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THE YEARS OF PROJECT HTAUTOMAT, 1956 - 1958

VOLUME IV

by



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NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER
THE YEARS OF PROJECT HTAUTOMAT, 1956 - 1958

VOLUME IV

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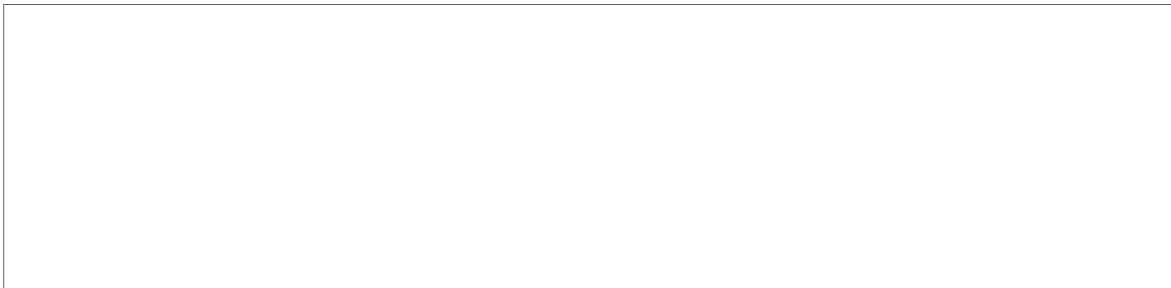
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FIGURE 1

Steuart Building. This photograph was taken from the southwest corner of sixth and K Streets, Northwest, nearly seven years after the removal of NPIC to Entrance to HTA work areas on the four upper floors was at 1014 fifth Street.

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FIGURE 2

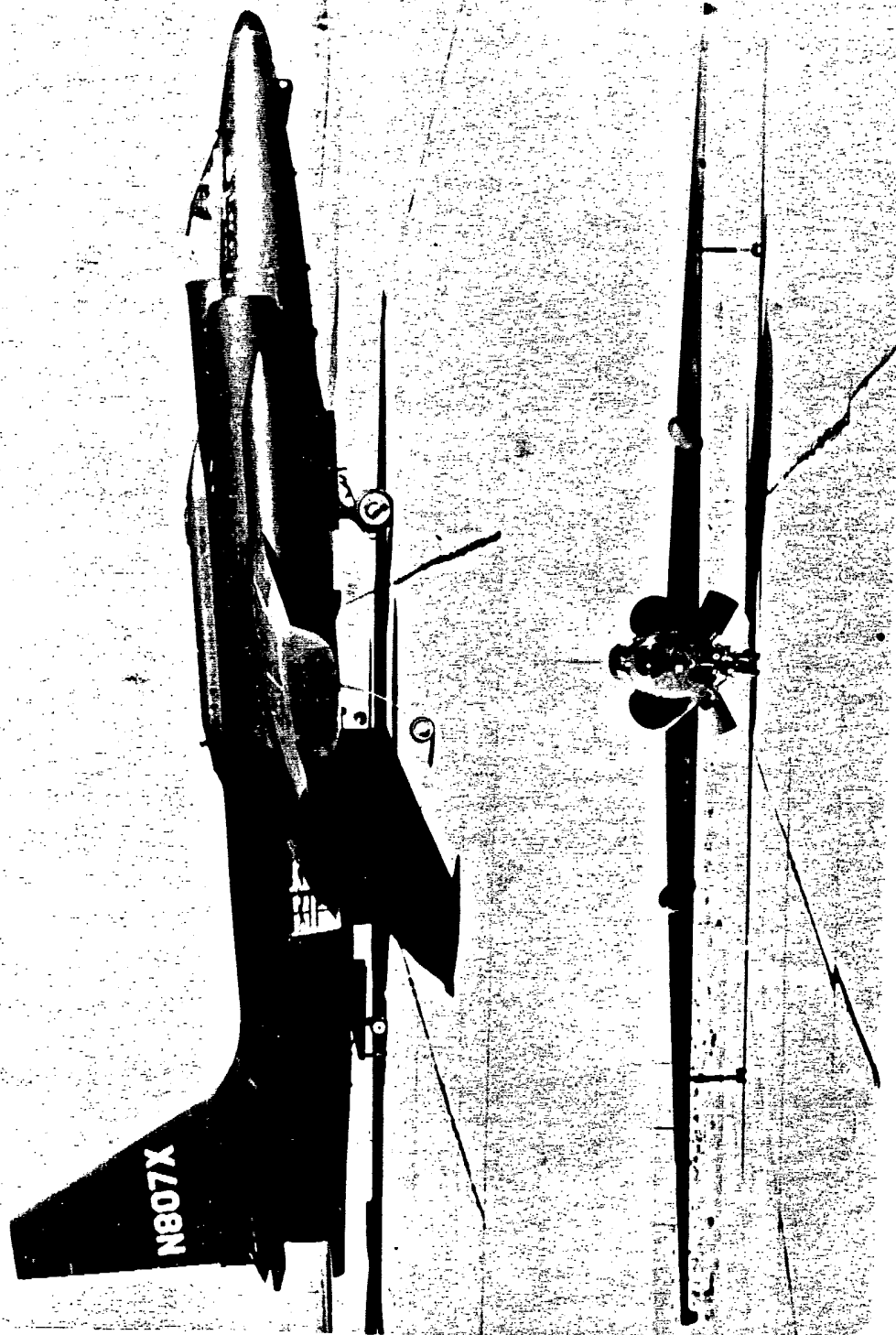
The U-2: Reconnaissance aircraft supreme.

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FIGURE 3

HIAUTOMAT: Organization and Key Personnel, July 1956.

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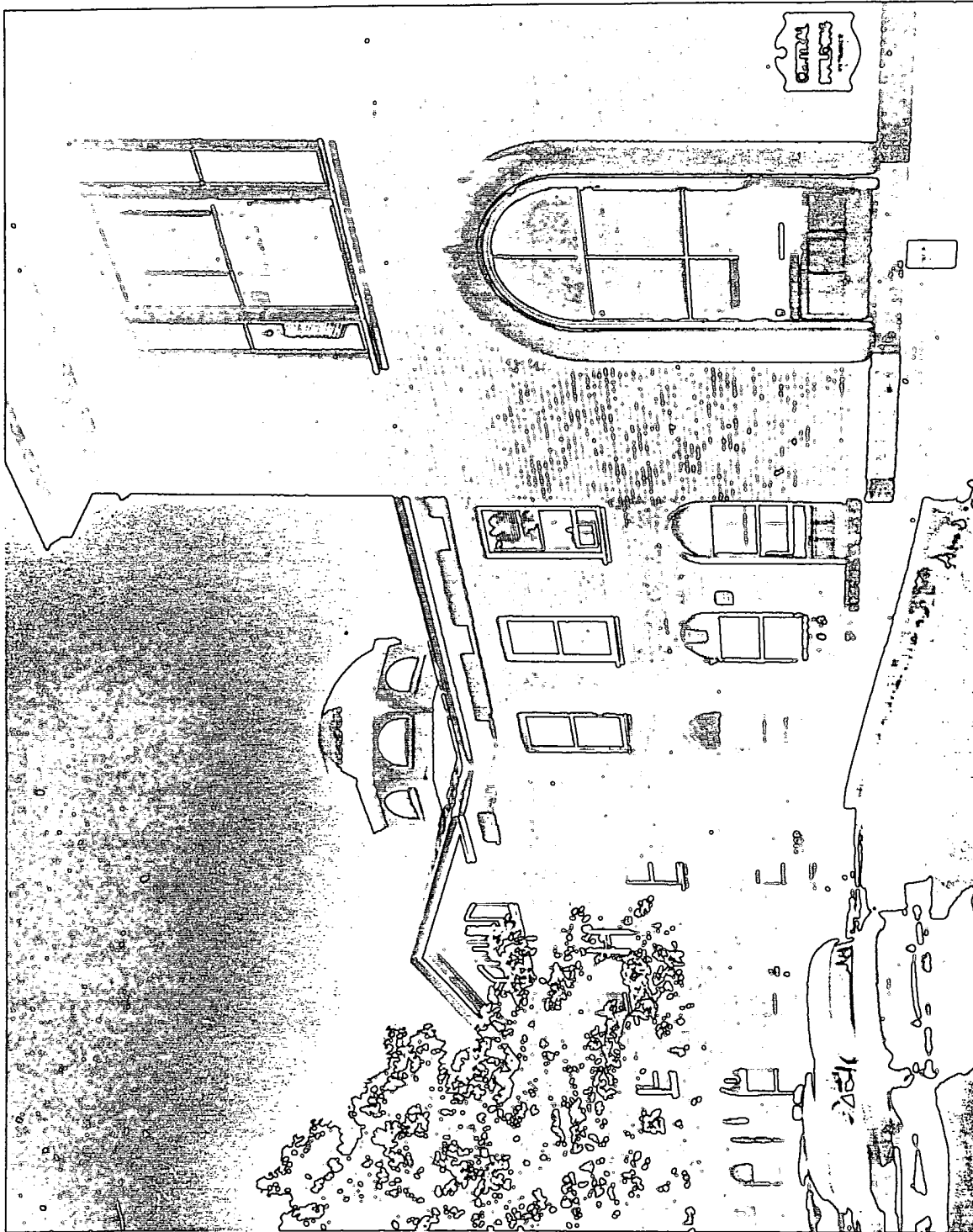
FIGURE 5

Central Building. Central Branch of D/GP occupied space on the second floor at the west end (right hand side on photo) of this building, including the wing in the foreground.

