1. DATE - TIME GROUP 11 Jul 68 0300 local 1200Z	2. LOCATION EIELSON AFB, ALASKA mult
3. SOURCE military	10. CONCLUSION RADAR: Probable Anomalous propagation VISUAL: Probable Astronomical (MOON) Prob Comments: See reverse side of card
4. NUMBER OF OBJECTS one	
5. LENGTH OF OBSERVATION 25 mins	11. BRIEF SUMMARY AND ANALYSIS At 0300 local, several aircraft controllers sighted a large orange or yellow light in a clear area of sky south of the base. The light did not move much laterally (except slightly west) and gradually became dimmer until it disappeared to 0325 into the haze that had moved into the area. The Fairbanks RAPCON was contacted, by the tower personnel, and reported radar returns south of Eielson AFB.
6. TYPE OF OBSERVATION ground vidual	
7. COURSE see case	
8. PHOTOS ☐ Yes XX No	
9. PHYSICAL EVIDENCE ☐ Yes ☑ No	

FORM
FTD SEP 63 0-329 (TDE) Previous editions of this form may be used.

COMMENTS: The 744 ACW Squadron at Murphy Dome located 35 km west of Eielson AFB was requested to report any visual or radar sightings in area in question. No sightings were made. There were no known aircraft or balloons that could have been in the area. There was a good correlation between times of the radar sightings and visuals but radar sightings do not correlate well with visuals in reference to movement, quantity of objects involved and position of objects. This combined with the statement by the RAPCON console operator that he thought the paints were radar "ghosts" indicates that the radar paints were indeed due to anomalous propagation. At 0300 local the moon was at azimuth of 194 deg and elevation of 5 to 6 deg and was very nearly a full moon (full moon 10 Jul 68). At about 0325 local it was at approximately 201 deg az and at about 4 to 5 deg elevation. This combined with the statement that the object was seen in a bright patch of sky and that the sky gradually hazed over in the south would seem to indicate that the observers were looking at the moon.

Atch 3-2

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The disorientation that pilots experience during night formation flight may result from what is called the autokinetic illusion. The autokinetic illusion is a visual phenomenon in which a stationary spot of light against a dark background appears to move erratically. It is known to have been experienced by pilots when they were observing formation lights on other aircraft (8). In fact, this illusion can disorient a trained pilot to the extent that he will spin in a link trainer (8). In a recent night formation flight accident a surviving pilot reported that he "saw" the other two aircraft in the formation peel-off to the left when, actually, they had not changed course (16). On the basis of this false information he maneuvered his aircraft so as to collide with the other two with a resultant loss of one pilot and three F-86D aircraft. The "peeling-off" of these two aircraft is typical of the nature of the autokinetic illusion.

Investigations of the autokinetic illusion reveal that the apparent movement is greatest and most frequent when small (point-source), dim lights are being viewed; but it is still present in the case of large light sources (6, 7) and, although to a lesser degree, when viewing patterns of lights (8). Therefore, the use of more or larger area reference lights in formation flight should cause a reduction in the autokinetic effect. It has been demonstrated that autokinetic movement was frequent and large when only one reference light was visible during formation flight, was much reduced when two references lights were visible, and reduced even more when tree reference lights were visible (8).

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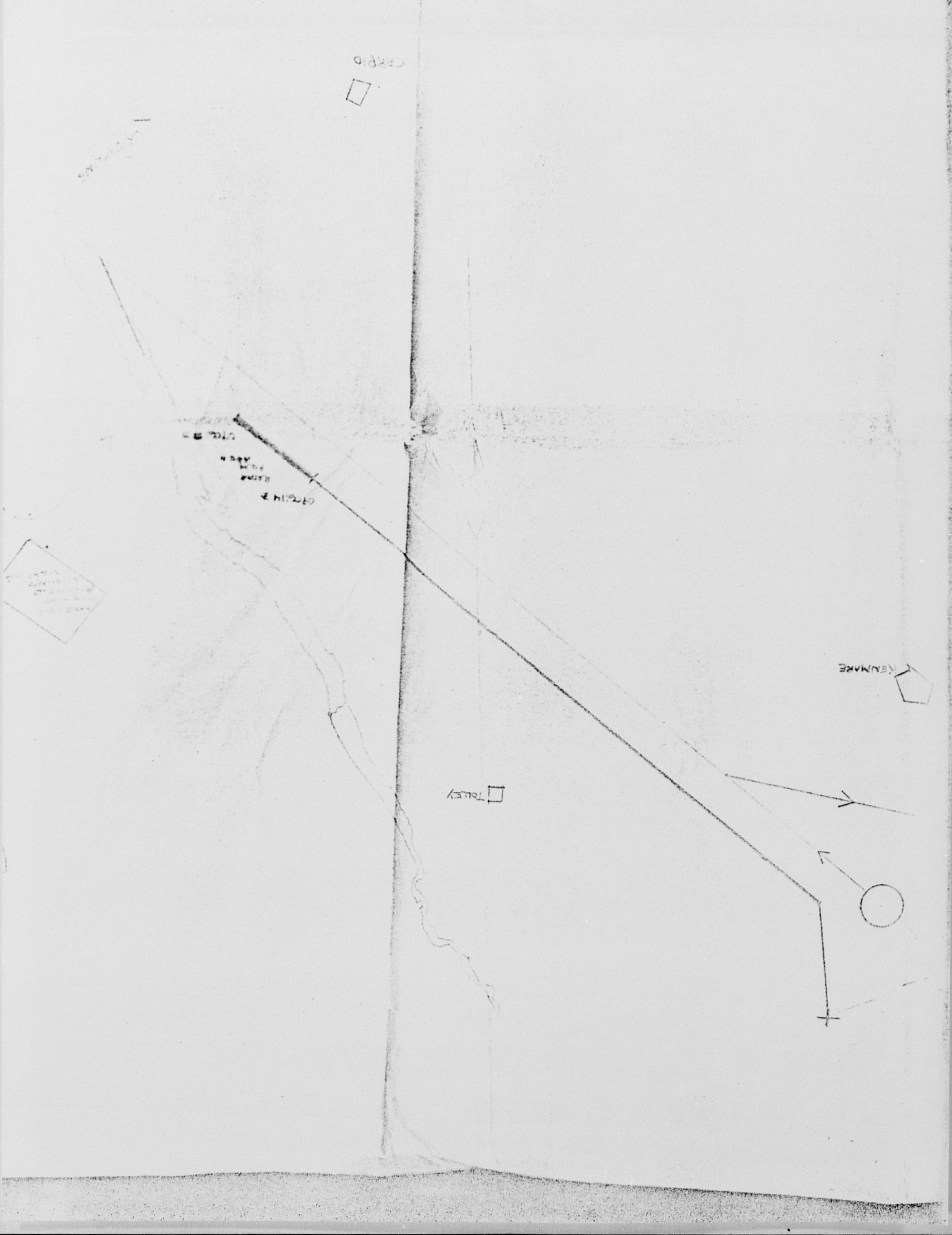
MEMO FOR THE RECORD

14 November 1968

Subject: Telephone call of 13 Nov 68 to Minot AFB, North Dakota

On 13 November 1968 we called Minot AFB for Col Werlich, however, there was no answer at either of his telephone numbers. The base telephone operator said that they were having an exercise at the time and wouldn't be answering their phones. We had wanted to request information on the weathers radar.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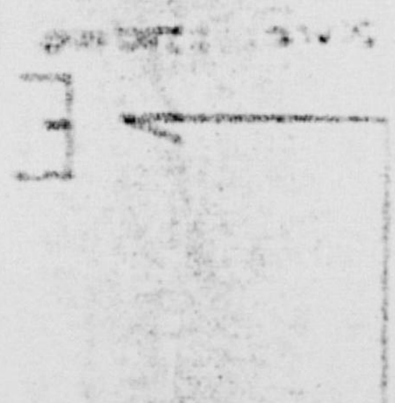

