

SURVEY CONTROL DATA IN QUADRANGLE 219

20 ATA (USGS, 1950; Ashe County, North Carolina)
Located 5 feet north of masonry steps leading to Lansing High School, 4 feet east of masonry wall, and 21 feet south of poplar tree. A standard tablet stamped "20 ATA 2699 1950" and painted "USBM 2698.8".
ELEVATION: 2698.84 feet (G-3 Unadjusted)

21 ATA (USGS, 1950; Ashe County, North Carolina)
Located 2.2 miles north of Lansing High School along State Route 162, 50 feet north of and about 5 feet lower than intersection of State Route 162 with road northeast, 60 feet west of stop sign and 4 feet west of south corner of fence post of pasture. A standard tablet stamped "21 ATA 2891 1950" and painted "USBM 2891.2".
ELEVATION: 2891.16 feet (G-3 Unadjusted)

22 ATA (USGS, 1950; Ashe County, North Carolina)
Located 0.6 miles west of Sturgills, along State Route 162, 35 feet west of intersection of State Route 162 and road northwest, 12 feet northwest of southeast corner of fence post of field, and 1 foot southwest of wooden fence. A standard tablet stamped "22 ATA 2867 1950" and painted "USBM 2867.1".
ELEVATION: 2867.12 feet (G-3 Unadjusted)

BAID KNOB (USGS, 1934; Johnson County, Tennessee)
Located about 5½ miles east of Cold Springs, 5½ miles northeast of Mountain City, 4½ miles southeast of Laurel Bloomingery, in center of bald knob on highest point of Bald Knob which is high cleared peak of Blue Ridge Mountains, and 55 feet north-northeast of a 20 inch dead chestnut tree.
To reach from Mountain City, go southeast on Highway 421 about 2 miles to post office at Shouns. At 2.0 miles keep left, at 5.7 miles keep left, at 8.5 miles (Paynes Gap) take narrow ridge road to left at Paynes Gap and follow road about 4 miles to gap. Station is on High Bald Knob about 1000 feet north.
Station is marked by U.S. Geological Survey disk stamped "1934" in irregular-shaped buried stone. Reference and azimuth marks are standard reference disks in boulders.

Reference Mark 1 is in square buried stone on eastern slope of ridge and 17.490 meters (57.38 feet) from the station in geodetic azimuth 3°33'.
Reference Mark 2 is in buried stone on western slope of ridge, 8 feet west of 20 inch dead chestnut tree, and 18.150 meters (59.55 feet) from station in geodetic azimuth 84°39'.

Azimuth mark is in small buried stone flush with the ground, near middle and eastern edge of sloping ridge and 500 yards from the station.
GEODETIC POSITION: Lat. = 36°30'46.533"; Long. = 81°43'20.369" (C-2)

Geodetic Azimuth to Azimuth Mark: 229°28'11.8"

GRID POSITION (Tennessee): X = 3,256,796.17; Y = 799,516.25 (C-2)

Grid Azimuth to Azimuth Mark: 226°57'56"

GRID POSITION (North Carolina): X = 1,199,939.70; Y = 1,016,580.16 (C-2)

Grid Azimuth to Azimuth Mark: 231°02'29"

ELEVATION: 4328 (T-5)

BEACH (TVA, 1938; Washington County, Virginia)
To reach from Green Cove, Virginia, drive east and south about 1.8 miles to road fork, turn left, proceed about 1.5 miles to sign "To White Top" turn left and proceed to top of mountain and end of road. Proceed west 1.1 mile on foot to top of Beach Mountain and station which is on top.
Station is marked by a 1 inch angle iron stamped "BEACH" and driven in ground on top of Beach Mountain.

Reference Mark 1: 18.6 feet S 05° W to triangle on 8 inch oak.

Reference Mark 2: 20.2 feet S 75° W to triangle on 10 inch beech.

Reference Mark 3: 3.0 feet N 18° W to triangle on 14 inch beech.

GEODETIC POSITION: Lat. = 36°38'09.95"; Long. = 81°37'32.68" (T-4)

GRID POSITION (Virginia South): X = 1,082,970.8; Y = 125,414.2 (T-4)

GRID POSITION (Tennessee): X = 3,283,149.3; Y = 849,569.8 (T-4)

ELEVATION: 4966 feet (T-5)

BM 3272.1 (USGS, 1934; Grayson County, Virginia)
Located 4.3 miles east thence 2.2 miles south of Green Cove, 120 feet south of T-road east, and 20 feet west of road. A chiseled square, painted "USBM 3272.1" on large boulder.
ELEVATION: 3271.20 feet (G-3)

BM 3334 (USGS, 1908; Grayson County, Virginia)
Located 3.5 miles east of Laurel Bloomingery, about 0.5 mile from top of mountain, 100 yards west of sawmill, 3 feet south of road. A cross marked "3334" on rock ledge.
ELEVATION: 3333.70 feet (G-3)

BM 3391.8 (USGS, 1934; Grayson County, Virginia)
Located 1.2 miles north of mouth of Cabin Creek, 140 feet west of intersection of roads, 50 feet northwest of bridge. A chiseled square, painted "USBM 3391.8" on ledge.
ELEVATION: 3391.38 feet (G-3)

BM 3665.7 (USGS, 1934; Grayson County, Virginia)
Located 4.3 miles east thence 1.1 miles south down Mud Creek from Green Cove, 60 feet south of trail east, and 50 feet west of road, on a sharp ridge. A chiseled square, painted "USBM 3665.7" in ledge.
ELEVATION: 3666.48 feet (G-3)

BM 3678.6 (USGS, 1934; Grayson County, Virginia)
Located 2.0 miles north of mouth of Cabin Creek, 350 feet north of road fork at ford, 240 feet southeast of house, at foot of trail up to Massies Gap. A chiseled square, painted "USBM 3678.6" on boulder.
ELEVATION: 3678.20 feet (G-3)

BM 3747 (USGS, 1908; Ashe County, Virginia)
Located 4.3 miles east of Laurel Bloomingery, at top of Cut Laurel Gap, 8 feet north of road, 100 feet south of house, just to east of Tennessee-North Carolina state line, on ledge of granite. A chiseled oval marked "3747".
Reference Mark 1: 39.3 feet N 75° W from northwest corner of old building.
Reference Mark 2: 32.5 feet N 5° W from south one of two 36 inch oak trees.
Reference Mark 3: 14.0 feet S 60° E from a 48 inch maple tree.
Reference Mark 4: 50.0 feet S 30° W from road intersection.
ELEVATION: 3746.01 feet (G-3)

BM 3791.2 (USGS, 1934; Grayson County, Virginia)
Located 4.9 miles west thence 0.7 miles south of Trout Dale, 60 feet northwest of house, on east side of road. A chiseled square, painted

"3791.2" on ledge.
ELEVATION: 3790.69 feet (G-3)

BM 3984 (USGS, 1908, Smyth County, Virginia)
Located 1.9 miles south of Whitetop Gap, 300 feet northwest of old house, 8 feet east of road. A cross marked "3984" on ledge of rock.
ELEVATION: 3984.57 feet (G-3)

BM 4026.8 (USGS, 1934; Grayson County, Virginia)
Located 2.5 miles north of mouth of Cabin Creek, on trail to Massies Gap, 150 feet south of timber line, 20 feet east of trail in pasture. A chiseled square, painted "USBM 4026.8" on ledge.
ELEVATION: 4026.32 feet (G-3)

FEATHERCAMP (USC&GS, 1934; Washington County, Virginia)
Located in Unaka National Forest, about 5½ miles north-northwest of Virginia-Tennessee-North Carolina Corner, 4½ miles northeast of Damascus, on summit of Feathercamp Peak of Grosses Mountain, 30 feet northwest of small log cabin, and in longitudinal center of summit.
To reach from railroad crossing on Route 58 in Damascus, go east 6.8 miles on dirt road on north side of railroad tracks to top of grade, turn left onto dirt road and go about 1.5 miles to summit and station site.
Station was marked by standard station disk in boulder. (In 1938 it was reported considerable grading had been done in the area. Surface mark was not found. Underground mark thought to be still in place.)

Reference Mark 1 is standard reference disk in bedrock down east slope, and 43.26 feet from the station in geodetic azimuth 345°54'.

Reference Mark 2 is probably standard reference disk in top of concrete footing of northwest leg of fire tower, 75.83' from station in geodetic azimuth 74°53'.

Azimuth mark is standard reference disk in top of boulder on southwest edge of road leading to station, about ½ mile west of group of rough frame buildings, and between 0.6 and 0.7 mile from station.

GEODETIC POSITION: Lat. = 36°39'53.491"; Long. = 81°43'03.199" (C-2)

Geodetic Azimuth to Azimuth Mark: 279°02'38.1"

GRID POSITION (Virginia South): X = 1,056,402.64; Y = 136,784.16 (C-2)

Grid Azimuth to Azimuth Mark: 280°59'48"

FEATHERCAMP FIRE TOWER (? ; Washington County, Virginia)
Located on Feathercamp Peak of Grosses Mountain near site of Feathercamp triangulation station.

