Frequency	Field strength (volts per meter)	
	Peak	Average
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 root-mean-square (rms) values.

or, (2) The applicant may demonstrate by a system test and analysis that the electrical and electronic systems that perform critical functions can withstand a minimum threat of 100 volts per meter peak electrical strength, without the benefit of airplane structural shielding, in the frequency range of 10 kHz to 18 GHz. When using this test to show compliance with the HIRF requirements, no credit is given for signal attenuation due to installation. Data used for engine certification may be used, when appropriate, for airplane certification.

2. *Electronic Engine Control System.* The installation of the electronic engine control system must comply with the requirements of § 23.1309(a) through (e) at Amendment 23–49. The intent of this requirement is not to re-evaluate the inherent hardware reliability of the control itself, but rather determine the effects, including environmental effects addressed in § 23.1309(e), on the airplane systems and engine control system when installing the control on the airplane. When appropriate, engine certification data may be used when showing compliance with this requirement.

With respect to compliance with § 23.1309(e), the levels required for compliance shall be at the levels for catastrophic failure conditions.

Issued in Kansas City, Missouri on June 7, 2006.

David R. Showers,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E6–9228 Filed 6–13–06; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 23

[Docket No. CE242; Special Conditions No. 23–182–SC]

Special Conditions: AmSafe, Inc.; Approved Model List; Installation of AmSafe Inflatable Restraints in Normal and Utility Category Non-23.562 Certified Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions.

SUMMARY: These special conditions are issued for the installation of an AmSafe, Inc., Inflatable Two-, Three-, Four- or Five-Point Restraint Safety Belt with an Integrated Airbag Device on various airplane models. These airplanes, as modified by AmSafe, Inc., will have a novel or unusual design feature(s) associated with the lap belt or shoulder harness portion of the safety belt, which contains an integrated airbag device. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. 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: *Effective Date:* The effective date of these special conditions is June 6, 2006.

FOR FURTHER INFORMATION CONTACT: Mr. Mark James, Federal Aviation Administration, Aircraft Certification Service, Small Airplane Directorate, ACE–111, 901 Locust, Room 301, Kansas City, Missouri 64106; 816–329–4137, fax 816–329–4090 e-mail *mark.james@faa.gov*.

SUPPLEMENTARY INFORMATION:

Background

On August 19, 2005, AmSafe, Inc., Aviation Inflatable Restraints (AAIR) Division, 1043 North 47th Avenue, Phoenix, AZ 85043, applied for a supplemental type certificate for the installation of an inflatable restraint in various airplane models certificated before the dynamic structural requirements as specified in 14 CFR, part 23, § 23.562, took effect.

The inflatable restraint system is either a two-, three-, four-, or five-point safety belt restraint system consisting of a shoulder harness and a lap belt with an inflatable airbag attached to either the lap belt or the shoulder harness. The inflatable portion of the restraint system will rely on sensors to electronically activate the inflator for deployment. The inflatable restraint system will be made available on the pilot, co-pilot, and passenger seats of these airplanes.

In the event of an emergency landing, the airbag will inflate and provide a protective cushion between the occupant's head and structure within the airplane. This will reduce the potential for head and torso injury. The inflatable restraint behaves in a manner that is similar to an automotive airbag, but in this case, the airbag is integrated into the lap or shoulder belt. While airbags and inflatable restraints are standard in the automotive industry, the use of an inflatable restraint system is novel for general aviation operations.

The FAA has determined that this project will be accomplished on the basis of not lowering the current level of safety of the airplanes' original certification basis. The FAA has two primary safety concerns with the installation of airbags or inflatable restraints:

- That they perform properly under foreseeable operating conditions; and
- That they do not perform in a manner or at such times as to impede the pilot's ability to maintain control of the airplane or constitute a hazard to the airplane or occupants.

The latter point has the potential to be the more rigorous of the requirements. An unexpected deployment while conducting the takeoff or landing phases of flight may result in an unsafe condition. The unexpected deployment may either startle the pilot, or generate a force sufficient to cause a sudden movement of the control yoke. Either action could result in a loss of control of the airplane, the consequences of which are magnified due to the low operating altitudes during these phases of flight. The FAA has considered this when establishing these special conditions.

