

33°15'
110°45'

ARIZONA 164

Index

<u>Station</u>	<u>Project</u>
Azimuth —	--
Babich —	--
Barnes —	--
BM "3 M" —	--
BM "7 M 1944" —	--
BM "11 M 1944" —	--
BM "4300" —	--
BM "4694" —	--
Blackhawk Butte —	--
Carlota —	--
Center Station —	--
Cone —	--
Copper —	--
✓ Copper (C&GS) INACTIVE FILE	--
Craig —	--
✓ Dance Hall (Roof) —	--
✓ Five Point Mountain —	--
✓ Fry (C&GS)	San Carlos
✓ Globe (C&GS)	--
✓ Hatton (C&GS) INACTIVE FILE	--

Index (CONTINUED)

<u>Station</u>	<u>Project</u>
Hutton /	--
✓ S Hutton's Peak /	--
Madera /	--
✓ Miami (C&GS) INACTIVE FILE	--
✓ Mine (C&GS)	San Carlos
✓ S Mineral Monument No. 5 /	--
Needle /	--
✓ S North East Station /	--
Nugget /	Carrizo
✓ Pinal (C&GS)	--
✓ S Pinal Mountain /	--
Pinal Peak INACTIVE FILE	--
Sec Corner (T1N T1S, R15E) INACTIVE FILE /	--
Signal Peak INACTIVE FILE	--
✓ Signal Peak L.O. Tower (C&GS)	--
Sleeping Beauty /	--
✓ S Township Corner <i>No Record!</i>	--
✓ Webster (USGS)	--
Webster S.E. INACTIVE FILE	--
4-79 B INACTIVE FILE	--
4-81 E INACTIVE FILE	--
✓ S 4-96 B /	--

33°15'
110°45'

ARIZONA 104



Index (CONTINUED)

Suppl

Station

Project

5-4 B —

Carrizo

5-43 A —

--

5-49 B —

--

5-74 A —

--

5-80 B —

--

5-84 A INACTIVE FILE

--

San Carlos Project Master - NONE - Book: PH 1098
Carrizo Project Master in ARIZONA 184 - Book: PH 1186

Arizona (164)

Gila County

GLOBE (C&GS)

1927 N.A.D.

USC&GS, 1938

B.H. Yoakum, 1944

Book: H 160

Described in U.S. Coast and Geodetic Survey in Description List
33 110 3, station 1010.

ARIZONA ZONE EAST

V.A. Elevation: 3879 ft.

*X=315,503.92

*Y=874,796.04

*Latitude: 33°24'12.118" Longitude: 110°46'16.373"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
*Pina 1 (C&GS)	18°52'50.83"	198°51'13.28"	46,560.7
*Miami (C&GS)	99 18 02.03	279 14 36.16	32,113.7
BM 4300	153 17 39.70	333 17 17.56	7,583.46
BM 4694	207 33 20.93	27 33 49.21	9,409.44

NAD 83 VALUES AVAILABLE

*-Values by C&GS

FILE COPY

3/20/69 blm

Arizona (164)

Gila County

MINE (C&GS)

1927 N.A.D.

USC&GS, 1938, 1945

B.H. Yoakum, 1944

C.G. Merrick, 1965

Books: H 160, PH 1098

Described in U.S. Coast and Geodetic Survey Description List
33 110 3, station 1018.

ARIZONA ZONE CENTRAL

ARIZONA ZONE EAST

V.A. Elevation: 4794 ft.

X=851,017.28

*X=317,152.04

Y=888,495.49

Y=887,080.24

$\Delta \alpha = -0^{\circ}19'49''$

*Latitude: $33^{\circ}26'13.752$ Longitude: $110^{\circ}45'57.767''$

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Pinal (C&GS)	16°27'29.60"	196°25'41.78"	58,756.42
Madera	41 51 44.35	221 48 18.72	47,504.56
BM 4300	42 05 16.16	222 04 43.76	7,437.53
Needle	71 08 06.84	251 02 37.54	53,584.83
Miami (C&GS)	77 56 55.19	257 53 18.98	34,018.47
Sleeping Beauty	100 25 47.91	280 21 51.16	37,006.56
Babich	118 58 25.07	298 54 07.24	45,260.46
Nugget	175 30 54.39	355 30 43.60	21,185.65
*Apache Mid Pk. (C&GS)	191 02 38.45	11 03 26.26	38,287.0
*Chrome (C&GS)	222 14 16.97	42 16 41.43	32,995.9
BM 4694	324 55 04.98	144 55 23.02	4,829.81

NAD 83 VALUES AVAILABLE

*=Values by C&GS

FILE COPY

4/1/69 blm

Arizona (164)

Gila County

PINAL (C&GS)

1927 N.A.D.

USC&GS, 1938, 1947

B.H. Yoakum, 1944

Books: H 160, PH 2

R.G. Thompson, 1946

Described in U.S. Coast and Geodetic Survey in Description List
33 110 3, station 1019.

ARIZONA ZONE CENTRAL

ARIZONA ZONE EAST

V.A. Elevation: 7848 ft.

X=834,993.42

*X=300,182.53

Y=831,964.15

Y=830,831.22

*Latitude: 33°16'56.211" Longitude: 110°49'13.846"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Granite (C&GS)	55°17'52.58"	235°11'06.78"	76,589.08
Hagen	69 20 30.42	249 15 44.96	47,250.60
Apache	84 33 19.60	264 25 24.20	73,916.09
Picket Post (C&GS)	84 54 30.19	264 43 25.38	103,324.09
Kings Crown	103 16 57.82	283 08 43.89	78,419.90
Craig	116 06 19.39	296 00 31.05	59,904.26
Madera	144 17 37.90	324 16 00.38	25,814.63
*Miami (C&GS)	161 19 08.30	341 17 20.33	51,975.9
Sleeping Beauty	162 34 40.85	342 32 32.44	66,068.86
BM 4300	192 53 29.28	12 54 44.75	52,150.00
*Globe (C&GS)	198 51 13.28	18 52 50.83	46,560.7

NAD 83 VALUES AVAILABLE

*- Values by USC&GS

FILE COPY

4/1/69 blm

cl
✓

Arizona (164)

Gila County

SIGNAL PEAK L.O. TOWER (C&GS)

1927 N.A.D.

USC&GS, 1938

K.B. Miller, 1963

Book: PH 910

Described in U.S. Coast and Geodetic Survey Description List 33 110 3 station 1032.

To reach from post office in Globe, proceed westerly on U.S. Highways 60-70 for 3.7 mi.; thence left, southerly, 6 mi.; thence right, SW., 5.2 mi. to junction on divide; thence left 4.7 mi. to junction; thence right 0.6 mi. to 60 ft. steel lookout tower. Station mark lies centered under lookout tower.

Station mark: A standard U.S. Dept. of Agriculture tablet stamped "SIGNAL 1934" in rock under center of tower.

Signal: A structural steel lookout tower centered over station mark.

Signal data: Floor of USFS lookout tower 58.1 ft.
Eaves of USFS lookout tower 65.5
Apex of roof of lookout tower 67.9

A USGS BM tablet set in concrete post is 4.65 ft. from station mark in plane azimuth $160^{\circ}56'$.

ARIZONA ZONE CENTRAL

X=830,439.

Y=835,869.

ARIZONA ZONE EAST

*X=295,695.

Y=834,811.

V.A. Elevation: 7812 ft.
(Ground)

*Latitude: $33^{\circ}17'35.31''$ Longitude: $110^{\circ}50'07.01''$

NAD 83 VALUES AVAILABLE

Arizona (164)

Gila County

WEBSTER (USGS)

1927 W.A.D.

B.H. Yoakum, 1944
USC&GS, 1947

Book: H 160

Described in U.S. Coast and Geodetic Survey description list
33 110 3, station 1025.

1967 Description by 30th. Engineers Battallion:

Located approximately 10.0 mi. (airline) NW. of Globe; 2.4 mi. N.
of Castle Dome Copper Company.

To reach from Globe P.O., take Highway 60-70 to Junction State
Highway 88; go right N. 5.3 mi. to Lavine Ranch; go left W. 2.2 mi.
to fork of rd.; take left fork W. for 0.5 mi. to J. Pleich Camp; con-
tinue W. 0.3 mi. to fork at Babich Camp, continue SW. on rd. 2.8 mi.
passing old house, coming to gate; take left fork S. 1.4 mi. to Y-
intersection; go right SW. for 0.4 mi. to house; follow trail through
gate W. 1.1 mi. to end of four-wheel drive; go SW. to center of ridge
line, at ridge go right NW. 150 ft. to station at extreme NE. end of
main ridge, not on highest point. Packing time is 1 hour and 30 minutes.

Station mark: A standard USGS tablet stamped "WEBSTER 1944", set
on top of a rock 1.0 ft. above the ground.

Reference mark No. 1: A standard USC&GS disk stamped "WEBSTER
NO 1 USGS 1946" set in a rock.

Reference mark No. 2: A standard USC&GS disk stamped "WEBSTER
NO 2 USGS 1946" set in a rock.

ARIZONA ZONE CENTRAL
X=796,177.97
Y=893,841.53

ARIZONA ZONE EAST
*X=262,414.30
Y=893,348.25

V.A. Elevation: 5776 ft.

*Latitude 33°27'12.176"

Longitude 110°56'44.229"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Carlota	38°45'35.55"	218°43'50.77"	25,761.66
Cone	45 12 34.23	225 11 42.24	11,267.62
Barnes	146 03 03.38	326 02 28.11	9,702.04
BM "11 M"	155 51 06.55	335 50 47.92	6,998.18
Babich	223 26 40.63	43 28 19.32	22,034.75
*Apache Mid Pk. (C&GS)	242 54 59.62	63 01 44.22	69,698.0
Sleeping Beauty	267 34 27.21	87 36 26.79	18,395.75
Needle	349 59 08.38	169 59 35.08	23,631.42

NAD 83 VALUES AVAILABLE

* = Values by USC&GS

FILE COPY

4/18/69

slh

slh
✓

Arizona (164)

Gila County

AZIMUTH

1927 N.A.D.

H.L. Baldwin, 1902

USFS, 1935

Books: 2799, 2808, PH 910

K.B. Miller, 1963

Located about 3.0 mi. SE. of Globe, on a low hill.

To reach from post office in Globe, proceed southerly up Six Shooter Canyon Rd. 1.9 mi.; thence left across drain and through gate following dim rd. easterly 0.6 mi.; thence sharp right along dim rd. along ridge 0.7 mi. to station.

Station mark: A very badly battered standard tablet in rock outcrop stamped "AZIMUTH".

Computers Note: This station probably is "3885 PHNX" azimuth. Elevation 3884.763 USGS Third Order Leveling.

ARIZONA ZONE CENTRAL

*X=854,685.32

Y=863,817.58

ARIZONA ZONE EAST

*X=320,404.25

Y=862,346.63

Elevation: 3884.763 ft.

(Third Order Levels by

TI Winsor, 1900)

*Latitude: 33°22'09.220" Longitude: 110°45'17.740"

NAD 83 VALUES AVAILABLE

*Values by USFS

FILE COPY

3/21/69 blm

blm
✓

Arizona (164)

Gila County

FRY (C&GS)

1927 N.A.D.

USC&GS, 1938

Book: PH 1098

P. H. Johnson, 1963

L. B. Mansfield, 1965

Described in U. S. Coast and Geodetic Survey Description List No. ~~245, page 1:~~ 33 110 3 - 1008

Note by P.H.J., 1963:

Station is about 430 ft. E. of State Highway 77 at a point 8.6 mi. S. of junction of U. S. Highway 70 and State Highway 77 on eastern end of a short spur ridge.

To reach station from post office in Globe, proceed SE. on U. S. Highway 70 for 3.4 mi. to junction of U. S. Highway 70 and State Highway 77; turn S. and follow State Highway 77 for 8.6 mi. to divide and end of truck travel; climb up to ridge and go E. about 400 ft. to station.

ARIZONA ZONE EAST
*X=314,419.74
Y=823,144.75

ARIZONA ZONE CENTRAL
X=849,358.75
Y=824,516.74

Elevation: 4997 ft.
(PTL from BM "V 17")

$\Delta \alpha = -0^{\circ}19'59''$

*Latitude: $33^{\circ}15'41.010''$ Longitude: $110^{\circ}46'25.614''$

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
BM "M 16"	230°38'30.92"	50°43'04.98"	54,749.79
Blair (C&GS)	273 34 09.18	93 38 40.47	42,093.25

NAD 83 VALUES AVAILABLE

* - Values by USC&GS

FILE COPY

8/19/65 dc

Handwritten signature
✓

Arizona (164)B

Gila County

BABICH

1927 N.A.D. (Adj.)

B.H. Yoakum, 1944

L.H. Hendrickson, 1947

Books: H 160, PH 20

Located approximately 7.0 mi. (airline) NW. of Globe; 1.0 mi. (N.) of John Babich Camp.

To reach from Globe P.O. take U.S. Highway 60-70 W. to junction Highway 88, go right N. for 5.3 mi. to Lavine Ranch; go left W. for 2.2 mi. to fork on rd.; take left fork W. for 0.5 mi. to J. Fleich Ranch; continue (W.) for 0.3 mi. to fork; take right fork N. for 0.3 mi. to John Babich Camp house and rd. fork; take left fork W. for 0.1 mi. to fork; take right fork NW. for 0.4 mi. to fenceline and end of truck travel. Continue up wash in NW. direction and climb out of wash up NE. ridge line to summit and station. Packing time is 30 minutes.

Station mark: Standard tablet, stamped "BABICH 1944", cemented in flat rock outcrop.

Reference mark No. 1: Drill hole in rock outcrop on NE. rim of summit, 23.75 ft. from station mark in azimuth 213°38'.

Reference mark No. 2: Drill hole in rock outcrop on crest of ridge to SE., 44.40 ft. from station mark in azimuth 325°15'.

ARIZONA ZONE CENTRAL
X= 811,180.08
Y= 909,980.67

ARIZONA ZONE EAST
X= 277,685.49
Y= 909,231.62

V.A. Elevation: 4240 ft.

Latitude 33°29'50.417"

Longitude 110°53'45.312"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Webster (USGS)	43°28'19.32"	223°26'40.63"	22,034.75
BM 11 M	61 56 40.10	241 54 42.74	20,419.21
Barnes	68 53 49.96	248 51 35.96	22,053.19
Salt (C&GS)	151 34 36.11	331 33 28.44	21,787.17
Salt River Pk.	162 47 16.74	342 46 39.86	19,103.65
Rock	212 42 17.43	32 44 56.23	44,984.13
Apache Mid Peak (C&GS)	251 28 56.43	71 34 02.46	49,471.82
Alamo	264 18 14.02	84 19 29.56	11,648.10
Nugget	271 08 31.00	91 12 38.23	37,947.66
Mine (C&GS)	298 54 07.24	118 58 25.07	45,260.46
Sleeping Beauty	348 03 22.45	168 03 43.41	15,557.84

NAD 83 VALUES AVAILABLE

FILE COPY

4/11/69 cjl

Arizona (164)B

Gila County

BARNES

1927 N.A.D. (Adj.)

B.H. Yoakum, 1944

Book: H 160

Located approximately 11.7 mi. (airline) NW. of Globe, 2.2 mi. ENE. of Horrel's Ranch; on Barnes Peak, a prominent cone shaped peak extending to the W.

To reach from Miami P.O. take U.S. Highways 60-70 W. for 5.2 mi. to intersection; go right N. 2.4 mi. to rd. fork; take left fork W. for 1.7 mi. to fork; continue on right fork (main rd.) for 0.4 mi. to intersection; go right N. 0.5 mi. to side rd.; keep going N. 0.1 mi. to fork; take left fork 0.3 mi. to fork; take right fork 2.0 mi. to fork; take right fork 0.2 mi. to fork; take left fork for 2.1 mi. to fork; take right fork NE. 1.2 mi. to gate at Horrel's Ranch. (Go to ranch house and obtain permission to go into the ranch land). Go past the house to next gate and corral; follow the fenceline on left to another gate and corral; follow trail in N. direction 0.5 mi. to fork; take right fork E. up canyon 1.3 mi. to end of four wheel drive. Go E. following ridge line by passing first peak to highest peak and station.

Station mark: Existing aluminum tablet stamped "BARNES 1944", cemented in projecting ledge of rock.

Reference mark No. 1: Drill hole in rock outcrop on highest part of summit, 7.99 ft. from station mark in azimuth 32°32'.

Reference mark No. 2: Drill hole in rock outcrop at NW. edge of summit, 13.88 ft. from station mark in azimuth 158°55'.

ARIZONA ZONE CENTRAL
X=790,684.84
Y=901,838.70

ARIZONA ZONE EAST
X=257,056.81
Y=901,436.52

V.A. Elevation: 5032 ft.

Latitude: 33°28'31.796" Longitude: 110°57'48.190"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Cone	9°09'07.74	189°08'50.99	16,192.98
Carlotta	20 49 46.15	200 48 36.57	30,105.98
Horrel	105 34 47.25	285 32 58.93	17,264.33
Babich	248 51 35.96	68 53 49.96	22,053.19
Sleeping Beauty	286 58 37.24	107 01 12.13	24,883.01
BM "11 M"	303 02 16.49	123 02 33.12	33,048.40
Webster (USGS)	326 02 28.11	146 03 03.38	9,702.04

NAD 83 VALUES AVAILABLE

FILE COPY

4/1/69 blm

cl
✓

Arizona (164)

Gila County

BM "3 M 1944"

1927 N.A.D.

B.H. Yoakum, 1944
K.B. Miller, 1963

Book: H 160, PH 910

Described in level line by D.E. Marsden 1944, Book V 117 and D. Meyer, 1963, Book PV 484 as follows:

"Miami, 4.7 mi. W. of, 70 ft. S. of intersection of U.S. Highways 60 and 70 and rd. to Castle Dome Mine, 16 ft. higher than center of highway.

Station mark: Standard tablet stamped "3M 1944 4287" cemented in granite boulder.

ARIZONA ZONE CENTRAL
X=798,528.56
Y=862,435.78

ARIZONA ZONE EAST
X=264,236.30
Y=861,908.55

Elevation: 4287.236 ft.
(Spirit leveling by D. Meyers, 1963)

Latitude: 33°22'01.257" Longitude: 110°56'19.972"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Craig	75°39'09.40"	255°37'15.00"	18,214.13
Carlota	121 56 43.31	301 54 45.29	21,430.53
Madera	295 04 30.78	115 06 47.43	23,281.31

NAD 83 VALUES AVAILABLE

FILE COPY

4/1/69 blm

Arizona (164)^N

Gila County

BM "7 M 1944"

1927 N.A.D. (Sec.)

B.H. Yoakum, 1944

Book: H 160

Described in level line by L.E. Marsden, 1944 Book V 117 and D. Meyer, 1963 Book PV 484 as follows:

Carlota Mine, 2.0 mi. NE. of, 7.2 mi. S. of Horrel Ranch, 0.2 mi. N. of Castle Dome Sluice Dam, 60 ft. N. of and 20 ft. higher than rd. intersection, in rectangular boulder; standard tablet stamped "7 M 1944 3912".