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FIGURE 6

**Range of U-2 Aircraft from operational bases in Europe and
the Near East.**

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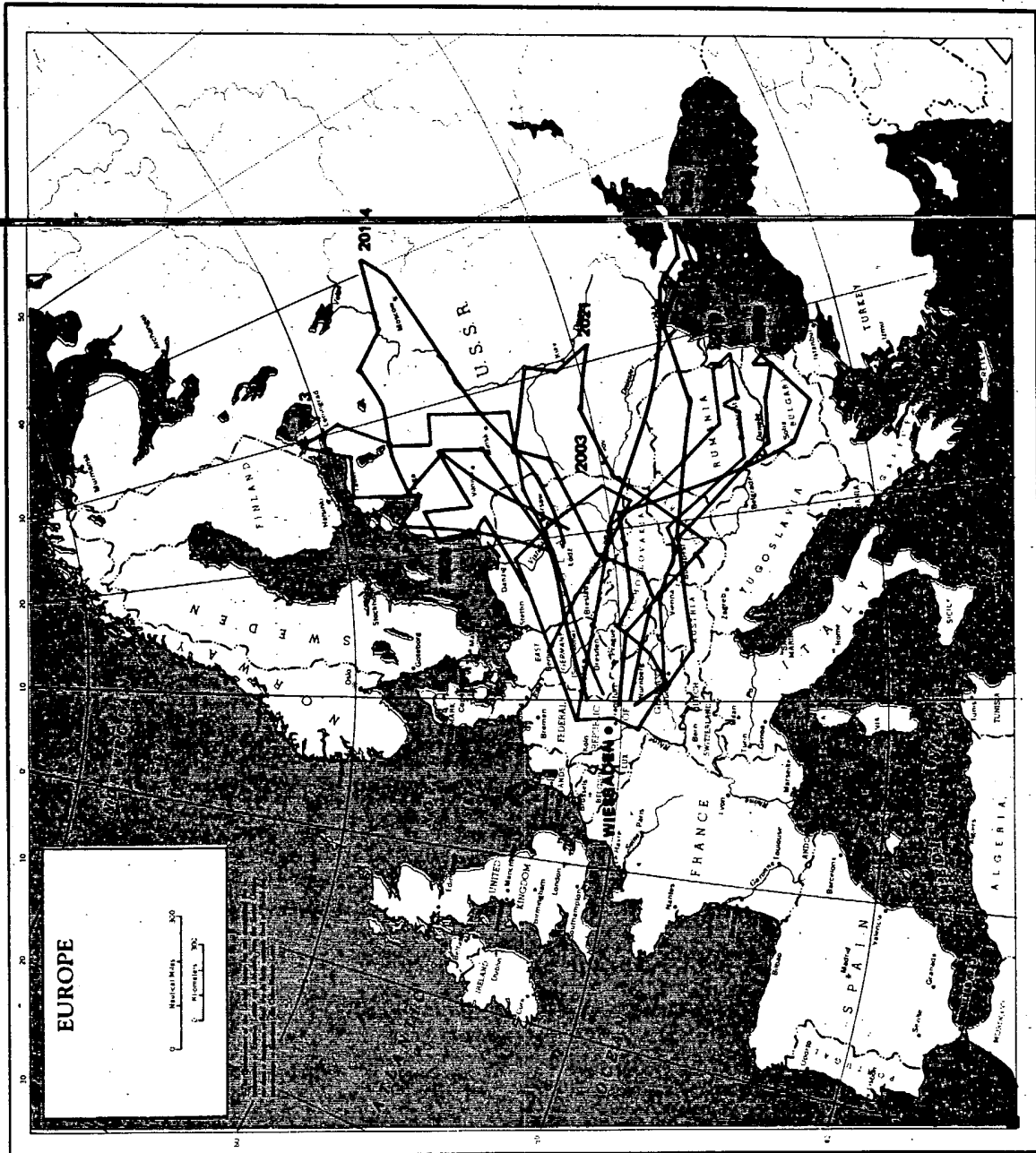
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FIGURE 7

Tracks of the first eight U-2 operational missions.

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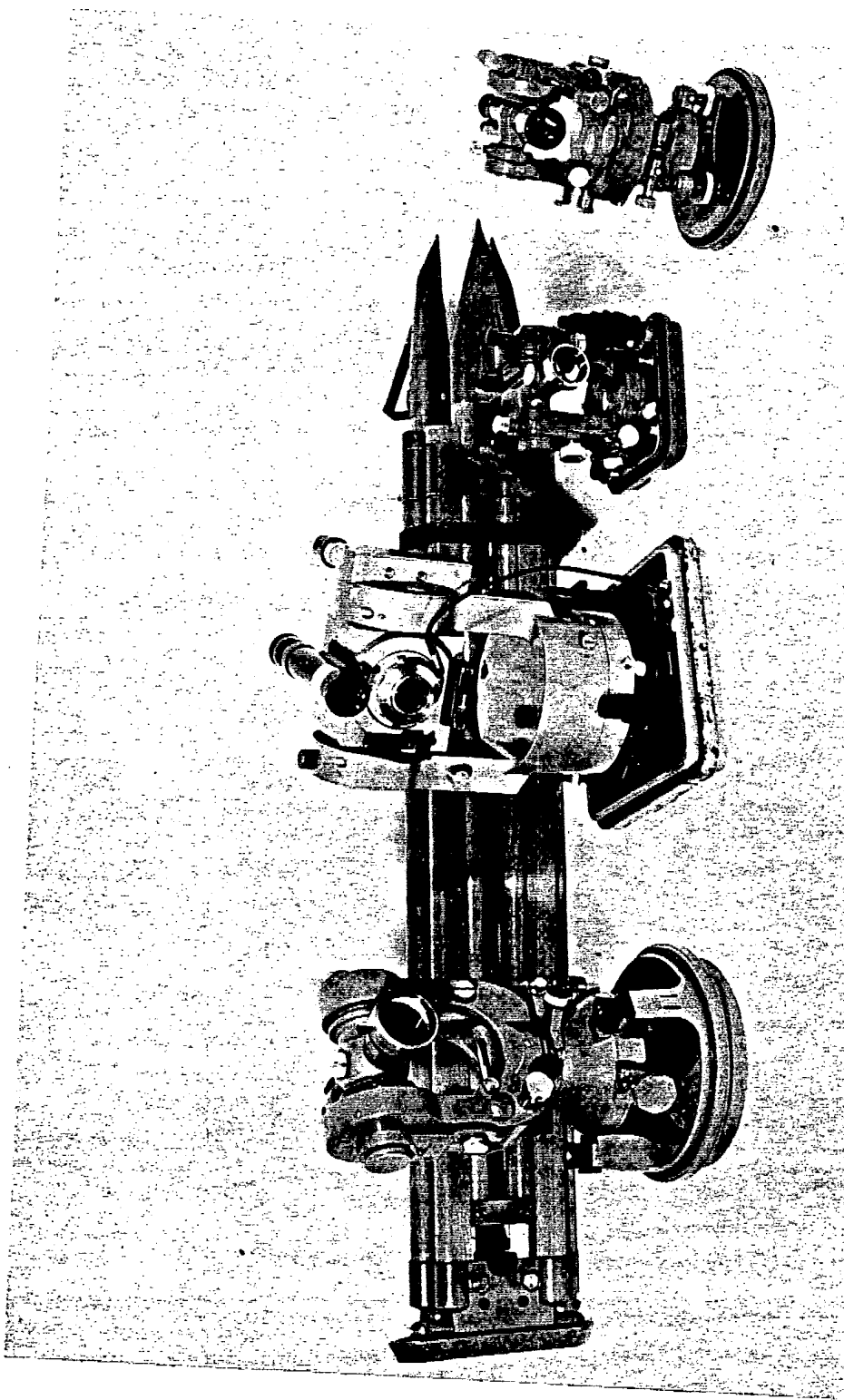
FIGURE 8

MM 50 Surveying Camera.

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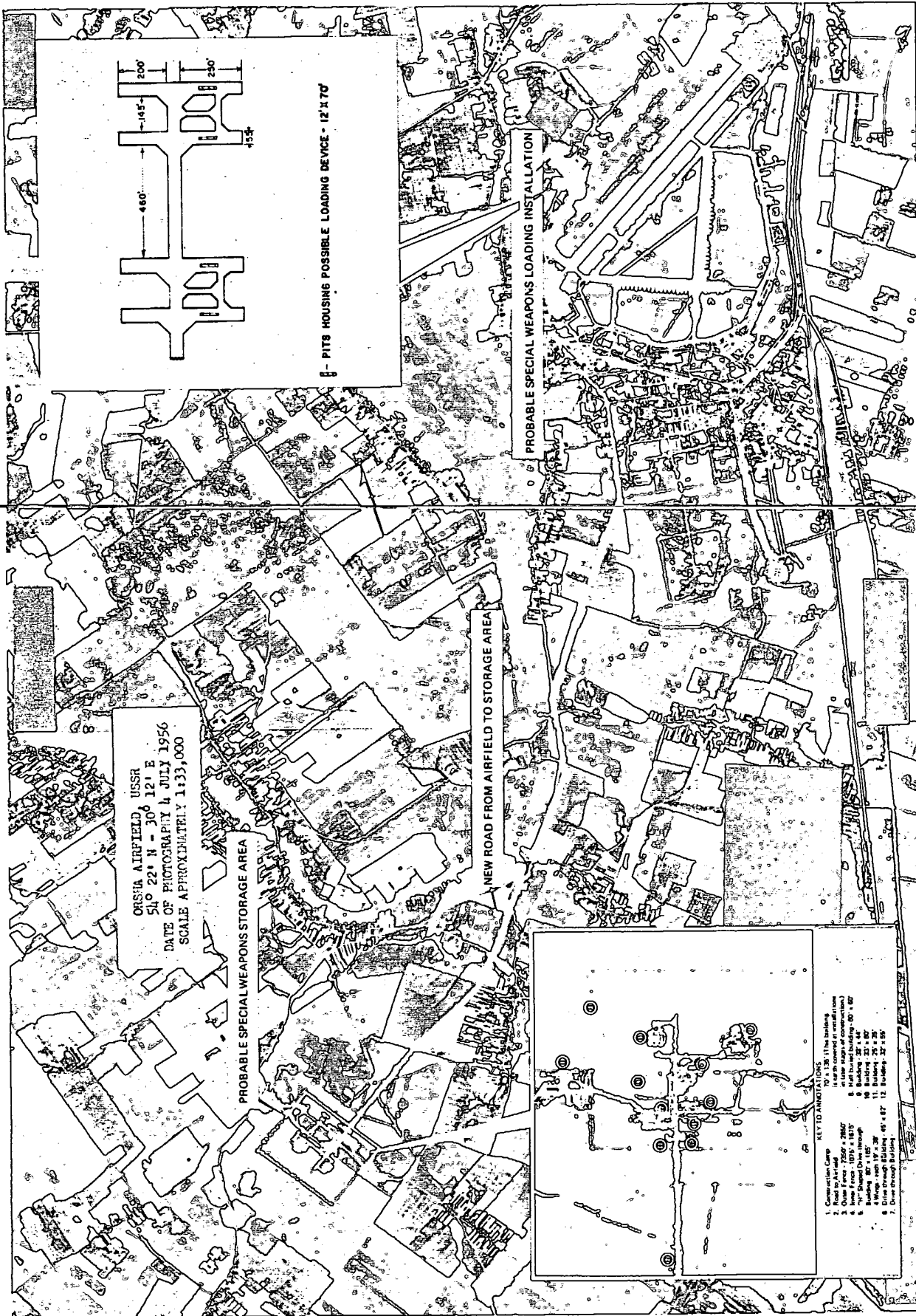
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FIGURE 9

