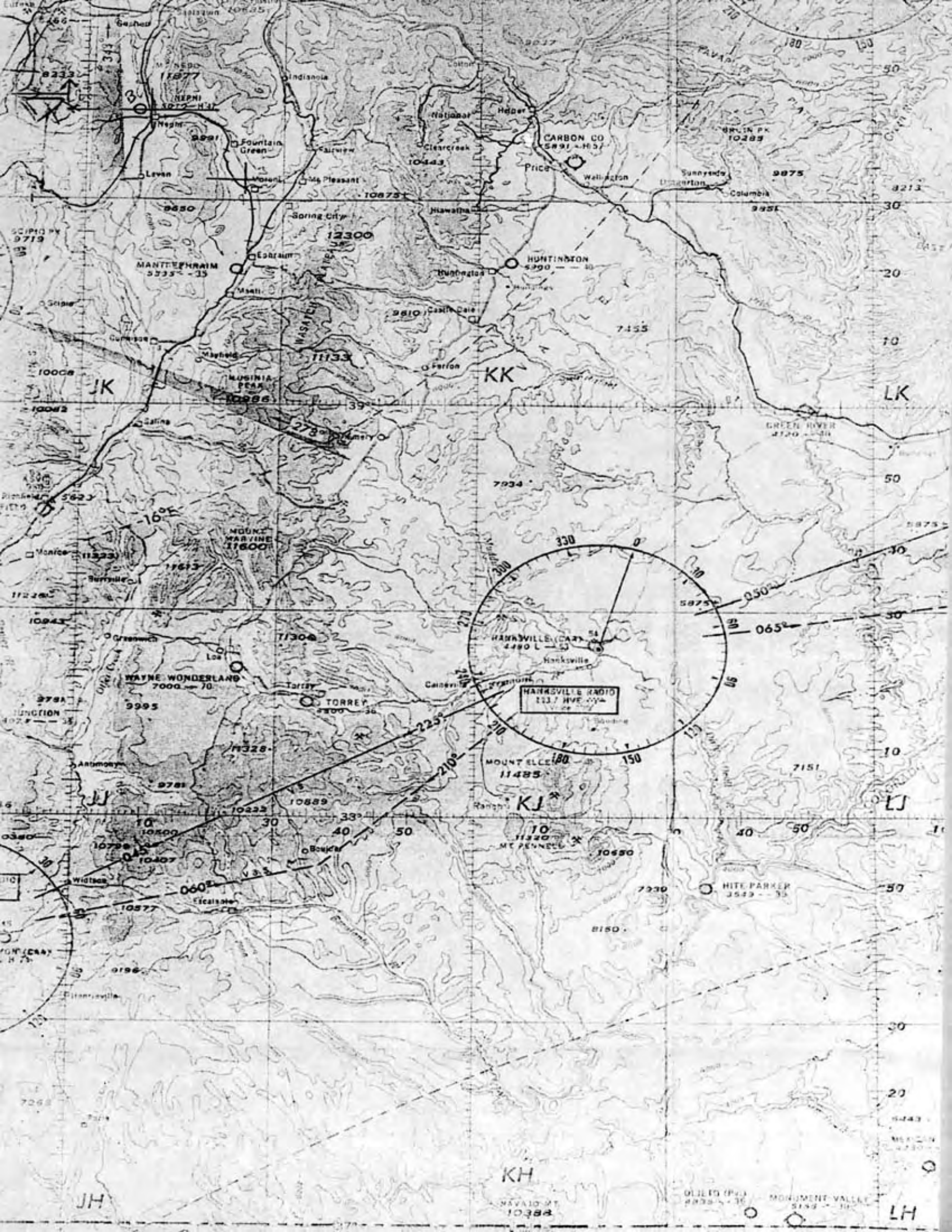
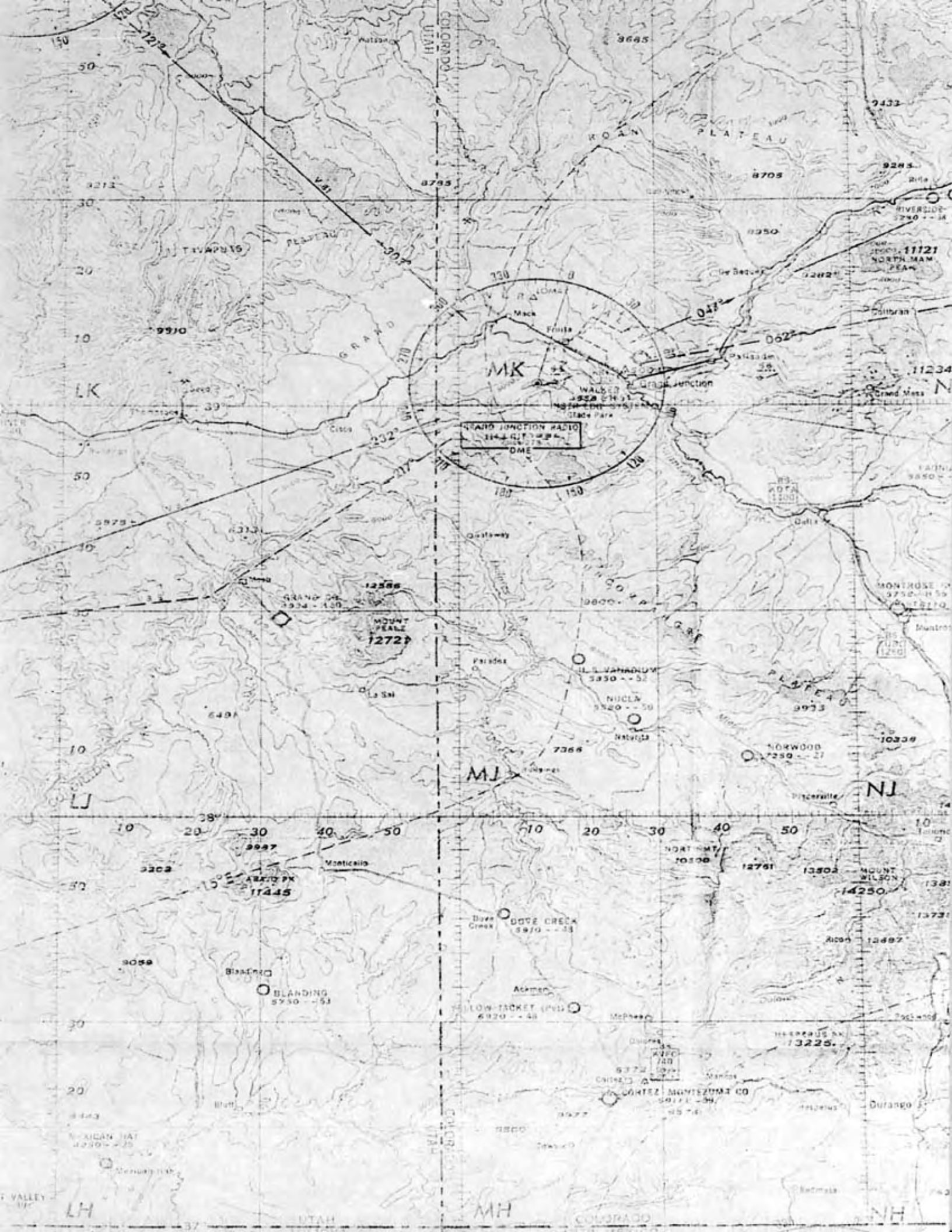