Station mark: Standard tablet stamped "7 M 1944 3912" cemented in a rectangular boulder, projecting 0.2 ft. above ground.

ARIZONA ZONE CENTRAL
X=788,876.94
Y=871,148.92

ARIZONA ZONE EAST
X=254,732.77
Y=870,782.37

Elevation: 3912.898 ft.
(Spirit Leveling by D. Meyer, 1963)

Latitude: 33°23'28.340" Longitude: 110°58'12.829"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Craig	31°13'10.27"	211°12'17.92"	15,574.71
Carlota	106 22 58.33	286 22 02.40	8,980.96
Cone	178 05 56.60	358 05 53.43	14,693.25

NAD 83 VALUES AVAILABLE

FILE COPY

4/1/69 blm

Arizona (164)^R

Gila County

BM "11 M 1944"

1927 N.A.D.

B.H. Yoakum, 1944 (n)

Book: H 160

Described in level line by L.E. Marsden, 1944 Book V 117 as follows:

Horrel Ranch, 3.3 mi. E. of, 0.6 mi. SE. of Barnes Peak, on main divide between Pinal and Pinto Creeks, 880 ft. N. of Forest Service trail, 80 ft. E. of N-S. fence, at summit of low top between Barnes Peak and Webster Mtn., in boulder; standard tablet stamped "11 M 1944 4851".

Station mark: A standard tablet stamped "11 M 1944 4851" cemented in a top of boulder in place.

ARIZONA ZONE CENTRAL
X=793,255.47
Y=900,200.26

ARIZONA ZONE EAST
X=259,599.40
Y=899,755.05

Elevation: 4851.642 ft.
(Spirit Leveling by L.E. Marsden, 1944)

Latitude: 33°28'15.352" Longitude: 110°57'18.024"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Barnes	123°02'33.12"	303°02'16.49"	3,048.40
Babich	241 54 42.74	61 56 40.10	20,419.21
Sleeping Beauty	284 46 53.94	104 49 12.18	21,969.79
Webster (USGS)	335 50 47.92	155 51 06.55	6,998.18

NAD 83 VALUES AVAILABLE

(n) = Not Occupied

FILE COPY

4/1/69 blm / *bl*

Arizona (164)

Gila County

BM "4300"

1927 N.A.D.

B.H. Yoakum, 1944

Book: H 160

Located approximately 7.0 mi. (airline) W. of Miami; approximately 1.7 mi. N. of Globe; on highest part of ridge.

To reach from Globe P.O. take U.S. Highways 60-70 W. for 0.4 mi. to Yuma St., turn right NE. for 0.3 mi. to Copper Hills Rd.; take Copper Hills Rd.; for 1.3 mi. to fork in rd.; take left fork NW. for 0.4 mi. to top of first ridge and fork on trail; take right fork NW. for 0.3 mi. to fork on trail; take left fork W. for 0.1 mi. to end of jeep travel, continue W. to top of ridge which runs NE-SW. to station. Packing time is 15 min.

Station mark: A existing VABM tablet stamped "BM 4300 1944" set in a rock flush with the ground.

Reference mark No. 1: Cross chiseled in rock on summit, 33.20 ft. from station mark in azimuth 224°00'. (Not Found, 1967)

Reference mark No. 2: Cross chiseled in rock on SE. slope, 23.95 ft. from station mark in azimuth 297°31'. (Not Found, 1967)

ARIZONA ZONE CENTRAL
X=846,093.36
Y=882,920.89

ARIZONA ZONE EAST
X=312,135.52
Y=881,589.81

V.A. Elevation: 4299 ft.

Latitude: 33°25'19.140" Longitude: 110°46'56.580"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Pinal (C&GS)	12°54'44.75"	192°53'29.28"	52,150.00
Madera	41 48 41.52	221 45 48.30	40,067.10
Miami (C&GS)	86 47 14.30	266 44 10.53	28,327.86
Sleeping Beauty	111 14 52.07	291 11 27.78	33,702.94
*Mine (C&GS)	222 04 43.76	42 05 16.16	7,437.53
Globe (C&GS)	333 17 17.56	153 17 39.70	7,583.46

NAD 83 VALUES AVAILABLE

FILE COPY

4/1/69 blm j

alt

Arizona (164)

Gila County

BM "4694"

1927 N.A.D. (Adj.)

B.H. Yoakum, 1944

Book: H 160

Located approximately 2.5 mi. (airline) NE. of Globe; on highest point of hill.

To reach from Globe D10, take highway 60-70 (W.) for 0.4 mi. to Yuma St.; turn right NE. for 0.3 mi. to Copper Hills Rd.; take Copper Hills Rd. for 2.6 mi. to rd. fork at entrance to dump; leave vehicle and continue in a SE. direction to top of hill and station. Packing time 30 min.

Station mark is an existing VABM tablet stamped "4694" set in rock about 1.5 ft. above the ground.

ARIZONA ZONE EAST

V.A. Elevation: 4697 ft.

X=319,905.0

Y=883,112.2

Latitude: $33^{\circ}25'34.648''$ Longitude: $110^{\circ}45'25.016''$

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Globe (C&GS)	$27^{\circ}33'49.21''$	$207^{\circ}33'20.93''$	9,409.44
BM 4300	78 35 20.90	258 34 30.46	7,917.71
Miami (C&GS)	85 00 36.37	264 56 42.16	36,182.06
Mine (C&GS)	144 55 23.02	324 55 04.98	4,829.81

NAD 83 VALUES AVAILABLE

FILE COPY

4/1/69 blm

FILE COPY

ARIZONA (164)

Gila County

BLACKHAWK BUTTE

PRE-1927 N.A.D.

A. H. Thompson, 1899

Books: 2105-2106

Described in Appendix 21st Annual Report, p. 340 as follows:

"On a sharp peak about 3.0 mi. N. of Globe and about 1.0 N. of the Gubright and Gray Mines. The summit of the peak is a mass of angular rocks. The broken mass slopes to the NE. and forms a dark black cap to the peak.

"Station mark: An aluminum bench mark tablet set in one of the largest masses of the rock, over which a rock cairn 6 ft. high was built."

PRE-1927 N.A.D.

Latitude 33°26'09.23" Longitude 110°46'02.26"

NAD 83 VALUES AVAILABLE

FILE COPY

5/5/59 hme .

Arizona (164)^p

Gila County

CARLOTA

1927 N.A.D. (Adj.)

B.H. Yoakum, 1944

R.G. Thompson, 1946

Books: PH 2, H 160

Located about 12.6 mi. (by rd. and trail) W. of P.O. in Miami; about 1.5 mi. (by trail) N. of the Carlota Mine, on the most northerly and highest of a series of rocky tops on ridge lying between Pinto Creek and Powers Gulch. The summit consists of two distinct, flat-topped rock crags separated by a break about 5 ft. deep, the station is between two large, flat-topped rocks forming the NW. end of the summit, and is 1.5 ft. lower in elevation than the tops of these rocks.

To reach from P.O. in Miami, drive W. on U.S. Highways 60 and 70 for 4.8 mi. to forks of Castle Dome Rd. in divide; turn right on Castle Dome Rd. and go 2.35 mi. to forks of Pinto Creek Rd.; turn left on Pinto Creek Rd. and go 2.1 mi. to forks of rd. leading to Carlota Mine; take left fork and go 1.8 mi. to Carlota Mine; leave truck near mine and follow trail N. along E. slope of ridge to gate in fence line in a saddle; go through gate and around N. side of knoll over which fence passes, through a saddle and to S. of second knoll, thence through another saddle, and across head of draw, and climb to top of highest peak and station.

Station mark: Standard tablet, stamped "CARLOTA 1944", cemented in small rock in place.

Reference mark No. 1: Drill hole in large flat-topped rock, 5.86 ft. from station mark in azimuth 208°40'.

Reference mark No. 2: Drill hole in large flat-topped rock, 20.80 ft. from station mark in azimuth 286°36'.

Reference mark No. 3: Small drill hole in large flat-topped rock, (probably mine survey station) 2.89 ft. from station mark in azimuth 9°30'.

ARIZONA ZONE CENTRAL

ARIZONA ZONE EAST

V.A. Elevation: 4282 ft.

X=780,238.01

X=246,136.51

Y=873,603.59

Y=873,381.86

Latitude: 33°23'53.390" Longitude: 110°59'54.454"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Barnes	200°48'36.57"	20°49'46.15"	30,105.98
Cone	213 45 51.83	33 46 44.62	14,620.24
Webster (USGS)	218 43 50.77	38 45 35.55	25,761.66
Needle	278 54 33.56	98 56 44.94	20,486.45
BM 7M	286 22 02.40	106 22 58.33	8,980.96

NAD 83 VALUES AVAILABLE

FILE COPY

3/20/69 blm

FILE COPY

ARIZONA (164)

Gila County

CENTER STATION

PRE-1927 N.A.D.

Thomas Winsor, 1899-1900

Book: 8515

Described in Bulletin 201, p. 130 as follows:

"About 200 ft. SW. of summit of ridge extending in NE direction from the Buffalo Mine, about 1,800 ft. from Buffalo Mine and about 1,900 ft. from the Gray Mine.

"Station mark: A bronze tablet cemented in rock."

PRE-1927 N.A.D.

Latitude $33^{\circ}25'14.60''$ Longitude $110^{\circ}47'00.94''$

NAD 83 VALUES AVAILABLE

Not plotted on GCD

5/5/59 hme *hme*

FILE COPY

Arizona (164)

Gila County

COPPER

1927 N.A.D. (Adj.)

E.L. Nelson, 1947

Book: PH 2

Located about 2.0 mi. (airline) NE. of Hagens' Ranch; about 0.75 mi. SE. of old abandoned Globe-Copper Mine; on the E. and highest one of two dark colored tops, about 300 ft. S. of an E-W. fence running over N. end of top; on the highest point, about 12 ft. SW. of two large boulders that are about 5 ft. higher than tablet.

To reach from Hagens' Ranch, take rd. W. about 3.5 mi. to point where rd. leaves Lyons Fork Creek (near old Globe-Copper Mine). Leave truck and climb brushy ridge SE. to highest point and station.

Station mark: Standard tablet, stamped "1947", cemented in boulder in place.

Reference mark No. 1: Drill hole in large boulder, 33.7 ft. from station mark in azimuth 166°31'.

Reference mark No. 2: Drill hole in large flat-topped boulder, 19.5 ft. from station mark in azimuth 355°11'.

ARIZONA ZONE CENTRAL

V.A. Elevation: 3973 ft.

X=797,485.82

Y=831,095.19

ARIZONA ZONE EAST

X=262,667.87

Y=830,591.05

Latitude: 33°16'51.292" Longitude: 110°56'35.714"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Hagen	22°24'12.67"	202°23'29.55"	17,525.16
Hutton	138 31 37.67	318 29 59.80	22,836.31
Madera	226 15 07.67	46 17 32.81	31,039.67

NAD 83 VALUES AVAILABLE

FILE COPY

3/20/69 blm

Arizona (164) *8*

Gila County

CONE

1927 N.A.D. (Adj.)

B.H. Yoakum, 1944

R.G. Thompson, 1946

Books: PH 2, H 160

Located about 1.5 mi. (airline) MNW. of Porphyry Mtn. (Castle Dome Copper Co. strip mining operations); on a prominent, isolated cone peak; on highest part of summit, at extreme N. end.

To reach from Castle Dome Copper Co. powder magazine, which is about 0.25 mi. N. of their Porphyry Mtn. strip mining operations, walk across-country.

Station mark: Standard tablet stamped "CONE 1944", cemented in sloping face of natural rock about flush with ground surface.

Reference mark No. 1: Cross chiseled in natural rock outcrop in E. face of rock on summit, 32.25 ft. from station mark in azimuth $10^{\circ}09'$.

Reference mark No. 2: Cross chiseled in natural rock outcrop in sloping rock on bench to W., 32.20 ft. from station mark in azimuth $95^{\circ}02'$.

ARIZONA ZONE CENTRAL

X=788,255.98

Y=885,828.97

ARIZONA ZONE EAST

X=254,358.81

Y=885,470.39

V.A. Elevation: 4719 ft.

Latitude: $33^{\circ}25'53.629''$ Longitude: $110^{\circ}58'18.580''$

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Craig	$15^{\circ}09'16.41''$	$195^{\circ}08'27.20''$	29,013.55
Carlota	$333^{\circ}46'44.62$	213 45 51.83	14,620.24
Gov't Hill	75 02 24.12	254 58 28.27	37,578.64
Pinto	103 54 14.28	283 49 24.14	45,946.76
Pine	119 11 50.36	299 07 12.53	48,880.17
Horrell	145 43 19.78	325 41 48.28	24,957.21
Barnes	189 08 50.99	9 09 07.74	16,192.98
Webster (USGS)	225 11 42.24	45 12 34.23	11,267.62
Needle	321 41 37.24	141 42 55.88	19,536.06
BM 7 M	358 05 53.43	178 05 56.60	14,693.25

NAD 83 VALUES AVAILABLE

FILE COPY

4/1/69 blm *ck*

Arizona (164)

Pinal County

CRAIG

1927 N.A.D.

B.H. Yoakum, 1944
R.G. Thompson, 1946

Books: PH 2, H 160

Located about 1.0 mi. W. of point where U.S. Highways 60 and 70 cross the Gila-Pinal County line; 0.75 mi. N. of Pinal Ranch; on rocky top of main divide between Pinto Creek and Queen Creek drainages; 7 ft. N. of center of highest part of summit, which is a bare flat, about 15 ft. in diameter with boulders and clumps of brush at its outer edges. Peak is visible from the Pinal Ranch by looking through a low saddle in ridge to the S. of station.

To reach from the Gila-Pinal County line crossing on U.S. Highways 60 and 70, follow highway SW. for 0.7 mi. and turn right off highway at forks of rd. leading through cattleguard (at Y.S. Clark mailbox); follow this rd. 0.25 mi. to forks, and leave truck; bear left W. and go through low saddle and through fence at corner by juniper tree; bear right and go up drain for short distance, then cross drain and climb to summit and station.

Station mark: Standard tablet stamped "CRAIG 1946" cemented in boulder flush with ground.

Note: Original station a copper nail and washer replaced in 1946.

Reference mark No. 1: Drill hole in large projecting boulder, 9.03 ft. from station mark in azimuth 65°33'.

Reference mark No. 2: Drill hole in large projecting boulder, 7.05 ft. from station mark in azimuth 307°15'.

ARIZONA ZONE EAST

X= 246,557.83

Y= 857,526.12

ARIZONA ZONE EAST

X= 780,925.71

Y= 857,756.91

V.A. Elevation: 5117 ft.

Latitude 33°21'16.554"

Longitude 110°59'47.995"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Granite Mtn (C&GS)	7°22'21.48"	187°21'23.07"	70,560.79
Picket Post (C&GS)	54 01 35.26	233 56 18.02	60,625.07
Kings Crown	69 35 05.71	249 32 39.86	24,023.40
Carlota	178 01 16.52	358 01 12.97	15,861.74
Cone	195 08 27.20	15 09 16.41	29,013.55
BM 7/M	211 12 17.92	31 13 10.27	15,574.71
Needle	237 13 22.61	57 15 30.35	23,420.46
BM 3 M	255 37 15.00	75 39 09.40	18,214.13
Madera	277 50 14.13	97 54 25.11	39,101.34
Pinal (C&GS)	296 00 31.05	116 06 19.39	59,904.26
Hutton	352 59 51.35	172 59 59.08	9,776.98

NAD 83 VALUES AVAILABLE

FILE COPY

4/11/69 cjl

alt

Arizona (164)

Gila County

DANCE HALL (Roof) (n)

1927 N.A.D.

B. H. Yoakum, 1944

Books: H 159, H 160

Located 8.0 mi. W. along U.S. Highways 60 and 70, from post office in Miami, 1.25 mi. E. along U.S. Highways 60 and 70, from Gila-Pinal county line, at "Top of the World" tavern and service station on N. side of hwy., back of service station.

Station mark and Signal: Center of small ventilator at center of cone roof over circular dance floor.

V.A. Elevation: 4671 ft.
(Center of roof at a point 1.5 ft. below edge of cover over small ventilator)

Latitude: 33°21'19.46"

Longitude: 110°57'50.75"

NAD 83 VALUES AVAILABLE

(n) = Not Occupied

12/19/60 hd ce

FILE COPY

Base: C & G S Stations, Graham-Line

FIVE POINT MOUNTAIN

Pinal & Gila Counties
Arizona (164)

Intersected by A. H. Schadler, 1935

Eight miles southwest of Miami, Arizona, which is the highest points of Five Point Mtn., on line between Pinal and Gila Counties.

From Miami, Arizona, take U. S. Highway #180 westwardly approximately 10 miles to Pinal Ranch; thence, take road to southeast approximately $1\frac{1}{2}$ miles to top of saddle between Five Point and Hutton Peaks, about a one mile climb to station.

Station Mark: A standard U. S. Dept. of Agri. tablet in granite rock.

Signal: Flag in rock mound.

NAD 83 VALUES AVAILABLE

Datum: N. A. 1927

[Latitude 33° 20' 31.32" Longitude 110° 58' 26.69"]

To Station---	Azimuth			Back Azimuth			Distance	
	°	'	"	°	'	"	Log Meters	Miles
Signal Peak	292	44	07.91	112	48	42.37	4.1466714	8.710
Apache	224	23	14.78	44	30	55.22	4.4887930	19.150

Handwritten: ~~This is on the line between Pinal and Gila Counties~~
Hutton Peak

FILE COPY

Arizona (164)

Pinal County

HUTTON

1927 N.A.D. (Adj.)

R.G. Thompson, 1946
K.B. Miller, 1963

Books: PH 910, PH 2

Located 9.0 mi. (airline) SW. of Miami; approximately 6.0 mi. NE. of Superior.

To reach from Miami P.O. go W. on U.S. Highways 60-70 for 8.8 mi. to a dirt rd. on left; take left rd. S. for 0.9 mi. to a fork in rd.; take left fork for 0.6 mi. to a fork; take left fork S. for 0.45 mi. to fork; take right fork S. for 0.25 mi. to fork in rd.; take right fork W. for 0.7 mi. passing through gate. Leave truck and climb in a NNE. direction, once on top go in a westerly direction passing a pond on the S. side and continue in a westerly direction to top of rocky peak and station. A 40 minute pack.

Station mark: A standard tablet stamped "HUTTON 1946 VA 5608" in large boulder.

Reference mark No. 1: Drill hole in boulder, 25.5 ft. from station mark in azimuth $354^{\circ}28'$. (Reported destroyed in 1967).

Reference mark No. 2: Drill hole in boulder, 40.4 ft. from station mark in azimuth $128^{\circ}16'$.