GEODETIC POSITION: Lat. = 36°39'53.146"; Long. = 81°43'04.196" (C-3)

GRID POSITION (Virginia South): X = 1,056,320.27; Y = 136,752.02 (C-3)

ELEVATION: 3795 feet (Ground) (T-5)

FODDERSTACK (USGS, 1934; Johnson County, Tennessee)
Located about 4 miles southeast of Damascus and 2 miles northeast of Laurel Bloomingery on east end of Fodderstack Mountain. From Damascus, take Mountain City Road 3.0 miles, turn left on Taylor Valley Road 0.6 mile, then turn sharp right 1.0 mile to small community called Matney at base of mountain. Proceed up mountain to station. Station is a standard tablet stamped "FODDERSTACK 1934" and set in rock on highest point of mountain.

GEODETIC POSITION: Lat. = 36°35'27.991"; Long. = 81°44'08.772" (G-3)

Geodetic Azimuths

Distance

To Station Azimuth Back Azimuth Log. Meters Miles

Grant 130°20'01.5" 310°14'36.5" 4.248703 11.0

White Top 2 247°13'47.2" 67°18'27.0" 4.101753 7.9

Bald Knob 352°05'46.9" 172°06'15.7" 3.942449 5.4

GRID POSITION (Tennessee): X = 3,251,608.5; Y = 827,781.1 (G-3)

GRID POSITION (Virginia South): X = 1,050,142.8; Y = 110,131.8 (G-3)

ELEVATION: 3731 feet (T-5)

GLENN (USC&GS, 1934; Ashe County, North Carolina)
Located about 7 miles southeast of Damascus, Virginia, on highest part of highest knob at junction of Stone and Pond Mountains, about 40 feet north of stump of large tree, and 6.8 feet southeast from obtuse-angled junction of fence lines.

To reach from Whitetop, Virginia, cross overhead bridge and go to right 2.7 miles over rough farm road to home of Roby W. Sullivan at end of truck travel, follow dim wagon road 1.5 miles up ridge to station North Carolina corner, go southwest 0.25 mile along ridge to gap, and follow ridge southeast 0.25 mile to top of knob and station site. Station is a standard station disk in buried rock.

Reference Marks are standard reference disks in buried rocks.

Reference Mark 1 is on southern downward slope of knob and is 113.00 feet from station in geodetic azimuth 329°57'.

Reference Mark 2 is on downward slope of knob and 96.58 feet from station in geodetic azimuth 30°03'.

Azimuth mark was established for station North Carolina Corner and is a standard reference disk in boulder stamped "N.C. Corner", on north side of trail leading to station, about 10 feet north-northeast of large tree and 0.4 mile from station.

GEODETIC POSITION: Lat. = 36°34'52.313"; Long. = 81°40'37.488" (C-2)

Geodetic Azimuth to Azimuth Mark: 166°35'22.3"

GRID POSITION (North Carolina): X = 1,213,903.66; Y = 1,041,068.06 (C-2)

Grid Azimuth to Azimuth Mark: 168°08'05"

GRID POSITION (Virginia South): X = 1,067,243.26; Y = 105,940.44 (C-2)

Grid Azimuth to Azimuth Mark: 168°31'04"

GRID POSITION (Tennessee): X = 3,268,983.09; Y = 824,932.11 (C-2)

Grid Azimuth to Azimuth Mark: 164°03'31"

ELEVATION: 4980 feet (T-5)

LR 124 (TVA, 1936; Johnson County, Tennessee)
Located 5.0 miles east of Laurel Bloomingery, Tennessee. To reach from Laurel Bloomingery, drive east on gravel road 0.8 mile to church, turn right 0.1 mile to T-intersection, thence turn left 4.0 miles to Cut Laurel Gap, thence turn left 1.7 miles to broad flat grassy top. Point is at most northerly end of top, about 50 feet east of a lone 12 inch locust and stamped "TVA LR 124 1938". Station is a 1 x 1 inch x 1/8 inch angle iron nearly on the Johnson County, Tennessee and Ashe County, North Carolina line.

Reference Mark 1: 13.38 feet N 75° E to short maple stump.

Reference Mark 2: 26.44 feet north to burned chestnut stump.

Reference Mark 3: 37.93 feet S 85° W to chestnut stump.

GRID POSITION (Tennessee): X = 3,264,349.1; Y = 813,901.2 (T-4)

ELEVATION: 4237 feet (T-5)

LR 125 (TVA, 1938; Johnson County, Tennessee - Ashe County, North Carolina)
To reach from Laurel Bloomingery, drive east on gravel road 0.8 mile to church, turn right 0.1 mile to T-intersection, thence turn left 4.0 miles to Cut Laurel Gap, thence turn left 1.7 miles to broad flat grassy top. Point is about 1 mile (airline north of LR 124) and about 1.3 miles along ridge on cleared top, about 500 feet north of gap and 1000 feet southwest of shed, 150 feet west of fence corner and about 10 feet south of fence. Station is a 1 x 1 inch angle iron nearly on the Johnson County, Tennessee and Ashe County, North Carolina line, about 5.0 miles east of Laurel Bloomingery, Tennessee and stamped "TVA LR 125 1938".

Reference Mark 1: 17.90 feet N 70° W to fence post.

Reference Mark 2: 14.80 feet N 30° E to fence post.

Reference Mark 3: 13.50 feet N 50° W to fence post.

GRID POSITION (Tennessee): X = 3,265,284.8; Y = 820,317.6 (T-4)

ELEVATION: 4393 feet (T-5)

LR 126 (TVA, 1938; Ashe County, North Carolina)

To reach from Hemlock, North Carolina, Post Office, drive north 1.7 miles to a two-story windowless frame dwelling on the right. Follow nose of ridge to right 500 feet to top of small knoll. LR 126 is about 30 feet south of fence and woods line and 15 feet east of top of knoll. Station is a 1 x 1 inch angle iron, located 1.7 miles north of Hemlock Post Office and stamped "TVA LR 126 1938".

Reference Mark 1: 14.57 feet S 10° W to 12 inch chestnut stump.

Reference Mark 2: 9.95 feet S 70° E to 8 inch chestnut stump.

Reference Mark 3: 6.20 feet N 10° E to 18 inch chestnut stump.

GRID POSITION (Tennessee): X = 3,267,602.2; Y = 802,679.1 (T-4)

ELEVATION: 3416 feet (T-5)

LR 129 (TVA, 1938; Johnson County, Tennessee)

To reach from Laurel Bloomingery, drive east on gravel road 0.8 mile to church at crossroads, continue east on ungraded road 0.9 mile to sawmill at edge of woods. Continue on said road 500 feet then bear right on log trail 1000 feet to gap. At gap turn left along ridge 300 feet to 18 inch pine tree. Point is on the northwest side of tree. Station is a 1 x 1 x 1/8 inch angle iron. It is 2.0 miles east of Laurel Bloomingery and stamped "TVA LR 129 1938".

Reference Mark 1: 11.69 feet N 30° E to 8 inch dead red oak.

Reference Mark 2: 2.80 feet S 70° E to 18 inch pine.

Reference Mark 3: 4.84 feet N 70° W to a 3 inch chestnut snag.

GRID POSITION (Tennessee): X = 3,252,650.7; Y = 814,035.6 (T-4)

ELEVATION: 2938 feet (T-5)

LR 130 (TVA, 1938; Grayson County, Virginia)

To reach from White Top, Post Office, drive north on gravel road 2.1 miles to reverse Y-intersection. Turn back left 1.1 miles to T-road right. Continue straight ahead 0.1 mile to farm road right, follow farm road to gap, 0.2 mile. Point is 300 feet north of gap on side of knob and 150 feet south of top. Station is a 1 x 1 inch angle iron in Grayson County, Virginia, 2 miles north of White Top and stamped "TVA LR 130 1938".

Reference Mark 1: 21.38 feet S 20° W to 30 inch chestnut stump.

Reference Mark 2: 40.40 feet S 20° E to 36 inch chestnut stump.

GRID POSITION (Tennessee): X = 3,284,795.4; Y = 838,118.7 (T-4)

ELEVATION: 3762 feet (T-5)

LR 132 (TVA, 1938; Grayson County, Virginia)

To reach from White Top drive 0.8 mile southeast along south side of the Norfolk Western Railway from overhead bridge across same, to T-road left. Point is 23 feet west of lone tree on nose of ridge, 1000 feet southwest of intersection. An iron bed post 0.8 mile south of White Top.

Reference Mark 1: 23.0 feet S 80° E to 10 inch tree.

GRID POSITION (Tennessee): X = 3,284,895.3; Y = 828,944.0 (T-4)

ELEVATION: 3684 feet (T-5)

LR 133 (TVA, 1938; Washington County, Virginia)

To reach from Green Cove, Virginia, drive west from railroad station 0.6 mile to ungraded woods road up valley to left. Go south on this wood road 0.4 mile to fork. Bear right .4 mile on old Tram road to farmhouse. Turn right 1000 feet then right again and follow creek to head of hollow. Point is on top of hill to north 100 feet west of edge of woods and on east side of clump of chestnut sprouts. A 1 x 1 inch angle iron in Washington County, Virginia, 1.2 miles southwest of Green Cove, Virginia, and stamped "TVA LR 133 1938".

Reference Mark 1: 4.05 feet to 12 inch chestnut stump.

Reference Mark 2: 5.23 feet to 12 inch chestnut stump.

