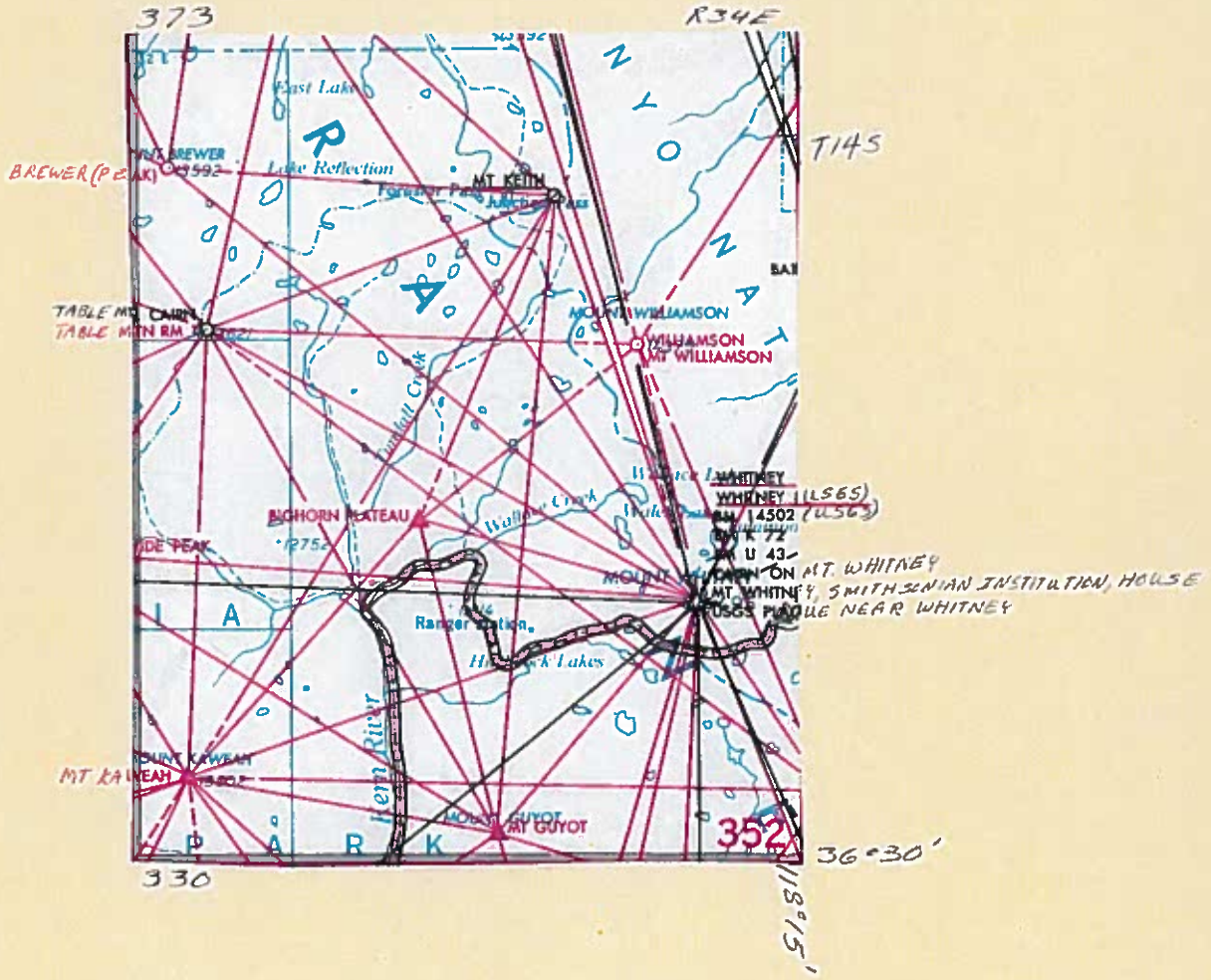
36°30'
118 15



36°30'
118°15'

CALIFORNIA 352

Index

Station	Project
Bighorn Plateau	Kern-Whitney
S Brewer ✓	High Sierra Revision
S Kaweah Mtn.	High Sierra Revision
Mt. Guyot	Kern-Whitney
Mt. Kaweah	Kern-Whitney
Mt. Keith	Kern-Whitney
S Mt. Williamson	Kern-Whitney
Table Mtn. Rm 1 1956 ✓	Kern-Whitney
Whitney	Kern-Whitney & High Sierra Rev.

Kern-Whitney Project Master in CALIFORNIA 283 - Book: PH 482
High Sierra Revision Project Master in CALIFORNIA 211 - Book: A 218-34
2785, 88-91

California (352) Tulare County BIGHORN PLATEAU

1927 N.A.D. (Adj., 1960) E. J. Kurowski, 1956

Book: PH 482

Located about 19.0 mi. SW. of Independence, 18.0 mi. W. of Lone Pine; 6 mi. WNW. of Mt. Whitney; on a low bald rocky top.

Station reached by helicopter. Can be reached by horses from the John Muir Trail.

Station mark: Standard tablet stamped "BIGHORN PLATEAU 1956" cemented in bedrock.

Reference mark No. 1: Standard reference mark tablet stamped "NO 1 1956" cemented in boulder, 6.6 ft. from station mark in azimuth 237°51'.

Reference mark No. 2: Standard reference mark tablet stamped "NO 2 1956" cemented in boulder, 15.95 ft. from station mark in azimuth 340°39'.