ARIZONA ZONE EAST
X=247,672.42
Y=847,813.15

ARIZONA ZONE CENTRAL
X=782,203.22
Y=848,063.84

V.A. Elevation: 5615 ft.
(Checked, 1963)

Latitude: $33^{\circ}19'40.544''$ Longitude: $110^{\circ}59'33.948''$

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Granite Mtn. (C&GS)	$9^{\circ}39'00.47''$	$189^{\circ}37'54.38''$	61,138.11
Apache	41 26 29.49	221 24 14.87	13,862.11
Picket Post (C&GS)	62 43 47.40	242 38 22.56	56,540.15
BM 107	70 34 42.50	250 33 17.87	13,862.11
Kings Crown	93 11 57.64	273 09 24.12	23,743.58
Iron Mtn.	125 15 30.00	305 09 39.70	66,084.18
Govt. Hill	133 06 28.87	313 03 14.80	40,976.23
Granite	163 26 00.53	343 23 44.92	73,100.94
Craig	172 59 59.08	352 59 51.35	99,776.98
Cone	189 36 50.19	9 37 31.65	38,247.37
Madera	263 21 34.94	83 25 38.11	37,797.92
Doak	308 04 53.35	128 09 04.92	49,460.65
Hagen	345 44 55.44	165 45 50.10	34,366.56

NAD 83 VALUES AVAILABLE

FILE COPY

4/2/69 blm 

Base: C. & G. S. Stations, Graham-Line

HUTTON'S PEAK

Pinal County, Arizona (164)

Crack

Occupied by A. H. Schadler - 1935

Near Oak Flat on high conical peak, about 9 miles southwest of Miami, Arizona.

From Miami, Arizona, take U. S. Highway #180 west for approximately 9 miles; turn on side road southeast about 1 mile to low saddle between Five Point Mountain and Hutton's Peak. About 1 mile easy climb from here.

Station Mark: Standard W. S. F. S. tablet in large boulder, stamped Hutton Peak -1935.

Signal: White Flag on 8-ft. pole.

Datum: N. A. 1927

NAD 83 VALUES AVAILABLE

[Latitude 33 19 42.62 Longitude 110 59 39.61]

To Station---	Azimuth			Back Azimuth			Distance	
	°	'	"	°	'	"	Log Meters	Miles
Apache Peak	224	53	25.59	45	01	46.14	4.5212784	20.635
Signal Peak	284	47	48.89	104	53	03.37	4.1853799	9.522

FILE COPY

Arizona (164)

Gila County

MADERA

1927 N.A.D. (Adj.)

B.H. Yoakum, 1944
R.G. Thompson, 1946
K.B. Miller, 1963

Books: H 160, PH 2, PH 910

Located about 4 mi. S. and 6 mi. W. of post office in Globe; on a prominent timbered peak known as Madera Peak. There is an abandoned 50 ft. steel tower in concrete footings centered over station mark.

To reach from post office in Globe, proceed westerly along U.S. Highways 60-70 for 3.7 mi.; thence left southerly along rd. to Signal Peak Lookout Tower 6 mi.; thence right at main junction on ridge 5.2 mi. to junction and sign reading "MADERA PEAK 4 MILES"; thence right along this rd. 4.5 mi. to summit of Madera Peak. There are two small buildings and an antenna on this peak.

Station mark: Standard tablet stamped "MADERA 1944", cemented in large boulder buried in ground under center of lookout house on tower.

Reference mark No. 1: Inside corner of SW. concrete pier 7.16 ft. from station mark in azimuth 46°01'.

Reference mark No. 2: Inside corner of NW. concrete pier 7.13 ft. from station mark in azimuth 134°33'.

Reference mark No. 3: Inside corner of NE. concrete pier 6.90 ft. from station mark in azimuth 224°51'.

Reference mark No. 4: Inside corner of SE. concrete pier 6.96 ft. from station mark in azimuth 316°25'.

ARIZONA ZONE CENTRAL

ARIZONA ZONE EAST

V.A. Elevation: 6647 ft.

X=819,707.51

X=285,248.82

Y=852,767.19

Y=851,886.18

Latitude: 33°20'23.569" Longitude: 110°52'11.425

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Granite Mtn (C&GS)	36°32'38.61"	216°27'29.87"	80,392.71
Hagen	37°43'52.64"	217°40'44.43"	47,598.85
Picket Post (C&GS)	71°02'29.35"	250°53'01.51"	92,874.06
Hutton	83°25'38.04"	263°21'34.87"	37,798.22
Kings Crown	87°13'15.12"	267°06'38.40"	61,326.74
Craig	97°54'25.11"	277°50'14.13"	39,101.34
BM 3 M	115°06'47.43"	295°04'30.78"	23,281.31
Needle	133°28'19.37"	313°26'15.99"	26,212.45
Sleeping Beauty	173°34'42.93"	353°34'12.16"	42,339.35
Miami	176°46'16.07"	356°46'05.72"	28,319.77
BM 4300	221°45'48.30"	41°48'41.52"	40,067.10
Mine (C&GS)	221°48'18.72"	41°51'44.35"	47,504.56
Pinal (C&GS)	324°16'00.38"	144°17'37.90"	25,814.63

NAD 83 VALUES AVAILABLE FILE COPY

4/2/69 blm

Arizona (164)

Gila County

MINERAL MONUMENT NO. 5

1927 N.A.D.

B. H. Yoakum, 1944

Books: H 159, H 160

Located about 10.0 mi. (by rd.) N. of Globe, about 3.3 mi. (by rd.) N. of Radium, on S. side of Nugget Wash, on prominent, bare summit about 1.25 mi. NW. of Ramboz Peak, prominent higher peak. Station is on extreme E. end of highest part of summit about 800 ft. W. of an old rd. passing through saddle.

To reach station from Radium (a stock loading station on Southern Pacific RR.), take rd. E. of draw at sign "INDIAN MINING CO." and follow mining rd. for 2.8 mi., keeping all main left forks, to point where rd. enters draw near old dwelling sites and a cement well in draw; rd. washed out beyond this point and truck cannot be driven farther at this time (1944); from end of truck travel continue on old rd. to summit of ridge in saddle; leave rd. and walk W. up ridge to summit and station.

Alternate route from Radium is to take left fork, X-ing draw and climbing to crest of ridge, thence follow most used rd.; a good part of way up a dry wash, for 3.0 mi. to end of truck travel near the cement well in draw, as described above. This latter route is best in dry weather.

Station mark and Signal: Pole wedged in a crack in a large boulder which is scribed on W. face "U.S.M.M. No. 5".

Picture Point 4-74A, center of old rd. at highest point where it passes over ridge in saddle, is 805.5 ft. (taped distance) from station in azimuth $281^{\circ}40'16''$. V.A. Elevation at Picture Point is 3971 ft.

V.A. Elevation: 4054 ft.
(Ground at W. edge of boulder)

Latitude: $33^{\circ}28'23.527''$

Longitude: $110^{\circ}47'59.457''$

NAD 83 VALUES AVAILABLE

12/20/60 hd *cc*

FILE COPY

Arizona (164) *9*

Gila County

NEEDLE

1927 N.A.D. (Adj.)

B.H. Yoakum, 1944

Book: H 160

Located about 7.0 mi. W. of P.O. in Miami, about 1.5 mi. N. of U.S. Highways 60 and 70, 0.5 mi. E. of rd. leading to Castle Dome Mine; on highest part of Needle Mtn., on the SE. one of two knolls forming the main summit; in rock 3.5 ft. above natural ground surface at highest point.

To reach from P.O. in Miami, follow U.S. Highways 60 and 70 W. for 4.8 mi. to Castle Dome Rd. fork in saddle; turn right (N.) on Castle Dome Rd. for 1.65 mi. to summit; turn right off rd. and leave truck; walk E. along divide, cross fence to N. side and follow up ridge to summit and station.

Station mark: Standard tablet stamped "NEEDLE 1944", cemented in top of large conglomerate rock about 10 ft. long and 6 ft. wide.

Reference mark No. 1: Standard RM tablet cemented in solid rock of summit at ground level, 29.05 ft. from station mark in azimuth 267°18'.

Reference mark No. 2: Standard RM tablet cemented in solid rock of summit at ground level, 24.80 ft. from station mark in azimuth 309°55'.

ARIZONA ZONE CENTRAL
X=800,504.41
Y=870,609.48

V.A. Elevation: 5058 ft.

ARIZONA ZONE EAST
X=266,349.14
Y=870,047.57

NAD 83 VALUES AVAILABLE

Latitude 33°23'21.936" Longitude 110°55'55.766"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Craig	57 15'30.35"	237°13'22.61"	23,420.46
Kings Crown	63 31 06.21	243 26 32.59	47,168.28
Gov't. Hill	96 39 14.68	276 34 00.36	48,740.87
Carlota	98 56 44.94	278 54 33.56	20,486.45
Iron Mtn.	102 18 28.43	282 10 37.69	74,157.18
Granite Mtn.	140 30 27.58	320 26 11.58	61,819.70
Cone	141 42 55.88	321 41 37.24	19,536.06
Horrell	143 58 31.02	323 55 40.87	44,466.18
Webster (USGS)	169 59 35.08	349 59 08.38	23,631.42
Sleeping Beauty	210 41 23.78	30 42 56.57	27,964.78
Miami (C&GS)	239 31 36.14	59 33 29.29	20,213.60
Mine (C&GS)	251 02 37.54	71 08 06.84	53,584.83
Madera	313 26 15.99	133 28 19.37	26,212.45

FILE COPY

4/18/69 slb *file*

FILE COPY

ARIZONA (164)

Gila County

NORTHEAST

~~NORTH EAST STATION~~

PRE-1927 N.A.D.

Thomas Winsor, 1899-1900

Book: 8515

Described in Bulletin 201, p. 130 as follows:

"Summit of highest hill, about 0.9 mi. SE. of Black Hawk triangulation station.

"Station mark: A bronze tablet cemented in rock in place."

PRE-1927 N.A.D.

Latitude 33°25'30.09" Longitude 110°45'29.39"

NAD 83 VALUES AVAILABLE

Not Plotted on GCD

5/5/59 hme *hme*

FILE COPY

Arizona (164)

Gila County

NUGGET

1927 N.A.D. (Adj.)

B.H. Yoakum, 1944

C.G. Merrick, 1965

Books: H 159, H 160, PH 1098, PH 1186

M.J. Stephens, 1966

Located 7.0 mi. N. and 1.0 mi. E. of Globe; on a isolated summit at head of S. branch of Nugget Wash, a large wash which empties into Pinal Creek at a point about 6.0 mi. (airline) NW. of Globe, and about 0.5 mi. NW. of Bixby Ranch house. The station is near the extreme SE. end of highest part of summit.

To reach from P.O. in Globe, follow rd. leading up Copper Gulch for 3.3 mi. to summit; take left (main) fork, for 0.5 mi., continue straight ahead at fork right onto old RR. grade; go 0.55 mi. and keep straight ahead at fork to left up draw; go 0.25 mi. and take left fork; go 0.6 mi. and cross cattleguard; go 0.3 mi., take right fork (little used rd.) into draw; go 1.85 mi., pass through wire gate; go 0.1 mi., crossing a main draw; go up over ridge thence down into a branch of last draw crossed; cross this draw and bear right up ridge to summit; descend into draw running E., go down this draw for about 0.3 mi., cross over low point of ridge passing through cattleguard into another draw; turn left up this draw for a short distance, thence out on right side and up a ridge thence back into same draw last crossed; go up this draw to a point 0.3 mi. above earth tank; turn left off rd., cross draw, keep straight ahead across country and go through saddle in low ridge into a branch draw; turn right up this draw and drive to a gate in N-S. fence line ; leave truck and walk in SW. direction around end of ridge and into draw; station is on the summit just across this draw.

Station mark: Standard tablet stamped "NUGGET 1944", cemented in top of solid rock.

Reference mark No. 1: Standard reference mark tablet cemented in rock SW., 32.01 ft. from station mark in azimuth 106°57'.

Reference mark No. 2: Standard reference mark tablet cemented in large rock 36.19 ft. from station mark in azimuth 166°05'.

ARIZONA ZONE EAST

X=315,617.4

Y=908,208.9

V.A. Elevation: 5147 ft.

(Checked, 1966)

Latitude: 33°29'42.710" Longitude: 110°46'17.328"

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Miami (C&GS)	48°14'18.26"	228°10'52.67"	42,377.90
Sleeping Beauty	67 27 06.15	247 23 20.02	37,612.97
Babich	91 12 38.23	271 08 31.00	37,947.66
Apache Mid Peak (C&GS)	208 38 45.23	28 39 43.88	18,752.97
Chrome (C&GS)	262 05 46.10	82 08 21.46	24,065.33
Mine (C&GS)	355 30 43.60	175 30 54.39	21,185.65

NAD 83 VALUES AVAILABLE

FILE COPY

3/21/69 blm

FILE COPY

ARIZONA (164)

Gila County

PINAL MOUNTAIN

PRE-1927 N.A.D.

A. H. Thompson, 1899

Books: 2105-2106

Described in Appendix to 21st Annual Report, p. 340,
as follows:

"On the NW. high point of Pinal Mountain.

"Station mark: An aluminum bench mark tablet set in
a large rock.

"Reference mark: A trimmed dead tree 9.75 ft. distant
from the station."

PRE-1927 N.A.D.

Latitude $33^{\circ}17'30.80''$ Longitude $110^{\circ}50'11.44''$

NAD 83 VALUES AVAILABLE

Not Plotted on GCD

5/5/59 hme 189

FILE COPY

164

Base: C. & G. S. Stations, Graham-Line

TOWNSHIP CORNER
SECTION CORNER ON TOWNSHIP LINE
Sec. 1-6, T. 1 S., R. 15-16E

Gila County, Arizona (164)

Three Pointed by A. H. Schadler - 1933

From Globe, take U. S. Highway #180 east about 1 1/2 miles; turn off to Packing Plant 1/4 mile; thence, turn west to large steel water tank. Corner is about 300 feet west of tank.

Station Mark: Standard G. L. O. tablet on iron pipe.
Stamped, S-1 - S-6
T. 1 S, R-15-16E.

NAD 83 VALUES AVAILABLE

Datum: N. A. 1927

[Latitude 33° 22' 42.53" Longitude 110° 45' 25.09"]

To Station---	Azimuth	Back Azimuth	Distance	
			Log Meters	Miles
	° ' "	° ' "		

FILE COPY

FILE COPY - ROOM 313

Arizona (164)B

Gila County

SLEEPING BEAUTY

1927 N.A.D.

B.H. Yoakum, 1944
K.B. Miller, 1963

Books: H 150, PH 910

Located about 11.0 mi. (airline) NW. of P.O. in Globe; about 4.0 mi. N. of Miami; on highest part of summit of Sleeping Beauty Peak; near center of highest part of summit which consists of a broken, rocky backbone extending in a NW-SE. direction; on broadest part, near S. end of the middle one of three prominent rock ledges.

To reach from P.O. in Globe, follow Globe-Miami Highway (U.S. Highways 60 and 70) for 3.5 mi. to junction with Apache Trail Highway (State Highway 88); turn right on Apache Trail and follow for 2.6 mi. to a fork on left, after crossing concrete bridge over main draw, turn left and follow rd. up draw for 2.8 mi. to a fork on hillside 0.55 mi. after crossing a bridge over drain near a tool shed; turn sharp right and follow the main rd. which switchback up steep grade for 1.0 mi. to a sharp bench on summit near point of ridge. Leave truck, walk NW. into saddle, thence around head of steep part of drain on right, thence cross drain and go up spur ridge, through a slight saddle, thence up steep, rocky slope to summit and station. About 1 hour climb.

Station mark: Standard tablet stamped "SLEEPING BEAUTY 1944", cemented in top of large rock ledge.

Reference mark No. 1: Standard reference mark tablet cemented in natural rock near beginning of steep break on SW. slope, 52.05 ft. (slope distance) from station mark in azimuth $44^{\circ}41'$.

Reference mark No. 2: Standard reference mark tablet cemented in natural rock in top of first ledge to the SE., 29.85 ft. (slope distance) from station mark in azimuth $318^{\circ}45'$.

ARIZONA ZONE CENTRAL
X=814,549.27
Y=894,791.79

ARIZONA ZONE EAST
X=280,798.13
Y=893,989.00

V.A. Elevation: 5147 ft.
(Checked 1963)

Latitude: $33^{\circ}27'19.826''$ Longitude: $110^{\circ}53'07.312''$

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Needle	$30^{\circ}42'56.57''$	$210^{\circ}41'23.78''$	27,964.78
Webster (USGS)	87 36 26.79	267 34 27.21	18,395.75 ✓
HM 11 M	104 49 12.18	284 46 53.94	21,969.79
Barnes	107 01 12.13	286 58 37.24	24,883.01
Babich	168 03 43.41	348 03 22.45	15,557.84
Alamo	207 04 43.79	27 05 38.33	18,392.44
Nugget	247 23 20.02	67 27 06.15	37,612.97

NAD 83 VALUES AVAILABLE

FILE COPY

Arizona (164)

Gila County

SLEEPING BEAUTY

1927 N.A.D.

B.H. Yoakum, 1944

Books: H 160, PH 910

K.B. Miller, 1963

<u>To Station</u>	<u>Azimuth</u>	<u>Back Azimuth</u>	<u>Feet</u>
Mine (C&GS)	280°21'51.16"	100°25'47.91"	37,006.56"
BM 4300	291 11 27.78	111 14 52.07	33,702.94
Pinal (C&GS)	342 32 32.44	162 34 40.85	66,068.86
Miami (C&GS)	347 10 16.87	167 10 37.29	14,151.73
Madras	353 34 12.16	173 34 42.93	42,339.35

Arizona (164)

Gila County

~~4-96B~~ 4-96B

1927 N.A.D.

B. H. Yoakum, 1944

Books: H 159, H 160

Located about 10.0 mi. (by rd. and trail) NW. of Globe, about 2.25 mi. (air line) N. of Miami, 1.0 mi. N. of old Black Warrion Mine, on prominent summit on N. side of Lost Gulch.

To reach station from P.O. in Globe, follow Globe-Miami Highway (U.S. Highways 60 and 70) for 3.5 mi. to jct. with Apache Trail Highway, go N. on Apache Trail for 2.6 mi. to forks of rd. up draw, just after X-ing bridge over main draw; follow main traveled rd. up draw for 2.8 mi. to forks on slope of hill; keep left on main traveled rd. and go 0.7 mi. to summit of ridge; leave truck and walk S. along ridge to highest point and station.

