

## SURVEY CONTROL DATA IN QUADRANGLE 191

**A 124** (USC&GS, 1935; Madison County, North Carolina)

Located about 3.0 miles east along new State Highway 36 and old State Highway 36 from Little Creek, about 0.8 miles east of Faust, on the old highway, on the L. B. English property, about 125 feet east of a drain, 36.9 feet northeast of the northwest corner of a barn, 28.9 feet north-northwest of the northeast corner of the barn, 30 feet south of the highway, 15 feet south of an old road, and 5 feet south of a wire fence. A standard tablet stamped "A 124 1935" and set in the top of a concrete post.

Report on Condition (TVA, November, 1939): Top 6 inches of monument has been broken off and cap removed. Remainder of monument is in place.  
ELEVATION: 3215.689 feet or 980.144 meters (T-2)

**A 126** (USC&GS, 1935; Madison County, North Carolina)

Located at Little Creek, on State Highway 36, about 500 feet southeast of the center of the town, about 90 feet east of Big Laurel Creek, 80 feet south of Corns Chapel, 8 feet east of the highway, at a culvert, and in the top of the north end of the headwall. A standard tablet stamped "A 126 1935".  
ELEVATION: 2892.071 feet or 881.505 meters (T-2)

**A 137** (USC&GS, 1935; Madison County, North Carolina)

Located at the post office at Mars Hill on State Highways 213 and 36A, 175 feet north of the junction of the highway, 100 feet south of a Pure Oil Service Station, across the street from the Roy Cafe, 6 feet west of the highway, in the north end of the red brick post office building, and about 3 feet above the sidewalk. A standard tablet stamped "A 137 1935" and set vertically.  
ELEVATION: 2325.432 feet or 708.793 meters (T-2)

**AKW 261** (TVA, 1941; Buncombe County, North Carolina)

Located about 3-1/4 miles north of Alexander, 4-3/4 miles west of Stockville, at base of lone tree in field, 30 feet south of edge of road and 30 feet east of woods edge. To reach from Alexander Post Office, drive north on U. S. Highways 25 and 70 for 3.0 miles to intersection of Panther Branch road right, take road right 1.9 miles to abandoned church at fork, turn left for 0.3 miles to crest of hill. Station is 30 feet south of edge of road. Nail in root of 8-inch oak.

Reference Mark 1: 45.7 feet N 35° W to 10-inch white oak on fence line.  
Reference Mark 2: 36.0 feet N 59° W to 6-inch pine.  
Reference Mark 3: 35.1 feet West to 6-inch post oak.  
GRID POSITION (N. C.): X = 922,277.7; Y = 747,790.7 (T-4)  
ELEVATION: 2225 feet (T-5)

**AKW 264** (TVA, 1941; Buncombe County, North Carolina)

Located about 4 miles northeast of Alexander and 4-1/2 miles northwest of Weaverville, in east edge of woods and west edge of cultivated field, 15 feet south of edge of road. To reach from Flat Creek, at intersection of U. S. Highways 19 and 23 and Jupiter road, drive in general westerly direction for 3.2 miles to Jupiter. Station is 300 feet south of intersection, at northeast corner of woods. A 1-by-1-inch angle iron stamped "AKW 264 1941" and driven flush with ground.

Reference Mark 1: 3.35 feet East to 10-inch pine.  
Reference Mark 2: 2.9 feet South to 18-inch twin red oak.  
Reference Mark 3: 7.3 feet S 54° W to 3-inch sourwood.  
GRID POSITION (N. C.): X = 933,987.6; Y = 751,140.2 (T-4)  
ELEVATION: 2179 feet (T-5)

**AKW 265** (TVA, 1941; Madison County, North Carolina)

Located about 2-1/4 miles south of Marshall and 7 miles southeast of Walnut, 1000 feet east of main road, at highest point on cleared hill. To reach from courthouse in Marshall, drive west across bridge over French Broad River, 2.6 miles on State Highway 213 to intersection left, turn left on Laurel Branch road, 0.9 miles to intersection of field road left, turn left through gap in fence line 1000 feet to station. A 1-by-1-inch angle iron stamped "AKW 265 1941" and driven flush with ground.