CALIFORNIA ZONE 4 V.A. Elevation: 11,407 ft.
X=2,178,850.1
Y= 463,719.6

Latitude: 36°36'20.168" Longitude: 118°23'26.429"

To Station	Azimuth	Back Azimuth	Feet
Mt. Kaweah	41°28'24.64"	221°25'18.27"	38,554.69
Whitney (C&GS)	288 31 15.50	108 34 49.29	30,850.68
Mt. Guyot	246 27 11.61	166 28 13.40	36,157.58

FILE COPY

10/5/60 ds

Station: BREWER County: Tulare State: Calif.(352)

Observer: C.F. Urquhart Year: 1904 Datum: 1927 N.A. (Revised 1954)

Description:

FILE COPY

Books: A-218-34

Described in Bulletin 310, page 170 as follows:

Highest point of Mount Brewer, a prominent mountain at source of Brewer Creek; rather difficult to climb. Sharp peak at summit is used for signal.

Station mark: A cairn.

CALIF. ZONE 4
X=2,151,161.1
Y= 501,026.7

[Latitude 36 42 30.688 Longitude 118 29 03.567]

To Station—	Azimuth ° ′ ″	Back Azimuth ° ′ ″	Distance Feet Log. Meters	Feet
Goddard (USGS) (CGS)	154 32 53.35	334 24 26.25	4.6860302	159226.14
Split Mtn (USGS) (CGS)	189 09 36.29	09 11 52.00	4.5455987	115234.59
Whitney	309 45 39.71	129 52 35.03	4.3522881	73836.70
Kaweah Mtn.	358 16 32.07	178 16 46.68	4.3062774	66414.30

5-20-54 am

Form 9-107a

U. S. GOVERNMENT PRINTING OFFICE 16—55572-1

Station: KAWEAH MTN. County: Tulare State: Calif.(352)

Observer: C.F. Urquhart Year: 1904 Datum: 1927 N.A. (Revised 1954)

Description:

2

Book: A218-34

FILE COPY

Description in Bulletin 310, page 171 as follows:

On easternmost and only flat-topped mountain of the Kaweah group. At the source of Chagoopa Creek, a tributary of Kern River. Best reached by Chagoopa Creek.

Station mark: A small cairn, on highest point of mountain.

CALIF. ZONE 4
X=2,153,515.9
Y= 434,658.1

CARDED

See 1956 station "MT KAWEAH (PAH82)
near this - no mention of old station.

[Latitude 36 31 34.261 Longitude 118 28 39.082]

To Station—	Azimuth	Back Azimuth	Distance Feet	
	° ′ ″	° ′ ″	Log. Meters	
Florence	25 59 37.87	205 57 02.97	4.1707804	48614.36
Brewer	178 16 46.68	358 16 32.07	4.3062774	66414.30
Whitney	250 43 14.93	70 49 54.77	4.2475627	58015.88
Olancha	311 44 58.81	131 57 48.50	4.6374994	142391.34
Kern	324 39 00.15	144 45 47.49	4.4710961	97068.92

5-20-54 am

Form 9-107a

U. S. GOVERNMENT PRINTING OFFICE 16—55573-1

(1)

California (352) Tulare County MT. GUYOT

1927 N.A.D. (Adj., 1960) R. H. Stewart, 1956

Book: PH 482

Located about 17.0 mi. WSW. of Lone Pine and 6.0 mi. SW. of Mt. Whitney and 500 ft. SW. along the main ridge from the highest point on Mt. Guyot.

Station reached by helicopter.

Station mark: Standard tablet stamped "MT GUYOT 1956" cemented in a large flat rock.

Reference mark No. 1: Standard reference mark tablet stamped "NO 1 1956" cemented in large rock, 10.37 ft. from station mark in azimuth 88°44'.

Reference mark No. 2: Standard reference mark tablet stamped "NO 2 1956" cemented in rock, 8.49 ft. from station mark in azimuth 177°52'.

CALIFORNIA ZONE 4 V.A. Elevation: 12,300 ft.
X=2,187,542.0
Y= 428,624.6

Latitude: 36°30'32.563" Longitude: 118°21'42.687"

To Station	Azimuth	Back Azimuth	Feet
Florence	55°57'06.26"	235°50'23.92"	66,801.82
Mt. Kaweah	100 27 17.48	280 23 09.58	34,575.32
Triple Divide Peak	121 48 14.02	301 42 13.76	58,049.31
Table Mtn. RM 1	149 26 44.91	329 22 46.67	64,071.25
Bighorn Plateau	166 28 13.40	246 27 11.61	36,157.58
Mt. Keith	184 37 35.93	4 38 17.16	69,805.08
Whitney (C&GS)	219 21 42.88	39 24 14.65	32,781.85
Cirque Peak	287 27 16.43	107 31 46.31	38,851.47

FILE COPY

11/25/60 ds

California (352) Tulare County MT. KAWEAH

1927 N.A.D. (Adj., 1960) A. E. Letey, 1956

Book: PH 482

Located about 9.0 mi. NE. of Min King, on the highest part of Mt. Kaweah.

Station reached by helicopter.

Station mark: Standard tablet stamped "MT KAWEAH 1956" cemented in the top of boulder.

Reference mark No.1: Standard reference mark tablet stamped "NO 1 1956" cemented in top of boulder, 8.92 ft. from station mark in azimuth 5°19'.

Reference mark No. 2: Standard reference mark tablet stamped "NO 2 1956" cemented in top of boulder, 9.32 ft. from station mark in azimuth 100°09'.