The inflatable restraint system relies on sensors to electronically activate the inflator for deployment. These sensors could be susceptible to inadvertent activation, causing deployment in a potentially unsafe manner. The consequences of an inadvertent deployment must be considered in establishing the reliability of the system. AmSafe, Inc., must show that the effects of an inadvertent deployment in flight are not a hazard to the airplane or that an inadvertent deployment is extremely improbable. In addition, general aviation aircraft are susceptible to a large amount of cumulative wear and tear on a restraint system. It is likely that the potential for inadvertent

deployment increases as a result of this cumulative damage. Therefore, the impact of wear and tear on inadvertent deployment must be considered. Due to the effects of this cumulative damage, a life limit must be established for the appropriate system components in the restraint system design.

There are additional factors to be considered to minimize the chances of inadvertent deployment. General aviation airplanes are exposed to a unique operating environment, since the same airplane may be used by both experienced and student pilots. The effect of this environment on inadvertent deployment must be understood. Therefore, qualification testing of the firing hardware/software must consider the following:

- The airplane vibration levels appropriate for a general aviation airplane; and
- The inertial loads that result from typical flight or ground maneuvers, including gusts and hard landings.

Any tendency for the firing mechanism to activate as a result of these loads or acceleration levels is unacceptable.

Other influences on inadvertent deployment include high intensity electromagnetic fields (HIRF) and lightning. Since the sensors that trigger deployment are electronic, they must be protected from the effects of these threats. To comply with HIRF and lightning requirements, the AmSafe, Inc., inflatable restraint system is considered a critical system, since its inadvertent deployment could have a hazardous effect on the airplane.

Given the level of safety of the retrofitted airplane occupant restraints, the inflatable restraint system must show that it will offer an equivalent level of protection in the event of an emergency landing. In the event of a deployment, the restraint must still be at least as strong as a Technical Standard Order approved belt and shoulder harness. There is no requirement for the inflatable portion of the restraint to offer protection during multiple impacts, where more than one impact would require protection.

The inflatable restraint system must deploy and provide protection for each occupant during emergency landing conditions as specified in the original certification basis. The seats of the various airplane models were certificated prior to the dynamic structural requirements of § 23.562. Therefore, the emergency landing loads conditions identified in the original certification basis of the airplane must be used to satisfy this requirement. Compliance will be demonstrated using the test condition specified in the original certification basis. It must also be shown that the crash sensor will trigger when exposed to a rapidly applied deceleration, like an actual crash event. Therefore, the test crash pulses identified in § 23.562 must be used to satisfy this requirement, although, the peak ''G'' may be reduced to a level meeting the original certification requirements of the aircraft. Testing to these pulses will demonstrate that the crash sensor will trigger when exposed to a rapidly applied deceleration, like an actual crash event.

It is possible a wide range of occupants will use the inflatable restraint. Thus, the protection offered by this restraint should be effective for occupants that range from the fifth percentile female to the ninety-fifth percentile male.

In support of this operational capability, there must be a means to verify the integrity of this system before each flight. As an option, AmSafe, Inc., can establish inspection intervals where they have demonstrated the system to be reliable between these intervals.

It is possible that an inflatable restraint will be ''armed'' even though no occupant is using the seat. While there will be means to verify the integrity of the system before flight, it is also prudent to require that unoccupied seats with active restraints not constitute a hazard to any occupant. This will protect any individual performing maintenance inside the cockpit while the aircraft is on the ground. The restraint must also provide suitable visual warnings that would alert rescue personnel to the presence of an inflatable restraint system.

In addition, the design must prevent the inflatable seatbelt from being incorrectly buckled and/or installed such that the airbag would not properly deploy. As an alternative, AmSafe, Inc., may show that such deployment is not hazardous to the occupant and will still provide the required protection.

The cabins of the various model airplanes identified in these special conditions are confined areas, and the FAA is concerned that noxious gases may accumulate in the event of airbag deployment. When deployment does occur, either by design or inadvertently, there must not be a release of hazardous quantities of gas or particulate matter into the cockpit.

An inflatable restraint should not increase the risk already associated with fire. Therefore, the inflatable restraint should be protected from the effects of fire, so that an additional hazard is not created by, for example, a rupture of the inflator.

The airbag is likely to have a large volume displacement, and possibly impede the egress of an occupant. Since the bag deflates to absorb energy, it is likely that the inflatable restraint would be deflated at the time an occupant would attempt egress. However, it is appropriate to specify a time interval after which the inflatable restraint may not impede rapid egress. Ten seconds has been chosen as reasonable time. This time limit will offer a level of protection throughout the impact event.