GRID POSITION (Tennessee): X = 3,272,430.8; Y = 837,040.6 (T-4)

ELEVATION: 3782 feet (T-5)

LR 134 (TVA, 1938; Washington County, Virginia)

To reach from Taylor's Valley drive east on road to Green Cove 0.4 mile, then turn right 0.5 mile to gate at mouth of hollow on right. Go up hollow, bearing to the right 300 feet from gate to head of same. Point is at lone cedar on side of ridge on the right 100 feet west of woods line. A 1 x 1 inch angle iron, 0.6 mile south of Taylors Valley, Virginia, and stamped "TVA LR 134 1938".

Reference Mark 1: 2.19 feet to 4 inch cedar.

GRID POSITION (Tennessee): X = 3,257,367.7; Y = 836,738.2 (T-4)

ELEVATION: 2819 feet (T-5)

LR 135 (TVA, 1938; Johnson County, Virginia)

To reach from Taylor's Valley, drive east on road to Green Cove, 0.4 mile, then turn right 1.2 mile to gap. Turn right at gap and follow old road and field road in general northwesterly direction 0.5 mile to nose of ridge. Point is at top of knob at north end of the ridge. A 1 x 1 inch angle iron in Johnson County, Tennessee, 1.0 mile south of Taylor's Valley, Virginia and stamped "TVA LR 135 1938".

GRID POSITION (Tennessee): X = 3,255,863.4; Y = 834,383.6 (T-4)

ELEVATION: 2968 feet (T-5)

LR 137 (TVA, 1938; Washington County, Virginia)

To reach from Konnarock, Virginia, drive west on Straight Creek Road, 6500 feet, take left, drive 500 feet, take left fork, drive 3800 feet past second fill past first house on the right side of old railroad grade, proceed up trail on foot up a branch and hollow, 3000 feet to gap on top of ridge.

Point is 400 feet southwest of gap. A 1 x 1 inch angle iron 0.4 feet above the ground and is driven in the woods on the southeast side of a hill near the top.

Reference Mark 1: 9.95 feet S 27° E to 30 inch sweetgum.

Reference Mark 2: 4.35 feet N 83° W to 2 inch twin dogwood.

Reference Mark 3: 4.14 feet N 24° W to 3 inch oak. (All references are blazed.)

GEODETIC POSITION: Lat. = 36°38'25.59"; Long. = 81°39'48.36" (T-4)

GRID POSITION (Tennessee): X = 3,272,030.8; Y = 846,657.3 (T-4)

ELEVATION: 3570 feet (T-5)

LR 138 (TVA, 1938; Ashe County, North Carolina)

To reach from White Top, Virginia, at highway bridge over Norfolk and Western Railway, drive southwest on "GATE ROAD" 1.8 miles to fork. Bear left 0.6 mile to house, 1000 feet beyond house, bear left up hollow on old logging trail 1.0 mile to house. Continue southwest along ridge to north of house to high point, 2500 feet southwest of house. Point is about 100 feet north of high point on lesser high point. A 1 x 1 inch angle iron in Ashe County, North Carolina, 3 1/2 miles southwest of White Top, Virginia and stamped "TVA LR 138 1938".

GRID POSITION (Tennessee): X = 3,273,369.8; Y = 825,087.5 (T-4)

ELEVATION: 4664 feet (T-5)

LR 139 (TVA, 1938; Johnson County, Tennessee)

To reach from Laurel Bloomingery, drive east 0.8 mile on gravel road, turn left 0.1 mile, thence left 2.0 miles to gap, 200 feet north of gap, turn right on field road 0.5 mile to abandoned house. Continue on trail east 500 feet to forks of creek, then bear right up creek to ridge at head of same. Point is 1000 feet west of edge of cleared field on south side of ridge, and on rock outcrop, 3.5 miles northeast of Laurel Bloomingery, with angle iron guard-stamped "TVA LR 139 1938".

Reference Mark 1: 16.85 feet north to 6 inch pine.

Reference Mark 2: 9.60 feet southeast to 10 inch pine.

Reference Mark 3: 5.70 feet southwest to 8 inch pine.

GRID POSITION (Tennessee): X = 3,258,584.3; Y = 821,289.5 (T-4)

ELEVATION: 3993 feet (T-5)

3 M (USGS, 1934; Washington County, Virginia)

Located 1.5 mile north of Friendship, 130 feet southeast of road fork, 100 feet east of road, in ledge. A bronze tablet stamped "3 M 1934" and painted "1928.4".

Reference Mark is 70 feet north of tablet, 85 feet east of road fork, 15 feet south of road, on ledge. A chiseled square, painted "REF. B.M. 1920.2" and 8.20 feet lower.

ELEVATION: 1927.25 feet (G-3)

4 M (USGS, 1934; Washington County, Virginia)

Located 140 feet west of store at Love's Mill, 50 feet north of road, 30 feet west of stone spring house, in ledge. A bronze tablet stamped "4 M 1934", painted "U.S.B.M. 2068.4".

Reference Mark is about 200 feet west of tablet, 330 feet east of Love's Mill store, on south side of paved road at road fork, on ledge. A chiseled square, painted "REF. B.M. 2078.3" and 9.88 feet higher than tablet.

ELEVATION: 2067.00 feet (G-3)

5 M (USGS, 1934; Washington County, Virginia)

Located 4.1 miles east of Damascus, about 50 feet above railroad, 20 feet south of road on point of cliff, in rock. A bronze tablet stamped "5 M 1934", painted "U.S.P.B.M. 2215.0".

Reference Mark is 170 feet north of tablet on north side of road in cut, on ledge. A chiseled square, painted "USFBM 2217.9" and 2.88 feet higher than tablet.

ELEVATION: 2214.00 feet (G-3)

6 M (USGS, 1934; Washington County, Virginia)

Located 7.4 miles east of Damascus, 20 feet north of road, on north side of creek, 1 foot above water, in ledge. A bronze tablet stamped "6 M 1934", and painted "U.S.P.B.M. 2834.7".

Reference Mark is 55 feet west of tablet, 20 feet east of bridge on south side of road, on ledge. A chiseled square, 2.07 feet higher than tablet.

ELEVATION: 2873.69 feet (G-3)

7 M (USGS, 1934; Washington County, Virginia)

Located 1.9 miles southwest of Konnarock, 10.2 miles east of Damascus, 25 feet south of road, in large boulder. A bronze tablet stamped "7 M 1934", painted "U.S.P.B.M. 2887.2".

Reference Mark is 380 feet west of tablet on north side of road, on ledge. A chiseled square, painted "USFBM 2992.9" and 5.68 feet higher than tablet.

NOTE: Searched for but not recovered in January 1955 and August 1959.

ELEVATION: 2886.23 feet (G-3)

8 M (USGS, 1934; Washington County, Virginia)

Located 1.0 mile southwest of Big Hill, thence 1.0 miles southwest of Konnarock, thence 1.3 miles southeast, on road up Locust Branch to store at road fork, 150 feet south of road fork, 100 feet south of store, in flatrock ledge. A bronze tablet stamped "8 M 1934", painted "U.S.P.B.M. 3357.6".

Reference Mark is 150 feet north of tablet, on south side of road, at northwest corner of store, on large rock. A chiseled square, painted "USFBM 3359.9" and 2.28 feet higher than station.

ELEVATION: 3356.66 feet (G-3)

9 M (USGS, 1934; Washington County, Virginia)

Located 0.4 mile east of Green Cove Post Office, 125 feet southeast of Christian Church, 90 feet southeast of road fork, in ledge. A bronze tablet stamped "9 M 1934", painted "U.S.F.B.M. 3259.9".

Reference Mark is 125 feet northwest of tablet, 15 feet east of road, 10 feet west of southwest corner of church, on large boulder. A chiseled square, painted "USFBM 3256.6" and 3.29 feet lower than tablet.

ELEVATION: 3258.99 feet (G-3)

10 M (USGS, 1934; Grayson County, Virginia)

Located 3.0 miles east of Green Cove, 160 feet northeast of fork of road

southwest, and 100 feet north of road, on east side of fence in ledge. A bronze tablet stamped "10 M 1934", painted "USPBM 3746.9".

Reference Mark is 180 feet southwest of tablet, on west side of road intersection, on large boulder. A chiseled square, painted "USPBM 3736.3" and 10.66 feet lower than tablet.
ELEVATION: 3745.98 feet (G-3)

11 M (USGS, 1934; Grayson County, Virginia)

Located 5.5 miles east of Green Cove, 80 feet east of Helton Creek, 80 feet west of house and 50 feet north of road, in ledge. A bronze tablet stamped "11 M 1934", painted "USPBM 3418.8".

Reference Mark is 230 feet south of tablet, 30 feet southwest of road, on large boulder. A chiseled square, painted "USPBM 3419.1" and 0.25 feet higher than tablet.

NOTE: Searched for but not recovered, February 1955 and July 1959. Possibly destroyed by road construction.
ELEVATION: 3417.92 feet (G-3)

12 M (USGS, 1934; Grayson County, Virginia)

Located 8.1 miles southeast of Green Cove, 100 feet west of mouth of Cabin Creek, 40 feet southwest of bridge, 30 feet south of Helton Creek, 35 feet west of road, 105 feet S 03° W from and 0.6 feet lower than centerline of T-road southeast, in ledge. A bronze tablet stamped "12 M 1934", painted "USPBM 3099.1".