CALIFORNIA ZONE 4 V.A. Elevation: 13,802 ft.
X=2,153,501.8
Y= 434,672.3

Latitude: 36°31'34.402" Longitude: 118°28'39.254"

To Station	Azimuth	Back Azimuth	Feet
Florence	25°58'49.54"	205°56'14.71"	48,614.03
Mt. Eisen	69 05 21.58	249 02 08.81	28,319.63
Alta (C&GS)	113 24 45.25	293 18 08.85	59,143.67
Triple Divide Peak	147 42 02.58	327 40 10.38	28,748.60
Table Mtn. RM 1	181 36 23.91	01 36 33.95	48,921.70
Bighorn Plateau	221 25 18.27	41 28 24.64	38,554.69
Whitney (C&GS)	250 44 22.89	70 51 02.78	58,016.31
Mt. Guyot	280 23 09.58	100 27 17.84	34,575.32
Boreal	312 07 07.82	132 12 18.60	57,608.90
Kern	324 38 44.21	144 45 31.62	97,076.12

FILE COPY

11/18/60 ds

VJZ 4-52

California (352) Inyo-Tulare Counties MT. KEITH

1927 N.A.D. (Adj., 1960) R. H. Stewart, 1956

Book: PH 482

Located about 17.0 mi. NW. of Lone Pine and 9.0 mi. N. of Mt. Whitney, on top of Mt. Keith.

Station reached by helicopter.

Station mark: Standard tablet stamped "MT KEITH 1956" cemented in bedrock.

Reference mark No. 1: Standard reference mark tablet stamped "NO 1 1956" cemented in large boulder, 9.83 ft. from station mark and 2 ft. lower in azimuth 163°28'.

Reference mark No. 2: Standard reference mark tablet stamped "NO 2 1956" cemented in bedrock, 26.14 ft. from station mark and 7 ft. lower in azimuth 243°15'.

CALIFORNIA ZONE 4 V.A. Elevation: 13,977 ft.
X=2,192,709.9
Y= 498,234.0

Latitude: 36°42'00.563" Longitude: 118°20'33.548"

To Station	Azimuth	Back Azimuth	Feet
Mt. Guyot	04°38'17.16"	184°37'35.93"	69,805.08
Table Mtn. RM 1	69 21 14.60	249 16 34.52	40,826.28
Mt. Bago	132 40 26.05	312 37 02.52	37,658.05
Whitney (C&GS)	341 05 33.91	161 07 24.76	46,757.99

FILE COPY

11/18/60 ds

California (352) Inyo County MT. WILLIAMSON

1927 N.A.D. (Sec.) A. E. Letey, 1956 (n)

Book: PH 482

This is an intersected station.

Located about 5.5 mi. NNW. of Mt. Whitney.

Station mark and signal: The largest and southern-most of two cairns on top of Mt. Williamson. (This largest cairn is believed to be at the highest point of the top.)

CALIFORNIA ZONE 4
X=2,202,319.
Y= 482,224.

V.A. Elevation: 14,375 ft.

Latitude: 36°39'21.58" Longitude: 118°18'36.97"

FILE COPY

(n) = Not occupied.

11/16/60 ds

California (352) Tulare County TABLE MTN. RM 1 1956

1927 N.A.D. (Adj., 1960) A. E. Letey, 1956

Book: PH 482

Located 11.5 mi. NW. of Mt. Whitney along the Kings-Kern Divide, on the northern end and highest point of a flat, mountain top callled Table Mountain.

Station reached by helicopter.

Note: When this station was visited, the intersected USC&GS station TABLE MTN. was found to be poorly located for obtaining the desired lines of sight, and the cairn was so large and well constructed that is was decided to use the newly established reference mark No. 1 as station mark.

Station mark: Standard reference mark tablet stamped "NO 1 1956" cemented in huge rock slab.

Reference mark No. 1: The center of a large cairn over USC&GS station mark "TABLE MTN 1950", 24.6 ft. from station mark and 5 ft. lower in azimuth 317°43'.

Reference mark No. 2: Standard reference mark tablet stamped "NO 2 1956" cemented in rock, 32.05 ft. from station mark in azimuth 288°25'.

CALIFORNIA ZONE 4 V.A. Elevation: 13,630 ft. 4471.775

X=2,154,607.3

Y= 483,578.6

FILE COPY

Latitude: 36°39'37.965" Longitude: 118°28'22.420"

To Station	Azimuth	Back Azimuth	Feet
Mt. Kaweah	1°36'33.95"	181°36'23.91"	48,921.70
Triple Divide Peak	34 13 27.87	214 11 25.45	29,753.44
Alta (C&GS)	65 27 59.80	245 21 12.74	61,169.49
Silliman	84 41 46.03	264 33 46.26	65,781.81
Mitchell Pk. (C&GS)	110 19 14.15	290 10 34.81	75,443.62
Sphinx Crest	142 34 48.98	322 32 26.40	31,967.14
Mt. Bago	194 40 53.59	14 42 10.47	41,282.75
Mt. Keith	249 16 34.52	69 21 14.60	40,826.28
Whitney (C&GS)	299 08 21.08	119 14 51.56	61,133.10
Mt. Guyot	329 22 46.67	149 26 44.91	64,071.25

11/17/60 ds

Station: WHITNEY USGS County: Inyo & Tulare State: Calif.(352)

Observer: E. T. Perkins Year: 1901 Datum: 1927 N.A.(Revised 1954)

Description C. F. Urquhart 1904

3

FILE COPY

Books: 2785,2788-91; A218-34

Described in Bulletin 201, page 150 as follows:

"The highest peak in the United States proper, at head of Kern River, about 20.0 mi. SW of Independence.

"Station mark: A cairn, probably erected by the Wheeler Survey."

Described in Bulletin 310, page 165 as follows:

"Station is on the highest point of Mount Whitney. Peak is at source of Crabtree Creek as given by old Sierra Club map (but Whitney Creek on most recent edition)and Lone Pine Creek. Whitney Creek flows into Kern River. There is a good trail from Lone Pine P.O. to summit of peak and another trail from Kern River up old Whitney or Volcano Creek to its source, thence over ridge to Rock Creek thence over ridge to Whitney Creek, thence up creek to foot of mountain. Elevation 14,499 ft. above mean sea level.