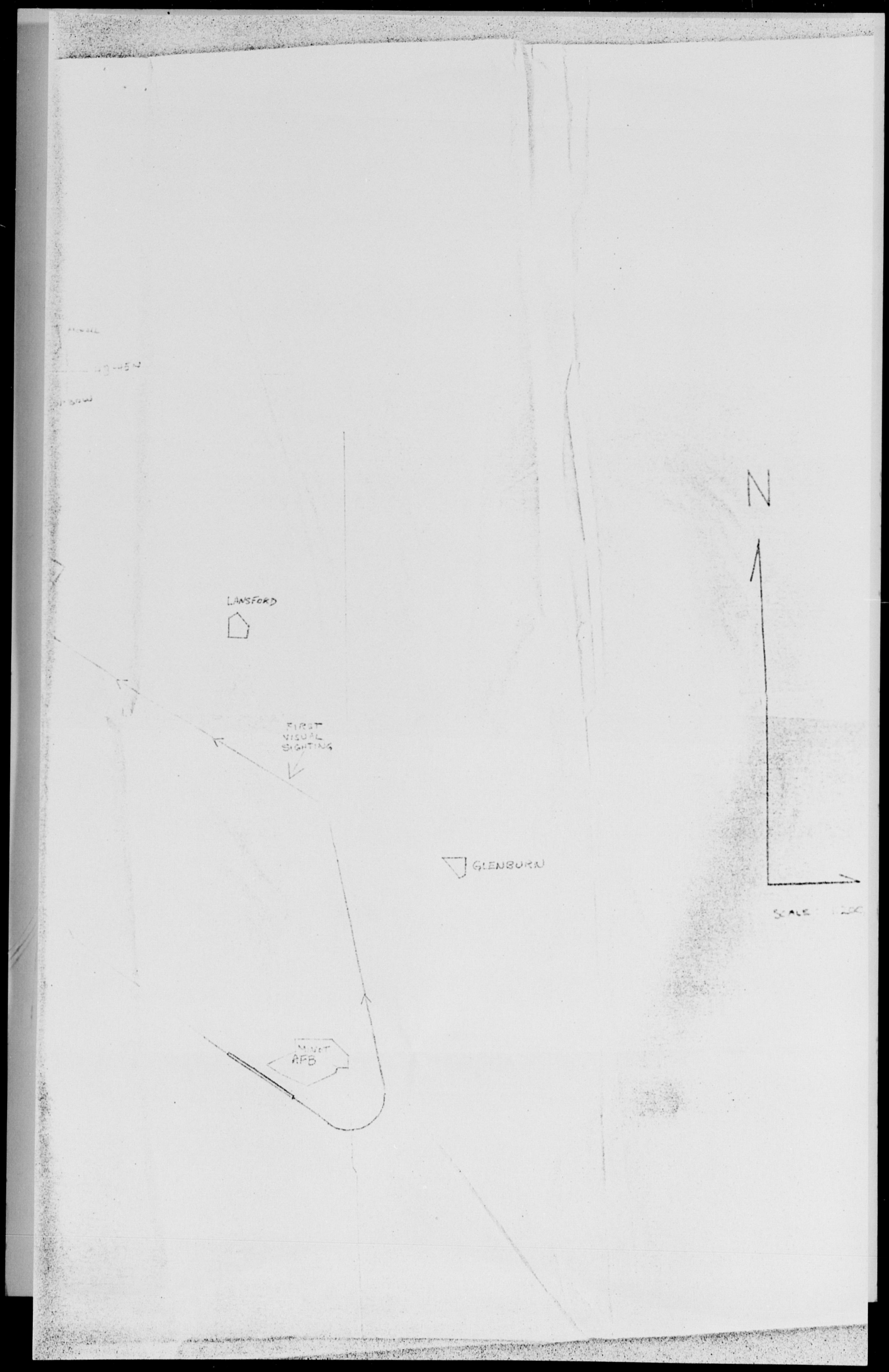
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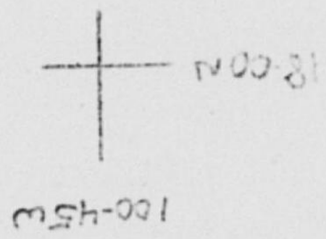
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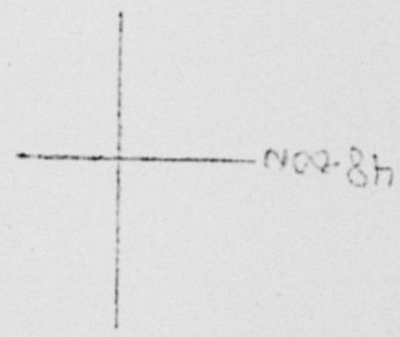
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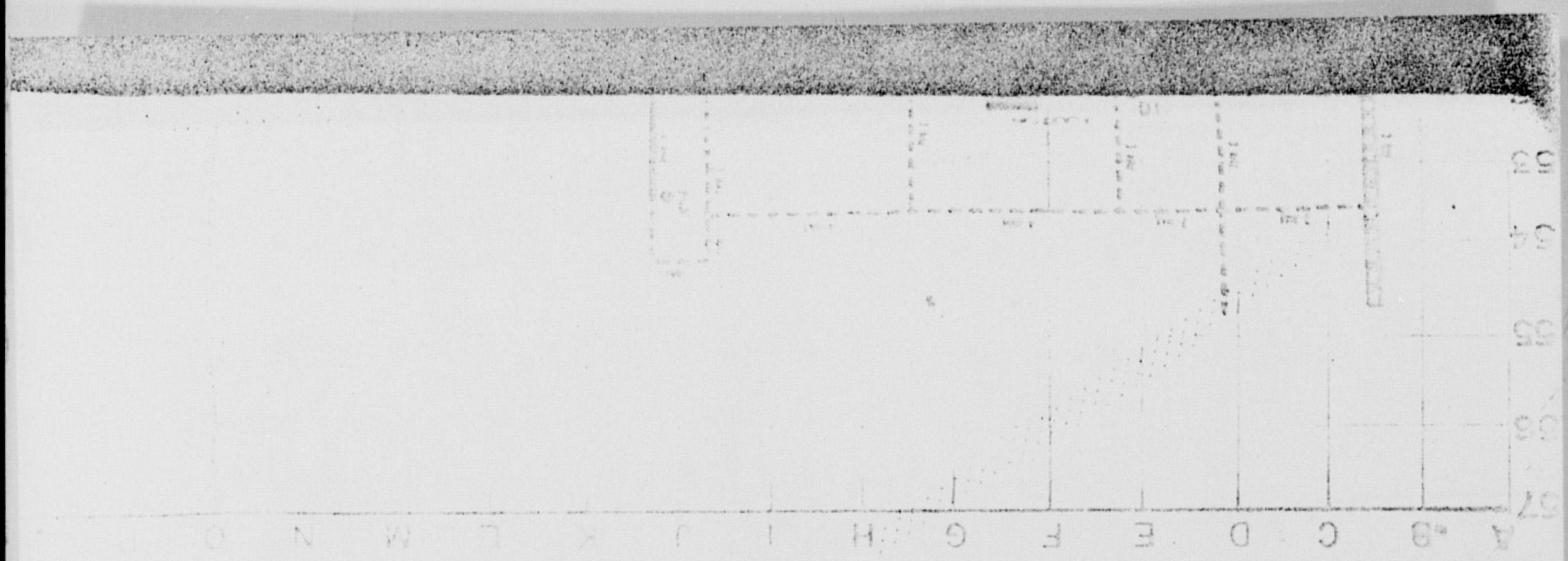
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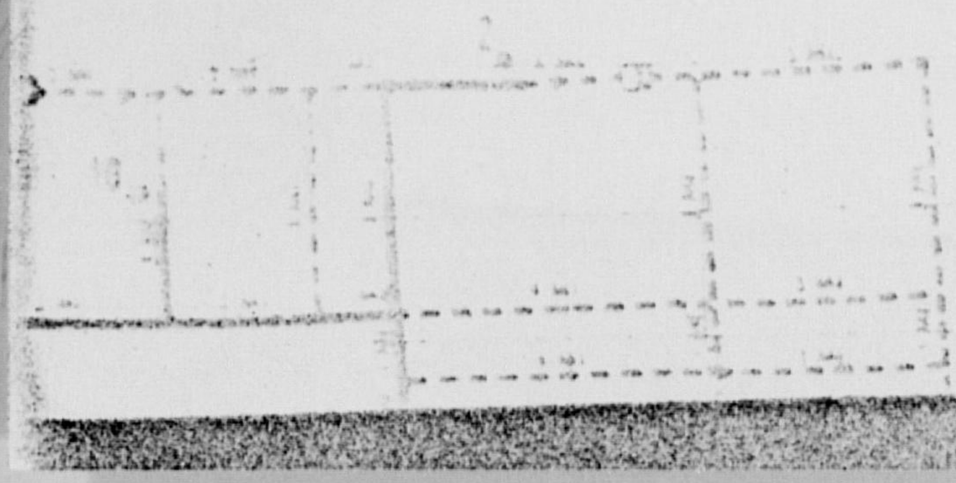