**Orsha Airfield and possible special weapons storage area,
4 July 1956.**

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FIGURE 10

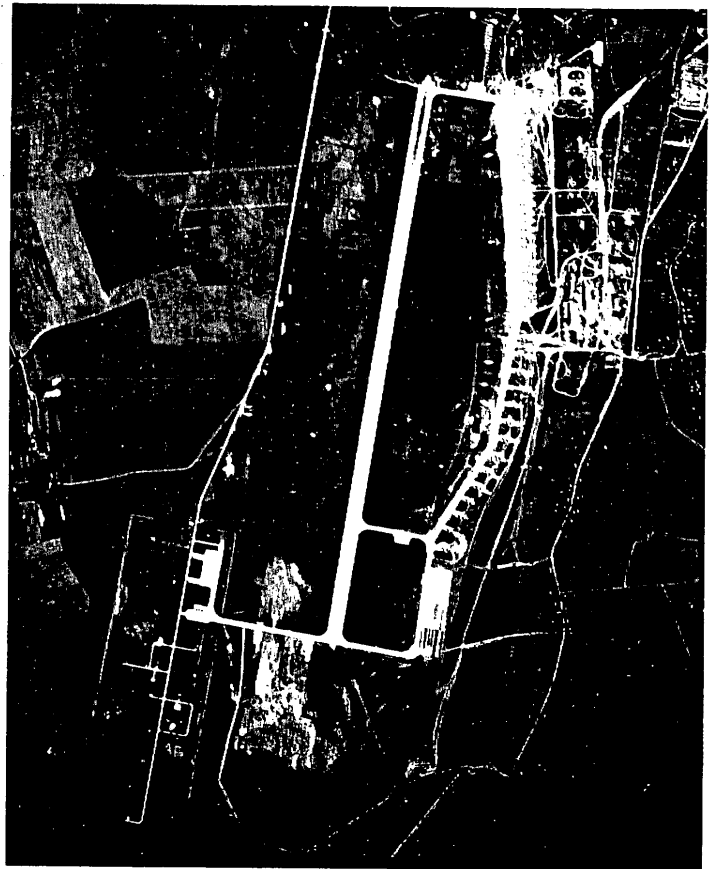
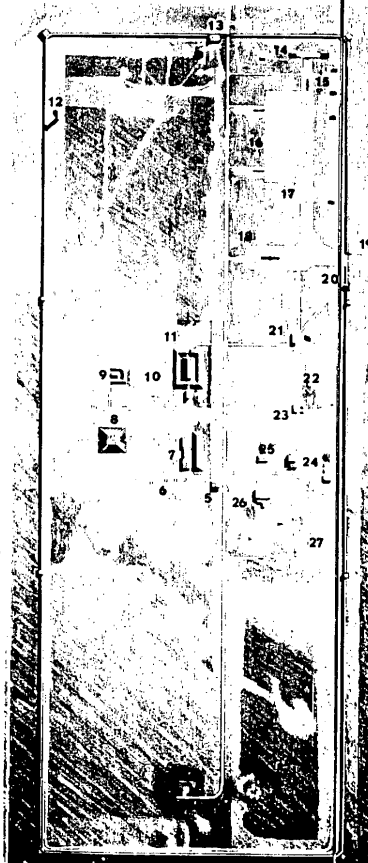
Stryy Airfield and special weapons storage and loading installation, 10 July 1956.

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1. REVETED PARKING APRON 42 X 42 FEET.
2. WOODEN FENCE WITH GUARD TOWERS AT THE CORNERS AND AT INTERVALS ALONG THE LONGER SIDES. FENCE, 4300 X 1500 FEET, ENCLOSES AN AREA OF 148 ACRES.
3. POSSIBLE WIRE FENCE.
4. MAIN ROAD WITHIN INSTALLATION 21 FEET WIDE.
5. PROBABLE EARTH-COVERED BUILDING 21 X 32 FEET.
6. INNER FENCED AREA 570 X 815 FEET. THREE SMALL BUILDINGS ARE LOCATED ADJACENT TO FENCE.
7. H-SHAPED DRIVE-THROUGH BUILDING WITH 42 X 54 FOOT WINGS AND 32 X 58 FOOT CENTER SECTION. A LARGE EARTH REVEMENT IS LOCATED ALONGSIDE THE BUILDING ON THE SIDE NEAREST THE AIRFIELD. THIS BUILDING COULD POSSIBLY BE USED AS AN ASSEMBLY BUILDING FOR COMPONENTS OF A NUCLEAR BOMB OR A MISSILE.
8. EARTH-COVERED, FLAT-TOPPED, PYRAMIDAL-SHAPED BUNKER 117 X 128 FEET. A 10 FOOT ACCESS ROAD LEADS TO SMALL ENTRANCES ON EITHER SIDE OF THE BUNKER. THIS BUNKER COULD POSSIBLY BE USED FOR STORAGE OF NUCLEAR COMPONENTS OF A NUCLEAR BOMB OR FOR THE WARHEAD OF A MISSILE.
9. REVETED BUILDING 21 X 23 FEET.
10. MOUND 21 X 21 FEET. (POSSIBLE EARTH COVERED BUILDING).
11. REVETED BUILDING 43 X 120 FEET. WITH ACCESS ROADS ENTERING REVEMENT AT BOTH ENDS. ON ONE END OF REVEMENT IS A PARKING APRON 53 X 75 FEET. ON THE OTHER END IS AN ASSOCIATED SMALL BUILDING, 21 X 42 FEET.
12. CIRCULAR TOWER WITH CYLINDRICAL TOP.
13. PROBABLE GUARD HOUSE AT ROAD GATE.
14. BLAST WALL.
15. LOADING RAMP 60 X 160 FEET. RAMP NARROWS TO 55 FEET AT REAR WITH LOADING PIT 10 X 60 FEET.
16. LOADING RAMP 62 X 120 FEET. RAMP NARROWS TO 50 FEET AT REAR WITH LOADING PITS 10 X 60 FEET.
17. SERVICING APRON 220 X 490 FEET.
18. LARGE LOADING RAMP 140 X 330 FEET WITH LOADING PIT 10 X 70 FEET. LOADING PIT WIDENS SLIGHTLY NEAR CENTER.
19. TAXIWAY GATE. A TAXIWAY, 70 FEET WIDE, EXTENDING FROM THE RUNWAY ENTERS THROUGH THIS GATE.
20. PROBABLE GATE CONTROL HOUSE.
21. BUILDING 30 X 55 FEET.
22. ROAD 10 FEET WIDE.
23. BUILDING 30 X 30 FEET.
24. BUILDING 32 X 42 FEET.
25. BUILDING 21 X 53 FEET; PARKING APRON IN FRONT OF BUILDING MEASURES 42 X 53 FEET.
26. BUILDING 42 X 88 FEET WITH 28 FOOT PARKING APRON. L-SHAPED STRUCTURE WITH WINGS MEASURING 23 X 42 FEET AND 23 X 53 FEET PROJECTS FROM REAR OF BUILDING.
27. ROAD 16 FEET WIDE.

NOTE: ALL MEASUREMENTS ARE APPROXIMATE.
MEASUREMENTS SOMEWHAT LESS RELIABLE THAN THE REST DUE TO POOR IMAGE AT THESE POINTS.



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FIGURE 11

Mozhaysk Installation, 5 July 1956. Numbers on the photograph refer to components detailed on Figure 12 through 15.

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FIGURE 12

Domed Structure (Unit 2), Mozhaysk Installation. This perspective drawing was done by who later became the first chief of the HTA graphics shop.

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FIGURE 13

Overhead concept of the domed structure and its incomplete counterpart (Unit 1). These views were the work of the late the most accomplished of HTA illustrators.

