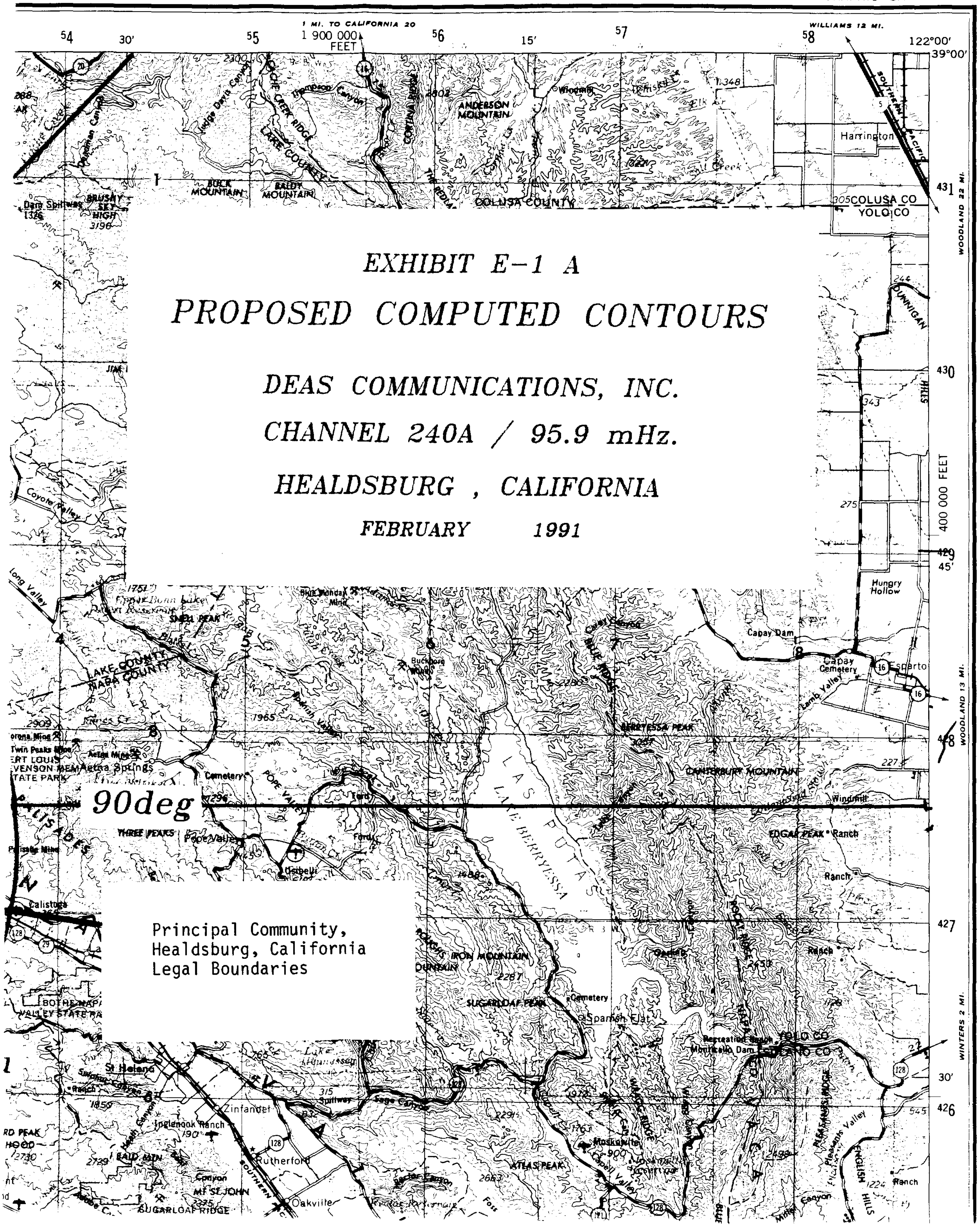
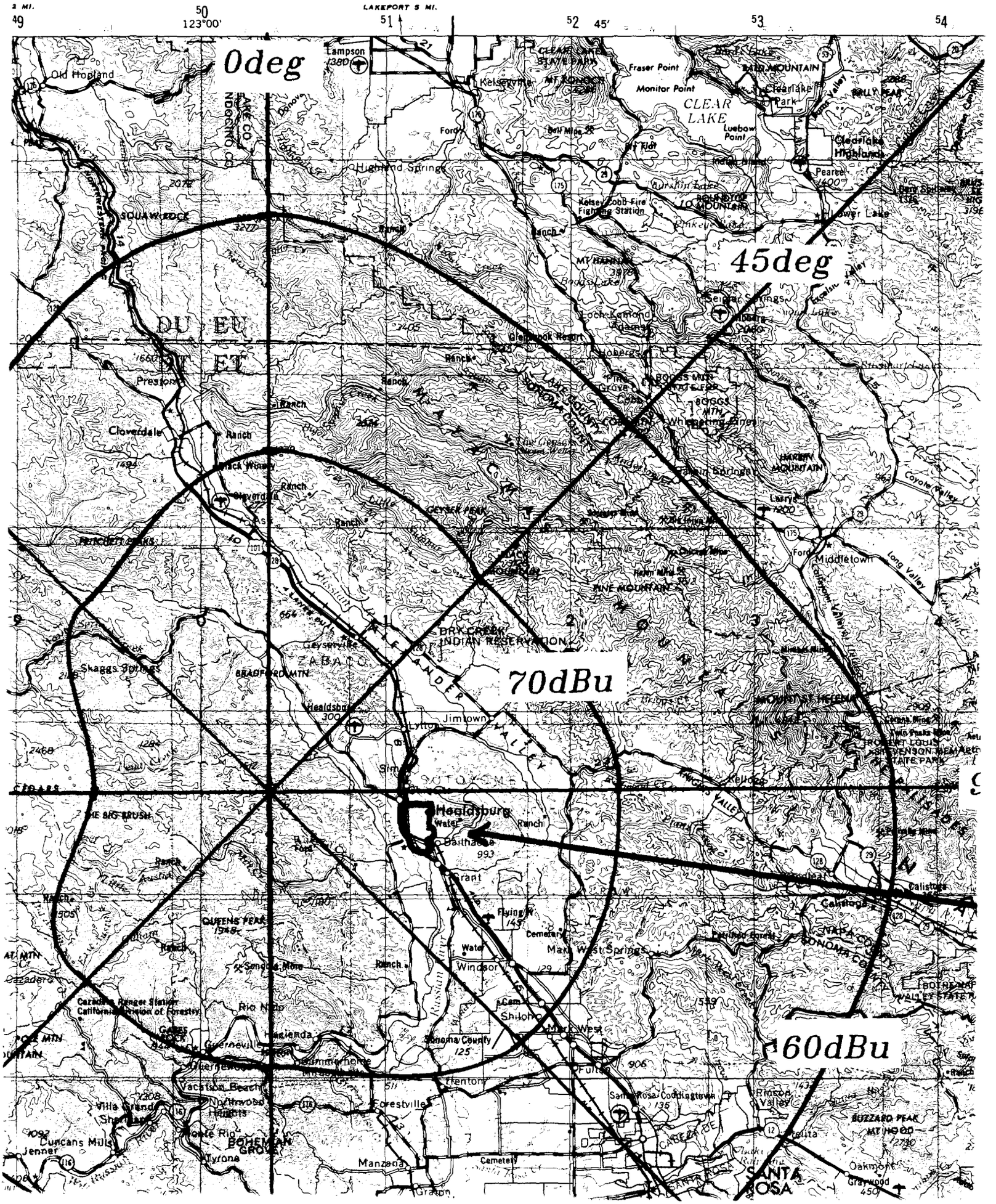
NJ 10-5
TOPOGRAPHIC–BATHYMETRIC

