of these systems to perform critical functions, are not adversely affected when the airplane is exposed to high intensity radiated electromagnetic fields external to the airplane.

2. For the purpose of these special conditions, the following definition applies: Critical Functions: Functions whose failure would contribute to, or cause, a failure condition that would prevent the continued safe flight and landing of the airplane.

Issued in Kansas City, Missouri on May 7, 2002.

Dorenda D. Baker,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 02–13133 Filed 5–23–02; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. NM221, Special Conditions No. 25–203–SC]

Special Conditions: Israel Aircraft Industries (IAI) Model 1124 Airplane; High-Intensity Radiated Fields (HIRF)

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final special conditions; request for comments.

SUMMARY: These special conditions are issued Israel Aircraft Industries (IAI) Model 1124 airplanes modified by Duncan Aviation, Inc. These modified airplanes will have novel and unusual design features when compared to the state of technology envisioned in the airworthiness standards for transport category airplanes. The modification incorporates the installation of an air data display unit that displays critical flight parameters to the flightcrew. The applicable airworthiness standards do not contain adequate or appropriate safety standards for the protection of these systems from the effects of high-intensity radiated fields. The special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that provided by the existing airworthiness standards.

DATES: The effective date of these special conditions is May 16, 2002. Comments must be received on or before June 24, 2002.

ADDRESSES: Comments on these special conditions may be mailed in duplicate to: Federal Aviation Administration, Transport Airplane Directorate, Attn: Rules Docket (ANM–113), Docket No. NM221, 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. NM221. Comments may be inspected in the Rules Docket weekdays, except Federal holidays, between 7:30 a.m. and 4 p.m.

FOR FURTHER INFORMATION CONTACT: Meghan Gordon, FAA, Standardization Branch, ANM–113, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW., Renton, Washington, 98055–4056; telephone (425) 227–2138; 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 airplanes. 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

The FAA invites interested persons to participate in this rulemaking by submitting 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 file in the docket all comments we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning these special conditions. The docket is available for public inspection before and after the comment closing date. If you wish to review the docket in person, go to the address in the **ADDRESSES** section of this preamble between 7:30 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

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 in light of the comments we receive.

If you want the FAA to acknowledge receipt of your comments on this proposal, include with your comments a pre-addressed, stamped postcard on which the docket number appears. We will stamp the date on the postcard and mail it back to you.

Background

On April 12, 2002, Duncan Aviation, Inc., 15745 South Airport Road, Battle Creek, MI, 49015, applied for a supplemental type certificate (STC) to modify the Israel Aircraft Industries (IAI) Model 1124 airplane listed on Type Certificate No. A2SW. The Model 1124 is a twin engine, small transport airplane. It is capable of carrying two flightcrew members and up to ten passengers. The modification incorporates the installation of an air data display system. The air data display system displays critical flight parameters to the flightcrew. These systems can be susceptible to disruption to command and/or response signals as a result of electrical and magnetic interference. This disruption of signals could result in loss of all critical flight displays and announcement functions or present misleading information to the pilot.

Type Certification Basis

Under the provisions of 14 CFR 21.101, Duncan Aviation must show that the Israel Aircraft Industries Model 1124 airplanes, as changed, continue to meet the applicable provisions of the regulations incorporated by reference in Type Certificate No. A2SW, 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 certification basis for the modified Israel Aircraft Industries Model 1124 airplane includes Civil Aviation Regulations (CAR) 4b, effective 31 December 1953, including amendments through 4b–11, 4b–12, paragraphs 4b.132(e), 4b.151(a), 4b.155, 4b.156, 4b.157, 4b.158, 4b.160, 4b.162, 4b.191, 4b.210(b)(5), 4b.603(k), 4b.711, and paragraphs pertaining to engine fire shielding 14 CFR part 25, dated February 1, 1965, including Amendments 25–1 through 25–20, as listed in the Type Certificate Data Sheet (TCDS) No. A2SW.