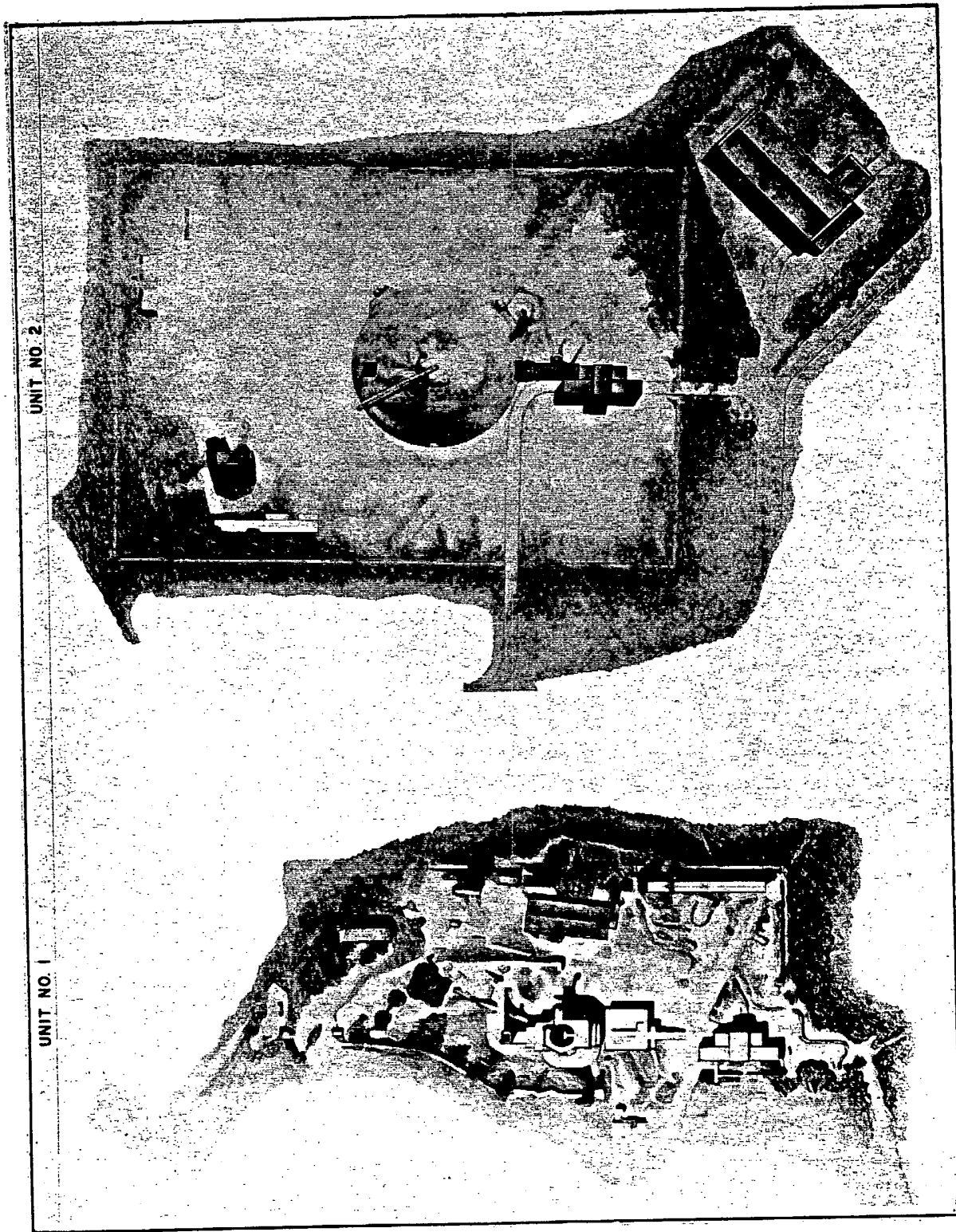
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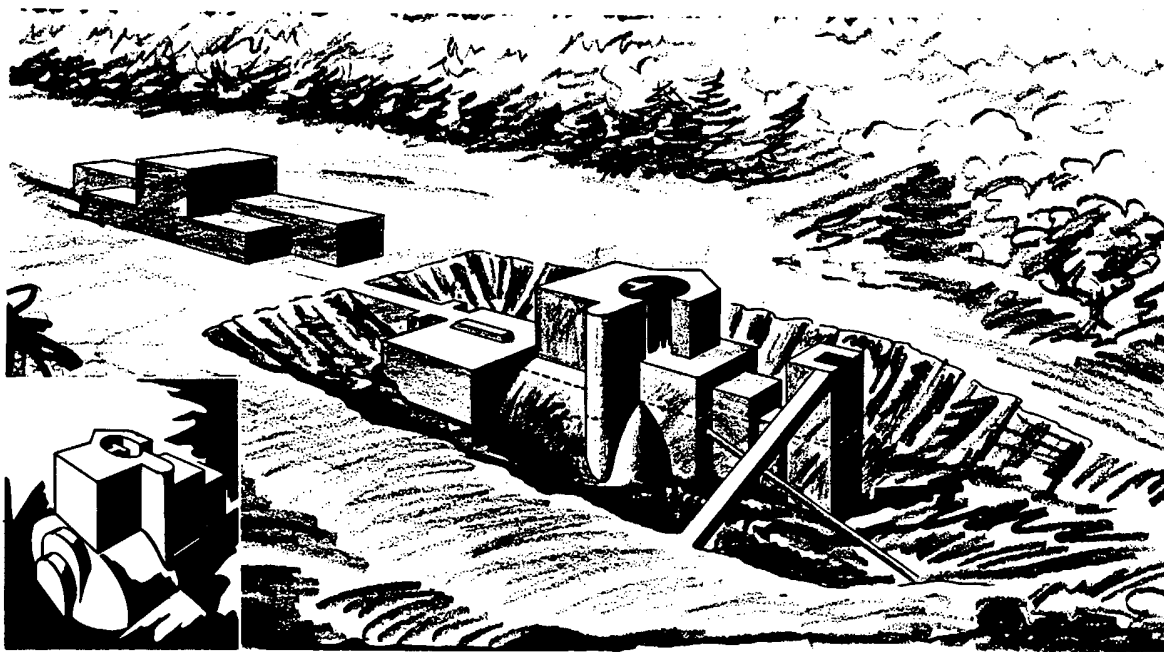
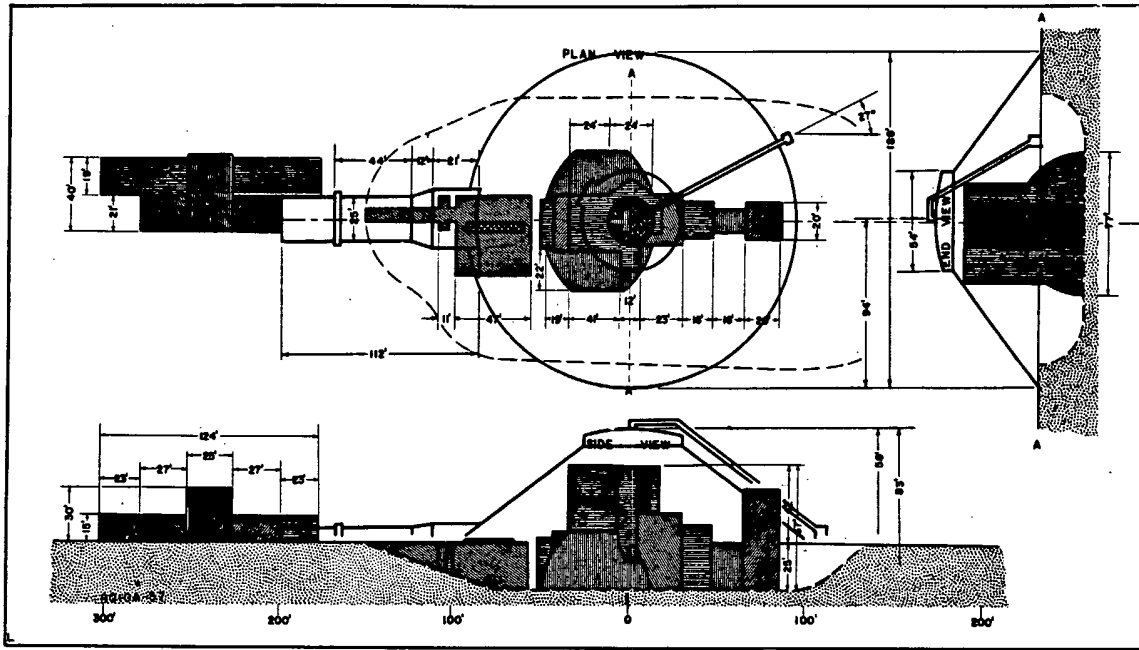
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FIGURE 14

Oblique view and metrical analysis of Unit 1. Coverage such as this, achieved during construction, is invaluable in revealing internal details that cannot be seen on later aerial photography.

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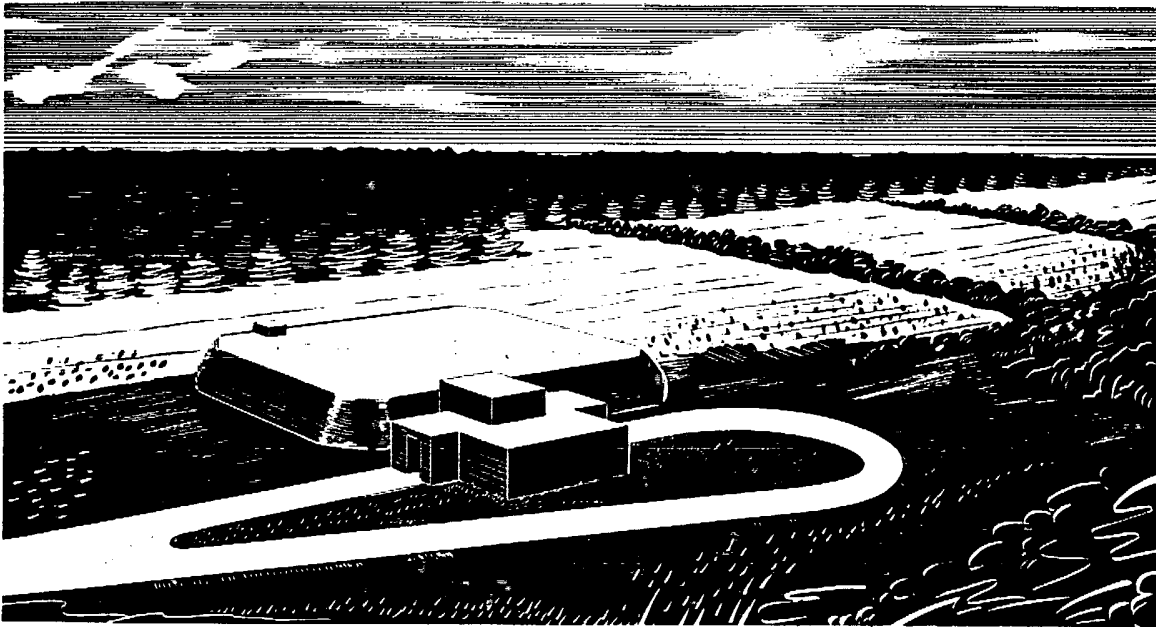
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FIGURE 15

Composite layout of Units 4, 5, and 6. It was believed that these were to be storage facilities. Note the massive construction and burial underground. Upper panel is a sketch of Unit 6, which appeared complete at the time of photography.

