

**SUPPLEMENT S12  
TO THE AIRPLANE FLIGHT MANUAL  
DA 42 NG**

**AmSafe Aviation Inflatable Restraint  
AAIR V23**

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The technical information contained in this Supplement to the DA 42 NG Airplane Flight Manual is EASA approved under Approval Number EASA.10064326.



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## 0.2 RECORD OF REVISIONS

Rev. No.	Reason	Chapter	Page(s)	Date of Revision	Approval Note	Date of Approval	Date Inserted	Signature
1	OÄM 42-324/b	All	All, except cover page	18-Jan-2018	Rev. 1 to AFM Supplement S12 to AFM Doc.No. 7.01.16-E is approved under the authority of DOA No. EASA 21J.052	22-Jan-2018		
2	OÄM 42-334	0, 7	9-S12-3, 9-S12-4, 9-S12-12	20-Mar-2019	Rev. 2 to AFM Supplement S12 to AFM Doc.No. 7.01.16-E is approved under the authority of DOA No. EASA 21J.052	12-Apr-2019		

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### 0.3 LIST OF EFFECTIVE PAGES

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		9-S12-2	18-Jan-2018
		9-S12-3	20-Mar-2019
		9-S12-4	20-Mar-2019
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1		9-S12-6	18-Jan-2018
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3		9-S12-8	18-Jan-2018
4A		9-S12-9	18-Jan-2018
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## **1. GENERAL**

This Supplement supplies the information necessary for the operation of the airplane when the AmSafe Aviation Inflatable Restraint AAIR V23 is installed. The information contained within this Supplement is to be used in conjunction with the complete AFM.

This Supplement to the "Airplane Flight Manual DA 42 NG" is a permanent part of the AFM and must remain in the AFM at all times when the AmSafe Aviation Inflatable Restraint AAIR V23 is installed.

## 2. OPERATING LIMITATIONS

### 2.16 OTHER LIMITATIONS

#### 2.16.13 AMSAFE AVIATION INFLATABLE RESTRAINT AAIR V23

A child safety seat shall not be installed in any seat equipped with the V23 AAIR system.

Infants must not be seated with or without loop-belt in any seat equipped with the V23 AAIR system.

Child safety seats may be installed or infants may be seated in rear passenger seats equipped with AmSafe standard (non airbag equipped) restraint.

#### **NOTE**

For a seat equipped with the V23 AAIR system, the entire system including the airbag function is considered a minimum equipment to be operative

Seats equipped with the V23 AAIR system unserviceable (restraints and/or airbag function) must not be occupied.

### 3. EMERGENCY PROCEDURES

No change.



## **4A. NORMAL OPERATING PROCEDURES**

### **4A.6 CHECKLISTS FOR NORMAL OPERATING PROCEDURES**

#### **4A.6.22 AMSAFE AVIATION INFLATABLE RESTRAINT AAIR V23**

To activate the system, join (buckle) the three-point restraint in the same manner as any other three-point seatbelt. An empty right front or empty rear passenger seat restraint may or may not be buckled at pilot's discretion.

#### **4B. ABNORMAL OPERATING PROCEDURES**

No change.

#### **5. PERFORMANCE**

No change.

## 6. MASS AND BALANCE

### 6.5 EQUIPMENT LIST AND INVENTORY

Airplane Serial No.:		Registration:		Date:		Mass		Lever Arm	
Description	Type	Part No.	Manufacturer	S/N	installed	lbs	kg	in	m
Three-Point SAA Belt/Bag (Pilot Seat)		7053-1-011(031)-()*	AmSafe			3.010	1.365	92.52	2.350
Three-Point SAA Belt/Bag (Co-pilot Seat)		7053-1-021(041)-()*	AmSafe			3.010	1.365	92.52	2.350
Inflator Assembly (Pilot Seat)		508792-401	AmSafe			1.300	0.590	90.0	2.286
Inflator Assembly (Co-pilot Seat)		508792-401	AmSafe			1.300	0.590	91.3	2.319
Inflator Assembly (Pilot Seat)		512847-401	AmSafe			1.030	0.467	90.0	2.286
Inflator Assembly (Co-pilot Seat)		512847-401	AmSafe			1.030	0.467	91.3	2.319
EMA Assembly		508358-421	AmSafe			0.690	0.313	125.5	3.188
Three-Point SAA Belt/Bag (RH Rear Seat)		7057-1-011(031)-()*	AmSafe			2.660	1.207	126.80	3.221
Three-Point SAA Belt/Bag (LH Rear Seat)		7057-1-021(041)-()*	AmSafe			2.660	1.207	126.80	3.221
Inflator Assembly (LH Passenger Seat)		510385-401	AmSafe			1.300	0.590	128.9	3.274
Inflator Assembly (RH Passenger Seat)		510385-401	AmSafe			1.300	0.590	128.9	3.274
Inflator Assembly (LH Passenger Seat)		512847-401	AmSafe			1.130	0.513	128.9	3.274
Inflator Assembly (RH Passenger Seat)		512847-401	AmSafe			1.130	0.513	128.9	3.274
EMA Assembly		508358-421	AmSafe			0.690	0.313	125.5	3.188

\*The first ( ) dash numbers refer to seat belt airbag assemblies with Portugese warning labels. For installation kit and component grouping part numbers refer to the installation and installation kit specification drawings.

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## 7. DESCRIPTION OF THE AIRPLANE AND ITS SYSTEMS

### 7.16 AMSAFE AVIATION INFLATABLE RESTRAINT AAIR V23

The AAIR V23 is a self-contained, modular, three-point restraint system that improves protection from serious head-impact injury during a survivable aircraft crash by inclusion of an inflatable airbag to the lapbelt portion of the three-point restraint. An unbuckled restraint airbag will not inflate.

Refer to Figures 1 and 2 for identification of seats equipped with the V23 AAIR system.



Figure 1 (left): inflatable airbag on lapbelt portion of the three-point restraint (front)

Figure 2 (right): inflatable airbag on lapbelt portion of the three-point restraint (rear)

- With installation of OÄM 42-334 the AAIR V23 is installed on Pilot and Copilot seat only.

## 8. AIRPLANE HANDLING, CARE AND MAINTENANCE

No change.