NOTE: Not recovered in July 1959. Believed covered by about 2 feet of dirt when new store was built.

GEODETIC POSITION: Lat. = 36°35'34.28"; Long. = 81°31'44.56" (G-3)
ELEVATION: 3098.18 feet (G-3)

13 M (USGS, 1934; Grayson County, Virginia)

Located 8.1 miles east of thence 2.5 miles southeast from Green Cove, 300 feet east of bridge, 140 feet east of barn, 300 feet west of house, 150 feet south of road, and 190 feet northeast of mouth of Feeze Branch, set in ledge. A standard tablet stamped "M 13 1934", painted "USPBM 2896.2".

Reference Mark is 130 feet north of tablet, on ledge. A chiseled square painted "USPBM 2899.2" and 2.98 feet higher than tablet.

Report on Condition (TVA, July 1959): Bench mark found with cap gone.
GEODETIC POSITION: Lat. = 36°34'09.25"; Long. = 81°30'30.20" (G-3)
ELEVATION: 2895.34 feet (G-3)

MCD 254 (TVA, 1955; Washington County, Virginia)

Located 1.5 miles northeast of Windener Valley, Virginia, on top of 4.0 foot cut 1.0 foot inside of fence, about 300 feet south of a house. To reach from the post office in Damascus, Virginia, go northeast on U.S. Highway 58, 0.3 mile to State Road 91. Turn left and go 1.4 miles to State Road 605, go 5.5 miles on State Road 605 to T-road left. Turn left, go 0.5 mile on gravel road to station. A 1 x 1 inch angle iron stamped "MCD 254", 1.4 feet west of fence post and about 10 feet south of gate, 20.0 feet west of centerline of gravel road and 113.6 feet S 30° W of centerline of T-road east.

GRID POSITION (Virginia South): X = 1,054,099.8; Y = 151,933.2 (T-4)
ELEVATION: 2196 feet (T-5)

MCD 260 (TVA, 1955; Ashe County, North Carolina)

From Warrensville, North Carolina, go west 7.3 miles along State Road 88 to gravel road intersection north at mouth of Rich Hill Creek. Turn right or north up Rich Hill Creek Road 4.8 miles to bench mark, on Rich Hill Creek Road. Bench mark is on west side of road in stream bed in large stone outcropping 3.0 feet lower than road, 32.0 feet S 70° W from centerline of road, 10.5 feet S 30° E from 24 inch birch, and 3.0 feet N 70° E from centerline of creek. It is about 300 feet northwest of T-road northeast, in curve of road at mouth of hollow. A chiseled square.

ELEVATION: 3488.11 feet (T-3)

MCD 261 (TVA, 1955; Ashe County, North Carolina)

From Warrensville, North Carolina, go 7.3 miles west along State Road 88 to gravel road intersection at mouth of Rich Hill Creek. Turn right or north up road, up Rich Hill Creek and go 5.7 miles up road to station. Station is in rock outcrop on northeast side of road at sharp curve in pasture field. It is on large boulder at ground level on west side of a pile of large rocks, about 100 feet from centerline of U-bend in road. A standard TVA tablet stamped "MCD 261 1955" and set in large boulder.

Reference Mark 1: 19.0 feet S 55° E to nail in a 8 inch maple tree.
Reference Mark 2: 32.6 feet N 25° E to chiseled square on high rock.
Reference Mark 3: 12.0 feet S 50° W to centerline of rock pile.

ELEVATION: 3885.30 feet (T-3)

MCD 262 (TVA, 1955; Ashe County, North Carolina)

To reach from Lansing, North Carolina, go 6 miles northeast to Horse Creek Road. Take same for 6.2 miles to White Oak School to road intersection. Turn left or southwest 1.2 miles to road fork, turn left or south 2.5 miles to bench mark. Station is on Horse Creek Road north of gap on Big Spring Mountain on property owned by Tom Calhoun. Soapstone outcrop is 750 feet east of centerline of U-bend in a pasture field, about 12.0 feet lower than road at curve, and about 250 feet southeast of T-road intersection. A chiseled square in outcrop of soft stone.

ELEVATION: 3861.54 feet (T-3)

MCD 263 (TVA, 1955; Ashe County, North Carolina)

To reach from Lansing, North Carolina, follow Little Horse Creek Road 6.2 miles to White Oak School. Turn left or southwest for 1.2 miles to road fork and go left for 1.4 miles to station. Located on west side of road in drain 10 feet east of ditch, about 800 feet north of farm house in hollow, and 45.0 feet west of centerline of road, 9.9 feet N 35° E to chiseled square, 5.8 feet N 60° E from 6 inch apple tree, 36.0 feet S 20° E from south end of drain pipe under road. A standard TVA tablet stamped "MCD 263 1955" and set in sandstone boulder.

ELEVATION: 3333.99 feet (T-3)

MCD 264 (TVA, 1955; Ashe County, North Carolina)

Located along Little Horse Creek Road from Lansing, North Carolina. To reach go 6.2 miles to White Oak School, turn left for 1.2 miles to road fork. Go left 0.3 miles to bench mark on property of Wade Ham. It is located on southeast side of road at large red barn, 20 feet from road centerline, about 6.0 feet higher than road level in pasture field, 46.6 feet S 30° E from southeast corner of large red barn, 49.7 feet west from centerline of drain and about 120 feet N 60° W from spring. A chiseled square in sandstone

boulder at ground level.

ELEVATION: 3059.84 feet (T-3)

MCD 265 (TVA, 1955; Ashe County, North Carolina)

To reach go 1.2 miles along road up Horse Creek northwest from White Oak School to concrete block house. Station is in mouth of hollow in front of, or north of house about 175 feet, on property of Coy Ham. Station is on north side of road at mouth of hollow in front of Coy Ham's farm house. It is set on the middle one of 3 large boulders in barn lot, about 3.0 feet above ground level, north about 50 feet from centerline of road, about 75.0 feet southwest of centerline of drain in hollow, 16.0 feet S 10° E to chiseled square in rock, 35.40 feet N 40° W from northwest corner of small building, 114.0 feet N 20° E from 15 inch pine in yard of house. A standard TVA tablet stamped "MCD 265" and set on large boulder.

ELEVATION: 3066.04 feet (T-3)

MCD 266 (TVA, 1955; Ashe County, North Carolina)

To reach go 3.0 miles northeast from White Oak School to bench mark on Little Horse Creek Road. Bench Mark is on east side of road in pasture field on south side of field road running east. It is about 90.0 feet east from T-road intersection with main road, 14.5 feet N 30° W from 10 inch apple tree, and 78.30 feet N 20° E from east end of road drain tile. A chiseled square on flat rock in head of small hollow.

ELEVATION: 3344.76 feet (T-3)

MCD 267 (TVA, 1955; Ashe County, North Carolina)

Located 1.6 miles along Little Horse Creek Road from Live Oak School on Little Horse Creek Road. Bench Mark is in top of large boulder on north side of road, 20.0 feet from centerline of same, and about 600 feet from large barn S 15° W, 226 feet S 45° W to chiseled square, 18.0 feet N 70° W from centerline of road, 31.5 feet N 30° E from west end of culvert. A standard TVA tablet stamped "MCD 267 1955" and set in top of a large boulder.

ELEVATION: 3474.24 feet (T-3)

MCD 268 (TVA, 1955; Ashe County, North Carolina)

To reach from White Oak School, go west 4.2 miles to road intersection, turn left or south for 1.0 miles to bench mark in sharp horseshoe curve at small house in hollow on Whinning Ridge Road on property of Vol Perry. Station is on middle one of three boulders west of the road on west bank of a small stream. It is 90.00 feet N 80° W from centerline of sharp horseshoe curve, 29.50 feet east from southeast corner of farm house and 22.80 feet S 80° W from 12 inch poplar. A chiseled square on top of boulder.

NOTE: Three boulders still in place. Was unable to identify chiseled square station mark in July 1959.

ELEVATION: 3710.62 feet (T-3)

MCD 269 (TVA, 1955; Ashe County, North Carolina)

To reach go southeast 2.4 miles from railroad station at White Top, Virginia, to T-road south. Take road south 1.9 miles to station on Whinning Ridge Road. Bench Mark is in old road bed at sharp curve in new road. It is about 90.0 feet east of centerline of sharp curve, 14.60 feet east from a 12 inch black oak, 7.50 feet west from fence line, 25.0 feet east from a 10 inch chestnut oak. A standard tablet stamped "MCD 269 1955" and set in concrete monument.

ELEVATION: 3832.80 feet (T-3)

MCD 271 (TVA, 1955; Ashe County, North Carolina)

Located in Farmers Store Community. From railroad station at White Top, Virginia, go southeast along road 2.40 miles to Farmers Store and station. Station is on property of Wiley Farmer and is set in large flat boulder in pasture field at road intersection east of T-road intersection, 150.0 feet east, about 600 feet southwest of a large barn, 63.20 feet N 75° W to chiseled square, 68.90 feet north from north corner of barn, 57.0 feet northwest from fence line. A standard TVA tablet stamped "MCD 271 1955" and set in large boulder.