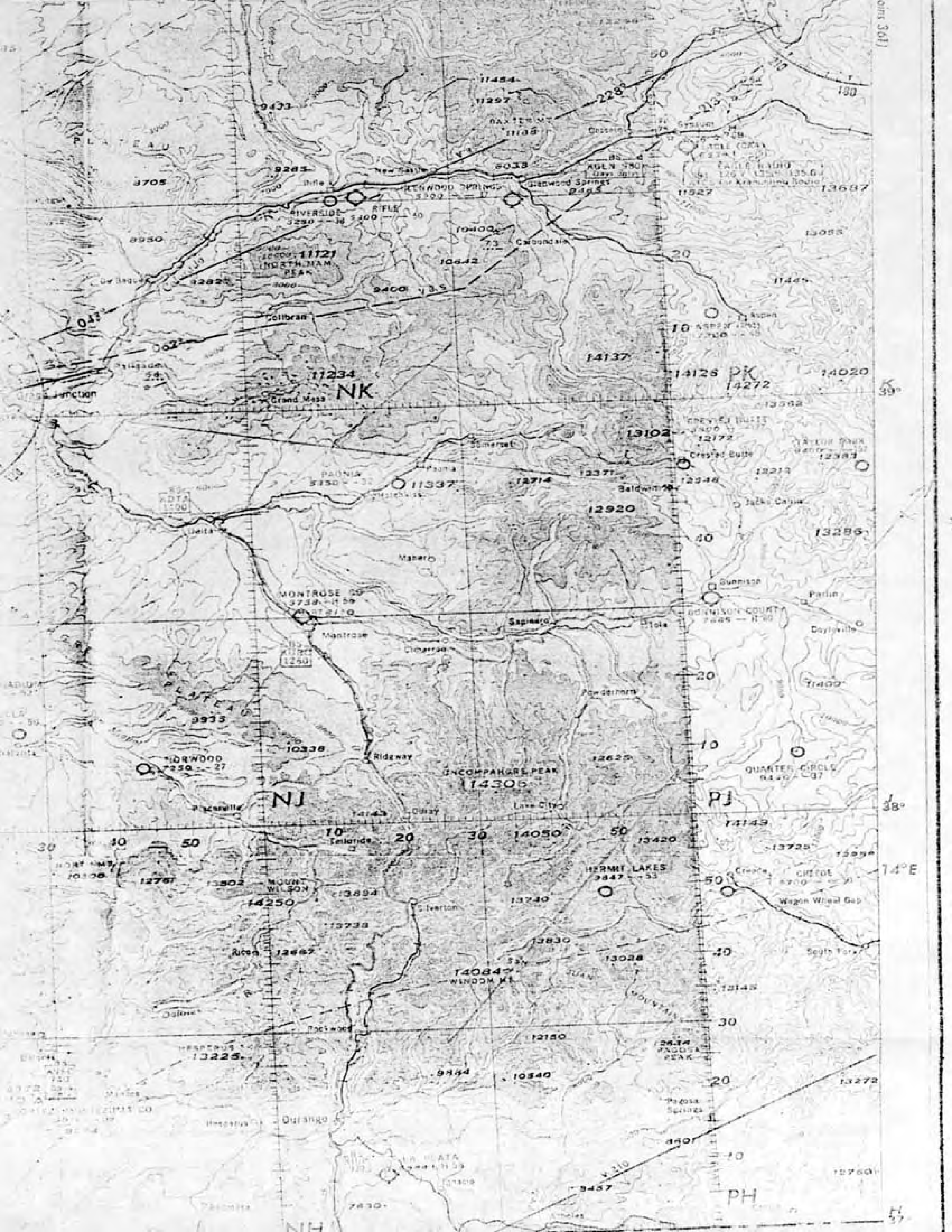
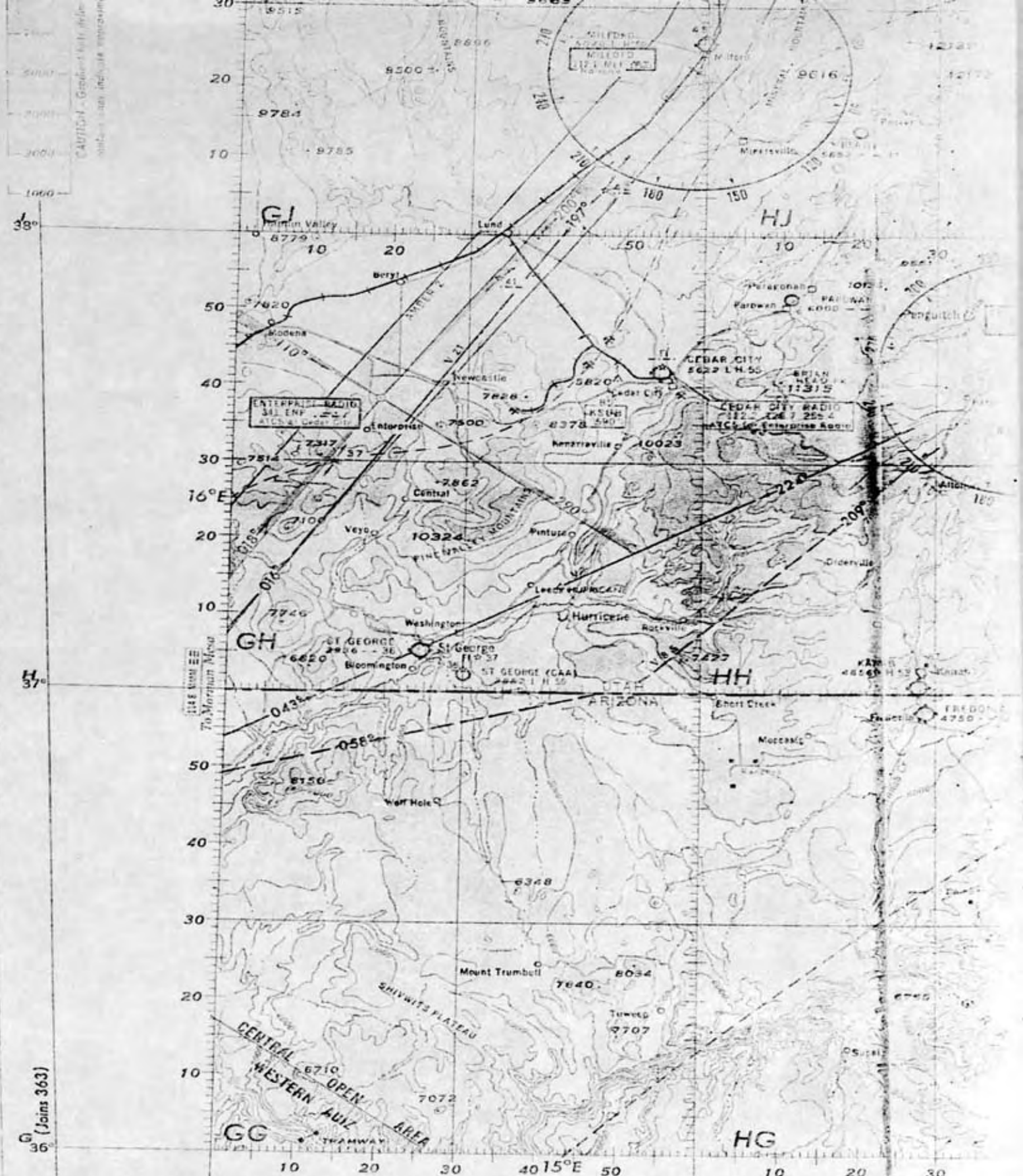

