contained herein. The FAA therefore finds that good cause exists for making these special conditions effective 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.

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<td>Cessna Aircraft Company/ Model 325C (CJ4)</td>
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<td>23–08–05–SC 3 ....</td>
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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.

We will consider all comments we receive on or before the closing date for comments. We will consider comments filed late if it is possible to do so without incurring expense or delay. We may change these special conditions based on the comments we receive.

Background

On May 5, 2017, TCW Technologies, LLC (TCW) applied for a supplemental type certificate (STC) to install a rechargeable lithium battery on Piper Aircraft Model PA–32–series airplanes. These airplanes are normal category airplanes with a maximum of 7 seats (including flightcrew), powered by a Lycoming O–540–series engine with rechargeable lithium batteries and their maintenance requirements that differ significantly from that of the nickel-cadmium (Ni-Cd) and lead-acid rechargeable batteries currently approved in other normal, utility, acrobatic, and commuter category airplanes. Therefore, the FAA is issuing this special condition to address—

• All characteristics of the rechargeable lithium batteries and their installation that could affect safe operation of the modified PA–32–series airplanes; and

• Appropriate Instructions for Continued Airworthiness (ICA) that include maintenance requirements to ensure the availability of electrical power from the batteries when needed.

Type Certification Basis

Under the provisions of § 21.101, TCW must show that the PA–32–series airplanes, as changed, continue to meet the applicable provisions of the regulations incorporated by reference in Type Certificate Data Sheet (TCDS) No. A3SO 2 or the applicable regulations in effect on the date of application for the change. The regulations incorporated by reference in the type certificate are commonly referred to as the “original type certification basis.” The regulations incorporated by reference are located in TCDS A3SO, pages 24 through 28.

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 PA–32–series airplanes because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

The FAA issues special conditions, as defined in § 11.19, under § 11.38 and they become part of the type certification basis under § 21.101. Special conditions are initially applicable to the models for which they are issued. Should the applicant apply for an STC to modify any other model(s) included on the same type certificate to incorporate the same novel or unusual design feature, the FAA would apply these special conditions to the other model(s) under § 21.101.


2 http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgSC.nsf/0/3CB48527C504646AC0D7Open Document&Highlight=%20rechargeable%20lithium%20battery.

Novel or Unusual Design Features

The Piper PA–32–series airplanes will incorporate the following novel or unusual design features:

The installation of a rechargeable lithium battery as backup power for avionics systems.

Discussion

The applicable regulations governing the installation of batteries in general aviation airplanes were derived from Civil Air Regulations (CAR) 3 as part of the recodification that established 14 CFR part 23. The battery requirements identified in §23.1353 were a rewording of the CAR requirements. Additional rulemaking activities—resulting from increased incidents of Ni-Cd battery fire or failures—incorporated §23.1353(f) and (g), amendments 23–20 and 23–21, respectively. The FAA did not envision the introduction of lithium battery installations at the time these regulations were published.

The proposed use of rechargeable lithium batteries prompted the FAA to review the adequacy of these existing regulations. We determined the existing regulations do not adequately address the safety of lithium battery installations.

Current experience with rechargeable lithium batteries in commercial or general aviation is limited. However, other users of this technology—ranging from personal computers, to wireless telephone manufacturers, to the electric vehicle industry—have noted safety problems with rechargeable lithium batteries. These problems, as described in the following paragraphs, include overheating, over-discharging, flammability of cell components, cell internal defects, and hazards resulting from exposure to extreme temperatures.

1. Overcharging: In general, rechargeable lithium batteries are significantly more susceptible than their Ni-Cd or lead-acid counterparts to thermal runaway, which is an internal failure that can result in self-sustaining increases in temperature and pressure. This is especially true for overcharging, which causes heating and destabilization of the components of the cell, leading to the formation (by plating) of highly unstable metallic lithium. The metallic lithium can ignite, resulting in a self-sustaining fire or explosion. Finally, the severity of thermal runaway due to overcharging increases with increasing battery capacity due to the higher amount of electrolyte in large batteries.