Station mark: Existing iron stake driven in ground.
(Probably a mine survey control station)

V.A. Elevation: 4272 ft.
(Ground at base of iron stake)

Latitude: 33°26'05.732"

Longitude: 110°52'27.011"

NAD 83 VALUES AVAILABLE

12/20/60 hd

FILE COPY

Arizona (164)

Gila County

5-4 B

1927 N.A.D. (Unadj.)

B. H. Yoakum, 1944

M. J. Stephens, 1966

Books: H 160, PH 1186

Located 11 mi. (by rd. and foot travel) N. of P.O. in Globe, about 1 mi. (airline) SW. of an earth tank near the head of Quartzite Canyon, on the highest part of spur ridge lying between branches of this canyon. Station is near middle of highest part of summit, which consists of rough, rock backbone, and is 3.75 ft. SW. of, 2.75 ft. lower than highest point of natural rock on summit.

To reach from Globe P.O., drive NE. on Highway 60 for 9.1 mi. to a rd. left through gate; follow rd. for 1.1 mi. to a rd. fork; take left fork through wire gate 0.8 mi. to a rd. fork approaching a stock tank and windmill; take left fork 0.25 mi. to a wire gate; continue through gate 0.8 mi. to a rd. fork; take right fork 0.5 mi. to a rd. fork at a fenced stock tank; take left fork around N. side of stock tank for about 0.1 mi., then turn right up dim rd. for 0.6 mi. to wire fence and end of rd.; then travel overland SSW. for about 0.3 mi. to a saddle in a wooded ridgeline; walk up into saddle and bear left (S.) to highest point on ridge and station.

Station mark and Signal (1944): Black over white flags on a pole anchored between two stubs of oak bushes and surrounded by a pile of rocks. Centerline of flags is 8.7 ft. above natural ground at station.

Reference mark No. 1: Copper nail without washer driven in blaze on limb of oak tree on NE. slope about 7 ft. above ground, 15.87 ft. from station mark in azimuth 225°03'.

Reference mark No. 2: Copper nail without washer driven in blaze on small oak tree on summit, 28.78 ft. from station mark in azimuth 301°28'.

Signal (1966): Flag over a cross-target on pole centered over station mark.

Signal data:	TF	10.2 ft.
	BF	8.0
	TXT	7.8
	BXT	5.2

FILE COPY

Photo No.: Paneled

ARIZONA ZONE EAST
X=319,014
Y=906,251

V.A. Elevation: 5161 ft.

NAD 83 VALUES AVAILABLE

$\Delta \alpha = -0^{\circ}19'39''$

5-4 B

	LAT.	STATION	AZIMUTH	LONG.	BACK AZIMUTH	DISTANCE
Mine (C&GS)	33° 29'	23.531"	5° 13'	110° 45'	185° 12'	8.157" 19262.01
Apache Mid Peak (C&GS)			196° 53'	15° 53'		12.306" 48.734" 19224.27
Chrome (C&GS)			255° 36'	75° 38'		.176" 13.322" 21092.15

5/12/66 do. alk

Arizona (164)

Gila County

5-43 A

1927 N.A.D. (Sec.)

B.H. Yoakum, 1944

K.B. Miller, 1963

Books: H 160, PH 910

Located 3.0 mi. (by rd.) S. of Miami, on a prominent low knoll on main dividing ridge between Solitude Gulch and Bloody Tanks Wash; in sec. 31, T 1 N, R 15 E; about 200 ft. E. of rd. which traverses the ridge in N-S. direction, and 80 ft. N. of fence line, near center of highest part of summit.

To reach from U.S. Highways 60 and 70 in Miami, go S. on first street E. of P.O. for about 0.25 mi. and turn sharp left out of draw; thence follow the main traveled winding rd. S. up to and along summit of ridge for 2.75 mi. to a gate across private rd. on W. side of main rd. Station is on knoll about 300 ft. S. from this gate.

Station mark: Copper nail with washer cemented in bluish colored boulder naturally embedded in earth. (Nearly flush with ground).

Reference marks: Fencepost at junction of 3-way fences, 81.2 ft. from station mark in azimuth $340^{\circ}42'$. Gatepost, between gate and cattleguard across main rd. 284 ft. from station mark in azimuth $43^{\circ}11'06''$.

ARIZONA ZONE EAST

X=285,524.76

Y=866,166.77

ARIZONA ZONE CENTRAL

X=819,743.56

Y=867,051.32

V.A. Elevation: 4268 ft.

Latitude: $33^{\circ}22'44.878''$ Longitude: $110^{\circ}52'09.308''$

NAD 83 VALUES AVAILABLE

FILE COPY

3/21/69 blm *cl*

Arizona (164)

Pinal County

5-49B

1927 N.A.D. (Secondary)

B.H. Yoakum, 1944

Books: H159-H160

Located about 1.0 mi. W. of point where U.S. Highways 60 and 70 cross the Gila-Pinal county line; 0.75 mi. N. of Pinal Ranch, on rocky top on main divide between Pinto Creek and Queen Creek drainages. Station is 7 ft. N. of center of highest part of summit which is a bare flat about 15 ft. in diameter with boulders and clumps of brush at its outer edges. Peak is visible from the Pinal Ranch by looking through a low saddle in ridge to the S. of station.

To reach station from the Gila-Pinal county line crossing on U.S. Highways 60 and 70, follow hwy. SW. for 0.7 mi. and turn right off hwy. at forks of rd. leading through cattleguard (at Y. S. Clark mail box); follow this rd. 0.25 mi. to forks and leave truck; bear left (W.) and go through low saddle and through fence at corner by juniper tree; bear right and go up drain for short distance then cross drain and climb to summit and station.

Station mark: A copper nail and washer buried in ground, 2 or 3 inches beneath surface, in an angle formed by a 3-piece boulder, and 0.15 ft. out from point of arrow chiseled in boulder.

Reference mark No. 1: Drill hole in large projecting boulder 9.03 ft. from station mark in azimuth $65^{\circ}33'$.

Reference mark No. 2: Drill hole in large projecting boulder 7.05 ft. from station mark in azimuth $307^{\circ}15'$.

V.A. Elevation: 5116 (Ground surface at highest point)

Latitude: $33^{\circ}21'16.53''$

Longitude: $110^{\circ}59'48.00''$

NAD 83 VALUES AVAILABLE

FILE COPY

5/5/59 mm *1mk*

Arizona (164)

Gila County

~~5-74A~~ 5-74A

1927 N.A.D.

B. H. Yoakum, 1944

Books: H 159, H 160

Located about 1.5 mi. (air line) NE. of Globe P.O., on first prominent summit on ridge extending NE. from Globe city limits. Station is on S. end of summit, 8 ft. S. from large, flat rock, which is highest point, and is midway between N. points of a patch of crescent shaped brush, and 0.3 ft. S. of small, sharp-pointed, projecting rock.

To reach from P.O. in Globe, go E. on Sycamore St. for 0.45 mi. to end of street; turn left and follow rd. along gravel ridge for 1.3 mi. to top of grade; turn right off rd. and follow dim track 0.05 mi. to foot of rocky knoll; continue on foot to top of knoll and station.

Station mark and Signal: A pole surrounded by a cairn.

Reference mark No. 1: Chiseled cross in natural rock on SW. slope of break, 45.2 ft. from station mark in azimuth $44^{\circ}30'$.

Reference mark No. 2: Chiseled cross in large, flat rock forming highest natural point of summit, 7.75 ft. from station mark in azimuth $156^{\circ}27'$.

Latitude: $33^{\circ}24'25.471''$

Longitude: $110^{\circ}45'48.955''$

NAD 83 VALUES AVAILABLE

12/20/60 hd *le*

FILE COPY

Arizona (164)

Gila County

~~P.P.~~ 5-80B

1927 N.A.D.

B. H. Yoakum, 1944

Books: H 159, H 160

Located about 1.5 mi. (air line) NW. of Miami, 1.0 mi. WSW. of Inspiration Village (store and post office), about 0.5 mi. E. of Inspiration Copper Co.'s Live Oak Mine (also known as Porphyry Mine), on prominent peak lying between Live Oak Gulch and Webster Gulch. Station is at extreme N. end of highest part of summit at NE. corner of a clump of oak brush, 10 ft. from center, which is the point in small circle on picture.

To reach station from Miami, follow USC&GS directions to reach triangulation station "MIAMI"; at point where this description reads "--turn R. across black bridge--"; continue straight ahead on paved rd. for 0.4 mi. to Inspiration Village; continue on main rd. into and up Webster Gulch for 1.85 mi. to rd. forks just after X-ing culvert; leave truck and climb E., X-ing RR. track, to summit and station.

Station mark: Existing iron rod driven in ground and projecting 4 ft. above surface, over which is an iron pipe 8 ft. long.

V.A. Elevation: 4399 ft.
(Ground at base of iron rod)

Latitude: 33°24'26.644"

Longitude: 110°54'02.181"

NAD 83 VALUES AVAILABLE

12/20/60 hd *ca*

FILE COPY

North American Datum Conversion
 NAD 27 to NAD 83
 NADCON Program Version 1.01

A2164

=====
 Transformation #: 1 Region: Conus

Station name: AZIMUTH

	Latitude	Longitude
NAD 27 datum values:	33 22 9.220	110 45 17.740
NAD 83 datum values:	33 22 9.423	110 45 20.131
NAD 83 - NAD 27 shift values:	.203	2.391(secs.)
	6.253	61.796(meters)
Magnitude of total shift:		62.112(meters)

Transformation #: 2 Region: Conus

Station name: BABICH

	Latitude	Longitude
NAD 27 datum values:	33 29 50.417	110 53 45.312
NAD 83 datum values:	33 29 50.605	110 53 47.721
NAD 83 - NAD 27 shift values:	.188	2.409(secs.)
	5.807	62.177(meters)
Magnitude of total shift:		62.448(meters)

Transformation #: 3 Region: Conus

Station name: BARNES

	Latitude	Longitude
NAD 27 datum values:	33 28 31.796	110 57 48.190
NAD 83 datum values:	33 28 31.985	110 57 50.605
NAD 83 - NAD 27 shift values:	.189	2.415(secs.)
	5.817	62.364(meters)
Magnitude of total shift:		62.635(meters)

Transformation #: 4 Region: Conus

Station name: BM "3 M 1944"

	Latitude	Longitude
NAD 27 datum values:	33 22 1.257	110 56 19.972
NAD 83 datum values:	33 22 1.456	110 56 22.382
NAD 83 - NAD 27 shift values:	.199	2.410(secs.)
	6.135	62.308(meters)
Magnitude of total shift:		62.609(meters)

Transformation #: 5 Region: Conus

Station name: BM "7 M 1944"

	Latitude	Longitude
NAD 27 datum values:	33 23 28.340	110 58 12.829
NAD 83 datum values:	33 23 28.536	110 58 15.243
NAD 83 - NAD 27 shift values:	.196	2.414(secs.)
	6.046	62.392(meters)
Magnitude of total shift:		62.685(meters)

Transformation #: 6 Region: Conus

Station name: BM "11 M 1944"

	Latitude	Longitude
NAD 27 datum values:	33 28 15.352	110 57 18.024
NAD 83 datum values:	33 28 15.541	110 57 20.438
NAD 83 - NAD 27 shift values:	.189	2.414(secs.)
	5.836	62.341(meters)
Magnitude of total shift:		62.614(meters)

Transformation #: 7 Region: Conus

Station name: BM "4300"

	Latitude	Longitude
NAD 27 datum values:	33 25 19.140	110 46 56.580
NAD 83 datum values:	33 25 19.338	110 46 58.975
NAD 83 - NAD 27 shift values:	.198	2.395(secs.)
	6.094	61.871(meters)
Magnitude of total shift:		62.170(meters)

Transformation #: 8 Region: Conus

Station name: BM "4694"

	Latitude	Longitude
NAD 27 datum values:	33 25 34.648	110 45 25.016
NAD 83 datum values:	33 25 34.846	110 45 27.408
NAD 83 - NAD 27 shift values:	.198	2.392(secs.)
	6.100	61.800(meters)
Magnitude of total shift:		62.101(meters)

Transformation #: 9 Region: Conus

Station name: BLACKHAWK BUTTE

	Latitude	Longitude
NAD 27 datum values:	33 26 9.230	110 46 2.260
NAD 83 datum values:	33 26 9.427	110 46 4.654
NAD 83 - NAD 27 shift values:	.197	2.394(secs.)
	6.068	61.829(meters)
Magnitude of total shift:		62.126(meters)

Transformation #: 10 Region: Conus

Station name: CARLOTA

	Latitude	Longitude
NAD 27 datum values:	33 23 53.390	110 59 54.454
NAD 83 datum values:	33 23 53.585	110 59 56.871
NAD 83 - NAD 27 shift values:	.195	2.417(secs.)
	6.008	62.470(meters)
Magnitude of total shift:		62.758(meters)

Transformation #: 11 Region: Conus

Station name: CENTER STATION

	Latitude	Longitude
NAD 27 datum values:	33 25 14.600	110 47 .940
NAD 83 datum values:	33 25 14.798	110 47 3.335
NAD 83 - NAD 27 shift values:	.198	2.395(secs.)
	6.096	61.874(meters)
Magnitude of total shift:		62.174(meters)

Transformation #: 12 Region: Conus

Station name: CONE

	Latitude	Longitude
NAD 27 datum values:	33 25 53.629	110 58 18.580
NAD 83 datum values:	33 25 53.822	110 58 20.995
NAD 83 - NAD 27 shift values:	.193	2.415(secs.)
	5.933	62.392(meters)
Magnitude of total shift:		62.674(meters)

Transformation #: 13 Region: Conus

Station name: COPPER (USGS)

	Latitude	Longitude
NAD 27 datum values:	33 16 51.292	110 56 35.714
NAD 83 datum values:	33 16 51.499	110 56 38.123
NAD 83 - NAD 27 shift values:	.207	2.409(secs.)
	6.370	62.329(meters)
Magnitude of total shift:		62.654(meters)

Transformation #: 14 Region: Conus

Station name: CRAIG

	Latitude	Longitude
NAD 27 datum values:	33 21 16.554	110 59 47.995
NAD 83 datum values:	33 21 16.753	110 59 50.411
NAD 83 - NAD 27 shift values:	.199	2.416(secs.)
	6.131	62.470(meters)
Magnitude of total shift:		62.770(meters)

Transformation #: 15 Region: Conus

Station name: DANCE HALL (ROOF) (n)

	Latitude	Longitude
NAD 27 datum values:	33 21 19.460	110 57 50.750
NAD 83 datum values:	33 21 19.660	110 57 53.163
NAD 83 - NAD 27 shift values:	.200	2.413(secs.)
	6.150	62.379(meters)
Magnitude of total shift:		62.682(meters)

Transformation #: 16 Region: Conus

Station name: FIVE POINT MOUNTAIN

	Latitude	Longitude
NAD 27 datum values:	33 20 31.320	110 58 26.690
NAD 83 datum values:	33 20 31.521	110 58 29.103
NAD 83 - NAD 27 shift values:	.201	2.413(secs.)
	6.181	62.409(meters)
Magnitude of total shift:		62.714(meters)

Transformation #: 17 Region: Conus

Station name: HUTTON

	Latitude	Longitude
NAD 27 datum values:	33 19 40.544	110 59 33.948
NAD 83 datum values:	33 19 40.746	110 59 36.363
NAD 83 - NAD 27 shift values:	.202	2.415(secs.)
	6.208	62.463(meters)
Magnitude of total shift:		62.770(meters)

Transformation #: 18 Region: Conus

Station name: HUTTON'S PEAK

	Latitude	Longitude
NAD 27 datum values:	33 19 42.620	110 59 39.610
NAD 83 datum values:	33 19 42.821	110 59 42.025
NAD 83 - NAD 27 shift values:	.201	2.415(secs.)
	6.205	62.467(meters)
Magnitude of total shift:		62.774(meters)

Transformation #: 19 Region: Conus

Station name: MADERA

	Latitude	Longitude
NAD 27 datum values:	33 20 23.569	110 52 11.425
NAD 83 datum values:	33 20 23.772	110 52 13.827
NAD 83 - NAD 27 shift values:	.203	2.402(secs.)
	6.255	62.118(meters)
Magnitude of total shift:		62.432(meters)

Transformation #: 20

Region: Conus

Station name: MINERAL MONUMENT NO. 5

	Latitude	Longitude
NAD 27 datum values:	33 28 23.527	110 47 59.457
NAD 83 datum values:	33 28 23.720	110 48 1.855
NAD 83 - NAD 27 shift values:	.193	2.398(secs.)
	5.944	61.916(meters)
Magnitude of total shift:		62.201(meters)

Transformation #: 21

Region: Conus

Station name: NEEDLE

	Latitude	Longitude
NAD 27 datum values:	33 23 21.936	110 55 55.766
NAD 83 datum values:	33 23 22.133	110 55 58.176
NAD 83 - NAD 27 shift values:	.197	2.410(secs.)
	6.078	62.287(meters)
Magnitude of total shift:		62.583(meters)

Transformation #: 22

Region: Conus

Station name: NORTHEAST STATION

	Latitude	Longitude
NAD 27 datum values:	33 25 30.090	110 45 29.390
NAD 83 datum values:	33 25 30.288	110 45 31.782
NAD 83 - NAD 27 shift values:	.198	2.392(secs.)
	6.103	61.804(meters)
Magnitude of total shift:		62.104(meters)

Transformation #: 23

Region: Conus

Station name: NUGGET

	Latitude	Longitude
NAD 27 datum values:	33 29 42.710	110 46 17.328
NAD 83 datum values:	33 29 42.902	110 46 19.724
NAD 83 - NAD 27 shift values:	.192	2.396(secs.)
	5.907	61.838(meters)
Magnitude of total shift:		62.119(meters)

Transformation #: 24

Region: Conus

Station name: PINAL MOUNTAIN

	Latitude	Longitude
NAD 27 datum values:	33 17 30.800	110 50 11.440
NAD 83 datum values:	33 17 31.008	110 50 13.837
NAD 83 - NAD 27 shift values:	.208	2.397(secs.)
	6.407	62.028(meters)
Magnitude of total shift:		62.358(meters)

Transformation #: 25 Region: Conus

Station name: SEC. 1-6, T. 1S., R. 15-16E

	Latitude	Longitude
NAD 27 datum values:	33 22 42.330	110 45 25.090
NAD 83 datum values:	33 22 42.532	110 45 27.481
NAD 83 - NAD 27 shift values:	.202	2.391(secs.)
	6.227	61.802(meters)
Magnitude of total shift:		62.115(meters)

Transformation #: 26 Region: Conus

Station name: SLEEPING BEAUTY

	Latitude	Longitude
NAD 27 datum values:	33 27 19.826	110 53 7.312
NAD 83 datum values:	33 27 20.018	110 53 9.719
NAD 83 - NAD 27 shift values:	.192	2.407(secs.)
	5.929	62.152(meters)
Magnitude of total shift:		62.434(meters)

Transformation #: 27 Region: Conus

Station name: 4-96 B

	Latitude	Longitude
NAD 27 datum values:	33 26 5.732	110 52 27.011
NAD 83 datum values:	33 26 5.927	110 52 29.416
NAD 83 - NAD 27 shift values:	.195	2.405(secs.)
	5.994	62.123(meters)
Magnitude of total shift:		62.411(meters)