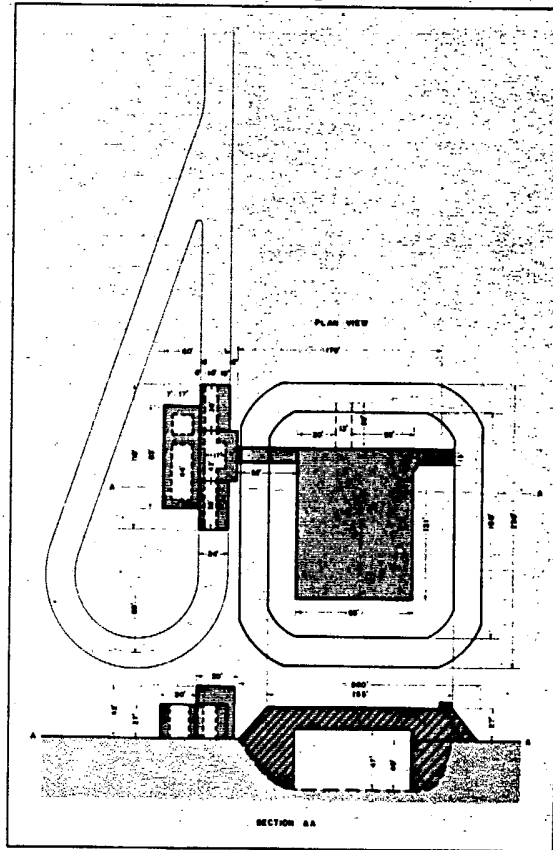
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VERTICAL SKETCH
UNIT NO. 6

COMPOSITE VIEW
UNITS 4, 5 AND 6



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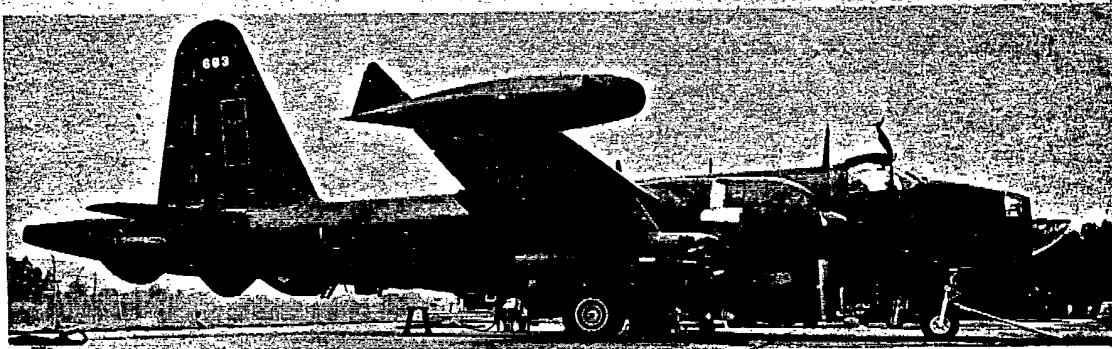
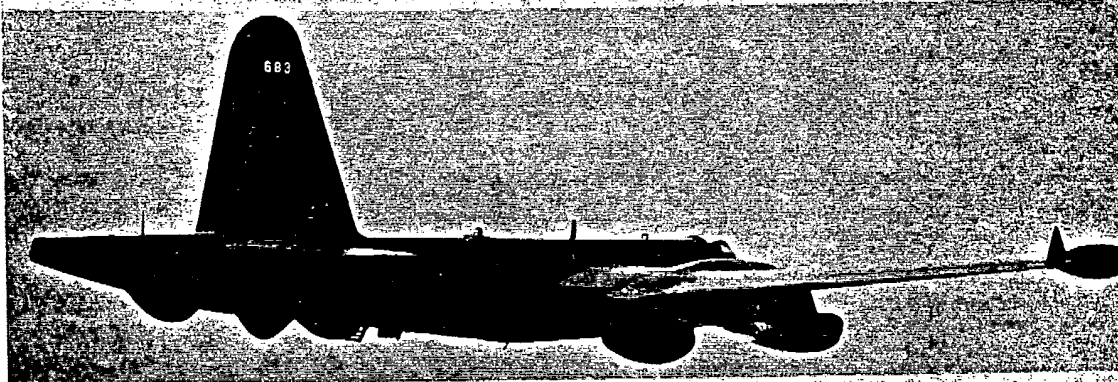
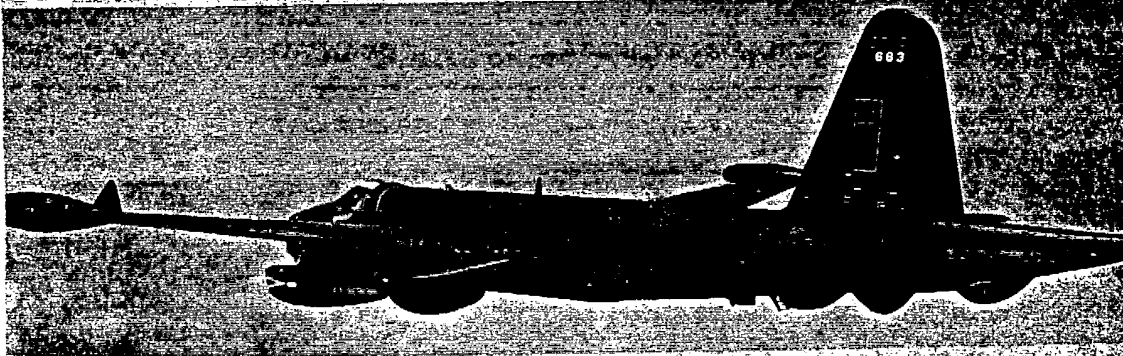
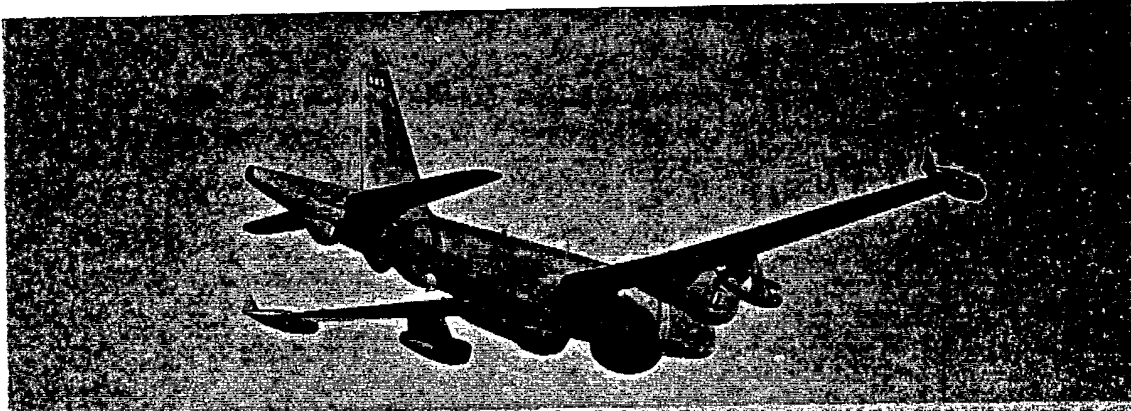
FIGURE 16

P2V-7: Disappointment in Night Photo Reconnaissance. The night photographic configuration differed from the one in these photos in that the wing pods contained the lights and a propeller-driven generator and there was no large radome under the forward part of the fuselage.

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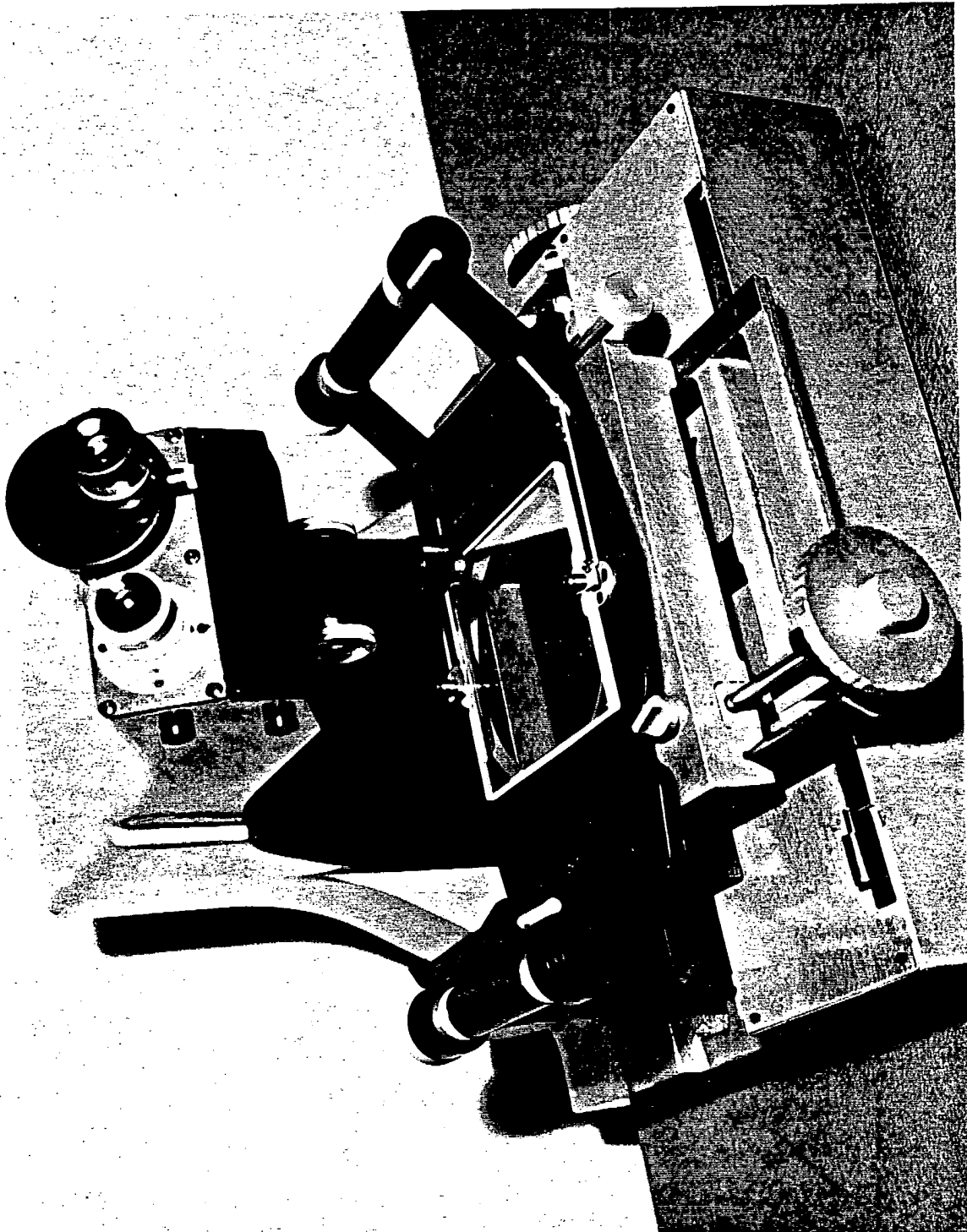
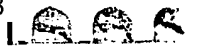
FIGURE 17

