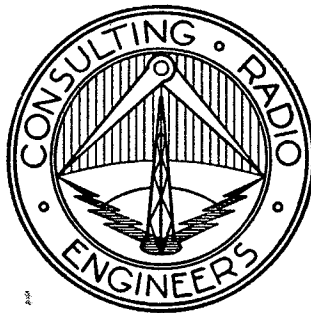


ENGINEERING EXHIBITS SUPPORTING
THE DAYTIME INTERFERENCE STUDY
ON BEHALF OF
STATION WCKY, CINCINNATI, OHIO

June 4, 1947 Docket No. 8333



RING & CLARK

WASHINGTON, D. C.

TABLE I

INTERFERENCE IN CINCINNATI FROM PHILADELPHIA
1942-1943-1944 - AVERAGE CINCINNATI-BALTIMORE PATH

<u>Time at Transmitter</u>	<u>Limit from 10 kw Transmitter in Philadelphia to Service in Cincinnati</u>	
SR	6.95 mv/m	6.32
SR+1	1.68	1.53
SR+2	.45 —	.41
SS-2	.14 —	.127
SS-1	.51 —	.46
SS	2.55 —	2.32

INTERFERENCE WHICH WOULD BE PRODUCED AT CINCINNATI
BY 10 KW STATION IN PHILADELPHIA
FROM FCC EXHIBIT 1 FIG. 7C

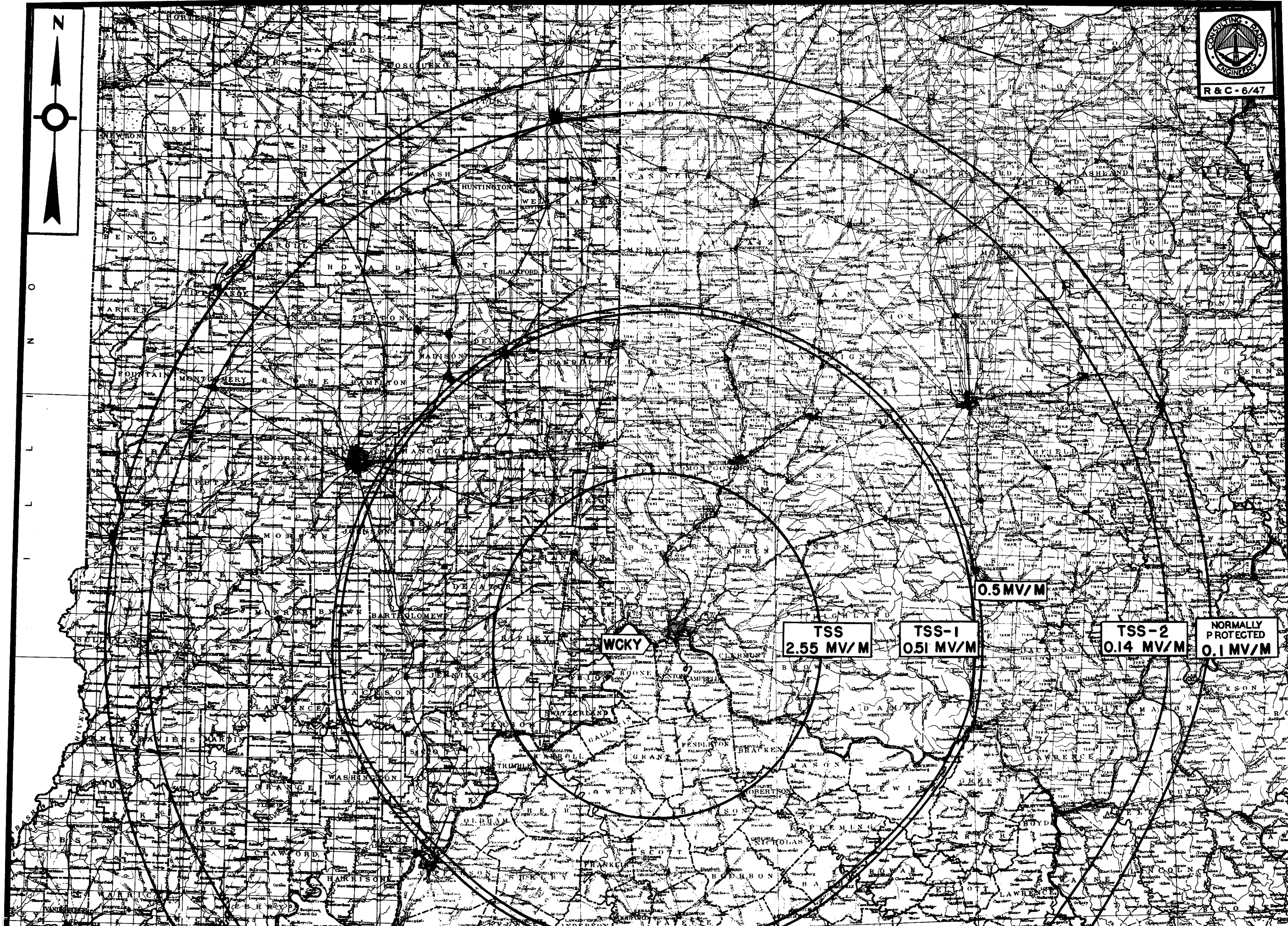
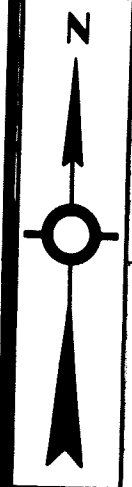
<u>Time at Transmitter</u>	<u>Limit from 10 kw Transmitter in Philadelphia to Service in Cincinnati</u>	
SR	7.55 mv/m	6.87
SR+1	2.35	2.14
SR+2	.43	.39
SS-2	.152	.138
SS-1	.794	.723
SS	3.65	2.32