"Station mark: A triangulation tablet cemented in rock under center of a cairn 8 ft. high".

Note: See C&GS station "WHITNEY" 1950. they refer to a U.S.G.S. plague in azimuth & distance. (Desc. Bk 1054 page 1)
Lat: 36°34'43.211 Long: 118°17'27.801" (C&GS values)
In 1950 C&GS also recovered "Cairn on Mt. Whitney" this may be E.T. Perkins, 1901, station "Whitney". Lat: 36°34'43.288" long: 118°17'27.732"

[Latitude 36 34 43.150 Longitude 118 17 27.706]

To Station—	Azimuth ° ′ ″	Back Azimuth ° ′ ″	Distance Log. Meters	Distance FT. XXXX Miles
Big Meadows	02 55 34.94	182 54 07.41	4.8615068	238501.43
Sunday	16 41 28.45	196 31 05.99	4.9647551	302509.70
Florence	50 32 45.01	230 23 30.74	4.4782242	98675.29
Kaweah Mtn.	70 49 54.77	250 43 14.93	4.2475627	58015.88
Brewer	129 52 35.03	309 45 39.71	4.3522881	73836.70
Split Mountain	166 41 41.31	346 36 59.97	4.7028393	165509.73
Olanacha	335 48 22.66	155 54 34.22	4.5811118	125053.55
Kern	359 17 45.25	179 17 54.03	4.4767359	98337.70

5/19/54 mk ✓

Recovered Kern-Whitney
Book Nos. PH482 Year 1956
As C&GS "WHITNEY #3"

Form 9-107a

U. S. GOVERNMENT PRINTING OFFICE 16—55573-1

California (352) Tulare-Inyo Counties WHITNEY

1927 N.A.D. USC&GS, 1950
A. E. Letey, 1956

Book: PH 482

Described by USC&GS in Description List 1056, p. 1.

Located about 16 1/2 mi. SSW. of Independence and 13.0 mi. W. of Lone Pine, on the highest point of Mount Whitney.

To reach the station from the Lone Pine P.O., go S. on U. S. Highway 395 and 6 for 1 1/2 blocks to a X-street and a sign "Whitney Portal 13", turn right and go 0.45 mi. to a X-rd. and a sign "Whitney Portal 13", continue straight ahead and follow the paved rd. for 2.3 mi. to a fork, take the left fork and follow the paved rd. for 10.7 mi. to the end of truck travel at the store and corral at Whitney Portal, follow the Mount Whitney Trail to the top of Mount Whitney and the station as described, a 1 day horse pack.

Note by AEL, 1956: All marks in good condition.

Note: WHITNEY (USGS 1901) described in Bul. 310, p. 165-166 and called "CAIRN" on Mt. Whitney by USC&GS, 1950 is 18.4 ft. from station mark in azimuth 196°13' (G.P. by USC&GS)

Note: A USGS aluminum plaque is set flush with the highest point of a large boulder, it is 0.91 meters higher than the station mark. The mark has been obliterated so badly by visitors that the stamping could not be verified.

Station mark: A standard disk stamped "WHITNEY 1950 " 20 ft. W. of the E. edge of the bluff.

Reference mark No. 1: A standard BM disk stamped "U 43 1925" set in a drill hole in top of a large boulder.

Reference mark No. 2: A standard BM disk stamped "K 72 1928" set in a drill hole in top of a large boulder.

CALIFORNIA ZONE 4
*X=2,208,162.77
Y= 454,106.18

V.A. Elevation: 14,491 ft.
(Level shot from C&GS BM "U 43 1925")

SEE LATER VALUES

FILE COPY

*Latitude: 36°34'43.114" Longitude: 118°17'27.796"

To Station	Azimuth	Back Azimuth	Feet
Boreal	11°52'49.34"	191°51'20.92"	59,014.56
Mt. Guyot	39 24 14.65	219 21 42.88	32,781.85
Florence	50 33 01.35	230 23 47.09	98,664.07
Mt. Kaweah	70 51 02.78	250 44 22.89	58,016.31
*Alta (C&GS)	92 24 09.58	272 10 52.73	109,130.5
Triple Divide Peak	94 19 17.91	274 10 45.43	70,320.44
Bighorn Plateau	108 34 49.29	288 31 15.50	30,850.68
Table Mtn. RM 1	119 14 51.56	299 08 21.08	61,133.10
Mt. Keith	161 07 24.76	341 05 33.91	46,757.99
VABM 14042	322 24 24.06	142 26 16.75	25,319.12
Cirque Pk.	336 18 10.06	156 20 08.44	40,418.95

* = USC&GS Values

higher point 18.15 ft from sta. mk. (NNW) = 19 494.164

11/17/60 ds

FILE COPY

36 118 1 CALIF. 352
36°30'
118°15'

NAME	STATION
WHITNEY	1019
WHITNEY (USGS)	1019
BENCH MARK 14502(USGS)	1019
BENCH MARK K 72	1019
BENCH MARK U 43	1019
CAIRN ON MT WHITNEY	1019
USGS PLAQUE NEAR WHITNEY	1019
MT WHITNEY SMITHSONIAN INSTITUTE HOUSE	1019
MT KEITH	1024
TABLE MOUNTAIN CAIRN	1026

CALIF 352

JULY 1963
PUBLISHED AND PRINTED BY:
U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
WASHINGTON D.C.

