

Quaternary Fault and Fold Database of the United States

As of January 12, 2017, the USGS maintains a limited number of metadata fields that characterize the Quaternary faults and folds of the United States. For the most up-to-date information, please refer to the [interactive fault map](#).

Peace Camp faults (Class A) No. 1072

Last Review Date: 1998-04-17

citation for this record: Anderson, R.E., compiler, 1998, Fault number 1072, Peace Camp faults, in Quaternary fault and fold database of the United States: U.S. Geological Survey website, <https://earthquakes.usgs.gov/hazards/qfaults>, accessed 12/14/2020 02:18 PM.

Synopsis	The Peace Camp faults are apparently normal faults at the southern margin of a large area of northeast-striking faults, many of which show evidence of sinistral Quaternary displacement. The Peace Camp faults are located along the westerly projection of the dextral-slip Las Vegas shear zone (Reheis, 1992 #1604). The eastern traces (about 4.5 km long) are on Quaternary deposits and the western traces (about 6 km long) on bedrock. The most recent displacement event is poorly constrained, but is most likely late to middle Quaternary (<750 ka).
Name comments	Name given here to a primary northeast-striking fault (and minor subparallel fault) at the northwestern end of the Spring Mountains, directly south of the turnoff to Mercury, Nev., from Highway 95. The term Peace Camp is derived from a time when protesters set up camp on the margin of the Nevada Test Site, near Mercury, to demonstrate against weapons testing. These faults

	could have been included with the South Ridge faults of Piety (1995 #915) because they are roughly coextensive, but the South Ridge faults are no longer considered Quaternary structures on the basis of recent unpublished mapping of the 1:100,000-scale Indian Springs quadrangle by P.L. Guth and J.C. Yount.
County(s) and State(s)	NYE COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. <i>Comments:</i> Mapped at 1:100,000 scale from aerial photographs at 1:60,000 and 1:80,000 scales (Reheis and Noller, 1991 #1195; Reheis, 1992 #1604).
Geologic setting	The Peace Camp faults are at the southern boundary of a broad area of northeast-striking faults, the northern members of which (the Rock Valley [1065], Cane Spring [1067], Wahmonie [1068], and Mine Mountain [1066] faults) form the Spotted Range-Mine Mountain structural zone of Carr (1984 #1472). Other northeast-striking faults in this broad area include the Cactus Spring fault [1071], South Ridge fault (not considered a Quaternary structure), Crossgrain Valley faults [1069], Mercury Ridge faults [1070], and Checkpoint Pass and Ranger Mountains faults (both not considered Quaternary structures). Together, the two groups of faults comprise a broad structural zone of northeast-striking faults that intersects and extends into the Las Vegas Valley shear zone and is as much as 50 km wide across its northeast end. It is uncertain whether these faults are conjugate to the Las Vegas shear zone (Carr, 1984 #1472) or are early normal faults that were bent clockwise and reactivated in sinistral shear as a result of drag associated with dextral displacement on the Las Vegas shear zone (Ekren and others, 1968 #1508).
Length (km)	14 km.
Average strike	N50°E
Sense of movement	Normal <i>Comments:</i> Although the Peace Camp faults appear to be part of a broad zone of northeast-striking faults with sinistral slip, only dip

	slip has been reported (Reheis, 1992 #1604).
Dip Direction	Unknown <i>Comments:</i> Not reported. In the Las Vegas 1? x 2? sheet dip is probably northwest on the northwest (minor) fault and southeast on the southeast (primary) fault based on the normal displacement indicated by Reheis (1992 #1604).
Paleoseismology studies	
Geomorphic expression	The eastern traces of the Peace Camp faults (in the Las Vegas 1? x 2? sheet) are on Quaternary deposits (Reheis, 1992 #1604) and the western traces (in the Death Valley 1? x 2? sheet) are on bedrock (Reheis and Noller, 1991 #1195). The eastern traces are characterized by well-defined lineaments or scarps (Reheis, 1992 #1604) and the western traces as moderately to well-defined lineaments or scarps (Reheis and Noller, 1991 #1195).
Age of faulted surficial deposits	Stratigraphic subdivisions of Quaternary deposits are only available in the unpublished mapping of the 1:100,000-scale Indian Springs quadrangle by P.L. Guth and J.C. Yount. According to that mapping, parts of the eastern part of the Peace Camp faults are in a mixed-age stratigraphic unit of late and middle Pleistocene (their intermediate-age alluvium) and Holocene and late Pleistocene (their young alluvium). The western part of the Peace Camp cuts bedrock.
Historic earthquake	
Most recent prehistoric deformation	middle and late Quaternary (<750 ka) <i>Comments:</i> Although the unpublished mapping noted above shows that parts of the fault in the mixed stratigraphic unit that can include some Holocene alluvium, nearby parts are buried by cross-fault bands of late and middle Pleistocene alluvium (their intermediate-age alluvium), creating some ambiguity as to whether the last displacement event is late Pleistocene or middle Pleistocene or older.
Recurrence interval	

Slip-rate category	<p>Less than 0.2 mm/yr</p> <p><i>Comments:</i> No geomorphic data other than the characterization of lineaments or scarps in Quaternary alluvium as well-defined (Reheis, 1992 #1604) are available to constrain the slip rate. Low slip-rate category is assigned on the basis of poor geomorphic preservation and relative inactivity of similar distributed faults in the Basin and Range province.</p>
Date and Compiler(s)	<p>1998</p> <p>R. Ernest Anderson, U.S. Geological Survey, Emeritus</p>
References	<p>#1472 Carr, W.J., 1984, Regional structural setting of Yucca Mountain, southwestern Nevada, and late Cenozoic rates of tectonic activity in parts of the southwestern Great Basin, Nevada and California: U.S. Geological Survey Open-File Report 84-854, 114 p.</p> <p>#1508 Ekren, E.B., Rogers, C.L., Anderson, R.E., and Orkild, P.P., 1968, Age of Basin and Range normal faults in Nevada Test Site and Nellis Air Force Range, Nevada, <i>in</i> Eckel, E.B., ed., Nevada Test Site: Geological Society of America Memoir 110, p. 247-250.</p> <p>#915 Piety, L.A., 1995, Compilation of known and suspected Quaternary faults within 100 km of Yucca Mountain, Nevada and California: U.S. Geological Survey Open-File Report 94-112, 404 p., 2 pls., scale 1:250,000.</p> <p>#1604 Reheis, M.C., 1992, Aerial photographic interpretation of lineaments and faults in late Cenozoic deposits in the Cactus Flat and Pahute Mesa 1:100,000 quadrangles and the western parts of the Timpahute Range, Pahrangat Range, Indian Springs, and Las Vegas 1:100,000 quadrangles, Nevada: U.S. Geological Survey Open-File Report 92-193, 14 p., 3 pls., scale 1:100,000.</p> <p>#1195 Reheis, M.C., and Noller, J.S., 1991, Aerial photographic interpretation of lineaments and faults in late Cenozoic deposits in the eastern part of the Benton Range 1:100,000 quadrangle and the Goldfield, Last Chance Range, Beatty, and Death Valley Junction 1:100,000 quadrangles, Nevada and California: U.S. Geological Survey Open-File Report 90-41, 9 p., 4 sheets, scale 1:100,000.</p>

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