EXHIBIT E–1 A
PROPOSED COMPUTED CONTOURS

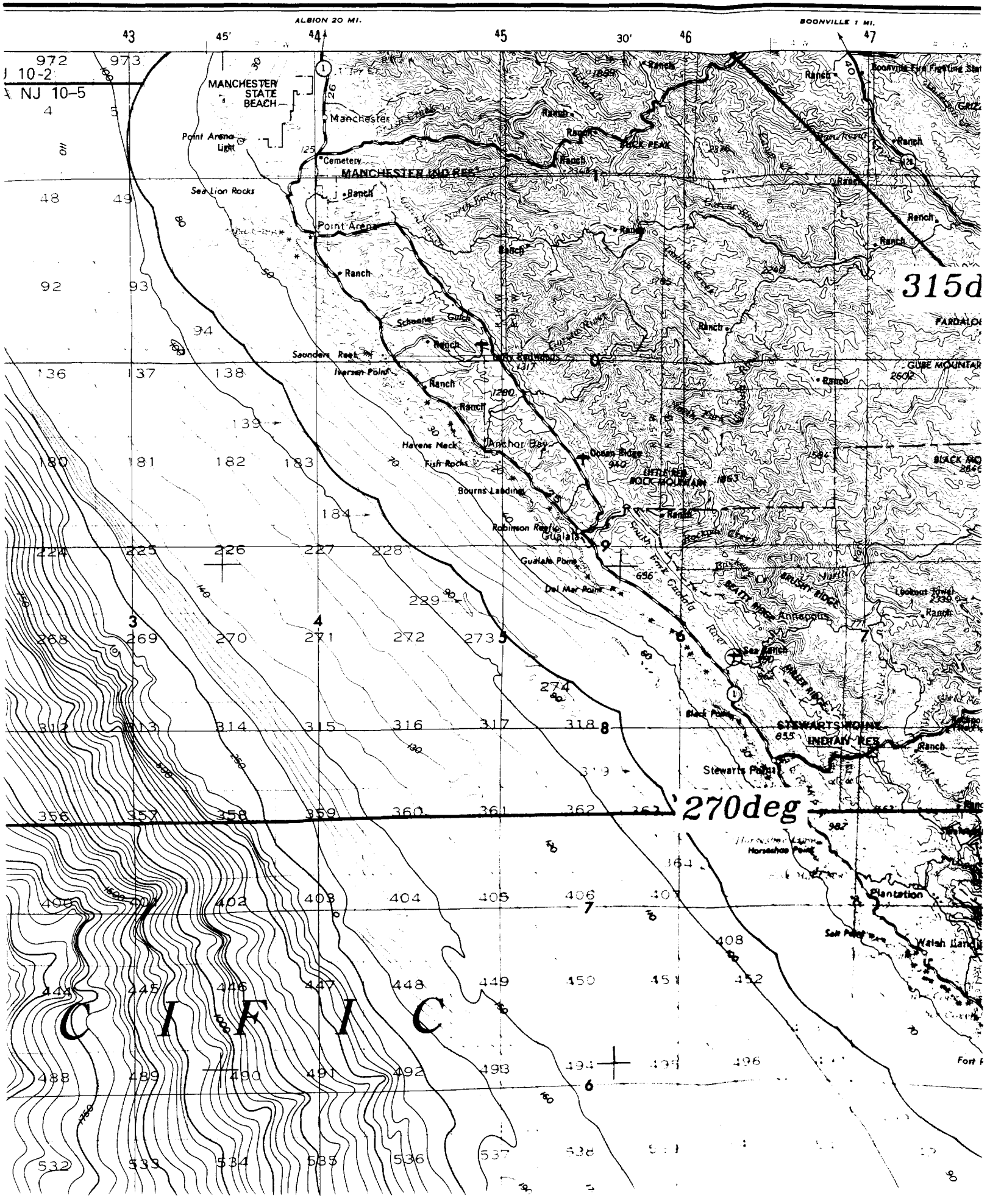
DEAS COMMUNICATIONS, INC.
CHANNEL 240A / 95.9 mHz.
HEALDSBURG , CALIFORNIA
FEBRUARY 1991

