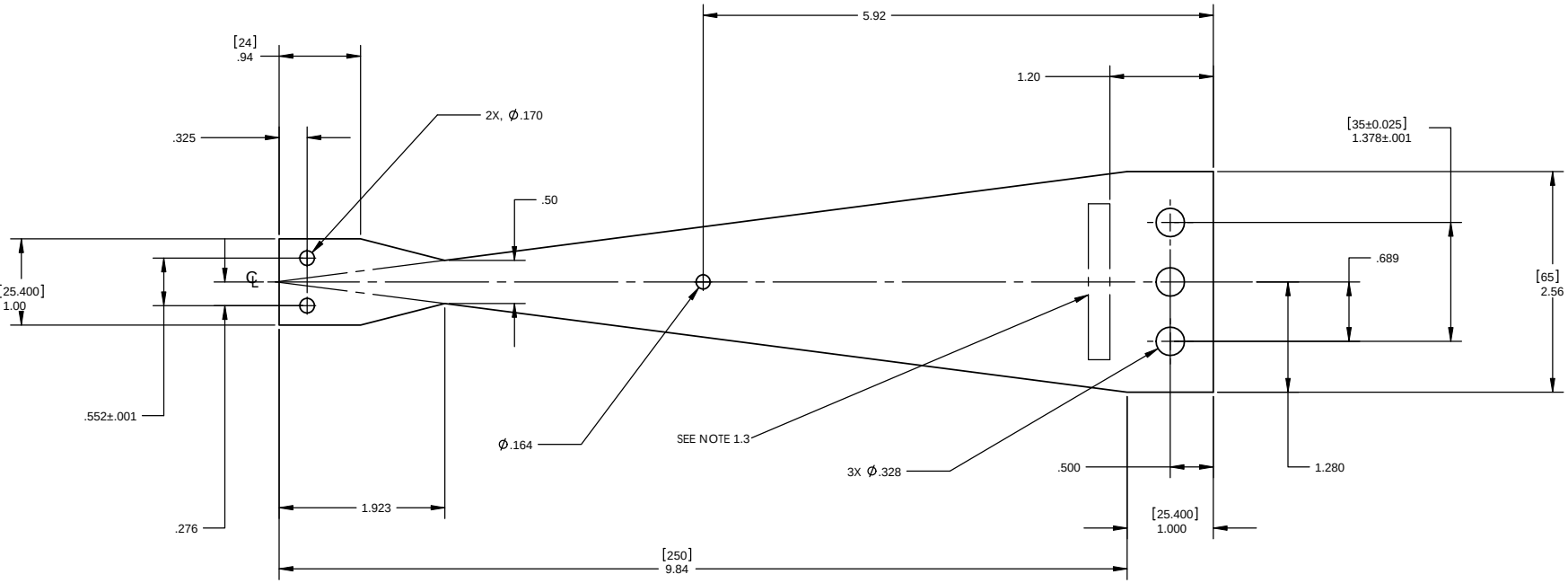
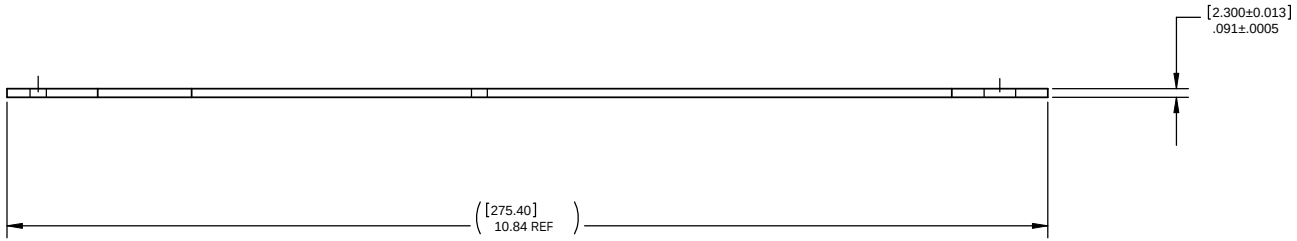
REV.	DATE	DCN #	DRAWING TREE #
08	17 JAN,08	UPDATED PER LATEST COMPUTATIONS.	
A	1 FEB,08	RELEASED FOR RFQ PER DCN E080066	
B	17th Apr 08	E080169-00	
C	24th Apr 08	E080179-00	