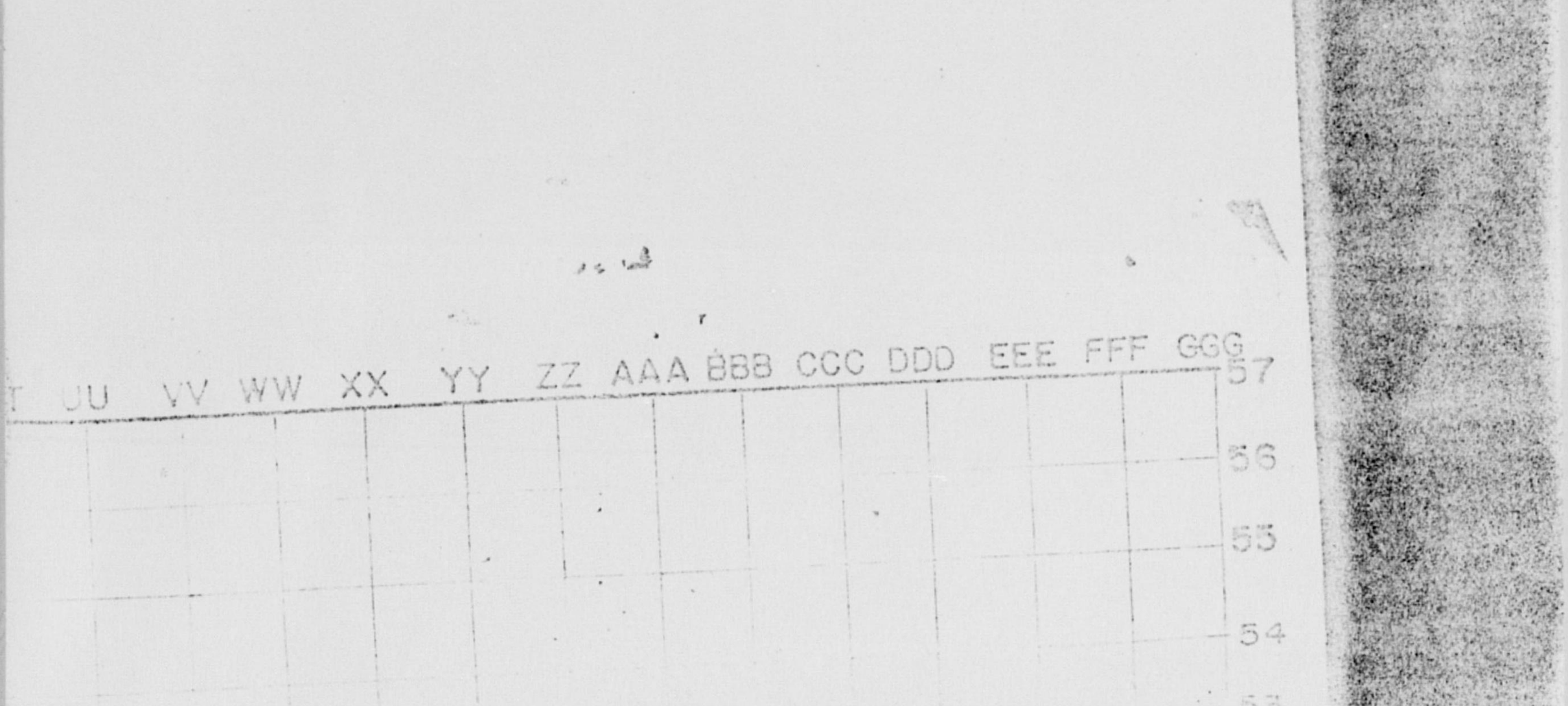
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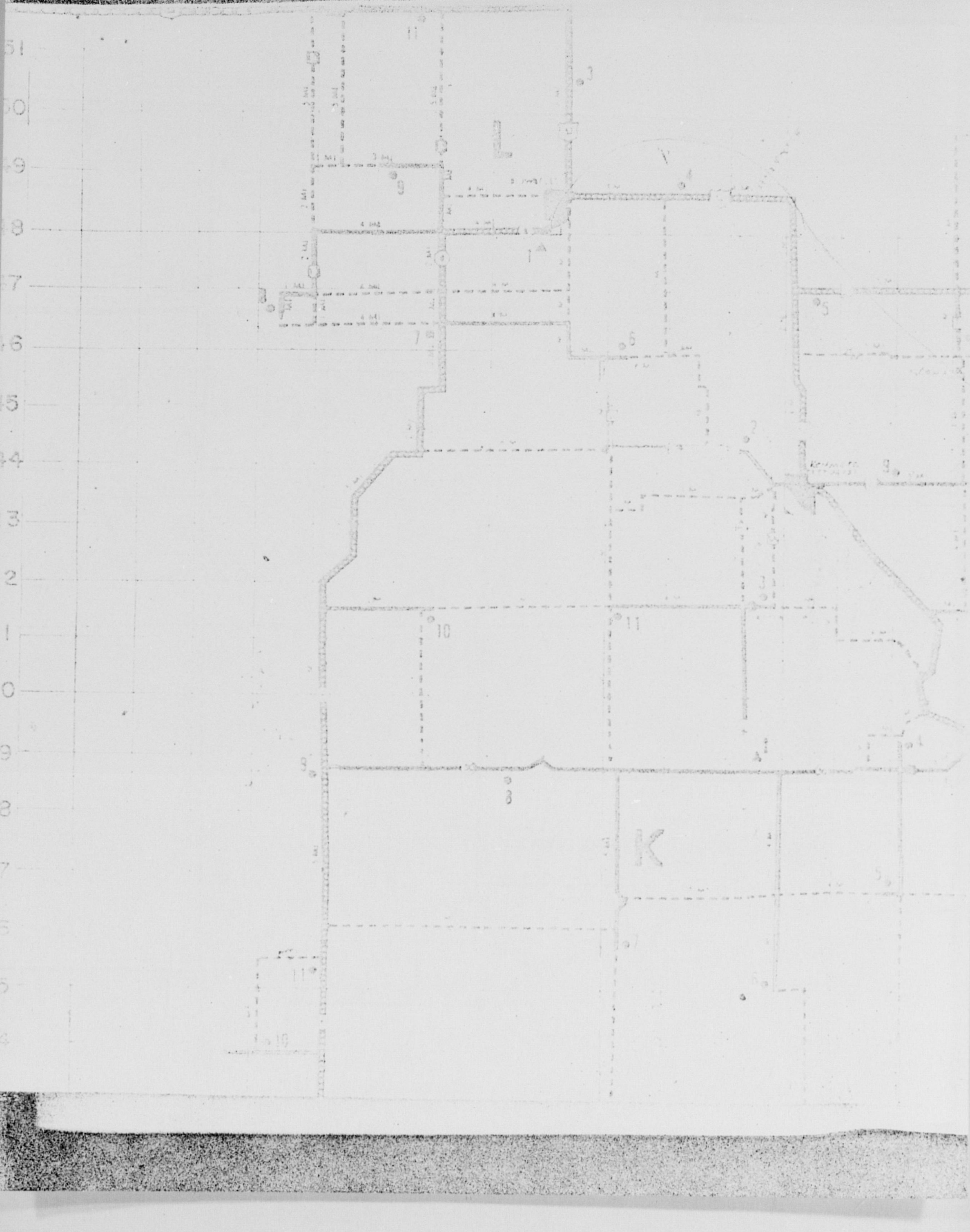
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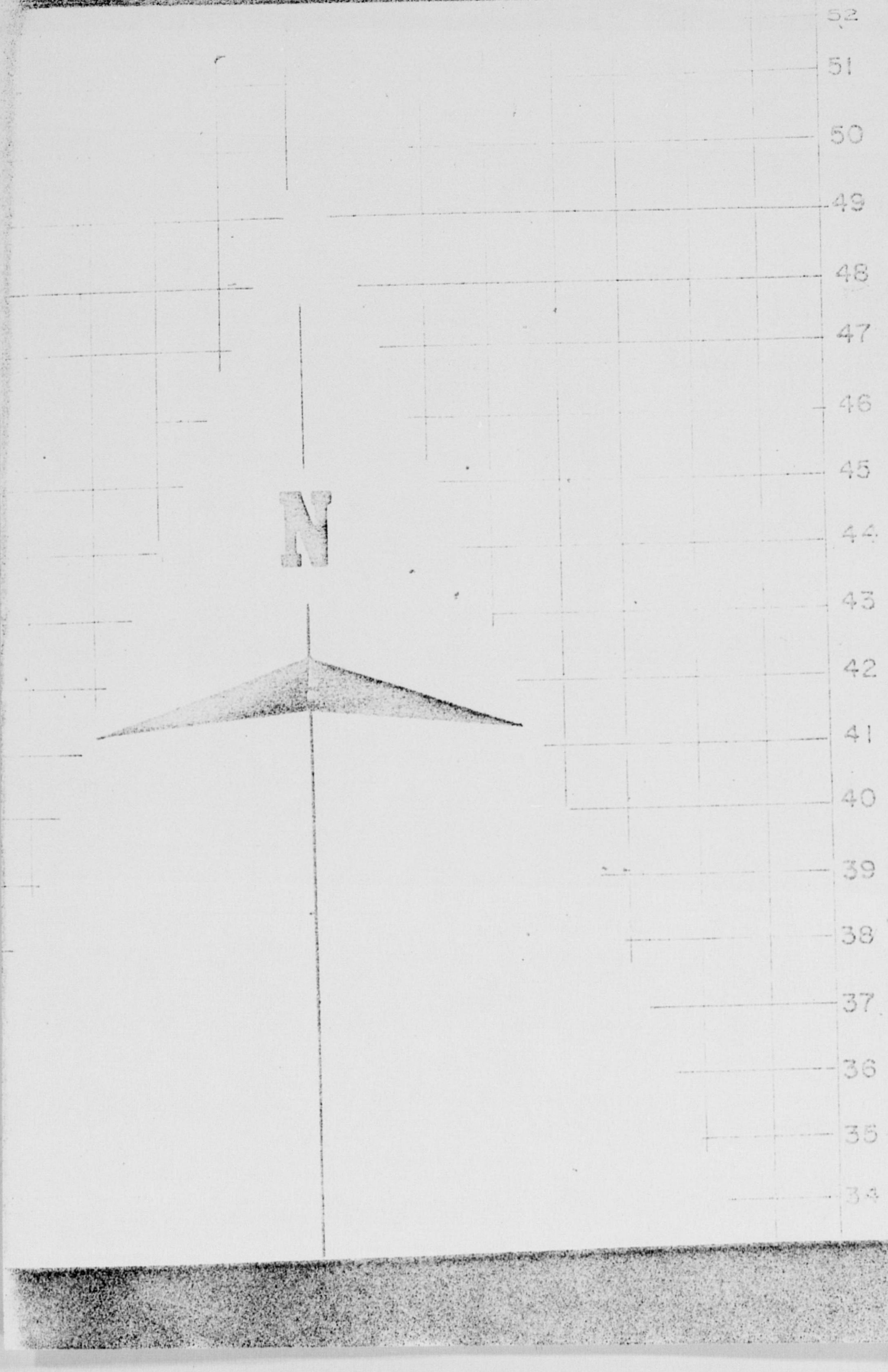
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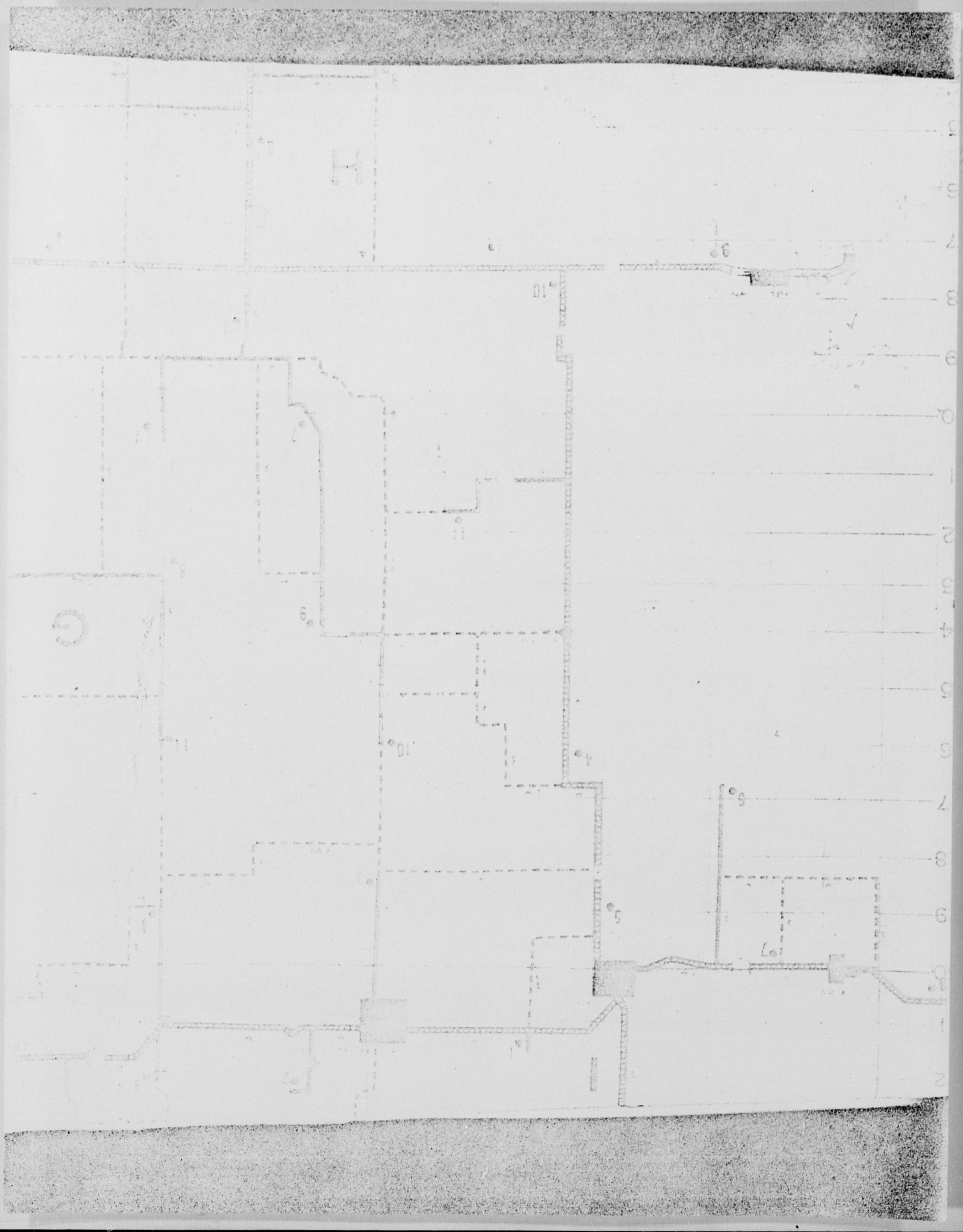
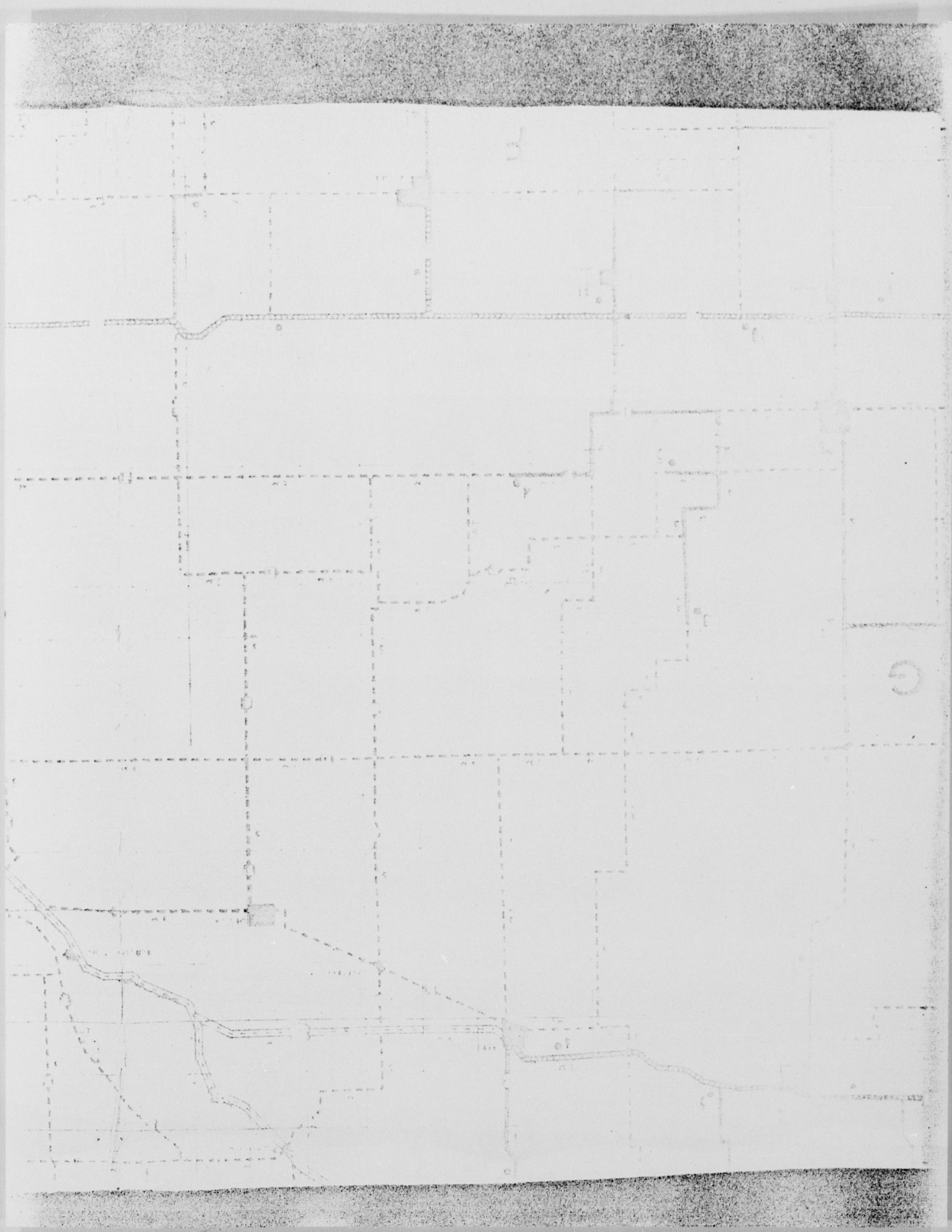
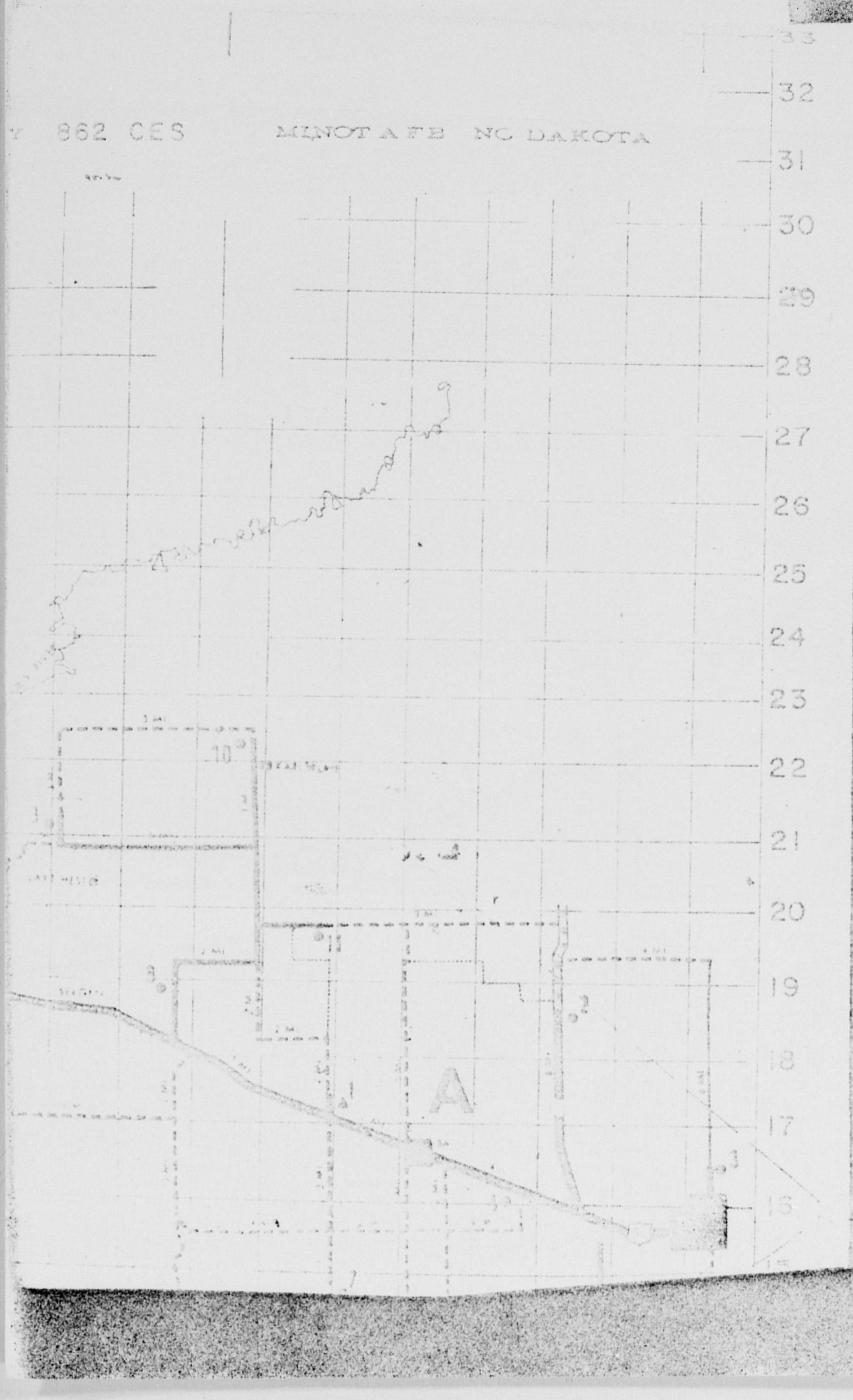




