

FIELD SHEET, TELLUROMETER DATA ENTRIES (MRA3 MKII)

For use of this form, see FM 3-34.331; the proponent agency is TRADOC.

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OPERATION		APPROXIMATE DISTANCE		DATE (YYYYMMDD)		METHOD OF DETERMINATION	
MASTER STATION			INST NO.	H. I.		ECCENTRICITY	ELEVATION
REMOTE STATION			INST NO.	H. I.		ECCENTRICITY	ELEVATION
MASTER OPERATOR		REMOTE OPERATOR		RECORDER		ORGANIZATION	

COARSE READINGS				FINE READINGS											
TIME	CAVITY			TIME	CAVITY			RDG. NO.	CAVITY	A FORWARD	A REVERSE	RDG. NO.	CAVITY	A FORWARD	A REVERSE
INITIAL	A			FINAL	A			1				13			
	E				E			2				14			
	D				D			3				15			
	C				C			4				16			
	B				B			5				17			
								6				18			
								7				19			
								8				20			
								9				21			
								10				22			
								11				23			
								12				24			
								SUM				SUM			
								MEAN				MEAN			
								FINAL MEAN							

METEOROLOGICAL READINGS		PRESSURE ALT	TEMPERATURE			
			DRY (t)	WET (t')		
MASTER INITIAL					10	22
REMOTE INITIAL					11	23
MASTER FINAL					12	24
REMOTE FINAL					SUM	
SUM					MEAN	
MEAN					FINAL MEAN	

BAROMETRIC PRESSURE (P)	"HG	DEPRESSION (t-t')	°F
B A		e'	"HG
UNCORRECTED DISTANCE (UD)	METERS	Δe	"HG
ZERO CORRECTION (Z)	METERS	e	"HG
REFRACTIVE INDEX CORR. (RC)	METERS	N	
SLOPE DISTANCE (T)	METERS	REFRACTIVE INDEX DEVIATION (RD)	PPM
HORIZONTAL DISTANCE (H)	METERS	DIFF OF ELEV (d)	FEET METERS
ECCENTRICITY CORRECTION	METERS	MEAN ELEVATION (h)	FEET METERS
CHORD- ARC CORRECTION (K)	METERS	a MEANØ	° °
SEA LEVEL REDUCTION (C)	METERS	MEAN RADIUS OF CURVATURE (p)	METERS
GEODETIC DISTANCE (S)	METERS	REMARKS (Use reverse)	

$$B = \frac{4730}{459.688 + t} \quad A = \frac{8540}{459.688 + t} \times \frac{4730}{459.688 + t} \quad H = \sqrt{T^2 - d^2} \quad K = \frac{H^3}{24p^2} \dots \quad c = -H \frac{h}{p} + H \frac{h}{p^2} \dots$$

$$e = e' \Delta e \quad RD = 325 - N \quad RC = UD \times RD \times 10^6 \quad H = T - \frac{d^2}{2T} - \frac{d^4}{8T^3} \dots \quad K = 1.027H^3 \times 10^5 \quad S = H + K + C$$

COMPUTED BY	DATE (YYYYMMDD)	CHECKED BY	DATE (YYYYMMDD)
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