PARTS LIST

NOTES: (UNLESS OTHERWISE SPECIFIED)

1.1 REMOVE ALL SHARP EDGES, R.02 MIN.

1.2 ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI MILACRON'S CIMTECH 410 (STAINLESS STEEL)

1.3 ENGRAVE OR STAMP DRAWING, PART AND THREE DIGITS SERIAL NUMBER ON NOTED SURFACE OF PART. SERIAL NUMBER STARTS AT 001 FOR THE FIRST PART AND PROCEEDS CONSECUTIVELY. USE .07" HIGHT CHARACTERS. EXAMPLE: D020617-001. A VIBRATORY TOOL MAY BE USED.

1.4 SHEET 1 OF 2 SHOWS VIEWS PRIOR TO FORMING.

1.5 AFTER FORMING, HEAT TREAT AT 435 °C FOR 100 HOURS.

1.6 SHEET 2 OF 2 HAS VIEWS SHOWING BLADE AFTER FORMING AND ANNEALING.

1.7 AS SHOWN IN SHEET 2 OF 2, THE RADIUS OF CURVATURE IS THE INTERNAL RADIUS.

1.8 AS SHOWN, THE OVERALL DEFLECTION IS MEASURED FROM THE BOTTOM OF THE BASE POINT TO THE HIGHEST POINT ON THE TIP OF THE BLADE.

OTHER NOTES (FOR INTERNAL USE)

2.1 SHAPE FACTOR UPPER BLADE = 1.36

2.2 LOAD ON UPPER BLADE (FLAT) = 18.215 kg

2.3 PREDICTED UNCOUPLED FREQUENCY = 2.70 Hz

2.4 PREDICTED FIRST INTERNAL MODE = 139 Hz

2.5 MAXIMUM STRESS = 780 MPa

2.6 SOLIDWORKS RADIUS VALUE OVER WRITTEN WITH VALUE CALCULATED BY NAR.

2.7 IN SOLIDWORKS PART, BLADE MUST BE DRAWN SHEET METAL AND EXTRUDED VERTICALLY DOWN-WARDS.

2.8 IN SOLIDWORKS PART, RADIUS SHOULD BE ADJUSTED TO ATTAIN DESIRED LENGTH ON DRAWING SHEET.

[MM]
DIMENSIONS ARE IN INCHES
TOLERANCES:
.XX ± 0.01
.XXX ± 0.005
ANGULAR ± 0.5 °

MATERIAL: MARAGING STEEL C250

FINISH:

	NAME	DATE
DRAWN	B.KIRKNER	JAN 17,2008
CHECKED	CP	JAN 17, 2008
APPROVED		

CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
IGR, GLASGOW UNIVERSITY GEO 600 GROUP