If the Administrator finds that the applicable airworthiness regulations (i.e., part 25, as amended) do not contain adequate or appropriate safety standards for the Israel Aircraft Industries Model 1124 airplane 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 1124 airplane

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 defined in § 11.19, are issued in accordance with § 11.38 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 Duncan Aviation, Inc. apply for a supplemental type certificate to modify any other model included on the same type certificate to incorporate the same novel or unusual design feature, these special conditions would also apply to the other model under the provisions of § 21.101(a)(1).

Novel or Unusual Design Features

The Israel Aircraft Industries Model 1124 airplane will incorporate an air data display unit that displays critical flight parameters to the flightcrew. These systems can be susceptible to disruption to command and/or response signals as a result of electrical and magnetic interference. This disruption of signals could result in loss of all critical flight displays and announcement functions or present misleading information to the pilot. The current airworthiness standards (14 CFR part 25) do not contain adequate or appropriate safety standards that address protecting this equipment from the adverse effects of HIRF. Accordingly, these instruments are considered to be a novel or unusual design feature.

Discussion

There is no specific regulation that addresses protection requirements for electrical and electronic systems from HIRF. Increased power levels from ground-based radio transmitters and the growing use of sensitive avionic/electronic and electrical systems to command and control airplanes have made it necessary to provide adequate protection.

To ensure that a level of safety is achieved equivalent to that intended by the regulations incorporated by reference, special conditions are needed for the Israel Aircraft Industries Model 1124, as modified by Duncan Aviation, Inc. These special conditions require that new avionic/electronic and electrical systems such as the air data display unit, which perform critical functions, be designed and installed to preclude component damage and interruption of function due to both the direct and indirect effects of HIRF.

High-Intensity Radiated Fields (HIRF)

With the trend toward increased power levels from ground-based transmitters, plus the advent of space and satellite communications, coupled with electronic command and control of the airplane, the immunity of critical digital avionics systems to HIRF must be established.

It is not possible to precisely define the HIRF to which the airplane will be exposed in service. There is also uncertainty concerning the effectiveness of airframe shielding for HIRF. Furthermore, coupling of electromagnetic energy to cockpit-installed equipment through the cockpit window apertures is undefined. Based on surveys and analysis of existing HIRF emitters, an adequate level of protection exists when compliance with the HIRF protection special condition is shown with either paragraph 1 OR paragraph 2, below:

1. A minimum threat of 100 volts rms per meter electric field strength from 10 KHz to 18 GHz.

a. The threat must be applied to the system elements and their associated wiring harnesses without the benefit of airframe shielding.

b. Demonstration of this level of protection is established through system tests and analysis.

2. A threat external to the airframe of the field strengths indicated in the table below for the frequency ranges indicated. Both peak and average field strength components from the table below are to be demonstrated.

TABLE 1

Frequency	Field strength (volts per meter)	
	Peak	Average
10 kHz–100 kHz	50	50
100 kHz–500 kHz	50	50
500 kHz–2 MHz	50	50
2 MHz–30 MHz	100	100
30 MHz–70 MHz	50	50
70 MHz–100 MHz	50	50
100 MHz–200 MHz ...	100	100
200 MHz–400 MHz ...	100	100
400MHz–700 MHz	700	50
700 MHz–1 GHz	700	100
1 GHz–2 GHz	2000	200
2 GHz–4 GHz	3000	200
4 GHz–6 GHz	3000	200
6 GHz–8 GHz	1000	200
8 GHz–12 GHz	3000	300
12 GHz–18 GHz	2000	200
18 GHz–40 GHz	600	200

The field strengths are expressed in terms of peak of the root-mean-square (rms) over the complete modulation period.

The threat levels identified above are the result of an FAA review of existing studies on the subject of HIRF, in light of the ongoing work of the Electromagnetic Effects Harmonization Working Group of the Aviation Rulemaking Advisory Committee.

