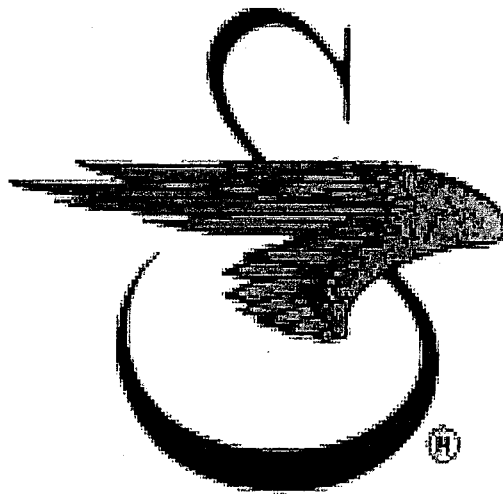


# **Sikorsky Aircraft**

## **Material Review Board**



*Aug/24/2006*

### **Training Guide for Sikorsky Aircraft PRB MRB Members**

*Preliminary*

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# MRB/SRM

## Documentation Guidelines

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### INTRODUCTION

**This training guide provides basic instructions for documenting typical non-conformances requiring Sikorsky Aircraft Material Review Board disposition approval. All non-conformances must be documented on electronic SA 342 form. Completed MRBs should be submitted to an authorized Sikorsky MRB representative. SA 342 forms should include digital photos of subject non-conformances to help facilitate disposition approval.**

**Each item must be written clearly and completely. The Description of the Nonconformance must be written so it can be understood by an independent person, without the benefit of having the mechanic, inspector or A/C to clarify any ambiguities that may exist in the write-up.**

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### SAMPLE DEFECT DESCRIPTIONS

**The following examples of acceptable Defect Descriptions are provided as a guideline for documenting non-conformances:**

**DENTS, GOUGES, FALSE CUTS, GAPS, ETC., ALWAYS REQUIRE THE LENGTH, DEPTH, WIDTH DIMENSIONS AND LOCATION REFERENCED FOR EACH DISCREPANCY ON THE REJECTION REPORT.**

#### **Basic write-up for Gouge, Dent:**

*One gouge measuring .500" long, .150" wide by .060" deep exists in the 76xxx-xxxx-101 web. Gouge is located 1.00" aft of a MSxxxxx-xx nutplate. B/P sh/zn, Sta/line, w/line, b/line, L or R.*

#### **Basic write-up for a Gap Condition:**

*A .060" to .200" tapered gap exists between the 76xxx-xxxxx-121 skin and the 76xxx-xxxxx-101 stringer. Gap is 9" long x 1.00" deep.  
B/P 76xxx-zzzzz sh/zn Sta, w/line, b/line, L or R.*

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**ELONGATED OR DOUBLE DRILLED/ OVERSIZE HOLES REQUIRE THE DISCREPANT HOLE SIZE REFERENCED WITH THE B/P HOLE DIAMETER AND THE AFFECTED FASTENER CALLED OUT IN THE WRITE-UP.**

**Basic write-up for double drilled, oversize/elongated holes:**

*Three .187" Dia. Holes for BJ-6 fasteners have been double drilled to .250". Condition exists in the 76xxx-xxxxx-102 angle and the 76xxx-xxxxx-109 fitting. Fastener installation called out on B/P 76xxx-zzzzz sh/zn, Sta, w/line, b/line, L or R.*

**MISLOCATED HOLES REQUIRE THE HOLE SIZE WITH THE FASTENER CALLOUT, HOW FAR OFF FROM B/P LOCATION, AND IN WHAT DIRECTION.**

**Basic write-up for Mislocated holes:**

*Five .098" Dia. Pilot Holes for DT-5 fasteners mislocated .125" down from proper B/P location of w/line 225. Holes were drilled at w/line 224.875 in the 76xxxx-xxxxx-101 web only. Condition does not exist in the attaching blank 76xxx-xxxxx-125 Tee. B/P sh/zn, Sta/line, w/line, b/line, L or R.*

**CRACKS REQUIRE LENGTH REFERENCED, WITH THE DIRECTION OF TRAVEL AND ANY DETAIL CHARACTERISTICS AFFECTED SUCH AS, EXTENDING INTO RADIUS OR A CUTOUT / NUTPLATE HOLE.**

**Basic write-up for a crack:**

*A .150" crack is located between a countersunk .098" hole and the adjacent .203 clearance hole for a MSxxxxx-xx nutplate. The crack exists in the 76xxx-xxxxx-102 skin and the 76xxxx-xxxxx-135 stringer. B/P 76xxxx-zzzzz sh/zn, Sta/line w/line, b/line, L or R.*

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Fasteners with shy edge distance must be measured from the center of the hole to the edge of the part. When a hole is close to the edge of the detail part, it is acceptable to measure from the edge of the hole to the edge of part., but the report must state the method of measuring in this case. If the hole is breaking the edge of a part, provide the amount of hole that is “hanging” over. This write-up requires the number of fasteners, type and size of fasteners, the actual edge distance (E.D.), and what the edge distance should be per B/P. All affected detail part numbers must be referenced in each item on the rejection report.