Finally, there is an elevated risk associated with inadvertent deployment for agricultural airplanes, which are type certificated under the restricted category. This is due to the unique operating environment and low altitude flying of these airplanes. The FAA is still trying to understand the risk and benefit associated with the installation of these systems into restricted category airplanes in general and agricultural airplanes specifically. Therefore, the installation of the AAIR system is currently prohibited in agricultural airplanes type certificated under the restricted category.

Special conditions for the installation of AAIR systems on other Non-23.562 certificated airplanes have been issued and no substantive public comments were received. Since the same special conditions were issued multiple times for different model airplanes with no substantive public comments, the FAA began issuing direct final special conditions with an invitation for public comment. This was done to eliminate the waiting period for public comments, and so AmSafe, Inc., could proceed with the project, since no comments were expected.

These previous special conditions were issued for a single model airplane or for variants of a model from a single airplane manufacturer, and required dynamic testing of each AAIR system installation for showing compliance. The AML Supplemental Type Certificate sought by AmSafe, Inc., has numerous airplane models and manufacturers. Since AmSafe, Inc., has previously demonstrated by dynamic testing, and has the supporting data, that the Electronics Module Assembly (EMA) and the inflator assembly will function as intended in a simulated dynamic emergency landing, it is not necessary to repeat the test for each airplane model shown in these special conditions.

This is a departure from the method of showing compliance used in the prior special conditions. Testing is required to show compliance, but it is not necessary to repeat the testing for each airplane installation. Existing test data

is adequate for showing compliance for other airplanes where the AAIR equipment is identical and the installation is nearly identical. Since this is a substantial change in the philosophy of showing compliance, it was prudent to give the public time to comment on these special conditions. We published a notice of proposed special conditions No. 23–06–02–SC on April 20, 2006 (71FR 20368). The comment period closed on May 22, 2006.

Type Certification Basis

Under the provisions of 14 CFR part 21, § 21.101, AmSafe, Inc., must show that the affected airplane models, as changed, continue to meet the applicable provisions of the regulations incorporated by reference in the Type Certificate Numbers listed below 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'' and can be found in the Type Certificate Numbers listed below. The following models are covered by this special condition:

LIST OF ALL AIRPLANE MODELS AND APPLICABLE TCDS

Make	Model	TC holder	TCDS	Certification basis
Aerostar	PA–60–600 (Aerostar 600) PA–60–601 (Aerostar 601) PA–60–601P (Aerostar 601P) PA–60–602P (Aerostar 602P) PA–60–700P (Aerostar 700P)	Aerostar Aircraft Corporation.	A17WE Revision 22.	14 CFR Part 23.
All American	10A	All American Aircraft, Inc	A–792	CAR 3.
American Champion (Champion).	402	American Champion Aircraft Corp.	A3CE Revision 5	CAR 3.
American Champion (Bellanca) (Champion) (Aeronca).	7AC, 7ACA, 7EC, 7GCB, S7AC, S7EC, 7GCBA (L–16A), 7BCM, 7ECA, 7GCBC (L–16B), 7CCM, 7FC, 7HC, S7CCM, 7GC, 7JC, 7DC, 7GCA, 7KC, S7DC, 7GCAA, 7KCAB.	American Champion Aircraft Corp.	A–759 Revision 67	CAR 4a.
American Champion (Bellanca) (Trytek) (Aeronca)	11AC, S11AC, 11BC, S11BC	American Champion Aircraft Corp.	A–761 Revision 17	CAR 4a.
American Champion (Bellanca) (Trytek) (Aeronca)	11CC, S11CC	American Champion Aircraft Corporation.	A–796 Revision 14	CAR 3.
Varga (Morrisey)	2150, 2150A, 2180	Augustair, Inc	4A19 Revision 9	CAR 3.
Bellanca	14–13, 14–13–2, 14–13–3, 14–13–3W	Bellanca Aircraft Corporation.	A–773 Revision 10	CAR 4a.
Bellanca	14–9, 14–9L	Bellanca Aircraft Corporation.	TC716	CAR 4a.
Cessna	310, 310J, 310A (USAF U–3A), 310J–1, 310B, E310J, 310C, 310K, 310D, 310L, 310E (USAF U–3B), 310N, 310F, 310P, 310G, T310P, 310H, 310Q, E310H, T310Q, 310I, 310R, T310R.	Cessna Aircraft Company	3A10 Revision 62	CAR 3.
Cessna	321 (Navy OE–2)	Cessna Aircraft Company	3A11 Revision 6	CAR 3.
Cessna	172, 172I, 172A, 172K, 172B, 172L, 172C, 172M, 172D, 172N, 172E, 172P, 172F (USAF T–41A), 172Q, 172G, 172H, (USAF T–41A).	Cessna Aircraft Company	3A12 Revision 73	CAR 3.
Cessna	175, 175A, 175B, 175C, P172D, R172E (USAF T–41B) (USAF T–41C and D), R172F (USAF T–41D), R172G (USAF T–41C or D), R172H (USAF T–41D), R172J, R172K, 172RG.	Cessna Aircraft Company	3A17 Revision 45	CAR 3.
Cessna	182, 182K, 182A, 182L, 182B, 182M, 182C, 182N, 182D, 182P, 182E, 182Q, 182F, 182R, 182G, R182, 182H, T182, 182J, TR182.	Cessna Aircraft Company	3A13 Revision 64	CAR 3.
Cessna	210, 210K, 210A, T210K, 210B, 210L, 210C, T210L, 210D, 210M, 210E, T210M, 210F, 210N, T210F, P210N, 210G, T210N, T210G, 210R, 210H, P210R, T210H, T210R, 210J, 210–5 (205), T210J, 210–5A (205A).	Cessna Aircraft Company	3A21 Revision 46	CAR 3.
Cessna	185, A185E, 185A, A185F, 185B, 185C, 185D, 185E.	Cessna Aircraft Company	3A24 Revision 37	CAR 3.
Cessna	320, 320F, 320–1, 335, 320A, 340, 320B, 340A, 320C, 320D, 320E.	Cessna Aircraft Company	3A25 Revision 25	CAR 3.
Cessna	140A	Cessna Aircraft Company	5A2 Revision 21	CAR 3.
Cessna	180, 180E, 180A, 180F, 180B, 180G, 180C, 180H, 180D, 180J, 180E, 180K.	Cessna Aircraft Company	5A6 Revision 66	CAR 3