WHITNEY (Continued)

HORIZONTAL CONTROL DATA SHEET 2 of 2

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

FILE COPY

QUAD 361181 STATION 1019
CALIF
LATITUDE 36°30' TO 37°00'
LONGITUDE 118°00' TO 118°30'
DIAGRAM NJ 11-10 FRESNO

36°30'
118° 15'

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: BENCH MARK 14502 (USGS) YEAR: 1950 1962

STATE: California LOCALITY: Visalia-Big Pine Area

Second -ORDER Traverse SOURCE: G-9098 FIELD SKETCH: Calif. 387, 484
(No check on this position) G-13129

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH (OR Δα) ANGLE	MARK
STATE: Calif. ZONE: 4 CODE: 0404	x 2,208,157.39 y 454,115.84	+ 0 25 23	
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION	SECONDS IN METERS	ELEVATION
	LATITUDE: 36° 34' 43".2098 NORTH LONGITUDE: 118 17 27.8610 WEST		METERS FEET
TO STATION		GEODETIC AZIMUTH (From south)	DISTANCE (Meters)

Computed from station WHITNEY

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
Form 535 b

DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: Bench Mark 14502 (USGS)

CHIEF OF PARTY: John C. Childs YEAR: 1962 STATE: California COUNTY: Tulare-Inyo

Description, including sketch of object: The station is on the highest part of Mount Whitney, 16-1/2 miles south-southwest of Independence and 13 miles west of Lone Pine.
The mark is a United States Geological Survey aluminum disk, stamped 14502, cemented in a drill hole in a 5 by 10 foot boulder projecting 3-1/2 feet.
A traverse connection was made to triangulation station WHITNEY 1950, the distance being 9.78 feet or 2.982 meters north of the station.

Described by E. B. Kelly

Comp-PC $1800

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: BENCH MARK K 72 YEAR: 1950 1962

STATE: California LOCALITY: Visalia-Big Pine Area

Second -ORDER Traverse SOURCE: G-9098 FIELD SKETCH: Calif. , 484
(No check on this position) G-13129

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH (OR Δα) ANGLE	MARK
STATE: Calif. ZONE: 4 CODE: 0404	x 2,208,165.23 y 454,116.11	+ 0 25 23	
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION	SECONDS IN METERS	ELEVATION
	LATITUDE: 36° 34' 43".2121 NORTH LONGITUDE: 118 17 27.7649 WEST		BENCH MARK METERS FEET
TO STATION		GEODETIC AZIMUTH (From south)	DISTANCE (Meters)

Level line 36 1181 First order 1940, 14493.013 ft

Computed from station WHITNEY

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: BENCH MARK U 43 YEAR: 1950 1962

STATE: California LOCALITY: Visalia-Big Pine Area

Second -ORDER Traverse SOURCE: G-9098 FIELD SKETCH: Calif. 387, 484
(No check on this position) G-13129

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH (OR Δα) ANGLE	MARK
STATE: Calif. ZONE: 4 CODE: 0404	x 2,208,151.73 y 454,113.81	+ 0 25 22	
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION	SECONDS IN METERS	ELEVATION
	LATITUDE: 36° 34' 43".1902 NORTH LONGITUDE: 118 17 27.9307 WEST		BENCH MARK METERS FEET
TO STATION		GEODETIC AZIMUTH (From south)	DISTANCE (Meters)

Computed from station WHITNEY

Level line 36 1181, First order, 1940, 14493.432

JAN 1964

352 Calif.

JULY 1963
PUBLISHED AND PRINTED BY:
U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
WASHINGTON D.C.

HORIZONTAL CONTROL DATA SHEET 2 of 2

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

QUAD 361181 STATION 1019
CALIF
LATITUDE 36°30' TO 37°00'
LONGITUDE 118°00' TO 118°30'
DIAGRAM NJ 11-10 FRESNO

FILE COPY

36° 30'
118° 15'

destroyed

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: CAIRN ON MT WHITNEY YEAR: 1950

STATE: California LOCALITY: Visalia-Big Pine Area

Third-ORDER Traverse SOURCE: G-9098 G-13129 FIELD SKETCH: Calif. 387
(No check on this position)

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH (IOR Δα) ANGLE	MARK
STATE: Calif. ZONE: 4 CODE: 0404	x 2,208,162.93 y 454,123.74	+ 0 25 23	
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION	SECONDS IN METERS	ELEVATION
	LATITUDE: 36° 34' 43".288 NORTH LONGITUDE: 118 17 27.792 WEST		METERS FEET
TO STATION		GEODETIC AZIMUTH (From south)	DISTANCE (Meters)

Computed from station WHITNEY

destroyed

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: USGS PLAQUE NEAR WHITNEY YEAR: 1950

STATE: California LOCALITY: Visalia-Big Pine Area

Second-ORDER Traverse SOURCE: G-9098 G-13129 FIELD SKETCH: Calif. 387
(No check on this position)

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH (IOR Δα) ANGLE	MARK
STATE: Calif. ZONE: 4 CODE: 0404	x 2,208,157.35 y 454,115.90	+ 0 25 23	
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION	SECONDS IN METERS	ELEVATION
	LATITUDE: 36° 34' 43".2105 NORTH LONGITUDE: 118 17 27.8616 WEST		METERS FEET
TO STATION		GEODETIC AZIMUTH (From south)	DISTANCE (Meters)

Computed from station WHITNEY

RECOVERY TRAVERSE

DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY Form 526 D

DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: USGS Aluminum Plaque 1950

Recovered By:
CHIEF OF PARTY: John C. Childs YEAR: 1962 STATE: California COUNTY: Tulare-Inyo

Description, including sketch of object: This mark has been destroyed. The station to which it was traversed to is WHITNEY 1950.

