

The information, technical data and designs disclosed in this document (the "Information") is either the exclusive property of de Havilland Inc. or is subject to proprietary rights of others. The Information is not to be used for design or manufacture or disclosed to others without the express prior written consent of de Havilland Inc. The holder of this document, by its retention and use, agrees to hold the Information in confidence. These restrictions do not apply to persons having proprietary rights in the Information, to the extent of those rights.

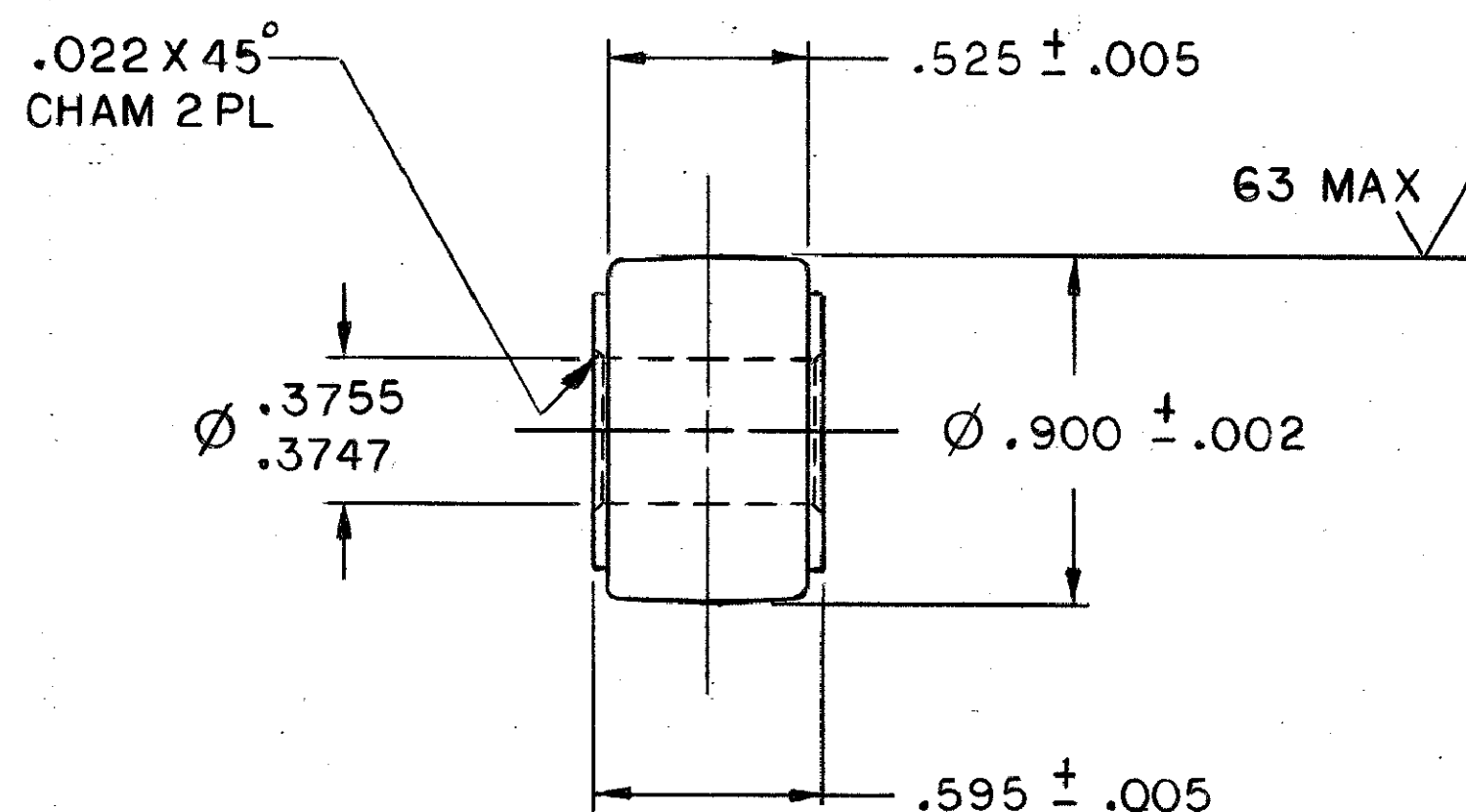
REPORT ALL DRAWING ERRORS TO
ENGINEERING