Photogrammetry, Incorporated, Comparator. Much of the engineering work on this piece of equipment was done by [redacted] of HTA and successor organizations, when he was employed by the Silver Spring, Md., firm that designed and manufactured this device.

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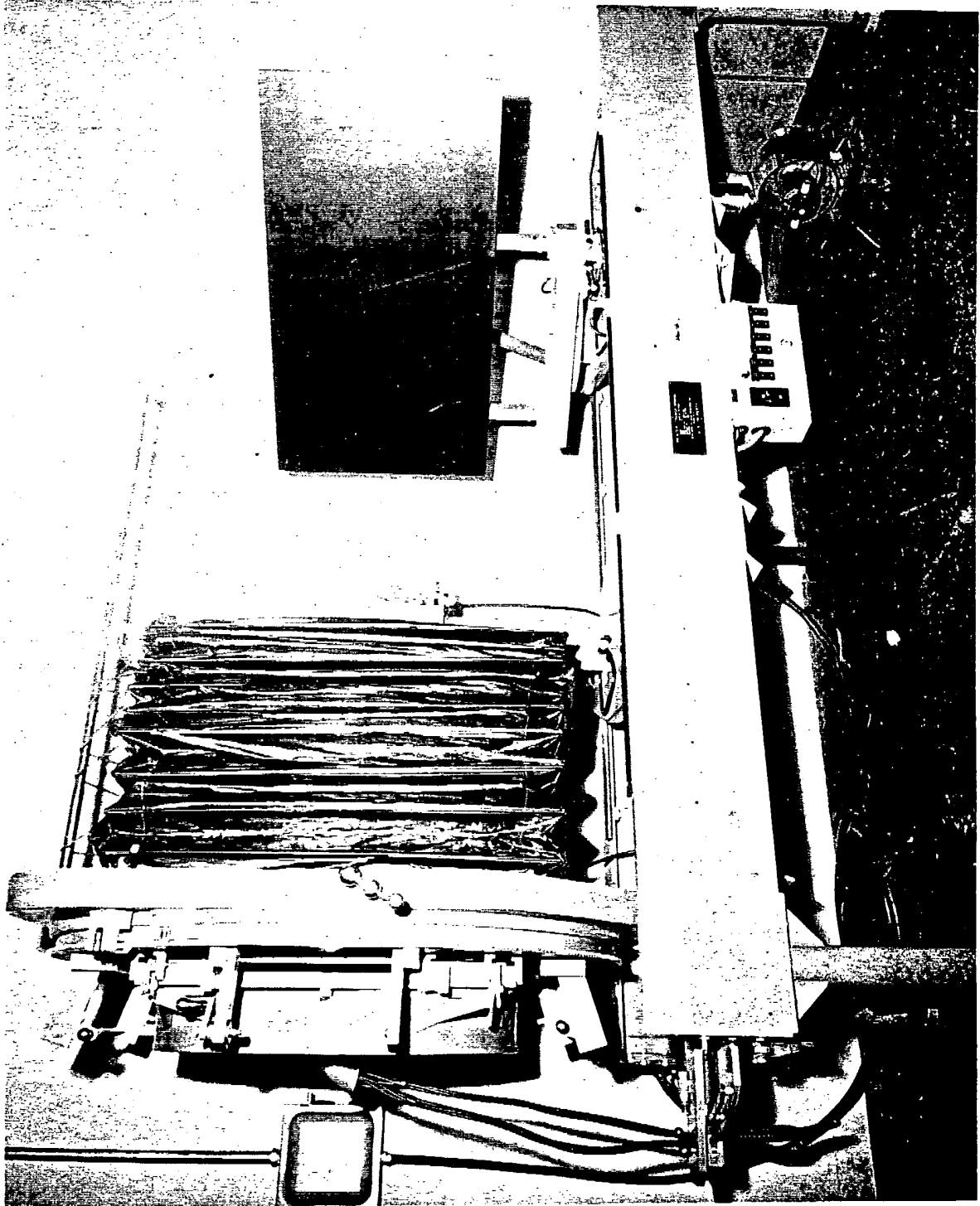
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FIGURE 19

Reed Transforming Printer. When this machine was used in the first step for rectifying high oblique photographs, the image was projected onto negative film which was then loaded into the Reed Rectifier for printing.

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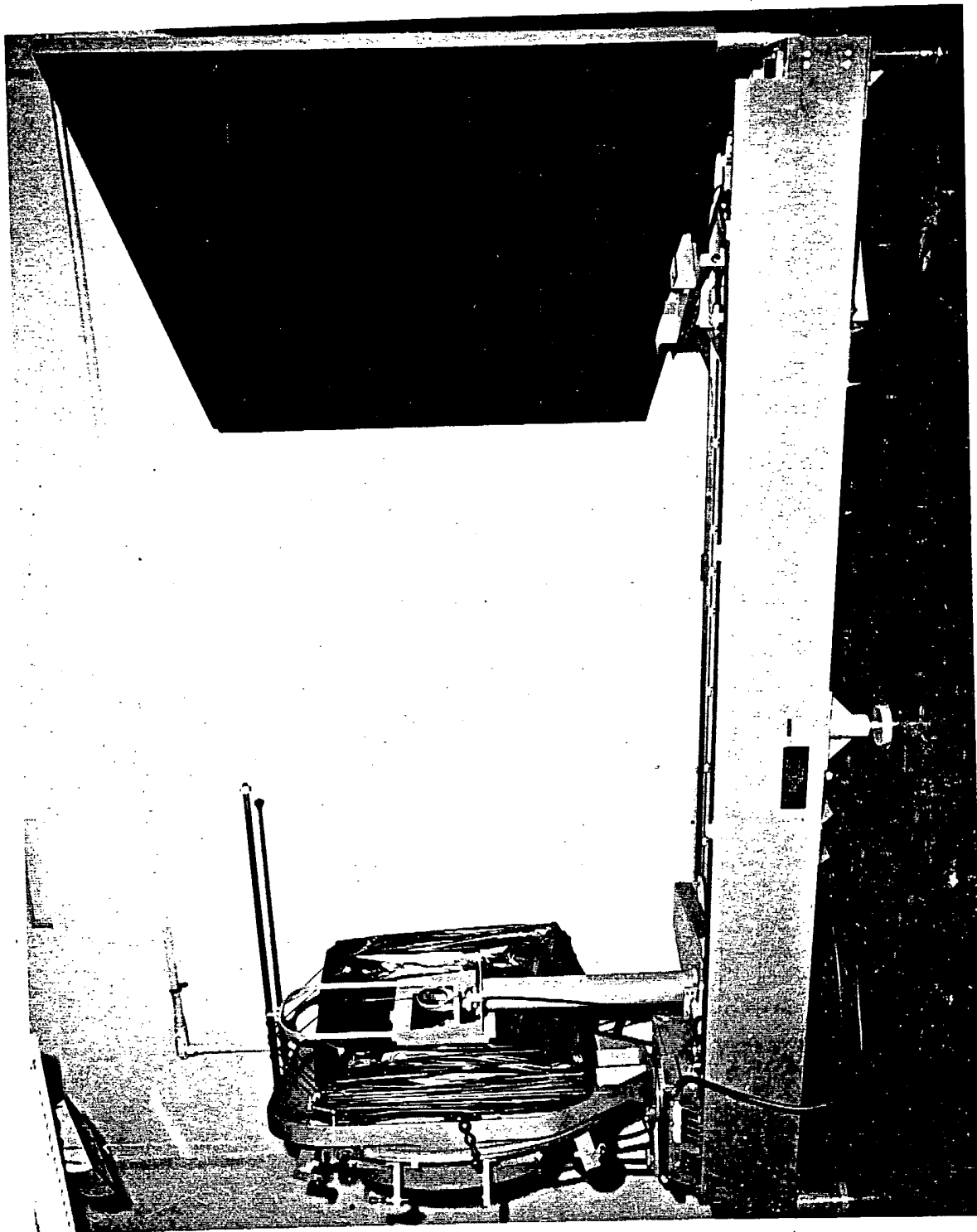
FIGURE 20

Reed Rectifier. This autofocusing equipment was used in the final step in the process of rectifying high oblique photographs.