R

JAN 1964

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: MT WHITNEY SMITHSONIAN INSTITUTE HOUSE YEAR: 1950

STATE: California LOCALITY: Visalia-Big Pine Area

Third-ORDER Traverse SOURCE: G-9098 G-13129 FIELD SKETCH: Calif. 387
(No check on this position)

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH (IOR Δα) ANGLE	MARK
STATE: Calif. ZONE: 4 CODE: 0404	x 2,208,074.81 y 454,086.43	+ 0 25 22	
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION	SECONDS IN METERS	ELEVATION
	LATITUDE: 36° 34' 42".925 NORTH LONGITUDE: 118 17 28.876 WEST		METERS FEET
TO STATION		GEODETIC AZIMUTH (From south)	DISTANCE (Meters)

Computed from station WHITNEY

DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY Form 526 D

DESCRIPTION OF TRIANGULATION Traverse INTERSECTION STATION

NAME OF STATION: Mount Whitney, Smithsonian Institute, House YEAR: 1950 STATE: California COUNTY: Tulare

CHIEF OF PARTY: R.J.Sipe

Description, including sketch of object:

The station is located about 162 miles air line south southwest of Independence and 13 miles air line west of Lone Pine. It is on the summit of Mount Whitney. It is a stone house 30 feet long and 12 feet wide and it is about 10 feet high at the peak of the roof.

A traverse connection was made to the northeast corner of the house from the triangulation station WHITNEY. The northeast corner of the house is 26.0 meters west southwest of triangulation station WHITNEY. The northeast corner of the house can be used as a picture point.

Form 525b (11-8-35)

U.S. DEPARTMENT OF COMMERCE - COAST AND GEODETIC SURVEY

RECOVERY TRAVERSE

DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: Mount Whitney, Smithsonian Institute, House

Recovered By:
CHIEF OF PARTY: John C. Childs YEAR: 1962 STATE: California COUNTY: Tulare-Inyo

Description, including sketch of object: The station was recovered as previously described by R. J. S. in 1950.

CALIF 352

JULY 1963
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COAST AND GEODETIC SURVEY
WASHINGTON D.C.

HORIZONTAL CONTROL DATA SHEET 1 of 2

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

QUAD 361181 STATION 1019
CALIF
LATITUDE 36°30' TO 37°00'
LONGITUDE 118°00' TO 118°30'
DIAGRAM NJ 11-10 FRESNO

FILE COPY

36°30
118° 15'

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 533
Rev. Aug. 1948

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: WHITNEY STATE: California COUNTY: Tulare-Inyo

CHIEF OF PARTY: R.J.Sims YEAR: 1950 Described by: E.F.L.

NOTE.* HEIGHT OF TELESCOPE ABOVE STATION MARK 2.07 METERS.† HEIGHT OF LIGHT ABOVE STATION MARK METERS.

Surface-station mark, Underground-station mark -

DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION

OBJECT	BEARING	HOR. DISTANCE feet	HOR. DISTANCE meters	DIRECTION
AZIM				0° 00' 00.00"
BENCH MARK U43	SW	9.65	3.003	49 42 12.
USGS Plaque	W	9.85	3.002	85 12 28.
Cairn	NNE		5.61	104 09
BENCH MARK M72	NE	12.47	3.800	124 19 16.
12c Azimuth Mark	SE	approx. 12 miles		335 10 38.3
Stone House (northeast corner)	WSW		26.0 ft	304 43

The station is located about 16½ miles south southwest of Independence and 13 miles west of Lone Pine, on the highest point of Mount Whitney. It is 20 feet west of the east edge of the bluff and is stamped "WHITNEY 1950".

BENCH MARK U43, stamped "U 43 1925", is set in a drill hole in the top of a large boulder. It is 0.09 meters higher than the station mark.

BENCH MARK M72, stamped "M 72 1928", is set in a drill hole in the top of a large boulder. It is 3.50 meters higher than the station.

A U.S. Geological Survey aluminum plaque is set flush with the highest point of a large boulder. It is 0.71 meters higher than the station mark. The mark has been obliterated so badly by visitors that the stamping could not be verified.

The azimuth mark is located in a small basin, about 1 mile before reaching what is known as Trail Crest on the ascent. It is 150 yards southwest of a small lake, 22 feet south of the trail, and 4 feet northwest of a small cairn. The mark is stamped "WHITNEY 1950".

To reach the station from the post office in Lone Pine, go south on U.S. Highway 395 and 6 for 12 blocks to a cross street and a sign "Whitney Portal 13". Turn right and go 0.45 mile to a crossroad and a sign "Whitney Portal 13". Continue straight ahead and follow the paved road for 2.3 miles to a fork. Take the left fork and follow the paved road for 10.7 miles to the end of truck travel at the store and corral at Whitney Portal. Follow the Mount Whitney Trail to the top of Mount Whitney and the station as described above. A 1 day horse pack.

*Refers to notes in manuals of triangulation and state publications of triangulation. †To nearest meter only, where no trigonometric leveling is being done. ‡Horizontal angle measured clockwise, referred to initial station.

JPM

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: WHITNEY YEAR: 1950 1962

STATE: California LOCALITY: Visalia-Big Pine Area

Second -ORDER Triangulation SOURCE: G-9098 G-13129 FIELD SKETCH: Calif. 3[illegible], 484

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH (HOR ∠s) ANGLE	MARK
STATE: Calif. ZONE: 4 CODE: 0404	x 2,208,157.83 y 454,106.06	327° 09' 38" + 0 25 23	AZIMUTH MARK
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION	SECONDS IN METERS	ELEVATION
	LATITUDE: 36° 34' 43"1132 NORTH LONGITUDE: 118 17 27.8566 WEST		4419.1 METERS 14498 FEET

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE (Meters)
AZIMUTH MARK	THIRD-ORDER 327°35'01"2	

V.A.ELEV. 14,491.2 FT (USGS 1952)
(Checks with NGS above differences of elev. to 2 BMs.)
Elev. 4416.9 m

Form 286 (9-51-61) USCOMM-DC 62857

JAN 1964

352 CALIF.

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WASHINGTON D.C.

