

CHAP 2 AIRFRAME SP 125 A L SHEET 1 OF 8	SERVICING PROCEDURE F53 T55	BAC F53 & T55 (SA) 5A3A Section 1 2nd Edition								
Structural Overheating - Barcol Hardness Testing	AFSC 53450	TIME EST								
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.										
SPECIAL TOOLS AND EQUIPMENT		ASSOCIATED PROCEDURES								
<p>Barcol hardness tester (4A/2517).            Abrasive paper, waterproof, silicone carbide, Grade 320C.            (33J/1293939).</p> <p style="text-align: center;"><u>53450</u></p> <p>NOTE 1: This Servicing Procedure must be carried out when it is evident that structural overheating has taken place, indicated by sootting, paint blistering, thermal discolouration etc., or when called for on routine servicing.</p> <p>NOTE 2: Specific test areas are shown as Figs. 1 to 5.</p> <p>NOTE 3: Datum hardness numbers are as follows:-            Fig.1. detail A, test areas, A4/1 and A4/2 Barcol No.83.            Fig.3. detail D, test areas B4/1 and B4/2 Barcol No.80.            Fig.5. detail S, test areas D6/1 Barcol No.83.</p> <p>NOTE 4: Maintenance supervisor:- if the recorded Barcol numbers are below the following minimum report the results to:-            British Aerospace,            Saudi Technical Support</p>										
<table border="1"> <thead> <tr> <th>Test Area</th> <th>Minimum Barcol Number</th> </tr> </thead> <tbody> <tr> <td>A4/1 and A4/2</td> <td>81</td> </tr> <tr> <td>B4/1 and B4/2</td> <td>78</td> </tr> <tr> <td>D6/1</td> <td>82</td> </tr> </tbody> </table>		Test Area	Minimum Barcol Number	A4/1 and A4/2	81	B4/1 and B4/2	78	D6/1	82	
Test Area	Minimum Barcol Number									
A4/1 and A4/2	81									
B4/1 and B4/2	78									
D6/1	82									
		Continued Overleaf								

CHAP 2 AIRFRAME SP 125 AL SHEET 2 of 8	SERVICING PROCEDURE F53 T55	BAC F 53 & T 55 (SA) 5A3A Section 1 2nd Edition
--	--------------------------------	---

Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

53450

NOTE 5: Excluding test areas shown in this Servicing Procedure as a general guide, Barcol Numbers obtained for aluminium alloys should have a minimum value of 83 except for aluminium alloy to Specification L72 which should have a minimum figure of 82. If figures obtained are below these minimum values, report the findings to:-

British Aerospace,  
Saudi Technical Support Dept.,  
Warton,  
Lancashire,  
England.

#### 1. PREPARATION

NOTE: In Sub-item 1.1 the test area must be approximately 0.5 square in.

##### 1.1 Test area:-

(a) Local finish.

Remove with trichlorethylene.  
Remove self-etching primer and aluminium cladding by lightly rubbing down with 320C grade abrasive paper, taking care to prevent dishing.

(b) Anodised parts.

Remove anodising by lightly rubbing down with 320C grade abrasive paper, taking care to prevent dishing.

NOTE: Sub-item 1.2 is applicable only on subsequent tests.

##### 1.2 Test area.

- (i) Remove local finish with trichlorethylene.
- (ii) Remove self-etching primer by lightly rubbing with 320C grade abrasive paper, taking care to prevent dishing.

##### 1.3 Barcol hardness tester.

Check for correct indication against standard block provided.

Continued

CHAP. 2 AIRFRAME S.P. 125 A.L. SHEET 3 OF 8	SERVICING PROCEDURE F53 T55	BAC F53 & T55 (SA) 5A3A Section 1 2nd Edition
---	--------------------------------	---

Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

53450

## 2. TESTING

NOTE: Sub-items 2.1 and 2.2 must be carried out three times.

### 2.1 Barcol hardness tester.

Apply to test area with a light pressure ensuring that the indentor is perpendicular to the surface.

### 2.2 Tester dial.

(i) Note readings obtained.  
(ii) Record hardness number.

### 2.3 Datum hardness number.

Compare with reading obtained in Sub-item 2.2 (See NOTE 3).

