FERMILAB
ENGINEERING NOTE

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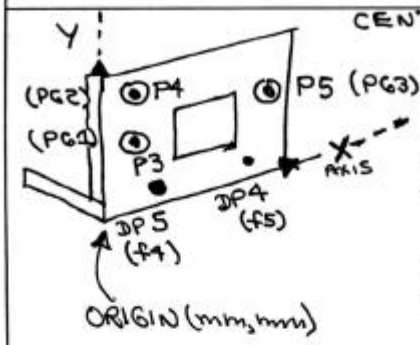
SUBJECT: DCOPS BRACKET CMM { PG TARGETS / DOWEL PINS }

NAME: J EARTLY

DATE: 6.15.2000

REVISION DATE:

CENTER OF HOLES



	DP5 5mm	DP4 4mm	PG1 (P3)	PG2 (P4)	PG3 (P5)	BRAC #
X=	19.596	81.575	7.673	7.658	92.479	1
Y=	8.141	8.156	23.122	73.685	54.117	ES1
X=	19.621	81.559	7.602	7.574	92.443	2
Y=	8.204	8.265	23.132	73.990	54.226	ES1
X=	19.566	81.549	7.666	7.638	92.476	3
Y=	8.194	8.108	23.119	73.929	54.117	ET1
X=	19.571	81.554	7.661	7.628	92.474	4
Y=	8.138	8.148	23.150	73.914	54.120	
X=	19.637	81.608	7.699	7.668	92.517	5
Y=	8.103	8.110	23.066	73.873	54.089	
X=	19.583	81.554	7.683	7.635	92.481	6
Y=	8.133	8.151	23.096	73.911	54.138	
X=	19.632	81.603	7.694	7.656	92.512	7
Y=	8.097	8.128	23.089	73.881	54.107	
X=	19.632	81.628	7.706	7.673	92.525	8
Y=	8.110	8.148	23.094	73.896	54.135	
X=	19.601	81.570	7.668	7.656	92.479	9
Y=	8.136	8.148	23.068	73.876	54.092	
X=	19.644	81.613	7.645	7.676	92.507	10
Y=	8.118	8.115	23.205	73.906	54.127	
X=	19.530	81.534	7.699	7.612	92.453	11
Y=	8.143	8.156	23.096	73.929	54.115	

ESTIMATED MEASUREMENT ERRORS < 12.7 μm (0.0127)

NOTE:

FOR ET0, ET1
ES1, ES10
THE BRACKET IS ROTATED 90°
Y = ISR Y
X = −ISR Z

FOR ET2, 3, 4
[redacted]
X = −ISR Y
Y = ISR Z

FOR ES2, 4, 5
X = ISR X
Y = ISR Z

FOR ES6, 7, 9
X = −ISR X
Y = ISR Z

THEORETICAL X_{DPS} = 19.50 ; THEO ( ) $\Delta X_{DPS-DP4}$ = 62.00 ; THEO X_{PG-PG} ( ) = 85.0

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ENGINEERING NOTE

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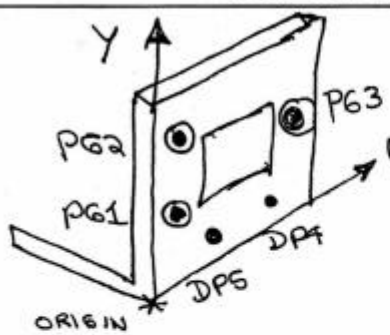
SUBJECT: DCOPS BRACKET CMM (FNAL) { PG TARGETS / DOWEL PINS

NAME: D. EARTLY

DATE: 6.16.2000

REVISION DATE:



	DP5	DP4	P61	P62	P63	BRACKET #
X =	19.665	81.643	7.706	7.701	92.540	12
Y =	8.131	8.130	23.091	73.989	54.112	
X =	19.530	81.536	7.617	7.584	92.413	13
Y =	8.141	8.158	23.089	73.896	54.099	

UNMEASURED NEW BRACKET FOR ETQ X = Y = (33)

.50) IN THEORY P61, P62 same X
2.50) IN THEORY P63
IN THEORY P61/P62 vs P63 symmetric to aperture and sensor board for DP4 = 81.50

℄ P62 is 3.0 mm above aperture (BRACKET)
℄ P61 is 1.8 mm below aperture → LP020028C
℄ P63 is 6.0 mm above centerline of aperture (BRACKET)