ELEVATION: 3751.07 feet (T-3)

MCD 272 (TVA, 1955; Ashe County, North Carolina)

From railroad station at White Top, Virginia, go southeast along road 1.40 miles to bench mark on White Top Road southeast. Bench mark is on south side of road at concrete block barn, 16.40 feet north from north corner of barn, 20.20 feet S 30° W from 12 inch pine, and 29.0 feet S 10° E from bridge over creek. A chiseled square on top of large boulder in barn lot.

ELEVATION: 3548.48 feet (T-3)

MCD 273 (TVA, 1955; Grayson County, Virginia)

From railroad station at White Top, Virginia, go 0.4 miles southeast along road to station on White Top Road southeast, 50.0 feet S 35° W from railroad trestle and N 35° E from centerline of road over drain. A standard TVA tablet stamped "MCD 273 1955" and set in the southeast end of the north-east headwall of culvert over stream.

ELEVATION: 3516.43 feet (T-3)

MCD 274 (TVA, 1955; Grayson County, Virginia)

To reach from railroad station at White Top, Virginia, go 1.0 miles on gravel road northeast to bench mark on road northeast to U.S. Route 58, on south side of road in flat rock outcrop on edge of small stream, 17.0 feet southeast from centerline of road, and 65.0 feet north from power pole. A chiseled square.

ELEVATION: 3599.86 feet (T-3)

MLB 1590 (TVA, 1955; Washington County, Virginia)

Located on Grass Mountain approximately 11 miles northeast from Damascus, Virginia. To reach from the post office in Damascus, Virginia, go east 7.35 miles on Highway 58 to a T-road north (left) to Feathercamp F.T. Turn left on this road and go 1.35 miles to a T-trail northeast (Appalachian Trail). Go northeast approximately 1.5 miles to a small clearing just east of high top and station site. A chiseled cross on a 1 1/2 x 20 foot rock flush with the ground in southwest end of small clearing and just south of trail.

Reference Mark 1: 25.2 feet S 15° E to a nail & blaze on 8 inch twin white oak tree.

Reference Mark 2: 24.4 feet S 60° W to a nail & blaze on 8 inch hickory tree.

Reference Mark 3: 31.7 feet N 52° E to a nail & blaze on 8 inch triple wild cherry.

GRID POSITION (Virginia South): X = 1,065,183.8; Y = 140,245.0 (T-4)
ELEVATION: 3805 feet (T-5)

MLB 1591 (TVA, 1955; Smyth and Grayson Counties, Virginia)

Located on Hurricane Mountain, on the Smyth-Grayson county line, Virginia, approximately 4.5 miles northwest from Troutdale, Virginia. To reach from the post office in Troutdale, go northwest for 2.1 miles on Highway 16 to gap in mountain. Turn left at service station and go 1.5 miles to T-road north. Turn right and go 0.1 miles to top of mountain. Turn left on trail and go 1.0 miles to southwest edge of field and station. Station is about 500 feet east of top of cleared ridge at east end of tree line, 6 feet east of old rail fence. A 1 x 1 inch angle iron.

Reference Mark 1: 6.9 feet N 65° W to a triangular blaze on 12 inch locust tree.

Reference Mark 2: 21.1 feet N 15° W to a triangular blaze on 10 inch ash tree.

Reference Mark 3: 15.2 feet S 15° W to a triangular blaze on 5 inch sassafras tree.

GRID POSITION (Virginia South): X = 1,118,920.9; Y = 150,320.6 (T-4)
ELEVATION: 4204 feet (T-5)

MLB 1592 (TVA, 1955; Smyth County, Virginia)

Located southeast from Chilhowie, Virginia on Roundtop Mountain. To reach from the intersection of Highway 11 and Highway 762 in Chilhowie, go southeast for 4.3 miles on Highway 762 to T-road intersection at south fork of Holston River, and intersection of roads 762 and 600. Turn left on Road 600 and go 6.0 miles to dim woods road east near top of mountain. Turn left or east and go 1.3 miles to road fork, keep right fork and continue 0.4 miles to second road fork. Keep right for 1.4 miles. Leave car and go north up mountain to top and station site. A 1 x 1 inch angle iron.

Reference Mark 1: 45.4 feet N 45° E to nail & triangular blaze on 18 inch oak tree.

Reference Mark 2: 17.65 feet S 31° E to a nail & triangular blaze on 8 inch black oak.

Reference Mark 3: 17.20 feet west to a nail & triangular blaze on 6 inch oak tree.

GRID POSITION (Virginia South): X = 1,097,599.0; Y = 149,505.3 (T-4)
ELEVATION: 4266 feet (T-5)

MLB 1593 (TVA, 1955; Grayson County, Virginia)

Located on Elk Garden Ridge on Balsam Mountain, approximately 13 miles northwest from Sturgills, North Carolina. To reach from Sturgills, follow State Road (N.C.) northwest and Virginia Road 751 for 3.7 miles to the junction of Road 751 and Highway 58. Turn left on Highway 58 and go 4.0 miles to junction of Highway 58 and Road 600 at G. V. Reedy's store. Turn right (north) on Road 600 and 3.45 miles to trail east at saddle of mountain. Turn right (east) through gate and follow trail for 2.0 miles to small clearing. Leave car and go west up ridge and along fence on north side of ridge for approximately 2000 feet and station site. Station is on edge of cliff about 140 feet north of fence. A 1 x 1 inch angle iron.

Reference Mark 1: 11.8 feet N 40° W to 18 inch birch tree.

Reference Mark 2: 17.3 feet S 23° W to 8 inch hawthorne apple tree.

Reference Mark 3: 10.7 feet S 60° E to 10 inch birch tree.

GRID POSITION (Virginia South): X = 1,101,334.2; Y = 133,140.9 (T-4)
ELEVATION: 4945 feet (T-5)

MLB 1594 (TVA, 1955; Grayson County, Virginia)

Located on Pine Mountain. To reach from Troutdale, Virginia, go northeast for 0.3 miles on Highway 16 to intersection of Road 603. Turn left (west) on Road 603 and go 3.0 miles to road up right side of Possum Creek. Turn left or south up this road for 4.4 miles to gap of mountain at old scales. Turn right through gate and follow dim trail around rim of mountain for 2.0 miles to another scale house and small barn. Station is about 150 feet north from barn and scale house. Station is on east side of top and about 40 feet east of a wire fence, 13.05 feet N 12° W from a 5 inch black cherry, 41.70 feet S 52° E from a 5 inch twin beech, 61.65 feet N 63° W from a 12 inch beech. A drill hole in a 1 x 2 foot boulder.

GRID POSITION (Virginia South): X = 1,116,593.7; Y = 135,888.8 (T-4)
ELEVATION: 5050 feet (T-5)

MLB 1595 (TVA, 1955; Grayson County, Virginia)

Located on Pine Mountain and on the north end of Wilburn Ridge, approximately 8 miles by road, southwest from Troutdale, Virginia. To reach from Troutdale, Virginia, go northeast for 0.3 mile on Highway 16 to intersection of Road 603. Turn left (west) on Road 603 and go 3.0 miles to old road south up east side of Possum Creek. Turn left (or south) on this road and continue up mountain 4.4 miles to gap of mountain at old scale house. Turn right through gate and follow dim trail around rim of mountain for 2.6 miles. Continue on foot to top of north one of two high rocky tops. Station is a 1 inch drill hole in a large flat rock.

GRID POSITION (Virginia South): X = 1,113,802.5; Y = 132,016.4 (T-4)
ELEVATION: 5526 feet (T-5)

MLB 1596 (TVA, 1955; Grayson County, Virginia)

Located on the southeast end of clearing on top of Haw Orchard Mountain. To reach from Volney, Virginia, go west on Highway 58 for 5.8 miles to T-road intersection at Mill Creek. Turn right (northwest) on this road and follow main road and trail for 4.6 miles to an old sawmill stand. Leave car and go southwest up old woods trail to top of mountain. Continue south to southeast end of clearing. Station is a 1 inch drill hole on highest one of two large boulders.

GEODETIC POSITION: Lat. = 36°37'20.64"; Long. = 81°30'06.31" (T-4)

GRID POSITION (Virginia South): X = 1,119,176.5; Y = 119,248.7 (T-4)

GRID POSITION (North Carolina): X = 1,265,753.5; Y = 1,054,722.5 (T-4)

ELEVATION: 4935 feet (T-5)

MLB 1598 (TVA, 1955; Grayson County, Virginia)

Located near Ashe County, North Carolina line on a small partly cleared top. To reach from Sturgills, North Carolina, go northwest 1.3 miles on Highway 194. Turn right at church, and go north on gravel road for 0.9 miles. Turn left on field road and go 0.25 miles to small drain in field. Leave car and follow path up left side of draw to top of ridge. Continue out ridge along fence line to wooded top, 12.45 feet due east from a blaze on a 4 inch hickory, 27.30 feet S 40° W from an 8 inch twin maple in fence line, 42.05 feet N 70° W from a 6 inch twin maple in fence line. Station is a 1 x 1 inch angle iron in old field, about 25 feet west of fence line.