Applicability

As discussed above, these special conditions are applicable to the Israel Aircraft Industries Model 1124 airplane modified by Duncan Aviation, Inc. to include the air data display unit. Should Duncan apply at a later date for a supplemental type certificate to modify any other model included on the same type certificate to incorporate 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 Israel Aircraft Industries Model 1124 airplanes modified by Duncan Aviation, Inc. 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 the special conditions for this airplane 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 Israel Aircraft Industries Model 1124 airplanes modified by Duncan Aviation, Inc.

1. *Protection from Unwanted Effects of High-Intensity Radiated Fields (HIRF).* Each electrical and electronic system that performs critical functions must be designed and installed to ensure that the operation and operational capability of these systems to perform critical functions are not adversely affected when the airplane is exposed to high intensity radiated fields.

2. For the purpose of these special conditions, the following definition applies:

Critical Functions: Functions whose failure would contribute to or cause a failure condition that would prevent the continued safe flight and landing of the airplane.

Issued in Renton, Washington, on May 16, 2002.

Linda Navarro,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 02–13132 Filed 5–23–02; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001–CE–32–AD; Amendment 39–12759; AD 2002–10–13]

RIN 2120–AA64

Airworthiness Directives; Raytheon Aircraft Company Model 58P, 60, A60, B60, and 65–88 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that applies to certain Raytheon Aircraft Company (Raytheon) Model 58P, 60, A60, B60, and 65–88 airplanes. This AD requires you to install new exterior operating instruction placards for the exit doors. This AD is the result of Raytheon improving the visibility and understandability of the door operating instruction placards. This was done as a result of difficulty opening the emergency exits of a similar type design airplane. The actions specified by this AD are intended to assure that clear and complete operating instructions are visible for opening the emergency exit doors. If not visible and understandable, this could result in the inability to open the exit door during an emergency situation.

DATES: This AD becomes effective on July 8, 2002.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of July 8, 2002.

ADDRESSES: You may get the service information referenced in this AD from Raytheon Aircraft Company, P.O. Box 85, Wichita, Kansas 67201–0085; telephone: (800) 429–5372 or (316) 676–3140. You may view this information at the Federal Aviation Administration (FAA), Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2001-CE–32–AD, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Steven E. Potter, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946–4124; facsimile: (316) 946–4407.

SUPPLEMENTARY INFORMATION:

Discussion

What Events Have Caused This AD?

The FAA believes that the instructions for opening the exit doors are either not visible or not easy to understand on Raytheon Model 58P, 60, A60, B60, and 65–88 airplanes. This is based on an accident involving a similar type design airplane that resulted in the issuance of AD 97–04–02. AD 97–04–02 was later superseded by AD 98–21–20 to incorporate more visible and understandable instructions.

What Is the Potential Impact if FAA Took No Action?

If the exterior door operating instruction placards are not visible and understandable, this could result in the inability to open the exit doors during an emergency situation.

Has FAA Taken Any Action to This Point?

We issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to certain Raytheon Model 58P, 60, A60, B60, and 65–88 airplanes. This proposal was published in the **Federal Register** as a notice of proposed rulemaking (NPRM) on January 14, 2002 (67 FR 1670). The NPRM proposed to require you to install new exterior operating instruction placards for the exit doors.

Was the Public Invited to Comment?

The FAA encouraged interested persons to participate in the making of this amendment. We did not receive any comments on the proposed rule or on our determination of the cost to the public.

FAA's Determination

What Is FAA's Final Determination on This Issue?

After careful review of all available information related to the subject presented above, we have determined that air safety and the public interest require the adoption of the rule as proposed except for minor editorial corrections. We have determined that these minor corrections:

- Provide the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Cost Impact

How Many Airplanes Does This AD Impact?

We estimate that this AD affects 850 airplanes in the U.S. registry.

What Is the Cost Impact of This AD on Owners/Operators of the Affected Airplanes?

We estimate the following costs to accomplish the modification:

Labor cost	Parts cost	Total cost per airplane	Total cost on U.S. operators
2 workhours × $60 per hour = $120.	$40	$120 + $40 = $160	$160 × 850 = $136,000.