Reference Mark 1: 25.8 feet S 29° E to 6-inch burned white pine stump.  
Reference Mark 2: 68.1 feet N 35° W to 18-inch hickory stump.  
Reference Mark 3: 71.3 feet N 07° W to 14-inch white pine stump.  
GRID POSITION (N. C.): X = 907,581.0; Y = 752,100.6 (T-4)  
ELEVATION: 2236 feet (T-5)

**1848 ASH** (USGS, 1896; Madison County, North Carolina)

Located 20 feet north of right bank of Ivy Creek, 0.25 miles from Eller Pond, 200 feet above mouth of Whiteoak Branch. Aluminum bolt stamped "1848 A", in stone.

Note: Searched for but not recovered, June, 1943.  
ELEVATION: 1846.12 feet (G-3)

**2084 ASH** (USGS, 1896; Madison County, North Carolina)

Located at Ivy, 70 feet southeast of southeast corner of post office, on south side of road. Iron post stamped "2084 ASH".  
Note: Searched for but not recovered, June, 1943. Possibly covered by new road fill.

ELEVATION: 2083.68 feet (G-3)

**2417 ASH** (USGS, 1896; Madison County, North Carolina)

Located about 0.4 miles north along State Highways 213 and 36A from the post office at Mars Hill at the southwest corner of the Jess Thomas property, 11 feet northwest of the highway, 7.2 feet southwest of a 16-inch red oak tree. A standard tablet stamped "2417 ASH" and set in the top of an iron pipe projecting about 1 foot higher than the ground.

ELEVATION: 2414.372 feet or 735.902 meters (T-2)

**B 124** (USC&GS, 1935; Madison County, Tennessee)

Located about 3.2 miles east along State Highway 36 (1938 route) from Little Creek, thence 0.9 miles south along the old highway through Murray Gap, 250 feet east of the Murray Gap Cemetery, at a hairpin curve, at a fence enclosing the Mrs. Eulah Murray property, 30 feet east of the highway, 15 feet west of a drain, 9.8 feet north of a fence post with the painted letters "ERM", and 7.1 feet west-northwest of a fence post with a painted cross. A standard tablet stamped "B 124 1935" and set in the top of a concrete post.  
ELEVATION: 3287.428 feet or 1002.010 meters (T-2)

**B 126** (USC&GS, 1935; Madison County, North Carolina)

Located about 1.1 miles west along the Big Laurel Creek road from Little Creek, on the B. B. Whitt property, 60 feet southwest of the house, 60 feet

northeast of a lumber yard, 18 feet southwest of a branch, 27 feet southwest of the road, 20 feet northeast of Big Laurel Creek, 11 feet northwest of an old road, 7 feet northeast of the northeast corner of a garage, and 7 feet north of a 12-inch poplar tree. A standard tablet stamped "B 126 1935" and set in the top of a concrete post.

ELEVATION: 2785.736 feet or 849.094 meters (T-2)

**B 137** (USC&GS, 1935; Madison County, North Carolina)

Located about 1.5 miles northeast along State Highways 213 and 36 A from the post office at Mars Hill on the Douglas Robinson property, 250 feet east of the house, 38.9 feet north-northeast of the northeast corner of a large barn, 300 feet north of the highway, 14.3 feet southwest of a fence corner, and 2 feet northwest of a wire fence. A standard tablet stamped "B 137 1935" and set in the top of a concrete post.

ELEVATION: 2446.704 feet or 745.757 meters (T-2)

**BARNETT 1** (TVA, 1941; Madison County, North Carolina)

Located about 3.25 miles northwest of Marshall, on the highest point of a top known locally as Barnett Knob. To reach from Marshall Courthouse follow U. S. Highway 25 northwest 4.3 miles and turn left at road fork, follow road 0.7 miles and turn left at next road fork and continue 0.6 miles, leave car and continue on foot in a southerly direction up ridge to station. Drill hole in rock set in ground.

Reference Mark 1: 1.35 feet N 64° W to 24-inch chestnut stump in fence corner.  
Reference Mark 2: 4.10 feet N 20° E to first post east of fence intersection.  
Reference Mark 3: 8.00 feet South to first post south of intersection.