REVISIONS

REVISION	ITEM NO.	ZONE	DESCRIPTION	ENG. AUTH.	VA. OPS.	ENG. RELEASE	DATE	DRAWN	CHECKED	STRESS
1			PRELIMINARY — FOR TRIAL INSTALLATION OF MOD 8/2508							

NOTES

1. THIS DRAWING SHOWS A BEARING - ROLLER DESIGNED FOR USE SPECIFICALLY AS THE 'LOWER DEAD WEIGHT ROLLER' FOR FLAP TRACK ~~4~~ 4 OF THE DASH 8 AIRCRAFT.
2. MATERIAL
OUTER RACE - CRES CUSTOM 455 PER AMS 5617
HEAT TREAT CONDITION H1000.
INNER RACE AND END PLATES -
CRES PH 13 - 8 MO PER AMS 5629
HEAT TREAT CONDITION H1000.
SEALS - DELRIN AF 113 OR EQUIVALENT.
3. LOAD RATINGS
NOMINAL RADIAL CAPACITY $.17 \text{ IN}^2 \times 10,000 \text{ PSI} = 1700 \text{ LB}$
NOMINAL AXIAL CAPACITY $.10 \text{ IN}^2 \times 5,000 \text{ PSI} = 500 \text{ LB}$
SEE SHEET 2 FOR CAPACITY AS A TRACK ROLLER.
4. LIFE TESTING
THE BEARING SHALL REMAIN SERVICEABLE WITH NO LINER WEAR THROUGH AFTER A ROLLING TEST AS FOLLOWS:
RADIAL LOAD 300 LB
STROKE 12 INCHES
30,000 CYCLES.
5. ENVIRONMENT
DESERT SAND.
TEMPERATURE -65° F TO 160° F .
6. FEATURES
MAXIMUM RADIAL PLAY .003.
AXIAL FLOAT .008 MAX.
THE OUTER RACE MUST BE FREE TO ROTATE WHILE THE INNER RACE IS HELD FINGER TIGHT (2 INCH LB MAX).
7. SEE SHEET 2 FOR EXTERNAL PROFILE AND FOR INSTALLATION DETAIL.