LIST OF ALL AIRPLANE MODELS AND APPLICABLE TCDS—Continued

Make	Model	TC holder	TCDS	Certification basis
Cessna	336	Cessna Aircraft Company ..	A2CE Revision 7 ...	CAR 3.
Cessna	206, U206B, TP206D, P206, U206C, TP206E, P206A, U206D, TU206A, P206B, U206E, TU206B, P206C, U206F, TU206C, P206D, U206G, TU206D, P206E, TP206A, TU206E, U206, TP206B, TU206F, U206A, TP206C, TU206G.	Cessna Aircraft Company ..	A4CE Revision 43	CAR 3.
Cessna	337A (USAF 02B), T337E, 337B, 337F, M337B (USAF 02A), T337F, T337B, 337G, 337C, T337G, T337C, 337H, 337D, P337H, T337D, T337H, T337H–SP.	Cessna Aircraft Company ..	A6CE Revision 40	CAR 3/14 CFR Part 23.
Cessna	401, 411A, 401A, 414, 401B, 414A, 402, 421, 402A, 421A, 402B, 421B, 402C, 421C, 411, 425.	Cessna Aircraft Company ..	A7CE Revision 46	CAR 3.
Cessna	190 (LC–126A,B,C), 195, 195A, 195B	Cessna Aircraft Company ..	A–790 Revision 36	CAR 3.
Cessna	170, 170A, 170B	Cessna Aircraft Company ..	A–799 Revision 54	CAR 3.
Cessna	150, 150J, 150A, 150K, 150B, A150K, 150C, 150L, 150D, A150L, 150E, 150M, 150F, A150M, 150G, 152, 150H, A152.	Cessna Aircraft Company ..	3A19 Revision 44 ..	CAR 3.
Cessna	177, 177A, 177B	Cessna Aircraft Company ..	A13CE Revision 24	14 CFR Part 23.
Cessna	404, 406	Cessna Aircraft Company ..	A25CE Revision 11	14 CFR Part 23.
Cessna	208, 208A, 208B	Cessna Aircraft Company ..	A37CE Revision 12	14 CFR Part 23.
Cessna	441	Cessna Aircraft Company ..	A28CE Revision 12	14 CFR Part 23.
Cessna	120, 140	Cessna Aircraft Company ..	A–768 Revision 34	CAR 4a.
Commander Aircraft	Model 112, Model 114, Model 112TC, Model 112B, Model 112TCA, Model 114A, Model 114B, Model 114TC.	Commander Aircraft Company.	A12SO Revision 21	14 CFR Part 23.
Great Lakes	2T–1A, 2T–1A–1, 2T–1A–2	Great Lakes Aircraft Company, LLC.	A18EA Revision 10	Aeronautical Bulletin No. 7–A.
Helio (Taylorcraft)	15A, 20	Helio Aircraft Corporation ..	3A3 Revision 7	CAR 4a.
Learjet	23	Learjet Inc	A5CE Revision 10	CAR 3.
Lockheed	402–2	Lockheed Aircraft International.	2A11 Revision 4	CAR 3.
Land-Air (Temco) (Luscombe)	11A, 11E	Luscombe Aircraft Corporation.	A–804 Revision 14	CAR 3.
Maule	Bee Dee M–4, M–5–180C, MXT–7–160, M–4–180V, M–4 M–5–200, MX–7–180A, M–4C, M–5–210C, MXT–7–180A, M–4S, M–5–210TC, MX–7–180B, M–4T, M–5–220C, M–7–235B, M–4–180C, M–5–235C, M–7–235A, M–4–180S, M–6–180, M–7–235C, M–4–180T, M–6–235, MX–7–180C, M–4–210, M–7–235, M–7–260, M–4–210C, MX–7–235, MT–7–260, M–4–210S, MX–7–180, M–7–260C, M–4–210T, MX–7–420, M–7–420AC, M–4–220, MXT–7–180, MX–7–160C, M–4–220C, MT–7–235, MX–7–180AC, M–4–220S, M–8–235, M–7–420A, M–4–220T, MX–7–160, MT–7–420.	Maule Aerospace Technology, Inc.	3A23 Revision 30 ..	CAR 3.
Mooney	M20, M20A, M20B, M20C, M20D, M20E, M20F, M20G, M20J, M20K (Up to S/N 25–2000), M20L.	Mooney Airplane Company, Inc.	2A3 Revision 47	CAR 3.
Interceptor (Aero Commander) (Meyers)	200, 200A, 200B, 200C, 200D, 400	Prop-Jets, Inc	3A18 Revision 16 ..	CAR 3.
Beech	35–33, J35, 35–A33, K35, 35–B33, M35, 35–C33, N35, 35–C33A, P35, E33, S35, E33A, V35, E33C, V35A, F33, V35B, F33A, 36, F33C, A36, G33, A36TC, H35, B36TC, G36.	Raytheon Aircraft Company	3A15 Revision 90 ..	CAR 3.
Beech	45 (YT–34), A45 (T–34A, B–45), D45 (T–34B).	Raytheon Aircraft Company	5A3 Revision 25	CAR 03.
Beech	19A, B23, B19, C23, M19A, A24, 23, A24R, A23, B24R, A23A, C24R, A23–19, A23–24.	Raytheon Aircraft Company	A1CE Revision 34	CAR 3.