TABLE II

INTERFERENCE CAUSED 10% OF THE DAYS
DURING MONTH MAXIMUM INTERFERENCE
WAS RECORDED* - YEARS 1942-1943-1944

	<u>Date</u>	<u>Transmitter Time</u>	<u>Limit from 10 kw Transmitter in Philadelphia to Service in Cincinnati</u>
1942	June	SR	13.82 mv/m
	March	SR+1	2.27
	January	SR+2	.626
	November	SS-2	.419
	December	SS-1	1.147
	April	SS	4.18
1943	March	SR	10.2 mv/m
	December	SR+1	3.88
	December	SR+2	1.235
	December	SS-2	.59
	December	SS-1	1.302
	April	SS	4.1
1944	March	SR	11.8 mv/m
	March	SR+1	3.02
	January	SR+2	.977
	November	SS-2	.667
	December	SS-1	1.45
	December	SS	5.48

* Recorded at eastern end Cincinnati-Baltimore path and adjusted by constant and difference of time to apply for Philadelphia transmitter to service limit in Cincinnati at hour specified.



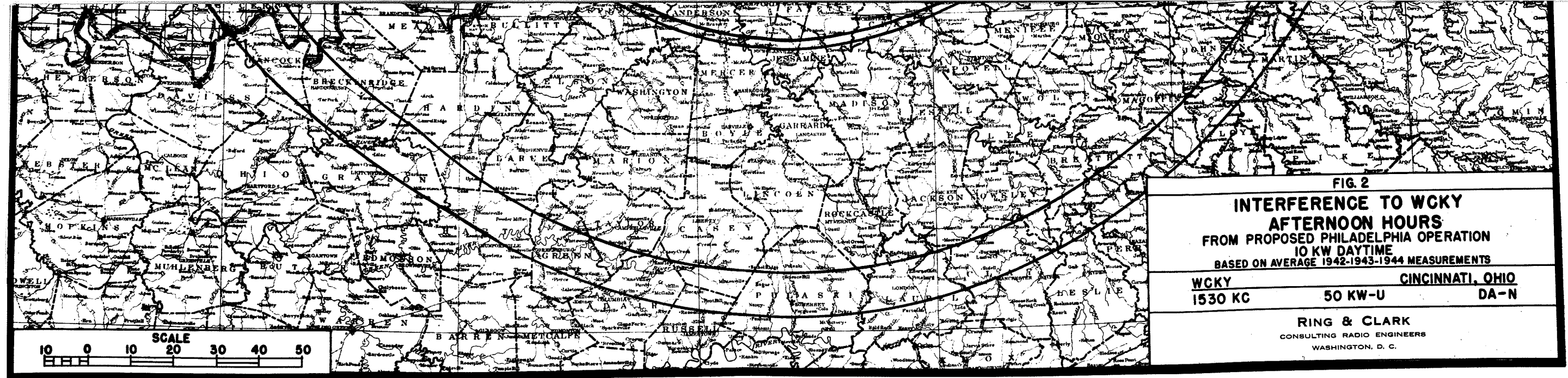
WCKY

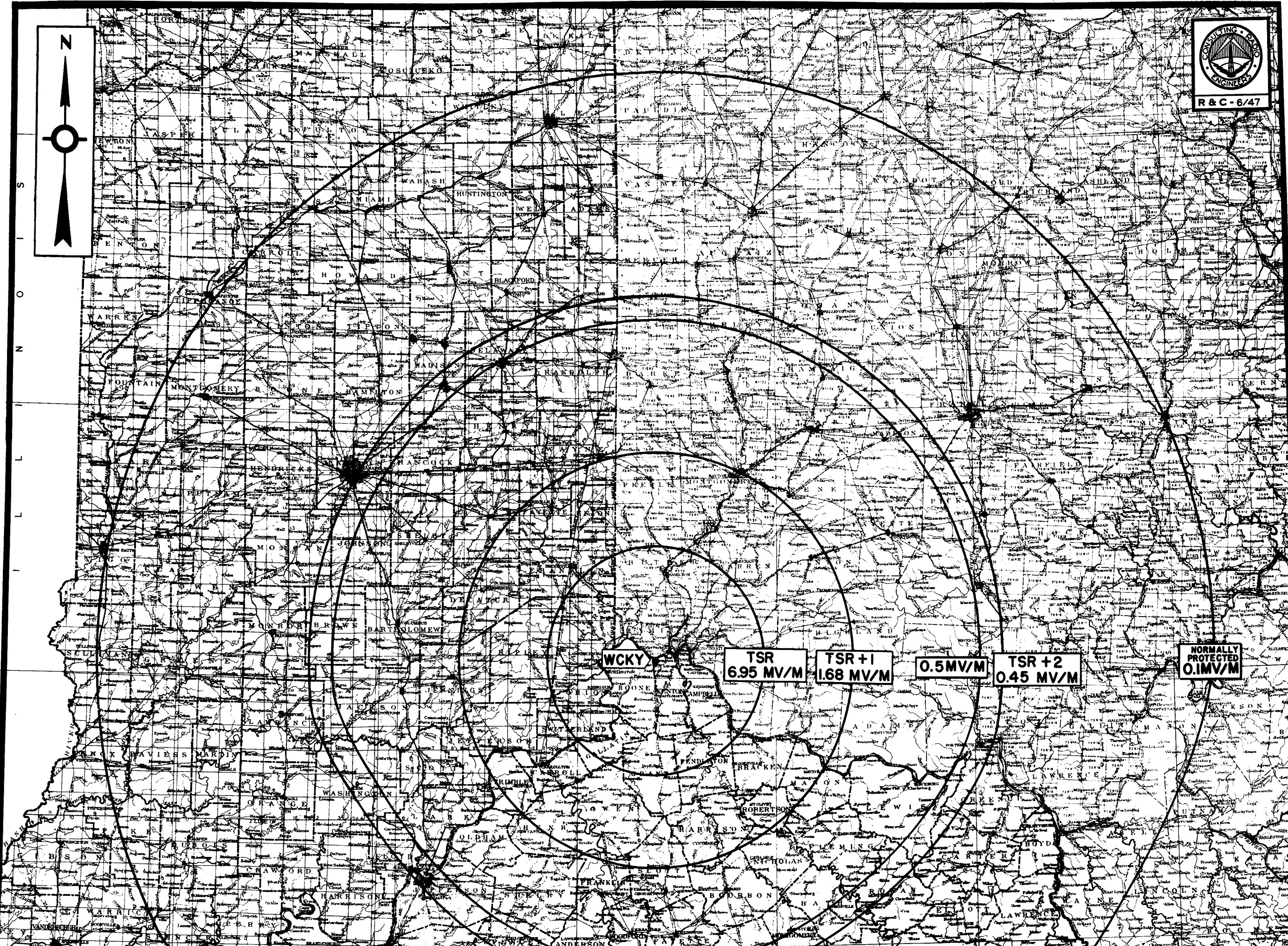
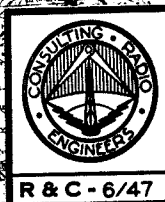
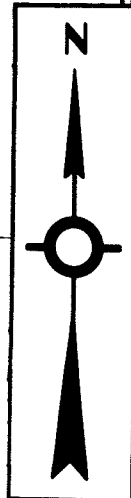
TSS
2.55 MV/M