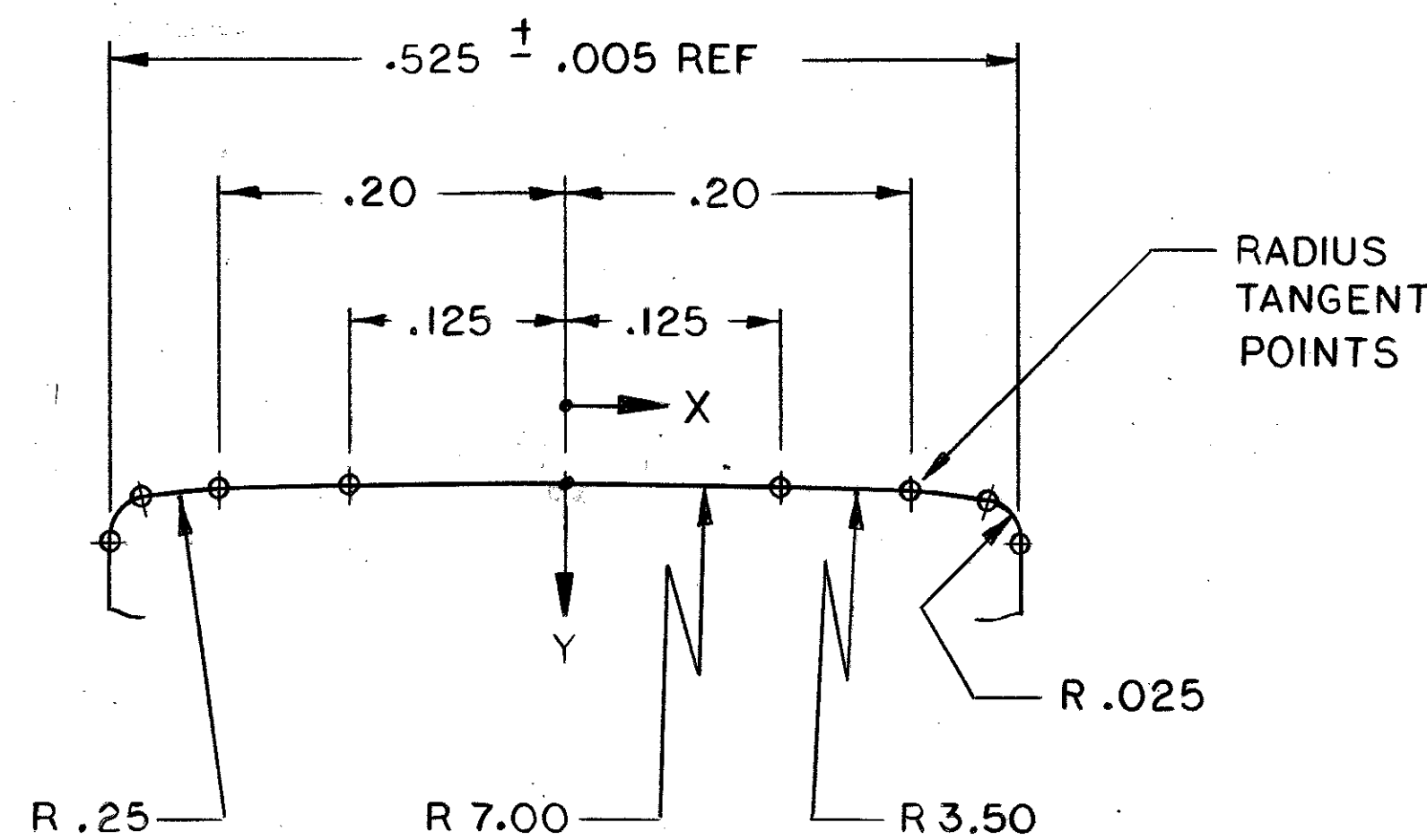
PART N° DSC 510 - I

[illegible][illegible]

The information, technical data and designs disclosed in this document (the "Information") is either the exclusive property of de Havilland Inc. or is subject to proprietary rights of others. The Information is not to be used for design or manufacture or disclosed to others without the express prior written consent of de Havilland Inc. The holder of this document, by its retention and use, agrees to hold the Information in confidence. These restrictions do not apply to persons having proprietary rights in the Information, to the extent of those rights.

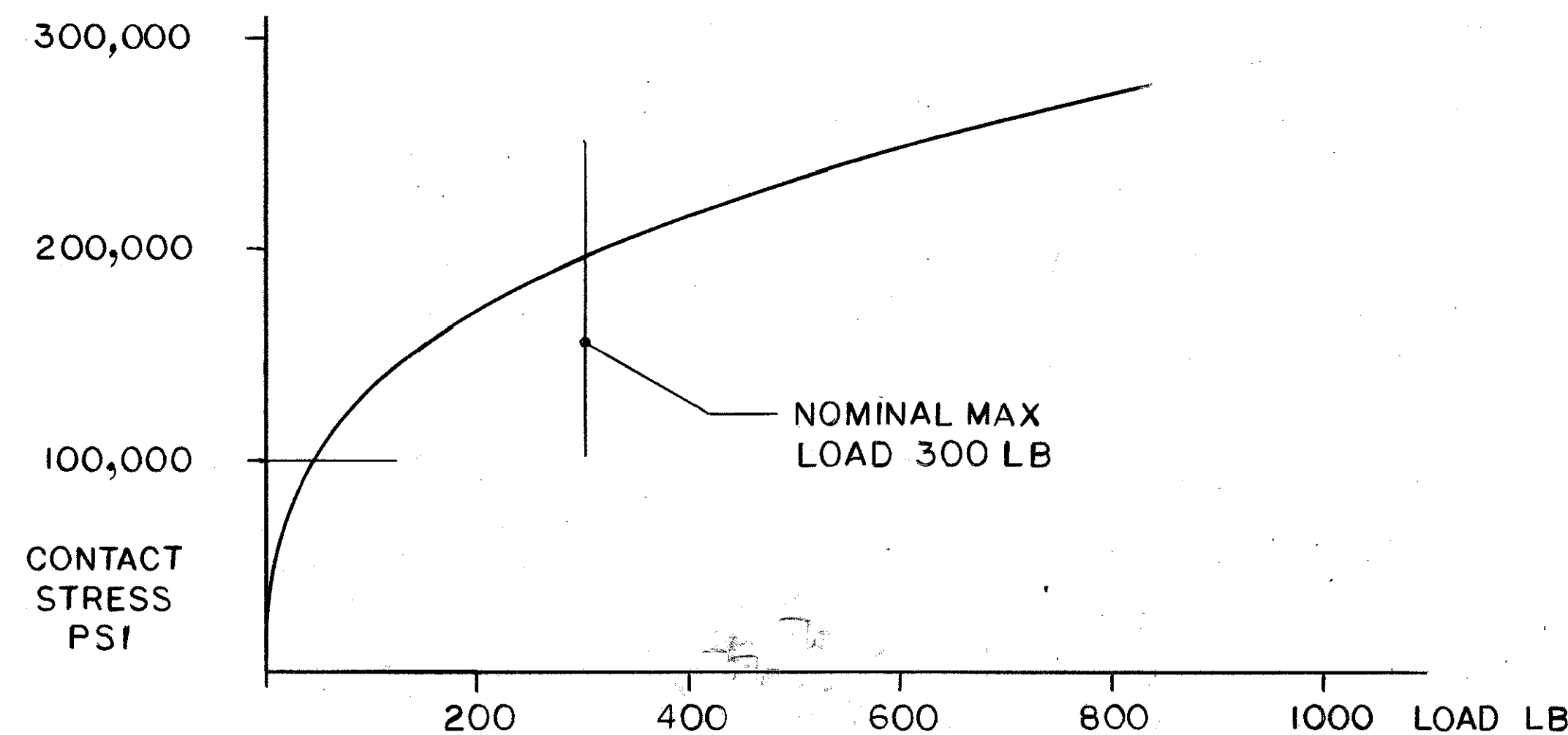
REPORT ALL DRAWING ERRORS TO
ENGINEERING