Note: The original station "BARNETT" by the USGS was searched for but not recovered by a TVA field party in May, 1941. However, one of the original reference marks was found torn out of the ground. It was reset, referenced, and designated "BARNETT 1" and a new position and elevation were established. The new position is approximately 17 feet west of the original station position.

GRID POSITION (N. C.): X = 896,540.3; Y = 776,046.3 (T-4)  
ELEVATION: 2596 feet (T-5)

**BOYD** (USGS, 1934; Madison County, North Carolina)

Located about 3 miles south and 2-1/2 miles west of Marshall, on a grassy top known as Big Knob. To reach from Marshall drive west on Highway 70 for 1.3 miles, turn left on Little Pine road and drive 5.5 miles, turn right after crossing Little Pine Creek and drive 0.6 miles, turn left on Roberts Branch and drive 1.3 miles, thence left 0.3 miles to log cabin which is home of R. P. Meadows. Station can be seen from this point 560 feet west. Walk up old road through cleared fields to station about 1 mile. A standard tablet stamped "BOYD 1934" and set in sandstone boulder set in place.

Reference Mark 1: 8.3 feet N 22° E to drill hole in rock set in place.  
Reference Mark 2: 11.1 feet S 45° E to drill hole in rock set in place.

Report on Condition (TVA, 1941): Tablet has been removed from set stone and stone battered so that it was impossible to tell where it had been set. The two original references were recovered and a 60d nail was driven into the sandstone at the intersection.

GEODETIC POSITION: Lat. = 35°45'07.065"; Long. = 82°43'46.067" (G-3)

To Station	Geodetic Azimuth	Distance	Log. Meters	Miles
Sandy Mash	59°59'54.1"	239°54'32.3"	4.204404	9.9
Trouble	125 35 15.0	305 31 50.2	4.034058	6.7
White Oak	258 59 35.4	79 03 59.5	4.063478	7.2
Spivey	337 14 08.4	157 16 51.1	4.259425	11.3

GRID POSITION (TENN.): X = 2,970,277.8; Y = 511,249.0 (G-3)  
GRID POSITION (N. C.): X = 893,668.8; Y = 749,375.3 (G-3)  
ELEVATION: 3056 feet (T-5)

**C 124** (USC&GS, 1935; Madison County, North Carolina)

Located about 3.2 miles east along State Highway 36 (1938 route) from Little Creek, thence 2.0 miles south along the old highway, on the C. L. Hollinfield property, 65 feet north of the house, 350 feet east of the new highway, 36 feet east of the old highway, 175 feet northeast of a tobacco barn, 44.8 feet south of the southwest corner of a chicken house, 9.7 feet north of a fence corner, 6 feet south of a gap in the fence, and 2 feet west of a wooden fence. A standard tablet stamped "C 124 1935" and set in the top of a concrete post.

ELEVATION: 2933.242 feet or 894.054 meters (T-2)

**C 126** (USC&GS, 1935; Madison County, North Carolina)

Located about 2.1 miles west along the Big Laurel Creek road from Little Creek on the Decatur English property, 25.8 feet west of the northwest corner of the house, 57.5 feet south of the southwest corner of an apple house, 55 feet southeast of Big Laurel Creek, 13 feet southeast of Big Laurel Creek road, 9 feet northeast of a gate, and 4 feet southeast of a fence. A standard tablet stamped "C 126 1935" and set in the top of a concrete post.

ELEVATION: 2636.396 feet or 803.575 meters (T-2)

**C 137** (USC&GS, 1935; Madison County, North Carolina)

Located at Petersburg, about 4.1 miles west along State Highway 213 from Mars Hill, 70 feet northeast of the highway bridge over Bull Creek, 18 feet northwest of the highway, 8 feet northeast of the Bull Creek road, on the O. S. Edmons store, 36.5 feet north of the northeast corner of the old store building, 30 feet northeast of an Esso gas pump, 41.7 feet north-northwest of a 16-inch buckeye tree, in the southwest corner of the store building, and about 4 feet above the ground. A standard tablet stamped "C 137 1935" and set vertically.

