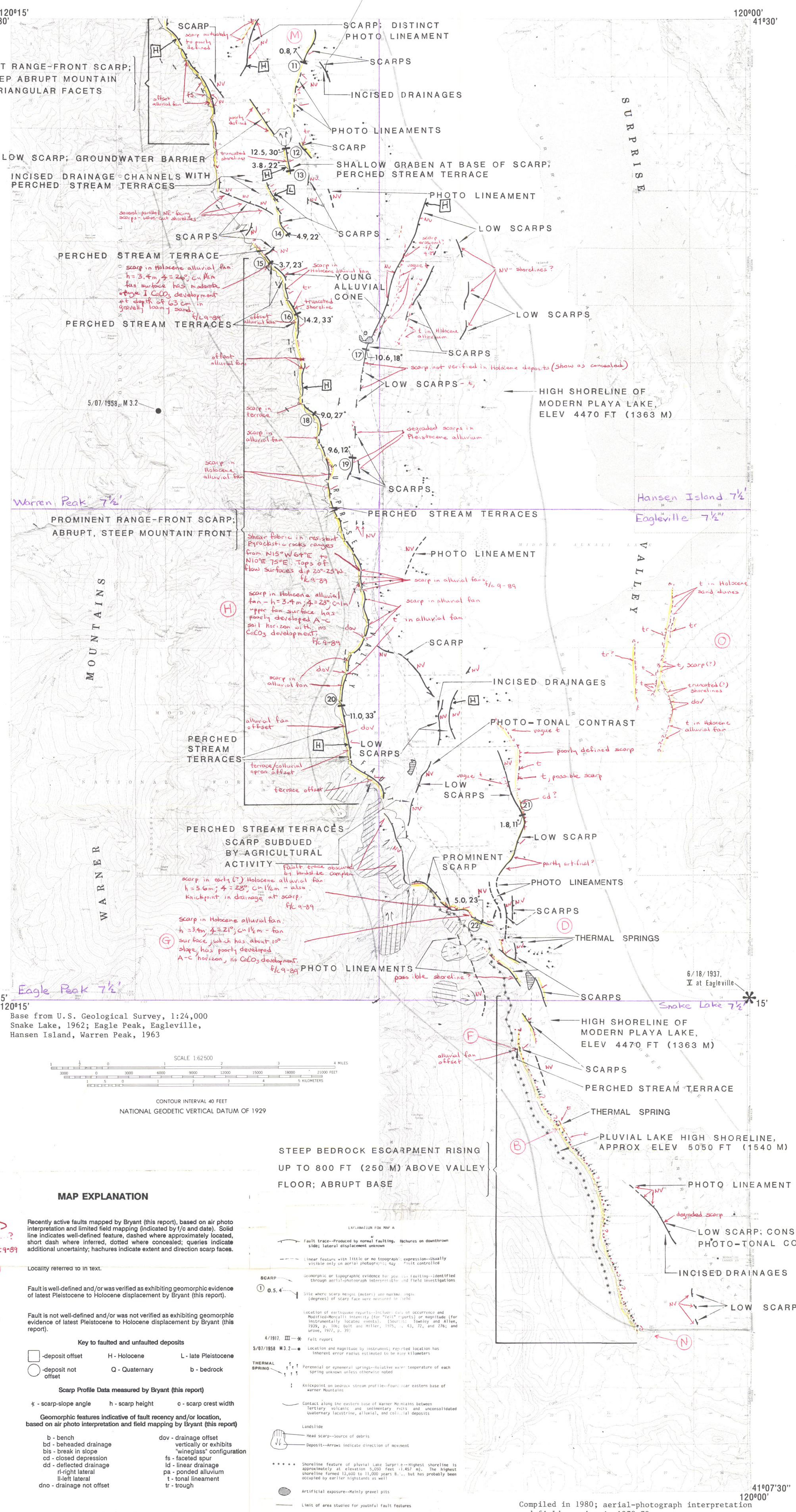

Base from U.S. Geological Survey, 1:24,000
Snake Lake, 1962; Eagle Peak, Eagleville,
Hansen Island, Warren Peak, 1963

SCALE 1:62500

CONTOUR INTERVAL 40 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Compiled in 1980; aerial-photograph interpretation and field mapping in 1978-79.

MAP EXPLANATION

Recently active faults mapped by Bryant (this report), based on air photo interpretation and limited field mapping (indicated by f/c and date). Solid line indicates well-defined feature, dashed where approximately located, short dash where inferred, dotted where concealed; queries indicate additional uncertainty; hachures indicate extent and direction scarp faces.

Locality referred to in text.

Fault is well-defined and/or was verified as exhibiting geomorphic evidence of latest Pleistocene to Holocene displacement by Bryant (this report).

Fault is not well-defined and/or was not verified as exhibiting geomorphic evidence of latest Pleistocene to Holocene displacement by Bryant (this report).

Key to faulted and unfaulted deposits

-deposit offset — H - Holocene — L - late Pleistocene

-deposit not offset — Q - Quaternary — b - bedrock

Scarp Profile Data measured by Bryant (this report)

- scarp-slope angle — h - scarp height — c - scarp crest width

Geomorphic features indicative of fault recency and/or location, based on air photo interpretation and field mapping by Bryant (this report)

b - bench
bd - beheaded drainage
bis - break in slope
cd - closed depression
dd - deflected drainage
rl-right lateral
ll-left lateral
dno - drainage not offset
dov - drainage offset vertically or exhibits "wineglass" configuration
fs - faceted spur
ld - linear drainage
pa - ponded alluvium
t - tonal lineament
tr - trough

EXPLANATION FOR MAP A

Fault trace--Produced by normal faulting. Hachures on downthrown side; lateral displacement unknown

Linear feature with little or no topographic expression--Usually visible only on aerial photographs; may be fault controlled

SCARP — Geomorphic or topographic evidence for youthful faulting--Identified through aerial-photograph interpretation and field investigations

0.5, 4° — Site where scarp height (meters) and maximum angle (degrees) of scarp face were measured in field

Location of earthquake reports--Includes date of occurrence and Modified-Mercalli intensity (for "felt" reports) or magnitude (for instrumentally located events). (Sources: Townley and Allen, 1939, p. 106; Bolt and Miller, 1975, p. 43, 72, and 276; and Grove, 1977, p. 39)

4/1917, III — Felt report

5/07/1958 M3.2 — Location and magnitude by instrument; reported location has inherent error radius estimated to be many kilometers

THERMAL SPRING — Perennial or ephemeral springs--Relative water temperature of each spring unknown unless otherwise noted

Knickpoint on bedrock stream profile--Found near eastern base of Warner Mountains

Contact along the eastern base of Warner Mountains between Tertiary volcanic and sedimentary rocks and unconsolidated Quaternary lacustrine, alluvial, and colluvial deposits

Landslide
Head scarp--Source of debris
Deposit--Arrows indicate direction of movement

Shoreline feature of pluvial Lake Surprise--Highest shoreline is approximately at elevation 5,050 feet (1,457 m). The highest shoreline formed 13,600 to 11,000 years B.P., but has probably been occupied by earlier highstands as well

Artificial exposure--Mainly gravel pits

Limit of area studied for youthful fault features

Figure 2b (to FER-217). Recently active faults in the Surprise Valley study area, based on mapping by Hedel (1984) and air photo interpretation and limited field mapping by Bryant (this report). Faults highlighted in yellow are recommended for zoning for special studies.