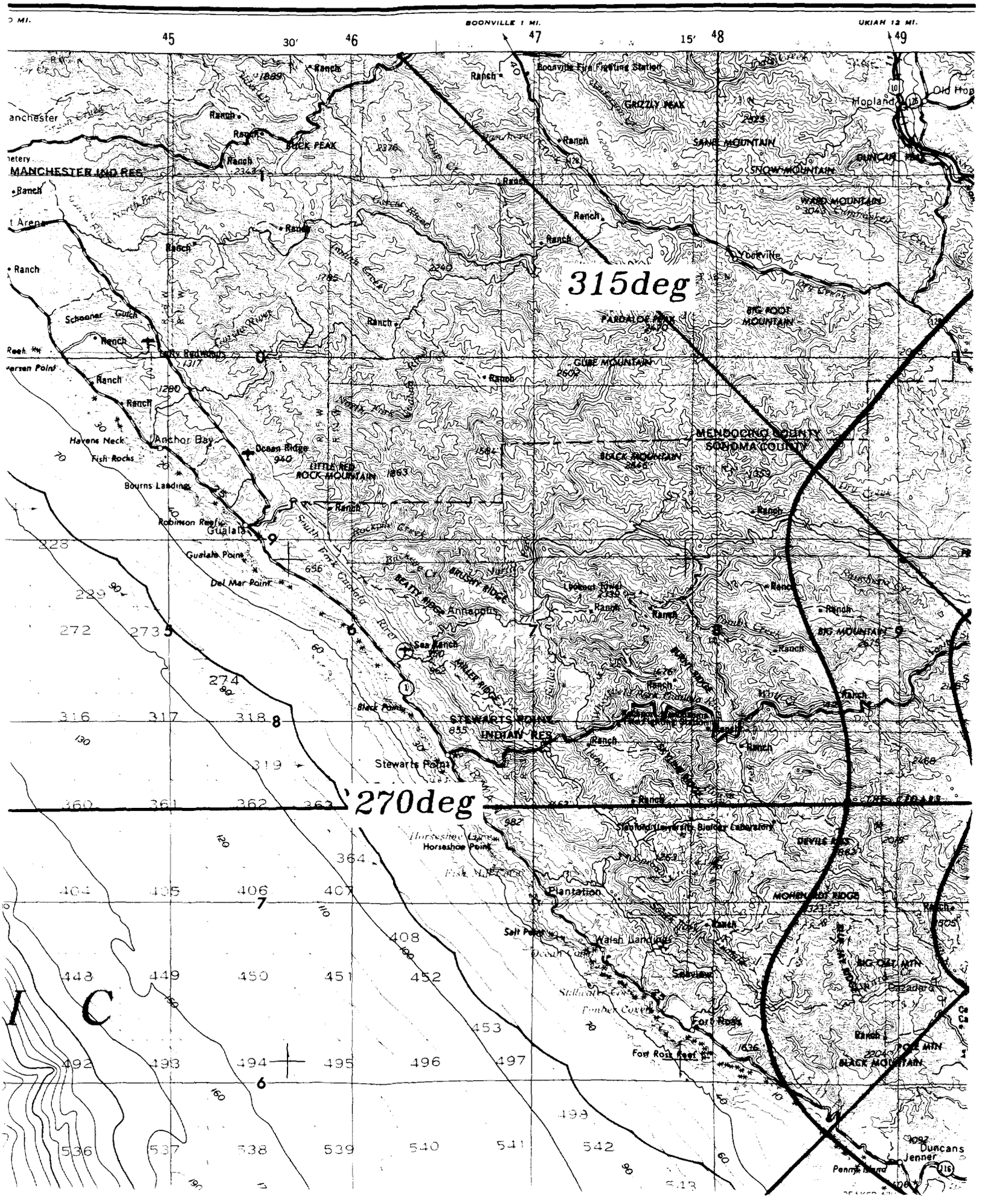


SANTA ROSA

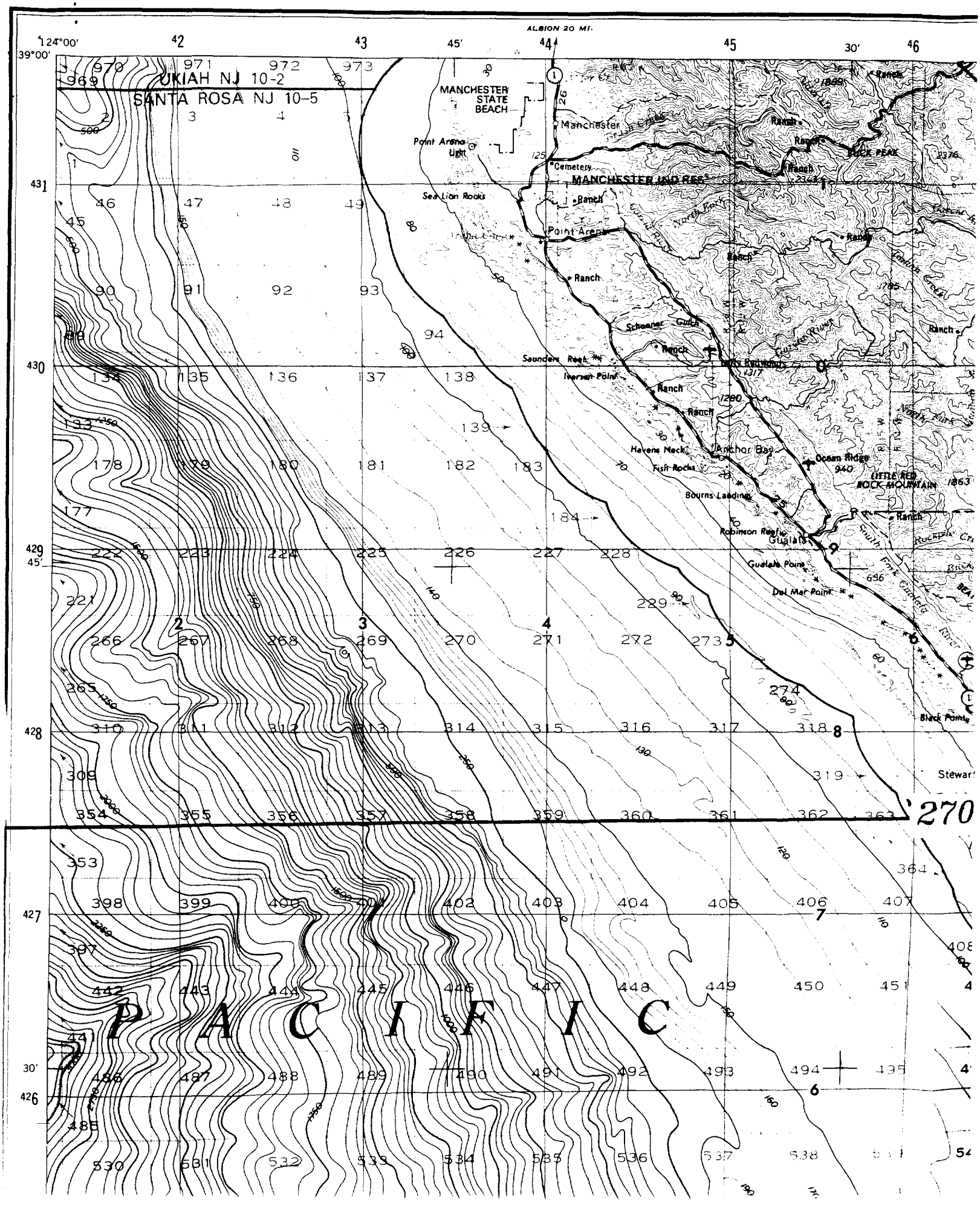

0deg
45deg
70dBu
60dBu
LAKEPORT 5 MI.
123°00'
Old Hopland
Lampson
Kelseyville
Fraser Point
Monitor Point
CLEAR LAKE
Clearlake Park
Luebow Point
Clearlake Highlands
Pearce
Highland Springs
Kelsey Cobb Fire Fighting Station
Lower Lake
Seigler Springs
Loch Lomond
Glenbrook Resort
Preston
Cloverdale
Ranch
Geyserville
Skaggs Springs
Healdsburg
Jimtown
Lytton
Middletown
Long Valley
Calistoga
Windsor
Shiloh
Mark West
Fulton
Trenton
Forestville
Santa Rosa
Cotati
Rohnert Park
Sebastopol
Graton
Duncans Mills
Jenner
Bodega
Tomales
Petaluma
Oakmont
Graywood
Manzana
Cemetery
Tyrone
Villa Grande
Monte Rio
Guerneville
Rio Nido
Caballo Ranger Station California Division of Forestry
Sonoma County