Transformation #: 28 Region: Conus

Station name: 5-4 B

	Latitude	Longitude
NAD 27 datum values:	33 29 23.531	110 45 37.093
NAD 83 datum values:	33 29 23.723	110 45 39.487
NAD 83 - NAD 27 shift values:	.192	2.394(secs.)
	5.929	61.808(meters)
Magnitude of total shift:		62.091(meters)

Transformation #: 29 Region: Conus

Station name: 5-43 A

	Latitude	Longitude
NAD 27 datum values:	33 22 44.878	110 52 9.308
NAD 83 datum values:	33 22 45.078	110 52 11.711
NAD 83 - NAD 27 shift values:	.200	2.403(secs.)
	6.149	62.113(meters)
Magnitude of total shift:		62.417(meters)

Transformation #: 30 Region: Conus

Station name: 5-49 B

	Latitude	Longitude
NAD 27 datum values:	33 21 16.530	110 59 48.000
NAD 83 datum values:	33 21 16.729	110 59 50.416
NAD 83 - NAD 27 shift values:	.199	2.416(secs.)
	6.131	62.470(meters)
Magnitude of total shift:		62.770(meters)

Transformation #: 31 Region: Conus

Station name: 5-74 A

	Latitude	Longitude
NAD 27 datum values:	33 24 25.471	110 45 48.955
NAD 83 datum values:	33 24 25.671	110 45 51.347
NAD 83 - NAD 27 shift values:	.200	2.392(secs.)
	6.147	61.819(meters)
Magnitude of total shift:		62.124(meters)

Transformation #: 32 Region: Conus

Station name: 5-80 B

	Latitude	Longitude
NAD 27 datum values:	33 24 26.644	110 54 2.181
NAD 83 datum values:	33 24 26.840	110 54 4.588
NAD 83 - NAD 27 shift values:	.196	2.407(secs.)
	6.050	62.198(meters)
Magnitude of total shift:		62.492(meters)

33 110 3

33°15'
110°45'

ARIZONA 164

<u>NAME</u>	<u>STATION</u>
✓✓ COPPER	1006
✓✓ FRY	1008
✓✓ GLOBE	1010
✓✓ HATTON	1011
✓✓ MIAMI (Destroyed)	1017
✓ MIAMI INSPIRATION COPPER CO WATER TANK	1017
✓ BOUNDARY MONUMENT M C CO NO 76	1017
✓ MINE	1018
✓ IRON PIPE SET IN TRIANGULAR BASE	1018
✓ PINAL	1019
✓✓ WEBSTER USGS	1025
✓✓ GLOBE BLACK METAL STACK	1028
✓ MIAMI INSPIRATION COPPER CO STACK	1030
✓✓ PINAL PEAK LOOKOUT TOWER	1031
✓✓ SIGNAL PEAK LOOKOUT TOWER	1032

NAD 83 VALUES AVAILABLE*IN Mesa*

FILE CC ✓

JULY 1966
 PUBLISHED AND PRINTED BY:
 U.S. DEPARTMENT OF COMMERCE
 COAST AND GEODETIC SURVEY
 WASHINGTON D.C.

HORIZONTAL CONTROL DATA

by the
 Coast and Geodetic Survey
 NORTH AMERICAN 1927 DATUM

File Arizona 164

QUAD 331103 STATION 1005
 ARIZ
 LATITUDE 33°00' TO 33°30'
 LONGITUDE 110°30' TO 111°00'
 DIAGRAM NI 12-8 MESA

COOLIDGE (Pinal County, Ariz., R.A.M., 1945)--Station is located about 2 1/4 miles SE of Globe, 1 1/2 miles S of San Carlos, and about 2-1/4 miles SE of Coolidge Dam. It is on the first prominent peak SE of the dam; the peak has rimrock on its N side and it is not visible from the highway except for a short distance about 2-1/2 miles E of the dam. At this point it can be seen through a canyon leading up toward the peak.

To reach station from Globe, follow U.S. Highway 70 S and E to Coolidge Dam. From the center of the dam continue on the highway for 2.3 miles to the end of truck travel. At this point a small wash leads to the right and by walking to the left or N side of the highway and looking S through a large saddle and canyon the peak can be seen about 2 miles to the S. From here pack S following the top of the ridge that is just to the left of the wash for 200 yards to the azimuth mark; this is about 100 yards before reaching an E-W ridge connecting to the ridge the mark is on. From here the station can be seen toward the S through the deep saddle. Continue toward the saddle dropping down into the deep canyon. Follow the canyon as it winds toward the station for about 1-1/4 miles until coming to the first side canyon leading to the right. At this point the station can be seen to the right about 1/2 mile. Bear right up the side canyon about 100 yards and then leave the canyon and get up on the higher ground on the left and continue toward the peak, going up to the right of the rimrock to the highest point, the station being 8 feet NW of the highest point.

Station mark is a bronze station disk set in a depression in outcropping bedrock, the depression being about 8 inches lower than the surrounding rock. It is 8 feet NW of the highest point and about 1 foot lower. Stamped "COOLIDGE 1945."

Reference mark 1 is a bronze reference disk set in outcropping bedrock and is stamped "COOLIDGE NO 1 1945." It is in the same rock outcrop as the station, is S of the station, and about 3 feet lower.

Reference mark 2 is a bronze reference disk set in outcropping bedrock and is stamped "COOLIDGE NO 2 1945." It is WNW of the station, about 2 feet lower, and about 30 feet SE of the sharp cliff to the NW.

Azimuth mark is a bronze azimuth disk set in a boulder projecting about 3 inches and is stamped "COOLIDGE 1945." It is about 1-1/2 miles NNE of the station, 5 feet NW of a witness post, and is reached as shown in the above description.

OBJECT	DISTANCE	DIRECTION
COAL (U.S.G.S.)	meters feet	0°00'00"0
R.M. 2 WNW	9.392 30.815	65 53 42
Tower WNW	18 miles	67 33 29
Azimuth Mark NNE	1-1/2 miles	157 48 10.0
R.M. 1 S	3.419 11.215	303 54 55

Height of instrument above station mark - 1.88 meters.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: COOLIDGE YEAR 1945
 STATE: Ariz LOCALITY: Globe to Clofton, Southeastern Arizona
 First -ORDER Triangulation SOURCE: G-7961 FIELD SKETCH: ARIZ 20

GRID DATA	COORDINATES (P+U)	PLANE AZIMUTH & HOR. ANG. ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	x 397,050.88 y 780,680.77	207°36'52" - 0 11 02	AZIMUTH MARK
STATE: Ariz ZONE: C CODE: 0202	x 932,701.18 y 783,434.77	206 39 27 + 0 46 23	AZIMUTH MARK

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION	
	LATITUDE:	LONGITUDE:		NORTH WEST	METERS FEET
	33°08'44"534	110 30 10.864		1,245.4	4,086

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK	THIRD-ORDER 207°25'49"4		

164 ARIZONA

JULY 1966
 PUBLISHED AND PRINTED BY:
 U.S. DEPARTMENT OF COMMERCE
 COAST AND GEODETIC SURVEY
 WASHINGTON D.C.

HORIZONTAL CONTROL DATA

by the
 Coast and Geodetic Survey
 NORTH AMERICAN 1927 DATUM

QUAD 331103 STATION 1006
 ARIZ
 LATITUDE 33°00' TO 33°30'
 LONGITUDE 110°30' TO 111°00'
 DIAGRAM NI 12-8 MESA

33 15
 110 45

DEPARTMENT OF COMMERCE
 U. S. COAST AND GEODETIC SURVEY
 FORM 1005
 Rev. Oct. 1957

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: COPPER
 CHIEF OF PARTY: D.H. Konicnek
 Surface-station mark, Note,*
 Underground-station mark, Note,*
 Reference mark, Note,*
 Reference mark, Note,*
 Azimuth mark, Note,*
 Witness mark, Note,*
 Height of light above station mark, meters.
 Height of telescope above station mark, meters.

OBJECT	HOR.	DISTANCE	DIRECTION	AZIMUTH
APACHE TRAIL (USGS) 1938		5.663	00 00' 00" 00	
R.M. No. 1	NE	5.663	26 01 14	
R.M. No. 2	S	8.024	129 51 34	
Az. M. S. above road			134 20 34.5	

Detailed description: Station is on top of a prominent low peak approximately 5.5 miles west of Miami and 2.5 miles south of Castle Dome Mine on the east side of the road leading from U. S. Routes 60 & 70 to Castle Dome Mine. It is on the east end of a small ridge on the peak and 12 feet east of a barb wire fence. Mark is a bronze disk stamped: "COPPER 1946" and is set in a drill hole in bedrock extending 4 inches above the ground.

Reference mark No. 1 is a bronze disk set in bedrock 3 feet lower than the station on the east part of the peak. It projects 5 inches and is stamped: "COPPER NO 1 1946".

Reference mark No. 2 is a bronze disk set in a drill hole in bedrock extending 5 inches above the ground. It is on the south part of the peak 2.5 feet lower than the station and stamped: "COPPER NO 2 1946".

The azimuth mark is southwest of intersection of U. S. Highway 60 and 70 and the Castle Dome road; 40 paces south-southwest of cattle guard and 25 feet south of highway. It is 15 feet above the existing highway (which is to be repaired and moved a few feet) on outcropping bedrock. It is a USGS Bench Mark stamped: "3N 1944 Elev. 4287 feet".

To reach from Miami, go west on highway 60 and 71 for 5.0 miles to intersection of U. S. 70 and 60 and the Castle Dome road. Here the azimuth mark is on the bluff on the south side of the highway and the station is on the western and more distant one of two peaks to the north and approximately 0.7 mile away. Turn right on the Castle Dome road and go 1.0 mile to the base of the peak to the right.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: COPPER YEAR: 1947
 STATE: Ariz LOCALITY: Tonto National Forest and Winkelman to Winslow to Phoenix
 Second-ORDER Triangulation SOURCE: G-7605 FIELD SKETCH: ARIZ 24

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH θ (OR Δ OR ANGLE)	MARK
STATE: Ariz ZONE: E CODE: 0201	x 264,257.37 y 866,126.37	0°17'30" - 0 25 30	AZIMUTH MARK
STATE: Ariz ZONE: C CODE: 0202	x 798,478.76 y 866,653.55	359 19 43 + 0 32 17	AZIMUTH MARK

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION	
	LATITUDE:	LONGITUDE:		NORTH	METERS
	33°22'42"988	110 56 20.092		1,486.8	4,878

TO STATION	GEODETIC AZIMUTH (From 0000)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK	THIRD-ORDER 359°51'59"8		

*Elev. checked by uscs
(PH 910)*

FILE COPY

JULY 1966
 PUBLISHED AND PRINTED BY:
 U.S. DEPARTMENT OF COMMERCE
 COAST AND GEODETIC SURVEY
 WASHINGTON D.C.

HORIZONTAL CONTROL DATA

by the
 Coast and Geodetic Survey
 NORTH AMERICAN 1927 DATUM

QUAD 331103 STATION 1007
 ARIZ
 LATITUDE 33°00' TO 33°30'
 LONGITUDE 110°30' TO 111°00'
 DIAGRAM NI 12-8 MESA

CUTTER (Gila County, Ariz., R.A.M., 1945)--Station is located about 7-1/2 miles ESE of Globe, 11-1/2 miles W of San Carlos, and 1/2 mile E of Cutter. It is at the junction of U.S. Highway 70 and a dirt road to San Carlos, near the E end of the Cutter air field; on the highway right-of-way.

To reach station from Globe, go E on U.S. Highway 60 and 70 about 1 mile to a fork where highway 60 turns to left. Keep straight ahead on highway 70 from this junction for 7.0 miles to Cutter railroad siding on left and air field on right. Continue 0.4 mile to dirt side road leading left to San Carlos, where highway curves to right.

Station is here, 159 feet SW of the center line of the highway, 271 feet SE of the E corner of the landing field, 51 feet NW of the center of a cattle guard, and 7 feet NE of fence line. It is a bronze station disk set in a cylindrical concrete post that projects 3 inches above ground. It is stamped "CUTTER 1945."

Reference mark 1 is N of the station, 51 feet SE of the center line of the highway. It is a bronze reference disk set in a square concrete post that projects 2 inches above ground. It is stamped "CUTTER NO 1 1945."

Reference mark 2 is SE of the station, 24 feet NW of the center of the cattle guard, 2 feet NE of the fence. It is a bronze reference disk set in a square concrete post that projects 2 inches above ground and is stamped "CUTTER NO 2 1945."

Azimuth mark is SSE of the station. It is a bench-mark disk of the Arizona Highway Department set in top of the center of the E side wall of a concrete bridge; midway of the length of the bridge. This is the second bridge along the highway E of the station. A cross marks the center of the disk which bears no station designation.

U.S.G.S. B.M. 3168 is NE of the station, across the railroad tracks and about 400 feet W of a crossing. It is a standard U.S. G.S. B.M. disk with a cross marking center and bearing the elevation and datum inscriptions "3167.294 ft. PNM" on top of a 3-inch pipe which projects 10 inches above ground. It is 10 feet SE of milepost 1213.

OBJECT		DISTANCE		DIRECTION
		meters	feet	
RICE				0°00'00"0
R.M. 2	SE	8.466	27.775	55 34 30
Azimuth Mark	SSE	1/4 mile		74 40 55.8
Forest Service Lookout				
Signal Peak				196 57 09
Cutter, water tank				223 21 10
R.M. 1	N	14.326	47.000	287 02 38
U.S.G.S.				
B.M. 3168	NE	249.118		326 37 31.4

Height of instrument above station mark - 1.6 meters.

RECOVERY NOTE, TRIANGULATION STATION

NAME OF STATION:	CUTTER		
ESTABLISHED BY:	R.A.M.	YEAR: 1945	STATE: Arizona BENCH MARK(S) ALSO <input type="checkbox"/>
RECOVERED BY:	USGS	YEAR: 1965	COUNTY: Gila

AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN:

Detailed statement as to the fitness of the original description; including marks found, stampings, changes made, and other pertinent facts:

Station and one Reference Mark were destroyed; found knocked completely out. The other Reference Mark was not recovered.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: CUTTER YEAR: 1945
 STATE: Ariz LOCALITY: Globe to Clifton, Southeastern Arizona
 Second-ORDER Triangulation SOURCE: G-7961 FIELD SKETCH: ARIZ 20

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH θ (D.R.A.M. ANGLE)	MARK
STATE: Ariz ZONE: E CODE: 0201	x 351,138.18 y 856,126.43	322°02'54" - 0 16 05	AZIMUTH MARK (BENCH MARK HWY DEPT)
STATE: ZONE: CODE:			

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE: 33°21'09".246 LONGITUDE: 110 39 15.004	NORTH WEST		965.8 3,169

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK (BENCH MARK HWY DEPT)	THIRD-ORDER 321°46'48"8		

R

164 ARIZONA

JULY 1966
 PUBLISHED AND PRINTED BY:
 U.S. DEPARTMENT OF COMMERCE
 COAST AND GEODETIC SURVEY
 WASHINGTON D.C.

HORIZONTAL CONTROL DATA

by the
 Coast and Geodetic Survey
 NORTH AMERICAN 1927 DATUM

QUAD 331103 STATION 1008
 ARIZ
 LATITUDE 33°00' TO 33°30'
 LONGITUDE 110°30' TO 111°00'
 DIAGRAM NI 12-8 MESA

33 15
 110 45

FRY (Gila County, Ariz., F.O.J., 1938)--Station is 0.1 mile E of Ariz. 77 at a point 9.3 miles S of junction of U.S. 70 and Ariz. 77 on eastern end of a short spur that is about same elevation as road.

Surface, underground, reference, and azimuth marks are standard bronze disks set in concrete, a boulder, outcropping bedrock, and a boulder as described in notes 1a, 7a, 12c, 12a, and 12c.

To reach from Globe go E and S on 70 about 6 miles to junction of 70 and 77 (road to Winkelman); thence go southward on 77, 9.3 miles to a sharp "S" curve (about 1 1/2 miles N of El Capitan Schoolhouse. From here take time track road leading eastward 0.1 mile to eastern end of spur and station.

Chimney of El Capitan School building (a square brick building with a brick chimney) is a good azimuth mark.

Azimuth mark is about 5 paces E of road between Globe and Winkelman, and about 1/3 mile SW of station.

OBJECT	DISTANCE	DIRECTION
	feet	meters
R.M.No.2	S 25.31	7.712 85 16 26
Chimney, El Capitan School	SSW approx. 1 mile	110 28 07.8
R.M.No.1	47.76	14.558 340 14 22
Azimuth mark	SW approx. 1/3 mile	130 27 29.9
Height of telescope above station mark - 2 meters.		

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: FRY
 STATE: Ariz LOCALITY: Tonto National Forest and Winkelman to Winslow to Phoenix
 Second -ORDER Triangulation SOURCE: G-7605 FIELD SKETCH: ARIZ 18
 YEAR: 1938

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH & TORION ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	x 314,419.75 y 823,144.75	44°21'38" - 0 19 59	AZIMUTH MARK
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE:	LONGITUDE:	NORTH WEST	METERS FEET
	33°15'41".010	110 46 25.614		

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK	THIRD-ORDER 44°01'38"6		

Elev.: 4997 ft. (PTL USGS 1965)

R

Form 526 (11-8-55)

U. S. DEPARTMENT OF COMMERCE - COAST AND GEODETIC SURVEY
 RECOVERY NOTE, TRIANGULATION STATION

NAME OF STATION: FRY
 ESTABLISHED BY: F.O.J.
 RECOVERED BY: USGS
 YEAR: 1938 STATE: Arizona
 YEAR: 1963 COUNTY: Gila

Detailed statement as to the fitness of the original description, including marks found, stampings, changes made, and other pertinent facts:

New Description: Station is about 430 ft E of State Hwy 77 at a point 8.6 mi. south of junction of Federal Hwy 70 and State Hwy 77 on eastern end of a short spur ridge.

To reach station from post office in Globe proceed SE on Federal Hwy 70 for 5.4 mi. to junction of Federal Hwy 70 and State Hwy 77. Turn S and follow State Hwy 77 for 8.6 mi. to divide and end of truck travel. Climb up to ridge and go E about 400 ft to the station.

P. H. JOHNSON

* 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.

FILE COPY

HORIZONTAL CONTROL DATA

by the
 Coast and Geodetic Survey
 NORTH AMERICAN 1927 DATUM

ARIZONA
 QUAD 331103 STATION 1009
 ARIZ
 LATITUDE 33°00' TO 33°30'
 LONGITUDE 110°30' TO 111°00'
 DIAGRAM NI 12-8.MESA

164

33°15'
 110°45'

GANNON (Gila County, Arizona, E.B.L., 1935)--Station is located on the north side of the Winkleman-Globe Road, about 1/2 mile south east of the point where the road starts up the ridge out of Dripping Springs Valley at the ranch of Mr. Gannon. Station reference and azimuth marks are bronze disks wedged in a drill hole in a boulder, as described in notes 4 and 12a. Reached from Winkleman by following the Globe road for 15.2 miles and pass a concrete tank, continue 0.6 mile and cross a wash with a concrete road bed (azimuth mark is on the left side of the road and wash at this point), continue 0.1 mile to station which is 32 feet to the right of road center.