**AIRCRAFT DEFECTS WITH DIFFERENT CHARACTERISTICS MUST BE WRITTEN SEPARATELY, EVEN IF IT'S IN THE SAME LOCATION OR ON THE SAME PART.**

**Multiple defect example:**

Condition – Rivet holes have shy edge distance and some of those holes are elongated.

**Item A:**

*The 76xxx-xxxxx-125 stringer has five .156” dia. holes for BJ-5 fasteners with edge distance of .200”. E.D. should be .312”. B/P 76xxx-zzzzz sh/zn Sta/line, w/line, b/line, L or R.*

**Item B:**

*Three .156” dia. Holes for BJ-5 fasteners are elongated to .205”. Condition exists in the 76xxx-xxxxx-125 stringer and the 76xxx-xxxxx-101 skin. B/P 76xxx-zzzzz sh/zn Sta/line, w/line, b/line, L or R.*

*Note: These holes are the 1<sup>st</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> fasteners with shy E.D. referenced in Item A.*

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### **Key elements for expedient processing:**

- **Provide the B/P number (if it's not the same as the detail part number) with sheet and zone.**
- **Specific Station line, Water line, with right or left hand Butt line, is required for all rejections issued to an aircraft.**
- **State the discrepancy clearly. *REF.* Should be..., Actual ... (Do not use single word descriptions, e.g., leaks, inoperative, broken, etc..)**
- **Whenever practical, please provide a “xerox” copy of the B/P area affected along with a sketch depicting the suggested repair.**




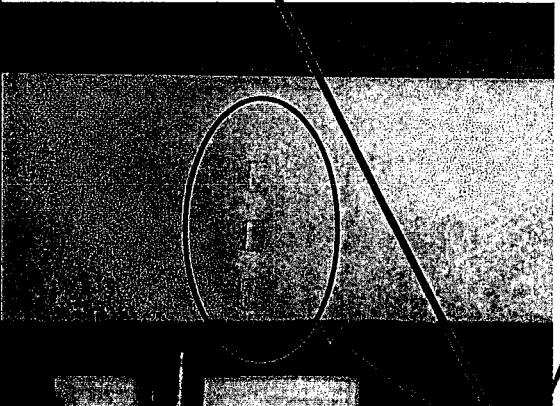
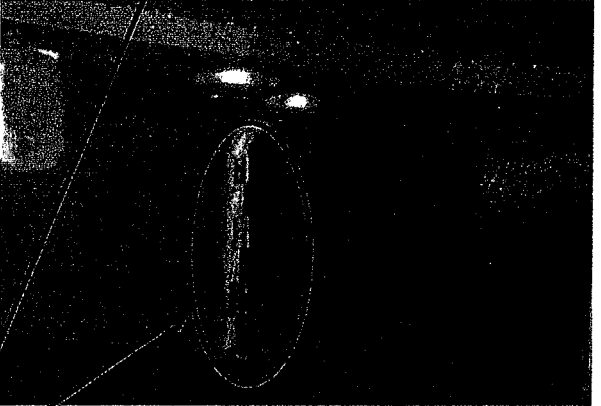


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## Documentation Guidelines

### SA 342-13 Supplement

(Example shown containing digital photos of defective areas)


 <b>Sikorsky</b> <small>A United Technologies Company</small>	<b>NONCONFORMING MATERIAL/REJECTION REPORT NO. V00082</b> <b>REASON FOR REJECTION, SKETCH SUPPLEMENT</b>				
	PART NO.	76076-20660-500	PAGE	OF	
REASON FOR REJECTION (SKETCH/MATRIX)					
					
					
<div style="border: 1px solid black; padding: 5px; display: inline-block; margin: 10px 0;"> <b>TOOLING GOUGES</b> </div>					
ORIGINATORS	INSPECTOR	DATE	MANUFACTURING SUPV.	DATE	INSPECTION SUPV.
SIGNATURE					
DISPOSITION	ENGINEERING	DATE	QUALITY ASSURANCE	DATE	GOVERNMENT
APPROVAL					
NOTE: USE THIS FORM ONLY IF SKETCHES AND/OR MATRIX REQUIRED ON SA 342-1					
SA 342-13 9/22/00					