JK
KK
LK
JJ
KJ
LJ
JH
KH
LH
HANKSVILLE RADIO
MOUNT ELLEN
11485
MOUNT MARINE
11600
MANTI-EPHRAIM
CARBON CO
HUNTINGTON
WAYNE WONDERLAND
TORREY
HITE PARKER
MONUMENT VALLEY
Price
Green River
Moab
Monticello
Blanding
Hanksville
Bicknell
Loa
Fremont
Fish Lake
Escalante
Boulder
Wiota
Antimony
Junction
Circleville
Panguitch
Parowan
Cedar City
Kanab
Navajo Mt.
Mt. Pennell
Navajo Mt.
10384


UTAH
COLORADO
GRAND JUNCTION RADIO
VOR
DME
MK
LK
MJ
LJ
MH
LH
NJ
NH
GRAND JUNCTION
MOUNT GARFIELD
12721
BLANDING
DOVE CREEK
CORTEZ MONTEZUMA CO
MONTICELLO
NORWOOD
NUCLA
MONTROSE
MOUNT WILSON
14250
13225
11445
11121
NORTH MAM PEAK
PLATEAU
GRAND MESA
GRAND VALLEY



NK
PK
NJ
PJ
PH
PLATEAU
Grand Junction
Grand Mesa
11234
Collbran
9400
NORTH MAM PEAK
11121
RIVERSIDE
RIFLE
Glenwood Springs
Carbondale
Aspen
14137
14126
14272
14020
Crested Butte
13102
12172
Somerset
Paonia
PAONIA
11337
12714
13371
Baldwin
12920
Jacks Cabin
13286
Delta
Maher
MONTROSE CO
Montrose
Sapinero
Cimarron
Gunnison
GUNNISON COUNTY
Parlin
Doyleville
Powderhorn
11400
PLATEAU
9933
10338
Ridgway
NORWOOD
Placerville
12625
UNCOMPAHGRE PEAK
14306
QUARTER CIRCLE
Lake City
Ouray
14143
14149
Telluride
14050
13420
13725
12761
13802
MOUNT WILSON
14250
13894
HERMIT LAKES
13740
Creede
Wagon Wheel Gap
Silverton
13738
13830
13028
Rico
12667
14084
WINDOM MT
South Fork
13145
SAN JUAN MOUNTAINS
Rockwood
13150
HESPERUS
13225
PAGOSA PEAK
9884
10340
13272
Pagosa Springs
Durango
Hesperus
LA PLATA
7430
8401
9457
228°
213°
39°
38°
14°E



TO REFERENCE BY THE GEOREF (SHOWN IN BLUE) TO MINUTES
(Select nearest intersection south and west of point)

Sample Point: ENTERPRISE

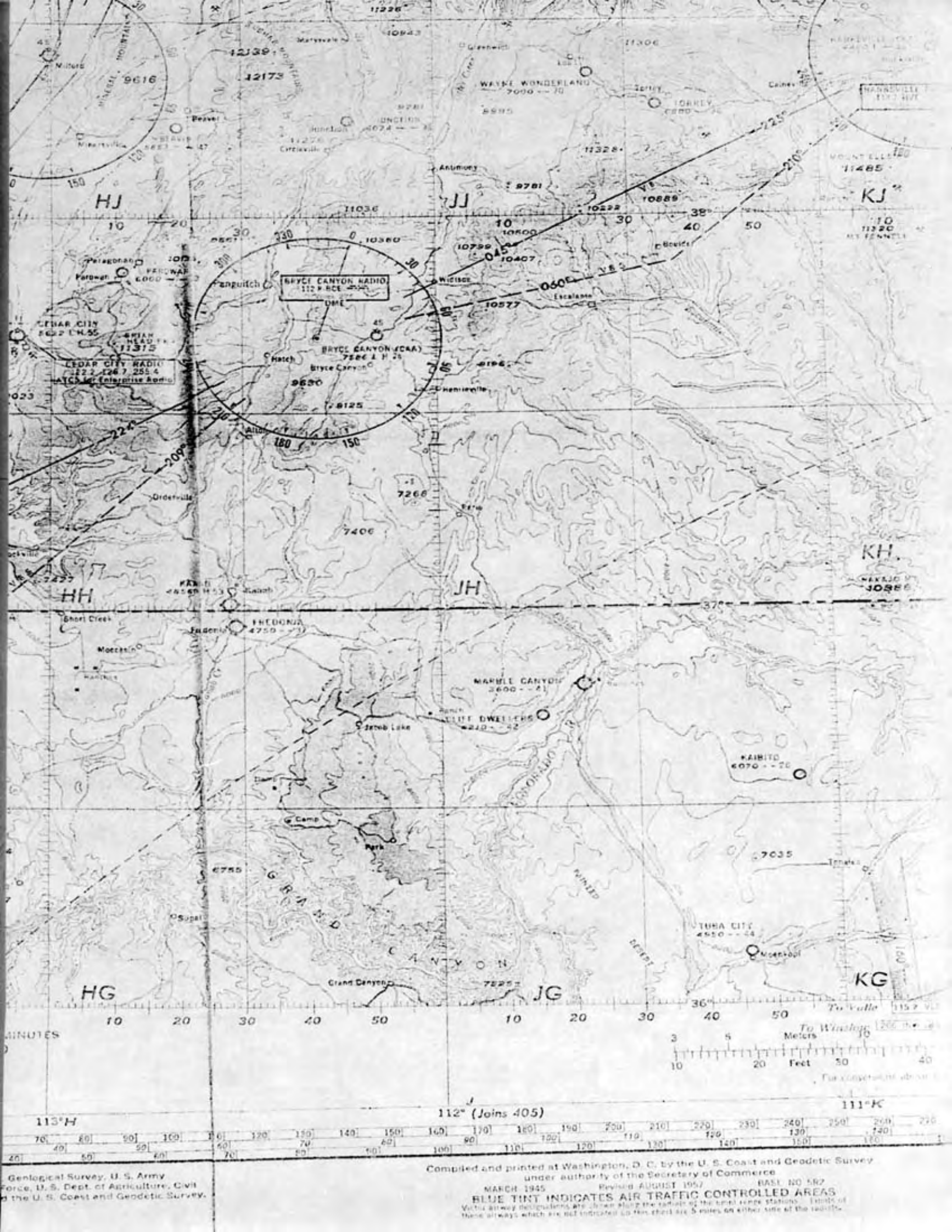
1. EJ identifies basic 15° quadrangle
2. GH identifies 1° quadrangle
3. 17 identifies Georef minute of longitude
4. 34 identifies Georef minute of latitude
5. Sample reference: EJGH1734

Kilometers
Nautical Miles
Statute Miles

(362)

PRICE 25 CENTS

Principal Sources: U.S. Geological Survey, U.S. Army Corps of Engineers, U.S. Air Force, U.S. Dept. of Agriculture, Civil Aeronautics Administration, and the U.S. Coast and Geodetic Survey.



Geological Survey, U. S. Army
Force, U. S. Dept. of Agriculture, Civil
the U. S. Coast and Geodetic Survey.

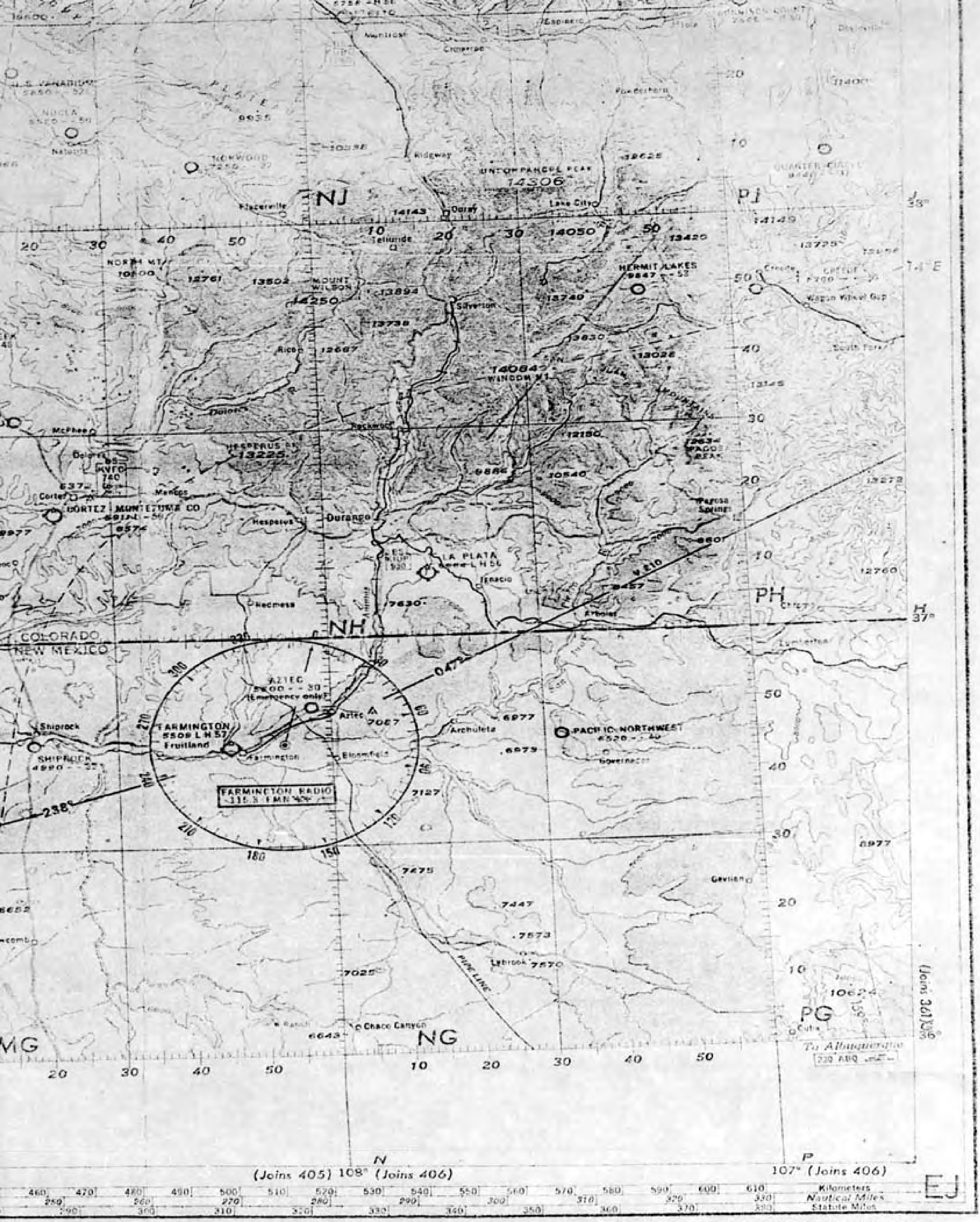
Compiled and printed at Washington, D. C. by the U. S. Coast and Geodetic Survey
under authority of the Secretary of Commerce