PREPARED BY 86

Y 862 CES MINOT AFB ND DAKOTA



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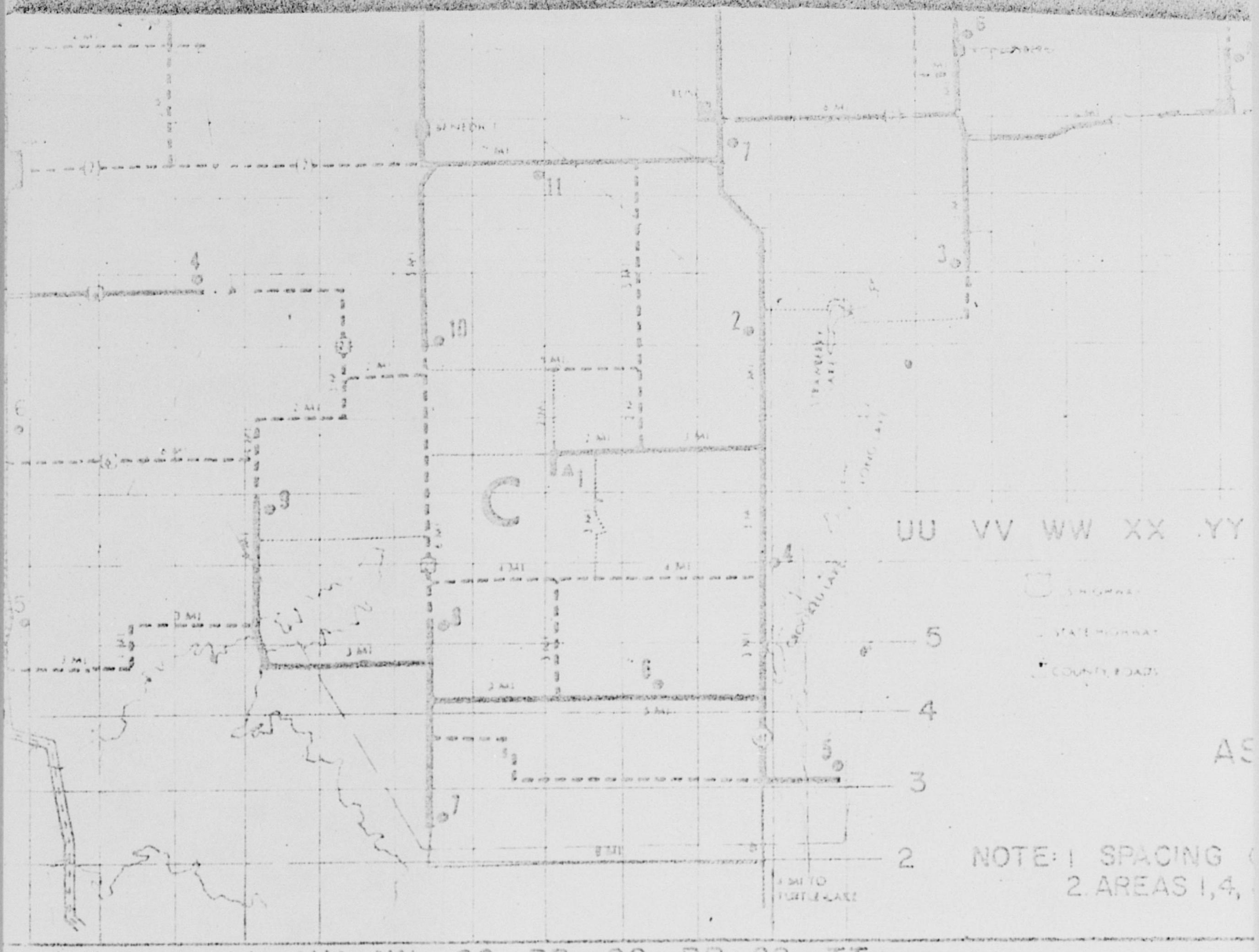
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NOTE: 1 SPACING
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II JJ KK LL MM NN OO PP QQ RR SS TT

ROL GRID MAP

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XX YY ZZ AAA BBB CCC DDD EEE FFF