SYSTEM: ADVANCED LIGO

SUB-SYSTEM: SUS

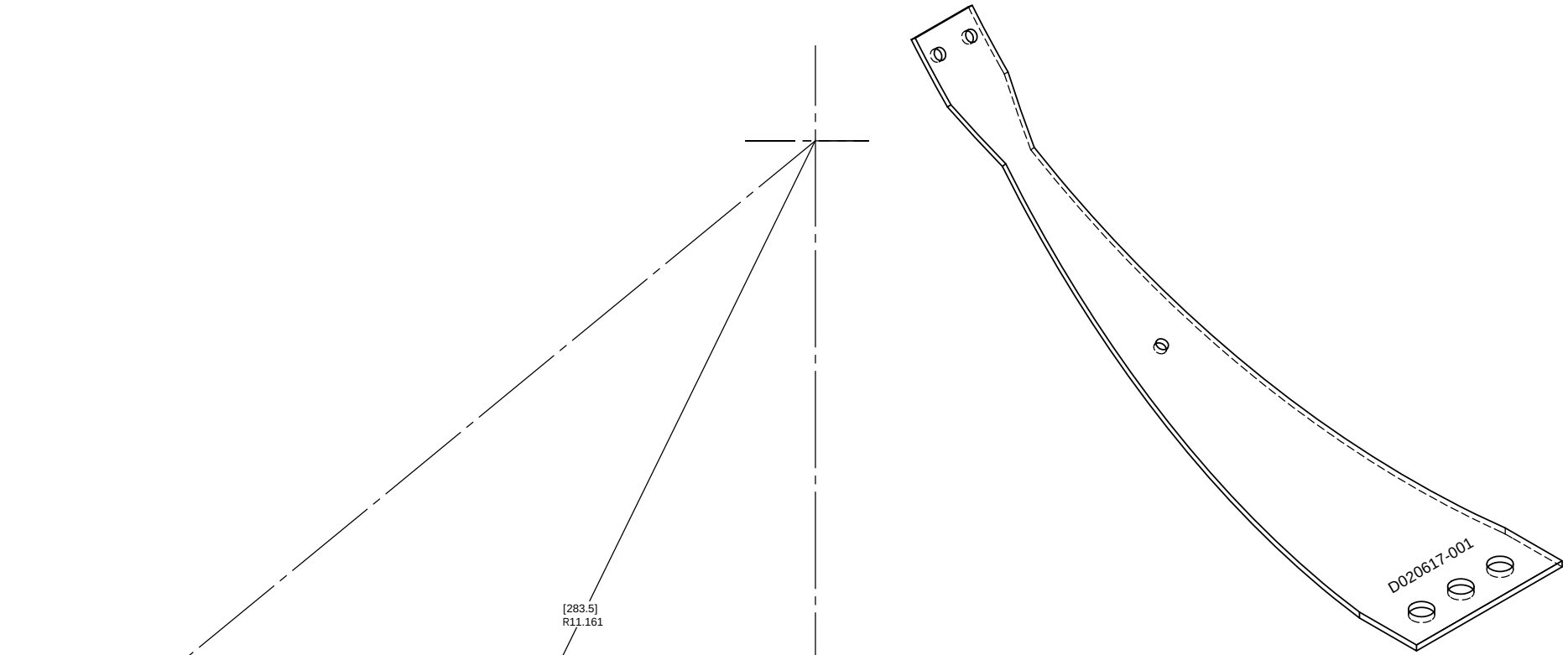
NEXT ASSY: ROTATIONAL ADJUSTER ASSY

PART NAME: UPPER BLADE, HLTS

SIZE: C | DWG. NO.: D020617 | REV.: C

SCALE: NTS | PROJECTION: | SHEET 1 OF 2

REV.	DATE	DCN #	DRAWING TREE #



PARTS LIST

NOTES: (UNLESS OTHERWISE SPECIFIED)

[MM]
DIMENSIONS ARE IN INCHES

TOLERANCES:
.XX ± 0.01
.XXX ± 0.005
ANGULAR ± 0.5 °

MATERIAL: MARAGING STEEL C250

FINISH:

	NAME	DATE
DRAWN	B.KIRKNER	JAN 17,2008
CHECKED	CIT	JAN 17,2008
APPROVED		

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
IGR, GLASGOW UNIVERSITY GEO 600 GROUP

SYSTEM: ADVANCED LIGO
SUB-SYSTEM: SUS
NEXT ASSY: ROTATIONAL ADJUSTER ASSY
PART NAME: UPPER BLADE, HLTS

SIZE: C | DWG. NO.: D020617 | REV.: C

SCALE: NTS | PROJECTION: | SHEET 2 OF 2