LIST OF ALL AIRPLANE MODELS AND APPLICABLE TCDS—Continued

Make	Model	TC holder	TCDS	Certification basis
Beech	3N, E18S–9700, 3NM, G18S, 3TM, H18, JRB–6, C–45G, TC–45G, D18C, C–45H, TC–45H, D18S, TC–45J or E18S, UC–45J (SNB–5).	Raytheon Aircraft Company	A–765 Revision 74	CAR 03.
	RC–45J (SNB–5P)			
Beech	35, A35, E35, B35, F35, C35, G35, D35, 35R.	Raytheon Aircraft Company	A–777 Revision 57	CAR 03.
Raytheon	200, A100–1 (U–21J), 200C, A200 (C–12A), 200CT, A200 (C–12C), 200T, A200C (UC–12B), B200, A200CT (C–12D), B200C, A200CT (FWC–12D), B200CT, A200CT (C–12F), B200T, A200CT (RC–12D), 300, A200CT (RC–12G), 300LW, A200CT (RC–12H), B300, A200CT (RC–12K), B300C, A200CT (RC–12P), 1900, A200CT (RC–12Q), 1900C, B200C (C–12F), 1900D, B200C (UC–12M), B200C (C–12R), B200C (UC–12F), 1900C (C–12J).	Raytheon Aircraft Company	A24CE Revision 91	14 CFR Part 23.
Beech	B95A, D55, D95A, D55A, E95, E55, 95–55, E55A, 95–A55, 56TC, 95–B55, A56TC, 95–B55A, 58, 95–B55B (T–42A), 58A, 95–C55, 95, 95–C55A, B95, G58.	Raytheon Aircraft Company	3A16 Revision 81 ..	CAR 3.
Beech	60, A60, B60	Raytheon Aircraft Company	A12CE Revision 23	14 CFR Part 23.
Beech	58P, 58PA, 58TC, 58TCA	Raytheon Aircraft Company	A23CE Revision 14	14 CFR Part 23.
Cessna	Cessna F172D	Reims Aviation S.A	A4EU Revision 11	CAR 10/CAR 3.
	Cessna F172E			
	Cessna F172F			
	Cessna F172G			
	Cessna F172H			
	Cessna F172K			
	Cessna F172L			
	Cessna F172M			
	Cessna F172N			
	Cessna F172P			
Socata	TB 9, TB 10, TB 20, TB 21, TB 200	Socata—Groupe Aerospatiale.	A51EU Revision 14	14 CFR Part 23.
Pitts	S–1S, S–1T, S–2, S–2A, S–2S, S–2B, S–2C.	Sky International Inc. (Aviat Aircraft, Inc.).	A8SO Revision 21	14 CFR Part 23.
Taylorcraft	19, F19, F21, F21A, F21B, F22, F22A, F22B, F22C.	Taylorcraft Aviation, LLC ...	1A9 Revision 19	CAR 3.
Taylorcraft	BC, BCS12–D, BCS, BC12–D1, BC–65, BCS12–D1, BCS–65, BC12D–85, BC12–65 (Army L–2H), BCS12D–85, BCS12–65, BC12D–4–85, BC12–D, BCS12D–4–85.	Taylorcraft Aviation, LLC ...	A–696 Revision 22	CAR 04
Taylorcraft	(Army L–2G) BF, BFS, BF–60, BFS–60, BF–65, BFS–65, (Army L–2K) BF 12–65, BFS–65.	Taylorcraft, Inc	A–699 Revision 5 ..	CAR 4a
Luscombe	8, 8D, 8A, 8E, 8B, 8F, 8C, T–8F	The Don Luscombe Aviation History Foundation, Inc.	A–694 Revision 23	CAR 4a
Piper	PA–28–140, PA–28–151, PA–28–150, PA–28–161, PA–28–160, PA–28–181, PA–28–180, PA–28R–201, PA–28–235, PA–28R–201T, PA–28S–160, PA–28–236, PA–28S–180, PA–28RT–201, PA–28R–180, PA–28RT–201T, PA–28R–200, PA–28–201T.	The New Piper Aircraft, Inc	2A13 Revision 47 ..	CAR 3.
Piper	PA–30, PA–39, PA–40	The New Piper Aircraft, Inc	A1EA Revision 16	CAR 3.
Piper	PA–32–260, PA–32R–301 (SP), PA–32–300, PA–32R–301 (HP), PA–32S–300, PA–32R–301T, PA–32R–300, PA–32–301, PA–32RT–300, PA–32–301T, PA–32RT–300T, PA–32–301FT, PA–32–301XTC.	The New Piper Aircraft, Inc	A3SO Revision 29	CAR 3.
Piper	PA–34–200, PA–34–200T, PA–34–220T.	The New Piper Aircraft, Inc	A7SO Revision 16	14 CFR Part 23.