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HORIZONTAL CONTROL DATA

SHEET 1 of 2

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

QUAD 361181 STATION 1019
CALIF
LATITUDE 36°30' TO 37°00'
LONGITUDE 118°00' TO 118°30'
DIAGRAM NJ 11-10 FRESNO

36°30'
118° 15' WHITNEY (Continued)

FORM 526a
10-15-60

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

RECOVERY NOTE, TRIANGULATION STATION

R

ALL MARKS ok 8/8/62 RSH

NAME OF STATION: WHITNEY
ESTABLISHED BY: R. S. J. YEAR: 1950 STATE: California
RECOVERED BY*: John C. Childs YEAR: 1962 COUNTY: Tulare-Inyo

HEIGHT OF TELESCOPE ABOVE STATION MARK 2.115 METERS. HEIGHT OF LIGHT ABOVE STATION MARK METERS.

DISTANCES AND DIRECTIONS TO AZIMUTH MARK, REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND AT THE STATION

OBJECT	BEARING	DISTANCE FEET	DISTANCE METERS	DIRECTION
ALTA 1950				0 00' 00.0"
Bench Mark U 43	NW	9.85	3.004	49 47
B.M. 14502 (USGS)	N	9.78	2.982	85 29
Whitney (USGS)	NNE	18.15	5.530	104 43 54
Bench Mark K 72	NE	12.50	3.809	124 22 54
Azimuth Mark	SE	(1-1/2 miles)		235 10 47.8

The station mark, Bench Mark U 43, Bench Mark K 72, the azimuth mark and the stone house were recovered as previously described. The cairn and the United States Geological Survey aluminum plaque had been destroyed. An aluminum disk of the same organization had been set near the location of what remained of the plaque. All measurements to the remaining marks, including the stone house, were verified. Traverse connections were made to the two new Geological Survey marks. Following is a complete new description.

The station is on the highest part of Mount Whitney, 16-1/2 miles south-southwest of Independence and 13 miles west of Lone Pine.

To reach the station from Whitney Portal, follow the Mount Whitney trail for about 7 miles to a sign "TRAIL CAMP" just south of a small lake. Continue on the trail for about 100 yards to the azimuth mark on the left. Continue on the trail for about 3-1/2 miles to the summit of Mount Whitney and the station. About a 6 hour horse pack.

The station mark is a standard disk, stamped WHITNEY 1950, cemented in a drill hole in a 8 by 12 foot boulder that is about 4 feet lower than the surrounding boulders. It is 26.0 feet northeast of the ~~northeast~~ corner of the stone house and about 20 feet west of the ~~east~~ rim of the mountain. (Note 4) ok

meters?

Bench Mark U 43 is a standard disk, stamped U 43 1925, cemented in a drill hole in a 15 by 20 foot boulder that is at about the same elevation as the surrounding boulders. It is 0.687 meters higher than the station. ok

2.25

Bench Mark K 72 is a standard disk, stamped K 72 1928, cemented in a drill hole in a 4 by 6 foot boulder projecting about 4 feet on the east side. It is 0.557 meters higher than the station.

1.83

USGS B M is a United States Geological Survey aluminum disk, stamped 14,502, cemented in a drill hole in a 5 by 10 foot boulder projecting 3-1/2 feet. It is 0.895 meters higher than the station. ok

2.94

USGS (Station Mark) is a bronze disk of the United States Geological Survey, (not stamped) cemented in a drill hole in a 4 by 6 foot boulder that projects about 1 foot above the surrounding boulders. It is 0.632 meters higher than the station.

The azimuth mark is a standard disk, stamped WHITNEY 1950, cemented in a drill hole in bedrock. It is about 150 yards southwest of a small lake, 22 feet south of the trail and 4 feet northwest of a cairn. (Note 17a) ok

2.07

Edward B. Kelly

*Name of chief of party should be inserted here. The officer who actually visited the station should sign his name at the end of the recovery note.

NOTE - One of these forms must be used for every station recovered.

USCOMM-DC 27173-P63

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: WHITNEY (USGS) YEAR: 1950 1962

STATE: California LOCALITY: Visalia-Big Pine Area

SECOND ORDER Traverse SOURCE: G-9098 FIELD SKETCH: Calif. 387, 484
(No check on this position) G-13129

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH FROM SOLAR ANGLE	MARK
STATE: Calif. ZONE: 4 CODE: 0404	x 2,208,163.04 y 454,123.43	° ' " + 0 25 23	
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE: 36° 34' 43".2846 NORTH			METERS
	LONGITUDE: 118 17 27.7911 WEST			FEET
TO STATION			GEODETIC AZIMUTH (From south)	DISTANCE (Meters)

Computed from station WHITNEY

TRAVERSE

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
Form 525 D

DESCRIPTION OF TRIANGULATION/INTERSECTION STATION

NAME OF STATION: Whitney (USGS)

CHIEF OF PARTY: John C. Childs YEAR: 1962 STATE: California COUNTY: Tulare-Inyo

Description, including sketch of object: The station is on the highest part of Mount Whitney, 16-1/2 miles south-southwest of Independence and 13 miles west of Lone Pine. The mark is a bronze disk of the United States Geological Survey (not stamped) cemented in a drill hole in a 4 by 6 foot boulder that projects about 1 foot above the surrounding boulders. A traverse connection was made to triangulation station WHITNEY 1950, distance being 18.15 feet or 5.530 meters north-northeast of the station.