NOTE: Item 3 is applicable only if reading recorded in Sub-item 2.2 is below the datum number after a re-check.

## 3. REPORTING

### 3.1 Suspect test area.

Maintenance supervisor (See NOTE 4).

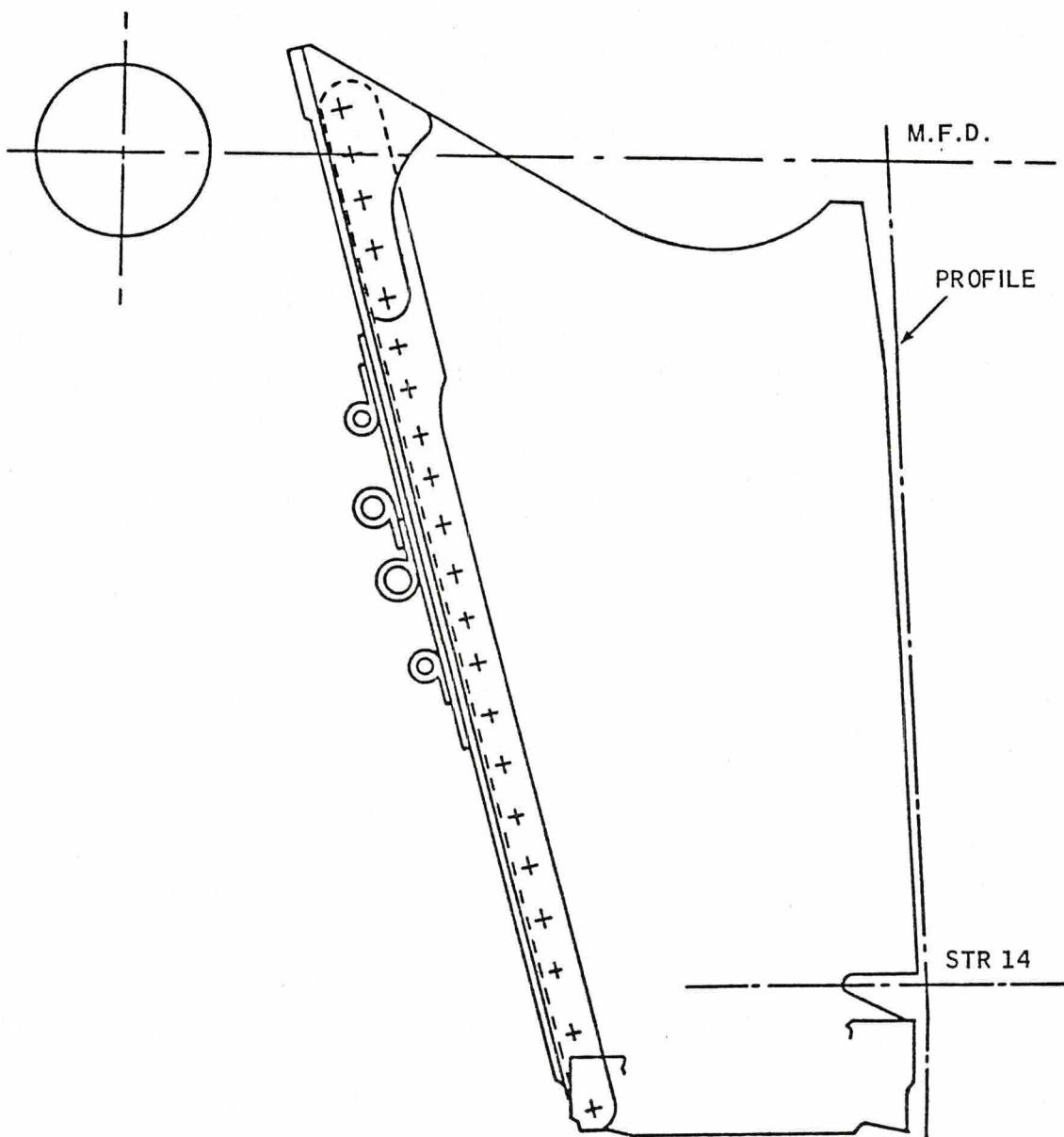
## 4. GENERAL

### 4.1 Test area.

(i) Apply self-etch primer.  
(ii) Apply local paint finish.