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## Documentation Guidelines

### SA 342-4 NMRR Supplement

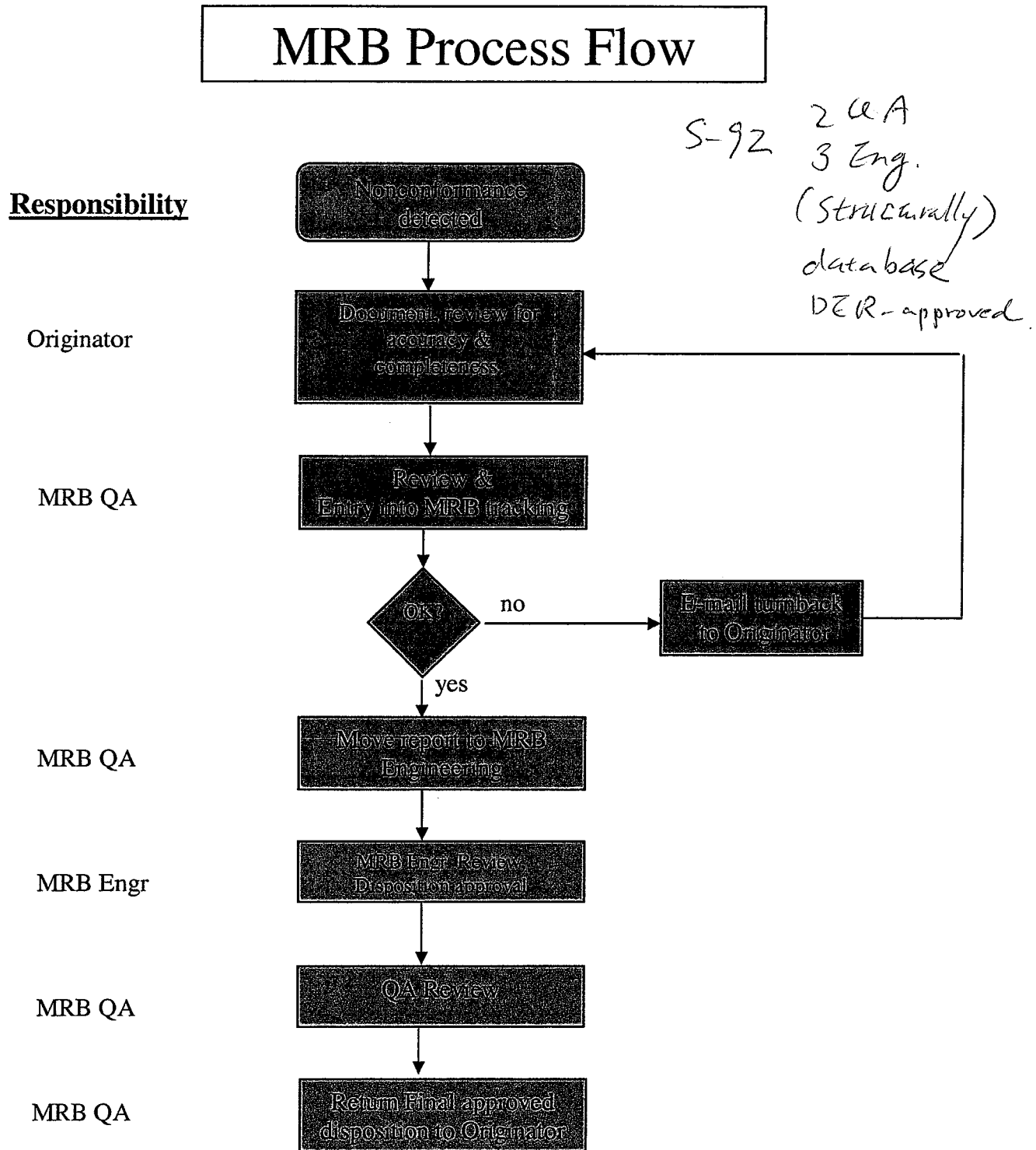
 <b>Sikorsky</b> A United Technologies Company	<b>NONCONFORMING MATERIAL/REJECTION REPORT NO.</b>					
	<b>SUPPLEMENT</b>					
	PART NO.	PAGE	OF			
DISPOSITION (SKETCH)						
<p>This form is used for documenting the recommended disposition</p>						
APPROVAL	ENGINEERING	DATE	QUALITY ASSURANCE	DATE	GOVERNMENT	DATE
NOTE: USE THIS FORM ONLY IF SKETCHES AND/OR ADDITIONAL DISPOSITION SPACE IS REQUIRED ON SA 342-1						
SA 342-4 9/22/00						

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