GEODETIC POSITION: Lat. = 36°34'51.01"; Long. = 81°30'52.26" (T-4)

GRID POSITION (Virginia South): X = 1,114,949.0; Y = 104,243.6 (T-4)

GRID POSITION (North Carolina): X = 1,261,624.5; Y = 1,039,688.1 (T-4)

ELEVATION: 3464 feet (T-5)

MLB 1599 (TVA, 1955; Ashe County, North Carolina)

Located near the North Carolina-Tennessee line, approximately 0.6 miles north from Cut Laurel Gap. To reach from Warrensville, North Carolina, go west 8.5 miles on Highway 88 to the intersection of Highway 88 and Big Laurel Road. Turn right (northwest) on Big Laurel Road and go 7.6 miles to T-road north (approximately 1.0 miles east of Tennessee-North Carolina line). Turn north on this road and go 0.4 miles to road intersection. Turn left and continue 2.1 miles to T-road north. Turn left on this road and go 2.3 miles to dim road fork at Cut Laurel Gap. Take right at gap and continue 0.65 miles to trail crossing. Turn right on trail and go about 1000 feet up woods line to station in edge of field near fence. A 1 x 1 inch angle iron.

Reference Mark 1: 14.3 feet N 4° E to a triangular blaze on a 10 inch oak tree in fence line.

Reference Mark 2: 4.6 feet N 60° W to a triangular blaze on a 10 inch oak tree in fence line.

Reference Mark 3: 30.0 feet S 45° W to a triangular blaze on an 8 inch oak tree.

GEODETIC POSITION: Lat. = 36°32'32.84"; Long. = 81°41'56.37" (T-4)

GRID POSITION (Virginia South): X = 1,060,335.0; Y = 92,060.4 (T-4)

GRID POSITION (Tennessee): X = 3,263,175.0; Y = 810,557.2 (T-4)

ELEVATION: 4053 feet (T-5)

MLB 1600 (TVA, 1955; Ashe County, North Carolina)

Located on high point of Big Spring Mountain. To reach from Warrensville, North Carolina, go west on Highway 88 for 7.2 miles to Rich Hill Road. Turn right on Rich Hill Road and go northwest for 6.3 miles to curve in road at point of ridge. Leave car and walk east up ridge to highest point and station site. A 1 x 1 inch angle iron.

Reference Mark 1: 55.6 feet N 43° W to a triangular blaze on a 14 inch ash.

Reference Mark 2: 55.8 feet S 40° W to a cross on large rock outcrop.

GEODETIC POSITION: Lat. = 36°30'45.50"; Long. = 81°37'36.29" (T-4)

GRID POSITION (North Carolina): X = 1,228,019.0; Y = 1,015,718.4 (T-4)

GRID POSITION (Tennessee): X = 3,284,863.0; Y = 800,652.5 (T-4)

GRID POSITION (Virginia South): X = 1,081,188.0; Y = 80,499.2 (T-4)

ELEVATION: 4241 feet (T-5)

MLB 1601 (TVA, 1955; Ashe County, North Carolina)

Located on property owned by Price Graham. To reach from Lansing Post Office, go north on Highway 194 for 5.1 miles to Sturgills, North Carolina. Turn right at Sturgills on Highway 194 and continue 0.2 miles to bridge over Helton Creek. Turn right at bridge and follow rough road 0.8 mile to home of Mr. Price Graham. Continue southwest from Mr. Graham's, over field road through several gates up ridge to station site. Station is in east edge of open field, 2.0 feet west of fence. A 1 x 1 inch angle iron.

Reference Mark 1: 41.7 feet N 60° E to triangular blaze on an 8 inch water oak.

Reference Mark 2: 22.1 feet east to a triangular blaze on a 20 inch water oak.

Reference Mark 3: 50.8 feet S 40° W to a triangular blaze on a 30 inch chestnut oak.

GEODETIC POSITION: Lat. = 36°32'35.79"; Long. = 81°30'05.25" (T-4)

GRID POSITION (North Carolina): X = 1,265,114.2; Y = 1,025,919.3 (T-4)

GRID POSITION (Virginia South): X = 1,118,347.4; Y = 90,453.3 (T-4)

ELEVATION: 3400 feet (T-5)

MLB 1602 (TVA, 1955; Ashe County, North Carolina)

Located about 10.5 miles northwest from Warrensville, North Carolina. To reach from Warrensville, go west on Highway 88 for 7.2 miles to Rich Hill Road. Turn right on Rich Hill Road and go north for 3.3 miles to Y-road intersection at brick house on right of road. Turn right and go northeast for 1.7 miles to top of ridge. Leave car and walk north to highest point on cleared ridge. Station is approximately 50 feet northeast of wire fence and on west edge of small rock pile. A 1 x 1 inch angle iron.

Reference Mark 1: 95.0 feet N 58° E from a triangular blaze on a 7 inch ash tree in fence line.

Reference Mark 2: 100.0 feet S 70° E from a triangular blaze on a 4 inch twin buckeye tree in fence line.

Reference Mark 3: 130.0 feet S 50° E from a triangular blaze on a 14 inch triple ash tree in fence line.

GEODETIC POSITION: Lat. = 36°30'21.96"; Long. = 81°36'33.48" (T-4)

GRID POSITION (N. Carolina): X = 1,233,083.1; Y = 1,013,203.2 (T-4)

GRID POSITION (Tennessee): X = 3,290,092.6; Y = 798,503.8 (T-4)

GRID POSITION (Virginia South): X = 1,086,235.0; Y = 77,950.5 (T-4)

ELEVATION: 4138 feet (T-5)

MLB 1603 (TVA, 1955; Ashe County, North Carolina)

Located on land owned by Mr. Victor Clark. It is approximately 1 mile north from Lansing, North Carolina. To reach from Lansing Post Office, go north on Highway 194 for 0.9 miles to home of Mr. Clark; turn left on farm road through Mr. Clark's barn lot and continue up ridge to saddle. Turn left and go to highest cleared top. Station is 60 feet northeast from highest point on top and 1 foot southwest of fence. A 1 x 1 inch angle iron.

Reference Mark 1: 62.45 feet N 63° W from a twin 24 inch chestnut oak.

Reference Mark 2: 21.1 feet S 40° W from a 14 inch locust stump.

Reference Mark 3: 0.7 feet S 20° W from a fence post.

GEODETIC POSITION: Lat. = 36°30'18.99"; Long. = 81°30'31.78" (T-4)

GRID POSITION (North Carolina): X = 1,262,600.1; Y = 1,012,142.4 (T-4)

GRID POSITION (Virginia South): X = 1,115,742.6; Y = 76,694.2 (T-4)

ELEVATION: 3017 feet (T-5)

MT. ROGERS NO. 1 (USGS, 1934; Washington County, Virginia)

About 1 mile S 35° W from Cole on high point of sharp wooded top commonly called Rafferty Knob. Station is a drill hole in rock directly under a 12 inch water oak.

GEODETIC POSITION: Lat. = 36°42'16.655"; Long. = 81°41'11.436" (G-3)

To Station	Asimuth	Back Asimuth	Distance	Meters	Miles
Feathercamp L.O.	32°20'23.5"	212°19'16.1"	3,718	883	3.3
Grant	86°26'38.9"	266°19'27.5"	4,254	114	11.2
Kelly	134°06'41.5"	314°02'09.5"	4,195	803	9.8
GRID POSITION (Virginia South):	X = 1,065,992.3;	Y = 150,945.6	(G-3)		

MT. ROGERS NO. 2 (USGS, 1934; Washington County, Virginia)

About 2½ miles southeast of Damascus and about 0.9 mile

N 40° W from gap on road between Dollars and Taylors Valley, on high point of wooded top, locally known as Fork Mountain. Signal is flag in 16 inch water oak. Station is drill hole in rock directly under signal.

GEODETIC POSITION: Lat. = 36°37'16.690"; Long. = 81°44'13.344" (G-3)

To Station	Azimuth	Back Azimuth	Log. Meters	Miles
Grant	121°13'46.8"	301°08'24.5"	4.195 144	9.7
Feathercamp L.O.199°35'37.8"		19°36'19.0"	3.709 364	3.2
Fodderstack	358°03'23.8"	178°03'26.6"	3.525 215	2.1
GRID POSITION (Virginia South):	X = 1,050,146.9; Y = 121,127.1 (G-3)			
GRID POSITION (Tennessee):	X = 3,250,757.5; Y = 838,743.5 (G-3)			
ELEVATION:	3522 feet (T-5)			

MT. ROGERS NO. 3 (USGS, 1934; Washington County, Virginia)

About 2 miles northeast of Taylor's Valley and about 1 mile S 39° W of intersection of Green Cove and Whitetop Creeks on hill locally known as Laurel Mountain and is on north of two spur ridges and about 1/4 mile north-east of high point of mountain. Signal is flag in 16 inch chestnut tree. Station is drill hole in rock directly under signal.

GEODETIC POSITION: Lat. = 36°38'09.638"; Long. = 81°41'04.251" (G-3)

To Station	Azimuth	Back Azimuth	Log. Meters	Miles
Fodderstack	42°38'16.6"	222°36'26.6"	3.830 687	4.2
Feathercamp L.O.136°58'37.6"		316°57'25.9"	3.640 043	2.7
GRID POSITION (Virginia South):	X = 1,065,734.5; Y = 125,958.6 (G-3)			
GRID POSITION (Tennessee):	X = 3,265,922.5; Y = 844,772.6 (G-3)			

MT. ROGERS NO. 4 (USGS, 1934; Johnson County, Tennessee)

About 4 miles southeast of Laurel Blooming and about 800 feet N 60° W from Cut Laurel Gap on open top about 140 feet S 30° W from Woods corner. Station is a drill hole in rock directly under signal.