MARCH 1945 Revised AUGUST 1957 BASE NO 582

BLUE TINT INDICATES AIR TRAFFIC CONTROLLED AREAS

Victor airway designations are shown along the radials of the omni ranges stations. Limits of these airways which are not indicated on this chart are 5 miles on either side of the radials.

HANKSVILLE RADIO
MOUNT ELLEN
11465
MT PENNELL
11320
BITE PARKER
MONTICELLO
ABAJO PK
11445
BLANDING
MEXICAN HAT
OLJETO (Pvt.)
MONUMENT VALLEY
NAVAJO MT
10388
KAYENTA
ROCK POINT MISSION
ROUND ROCK
COVE
MANY FARMS
CHINLE
Tonalea
Chinle
Ogilin Wash
CHINLE VALLEY
BLACK MESA
COLORADO
UTAH
ARIZONA
NEW MEXICO
KH
LH
KJ
LJ
MJ
KG
LG
ALTITUDE CONVERSION SCALE
Meters
Feet
111°K
110°L
NOTE: It is requested that users of this chart indicate corrections and additions which come to their attention and notify
"THE DIRECTOR, U.S. COAST AND GEODETIC SURVEY, WASHINGTON 25, D.C."
Obstructions
500 feet or higher above ground
Less than 500 feet above ground
Under construction, position and elevation unverified

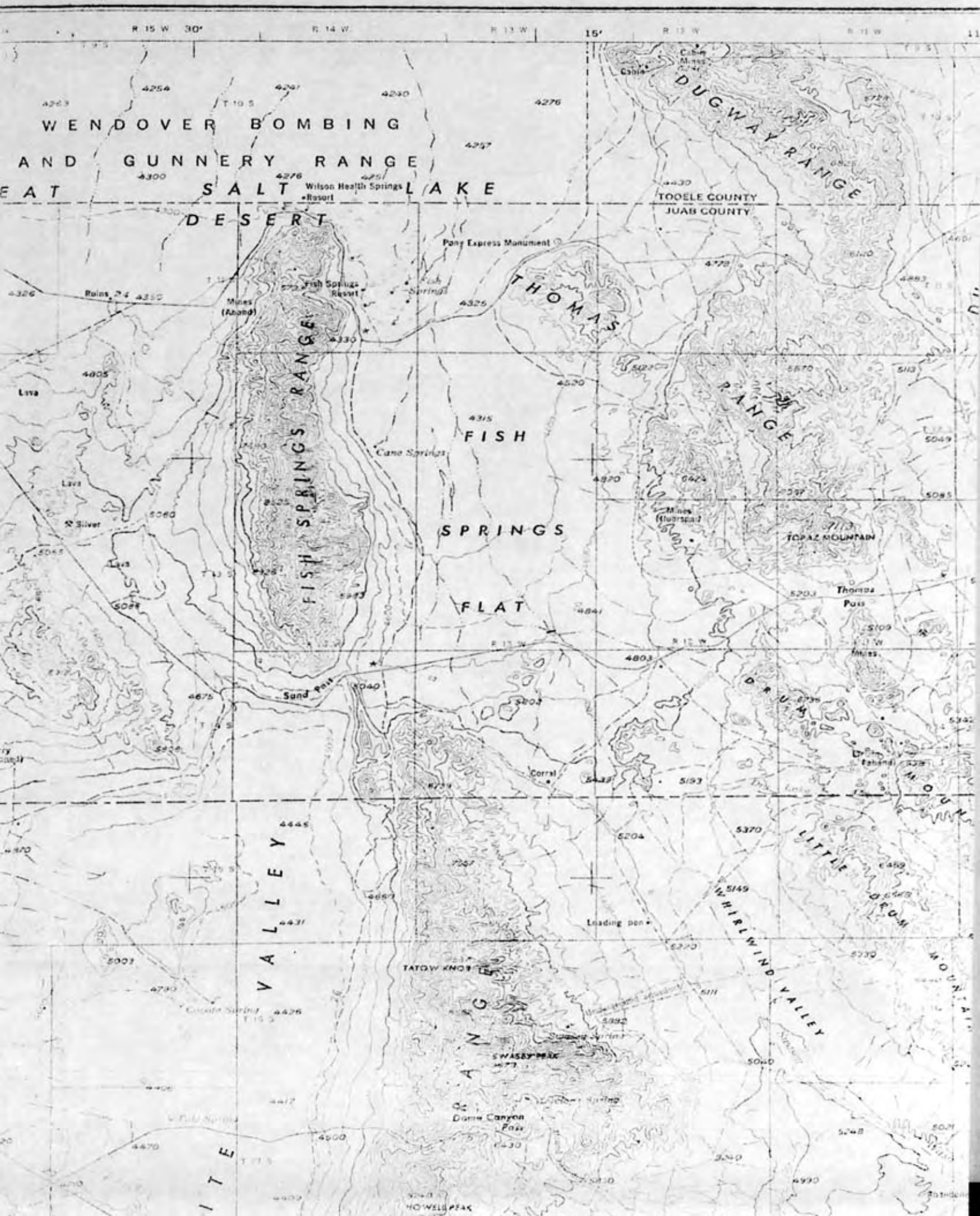


LE 1:1,000,000
GEOREF 10-55

20 TH EDITION Aeronautical information on this chart includes data received through September 19, 1957
Consult appropriate NOTAMS and Radio Facility Charts for supplemental data and current information.