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HARD SURFACE ROADS

GRAVEL ROADS

POOR ROADS

AS OF 9 NOV. 1965

SPACING OF GRID LINES — APPROX. 2 MI.
AREAS 1, 4, & 9 REVISED PER USAF LETTER 9-11-65

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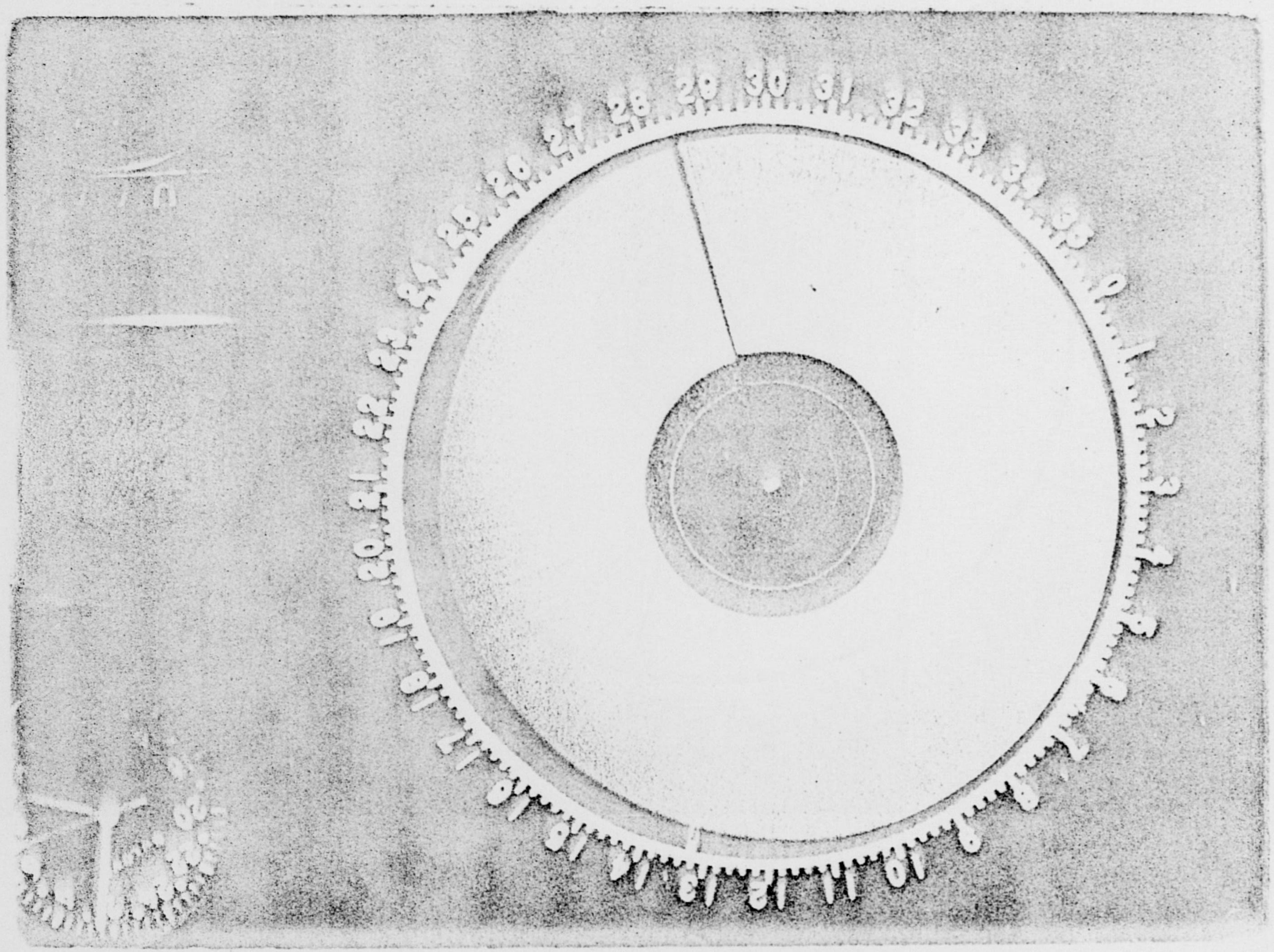