TSS-1
0.51 MV/M

TSS-2
0.14 MV/M

NORMALLY
PROTECTED
0.1 MV/M





WCKY

TSR
6.95 MV/M

TSR +1
1.68 MV/M

0.5 MV/M

TSR +2
0.45 MV/M

NORMALLY
PROTECTED
0.1 MV/M

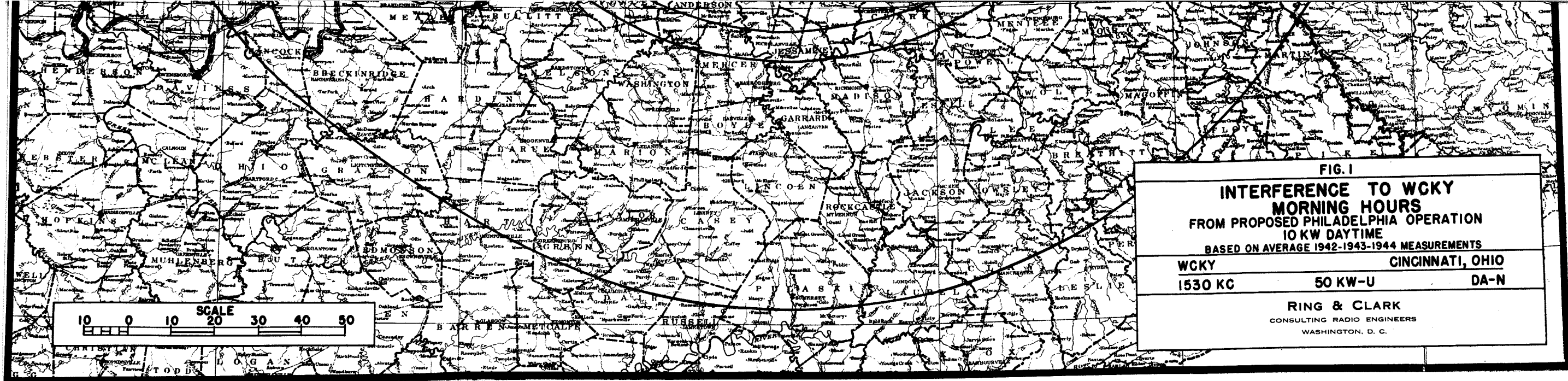


FIG. 3

SKYWAVE FIELD EXCEEDED 10 % OF THE DAYS
AVERAGE OF YEARS 1942-1943-1944
TRANSMISSION PATH — CINCINNATI-BALTIMORE
1530 KC — 420 MILES — MID LAT. 39.25°
BASED UPON 100 MV/M RADIATED AT CRITICAL ANGLE

RING & CLARK

CONSULTING RADIO ENGINEERS

WASHINGTON, D. C.

1000
100
10
MICROVOLTS PER METER

KEUFFEL & ESSER CO., N. Y. NO. 399-S1
Semi-Logarithmic, 4 Cycles X 10 to the Inch.
MADE IN U. S. A.

-2 -1 SR +1 +2 NOON -2 -1 SS +1 +2
MP SUN TIME - HRS.

