

CRITICAL ITEMS LIST

ASSY NOMENCLATURE: **DROGUE CANOPY**

SYSTEM: **CREW ESCAPE SYSTEM**

REVISION:

ASSY P/N: **SK1102436087**

SUBSYSTEM: **PERSONAL PARACHUTE ASSY.**

PAGE 22 OF 79

FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRIT'Y	FAILURE MODE AND CAUSE	FAILURE EFFECT ON END ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
2.2.1		DROGUE CANOPY, (1) SK1102436087	2/1R	2.2.1 Mode: Canopy seam rips Cause: • excessive loading • defective material	Possible main chute deployment failure if two or more seams rip	<p>1. DESIGN FEATURES TO MINIMIZE FAILURE MODES</p> <ul style="list-style-type: none"> a. The material is nylon certified in accordance with MIL-C-7020, type I, with a flow of 30 - 50 cubic feet 1/minute porosity. b. A breaking strength of 40 pounds in the warp and fill directions of material c. The thread is E-thread (nylon) in accordance with V-T-295, type I, class A. d. The thread breaking strength is 9 pounds. e. The drogue canopy is stitched 8-10 stitches per inch over 4.5 inches. f. The maximum load on the canopy is 1,200 pounds. g. The canopy is designed to a safety factor of 2. <p>2. TEST OR ANALYSIS TO DETECT FAILURE MODE</p> <ul style="list-style-type: none"> a. <u>Acceptance Test</u> <ul style="list-style-type: none"> (1) Material sample air permeability test (2) Tensile strength test on material to a minimum breaking strength of 42 pounds. (3) Material tear strength test to a minimum of 5 ± 1 pounds (4) Tensile strength test on the thread to a minimum breaking strength of 9 pounds b. <u>Certification Test</u> <ul style="list-style-type: none"> (1) Four dummy drops at 110 knots, 2 at 10,000 feet, 2 at 25,000 feet.

PREPARED BY: **R. L. ALLISON, M. HERR**

SUPERSEDING DATE: **10/24/11**

J. O. SCHLOSSER

DATE: **8/7/89**

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PAGE 23 OF 79

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SUPERSEDING DATE: **10/24**

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APPROVED BY: **J. O. SCHLOSSER**

DATE **8/7/89**