2. Over-discharging: Discharge of some types of rechargeable lithium battery cells beyond the manufacturer’s recommended specification can cause corrosion of the electrodes of the cell, resulting in loss of battery capacity that cannot be reversed by recharging. This loss of capacity may not be detected by the simple voltage measurements commonly available to flight crews as a means of checking battery status—a problem shared with Ni-Cd batteries. In addition, over-discharging has the potential to lead to an unsafe condition (creation of dendrites that could result in internal short circuit during the recharging cycle).

3. Flammability of Cell Components: Unlike Ni-Cd and lead-acid batteries, some types of rechargeable lithium batteries use liquid electrolytes that are flammable. The electrolyte can serve as a source of fuel for an external fire, if there is a breach of the battery container.

4. Cell Internal Defects: The rechargeable lithium batteries and rechargeable battery systems have a history of undetected cell internal defects. These defects may or may not be detected during normal operational evaluation, test, and validation. This may lead to an unsafe condition during in-service operation.

5. Extreme Temperatures: Exposure to an extreme temperature environment has the potential to create major hazards. Care must be taken to ensure that the lithium battery remains within the manufacturer’s recommended specification.

Applicability

As discussed above, these special conditions are applicable to the PA–32–series airplanes. Should TCW apply at a later date for a supplemental type certificate to modify any other model added to Type Certificate No. A350 with the same novel or unusual design feature, the FAA would apply these special conditions to that model as well.

Conclusion

This action affects only certain novel or unusual design features on the PA–32–series airplanes. 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.

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 subject contained herein. Therefore, notice and opportunity for prior public comment hereon are unnecessary and the FAA finds good cause, in accordance with 5 U.S.C. 553(b)(3)(B) and 553(d)(3), for making these special conditions effective 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 23

Aircraft, Aviation safety, Signs and symbols.

Citation

The authority citation for these special conditions is as follows:


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 Piper Aircraft PA–32–series airplanes modified by TCW Technologies, LLC.

1. Installation of Lithium Battery

The FAA adopts the following special conditions for lithium battery installations on Piper Aircraft PA–32–series airplanes in lieu of the requirements in §23.1353(a), (b), (c), (d), and (e), amendment 23–62.

Lithium battery installations on PA–32–series airplanes must be designed and installed as follows:

(1) Safe cell temperatures and pressures must be maintained during—

i. Normal operations;

ii. Any probable failure conditions of charging or discharging or battery monitoring system; and

iii. Any failure of the charging or battery monitoring system shown to not be extremely remote.

(2) The rechargeable lithium battery installation must be designed to preclude explosion or fire in the event of a failure under (1)(i)(ii) and (1)(i)(iii) above.

(3) Design of the rechargeable lithium batteries must preclude the occurrence of self-sustaining, uncontrolled increases in temperature or pressure.

(4) No explosive or toxic gasses emitted by any rechargeable lithium battery in normal operation or as the result of any failure of the battery charging system, monitoring system, or battery installation, which is shown to not be extremely remote, may accumulate in hazardous quantities within the airplane.

(5) Installations of rechargeable lithium batteries must meet the
requirements of § 23.863(a) through (d), amendment 23–34. 

(6) No corrosive fluids or gases that may escape from any rechargeable lithium battery, may damage surrounding structure or any adjacent systems, equipment, electrical wiring, or the airplane in such a way as to cause a major or more severe failure condition, in accordance with § 23.1309, amendment 23–62, and applicable regulatory guidance.

(7) Each rechargeable lithium battery installation must have provisions to prevent any hazardous effect on structure or essential systems that may be caused by the maximum amount of heat the battery can generate during a short circuit of the battery or of its individual cells.

(8) Rechargeable lithium battery installations must have a system to automatically control the charging rate of the battery to prevent battery overheating and overcharging, and either:

1. A battery temperature sensing and over-temperature warning system with a means for automatically Disconnecting the battery from its charging source in the event of an over-temperature condition; or

ii. A battery failure sensing and warning system with a means for automatically disconnecting the battery from its charging source in the event of battery failure.