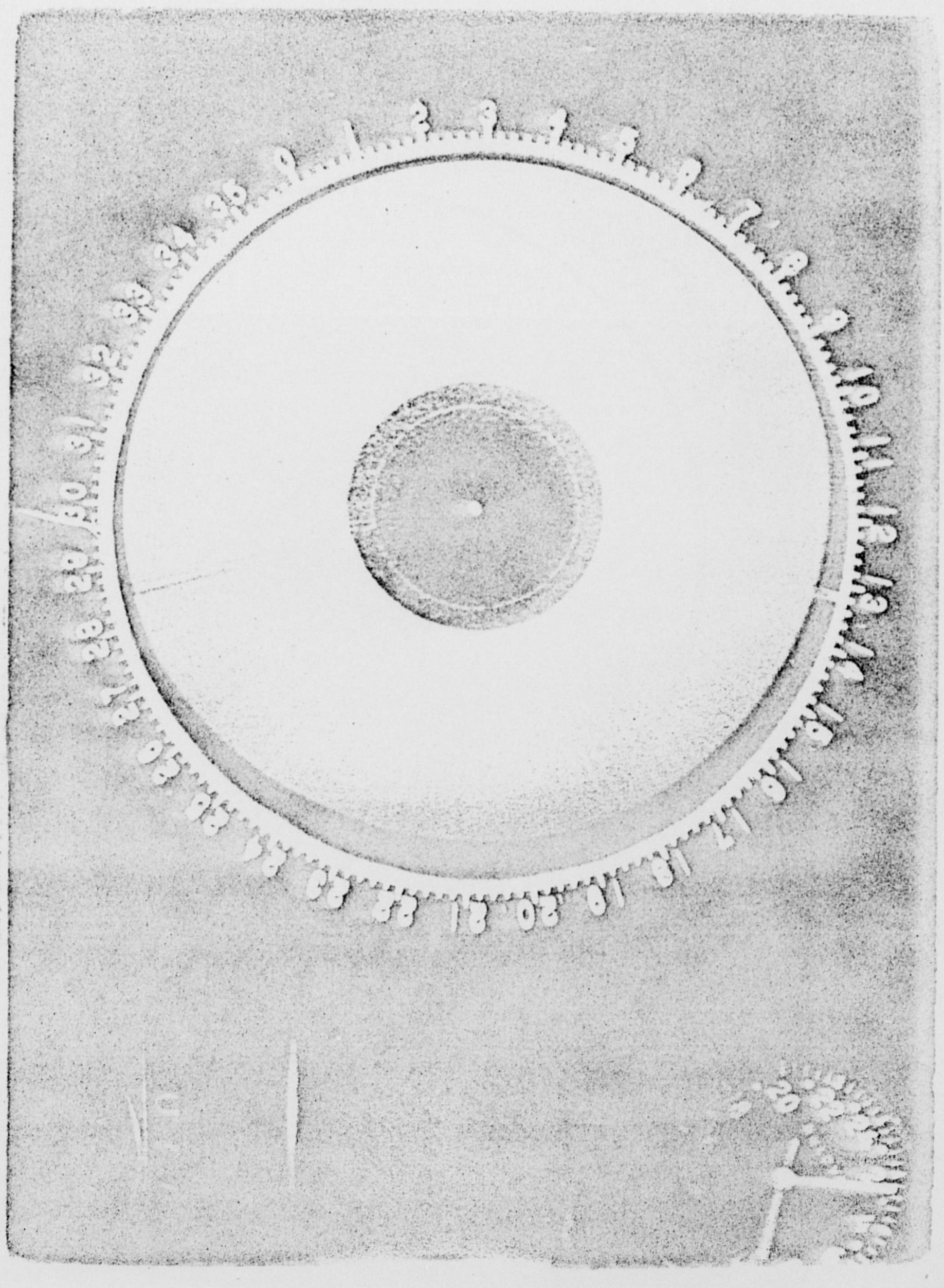

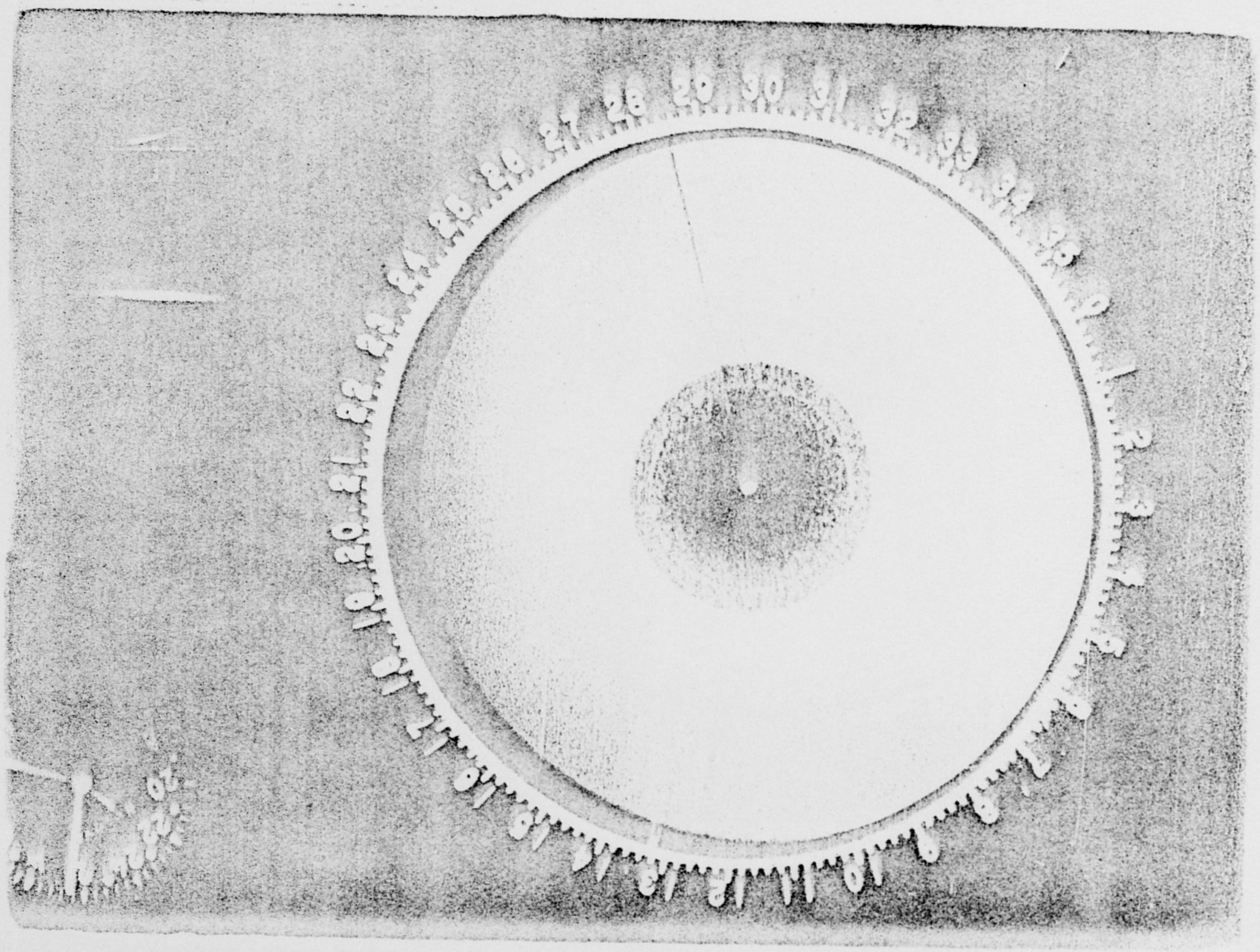

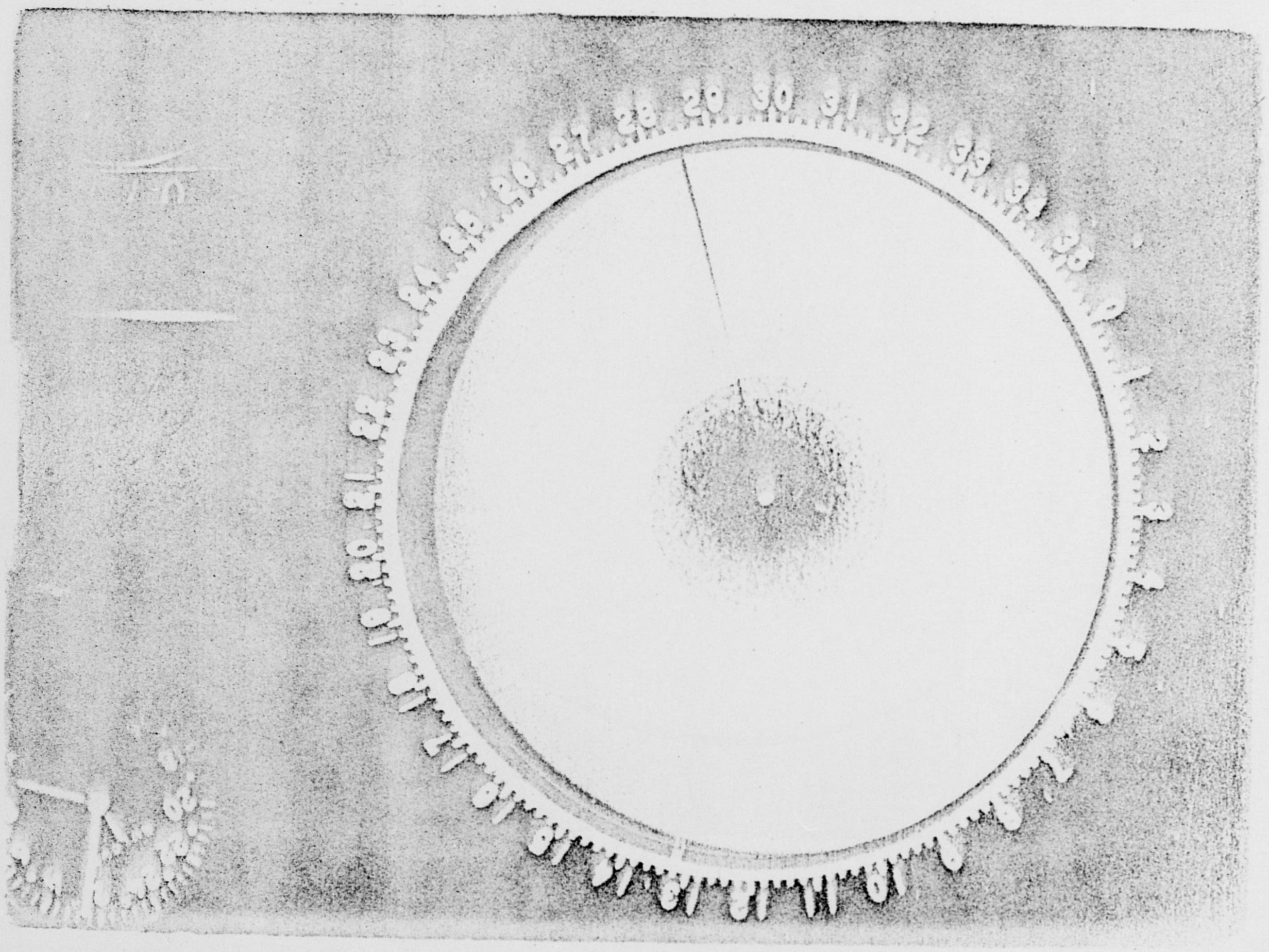

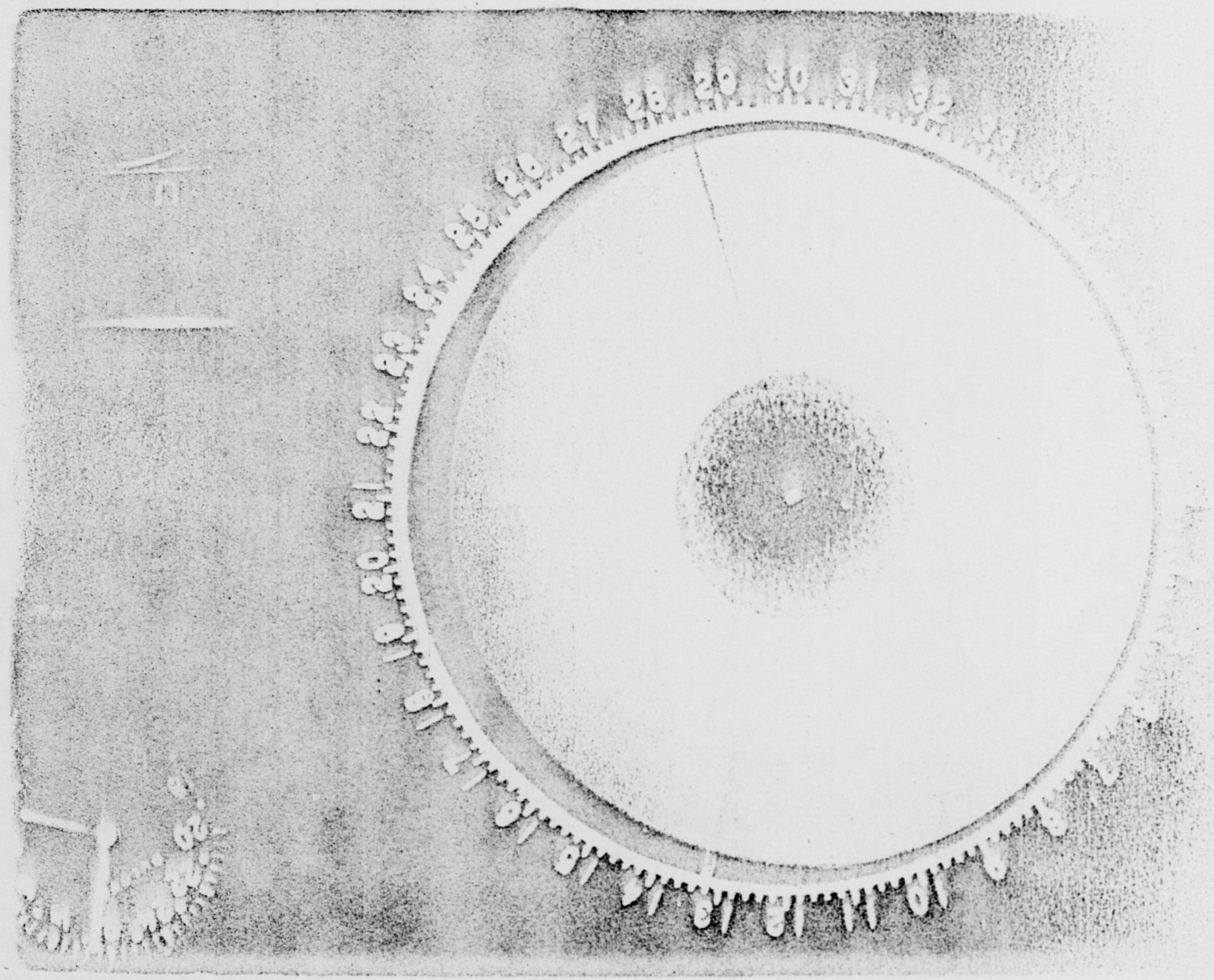

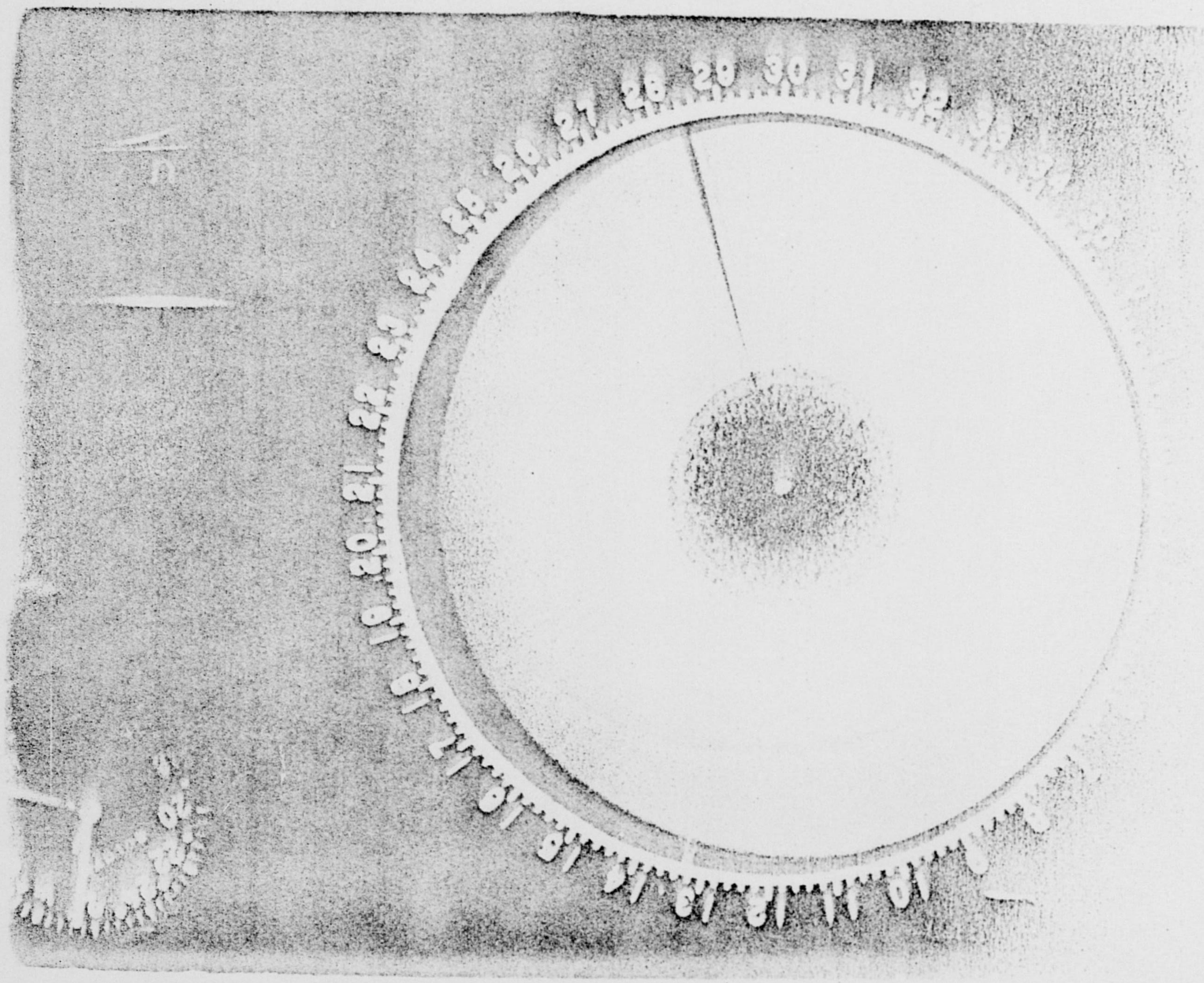

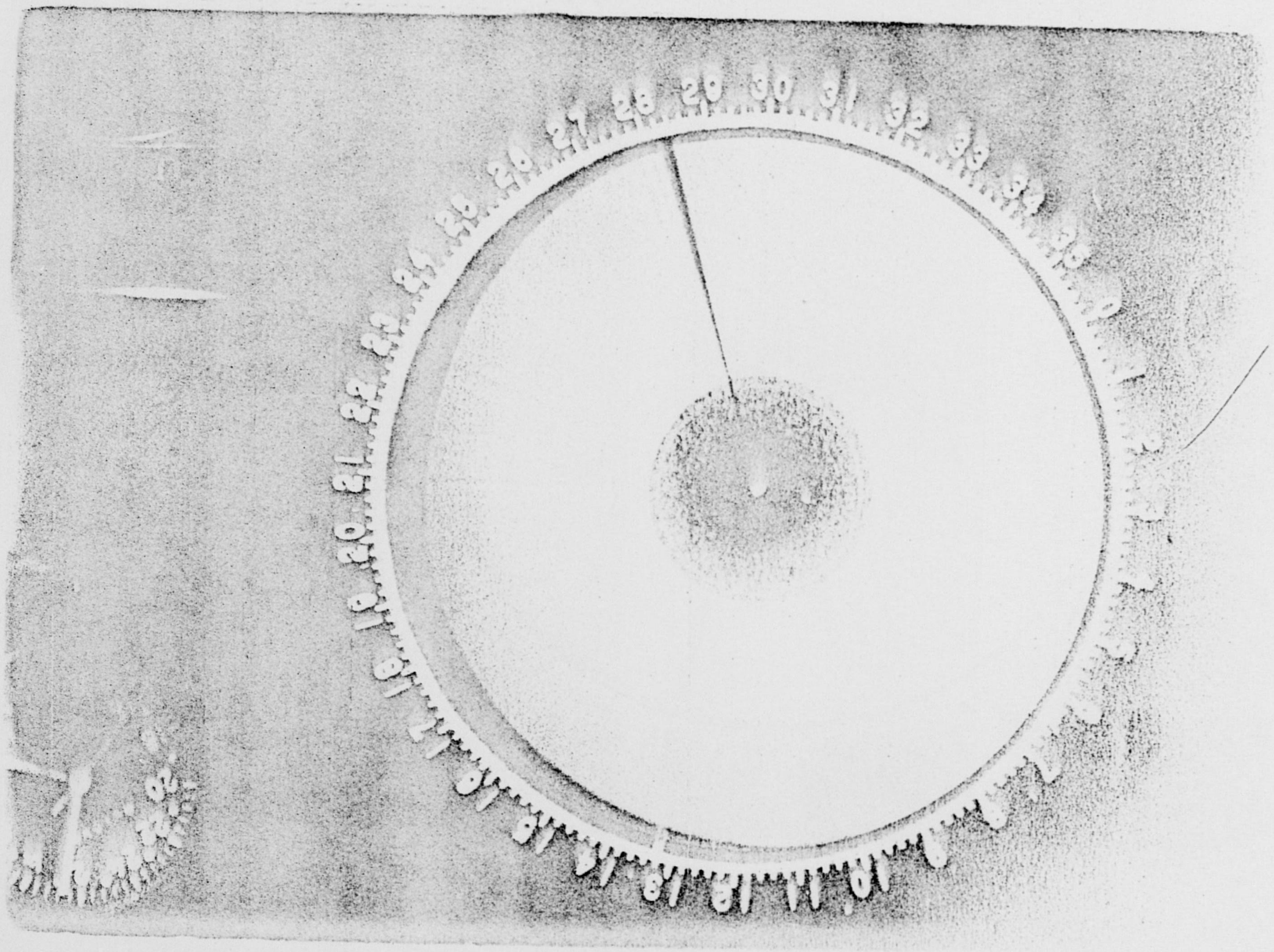

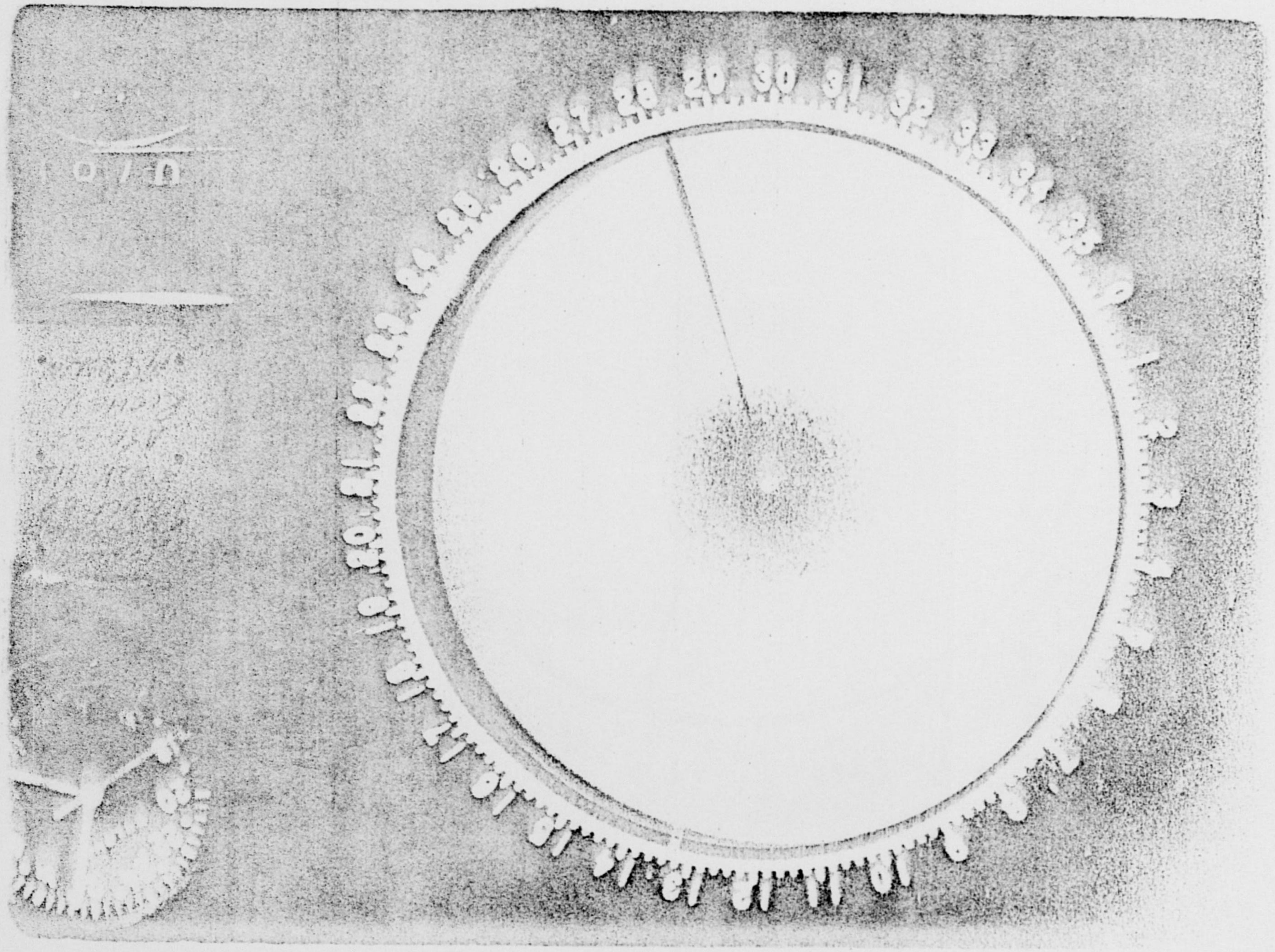

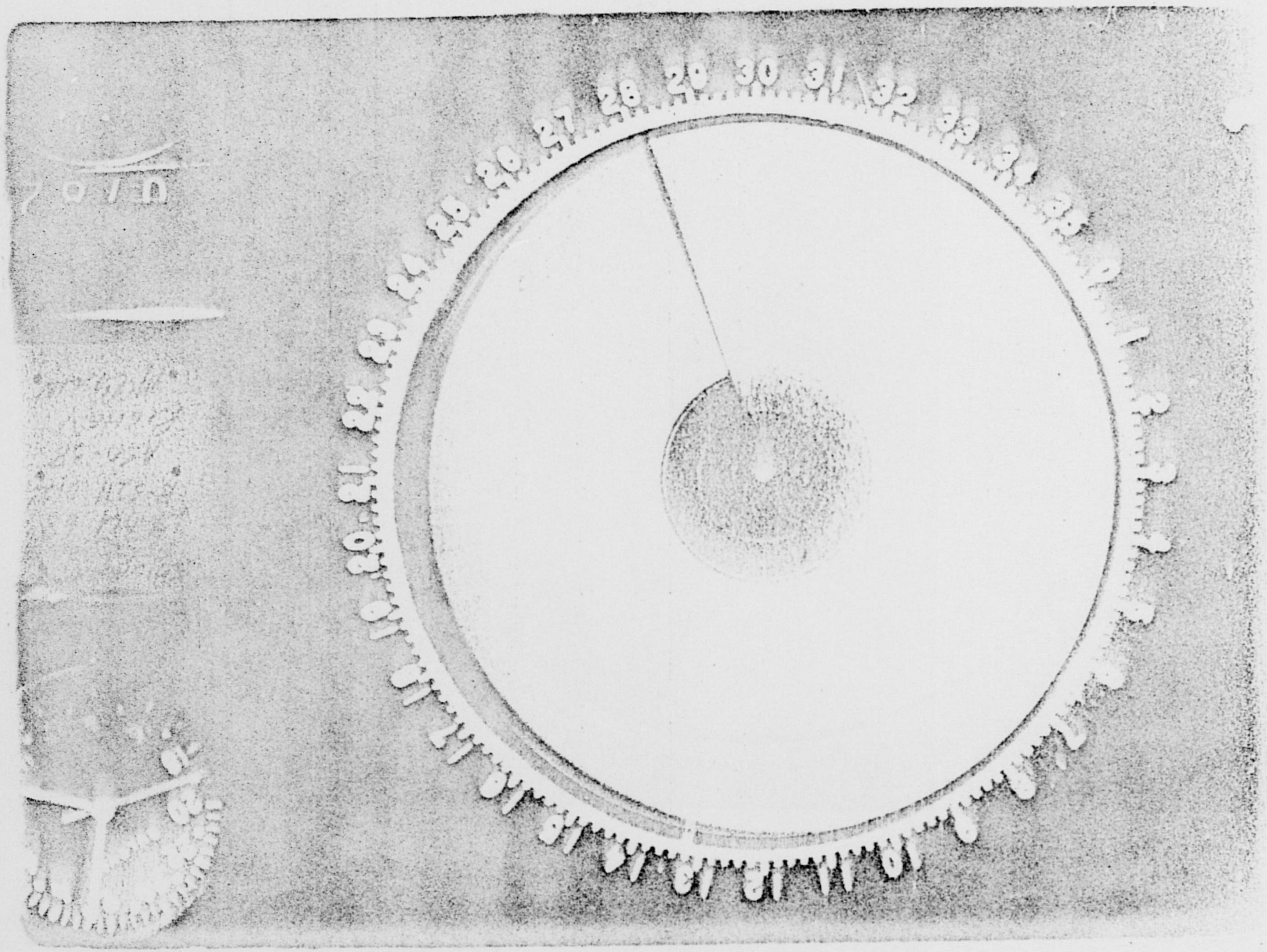

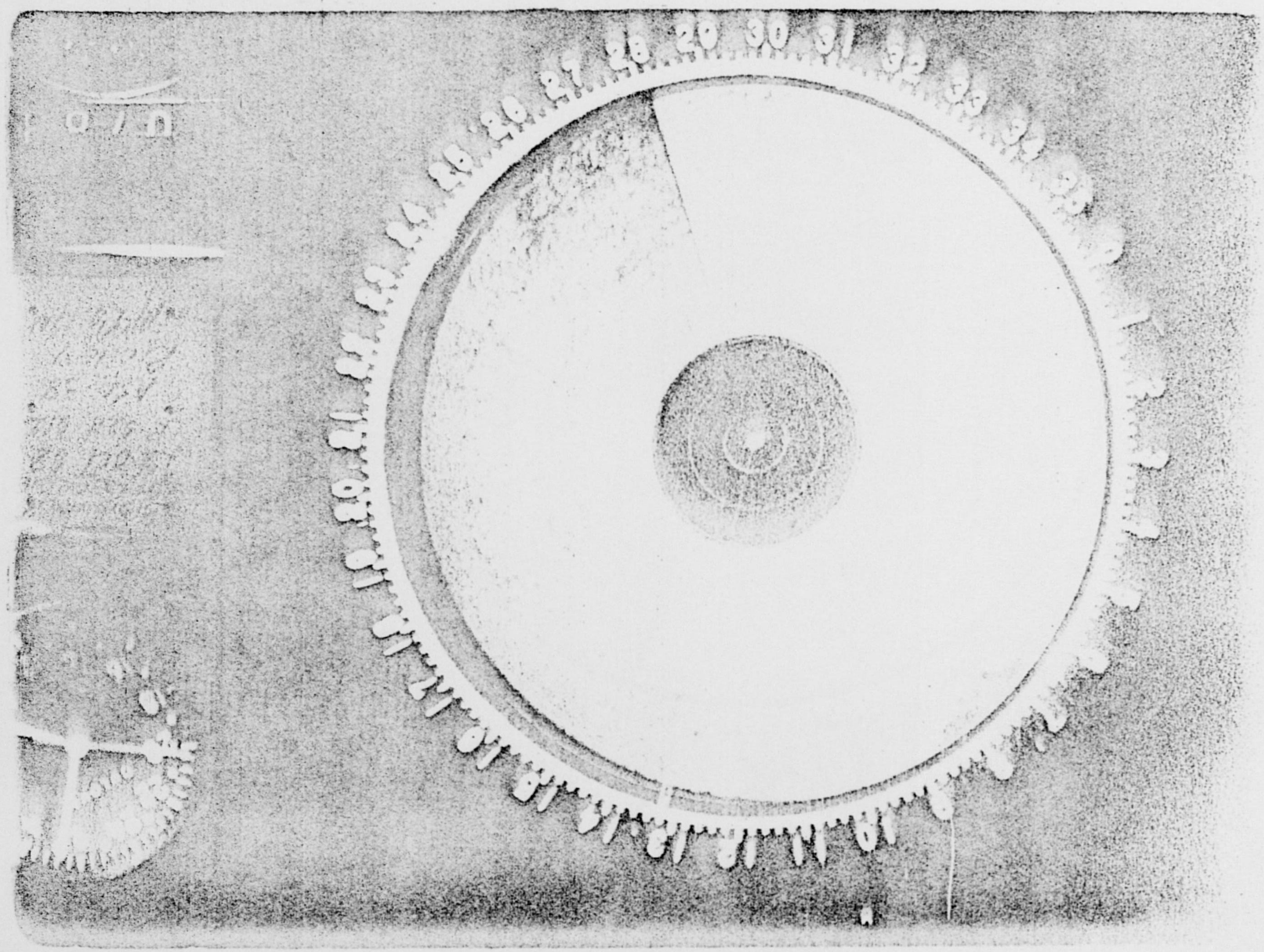

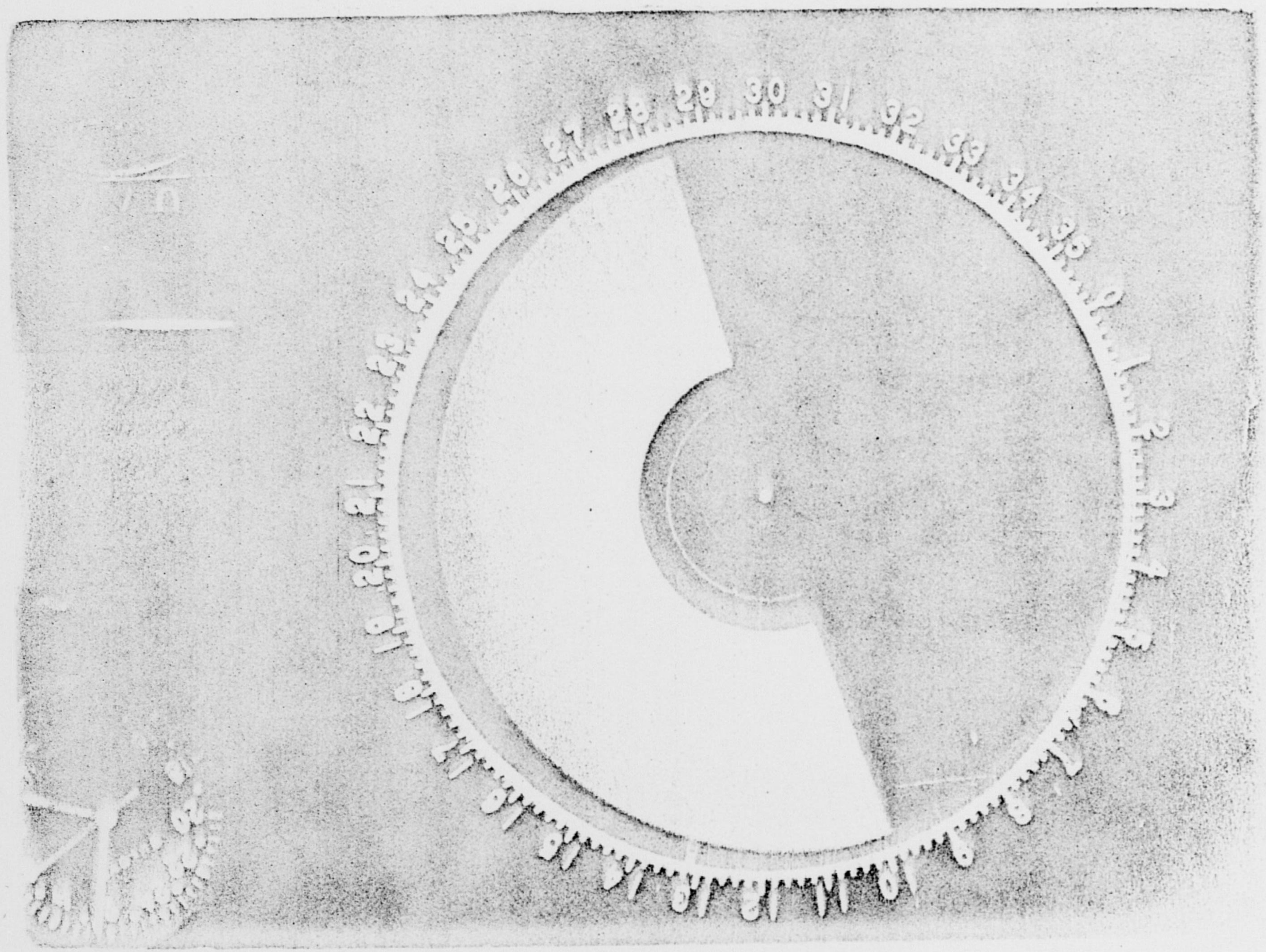

48-45

102-30

7

BOWBELLS

1 - 30 NOVEMBER 1968 SIGHTINGS

DATE	LOCATION	OBSERVER	EVALUATION
Nov	Bronx, New York		Other (CONFLICTING DATA)
8	124.5'W 36.5N		Insufficient Data