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FIGURE 21

Modified Binocular Microscope. At right note the cardboard-mounted prisms produced by [redacted] The flap at the left was provided to permit adjustment so as to bring both images into conjunction. The metal-mounted prisms below the [redacted] mount are believed to have been produced in the OCR Machine Division. These mounted in the instrument itself are probably the ones subsequently produced commercially.

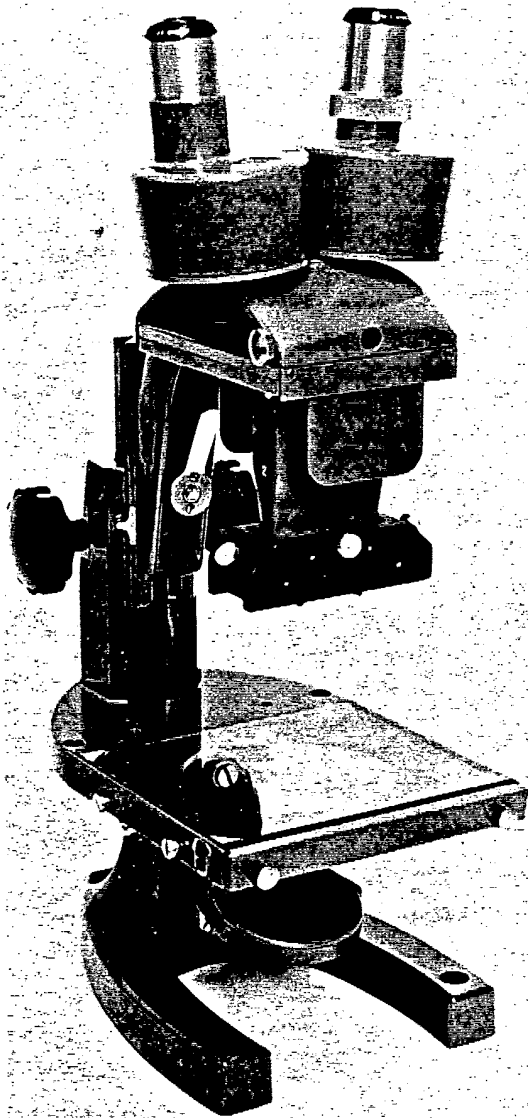
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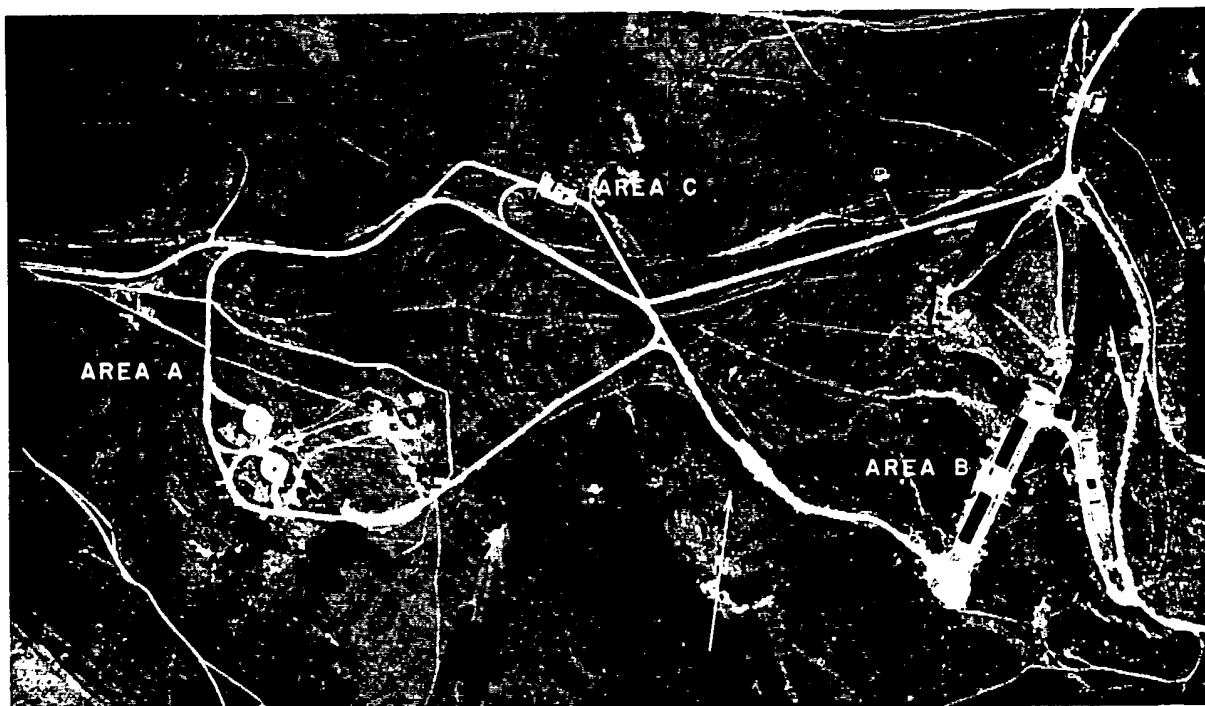
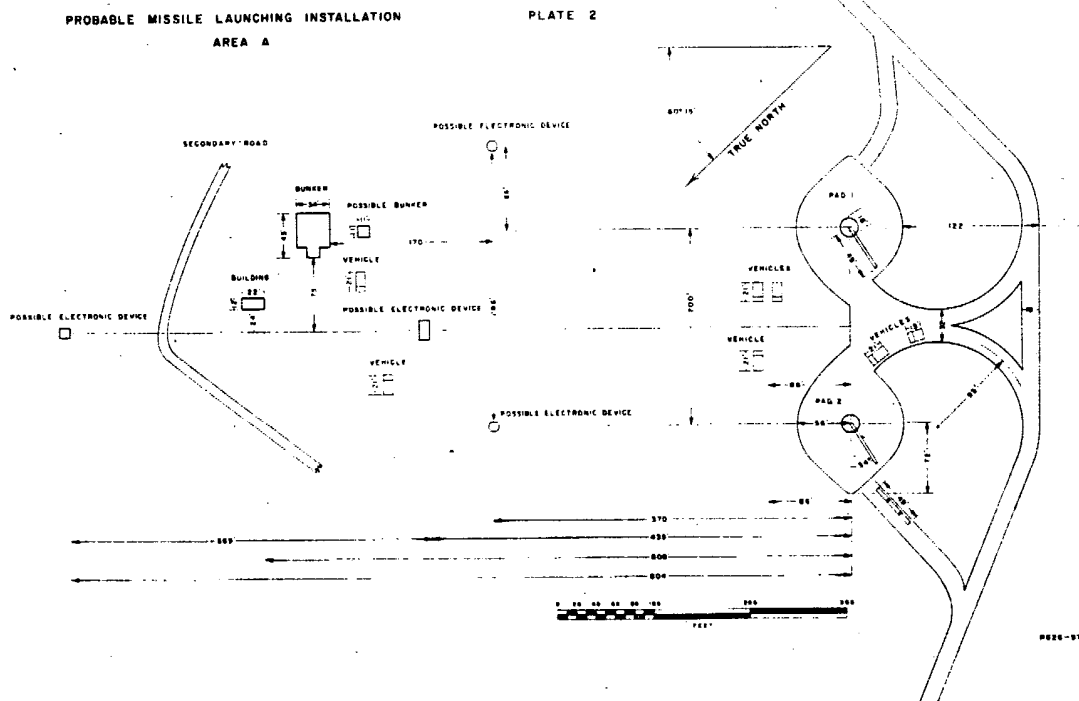
FIGURE 23

"Twin Eyes", 10 July 1956. The two probable launching pads were in Area A, the probable storage or assembly facilities in Area B, and the probable electronics site was designated Area C.

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FIGURE 24

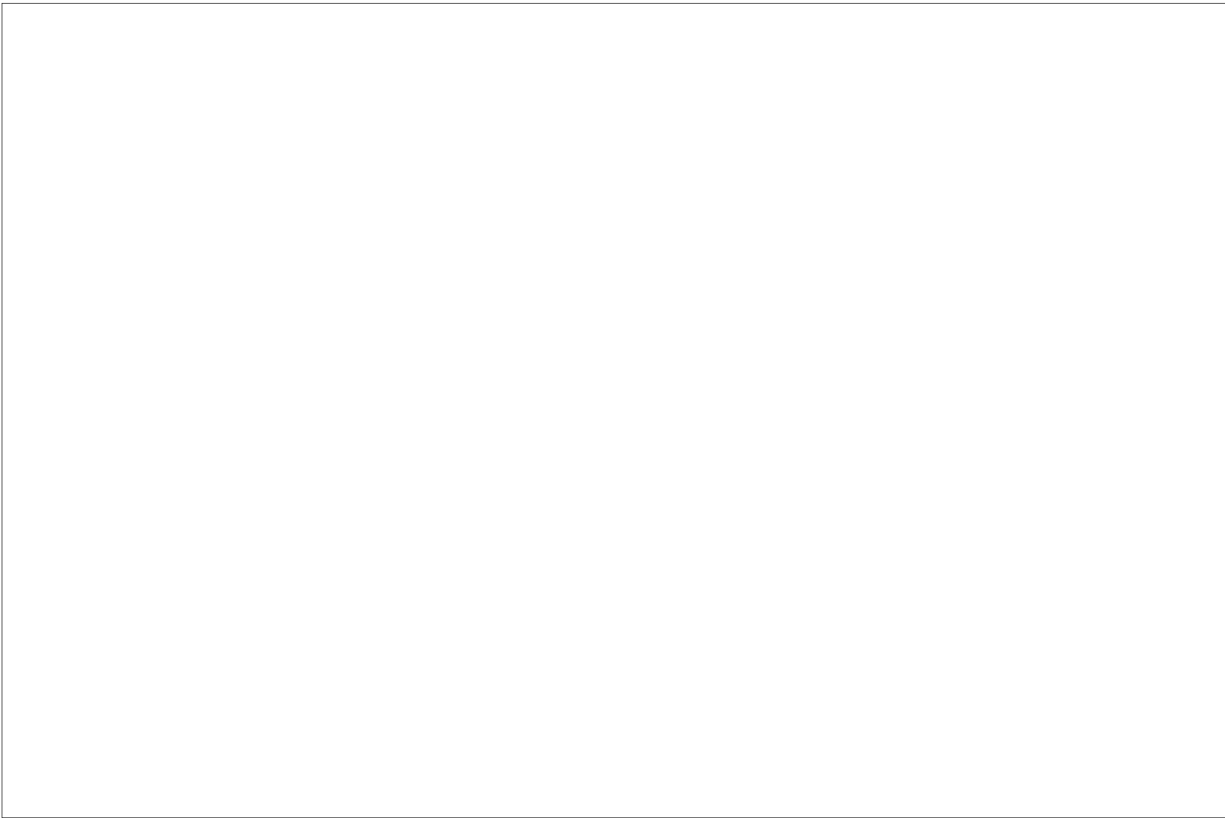
Karangit Installation, 10 July 1956. The newly established HTA graphics shop was committed to the proposition that PI reports should contain few, if any, graphics. Rather, it was held, analysis of the form, shape, and configuration of objects and facilities as well as the layout of installation should be done by illustrators and the results presented in the form of line drawings and three-dimensional drawings. The Photographic Intelligence Memorandum issued in September 1957 which reported on the Karangit installation had the distinction of being the first detailed HTA publication that included no photography. This unusual circumstance resulted from the fact that interpretation of the photography and preparation of the report were done by [redacted] a PI who had just been named deputy chief of the new graphics shop.