GEODETIC POSITION: Lat. = 36°32'17.251"; Long. = 81°42'31.775" (G-3)

To Station	Azimuth	Back Azimuth	Log. Meters	Miles
Bald Knob	23°23'03.1"	203°22'34.2"	3.483 804	2.0
Fodderstack	157°42'09.6"	337°41'11.9"	3.803 109	4.0
GRID POSITION (Tennessee):	X = 3,260,357.3; Y = 808,855.4 (G-3)			
ELEVATION:	4017 feet (T-5)			

MT. ROGERS NO. 5 (USGS, 1934; Johnson County, Tennessee)

On wooded top of ridge locally known as Pond Mountain, about 1/2 mile west and north of Virginia-Tennessee-North Carolina lines, N 81° W, 50 feet from northeast corner of woods and N 20° W from southeast corner of woods. Station is a drill hole in rock, directly under 16 inch water oak tree.

GEODETIC POSITION: Lat. = 36°35'16.892"; Long. = 81°41'12.076" (G-3)

To Station	Azimuth	Back Azimuth	Log. Meters	Miles
Bald Knob	20°57'40.2"	200°56'23.8"	3.950 540	5.5
Fodderstack	94°28'06.0"	274°26'20.7"	3.644 011	2.7
GRID POSITION (Tennessee):	X = 3,266,055.0; Y = 827,291.0 (G-3)			
GRID POSITION (Virginia South):	X = 1,064,507.4; Y = 108,519.8 (G-3)			

N 314 (TVA, 1937; Washington County, Virginia)

Located at Mile 88.3 South Fork Holston River on right bank, 12 feet from normal water's edge, 300 feet downstream from mill dam and 30 feet upstream from ford across river. A chiseled square on rock outcrop.

Report on Condition (TVA, 1959): Not found. Search made but not recovered. The entire bank area in vicinity of ford mentioned in description is rock strewn and although search was made, no chiseled square could be identified. ELEVATION: 1957.04 feet (T-3)

N 317 (TVA, 1937; Washington County, Virginia)

Located at Mile 90.2 South Fork Holston River on right bank, about 100 feet from river, on top of bluff. It is 60 feet north of east and west fence line and 10 feet south of 10 inch blazed walnut tree. A chiseled square on rock outcrop.

Report on Condition (TVA, July 1959): Not found. Search made but not recovered. No present day evidence of blazed walnut tree could be found which precluded too great a search for bench mark. ELEVATION: 2042.20 feet (T-3)

N 320 (TVA, 1937; Washington County, Virginia)

Located at Mile 92.4 South Fork Holston River, on first bridge downstream from Love Mill. A chiseled square on bridge abutment at northeast corner of bridge.

Report on Condition (TVA, 1959): Not found. Bridge abutment searched as described in control bulletin, but no chiseled square could be determined as such. Concrete abutment too defaced to make bench mark identify possible. ELEVATION: 2056.42 feet (T-3)

N 321 (TVA, 1937; Washington County, Virginia)

Located at Mile 93.2 South Fork Holston River on right bank at first house above Love Mill and 300 feet northwest along road from Smyth-Washington county line. Located on bottom concrete step leading from road to front yard of house. A chiseled square.

Report on Condition (TVA, July 1959): Not found. Search made but not recovered. House and concrete steps found as described, but concrete steps so worn and chipped that no chiseled square could be identified as such. ELEVATION: 2069.37 feet (T-3)

NORTH CAROLINA CORNER (USC&S, 1894 & 1934; Ashe County, N.C., Grayson County, Virginia, Johnson County, Tennessee)

Station is on North Carolina-Virginia-Tennessee boundary corner about 8.5 miles east-southeast of Damascus, Virginia, about 4 miles south-west of Whitetop, Virginia, on east face of Pond Mountain, about 1/2 mile from top, on sharp ridge which runs due north, about 35.5 feet west of 24 inch ash tree with dead top and 2 feet south of fence corner.

To reach from Chilhowie, Virginia, go south on Virginia State Highway 79, cross Norfolk and Western Railway and follow well marked road 13.4 miles to forks at Lutheran Training School for Girls. Follow right fork through Konnarock, Virginia, 2.8 miles to concrete block filling station, turn left, proceed 1.3 miles, turn right, proceed 3.1 miles to Green Cove Church, turn left and proceed 1.5 miles to overhead bridge at Whitetop, Virginia, bear to right and follow rough farm road 2.7 miles to home of Roby W. Sullivan which is at end of truck travel.

Follow dim wagon road up ridge 1 1/2 miles to station site.

Original corner boundary mark was cherry tree which had been blown down in 1894. Position was remarked with heavy stone with N-S and E-W grooves in top and letters U.S.C.S. Stone was recovered in 1933 and intersection grooves marked with standard disk station mark. Three standard reference disks wedged in drill holes in boulders, were established in 1933.

Reference Mark 1 was on east slope of hill 15 feet west of wire fence, and 25.675 meters (84.24 feet) from station in geodetic azimuth 259°34'.

In 1934, this reference mark had been destroyed, a standard reference disk set in concrete in a boulder was established on eastern downward slope, 16 feet west of wire fence and 28.892 meters (94.79 feet) from the station in geodetic azimuth 260°15'.

Reference Mark 2 is on top of ascending ridge, 15 feet north of 20 inch dead chestnut tree, and 575.75 feet from station in geodetic azimuth 34°33'59.2".

Reference Mark 3 is on top of ascending ridge, about 3 feet from wire fence, and 16.927 meters (55.53 feet) from station in geodetic azimuth 37°16'.

Feathercamp, fire lookout tower, is distant about 6 miles in geodetic azimuth 157°06'18".

GEODETIC POSITION: Lat. = 36°35'16.961"; Long. = 81°40'39.408" (C-2)

Geodetic Azimuth to Azimuth Mark RM 2: 34°33'59.2"

GRID POSITION (Virginia South): X = 1,067,170.61; Y = 108,436.97 (C-2)

Grid Azimuth to Azimuth Mark RM 2: 36°29'42"

GRID POSITION (Tennessee): X = 3,268,716.56; Y = 827,415.43 (C-2)

Grid Azimuth to Azimuth Mark RM 2: 32°02'09"

GRID POSITION (North Carolina): X = 1,213,814.31; Y = 1,043,564.32 (C-2)

Grid Azimuth to Azimuth Mark RM 2: 36°06'43"

RAFFERTY (USC&S, 1934; Washington County, Virginia)

Station is on the highest point of Rafferty's Knob (locally known as "Big Knob") which is at the northwest end and the highest point of a ridge which forms a spur of Iron Mountain, about 1 3/4 miles east-northeast of Masada, 3 1/2 miles northwest of Konnarock, and 6 1/2 miles south of Chilhowie.

To reach from the junction of U.S. Highway 11 and State Highway 79 at the City Cafe at Chilhowie, go southeast on State Highway 79 for 1.55 miles to road forks, turn right across culvert and proceed 2.6 miles to forks at store, turn right and go 0.4 mile to a T-road, turn left and continue 1.2 miles to a T-road, turn right and go 0.15 mile, turn left on cinder road up Mill Creek, follow 1.25 miles to end of cinder road, keep main road straight ahead 0.7 mile to forks, take right fork for 0.1 mile, keep right fork and continue 0.2 mile to fork, keep right fork and go 0.5 mile or 0.1 mile past sawmill to home of Mr. P.L. Barlow, which is end of truck travel. The station is located on the peak, about 1 mile to the northwest, cross foot bridge and go about 50 yards and turn left up hollow blazed trail. Follow about 3/4 mile to foot of hill, then left through brush about 1/2 mile to top of hill and station. The station is located at the northwest end of ridge, 20.5 feet southeast of 9 inch oak with triangle blaze. There is a copper bolt and washer stamped "USGS RM" in triangle 30.5 feet southeast of 14 inch dead chestnut, and 22.5 feet south of 5 inch white oak. Station, reference and azimuth marks are standard bronze disks set in concrete in depression in boulders.

NOTE: In 1958 the boulder in which the station was located was intact. Small drill hole and bits of concrete around it indicated its original location and is very legible. The station rock has been broken off some, leaving the top very irregular and it will be necessary to drill the hole deeper and break a little more off the rock to make a flat place for a new station disk or cap the rock with a large amount of concrete. The two reference marks were recovered as described and found to be in good condition. Search was made for the azimuth mark and it was not located.

Reference Mark 1 is southwest of station in a small pointed boulder, on the western edge of ridge. It is 37.78 feet from the station in geodetic azimuth 45°33'29".

Reference Mark 2 is north-northwest of station, on western downward slope 5 feet northwest of 14 inch dead chestnut. It is 40.09 feet from the station in geodetic azimuth 175°28'37".

Azimuth Mark is about 1 mile southeast of station, about 90 feet south of sawmill, 22 feet northeast of northeast post of shed, 33 feet northeast of 14 inch walnut and 11 feet south of trail.

Feathercamp Fire Tower is 3.5 miles distance from the station in geodetic azimuth 32°21'19".

