Rev. B

# AMSAFE STATE OF THE ART RESTRAINT SYSTEM (SOARS) WEIGHT AND BALANCE INFORMATION

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#### Prepared for:

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# **REVISION HISTORY**

REV	ВҮ	APPROVED	DATE	REVISION SUMMARY	
-	D. Londonson	J. Magish	3/26/2018	Initial Issue.	
А	D. Londonson	J. Magish	4/20/2018	Section 1.0:  Removed reference to 514480.  Revised inflator drawing, was "512859" and now is "514519".  Added reference to 514518. Section 3.0:  Revised table 1 to reflect new inflator and EMA part numbers.	
В	D. Londonson			Section 2.1:  Revised the opening sentence and added reference to SD7336.	

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# 1.0 REFERENCES

The following reference documents, at their latest revision, form a part of this document to the extent specified herein.

### **AmSafe Documents**

K7336	Inflatable Kit Assembly
513046	Cable Assembly, Interface
513047	LRU/Inflator Cable Interface
514519	Inflator Assembly
514518	Electronic Module Assembly
509121	Airbag Equipped Label
ICA7336	Instructions for Continued Airworthiness AmSafe State of the Art Restraint
	System (SOARS)
SD7336	AmSafe State of the Art Restraint System (SOARS) System Description



#### 2.0 INTRODUCTION

This report provides an overview of the AmSafe SOARS system along with individual component weight information to support the end user/aircraft operator in evaluating aircraft weight and balance.

#### 2.1 SOARS Defined

AmSafe SOARS incorporates an airbag packed within a cover attached to the webbing of a standard restraint system assembly. When a predetermined deceleration event is registered within the electronic module assembly, an initiation signal engages the inflator to release gas and fill the airbag. The airbag deploys out through a rip stitch/seam within the airbag cover. A full SOARS system description is provided under AmSafe document number SD7336. The elements of a standard AmSafe SOARS kit, as defined within drawing number K7336, are listed below:

- 1. Inflatable Restraint System Assembly (TSO C114)
- 2. Interface Cable Assembly
- 3. LRU/Inflator Cable Interface
- 4. Body Block (Alignment Tool/Not for Flight)
- 5. Inflator Assembly
- 6. Electronic Module Assembly (EMA)
- 7. Airbag Equipped Label

Figure 1 provides an overview of the AmSafe SOARS kit.

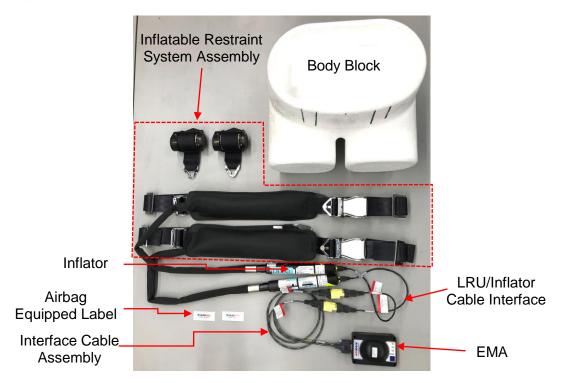


Figure 1 – SOARS Overview



#### 3.0 WEIGHT AND BALANCE INFORMATION

Table 1 provides a summary of weights for all the individual components of the AmSafe SOARS. Further reference can be made to system description SD7336 and instructions for continued airworthiness ICA7336.

Table 1 – SOARS Component Weights Summary

PART NUMBER	DESCRIPTION	WEIGHT (LBS)
7336-1-011-2396	Inflatable Restraint System Assembly (LH)	2.110
7336-1-021-2396	Inflatable Restraint System Assembly (RH)	2.110
513046-209-3636	046-209-3636 Interface Cable Assembly	
513047-405-18	513047-405-18 LRU/Inflator Cable Interface	
514519-401	401 Inflator Assembly	
514518-401-58	514518-401-58 EMA	
509121-1	509121-1 Airbag Equipped Label	
509121-2	Airbag Equipped Label	NEGLIGIBLE