LIST OF ALL AIRPLANE MODELS AND APPLICABLE TCDS—Continued

Make	Model	TC holder	TCDS	Certification basis
Piper	PA–31P, PA–31T, PA–31T1, PA–31T2, PA–31T3, PA–31P–350.	The New Piper Aircraft, Inc	A8EA Revision 22	CAR 3.
Piper	PA–36–285, PA–36–300, PA–36–375 ..	The New Piper Aircraft, Inc	A9SO Revision 9 ...	14 CFR Part 23.
Piper	PA–36–285, PA–36–300, PA–36–375 ..	The New Piper Aircraft, Inc	A10SO Revision 12	14 CFR Part 21/14 CFR Part 23.
Piper	PA–38–112	The New Piper Aircraft, Inc	A18SO Revision 4	14 CFR Part 23.
Piper	PA–44–180, PA–44–180T	The New Piper Aircraft, Inc	A19SO Revision 9	14 CFR Part 23.
Piper	PA–31, PA–31–300, PA–31–325, PA–31–350.	The New Piper Aircraft, Inc	A20SO Revision 10	CAR 3.
Piper	PA–42, PA–42–720, PA–42–1000	The New Piper Aircraft, Inc	A23SO Revision 17	14 CFR Part 23
Piper	PA–46–310P, PA–46–350P, PA–46–500TP.	The New Piper Aircraft, Inc	A25SO Revision 14	14 CFR Part 23.
Tiger Aircraft LLC (American General).	AA–1, AA–1A, AA–1B, AA–1C	Tiger Aircraft LLC	A11EA Revision 10	14 CFR Part 23.
Tiger Aircraft	AA–5, AA–5A, AA–5B, AG–5B	Tiger Aircraft LLC	A16EA Revision 13	14 CFR Part 23.
Twin Commander	500, 500–A, 500–B, 500–U, 520, 560, 560–A, 560–E, 500–S.	Twin Commander Aircraft Corporation.	6A1 Revision 45	CAR 3.
Twin Commander	560–F, 681, 680, 690, 680E, 685, 680F, 690A, 720, 690B, 680FL, 690C, 680FL(P), 690D, 680T, 695, 680V, 695A, 680W, 695B.	Twin Commander Aircraft Corporation.	2A4 Revision 46	CAR 3.
Univair (Stinson)	108, 108–1, 108–2, 108–3, 108–5	Univair Aircraft Corporation	A–767 Revision 27	CAR 3.
Univair	(ERCO) 415–D (ERCO) E (ERCO) G (Forney) F–1 (Forney) F–1A (Alon) A–2 (Alon) A2–A (Mooney) M10	Univair Aircraft Corporation	A–787 Revision 33	CAR 3.
Univair (Mooney)	(ERCO) 415–C, (ERCO) 415–CD	Univair Aircraft Corporation	A–718 Revision 29	CAR 4a.

For all the models listed above, the certification basis also includes all exemptions, if any; equivalent level of safety findings, if any; and special conditions not relevant to the special conditions adopted by this rulemaking action.

If the Administrator finds that the applicable airworthiness regulations (i.e., CAR 3 or part 23, as amended) do not contain adequate or appropriate safety standards for the AmSafe, Inc., inflatable restraint as installed on these models because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions, as appropriate, 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. Special conditions are initially applicable to the model for which they are issued. Should the applicant 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, the special conditions would also apply to that model under the provisions of § 21.101.

Novel or Unusual Design Features

The various airplane models will incorporate the following novel or unusual design feature:

The AmSafe, Inc., Inflatable Two-, Three-, Four-, or Five-Point Restraint Safety Belt with an Integrated Airbag Device. The purpose of the airbag is to reduce the potential for injury in the event of an accident. In a severe impact, an airbag will deploy from the restraint, in a manner similar to an automotive airbag. The airbag will deploy between the head of the occupant and airplane interior structure. This will, therefore, provide some protection to the head of the occupant. The restraint will rely on sensors to electronically activate the inflator for deployment.

The Code of Federal Regulations state performance criteria for seats and restraints in an objective manner. However, none of these criteria are adequate to address the specific issues raised concerning inflatable restraints. Therefore, the FAA has determined that, in addition to the requirements of part 21 and part 23, special conditions are needed to address the installation of this inflatable restraint.

Accordingly, these special conditions are adopted for the various airplane models equipped with the AmSafe, Inc., two-, three-, four-, or five-point inflatable restraint. Other conditions may be developed, as needed, based on further FAA review and discussions with the manufacturer and civil aviation authorities.

Discussion of Comments

A notice of proposed special conditions No. 23–06–02–SC for the various airplane models was published on April 20, 2006 (71FR 20368). No comments were received, and the special conditions are adopted as proposed.

Applicability

As discussed above, these special conditions are applicable to the various airplane models previously shown. Should AmSafe, Inc., apply at a later date for a supplemental type certificate to modify any other model included on the Type Certificates shown above, to incorporate the same novel or unusual design feature, the special conditions would apply to that model as well under the provisions of § 21.101(a)(1).

Under standard practice, the effective date of final special conditions would be 30 days after the date of publication in the **Federal Register**; however, as the certification date for some of the airplanes listed is imminent, the FAA finds that good cause exists to make

these special conditions effective upon issuance.

Conclusion

This action affects only certain novel or unusual design features on the previously identified airplane models. It is not a rule of general applicability, and it affects only the applicant who applied to the FAA for approval of these features on these airplanes.