REVISIONS									
REVISION	ITEM NO.	ZONE	DESCRIPTION				ENG. AUTH.	VA. OPS.	ENG. RELEASE
1			PRELIMINARY FOR TRIAL INSTALLATION ON MOD 8/2508.						



PROFILE — OUTER RACE
THE PROFILE DIMENSIONS SHOWN
ARE NOMINAL, NO TOLERANCES ARE IMPLIED.
THE RADII CENTRES TABULATED BELOW MAY
BE USED FOR N.C PROGRAMMING.

RADIUS	CENTRES	
	± X	Y
7.000	0.0000	7.00000
3.500	.0625	3.50056
.250	.1902	.25307
.025	.2375	.03310



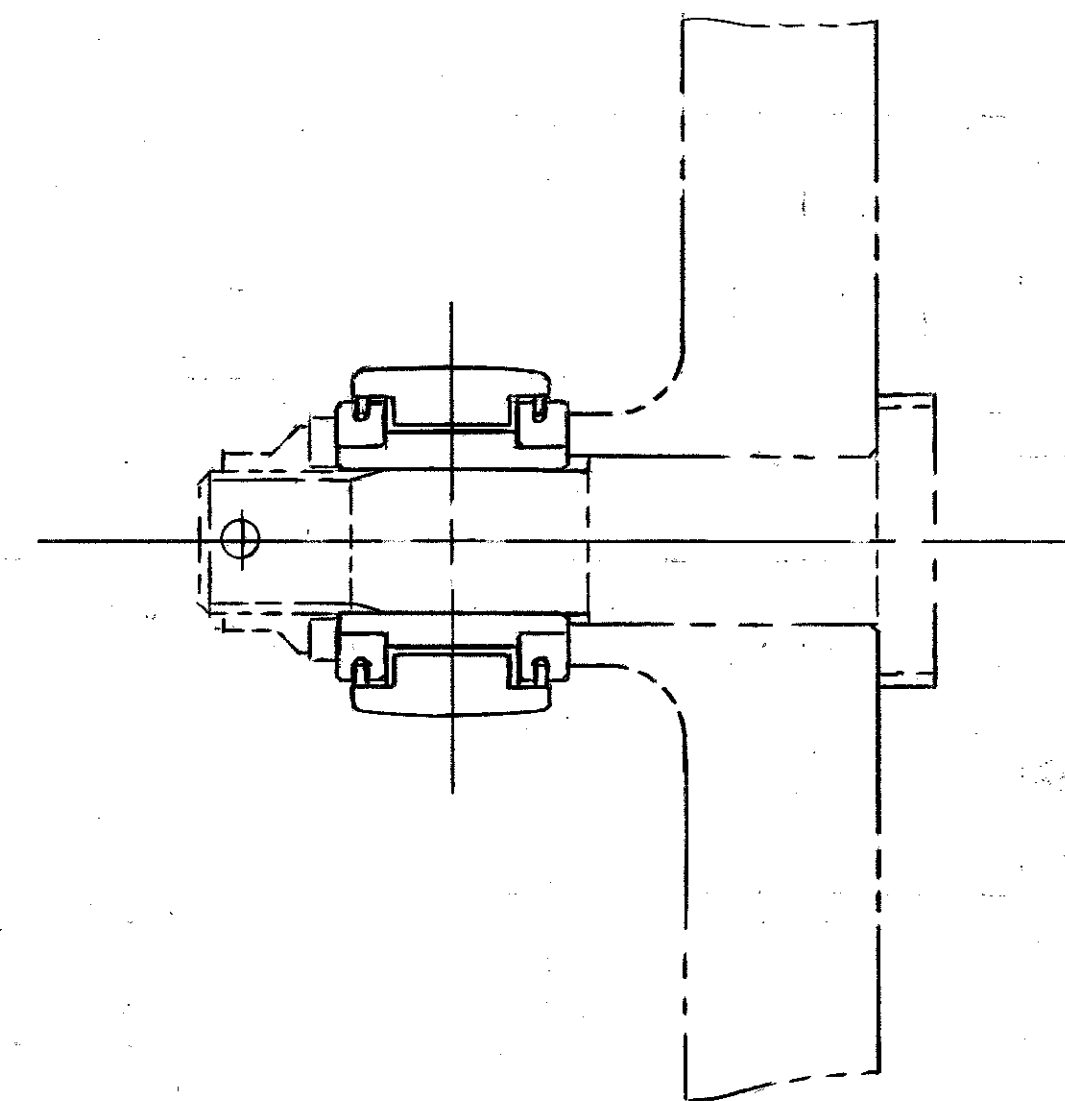
ROLLER — TRACK CONTACT STRESS (HERTZIAN STRESS)