Russian River
DRY CREEK INDIAN RESERVATION
ZABACO
BOHEMIAN GROVE
SANTA ROSA

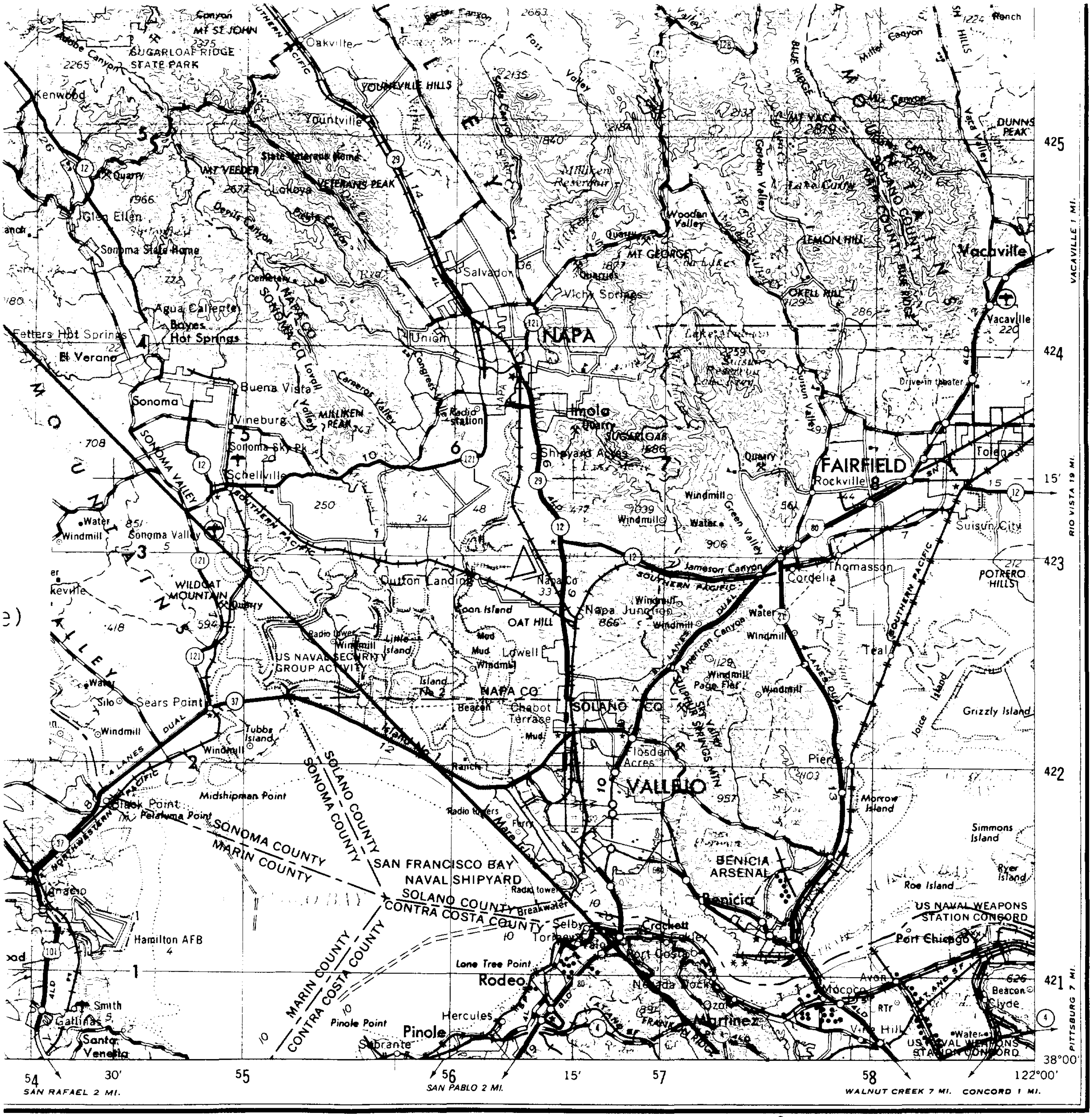
STATES 1:250,000




315deg
270deg
BOONVILLE 1 MI.
UKIAH 12 MI.
MANCHESTER IND RES
Boonville Fire Fighting Station
GRIZZLY PEAK
SANE MOUNTAIN
SNOW MOUNTAIN
WARD MOUNTAIN
Yorkville
BIG ROOT MOUNTAIN
FARDALOE PEAK
GUBE MOUNTAIN
MENDOCINO COUNTY
SONOMA COUNTY
BLACK MOUNTAIN
LITTLE RED ROCK MOUNTAIN
Schooner Gulch
Anchor Bay
Havens Neck
Fish Rocks
Bourns Landing
Robinson Reef
Gualala
Gualala Point
Del Mar Point
Ocean Ridge
Annapolis
Sea Ranch
Black Point
STEWARTS POINT INDIAN RES
Stewarts Point
Horseshoe Point
Plantation
Salt Point
Walsh Landing
Sea Ranch
Fort Ross
Fort Ross Reef
BIG MOUNTAIN
MOHEGAN RIDGE
BIG CAT MTN
POLE MTN
BLACK MOUNTAIN
Duncans Mills
Jenner
Penny Island