Described by E. B. Kelly

Comm-DC 57800

JAN 1964

CALIF 352

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COAST AND GEODETIC SURVEY
WASHINGTON D.C.

HORIZONTAL CONTROL DATA

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

QUAD 361181 STATIONS 1024, 1025
CALIF
LATITUDE 36°30' TO 37°00'
LONGITUDE 118°00' TO 118°30'
DIAGRAM NJ 11-10 FRESNO

FILE COPY

36°30'
118°15'

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: MT KEITH YEAR: 1950

STATE: California LOCALITY: Visalia-Big Pine Area

Third-ORDER Triangulation SOURCE: G-9098 G-13129 FIELD SKETCH: Calif. 387

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH (IOR Δα) ANGLE	MARK
STATE: Calif. ZONE: 4 CODE: 0404	x 2,192,701.32 y 498,232.50	+ 0 23 32	
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION	SECONDS IN METERS	ELEVATION
	LATITUDE: 36° 42' 00".549 NORTH LONGITUDE: 118 20 33.654 WEST		4259.7 METERS 13975 FEET

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE (Meters)

Computed from stations BLUE, MONARCH, WHITNEY

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 522 b

DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: Mt. Keith YEAR: 1950 STATE: California COUNTY: Inyo

CHIEF OF PARTY: R.J. Sipe

Description, including sketch of object: The station is a sharp pointed peak that breaks off sharply on the south and west sides. It is about 10½ miles southwest of the town of Independence and about 17 miles west northwest of the town of Lone Pine. A small cairn on the top of the peak is the point that was intersected.

Described by R.J.L.

VBA

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: PAIUTE MONUMENT YEAR: 1952

STATE: California LOCALITY: Vicinity of Independence

Third -ORDER Triangulation SOURCE: GTZ G-9820 FIELD SKETCH: CALIF 402

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH (IOR Δα) ANGLE	MARK
STATE: Calif ZONE: 4 CODE: 0404	x 2,282,508.88 y 558,518.49	+ 0 34 34	
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION	SECONDS IN METERS	ELEVATION
	LATITUDE: 36°51'49".166 NORTH LONGITUDE: 118 02 03.448 WEST		2,550 METERS 8,366 FEET

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE LOGARITHM (Meters)	DISTANCE METERS

Computed from stations NORTH ALA HILLS (LAWD), INDEPENDENCE SE BASE, CAMERA POST NO 5, KEARSARGE, INDEPENDENCE NW BASE, CAMERA POST NO 4, CAMERA POST NO 2, SW 1, SW 6

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 522 b

DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: Paiute Monument YEAR: 1952 STATE: California COUNTY: Inyo

CHIEF OF PARTY: Walter R. Helm

Description, including sketch of object:

Paiute Monument is located about 10 miles airline northeast of Independence in a saddle on the crest of a ridge of the Inyo Mountains. It is a granite rock formation that is approximately 60 feet in height, 25 feet in diameter at the base and about 10 feet in diameter at the top. The center of the top was intersected.

Described by John C. Childs

JAN 1964

352 CALIF.

36°30
118°15'

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HORIZONTAL CONTROL DATA

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

QUAD 361181 STATION 1026
CALIF
LATITUDE 36°30' TO 37°00'
LONGITUDE 118°00' TO 118°30'
DIAGRAM NJ 11-10 FRESNO

DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY Form 525 D

DESCRIPTION OF TRIANGULATION INTERSECTION STATION

NAME OF STATION: Table Mtn YEAR: 1950 STATE: California COUNTY: Tulare

CHIEF OF PARTY: R.J. Sipe

Description, including sketch of object: The station is located on a high, prominent table topped mountain on the Kings Kern Divide that is about 14 miles southeast of Cedar Grove, about 18 miles southwest of Independence, and about 23 miles west northwest of Lone Pine.

The station mark, stamped "TABLE MTN 1950", is a standard triangulation station disk that is set in a large boulder, 10 paces from the most northerly point of the north end and highest point of the mountain. It is about 12 paces west of the precipice that forms the eastern edge of the top of the mountain. An 8 foot cairn was erected over the mark.

The station can be reached from Forester Pass, on the Muir Trail, by going south about 5 miles to a trail to the right and a sign "South America Lake". Take the trail to the right, westerly, for about 1 mile to a fork in the trail and a sign "South America Lake" pointing to the right. Take the fork to the left, westerly, for about 2 miles to another "South America Lake" sign and a fork. Take the left fork down the Kern River for about ½ mile to a small rock pile and a trail up Milestone Creek. Take the trail up Milestone Creek, westerly, for about 2½ miles to the edge of Milestone Basin. From here pick your way northwesterly around the side of a prominent rock formation for about ½ mile to some small lakes and a camp site with stock feed. The top of the station peak is visible from here. Pack northwesterly to the highest point and the station. About a 3 hour back pack.

Described by P.W.S.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: TABLE MOUNTAIN CAIRN YEAR: 1950

STATE: California LOCALITY: Visalia-Big Pine Area

Third -ORDER Triangulation SOURCE: G-9098 G-13129 FIELD SKETCH: Calif. 387

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH (OR Δα) ANGLE	MARK
STATE: Calif. ZONE: 4 CODE: 0404	x 2,154,617.09 y 483,560.81	+ 0° 18' 52"	
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE: 36° 39' 37".789	NORTH		4151.7 METERS
	LONGITUDE: 118 28 22.302	WEST		13621 FEET

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE (Meters)

Computed from stations ALTA, MITCHELL PEAK, SPANISH

See "TABLE MTN RM NO1 1952" (USGS PH 482)

JAN 1964