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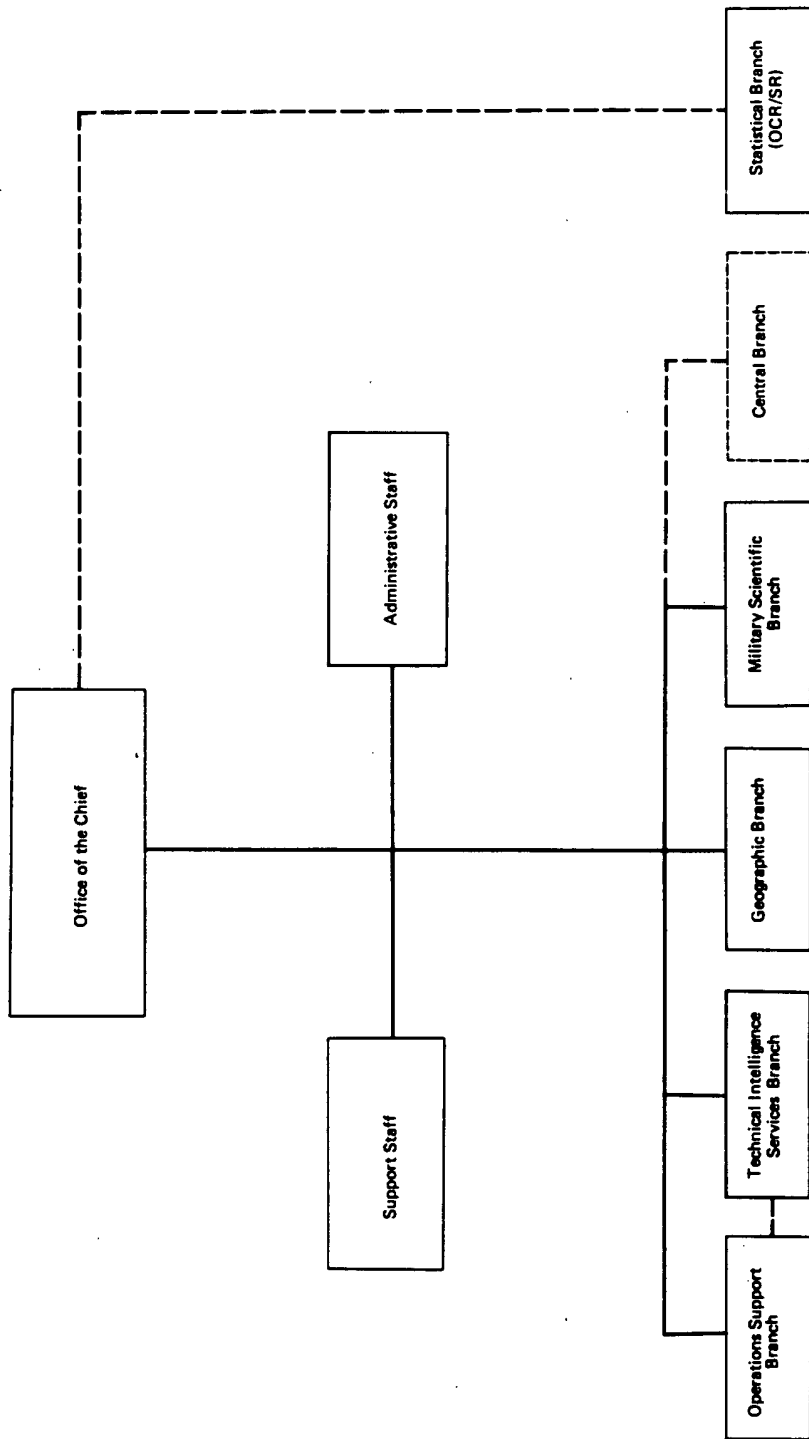
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FIGURE 25

HTA Organizational Realignment, July 1957. The dashed line between the box for the Operation Support Branch (previously the Special Projects Branch) and that for the Technical Intelligence Services Branch is meant to imply the custodial relationship that was developing as TISB prepared to ingest the remains of SPB. Though the Geographic Branch displayed incipient tendencies to acquire the name Geographic-Industrial Branch, the old name prevailed until the next reorganization. Not so with the former Industrial Branch, which had all but shed its previous unglamorous industrial responsibilities. Even before the realignment was announced, [] [] its chief, who knew the importance of a name, consistently referred to the component as the Military-Scientific Branch, a name that was quickly picked up and used by others on HTA.

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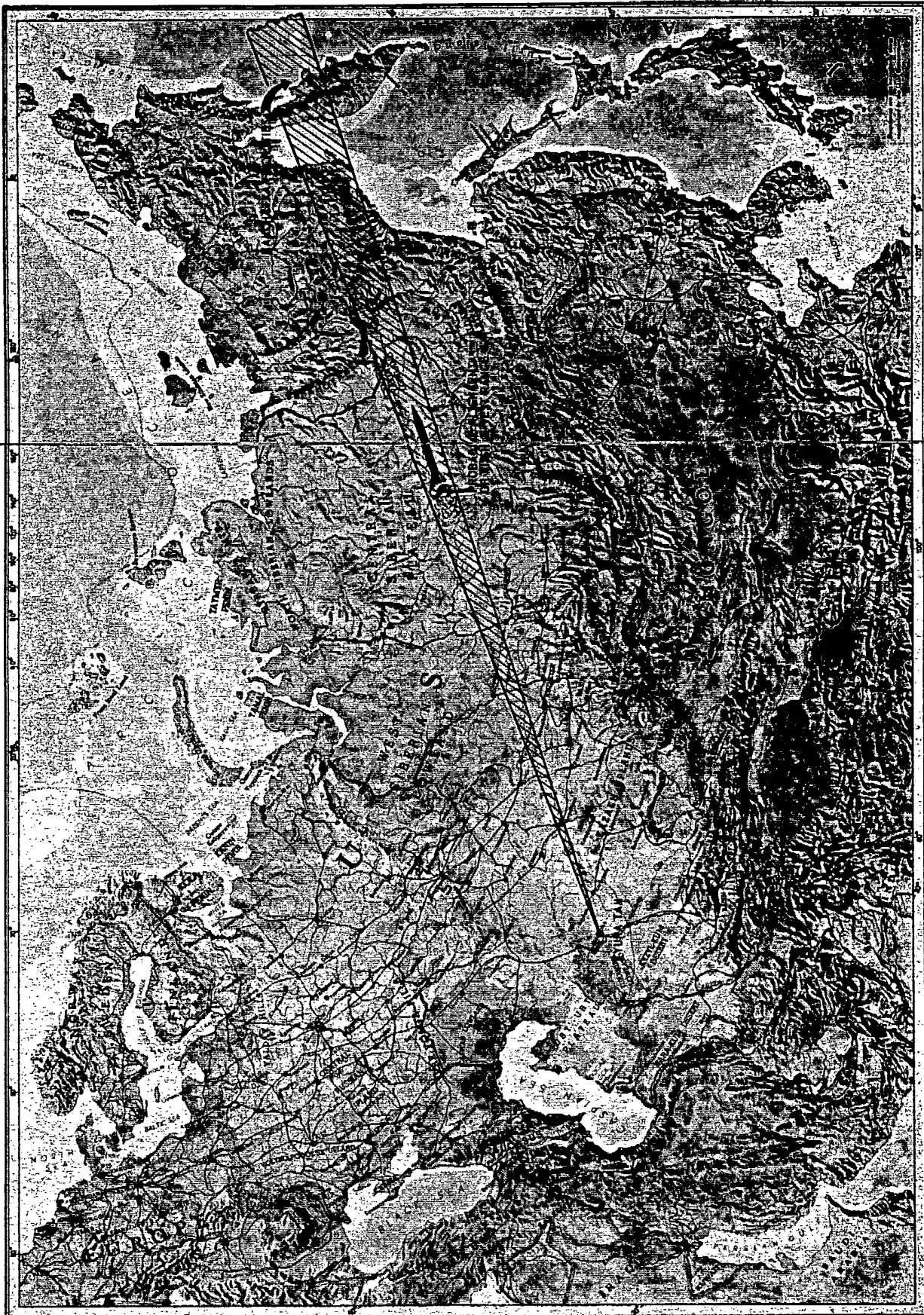
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FIGURE 39

Location and general geographical relationships of the Tyura Tam Missile Test Center and associated ballistic missile test range.

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Scale 1:500,000

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