WESTERN UNITED STATES 1:250,000

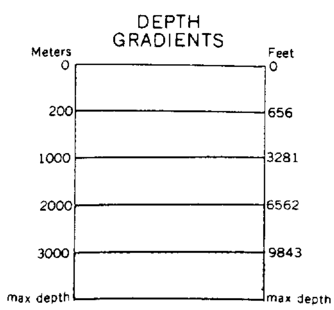




INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1980

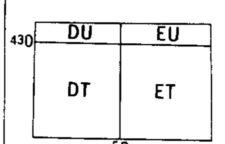
OCEAN SURVEY
SURVEY INFORMATION

SURVEY SCALE	SURVEY LINE SPACING (NAUT. MILES)
1:20,000	.03-.04
1:20,000	.02-.17
1:10,000	.02-.14
1:20,000	
1:40,000	.07-1.1
1:40,000	.14-3.3
1:40,000	.07-.55
1:40,000	.20-4.9
1:120,000	
1:10,000	.02-.14
1:10,000	.02-.14
1:10,000	.02-.14
1:5,000	.02-.12
1:10,000	
1:10,000	.02-.10
1:10,000	.01-.14
1:10,000	.01-.12
1:10,000	.03-.10
1:40,000	.07-.55



GRID ZONE DESIGNATION:
10S

100,000 M. SQUARE IDENTIFICATION

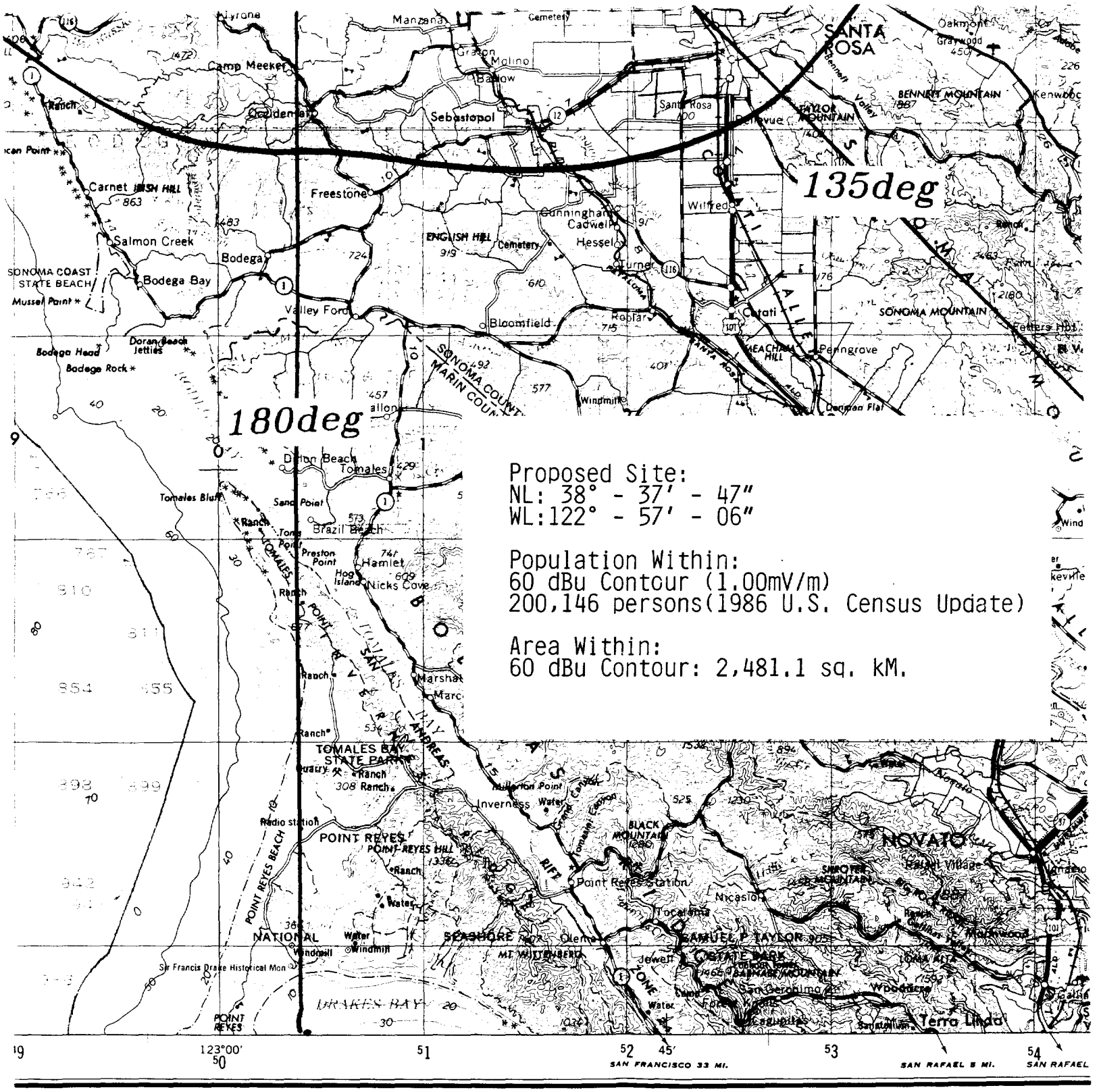


IGNORE the SMALLER figures of any grid number; these are for finding the full coordinates. Use ONLY the LARGER figure of the grid number; example: 4210000

TO GIVE A STANDARD REFERENCE ON THIS SHEET TO NEAREST 1000 METERS

SAMPLE POINT: WINDSOR

1. Read letters identifying 100,000 meter square in which the point lies.	ET		
2. Locate first VERTICAL grid line to LEFT of point and read LARGE figure labeling the line either in the top or bottom margin, or on the line itself:		1	
Estimate tenths from grid line to point:		6	
3. Locate first HORIZONTAL grid line BELOW point and read LARGE figure labeling the line either in the left or right margin, or on the line itself:			6
Estimate tenths from grid line to point:			6
SAMPLE REFERENCE:	ET1666		
If reporting beyond 18° in any direction, prefix Grid Zone Designation, as:	10SET1666		