GEODETIC POSITION: Lat. = 36°42'16.426"; Long. = 81°41'11.544" (C-2)

Geodetic Azimuth to Azimuth Mark: 312°26'15.8"

GRID POSITION (Virginia South): X = 1,065,982.65; Y = 150,922.81 (C-2)

Grid Azimuth to Azimuth Mark: 314°22'18"

ELEVATION: 3186 feet (T-5)

ROGERS (USC&S, 1894, 1934; Grayson-Smyth Counties, Virginia)

Station is about 25 miles east of Abingdon, about 5 1/2 miles east of Konnarock, about 65 feet north of highest point of Mount Rogers (locally known as "Balsam"), 33.8 feet north of twin 12 inch spruce trees, and in top of rock outcrop which projects about 3 feet above ground.

To reach from sign "White Top" at Chilhowie, go south 13.4 miles on State Highway 79 to White Top Inn on left, follow left fork across mountain 4.1 miles to top of grade, pass through gate on left and follow farm road 2.8 miles (keeping left at fork) to pasture in gap, and continue on foot along well-blazed trail north about 1 mile to station site.

Station was originally marked by drill hole in rock at intersection of N-S and E-W grooves and surrounded by letters "USCS". Station was remarked in 1930 with a standard station disk and two standard reference disks were established in rock outcrops.

Reference Mark 1 is about same elevation as station, near trail leading to station, 39.5 feet south of twin 12 inch trees, and 22.16 meters (72.7 feet) from station in geodetic azimuth 9°49'.

Reference Mark 2 is on downward slope of ridge and 15.01 meters (49.2 feet) from station in geodetic azimuth 86°02'.

Reference Mark 3, established in 1933, is a standard reference disk in E-W rock outcrop on downward slope of ridge, about 30 feet east-northeast of dead 6 inch tree, and about 75 yards from station.

GEODETIC POSITION: Lat. = 36°39'35.816"; Long. = 81°32'42.169" (C-1)

Geodetic Azimuth to Azimuth Mark RM 3: 83°17'59.5"

GRID POSITION (Virginia South): X = 1,106,917.64; Y = 133,319.46 (C-1)

Grid Azimuth to Azimuth Mark RM 3: 85°08'53"

ELEVATION: 5705 feet (T-5)

TT 12 D (USGS, 1931; Smyth County, Virginia)

Located 7.5 miles south of Chilhowie on Chilhowie-Whitetop Road, in southeast chimney of M. W. Barr's farmhouse. A standard tablet stamped "TT 12 D 1931".

GEODETIC POSITION: Lat. = 36°43'16.26"; Long. = 81°37'45.91" (G-3)
ELEVATION: 2467 feet (T-5)

TT 13 D (USGS, 1931; Smyth County, Virginia)

Located 11 miles south of Chilhowie, on Whitetop Mountain Road at sharp curve in road, on top of Iron Mountain, on west side of road. A standard USGS tablet set in vertical wall of sandstone rock and stamped "TT 13 D 1931". Report on Condition (TVA, July 1959): Not found. Search made, but not recovered. From ground evidence, it seems apparent that curve mentioned in description has been improved (widened) since bench mark set in 1931, and as a result, bench mark has probably been destroyed.

GEODETIC POSITION: Lat. = 36°41'59.36"; Long. = 81°36'45.42" (G-3)

TT 14 D (USGS, 1931; Smyth County, Virginia)

Located 1 mile southeast of Komarock School on Whitetop Mountain Road, 50 feet east of creek crossing, on southeast bank of road. A standard USGS bronze tablet set in rock outcrop and stamped "TT 14 D 1931".

NOTE: Searched for but not found in July 1959.

GEODETIC POSITION: Lat. = 36°39'39.40"; Long. = 81°36'03.03" (G-3)

TT 13 H (USGS, 1934; Grayson County, Virginia)

Located 10 miles southwest of Trout Dale, near southwest end of Wilburn Ridge, on low rocky cliff, about 1.0 miles south of rocky cliff on east end of Mount Rogers, 0.7 mile north of pinnacle on Haworth Mountain, 30 feet east of fence line, and 560 feet west of cattle scales at Massie's Gap, set in rock ledge. A standard tablet stamped "TT 13 H 1934" and painted "USPBM". Reference Mark is a chiseled square 130 feet west of tablet in ledge painted "USPBM 4905.9" and 2.98 feet lower than tablet.

GEODETIC POSITION: Lat. = 36°38'17.07"; Long. = 81°30'39.93" (G-3)
ELEVATION: 4908.44 feet (G-3)

TT 14 H (USGS, 1934; Grayson County, Virginia)

Located 4.9 miles west and 1.4 miles south of Trout Dale, 15 feet north and 40 feet east of ford crossing Lewis Fork Creek, 15 feet north and 20 feet east of old gate, 10 feet east of old logging grade. A standard USGS bronze tablet set in rock outcrop and stamped "TT 14 H 1934", painted "USPBM".

Reference Mark is a chiseled square 20 feet east of tablet, on ledge, painted "USPBM 4095.7" and 2.28 feet lower.

Report on Condition (TVA, July 1959): Not found. Search made but bench mark not found. No evidence of old ford, nor old gate, mentioned in description, could not be found. The logging grade (road) has not been used in years and the area abounds in rocks and rock ledges. It is thought the bench mark is probably still in place but it could not be located.

GEODETIC POSITION: Lat. = 36°40'23.78"; Long. = 81°31'32.45" (G-3)
ELEVATION: 4097.54 feet (G-3)

USFS 632 (USFS, 1927; Grayson County, Virginia)

A U.S. Department of Agriculture, Forest Service marker stamped "632 1927". No description available.

GEODETIC POSITION: Lat. = 36°38'59.82"; Long. = 81°35'07.55" (G-3)

USGS 2366 (USGS, 1908; Washington County, Virginia)

Located at Taylors Valley, 1360 feet northwest of station and 7 feet east of railroad. An aluminum tablet stamped "2366" in ledge of rock in cut.

ELEVATION: 2364.56 feet (use with caution) (G-3)

USGS 2945 (USGS, 1908; Ashe County, North Carolina)

Located 2.3 miles east of Apple Grove, at junction of two prongs of Little Horse Creek, 300 feet north of forks to east, 6 feet above level of road, and 6 feet northeast of road near Mr. Hamm's house. An aluminum tablet stamped "2945" and set in rock ledge.

ELEVATION: 2945.34 feet (G-3)

USGS 2954 (USGS, 1908; Ashe County, North Carolina)

Located near mouth of Mud Fork at Horse Creek, 20 feet northeast of road forks, near Bill Miller's house. Stem remaining of missing tablet stamped "2954" set in ledge.

NOTE: Stem recovered by A. Lee Moore, in 1934.

ELEVATION: 2954.56 feet (G-3)

USGS 3123 (USGS, 1908; Ashe County, North Carolina)

Located 1.0 mile northeast of Hamlock, 550 feet southwest of where Laurel Creek crosses road, and 6 feet southeast of road forks to south. An aluminum tablet stamped "3123" and set in sandstone ledge.

ELEVATION: 3122.98 feet (G-3)

USGS 3920 (USGS, 1908; Ashe County, North Carolina)

Located 11.9 miles east of Laurel Bloomery, on top of Big Spring Mountain, 6 feet north of road. A bronze tablet stamped "3920" and set in ledge of limestone.

ELEVATION: 3919.76 feet (G-3)

USGS 4535 (USGS, 1908; Smyth County, Virginia)

Located about 0.2 mile from top of gap between Whitetop and Rogers Mountains, about 60 feet south of second-class road fork to southwest and about 7 feet west of road. An aluminum tablet stamped "4535" in ledge of rock.

Reference Mark is a cross marked "4535", 6 feet west of road, on ledge of rock. Cross is 0.37 foot higher than tablet.

ELEVATION: 4534.78 feet (G-3)

WHITE TOP 2 (USC&GS, 1933; Grayson County, Virginia)

Station is about 20 miles by road southwest of Chilhowie in open field on south slope on White Top Mountain, about $\frac{1}{2}$ mile below summit, and 30 feet north of centerline of road.

To reach from Chilhowie, go south on State Highway 79 from sign "White Top", cross Norfolk and Western Railway, proceed 3.9 miles to junction of routes, cross intersection, proceed 0.4 mile on U.S. Highway 58, turn left across iron bridge and follow well marked road 14.2 miles to station site.

Surface, underground and reference marks are standard disks wedged in drill holes in boulders. In 1938 boulder in which brass plate is set was found to be very loose. At present, however, it is still approximately in correct position.

Reference Mark 1 is on downward slope of ridge and 28.093 meters (92.17 feet) from station in geodetic azimuth 62°36'.

Reference Mark 2 is on upward slope of ridge and 26.676 meters (87.52 feet) from station in geodetic azimuth 177°44'.

Reference Mark 3 is about 150 feet to right of convention or dance hall, about 15 feet west of centerline of road, and about 475 yards from station.

GEODETIC POSITION: Lat. = 36°38'06.441" Long. = 81°36'19.648" (C-2)

Geodetic Azimuth to Azimuth Mark RM 3: 324°14'41.4"

GRID POSITION (Virginia South): X = 1,088,908.78; Y = 124,862.78 (C-2)

Grid Azimuth to Azimuth Mark RM 3: 326°07'46"

ELEVATION: 5344 feet (T-5)