Continued Overleaf

Safety and Servicing Notes are to be complied with  
throughout the work detailed on this card.



DETAIL 'A'

LOOKING FORWARD ON FRAME. 36 - RIGHT

BARCOL TEST AREAS

FIGURE 1

Continued

Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

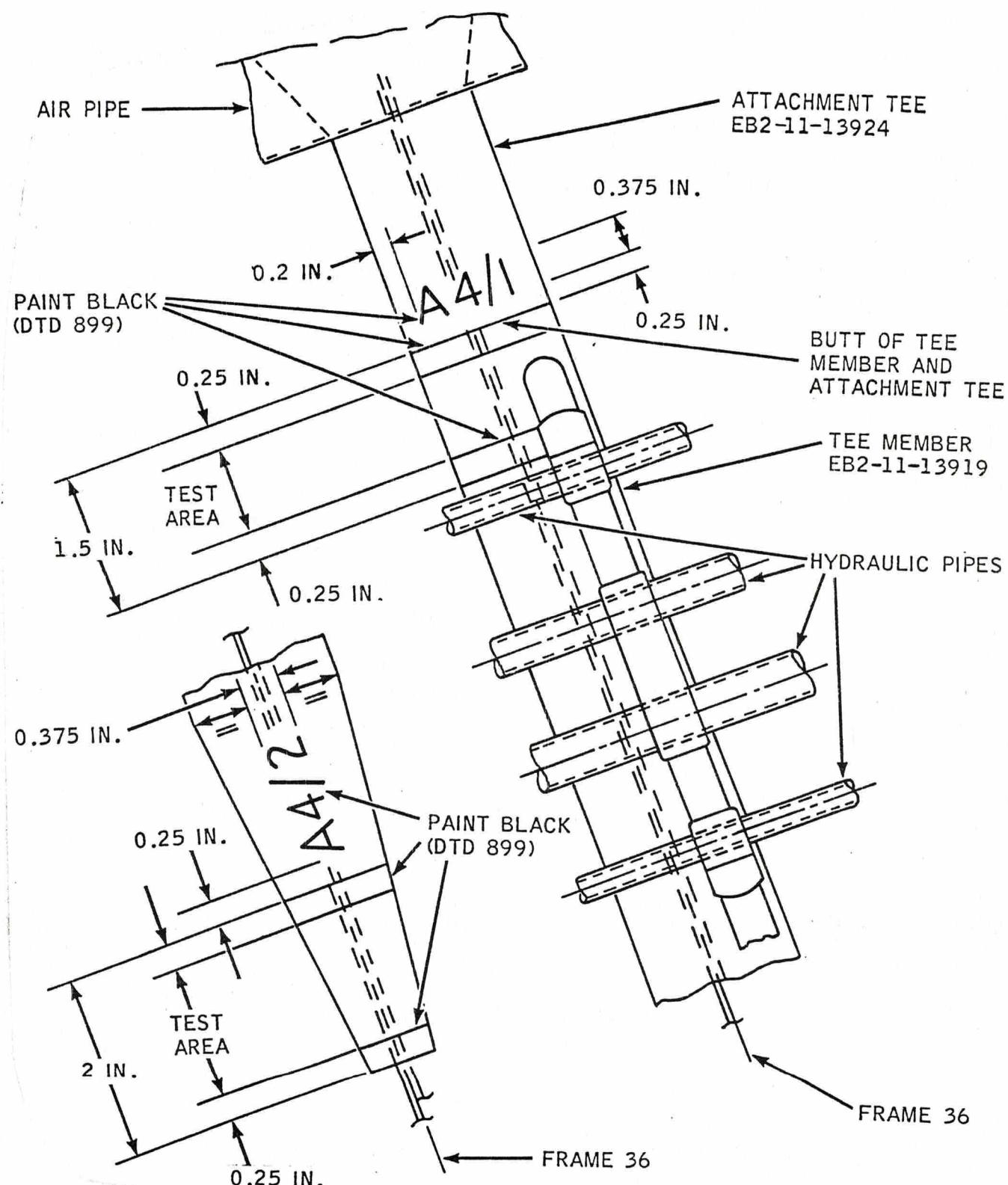
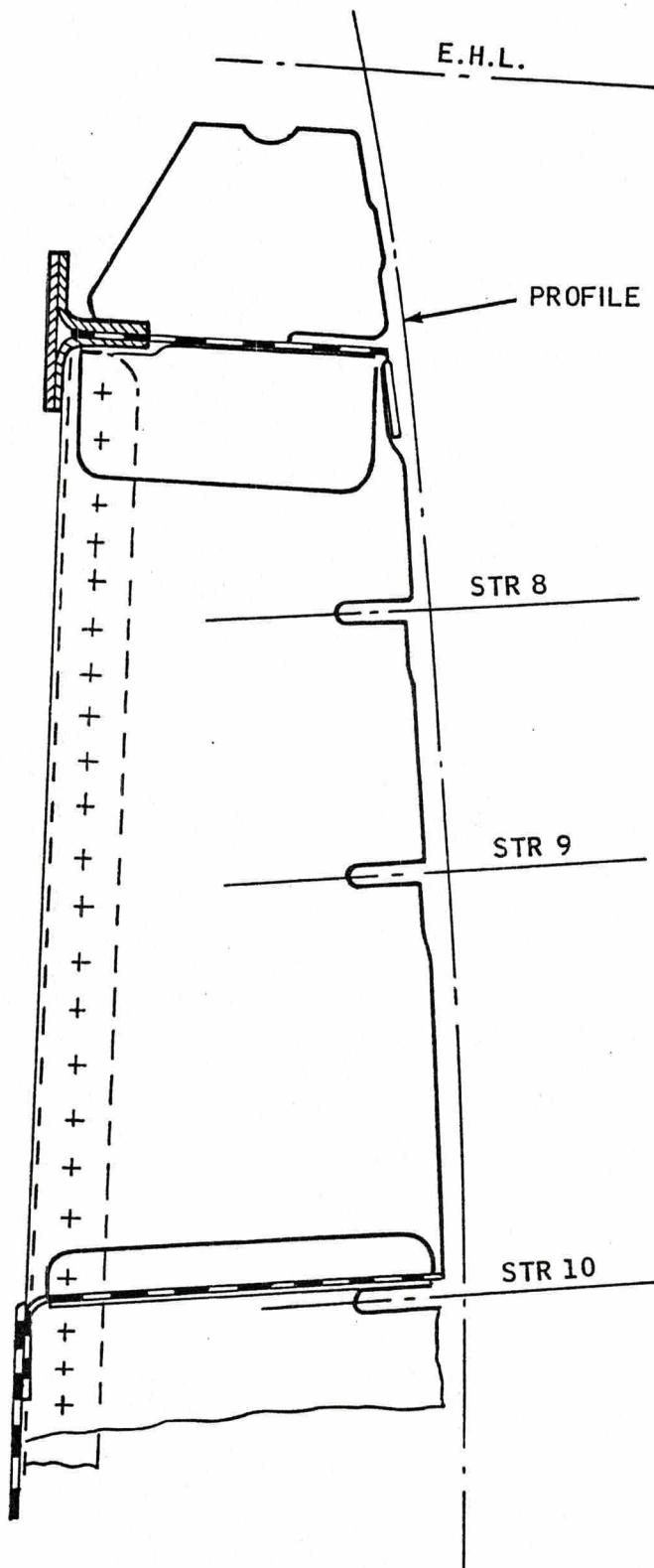