BRYCE CANYON (362)
UNITED STATES
U.S. AIR FORCE EDITION

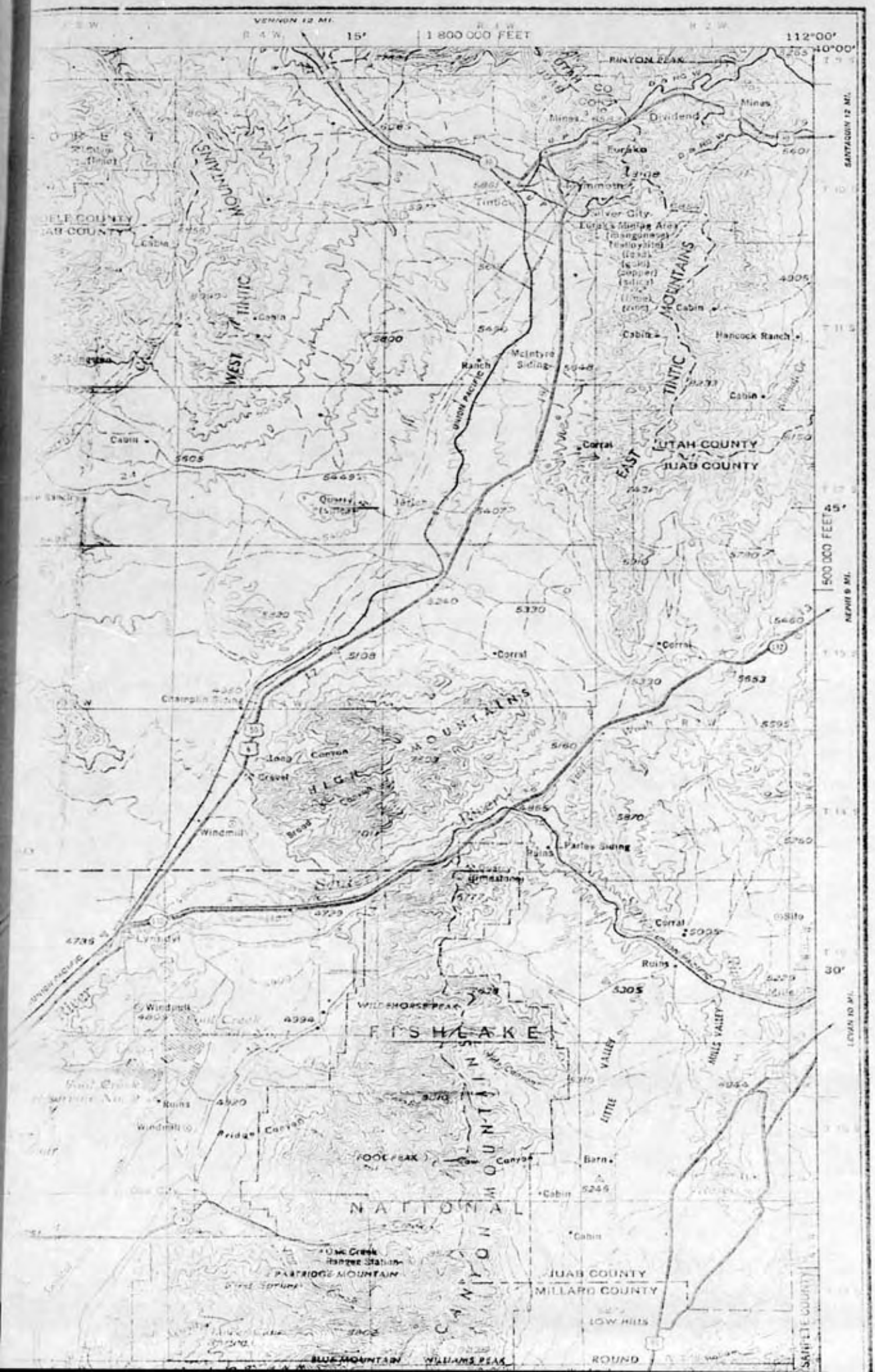
114°00'
40°00'
45'
30'
R 19 W
R 18 W
R 17 W
R 16 W
T 12 S
T 13 S
T 14 S
T 15 S
TOOELE COUNTY
JUAB COUNTY
MILLARD COUNTY
GOSHUTE
INDIAN
DESERT
VALLEY
CONFUSION
RANGE
GREAT
Ruins
Ranch
Rock Springs
Goshute
Callao
Siegrist Ranch
Creek
Spring
Tungsten
Mill
Tungsten Mt.
Haystack Peak
Sand Mountain
CCC Camp (abandoned)
Falkenberg Ranch
Nielsons Ranch
Trout Creek
Partoun
Granite Mountain
Quarry (abandoned)
Oil
Oil (abandoned)
Foute Ranch
Gandy
Salt Marsh Lake
Indian Pass
Cowboy Pass
Lava
Water
TO NEVADA STATE LINE 3 MI.

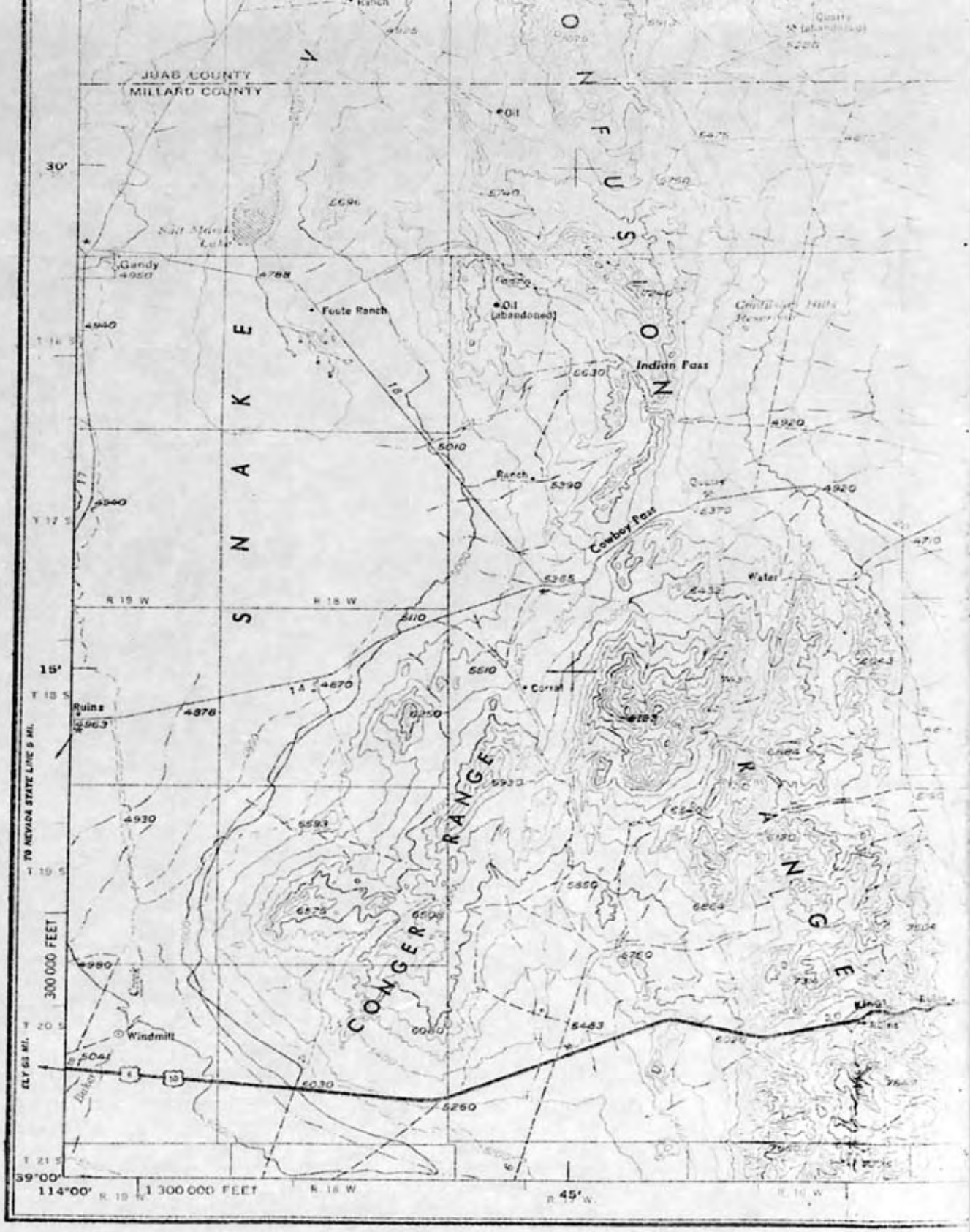

R 15 W
30'
R 14 W
R 13 W
15'
R 12 W
WENDOVER BOMBING
AND GUNNERY RANGE
SALT LAKE
DESERT
Wilson Health Springs Resort
Pony Express Monument
Ruins
Mines (Abnd)
Fish Springs Resort
Fish Springs
FISH SPRINGS RANGE
Lava
Silver
Cane Springs
FISH SPRINGS FLAT
Sand Pass
Corral
Leading pen
TATOW KNOB
SWASEY PEAK
Dome Canyon Pass
NOWELL PEAK
VALLEY
THOMAS RANGE
TOOELE COUNTY
JUAB COUNTY
Mines (Inactive)
TOPAZ MOUNTAIN
Thomas Pass
DRUM MOUNTAINS
Tabernacle
LITTLE DRUM MOUNTAINS
WHIRLWIND VALLEY

