

# CRITICAL ITEMS LIST

ASSY NOMENCLATURE: DROGUE CHUTE "LAZY LEG" DEPLOYMENT CORD    SYSTEM: CREW ESCAPE SYSTEM    REVISION  
 ASSY P/N: SK1102437087    SUBSYSTEM: PERSONAL PARACHUTE ASSY.    PAGE 28 OF 79

FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRTY	FAILURE MODE AND CAUSE	FAILURE EFFECT OR FRO ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
2.4.1		DROGUE CHUTE "LAZY LEG" DEPLOYMENT CORD, (1) SK1102437087	1/1	2.4.1 Mode: Lazy Leg cord breaks  Cause: • defective material • excessive loading	Main chute deployment failure	<ol style="list-style-type: none"> <li>1. DESIGN FEATURES TO MINIMIZE FAILURE MODES               <ol style="list-style-type: none"> <li>a. The material is 3,000 pounds braided Kevlar certified in accordance with MIL C-87124, type 2</li> <li>b. The maximum load expected is 1,200 pounds</li> <li>c. The Kevlar line is proof loaded to 3,000 pounds.</li> <li>d. The attach points are finger trapped and stitched to maintain the attach point configuration</li> <li>e. The load is absorbed by the 3-ring drogue release mechanism.</li> </ol> </li> <li>2. TEST OR ANALYSIS TO DETECT FAILURE MODE               <ol style="list-style-type: none"> <li>a. <u>Acceptance Test</u> <ol style="list-style-type: none"> <li>(1) The actual lazy leg assembly is tensile tested to the application it is used in to 3,000 pounds in accordance with the deviation to the specification</li> <li>(2) The thread is tensile tested to a minimum of 9 pounds breaking strength.</li> </ol> </li> <li>b. <u>Certification Test</u> <ol style="list-style-type: none"> <li>(1) Four dummy drops at 110 knots, 2 at 10,000 feet, 2 at 25,000 feet.</li> <li>(2) Four live water drop jumps</li> <li>(3) One 300 knot wind blast test.</li> <li>(4) Four dummy drops at 225 knots, 2 at 10,000 feet, 2 at 25,000 feet</li> <li>(5) Eight live jumps at 110 knots, 4 at 10,000 feet, 4 at 6,000 feet</li> </ol> </li> </ol> </li> </ol>

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

SUPERSEDING DATE

WED BY: J. O. SCHLOSSER

DATE 01/89

# CRITICAL ITEMS LIST

ASSY NOMENCLATURE: DROGUE CHUTE "LAZY LEG" DEPLOYMENT CORD      SYSTEM: CREW ESCAPE SYSTEM      REVISION:  
 ASSY P/N: SK11024370B7      SUBSYSTEM: PERSONAL PARACHUTE ASSY.      PAGE 29 OF 79

FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRTY	FAILURE MODE AND CAUSE	FAILURE EFFECT ON CHDMM	RATIONALE FOR ACCEPTANCE
REF	REV					
24.1		DROGUE CHUTE "LAZY LEG" DEPLOYMENT CORD, (1) SK11024370B7	U1	2.4.1 Mode: Lazy leg cord breaks  Cause: • defective material • excessive loading	Main chute deployment failure	(6) Four live jumps at 170 knots, 15,000 feet (7) Four live jumps at 185 knots, 20,000 feet (8) Four live jumps at 200 knots, 25,000 feet. c. <u>Turnaround (41).</u> (In accordance with PIA 23028) The PPA will be unpacked, inspected, and repacked prior to each flight  3. <u>INSPECTION</u> a. Visual inspection of the braided Kevlar cord. b. Visual inspection of the thread c. Visual inspection of the lazy leg assembly d. Visual inspection of the stitching to verify the number of stitches per inch and for any defects. e. Verify tensile strength of Kevlar cord  <u>Turnaround Inspection.</u> (In accordance with PIA 23028) a. The PPA will be unpacked, inspected, and repacked prior to each flight b. Visual inspection of the braided Kevlar cord. c. Visual inspection of the thread d. Visual inspection of the lazy leg assembly

PREPARED BY: R. L. ALLISON, M. HEAR

SUPERSEDING DATE: 10/1/2004

APPROVED BY: J. O. SCHLOSSER

DATE: 07/89

# CRITICAL ITEMS LIST

ASSY NOMENCLATURE: DROGUE CHUTE "LAZY LEG" DEPLOYMENT CORD SYSTEM: CREW ESCAPE SYSTEM REVISION:  
 ASSY P/N: SK1102437007 SUBSYSTEM: PERSONAL PARACHUTE ASSY. PAGE 30 OF 79

FMEA		NAME, QTY & DRAWING REF DESIGNATION	CRIT'Y	FAILURE MODE AND CAUSE	FAILURE EFFECT DN END ITEM	RATIONALE FOR ACCEPTANCE
REF	REV					
2.4.1		DROGUE CHUTE "LAZY LEG" DEPLOYMENT CORD, (1) SK1102437007	1/1	2.4.1 Mode: Lazy Leg cord breaks  Cause: <ul style="list-style-type: none"> <li>• defective material</li> <li>• excessive loading</li> </ul>	Main chute deployment failure	<ul style="list-style-type: none"> <li>• Visual inspection of the stitching to verify the number of stitches per inch and for any defects</li> </ul> <p>4. FAILURE HISTORY None This assembly is in fleet use by the Navy</p> <p>5. OPERATIONAL USE</p> <ul style="list-style-type: none"> <li>a. Operational Effect of Failure - Possible loss of life</li> <li>b. Crew Action - None.</li> <li>c. Crew Training - Not applicable.</li> <li>d. Mission Constraints - None - Mission would be terminated prior to use of this hardware</li> <li>e. In Flight Checkout - None.</li> </ul>

PREPARED BY: R. I. ALLISON, M. HEAR

SUPERSEDING DATE: 10/24/89

APPROVED BY: D. SCHLOSSER

DATE: 07/89