OBJECT	DISTANCE	DIRECTION
TAM O'SHANTER	Meters	0°00'00"0
R.M. No. 2, West	16.660	58 53 06.2
R.M. No. 1, North	13.010	139 39 06.2
Azimuth, R.M. No. 3 east on right of road	428 feet	261 14 17.4

Form 528
 (11-8-65)

U.S. DEPARTMENT OF COMMERCE - COAST AND GEODETIC SURVEY
 RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: GANNON
 ESTABLISHED BY: YEAR: 1935 STATE: ARIZONA
 RECOVERED BY: USGS YEAR: 1963 COUNTY: GILA

Detailed statement as to the fitness of the original description, including marks found, stampings, changes made, and other pertinent information.
New Description: Station is located on north side of the old Winkleman-Globe Rd, about 2/3 ml. SE of the point where the road starts up the ridge out of Dripping Springs Valley at the ranch of Mr. Tatum.
 To reach from post office in Globe proceed SE on Federal Hwy 70 for 3.4 mi. to junction of Federal Hwy 70 and State Hwy 77. Turn east and follow State Hwy 77 for 18.5 mi. to graded road on right at sign "TATUM 1.3 MI." Turn right and go 1.3 mi. to T-rd fork. Turn right, cross concrete apron in wash and go about 0.1 mi. to station which is 32 ft. to the right of road center.

P.H. JOHNSON

* 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.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: GANNON YEAR: 1935
 STATE: Ariz LOCALITY: Tonto National Forest and Winkelman to Winslow to Phoenix
 Second -ORDER Triangulation SOURCE: G-7605 FIELD SKETCH: ARIZ 9

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH @ TORSON ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	x 309,784.83 y 771,368.39	297°48'23" - 0 20 22	AZIMUTH MARK
STATE: Ariz ZONE: C CODE: 0202	x 845,589.83 y 772,665.05	296°51'01" + 0 37 00	AZIMUTH MARK

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE:	LONGITUDE:		
	33°07'08"447	110 47 16.578		

TO STATION	GEODETIC AZIMUTH (From center)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK	THIRD-ORDER 297°28'01"3		

FILE COPY

AUG 1969

164

JULY 1966
U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY
REVISED JUNE 1969

ARIZONA

HORIZONTAL CONTROL DATA

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

QUAD 331103 STATION 1010
ARIZ
LATITUDE 33°00' TO 33°30'
LONGITUDE 110°30' TO 111°00'
DIAGRAM NI 12-8 MESA

33°15'
110°45'

GLOBE (Gila County, Ariz., F.O.J., 1938)--Station is located on a gravel ridge extending northerly from limits of Globe and about 1.2 miles from post office, airline.

Surface, underground, reference, and azimuth marks are standard bronze disks set in concrete and a boulder as described in notes 1a, 7a, 11a, and 12c.

Reached from post office by continuing E on Sycamore St. 0.45 mile to its end; turn L and go about 50 feet to pass between two dwellings on R; continue 0.25 mile on road northeasterly which follows gravel ridge and pass through wire gate, continue 0.35 mile and turn sharp R off of road and go 0.1 mile southwesterly to summit of shoulder of ridge and station. To reach azimuth mark set in a boulder of red sandstone rock outcrop about 0.5 mile NE of station, continue along road to outcrop and azimuth mark sets in a large boulder about 10 feet lower in elevation than highest point, and in line with highest point and station.

OBJECT	DISTANCE	DIRECTION
BLAIR	feet meters	0°00'00"0
R.M.No.1	SSE 30.415 9.272	26 12 28
R.M.No.2	WSW 24.840 7.573	110 54 26
Azimuth mark	NE approx. 0.5 mile	256 42 11.5
Large black smelter stack	W of Globe	142 37 28
Height of telescope above station mark	- 1.4 meters.	

RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: **Globe**
ESTABLISHED BY: **F.O.J.** YEAR: **1938** STATE: **Arizona** BENCH MARK ALSO
RECOVERED BY: **A.M.S.** YEAR: **1967** COUNTY: **Gila**
AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN:
HEIGHT OF TELESCOPE ABOVE STATION MARK FEET. HEIGHT OF LIGHT ABOVE STATION MARK FEET.

OBJECT	DIRECTION	MAG. BEYOND AS	GEODETIC AZIMUTH	DISTANCE (M) (FT)
RH #1	230° 21' 12.0"	146°		30.5
RH #2	315° 01' 17.0"	236°		24.11
As Mk	100° 52' 21.5"	22°		

DESCRIPTION Located approximately 1.2 air miles (NE) of Globe and approximately 7.0 air miles (SW) of Miami.

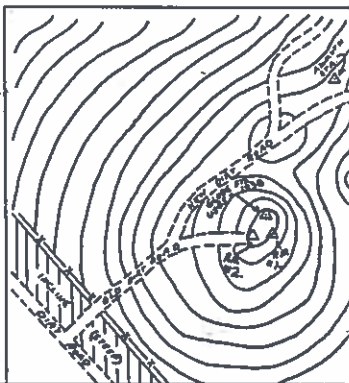
To reach from Globe P.O. go east on E. Sycamore Ave. for 0.4 Mi to S. Fourth St., go left (N) for 0.15 Mi to E. Cedar Ave, go right for 0.2 Mi to Catholic School, follow dirt road around the school for 0.2 Mi to fork in road, take left fork (NE) for 1.5 Mi up in line, go through fence gate to top of small hill and station.

Station is on the highest part of small hill. Station mark is a standard USC&GS disk set in concrete monument 6 inches above the ground.

RH #1 is a standard USC&GS disk set in a concrete monument 8 inches above ground and stamped 1938.

RH#2 is a standard USC&GS disk set in a concrete monument 2 inches above ground and stamped 1938.

Azimuth mark is set in rock out-crop about 500M from the station on a magnetic azimuth of 22° and stamped Globe As Mk 1938.



DESCRIBED OR (RECOVERED) BY: SSG J. Hartness AGENCY: 30th Engr Bn (Base Topo) DATE: Mar 67

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: **GLOBE** YEAR: **1938**
STATE: **Ariz** LOCALITY: **Tonto National Forest and Winkelman to Winslow to Phoenix**
Second ORDER Triangulation SOURCE: **G-7605** FIELD SKETCH: **ARIZ 18**

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH & IONOSPHERIC ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	x 315,503.92 y 874,796.07	219°49'08" - 0 19 58	AZIMUTH MARK
STATE: ZONE: CODE:			

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE:	LONGITUDE:	NORTH WEST	METERS FEET
	33°24'12".118	110 46 16.373		

TO STATION	GEODETIC AZIMUTH (From 0000)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK	THIRD-ORDER 219°29'10".4		

V.A. ELEV. 3879 FT (USGS 1944)

RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: **Globe**
ESTABLISHED BY: **F.O.J.** YEAR: **1938** STATE: **Arizona** BENCH MARK(S) ALSO
RECOVERED BY: **K.F. Burke** YEAR: **1968** COUNTY: **Gila**

AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN:
1.2 miles north of the Post Office in Globe.

Detailed statement as to the fitness of the original description; including marks found, stampings, changes made, and other pertinent facts:

The station, reference, and azimuth marks were found in good condition.

A new description is necessary due to the spreading of the city of Globe.

To reach the station from the Post Office in Globe, go west for two blocks to Cedar Street. Turn right (NE) and go for 0.6 miles to the end of the street and the Catholic School. Go through the school grounds to a track road in the northwestern corner. Take the track road to a flat area above the school grounds. Cross the flat, heading NE for 0.1 miles to a gate atop the steep slope. Go through the gate and follow the track road for 0.35 miles. Turn sharp right off the road and backtrack southwesterly to the top of the ridge and the station.

USCOMM-ESSA-ASHEVILLE

FILE COPY

AUG 1969

JULY 1966

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

HORIZONTAL CONTROL DATA

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

ARIZONA 164

QUAD 331103 STATION 1011
ARIZ
LATITUDE 33°00' TO 33°30'
LONGITUDE 110°30' TO 111°00'
DIAGRAM NI 12-8 MESA

33° 15'
110° 45'

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
Form 528
Rev. Oct., 1955

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: HATTON
CHIEF OF PARTY: D.H.Konichek
Surface-station mark, Note,* 2
Underground-station mark, Note,*
Reference mark, No. 1 Note,*12a
Reference mark, No. 2 Note,*12a
Azimuth mark, Note,*
Witness mark, Note,*
Height of light above station mark meters.
Height of telescope above station mark 1. meters.

STATE: Arizona COUNTY: Pinal
YEAR: 1947 LOCALITY: Miami

DISTANCES AND DIRECTIONS TO REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GRID				
OBJECT	Hor.	DISTANCE	DIRECTION	AZIMUTH
GRANITE MT. 1935		Meters	00 00' 00.00	" "
R.M. No. 2	WNW	7.529	107 48 12.	" "
Az. Mk. NNW	0.4 mile		141 28 45.3	" "
R.M. No. 1	SE	10.297	300 18 10.	" "

Detailed description: The station is located about 9 miles airline southwest of Miami, about 8 miles airline northeast of Superior, 0.4 mile south of where U. S. Highway #60 & 70 crosses the Pinal and Gila County line, on the most southwestern and highest of what is known locally as Hatton Five Peaks. The station mark is set flush on the highest point and center of a large rock outcropping. It is stamped: "HATTON 1946".

Reference mark No. 1 is 2 feet lower than station mark, projects 20 inches and is stamped: "HATTON NO 1 1946".

Reference mark No. 2 is 7 feet lower than station mark, projects 3 feet and is stamped: "HATTON NO 2 1946".

The azimuth mark is a bronze disk set in the concrete headwall of a cattle guard on U. S. Highway #60 & 70 at the Pinal and Gila County line. It is 20 feet south of the center line of the highway, 4 inches west of the east end of the southern headwall. It projects 10 inches and is stamped: "HATTON 1946".

To reach the station from the Valley National Bank in Miami, go west on U. S. Highway #60 & 70, 9.65 miles to a cattle guard at county line and azimuth mark on left as described above; continue on highway 0.45 mile to a road left at sign "American Mine"; turn left off highway, go 0.55 mile to end of truck travel at a triangle blazed tree on left. From here walk easterly up ridge to highest point and station. The route to station is very brushy and rough. A 45-minute pack.

RECOVERY NOTE, TRIANGULATION STATION

NAME OF STATION: Hatton
ESTABLISHED BY: D.H.K. YEAR: 1947 STATE: Arizona BENCH MARK ALSO
RECOVERED BY: Army Map Service YEAR: 1967 COUNTY: Pinal
AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN:
HEIGHT OF TELESCOPE ABOVE STATION MARK FEET. HEIGHT OF LIGHT ABOVE STATION MARK FEET.

DESCRIPTION SKETCH
Located approximately 9.0 airmiles S.W. of Miami and 6.5 airmiles N.E. of Superior.
To reach from Miami P.O. go west of U.S. Hwy 60-70 for 8.8 Mi to dirt road on left, turn left (S) and go for 0.35 Mi, leave truck and start to climb in a N.E. direction to most prominent peak and station. It is a 45 minute pack.
Station is on the highest point of the ridge. Station mark is a standard USC&GS disk stamped "Hatton 1946" set in a boulder.
RM #1 is a standard USC&GS disk set in a rock outcrop.

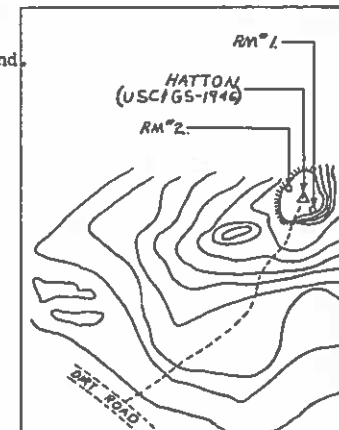
ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: HATTON YEAR: 1947
STATE: Ariz LOCALITY: Tonto National Forest and Winkelman to Winslow to Phoenix FIELD SKETCH: ARIZ 24
First -order Triangulation SOURCE: 0-7605

GRID DATA	COORDINATES (Foot)	PLANE AZIMUTH & CORRECTION ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	x 252,358.34 y 853,451.39	154°39'23" - 0 26 45	AZIMUTH MARK
STATE: Ariz ZONE: C CODE: 0202	x 786,793.93 y 853,780.08	153°41'40" + 0 30 58	AZIMUTH MARK

GEODETTIC DATA	POSITION		SECONDS IN METERS	ELEVATION	
	LATITUDE:	LONGITUDE:		NORTH WEST	METERS FEET
	33°20'36"691	110 58 39.241		1,673.6	
				5,491	
TO STATION			GEODETTIC AZIMUTH (From south)	DISTANCE	
AZIMUTH MARK			THIRD-ORDER 154°12'38"2	LOGARITHM (Meters)	METERS

RM #2 is a standard USC&GS disk set in a boulder.
Azimuth mark was searched for but not found.



(DESCRIBED) OR (RECOVERED) BY: SSG J. Martinez AGENCY: 30th Engr Bn (Base Topo) DATE: Mar 67
JA FORM 1959 DESCRIPTION OF HORIZONTAL CONTROL STATION (TM 5-377)

FILE COPY

AUG 1969

ELEV. Checked By USGS (PH 910)

USCOMM-ESSA-ASHEVILLE

JULY 1966

U. S. DEPARTMENT OF COMMERCE
 ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
 COAST AND GEODETIC SURVEY

REVISED JUNE 1969

HORIZONTAL CONTROL DATA

by the
 Coast and Geodetic Survey
 NORTH AMERICAN 1927 DATUM

QUAD 331103 STATION 1012
 ARIZ
 LATITUDE 33°00' TO 33°30'
 LONGITUDE 110°30' TO 111°00'
 DIAGRAM NI 12-8 MESA

Kel (Pinal County, J. Bowie, Jr., 1936).—About 3 miles east-southeast of the town of Kelvin, 0.1 mile north of the Kelvin-Winkelman Highway, on the north end and highest part of a north and south ridge crossed by the highway. The station is on a boulder projecting about 18 inches above the ground. Marked by a standard bronze disk as described in note 4. Reference mark No. 1, a standard bronze reference disk, note 12c, is 7.447 meters (24.43 feet) from station in azimuth 340°38'. Reference mark No. 2, a standard bronze reference disk, note 12c, is 7.733 meters (25.37 feet) from station in azimuth 92°02'. Station Kelvin may be used as an azimuth mark.

RECOVERY NOTE, TRIANGULATION STATION

R

NAME OF STATION: **Kel**
 ESTABLISHED BY: **J. B. Jr.** YEAR: **1936** STATE: **Arizona** BENCH MARK(S) ALSO
 RECOVERED BY: **Army Map Service** YEAR: **1966** COUNTY: **Pinal**
 AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN:

Detailed statement as to the fitness of the original description, including marks found, stampings, changes made, and other pertinent facts:

Station, reference and azimuth marks were recovered as described.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: **KEL**
 STATE: **ARIZONA** YEAR: **1936** SECOND-ORDER
 LOCALITY: **PAPAGO INDIAN RESERVATION**
 SOURCE: **G-3083** FIELD SKETCH: **ARIZ 14**

GEODETIC LATITUDE:	33 05 49.41272	ELEVATION:	METERS
GEODETIC LONGITUDE:	110 55 08.82677		FEET

STATE COORDINATES (Fm)				
STATE & ZONE	CODE	X	Y	θ (OR Δ α) ANGLE
ARIZ. E.	0201	269,563.15	763,643.96	- 0 24 39
ARIZ. C.	0202	805,499.77	764,270.02	+ 0 32 41

TO STATION OR OBJECT	GEODETIC AZIMUTH (Fm mark)	PLANE AZIMUTH (Fm mark)	CODE
AZIMUTH MARK-KELVIN	357 45 36.6	358 10 16	0201
AZIMUTH MARK-KELVIN	357 45 36.6	357 12 56	0202

THESE DATA OBTAINED FROM READJUSTMENT OF 3-69.

55-005

FILE COPY

AUG 1969

JULY 1966
 PUBLISHED AND PRINTED BY:
 U.S. DEPARTMENT OF COMMERCE
 COAST AND GEODETIC SURVEY
 WASHINGTON D.C.

HORIZONTAL CONTROL DATA

by the
 Coast and Geodetic Survey
 NORTH AMERICAN 1927 DATUM

ARIZONA 164

QUAD 331103 STATION 1017
 ARIZ
 LATITUDE 33°00' TO 33°30'
 LONGITUDE 110°30' TO 111°00'
 DIAGRAM NI 12-8 MESA

DESTROYED

33 15
 110 45

MIAMI (Gila County, Ariz., F.G.J., 1938)--Station is on highest point of Moonshine Hill which is about 1 mile NE of town of Miami. There is a large black water tank near top of hill and some houses on S slope near top. It is just N of Inspiration Mine.

Surface, reference, and azimuth marks are standard bronze disks set in boulders and in concrete as described in notes 4, 12c, and 11c.

To reach from Chief Hotel in Miami, go E on U.S. 60 and 70, 1.3 miles to school buildings with pedestrian overpass in front. Turn L off highway just W of school, sign "Inspiration Copper Co." "International Smelter" and go 0.7 mile; cross bridge and continue straight ahead on L fork (other road goes to Smelter) 0.8 mile; *take R fork, main-traveled road, and go 0.3 mile; continue straight ahead at forks, sign "Moonshine Hill", and go 0.4 mile, turn R across black bridge and go 0.5 mile to end of truck travel, end of street, and garages built across end of street. Pack N about 3 minutes to top of hill and station in back of houses.

*Azimuth mark is 42 yards beyond or northerly from R fork mentioned in description on way to station. It is 40 feet NE from edge of pavement, 6 feet 4 inches SW of small pipe line, 20 feet below road on slope going down to old mine pit, and is set in piece of abandoned concrete abutment.

Center of top of water tank which is also on Moonshine Hill was measured to. This tank is property of Inspiration Copper Co. Boundary monument is a 1-inch pipe set in concrete and following initials marked in concrete: "M.C.Co."-76.

OBJECT	DISTANCE	DIRECTION
GLOBE	feet meters	0°00'00"0
Azimuth mark	SE approx. 3/4 mile	28 52 54.7
R.H.No.2	SE 29.594 9.021	37 18 25.0
Water tank	41.56	125 01 02.6
Boundary Monument M.C.Co.	13.522	150 17 47.0
R.H.No.1	NxE 31.615	271 13 25.6
Height of telescope above station mark	- 1.4 meters.	