DELTA

Pony Express Monument
Boomtown Ranch
SIMPSON MOUNTAINS
Black Rock
Cabin
DUGWAY VALLEY
RANGE
Gravel
KEG MOUNTAINS
DESERT MOUNTAIN
Topaz Mountain
Thermal
Pass
Mines
Lava
Crater Springs Health Resort
JUAB COUNTY
MILLARD COUNTY
LITTLE DRUM MOUNTAINS
SEVIER
Windmill
Topaz Camp (abandoned)
Abraham
Farm
Delta
Abandoned

VERNON 12 MI.
1 800 000 FEET
30'
15'
R 6 W
R 5 W
R 4 W
SKULL VALLEY
INDIAN RESERVATION
DEEPROCK MOUNTAINS
NATIONAL FOREST
(VERNON DIVISION)
TOOELE COUNTY
JUAB COUNTY
ERICKSON KNOLL
Clyde Ranch
Cabin
Corral
Windmill
Rockwall Ranch
Jericho
Champlin Siding
Long Canyon
Gravel
Lynndyl
Leamington
Union Pacific
Strong Siding
Delta
Delta Reservoir
Oak Creek Ranger Station
PARTRIDGE MOUNTAIN
Ruins
Barn
Tintic
Eureka
Dividend
Mammoth
McIntyre Siding
Ranch
Parker Siding
Quarry
Limestone
WILDHORSE PEAK
FISHLAKE
NATIONAL
MOUNTAINS
JUAB COUNTY
MILLARD COUNTY
BLUE MOUNTAIN
WILLIAMS PEAK
ROUND
WEST TINTIC MOUNTAINS
EAST TINTIC MOUNTAINS
UTAH CO
JUAB CO
Silo
Towers
Bridge
Canyon
Creek
Valley
Little
Low Hill


VERNON 12 MI.
15'
1 800 000 FEET
112°00'
40°00'
RANYON PEAK
UTAH CO
CON
Mines
Dividend
Eureka
Lynn
Timmons
Silver City
Cabin
Hancock Ranch
Ranch
McIntyre Siding
UNION PACIFIC
WEST TINTIC MOUNTAINS
EAST TINTIC MOUNTAINS
UTAH COUNTY
JUAB COUNTY
Corral
Quarry
Station
Chairplin Siding
Long Canyon
Gravel
Windmill
Broad
Ruins
Parley Siding
Limestone
Lynndyl
Silo
WILD HORSE PEAK
FISHLAKE
NATIONAL
FOOL PEAK
Canyon
Barn
Cabin
Dug Creek
Ranger Station
PARTRIDGE MOUNTAIN
MILLARD COUNTY
LOW HILLS
BLUE MOUNTAIN
WILLIAMS PEAK
ROUND
500 000 FEET
45'
30'
NEPHI 9 MI.
LEVAN 10 MI.
SANTAQUIN 12 MI.



Prepared by the Army Map Service (FSGE), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1955 by photogrammetric methods and from United States Quadrangles, 1:62,500, U.S. Geological Survey, 1948-1953. Planimetric detail revised by photo-planimetric methods. Control by USC&GS, USGS, GLO and CE. Photography field annotated, 1953.

100,000-foot grids based on Utah coordinate system, central zone

10,000-meter Universal Transverse Mercator grid ticks, zone 12, shown in blue

Figures in red den...

POPULATED PLACES

Over 500,000 LOS AN...

100,000 to 500,000

25,000 to 100,000 GA...

5,000 to 25,000

1,000 to 5,000

Less than 1,000

RAILROADS

Standard gauge — Single track — Double or Multiple — Land...

Narrow gauge — Land...

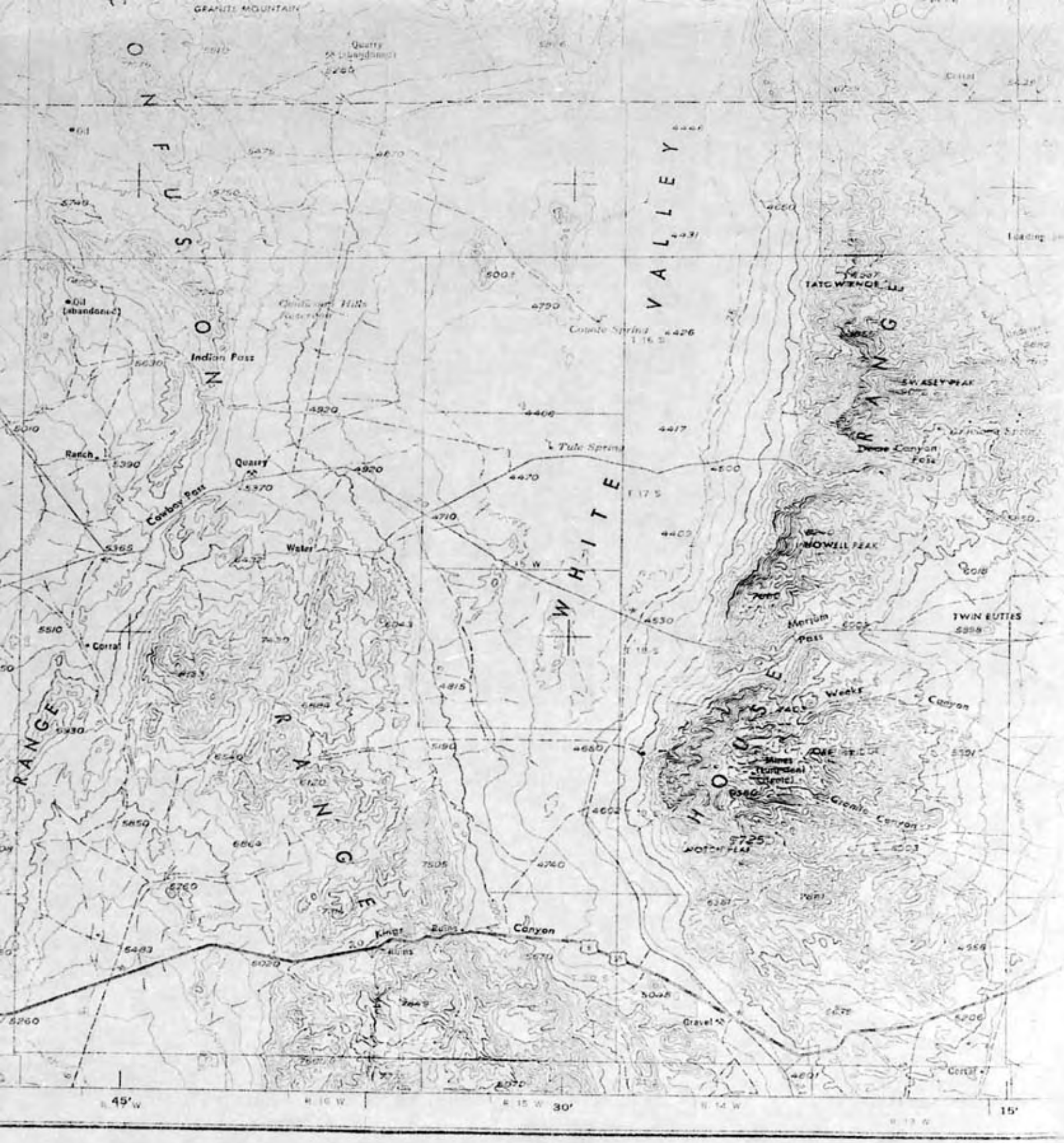
BOUNDARIES

International — Land...

State — Swa...

County — Swa...

Park or reservation — Woods...