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:

Authority: 49 U.S.C. 106(g), 40113 and 44701; 14 CFR 21.16 and 21.101; and 14 CFR 11.38 and 11.19.

The Special Conditions

The FAA has determined that this project will be accomplished on the basis of not lowering the current level of safety of the occupant restraint system for the airplane models listed in these 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 airplane models listed in these special conditions, modified by AmSafe, Incorporated. Inflatable Two-, Three-, Four-, or Five-Point Restraint Safety Belt with an Integrated Airbag Device installed in an airplane model.

1a. It must be shown that the inflatable restraint will provide restraint protection under the emergency landing conditions specified in the original certification basis of the airplane. Compliance will be demonstrated using the static test conditions specified in the original certification basis for each airplane.

1b. It must be shown that the crash sensor will trigger when exposed to a rapidly applied deceleration, like an actual emergency landing event. Therefore, compliance may be demonstrated using the deceleration pulse specified in paragraph 23.562, which may be modified as follows:

I. The peak longitudinal deceleration may be reduced, however the onset rate of the deceleration must be equal to or greater than the emergency landing pulse identified in paragraph 23.562.

II. The peak longitudinal deceleration must be above the deployment threshold of the sensor, and equal or greater than the forward static design longitudinal load factor required by the original certification basis of the airplane.

2. The inflatable restraint must provide adequate protection for each occupant. In addition, unoccupied seats that have an active restraint must not constitute a hazard to any occupant.

3. The design must prevent the inflatable restraint from being incorrectly buckled and/or incorrectly installed such that the airbag would not properly deploy. Alternatively, it must be shown that such deployment is not hazardous to the occupant and will provide the required protection.

4. It must be shown that the inflatable restraint system is not susceptible to inadvertent deployment as a result of wear and tear or the inertial loads resulting from in-flight or ground maneuvers (including gusts and hard landings) that are likely to be experienced in service.

5. It must be extremely improbable for an inadvertent deployment of the restraint system to occur, or an inadvertent deployment must not impede the pilot's ability to maintain control of the airplane or cause an unsafe condition (or hazard to the airplane). In addition, a deployed inflatable restraint must be at least as strong as a Technical Standard Order (C22g or C114) restraint.

6. It must be shown that deployment of the inflatable restraint system is not hazardous to the occupant or result in injuries that could impede rapid egress. This assessment should include occupants whose restraint is loosely fastened.

7. It must be shown that an inadvertent deployment that could cause injury to a sitting person is improbable. In addition, the restraint must also provide suitable visual warnings that would alert rescue personnel to the presence of an inflatable restraint system.

8. It must be shown that the inflatable restraint will not impede rapid egress of the occupants 10 seconds after its deployment.

9. For the purposes of complying with HIRF and lightning requirements, the inflatable restraint system is considered a critical system since its deployment could have a hazardous effect on the airplane.

10. It must be shown that the inflatable restraints will not release hazardous quantities of gas or particulate matter into the cabin.

11. The inflatable restraint system installation must be protected from the effects of fire such that no hazard to occupants will result.

12. There must be a means to verify the integrity of the inflatable restraint activation system before each flight or it must be demonstrated to reliably operate between inspection intervals.

13. A life limit must be established for appropriate system components.

14. Qualification testing of the internal firing mechanism must be performed at vibration levels appropriate for a general aviation airplane.

15. The installation of the AmSafe Aviation Inflatable Restraint (AAIR) system is prohibited in agricultural airplanes type certificated under the Restricted Category.

Issued in Kansas City, Missouri, on June 6, 2006.

David R. Showers,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E6–9226 Filed 6–13–06; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. 30499; Amdt. No. 3171]

Standard Instrument Approach Procedures; Miscellaneous Amendments

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment amends Standard Instrument Approach Procedures (SIAPs) for operations at certain airports. These regulatory actions are needed because of changes occurring in the National Airspace System, such as the commissioning of new navigational facilities, addition of new obstacles, or changes in air traffic requirements. These changes are designed to provide safe and efficient use of the navigable airspace and to promote safe flight operations under instrument flight rules at the affected airports.

DATES: This rule is effective June 14, 2006. The compliance date for each SIAP is specified in the amendatory provisions.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 14, 2006.

ADDRESSES: Availability of matter incorporated by reference in the amendment is as follows:

For Examination—

1. FAA Rules Docket, FAA Headquarters Building, 800