Scale 1:250,000

5 10 15 20 Statute Miles

5 10 15 20 25 30 Kilometers

5 10 15 Nautical Miles

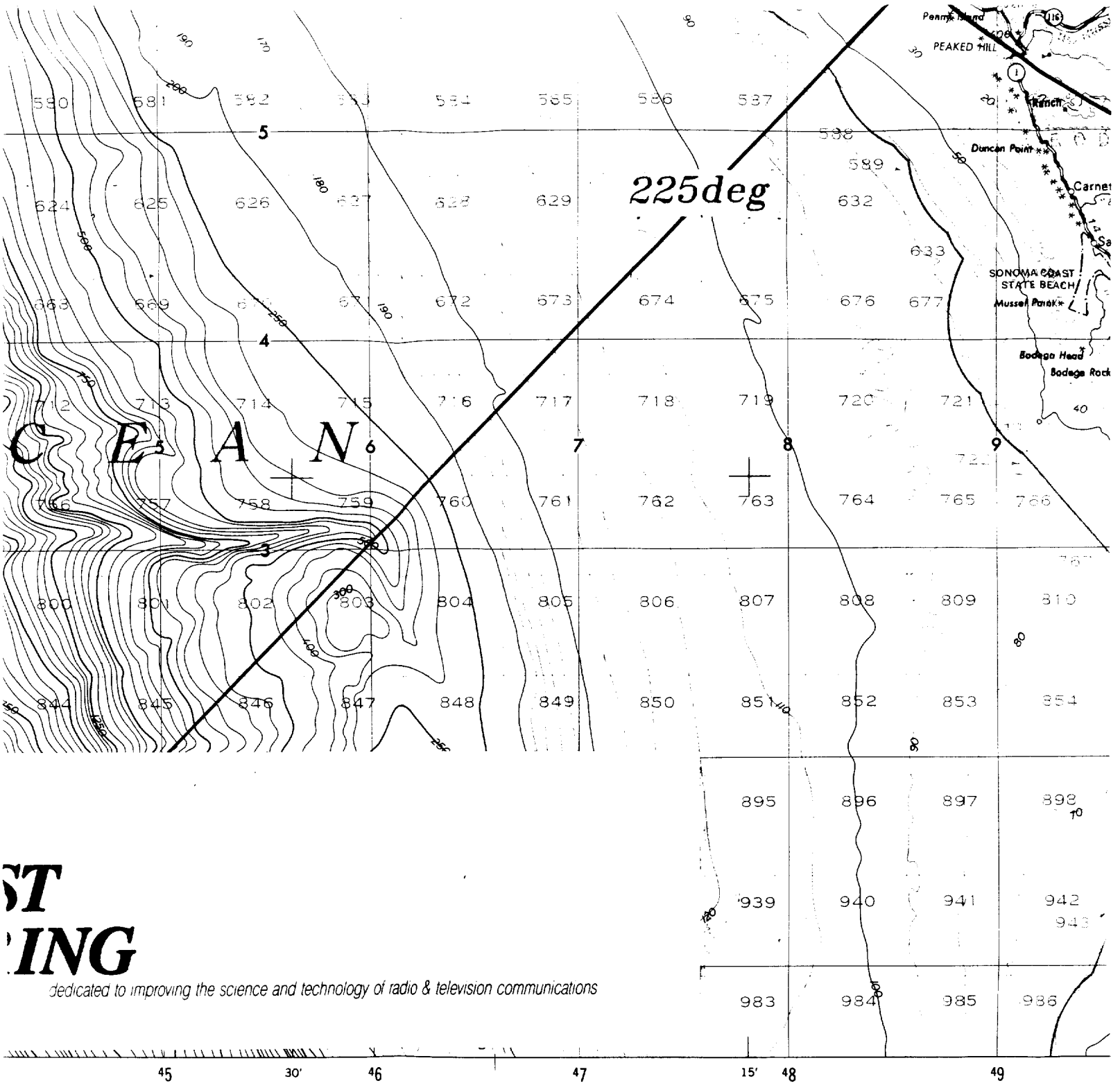
CONTOUR INTERVAL 200 FEET
ITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
TRIC CONTOUR INTERVAL 10 METERS TO THE 200 METER DEPTH,
50 METERS TO MAXIMUM DEPTH
DATUM: MEAN LOWER LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE

TIC VARIATION FOR 1980 IS 17° (300 MILS) EASTERLY OVER THE ENTIRE AREA

EOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

NATIONAL OCEAN SURV
HYDROGRAPHIC SURVEY INFC

SURVEY NUMBER	SURVEY DATE	SURVEY SCALE
H-4974	1929	1:20,000
H-4985	1929	1:20,000
H-4986	1929	1:10,000
		1:20,000
H-4987	1929	1:40,000
H-4988	1929	1:40,000
H-4990	1929	1:40,000
H-4993	1929	1:40,000
		1:120,000
H-5094	1930	1:10,000
H-5095	1930	1:10,000
H-5096	1930	1:10,000
H-5097	1930	1:5,000
		1:10,000
H-5098	1930-31	1:10,000
H-5162	1931	1:10,000
H-5163	1931	1:10,000
H-5164	1931	1:10,000
H-5169	1931-32	1:40,000



LEGEND

LOS ANGELES
OMAHA
GALVESTON
Durango
Grand Coulee
Sun Valley

Double or Multiple

Landplane airport
Landing area
Seaplane airport
Orchard
Woods-brushwood

ROADS
Primary, all-weather, hard surface
Secondary, all-weather, hard surface
Light-duty, all-weather, hard or improved surface
Fair or dry weather, unimproved surface
Trail
Interchange
Route markers: Interstate, U.S., State
Mine
Power line
Landmark: School, Church, Other
Spot elevation in feet
Marsh or swamp
Approximate shoreline
Sounding datum line