LEGEND

ROAD DATA 1953

Figures in red denote approximate distances in miles between stars

POPULATED PLACES

- Over 500,000 — LOS ANGELES
- 100,000 to 500,000 — OMAHA
- 25,000 to 100,000 — GALVESTON
- 5,000 to 25,000 — Laramie
- 1,000 to 5,000 — Grand Coulee
- Less than 1,000 — Sun Valley

RAILROADS

	Single track	Double or Multiple
Standard gauge		
Narrow gauge		

BOUNDARIES

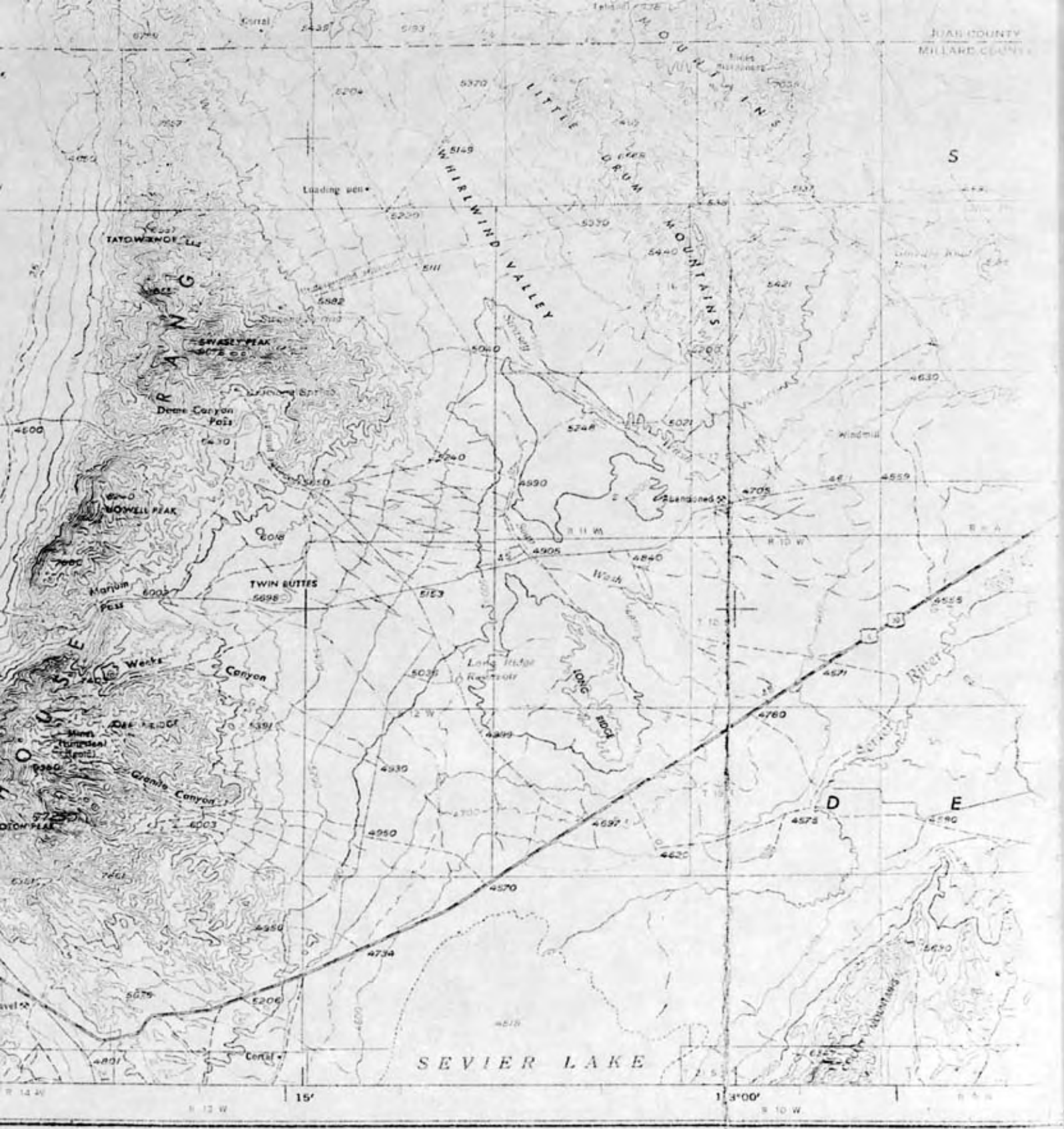
- International
- State
- County
- Park or reservation

- Landplane airport
- Landing area
- Seaplane airport
- Seaplane anchorage
- Woods-brushwood

ROADS

- Hard surface, heavy duty
  - More than two lanes wide — 2 LANES | 2 LANES
  - Two lanes wide; Federal route marker — 91
- Hard surface, medium duty
  - More than two lanes wide — 2 LANES | 2 LANES
  - Two lanes wide; State route marker — 10
- Improved light duty
- Unimproved dirt
- Trail

- Landmarks: School; Church; Other
- Horizontal control point — △
- Spot elevation in feet — 221
- Marsh or swamp
- Intermittent or dry stream
- Power line



Scale 1:250,000

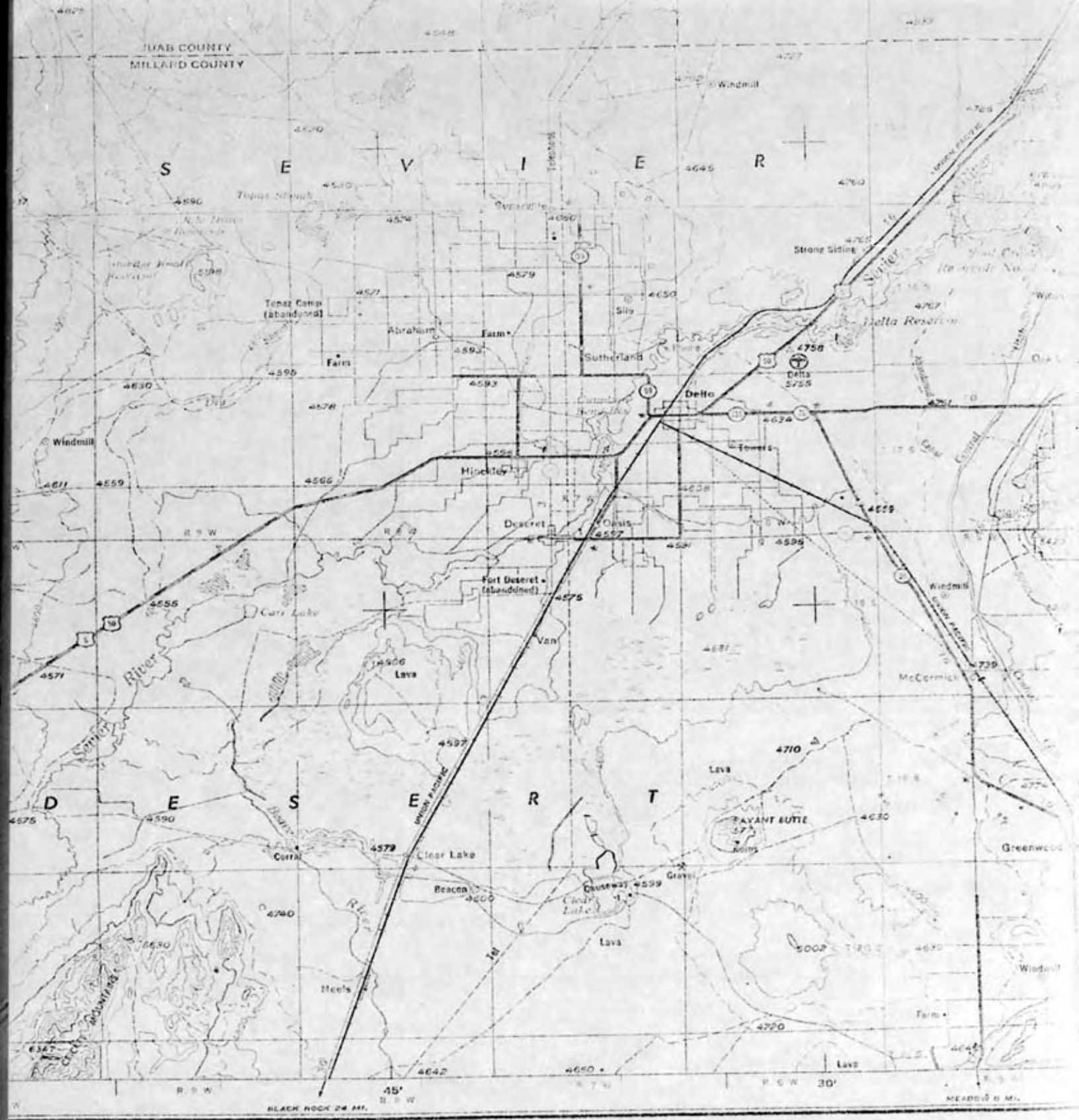
5 0 5 10 15

5 0 5 10 15 20 25

5 0 5 10

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
TRANSVERSE MERCATOR PROJECTION