TRACK MATERIAL 300 M STEEL PER AMS 6419, HEAT TREAT 280 KSI TO 305 KSI. TRACK IS NICKEL / BORON COATED.

ALLOWABLE CONTACT STRESS FOR TRACK 504,000 PSI.

ALLOWABLE CONTACT STRESS FOR CUSTOM 455 OUTER RACE 292,500 PSI.

NOMINAL LIMIT STRESS FOR ROLLING CONTACT 250,000 PSI.



INSTALLATION # 4 LOWER DEAD WEIGHT ROLLER
SHOWN FOR REFERENCE ONLY

TRACK # 4 LOWER DEAD WEIGHT ROLLER IS CANTILEVER MOUNTED ON AN ECCENTRIC SHAFT. THE SHAFT MATERIAL IS CRES 17-4 PH (H1150) WITH PROTECTIVE TREATMENT OF NICKEL STRIKE PRIOR TO CADMIUM PLATE. THE ECCENTRIC OFFSET IS .025, THE SHAFT DIA IS .3739-.3744. THE ROLLER IS CLAMPED BETWEEN AN960 D616L WASHERS AND A BOSS (7075 ALUM) THE FACE OF THE BOSS IS ANODIZED AND PRIMED WITH A CHROMATED EPOXY PRIMER. THE BOSS HAS AN I.D OF .4375-.4385 AND AN OUTSIDE DIA OF .65.

THE BEARING DESIGN SHOWN IS GENERIC AND THE PICTORIAL VIEW IS INTENDED TO HIGHLIGHT MOUNTING DETAILS WHICH MAY AFFECT THE INDIVIDUAL DESIGNS OF THE SUPPLIERS.

CERTAIN FEATURES OF THE BEARING AS SHOWN OR DESCRIBED MAY BE SUBJECT TO PATENT PROTECTION BY THE VENDORS.

de Havilland Inc. Downsview, Ontario, Canada		ENG. AUTH.		CSI 82604	
		DRAWN		DWS 18 Dec 95	
		CHECKED		P. K. L. 7/2/96	
		APPROVED		C. K. L. 23/4/96	
		STRESS		V. A. 19/12/96	
	MAT. TECH.		G. R. 21/7/96		
	ENG. RELEASE		D. B. 26/10/01		
	TECH. DES.		—		
VA. OPS.		—		6/3/96	
DWG SIZE	CODE IDENT. NO.	DRAWING NO.		RELEASE	REV.
D		DSC 510		R	—
SCALE	WGT. CALC.	ACTUAL		SHT	2 OF 2
10/1 & 2/1					