uncovers

5 0
5 0 5
5 0

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50
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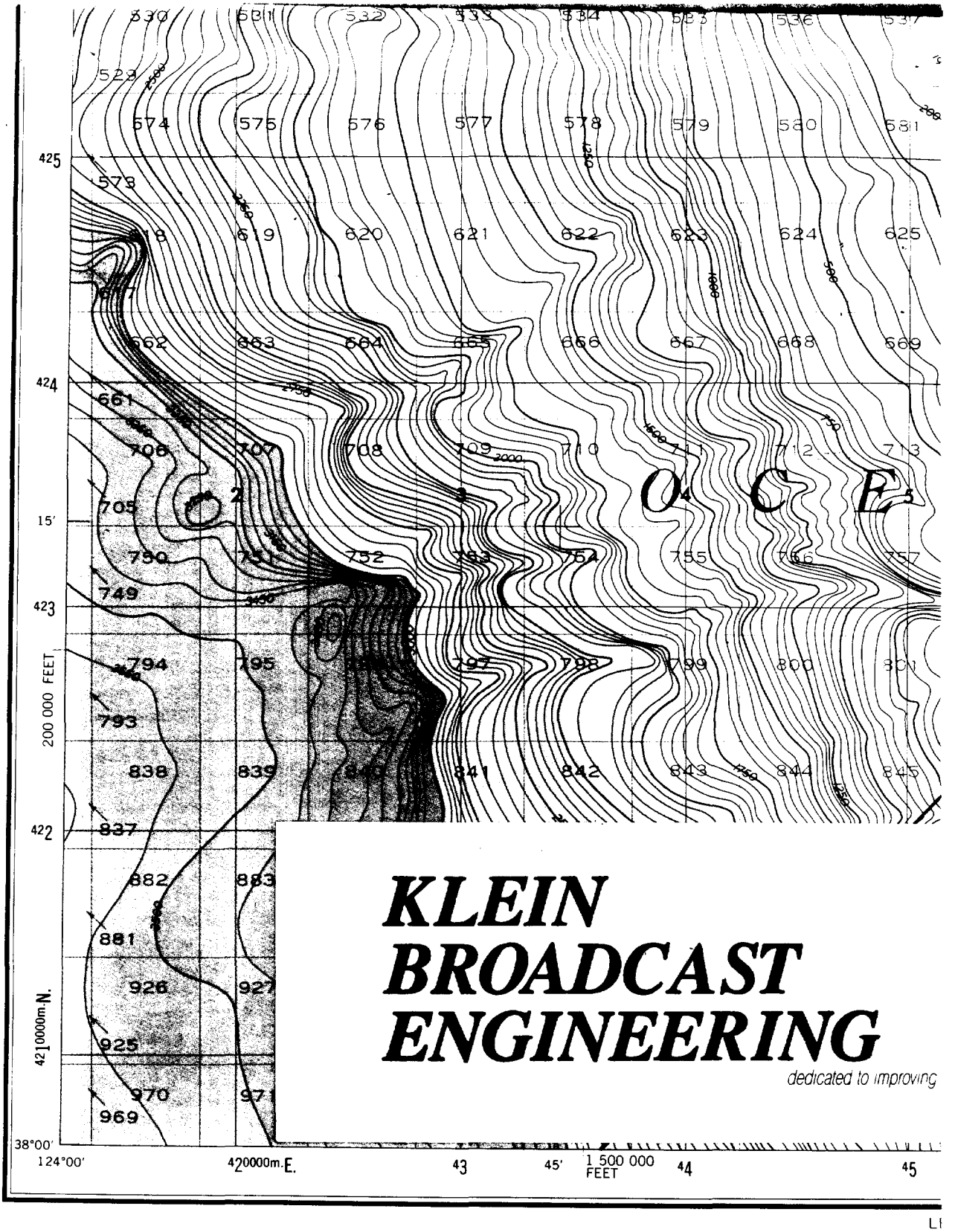

PRODUCED BY THE U. S. GEOLOGICAL SURVEY AND THE NATIONAL OCEAN SURVEY

Base map prepared by Defense Mapping Agency from 1:24,000, 1:25,000, and 1:50,000-scale maps dated 1942-1955. Field checked 1958. Revised by the U. S. Geological Survey 1970.

Bathymetry compiled by the National Ocean Survey from tide-coordinated hydrographic surveys. Bathymetric survey data comply with International Hydrographic Organization (IHO) Special Publication 44 accuracy standards and/or standards used at the date of the survey. This information is not intended for navigational purposes

Mean lower low water (dotted) line and mean high water (solid) line compiled by NOS from tide-coordinated aerial photographs

Offshore protraction survey data, shown in red, compiled by the Bureau of Land Management. Heavy lines indicate limits of BLM Outer Continental Shelf Official Protraction Diagrams dated November 2, 1976. The protractions on this map are not for Federal leasing purposes; for such purposes, refer to the OCS Official Protraction Diagrams available from the Bureau of Land Management

Transverse Mercator Projection. 10,000-meter Universal Transverse Mer-

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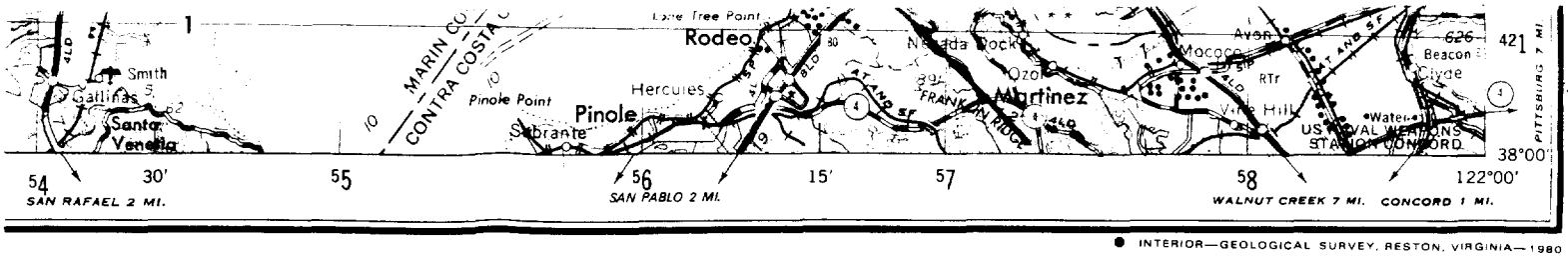
25,000 to 100,000 — GALVESTON
5,000 to 25,000 — Durang
1,000 to 5,000 — Grand Coul
Less than 1,000 — Sun Vall