(9) Any rechargeable lithium battery installation, the function of which is required for safe operation of the aircraft, must incorporate a monitoring and warning feature that will provide an indication to the appropriate flight crewmembers whenever the state of charge of the batteries has fallen below levels considered acceptable for dispatch of the aircraft.

Note 1 to paragraph (9): Reference § 23.1535(b) for dispatch consideration.

(10) The Instructions for Continued Airworthiness (ICA) required by § 23.1529 must contain maintenance requirements to assure that the battery has been sufficiently charged at appropriate intervals specified by the battery manufacturer and the equipment manufacturer that contain the rechargeable lithium battery or rechargeable lithium battery system. The lithium rechargeable batteries and lithium rechargeable battery systems must not degrade below specified ampere-hour levels sufficient to power the aircraft system. The ICA must also contain procedures for the maintenance of replacement batteries to prevent the installation of batteries that have degraded charge retention ability or other damage due to prolonged storage at a low state of charge. Replacement batteries must be of the same manufacturer and part number as approved by the FAA.

Note 2 to paragraph (10): Maintenance requirements include procedures that check battery capacity, charge degradation at manufacturers recommended inspection intervals, and replace batteries at manufacturer’s recommended replacement schedule/time to prevent age-related degradation.

Note 3 to paragraph (10): The term “sufficiently charged” means that the battery must retain enough charge, expressed in ampere-hours, to ensure that the battery cells will not be damaged. A battery cell may be damaged by low charge (i.e., below certain level), resulting in a reduction in the ability to charge and retain a full charge. This reduction would be greater than the reduction that may result from normal operational degradation.

Note 4 to paragraph (10): Replacement battery in spares storage may be subject to prolonged storage at a low state of charge.

Issued in Kansas City, Missouri on July 19, 2018.

Pat Mullen,
Manager, Small Airplane Standards Branch,
Aircraft Certification Service.

ENVIRONMENTAL PROTECTION AGENCY
40 CFR Part 63
RIN 2060–AS92
National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry Residual Risk and Technology Review
AGENCY: Environmental Protection Agency (EPA).
ACTION: Final rule.

SUMMARY: This action finalizes the residual risk and technology review (RTR) conducted for the Portland Cement Manufacturing Industry source category regulated under national emission standards for hazardous air pollutants (NESHAP). These final amendments include no revisions to the numerical emission limits of the rule based on the RTR. The amendments reflect corrections and clarifications of the rule requirements and provisions. While the amendments do not result in reductions in emissions of hazardous air pollutants (HAP), this action results in improved monitoring, compliance, and implementation of the rule.

DATES: This final action is effective on July 25, 2018.

ADDRESSES: The Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA–HQ–OAR–2016–0442. All documents in the docket are listed on the https://www.regulations.gov website. Although listed, some information is not publicly available, e.g., confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through https://www.regulations.gov, or in hard copy at the EPA Docket Center, WJC West Building, Room Number 3334, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Docket Center is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, contact Mr. Brian Storey, Sector Policies and Programs Division (D243–04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–1103; fax number: (919) 541–4991; and email address: storey.brian@epa.gov. For specific information regarding the risk modeling methodology, contact Mr. James Hirtz, Health and Environmental Impacts Division (C539–02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–0881; fax number: (919) 541–0840; and email address: hirtz.james@epa.gov. For information about the applicability of the NESHAP to a particular entity, contact Ms. Sara Ayres, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, U.S. EPA Region 5 (E–19), 77 West Jackson Boulevard, Chicago, Illinois 60604; telephone number: (312) 353–6266; email address: ayres.sara@epa.gov.

SUPPLEMENTARY INFORMATION: Preamble Acronyms and Abbreviations. We use capital acronyms and terms in this preamble. While this list may not be exhaustive, to