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 2, COLORADO OR WASHINGTON



10 15 20 Statute Miles
15 20 25 30 Kilometers
10 15 Nautical Miles

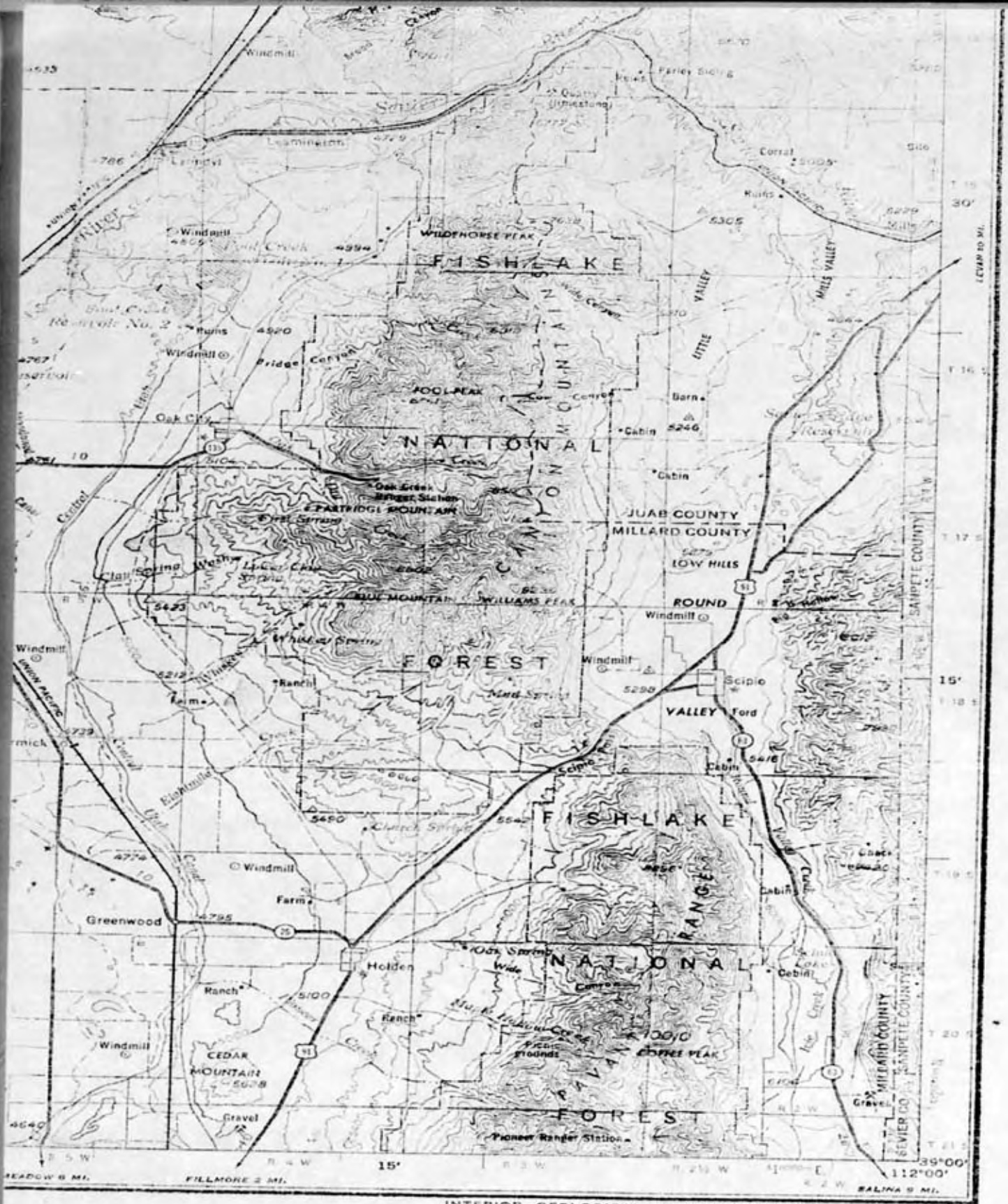
00 FEET
T 100 FOOT INTERVALS
PROJECTION

LOCATION DIAGRAM FOR NJ 12-1

NK 11-8	NK 11-9	NK 12-7	NK 12-8	NK 12-9
NK 11-11	NK 11-12	NK 12-10	NK 12-11	NK 12-12
NEVADA NJ 11-2	NJ 11-3	NJ 12-1	UTAH NJ 12-2	NJ 12-3
NJ 11-5	NJ 11-6	NJ 12-4	NJ 12-5	NJ 12-6
NJ 11-8	NJ 11-9	NJ 12-7	NJ 12-8	NJ 12-9

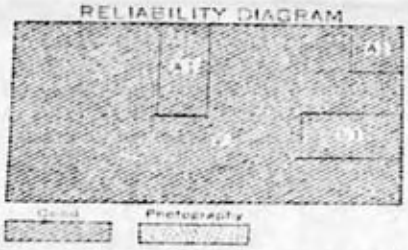
WYOMING
COLORADO
CALIFORNIA

2. COLORADO OR WASHINGTON 25, D. C.



INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1958—NS
M R-2796

RELIABILITY DIAGRAM



TOWNSHIP OR RANGE LINE
LAND GRANT BOUNDARY

SECTIONIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

A. Large scale topographic maps, photogrammetric, 1946-1953.
B. Large scale topographic maps, photogrammetric and controlled ground survey, 1951-1952.
1. Planimetry revised from 1953 aerial photography.
2. Stereocompiled from 1953 aerial photography.

DELTA, UTAH

1 - 15 MAY 1962 SIGHTINGS

DATE	LOCATION	OBSERVER	EVALUATION
May	Athens County, Ohio	Multi (PHYSICAL SPEC)	Other (CHAFF)
May	USSR (missing)	Civilian	Aircraft
May	Clinchco, Virginia	[redacted]	Balloon
1	Alexandria, Louisiana	[redacted]	Balloon
1	28.31N 137.19W (Pacific)	Military	Astro (METEOR)
1	28.23N 137.30W (Pacific)	Military	Insufficient Data
2	Dayton, Ohio	[redacted]	Insufficient Data
2	Fairborn, Ohio	[redacted]	Astro (METEOR)
2	Southwest, Ohio	Multi	Astro (METEOR)
2	Fairborn, Ohio	[redacted]	Astro (METEOR)
2-3	Vandalia, Ohio	[redacted]	Astro (VENUS)
3	Foreman, Arkansas	[redacted]	Aircraft
4	Coloma, Michigan	[redacted]	Astro (METEOR)
5	Kirksville, Missouri	[redacted]	Insufficient Data
6	Dayton & Lebanon, Ohio	[redacted]	Satellite
7	Danville, Kentucky	[redacted]	Astro (METEOR)
8	SW Canton Island (Pacific)	Civilian Airlines	Aircraft
9	Dayton, Ohio	[redacted]	Aircraft
10	Kansas City, Missouri	[redacted]	Insufficient Data
11	Millsap, Texas	[redacted]	Astro (METEOR)
11	42.50N 155.20E (Pacific)	Civilian	Aircraft
13	05.21N 157.28W (Pacific)	Military	Satellite
14-15	Chicago, Illinois	[redacted]	Insufficient Data

ADDITIONAL REPORTED SIGHTINGS (NOT CASES)

DATE	LOCATION	SOURCE	EVALUATION
3	Cincinnati, Ohio	Newsclipping	
9	Newcastle, England	Newsclipping	
10	Tokushima-Kin, Japan	Newsclipping	
12	Lexington, Massachusetts	Newsclipping	