FIGURE 2

Continued Overleaf

Safety and Servicing Notes are to be complied with  
throughout the work detailed on this card.



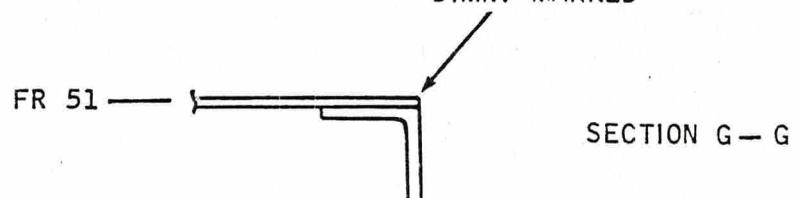
BARCOL TEST AREAS

FIGURE 3

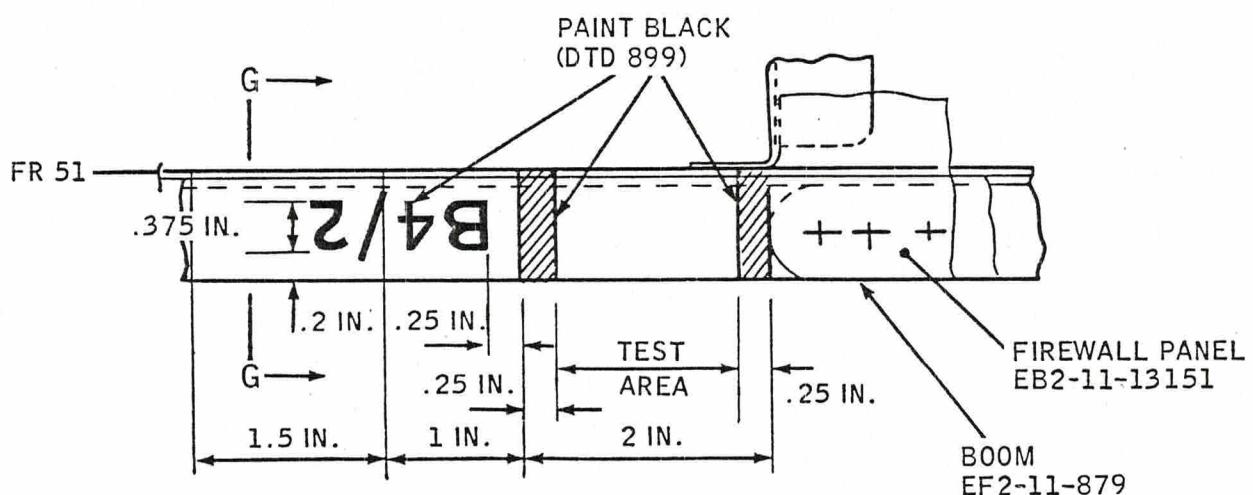
Continued

Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

ENSURE THAT EDGE OF FRAME WEB IS NOT PROUD OF BOOM OVER 1.5 IN.  
DIMN. MARKED



VIEW ON ARROW F



VIEW ON ARROW E

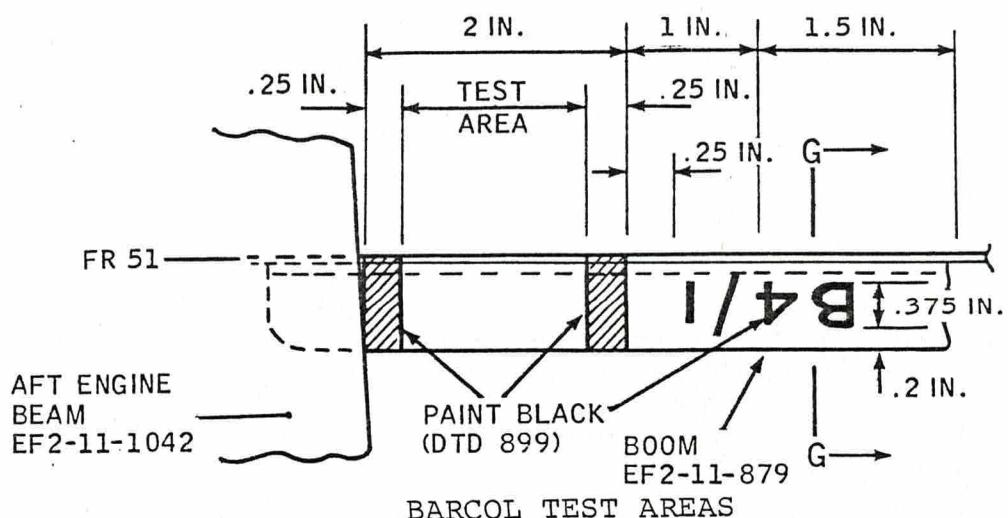
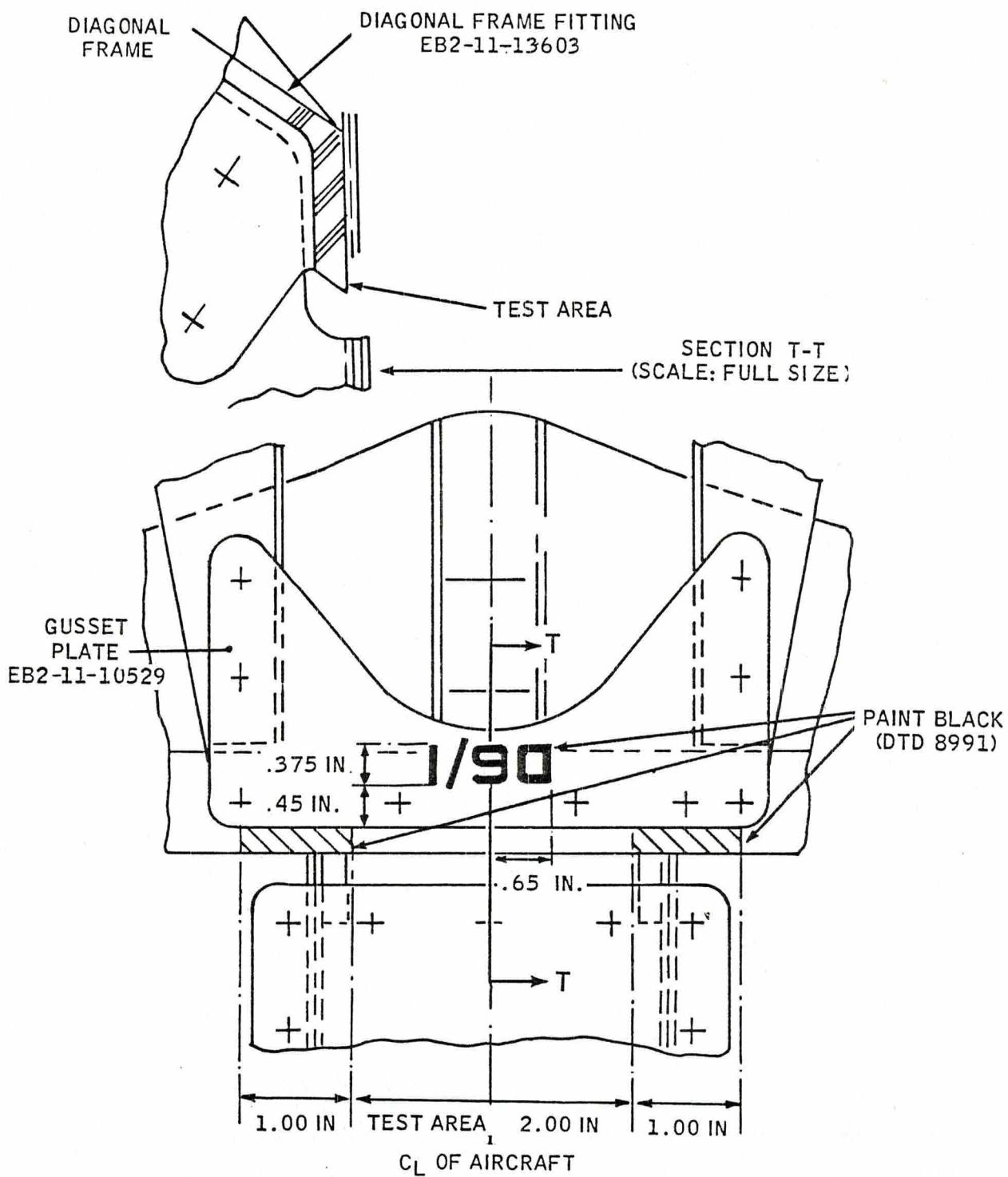


FIGURE 4

Continued Overleaf

Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

DETAIL 'S' LOOKING OUTBOARD ON DIAGONAL FR. AT TOP CENTRELINE



BARCOL TEST AREAS

FIGURE 5

A close-up, low-angle shot of an aircraft's internal wiring harness. The harness consists of numerous orange and white insulated wires, some of which are bundled together with black zip ties. The wires are installed in a metal channel within the aircraft's fuselage. In the upper left, a large, cylindrical component, possibly a motor or pump, is visible, with several wires attached to it. The overall environment is metallic and industrial.

This file was downloaded  
from the RTFM Library.

Link: [www.scottbouch.com/rtfm](http://www.scottbouch.com/rtfm)

Please see site for usage terms,  
and more aircraft documents.