RAILROADS
Normal gauge — Single track, Double or Multiple
Narrow gauge

BOUNDARIES
International
State
County
Park or reservation

Landplane airpor
Landing area
Seaplane airport
Orchard
Woods-brushwoo



● INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1980

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SURVEY INFORMATION

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1:20,000	.02-.17
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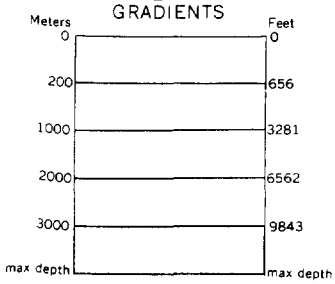
1:10,000	.02-.14
1:10,000	.02-.14
1:5,000	.02-.12
1:10,000	
1:10,000	.02-.10
1:10,000	.01-.14
1:10,000	.01-.12
1:10,000	.03-.10
1:40,000	.07-.55
1:40,000	.07-.55
1:10,000	.01-.10
1:10,000	.01-.07
1:10,000	.01-.07
1:10,000	.01-.24
1:20,000	.03-.20
1:10,000	.01-.10
1:10,000	.01-.10
1:10,000	.01-.10
1:10,000	.01-.10
1:160,000	.55-5.5
1:160,000	.55-11.2
1:200,000	3.0-5.0
at 100 meter contour)	

NATIONAL OCEAN SURVEY

DEPTH GRADIENTS



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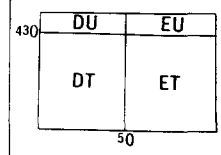

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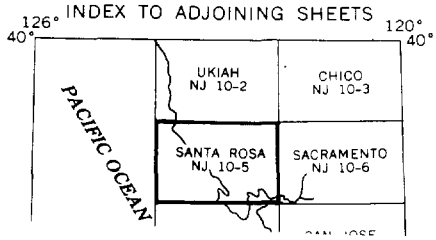
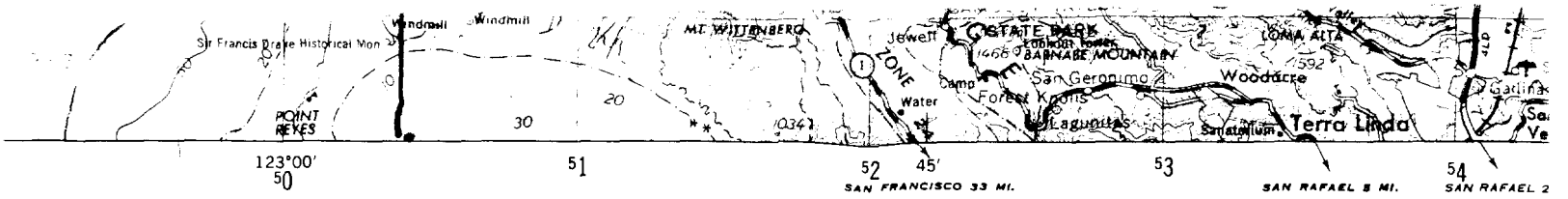
INDEX TO ADJOINING SHEETS





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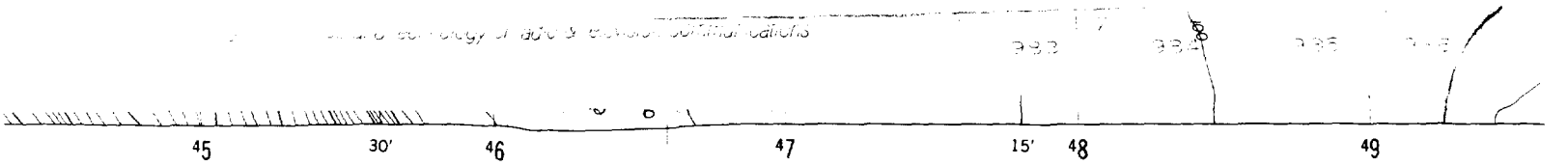
H-5171	1931-32	1:40,000
H-7867	1950	1:10,000
H-7897	1951	1:10,000
H-7898	1951	1:10,000
H-7899	1951	1:10,000
H-7900	1951	1:20,000
H-8353	1957	1:10,000
H-8354	1957	1:10,000
H-8355	1957	1:10,000
H-8356	1957	1:10,000
H-8566	1960-62	1:160,000
H-8567	1960	1:160,000
G-1-70*	1970	1:200,000

*(Generally seaward at 100 meter conto

NATIONAL



LEGEND

ROADS
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Secondary, all-weather, hard surface
Light-duty, all-weather, hard or improved surface
Fair or dry weather, unimproved surface
Trail
Interchange
Route markers: Interstate, U.S., State 95 29 193

OS ANGELES
OMAHA
GALVESTON
Durango
Grand Coulee
Sun Valley

Landplane airport
Landing area
Seaplane airport
Orchard
Woods-brushwood

Mine
Power line
Landmark: School; Church; Other
Spot elevation in feet 221
Marsh or swamp
Approximate shoreline
Sounding datum line
uncovers

5 0 5
5 0 5
5 0

CON
WITH SUPPLEMENTA
NATIONAL GE
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50 ME
DATUM
THE RELATIONSHIP

MAGNETIC VARIATION FOR 19

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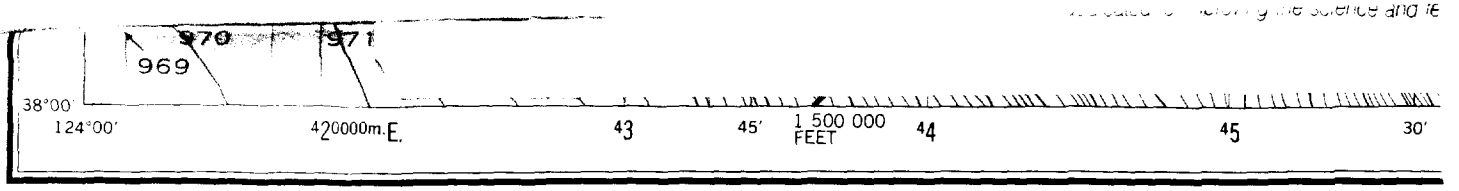
AND BY NATIONAL OC



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Transverse Mercator Projection. 10,000-meter Universal Transverse Mercator grid, zone 10. 100,000-foot grid ticks based on California coordinate system, zone 2. 1927 North American Datum. To place on the predicted North American Datum 1983 move the projection lines 17 meters north and 96 meters east

Location of geodetic control established by government agencies is shown on corresponding 1:250,000-scale Geodetic Control Diagram

There may be private inholdings within the boundaries of the National or State reservations shown on this map

LEGEND

Figures in red denote approximate elevations in m

POPULATED PLACES
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- Secondary, all-we
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- Fair or dry weathe
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- Route markers: In

- Mine
- Power lir
- Landmar
- Spot ele
- Marsh or
- Approxin
- Soundin