9	North Merrick, New York		Other (GROUND LIGHTS)
9	Fallon, Nevada		Balloon
13	Arcanum, Ohio		Other (GROUND LIGHTS)
13	Sommerville, Ohio		Insufficient Data
14	Duluth, Minnesota		Other (CONFUSING REPORT)
15	Duluth, Minnesota		Astro (METEOR)
16	Memphis, Tennessee		Balloon
17	Bridgeport, Ohio		Other (GROUND LIGHTS)
17	Waterloo, Illinois		Balloon
18	Portage, Pennsylvania		Insufficient Data
19	Hickory, North Carolina		Other (CONFLICTING DATA)
21	Memphis, Tennessee		Astro (ALTAIR)
21	Silv er Bay, Minnesota		Astro (VENUS)
21	Fairfield, California		Balloon
23	Newton, Georgia		UNIDENTIFIED
24	Collinsville, Illinois		Satellite
26	Bismark, North Dakota		1. Satellite 2. Balloon
27	Cassopolis, Michigan		Satellite (ECHO II)
27	Brattleboro, Vermont		Other (UNRELIABLE REPORT)
28	Ontario, California		Other (UNRELIABLE REPORT)
29	Hazelwood, Missouri		Other (CONFLICTING DATA)

ADDITIONAL REPORTED SIGHTINGS (NOT CASES)

DATE	LOCATION	SOURCE	EVALUATION
Nov	Cabo Rajo, Puerto Rico	AF Fm 117	
Nov	Manchester, Ohio	Ltr	
1	Rising Sun, Indiana	Ltr	
2	Manchester, New Hampshire	AF Fm 117	
10	Canal Zone	Msg	
13	Valparaiso, Chile	Msg	
20	Hawaiian Islands	Msg	
30	Elyria, Ohio	FTD Fm 164	
19	Aoyon, Tx		