MIAMI (Gila County, Ariz., F.G.J., 1938; C.R.R., 1947)
 --All marks recovered in good condition and the description by F.G.J. in 1938 was found to be complete and adequate.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: MIAMI
 STATE: Ariz
 LOCALITY: Tonto National Forest and Winkelman to Winslow to Phoenix
 Second-ORDER Triangulation
 YEAR: 1938
 SOURCE: G-7605
 FIELD SKETCH: ARIZ 18

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH & IONOSPHERIC ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	X 283,844.74 Y 880,169.80	308°30'57" - 0 23 25	AZIMUTH MARK
STATE: Ariz ZONE: C CODE: 0202	X 817,828.22 Y 881,025.06	307 33 07 + 0 34 25	AZIMUTH MARK

GEODETTIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE:	LONGITUDE:		
	33°25'03"309	110 52 30.243		

TO STATION	GEODETTIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK	THIRD-ORDER 308°07'31"5		

*U.A. Elev. 4018. ft. (USGS 1944)
 (H 160)*

FILE COPY

164

ARIZONA

JULY 1966
PUBLISHED AND PRINTED BY:
U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
WASHINGTON D.C.

HORIZONTAL CONTROL DATA

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

QUAD 331103 STATION 1017
ARIZ
LATITUDE 33°00' TO 33°30'
LONGITUDE 110°30' TO 111°00'
DIAGRAM NI 12-8 MESA

MIAMI (Continued)

ADJUSTED HORIZONTAL CONTROL DATA

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: MIAMI INSPIRATION COPPER CO WATER TANK YEAR: 1938

NAME OF STATION: BOUNDARY MONUMENT M C CO NO 76 YEAR: 1938

STATE: Ariz LOCALITY: Tonto National Forest and
Winkelman to Winslow to Phoenix
Third-ORDER Traverse SOURCE: G-7605 FIELD SKETCH: ARIZ 18
(No check on this position)

STATE: Ariz LOCALITY: Tonto National Forest and
Winkelman to Winslow to Phoenix
Second-ORDER Traverse SOURCE: G-7605 FIELD SKETCH: ARIZ 18
(No check on this position)

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH & IONOSPHERIC ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	x 283,749 y 880,073	- 0 23 25	
STATE: ZONE: CODE:	x y		

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH & IONOSPHERIC ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	x 283,803 y 880,155	- 0 23 25	
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION METERS FEET
	LATITUDE:	NORTH WEST		
	33°25'02"343			
	LONGITUDE: 110 52 31.366			

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION METERS FEET
	LATITUDE:	NORTH WEST		
	33°25'03"156			
	LONGITUDE: 110 52 30.733			

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
Computed from station MIAMI			

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
Computed from station MIAMI			

FILE COPY

JULY 1966
 PUBLISHED AND PRINTED BY:
 U.S. DEPARTMENT OF COMMERCE
 COAST AND GEODETIC SURVEY
 WASHINGTON D.C.

HORIZONTAL CONTROL DATA

by the
 Coast and Geodetic Survey
 NORTH AMERICAN 1927 DATUM

QUAD 331103 STATION 1018
 ARIZ
 LATITUDE 33°00' TO 33°30'
 LONGITUDE 110°30' TO 111°00'
 DIAGRAM NI 12-8 MESA

ARIZONA

164

33 15
 110 45

MINE (Gila County, Ariz., F.G.J., 1938)--Station is located on a sharp rocky hill about 2-1/2 miles ENE of Globe. The top of the hill is covered with loose boulders and is the highest point in the immediate vicinity.

Station and reference marks are bronze disks set in drill holes in boulders.

To reach station from the post office in Globe, go N 1 block; continue N where the highway turns left (W) for 0.1 mile; thence turn right (E) and go 0.1 mile; thence left and go 0.2 mile crossing bridge; thence right and go 0.1 mile; thence left and go 0.05 mile; thence right and follow up the S side of canyon for 2.55 miles to the azimuth mark which is set in the N abutment of culvert. Continue 0.1 mile to the top of the grade and a side road left which leads to an old mine shaft. Turn left on side road and go 0.1 mile to the mine shaft and end of truck travel. From here climb NW to the highest point and station. A 50-minute pack.

OBJECT	DISTANCE	DIRECTION
APACHE MID PK. (U.S.F.S.)	meters	0°00'00"0
R.M. 1 SE	10.918 feet	109 36 59
Iron pipe, tri. base	2.715 feet	133 10
Azimuth Mark SSE	approx. 0.3 mile	150 08 57.2
Signal Peak Lookout Tower		190 56 44.3
R.M. 2 WSW	3.261 10.70	223 18 50

(R.A.M., 1945)--Station recovered in good condition as described. Not visited by an observing unit. The following description is based on data gathered by a lightkeeper.

Station is located on a sharp, rocky hill (the top of which is covered with loose boulders) lying about 2-1/2 miles ENE of Globe. It is the highest point in the vicinity.

Station is marked by a bronze station disk cemented in a drill hole in a boulder. Stamped "MINE 1938."

Reference mark 1 is a bronze reference disk cemented in a drill hole in a boulder. It is ESE of the station, about 5 feet lower, and is stamped "MINE NO 1 1938."

Reference mark 2 is a bronze reference disk cemented in a drill hole in a boulder. It is WSW of the station, about 6 inches higher, and is stamped "MINE 1938 NO 2."

Azimuth mark is a bronze azimuth disk and is stamped "MINE 1938." It is SSE of the station, in the culvert abutment mentioned below, and is 8 feet N of road center. It is 1-1/2 feet higher than road surface.

About 9 feet SSE of the station a 10-foot iron pipe projects from a 15-inch triangular iron plate which is bolted to a boulder.

To reach station from the post office at Globe, go N 1 block; continue N where highway turns left (W) 0.1 mile; thence right 0.1 mile; thence left 0.2 mile, crossing bridge; thence right 0.1 mile; thence left 0.05 mile; thence right and follow up S side of canyon 2.55 miles to azimuth mark which is set in the N abutment of a culvert. Continue 0.1 mile to top of grade and a side road left which leads to an old mine shaft. Turn left on this side road and go 0.1 mile to mine shaft and end of truck travel. From here climb NW to highest point and station. A 3/4-hour pack.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: MINE YEAR: 1938
 STATE: Ariz LOCALITY: Tonto National Forest and Winkelman to Winslow to Phoenix
 First -order Triangulation SOURCE: G-7605 FIELD SKETCH: ARIZ 18

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH θ (OR ACI ANGLE)	MARK
STATE: Ariz ZONE: E CODE: 0201	x 317,152.04 y 887,080.24	341°31'31" - 0 19 49	AZIMUTH MARK
STATE: ZONE: CODE:	E Y		

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION	
	LATITUDE:	LONGITUDE:		NORTH WEST	METERS FEET
	33°26'13"752	110 45 57.767		1,461.7 4,796	

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK	THIRD-ORDER 341°11'41"6		

V. A. Elias: 4794 ft. (USGS 1965)

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: IRON PIPE SET IN TRIANGULAR BASE YEAR: 1938
 STATE: Ariz LOCALITY: Tonto National Forest and Winkelman to Winslow to Phoenix
 First -order Traverse SOURCE: G-7605 FIELD SKETCH: ARIZ 18
 (No check on this position)

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH θ (OR ACI ANGLE)	MARK
STATE: Ariz ZONE: E CODE: 0201	x 317,157 y 887,073	- 0 19 49	
STATE: ZONE: CODE:	X Y		

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION	
	LATITUDE:	LONGITUDE:		NORTH WEST	METERS FEET
	33°26'13"681	110 45 57.706			

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
Computed from station MINE			

FILE COPY

164

ARIZONA

JULY 1966
PUBLISHED AND PRINTED BY:
U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
WASHINGTON D.C.

HORIZONTAL CONTROL DATA

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

QUAD 331103 STATION 1018
ARIZ
LATITUDE 33°00' TO 33°30'
LONGITUDE 110°30' TO 111°00'
DIAGRAM NI 12-8 MESA

33 15

110 45

MINE (Continued)

316

R

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
FORM NO. 500

RECOVERY NOTE, TRIANGULATION STATION

NAME OF STATION: MINE
ESTABLISHED BY: F.G.J.
RECOVERED BY: D.H.K.
STATE: ARIZONA
LOCALITY: Globe
COUNTY: Gila
YEAR: 1938
YEAR: 1947

Detailed statement as to the fitness of the original description: All marks recovered in good condition as described with the exception of direction of reference marks. Correct directions given below.

The station is located about 2.5 miles east-northeast of Globe on a sharp rocky hill the top of which is covered with loose boulders. The station mark is a bronze disk as described in note 4 set flush 11 feet east of the west brim, 5 feet west of east brim and is stamped: "MINE 1938".

Reference mark No. 1 is a bronze disk as described in note 12c set flush 5 feet lower than station mark and stamped: "MINE NO 1 1938".

Reference mark No. 2 is a bronze disk as described in note 12c set flush 1 foot higher than station mark and stamped: "MINE NO 2 1938".

The azimuth mark is a bronze disk set in the concrete headwall of a culvert, 9 feet north of the center line of road, projects 14 inches and is stamped: "MINE 1938".

To reach station from the court house in Globe, go northerly on main street 0.35 mile to a street right; turn right, cross concrete bridge, go 0.2 mile to cross street; continue straight ahead on graded road 2.45 miles to remains of old buildings on right and azimuth mark on left as described above; continue straight ahead 0.1 mile to fork; turn left, go 100 feet to road left; turn left, go 100 feet to fork; turn right, go 0.1 mile to remains of old mine and end of truck travel. From here walk northwesterly to highest point of hill and station. A 30-minute pack.

OBJECT	HQR. DISTANCE Meters	DIRECTION
APACHE MID PK (USPS 1934) 1938		0 00 00
R.M.No.1 1938 SE	10.913	109 38 13
Iron Pipe, Tri. Base SE	2.708	133 17
Azi. Mk. 1938 SSE	0.5 Mile	150 09 08.2
Signal Peak L.O.Tower SSW	14 Mile	190 56 43.4
R.M.No.2 1938 SW	3.260	223 20 32
Stack At Claypool, Ariz. WSW	6 Mile	240 19 02.8

Observations made from a 1.4 meter trirod.

FILE COPY

ARIZONA

164

JULY 1966

U. S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

HORIZONTAL CONTROL DATA

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

QUAD 331103 STATION 1019

ARIZ

LATITUDE 33°00' TO 33°30'
LONGITUDE 110°30' TO 111°00'
DIAGRAM NI 12-8 MESA33°15'
110°45'DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
FORM 566

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: PINAL STATE: Arizona COUNTY: Gila
 CHIEF OF PARTY: F. G. Johnson YEAR: 1938 LOCALITY: South of Globe, Ariz.

OBJECT	DISTANCE	DIRECTION	AZIMUTH
MINE	0	00 00.0	
R. M. #1 NW	14.730	11.253	9 29 28
R. M. #2 SE	10.536	119 04 55	
Azimuth Mark (app. 200 Yds S)	161	56 48.8	
Pinal L.O. station	5.0	272 42	

Detailed description:
 About 9 miles south of Globe, Ariz. Station is on the top of Pinal Peak, a sharp wooded peak in the Crook National Forest. The station is 5 meters east of the Pinal L. O. station.

To reach the station from the south end of the main street in Globe, Ariz. at the railroad station continue southerly for 0.4 miles and cross the railroad tracks. Thence continue southerly on the main traveled road for 1.0 miles to a fork just beyond a bridge. Here take the right fork for 1.8 miles to a fork. Thence take the right fork and go for 2.6 miles to a fork and a cattle guard. Here take the left fork for 5.8 miles to a fork. Thence take the left fork and go for 4.9 miles to a fork. Here take the left fork and go for 0.15 miles to a fork. Thence take the right fork and go for 0.85 miles to a fork. Thence take the right fork and go for 0.2 miles to the Pinal L. O. station and the station site.

R. M. #1 is north northeast of the station and about 6 feet lower in elevation. R. M. #2 is southeast of the station and at about the same elevation. R. M. #1 is at the edge (east) of the road. R. M. #2 is about 25 feet south of the road. The azimuth mark is about 200 yards south of the station and at about the same elevation. It is located on a rounded knoll south of the station. It is not visible from the station at the elevation of the ground. A line must be cleared from the station. A 37 foot tower was erected over this station.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
FORM 566

RECOVERY NOTE, TRIANGULATION STATION

NAME OF STATION: PINAL STATE: Arizona COUNTY: Gila
 ESTABLISHED BY: F.G.J. YEAR: 1938 LOCALITY: Globe
 RECOVERED BY: D.H.K. YEAR: 1947

Detailed statement as to the fitness of the original description:

Station recovered as described and all marks found in good condition.

The station is located about 9 miles airline south of Globe on a sharp wooded peak known as Pinal Peak. The station mark is a bronze disk as described in note 4, set flush 15 paces south of center line of road and 5.0 meters east of the center of the Pinal Lookout Tower. It is stampped: "PINAL 1938".

Reference mark No. 1 is a bronze disk as described in note 12c, projects 1 foot, is 3 paces north-northeast of center line of road, 4 feet lower than station mark and is stamped: "PINAL NO 1 1938".

Reference mark No. 2 is a bronze disk as described in note 12c, projects 30 inches, is 10 feet west of center line of road, 1 foot higher than station mark and is stamped: "PINAL NO 2 1938".

The azimuth mark is a bronze disk as described in note 12c, projects 6 inches, is on first wooded knoll about 200 yards south of station, stamped: "PINAL 1938".

To reach from the railroad station in Globe; go south 0.4 mile to railroad tracks; cross tracks and continue south 1.0 mile to a fork just after crossing a bridge; turn right, go 1.8 mile to a fork; turn right, go 2.6 miles to a fork at a cattle guard; turn left, go 5.8 miles to a fork; turn left, go 4.9 miles to a fork; turn left, go 0.15 mile to a fork; turn right, go 0.85 mile to a fork; turn right, go 0.2 mile to lookout tower and station. A drive station.

OBJECT	HOR. DISTANCE	DIRECTION
	Meters	
MINE 1938		00 00 00.
R.M. No. 1 1938 NW	14.248	09 29 30.
R.M. No. 2 1938 SE	10.536	119 04 26.
Az. Mk. 1938 S	200 yds.	161 56 48.8
Pinal L.O.T. Center	approx. 5.0 m	272 42
Signal Peak L.O. Tower NW		294 47 02.1

Observations made from a 11.8 meter tripod.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: PINAL YEAR: 1938
 STATE: Ariz LOCALITY: Tonto National Forest and Winkelman to Winslow to Phoenix
 First ORDER Triangulation SOURCE: G-7605 FIELD SKETCH: ARIZ 18

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH θ FOR 30m ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	x 300,182.53 y 830,831.22	358°43'57" - 0 21 32	AZIMUTH MARK
STATE: Ariz ZONE: C CODE: 0202	x 834,993.42 y 831,964.23	357 46 19 + 0 36 06	AZIMUTH MARK

GEODETTIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE:	LONGITUDE:	NORTH WEST	METERS FEET
	33°16'56"211	110 49 13.846		2,290.7 7,843

TO STATION	GEODETTIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
AZIMUTH MARK	THIRD-ORDER 358°22'25"0		

V/A ELEV. 7848 FT (USGS 1944)

FILE COPY

NOV 1970

JULY 1966
 U.S. DEPARTMENT OF COMMERCE
 ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
 COAST AND GEODETIC SURVEY
 REVISED MAY 1970

HORIZONTAL CONTROL DATA

by the
 Coast and Geodetic Survey
 NORTH AMERICAN 1927 DATUM

ARIZONA

QUAD 331103 STATION 1024
 ARIZ
 LATITUDE 33°00' TO 33°30'
 LONGITUDE 110°30' TO 111°00'
 DIAGRAM NI 12-8 MESA

164

TAM O'SHANTER (Gila County, Arizona, E.B.L., 1935)--Station is located on Tam o'Shanter peak, which is the highest and most northern peak on the gray limestone ridge running north from the 79 mine. Station is about 8 miles north of the Gila River and about 11 miles NW of Winkelman.

Station and reference marks are bronze disks in outcropping bedrock as described in notes 2a and 12a.

Reached from Winkelman as follows: go west on Kelvin road 3.4 miles to Hayden junction, continue west 0.3 miles, turn right, up hill go 0.7 miles to ETT at an old bunk house which faces east. From ETT descend NE into the canyon running north and south between the gray limestone ridge and the high red ridge. Follow the main canyon for about 2 miles to the saddle, then left to second saddle, then right to rim rock which can be scaled on the SW side only. Continue to top and station. A pack of 1-1/2 hours.

OBJECT	DISTANCE	DIRECTION
DUDLEY	Meters	0°00'00"0
R.M. No. 2, ESE	12.822	274 47 21.3
R.M. No. 1, S	6.739	341 01 08.3

(11-8-55)

RECOVERY NOTE, TRIANGULATION STATION

NAME OF STATION: TAM O'SHANTER

ESTABLISHED BY: YEAR: 1935 STATE: Arizona
 RECOVERED BY: USGS YEAR: 1963 COUNTY: Gila

Detailed statement as to the status of the original description including marks found, stampings, changes made, and other pertinent facts:

Revised route description: To reach station from post office in Winkelman go north 0.1 mile to intersection of state hwy's 177 and 77. Follow State Hwy 177 NW for 1.3 mi. to Hayden Junction. Continue on State Hwy 177 for 2.2 mi. to graded rd on right, west of drain at sign "79 MINE". Turn right and go 2.4 mi. to Y-rd fork. Take left fork and proceed up hill for 1.5 mi. to two old houses on ridge at road fork. Take right fork following along ridge for 0.3 mi. to saddle and end of truck travel. Follow trail NE into main drain between gray colored ridge on left (west) and red colored ridge on right (east). Follow up drain on cow trail for about 1.3 mi. to saddle. Turn left and climb steep hill to saddle S of highest point in vicinity. Climb right to rimrock on SW side of top where there is a steep notch about 25 ft high which can be climbed. Continue a short distance to top and station mark. About 1 1/2 hour pack. It is advisable to take a rope along for use in pulling equipment up steep notch.

(8-18-60)

RECOVERY NOTE, TRIANGULATION STATION

NAME OF STATION: TAM O'SHANTER

ESTABLISHED BY: E.B.L. YEAR: 1935 STATE: Arizona
 RECOVERED BY: AMS YEAR: 1967 COUNTY: Gila

OBJECT	HEIGHT OF TELESCOPE ABOVE STATION MARK		DIRECTION (Mag)	AZIMUTH	DISK DISTANCE (FEET)	GRID DISTANCE (METERS)
	METERS	FEET				
Manhattan USC&GS (1935)	00	00	00°			
RM #1	231	01	04.0	180	22.5	
RM #2	164	47	44.0	115	43.6	

Located approximately 6.0 air miles (NNW) of Hayden Jet, Arizona and approximately 9.0 air miles (ESE) of the Kelvin Airport.

To reach from P.O. in Winkelman, Arizona go 3.5 Mi (NE) on Arizona State Hwy 77 to a unimproved gravel road, turn left (N) on road and proceed 1.1 Mi to "Y" road intersection, go left (W) at "Y", proceed 3.6 Mi to cross rd, continue straight ahead (W) for 0.9 Mi and end of truck travel. Station is the highest point in the area on a Mag As of 293°, approximately 1 1/2 hour pack. It is suggested to bring a rope (30ft) to aid in getting equipment up cliff. The best place to climb is on the (SE) side of cliff. Condition of station good.

Station mark is a standard USC&GS Bronze Disk set in rock and stamped "Tam O'Shanter 1935".

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: TAM O SHANTER YEAR: 1935
 STATE: Ariz LOCALITY: Tonto National Forest and Winkelman to Winslow to Phoenix
 First-order Triangulation SOURCE: G-7605 FIELD SKETCH: ARIZ 9

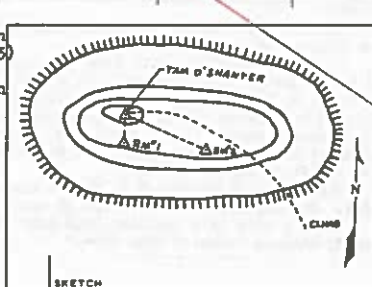
GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH & DR&M ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	x 301,659.65 y 760,415.12	- 0 21 13	
STATE: ARIZ ZONE: C CODE: 0202	x 837,647.77 y 761,576.74	+ 0 36 07	

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION METERS FEET
	LATITUDE:	NORTH WEST		
	33°05'19"584			
	110 48 51.315			

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
DUDLEY	24°15'47"01	4.154 1365	14,260.56

RM #1 is a standard USC&GS Bronze Disk set in rock and stamped "RM #1 Tam O'Shanter (1935)"

RM #2 is a standard USC&GS Bronze Disk set in rock and stamped "RM #2 Tam O'Shanter (1935)".



Y900 FILE COPY

0781 NOV 1970

164

JULY 1966

ARIZONA

U. S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY
REVISED MAY 1970

HORIZONTAL CONTROL DATA

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

QUAD 331103 STATION 1025
ARIZ
LATITUDE 33°00' TO 33°30'
LONGITUDE 110°30' TO 111°00'
DIAGRAM NI 12-8 MESA

U. S. COAST AND GEODETIC SURVEY
Form 522
Rev. Oct., 1952

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: WEBSTER (USGS 1944)

CHIEF OF PARTY: D.H. Konichek

Surface-station mark, Note,*

Underground-station mark, Note,*

Reference mark, No. 1 Note,*12c

Reference mark, No. 2 Note,*12c

Azimuth mark, Note,*12c

Witness mark, Note,*

Height of light above station mark, meters.

Height of telescope above station mark, meters.

Detailed description:

The station is located about 6.5 miles northwest of Miami and about 2.5 miles north of the Castle Dome Copper Co. residence area, it is on the extreme northwest end of the main summit and slightly lower than the highest point which is about 600 feet to the southeast, it is 60 feet southeast of the northwest end of ridge, 30 feet southwest of the northeast side, and 20 feet northeast of the southwest rim, a U.S.G.S. disk set in a boulder which projects 12 inches and stamped "WEBSTER 1944".

Reference mark No. 1 is approximately 6 inches higher than the station, projects about 24 inches and stamped "WEBSTER NO 1 USGS 1946".

Reference mark No. 2 is approximately 1 foot higher than the station, projects approximately 3 feet and stamped "WEBSTER NO 2 USGS 1946".

The azimuth mark is 30 paces north of the highest point and a 4 foot rock cairn, projects 4 feet and stamped "WEBSTER 1946".

To reach from the Valley National Bank in Miami; go west on routes #60 and #70 for 5.0 miles to junction of Castle Dome Road; turn right on Castle Dome road and go 3.0 miles to a guard station on right and reservoir on the left; continue for 0.05 mile to a reverse "Y" and sign "Castle Dome Residence 0.5 Mile"; turn sharp right and go 0.7 mile to the last building (a garage) of the residence area and the end of truck travel. From this point, cross fence and go up bank to a small clearing, from this clearing a trail is visible across the small wash to the east, keep to the west side of the wash and pack north for about 150 yards to the trail; thence follow the trail for about 1.0 mile to top of the first high ridge to where it ends in a saddle; from here continue on up the long ridge keeping close to the west rim of the ridge to its top at a cairn and azimuth mark; thence continue down across the low saddle and up the steep ridge to the highest point and fence line; thence angle left about 200 yards to the northwest end of the ridge and station site as described above. A 2-hour pack.

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

RECOVERY NOTE, TRIANGULATION STATION

NAME OF STATION: WEBSTER (USGS)

ESTABLISHED BY: DHK

RECOVERED BY: AMS

YEAR: 1947

YEAR: 1967

STATE: Arizona

COUNTY: Gila

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

OBJECT	DIRECTION	MAG. ANGLE Az	GEODETIC AZIMUTH	DISTANCE (FT)
RM-12H USGS (1944)	00° 00' 00"			
RM #1	20° 21' 44.5"	54°		8.9
RM #2	259° 46' 57.0"	319°		14.8

DESCRIPTION

Located approximately 10.0 air miles (NW) of Globe, 2.4 air miles (N) of Castle Dome Copper Company.

To reach from Globe P.O. take Hwy 60-70 (W) to Jct State Hwy 88, go right (N) 5.3 Mi to Lavine Ranch, go left (W) 2.2 Mi to fork of road, take left fork (W) for 0.5 Mi to J. Fleich Camp, continue (W) 0.3 Mi to fork Babich Camp, continue (SW) on road 2.8 Mi passing old house, coming to gate take left fork (S) 1.4 Mi to "Y" intersection, go right (SW) for 0.4 Mi to house, follow trail thru gate (W) 1.1 Mi to end of four wheel drive, go (SW) to center of ridge line, at ridge go right (NW) 150 ft to station.

Station is at extreme N.E. end of main ridge. Station is not highest point of ridge. Packing time is 1 hour and 30 min.

Station mark is a standard USGS disk set on top of a rock, 1.0 ft above the ground, stamped "Webster USGS 1944."

STATE: Arizona COUNTY: Gila

YEAR: 1947 LOCALITY: Miami

DISTANCES AND DIRECTIONS TO REFERENCE MARKS AND PROMINENT OBJECTS WHICH CAN BE SEEN FROM THE GROUND

OBJECT	DISTANCE METERS	DIRECTION	AZIMUTH
HATTON 1947		00 0 00.00	
R.M. No. 2 1947 NW	4.456	118 23 13.	
R.M. No. 1 1947 ENE	2.688	238 41	
AZ. Mk. 1947 approx.		157 20 07.7	

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: WEBSTER USGS

YEAR: 1947

STATE: Ariz

LOCALITY: Tonto National Forest and

First -ORDER Triangulation Winkelman to Winslow to Phoenix

SOURCE: G-7605

FIELD SKETCH: ARIZ 24

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH & TORION ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	X 262,414.30 Y 893,348.25	11°28'58" - 0 25 46	AZIMUTH MARK
STATE: Ariz ZONE: C CODE: 0202	X 796,177.95 Y 893,841.59	10 31 05 + 0 32 07	AZIMUTH MARK

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION		
	LATITUDE:	LONGITUDE:		NORTH	WEST	METERS
	33°27'12"176	110 56 44.229			1,761.3	5,779
		TO STATION		DISTANCE		
		GEODETIC AZIMUTH (From south)		LOGARITHM (Meters)		

AZIMUTH MARK

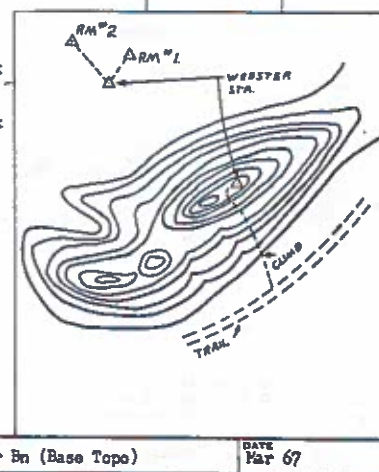
THIRD-ORDER
11°03'12"4

VA ELEV. 5776 FT (USGS 1947)

RM #1 is a standard USGS disk set in a rock stamped "RM-1-1946," WEBSTER NO 1 USGS 1946
RM #2 is a standard USGS disk set in a rock stamped "RM-2-1946," WEBSTER NO 2 USGS 1946

WEBSTER NO 2 USGS 1946

(Note:) RM's were set in by USGS 1946.

(DESCRIBED) OR (RECOVERED) BY
SSG J. MartinezAGENCY
30th Engr Bn (Base Topo)DATE
Mar 67

FILE COPY

NOV 1970

HORIZONTAL CONTROL DATA

by the
 Coast and Geodetic Survey
 NORTH AMERICAN 1927 DATUM

QUAD 331103 STATIONS 1026, 1027
 ARIZ
 LATITUDE 33°00' TO 33°30'
 LONGITUDE 110°30' TO 111°00'
 DIAGRAM NI 12-8 MESA

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: COOLIDGE DAM WATER TANK YEAR: 1945
 STATE: Ariz LOCALITY: Globe to Clifton, Southeastern Arizona
 Third-ORDER Triangulation SOURCE: G-7961 FIELD SKETCH: ARIZ 20

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH @ (OR Δ) ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	x 389,129.15 y 791,567.85	- 0 11 54	
STATE: Ariz ZONE: C CODE: 0202	x 924,597.05 y 794,190.08	+ 0 45 34	

GEODETTIC DATA	POSITION		SECONDS IN METERS	ELEVATION	
	LATITUDE:	NORTH WEST		METERS	FEET
	33°10'31".998			839.7	
	LONGITUDE: 110 31 44.479			2,755	

TO STATION	GEODETTIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
Computed from stations BOOT, SALT MOUNTAIN, COT			

COOLIDGE DAM WATER TANK (Pinal County, Ariz., R.A.M., 1945)--
 A large galvanized-iron tank located on the bluff at the W end of
 Coolidge Dam. It is about 100 feet W of the dam and about 100
 feet higher.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: CUTTER WATER TANK YEAR: 1945
 STATE: Ariz LOCALITY: Globe to Clifton, Southeastern Arizona
 Third-ORDER Triangulation SOURCE: G-7961 FIELD SKETCH: ARIZ 20
 (No check on this position)

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH @ (OR Δ) ANGLE	MARK
STATE: Ariz ZONE: E CODE: 0201	x 348,207 y 857,235	- 0 16 24	
STATE: ZONE: CODE:	x y		

GEODETTIC DATA	POSITION		SECONDS IN METERS	ELEVATION	
	LATITUDE:	NORTH WEST		METERS	FEET
	33°21'20".08			981	
	LONGITUDE: 110 39 49.62			3,218	

TO STATION	GEODETTIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
Computed from stations CUTTER, BLAIR			

(No description available)

164

ARIZONA

JULY 1966
PUBLISHED AND PRINTED BY:
U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
WASHINGTON D.C.

HORIZONTAL CONTROL DATA

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

QUAD 331103 STATIONS 1028, 1029
ARIZ
LATITUDE 33°00' TO 33°30'
LONGITUDE 110°30' TO 111°00'
DIAGRAM NI 12-8 MESA

33 15
110 45

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: **GLOBE BLACK METAL STACK** YEAR: 1938
STATE: Ariz LOCALITY: Tonto National Forest and
Winkelman to Winslow to Phoenix
Third-ORDER Triangulation SOURCE: G-7605 FIELD SKETCH: ARIZ 18
(No check on this position)

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH θ (ORION ANGLE)	MARK
STATE: Ariz ZONE: E CODE: 0201	X 309,608 Y 876,458	- 0 20 37	
STATE: ZONE: CODE:	X Y		

GEODETTIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE:	NORTH WEST		METERS FEET
	33°24'28.22			
	LONGITUDE: 110 47 26.04			

TO STATION	GEODETTIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
Computed from stations PINAL, GLOBE (No description available)			

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: **HAYDEN LARGE BRICK STACK** YEAR: 1935
STATE: Ariz LOCALITY: Tonto National Forest and
Winkelman to Winslow to Phoenix
Third-ORDER Triangulation SOURCE: G-7605 FIELD SKETCH:
(No check on this position)

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH θ (ORION ANGLE)	MARK
STATE: Ariz ZONE: E CODE: 0201	X 313,355 Y 730,198	- 0 19 54	
STATE: Ariz ZONE: C CODE: 0202	X 849,846 Y 731,556	+ 0 37 18	

GEODETTIC DATA	POSITION		SECONDS IN METERS	ELEVATION
	LATITUDE:	NORTH WEST		METERS FEET
	33°00'21.29			
	LONGITUDE: 110 46 31.80			

TO STATION	GEODETTIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
Computed from stations DUDLEY, RIPSEY HILL (No description available)			

FILE COPY

JULY 1966
 PUBLISHED AND PRINTED BY:
 U.S. DEPARTMENT OF COMMERCE
 COAST AND GEODETIC SURVEY
 WASHINGTON D.C.

HORIZONTAL CONTROL DATA

by the
 Coast and Geodetic Survey
 NORTH AMERICAN 1927 DATUM

QUAD 331103 STATIONS 1030, 1031
 ARIZ
 LATITUDE 33°00' TO 33°30'
 LONGITUDE 110°30' TO 111°00'
 DIAGRAM NI 12-8 MESA

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: MIAMI INSPIRATION COPPER CO STACK YEAR: 1938
 STATE: Ariz LOCALITY: Tonto National Forest and Winkelman to Winslow to Phoenix
 Third -ORDER Triangulation SOURCE: G-7605 FIELD SKETCH: ARIZ 18

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH θ (ORION ANGLE)	MARK
STATE: Ariz ZONE: E CODE: 0201	x 289,664.15 y 877,983.72	- 0 22 46	
STATE: ZONE: CODE:	x y		

GEODETIC DATA	POSITION		SECONDS IN METERS	(No check on elev.)		
	LATITUDE:	LONGITUDE:		NORTH	WEST	METERS
	33°24'42".067	110 51 21.418			1,178	3,865

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
Computed from stations MIAMI, MINE, See description Station GLOBE	GLOBE		

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: PINAL PEAK LOOKOUT TOWER YEAR: 1947
 STATE: Ariz LOCALITY: Tonto National Forest and Winkelman to Winslow to Phoenix
 Third -ORDER Triangulation SOURCE: G-7605 FIELD SKETCH:

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH θ (ORION ANGLE)	MARK
STATE: Ariz ZONE: E CODE: 0201	x 300,167.20 y 830,836.68	- 0 21 32	
STATE: Ariz ZONE: C CODE: 0202	x 834,978.00 y 831,969.43	+ 0 36 06	

GEODETIC DATA	POSITION		SECONDS IN METERS	ELEVATION		
	LATITUDE:	LONGITUDE:		NORTH	WEST	METERS
	33°16'56".264	110 49 14.027				

TO STATION	GEODETIC AZIMUTH (From south)	DISTANCE	
		LOGARITHM (Meters)	METERS
Computed from stations RICE, PINAL			

DEPARTMENT OF COMMERCE
 U. S. COAST AND GEODETIC SURVEY
 Form 536
 Rev. Oct., 1953

DESCRIPTION OF TRIANGULATION STATION

NAME OF STATION: Pinal Peak L. O. Tower STATE: Arizona COUNTY: Gila
 YEAR: 1947 LOCALITY: Globe

CHIEF OF PARTY: D.H.Konichek
 Surface-station mark, Note,*
 Underground-station mark, Note,*
 Reference mark, Note,*
 Reference mark, Note,*
 Azimuth mark, Note,*
 Witness mark, Note,*

Height of light above station mark meters.
 Height of telescope above station mark meters.†

Detailed description:

Station is the center of the U. S. Forest Service, structural steel lookout tower located about 9 miles airline south of Globe on a sharp wooded peak known as Pinal Peak. The tower is about 80 feet high and was connected by traverse to triangulation station PINAL 1938.

Described by R.W.W.

Marked by _____

NOTE.—The initial direction must be to some exchange station.

* Refer to pages 100 and 101, Special Publication No. 120, or to pages 112 and 113, Special Publication No. 121.
 † To nearest millimeter only, when no trigonometric leveling is being done.

33 110 TL

164

ARIZONA

JULY 1966
PUBLISHED AND PRINTED BY:
U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
WASHINGTON D.C.

HORIZONTAL CONTROL DATA

by the
Coast and Geodetic Survey
NORTH AMERICAN 1927 DATUM

QUAD 331103 STATION 1032
ARIZ
LATITUDE 33°00' TO 33°30'
LONGITUDE 110°30' TO 111°00'
DIAGRAM NI 12-8 MESA

33 15
110 45

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 505
Rev. Oct., 1952

RECOVERY INTERSECTION DESCRIPTION OF TRIANGULATION STATION

R

NAME OF STATION: Signal Pk. Lookout Tower STATE: Arizona COUNTY: Gila
Chief of Party: D.H. Konichek YEAR: 1937 LOCALITY: Globe

OBJECT	DISTANCE	DIRECTION	AZIMUTH
No original description			

- Surface-station mark, Note, *
- Underground-station mark, Note, *
- Reference mark, Note, *
- Reference mark, Note, *
- Azimuth mark, Note, *
- Witness mark, Note, *
- Height of light above station mark meters.
- Height of telescope above station mark meters.

Detailed description:
Located about 8 miles air line south-southwest of Globe on what is known as
Signal Peak. Station is the center of the top of the standard, U. S. Forest Service,
structural steel lookout tower which is about 60 feet high.

Described by A.A.P. Marked by _____

Note.—The initial direction must be to main scheme station. * Refer to pages 108 and 109, Special Publication No. 128, or to pages 112 and 113, Special Publication No. 115. † To nearest meter only, when no trigonometric leveling is being done.

ADJUSTED HORIZONTAL CONTROL DATA

NAME OF STATION: SIGNAL PEAK LOOKOUT TOWER YEAR: 1938
STATE: ARIZ LOCALITY: Tonto National Forest and
Winkelman to Winslow to Phoenix
Third-order Triangulation SOURCE: G-7605 FIELD SKETCH: ARIZ 18
(No check on this position)

GRID DATA	COORDINATES (Feet)	PLANE AZIMUTH & TORION ANGLE	MARK
STATE: ARIZ ZONE: E CODE: 0201	x 295,695 y 834,811	- 0 22 01	
STATE: ZONE: CODE:	x y		

GEODETTIC DATA	POSITION		SECONDS IN METERS	ELEVATION (No check on elev.)
	LATITUDE:	LONGITUDE:	NORTH WEST	METERS FEET
	33°17'35".31	110 50 07.01		2,403 7,884

TO STATION	GEODETTIC AZIMUTH (From center)	DISTANCE	
		LOGARITHM (Meters)	METERS
Computed from stations MINE, PINAL			

VA Elev: 7812. FT USGS, 1963
(PH 910) (GROUND)

FILE COPY