ELEVATION: 1971.778 feet or 600.999 meters (T-2)

**D 124** (USC&GS, 1935; Madison County, North Carolina)

Located about 3.2 miles east along State Highway 36 (1938 route) from Little Creek, thence 2.9 miles south along the old and new highway, on the John Cody property, 80 feet southwest of the house, 115 feet north of a tobacco barn, 110 feet east of another tobacco barn, 47.8 feet southwest of a 24-inch white oak tree, 55 feet east of the highway, 36.3 feet southeast of the southeast corner of a brick headwall for concrete steps, 20 feet above the highway, and in the top of a rock outcrop. A standard tablet stamped "D 124 1935".  
ELEVATION: 2612.951 feet or 796.429 meters (T-2)

## SURVEY CONTROL DATA IN QUADRANGLE 191

**A 124** (USC&GS, 1935; Madison County, North Carolina)

Located about 3.0 miles east along new State Highway 36 and old State Highway 36 from Little Creek, about 0.8 miles east of Faust, on the old highway, on the L. B. English property, about 125 feet east of a drain, 36.9 feet northeast of the northwest corner of a barn, 28.9 feet north-northwest of the northeast corner of the barn, 30 feet south of the highway, 15 feet south of an old road, and 5 feet south of a wire fence. A standard tablet stamped "A 124 1935" and set in the top of a concrete post.

Report on Condition (TVA, November, 1939): Top 6 inches of monument has been broken off and cap removed. Remainder of monument is in place.

ELEVATION: 3215.689 feet or 980.144 meters (T-2)

**A 126** (USC&GS, 1935; Madison County, North Carolina)

Located at Little Creek, on State Highway 36, about 500 feet southeast of the center of the town, about 90 feet east of Big Laurel Creek, 80 feet south of Corns Chapel, 8 feet east of the highway, at a culvert, and in the top of the north end of the headwall. A standard tablet stamped "A 126 1935".

ELEVATION: 2892.071 feet or 881.505 meters (T-2)

**A 137** (USC&GS, 1935; Madison County, North Carolina)

Located at the post office at Mars Hill on State Highways 213 and 36A, 175 feet north of the junction of the highway, 100 feet south of a Pure Oil Service Station, across the street from the Roy Cafe, 6 feet west of the highway, in the north end of the red brick post office building, and about 3 feet above the sidewalk. A standard tablet stamped "A 137 1935" and set vertically.

ELEVATION: 2325.432 feet or 708.793 meters (T-2)

**AKW 261** (TVA, 1941; Buncombe County, North Carolina)

Located about 3-1/4 miles north of Alexander, 4-3/4 miles west of Stockville, at base of lone tree in field, 30 feet south of edge of road and 30 feet east of woods edge. To reach from Alexander Post Office, drive north on U. S. Highways 25 and 70 for 3.0 miles to intersection of Panther Branch road right, take road right 1.9 miles to abandoned church at fork, turn left for 0.3 miles to crest of hill. Station is 30 feet south of edge of road. Nail in root of 8-inch oak.

Reference Mark 1: 45.7 feet N 35° W to 10-inch white oak on fence line.

Reference Mark 2: 36.0 feet N 59° W to 6-inch pine.

Reference Mark 3: 35.1 feet West to 6-inch post oak.

GRID POSITION (N. C.): X = 922,277.7; Y = 747,790.7 (T-4)

ELEVATION: 2225 feet (T-5)

**AKW 264** (TVA, 1941; Buncombe County, North Carolina)

Located about 4 miles northeast of Alexander and 4-1/2 miles northwest of Weaverville, in east edge of woods and west edge of cultivated field, 15 feet south of edge of road. To reach from Flat Creek, at intersection of U. S. Highways 19 and 23 and Jupiter road, drive in general westerly direction for 3.2 miles to Jupiter. Station is 300 feet south of intersection, at north-east corner of woods. A 1-by-1-inch angle iron stamped "AKW 264 1941" and driven flush with ground.

Reference Mark 1: 3.35 feet East to 10-inch pine.

Reference Mark 2: 2.9 feet South to 18-inch twin red oak.

Reference Mark 3: 7.3 feet S 54° W to 3-inch sourwood.

GRID POSITION (N. C.): X = 933,987.6; Y = 751,140.2 (T-4)

ELEVATION: 2179 feet (T-5)

**AKW 265** (TVA, 1941; Madison County, North Carolina)

Located about 2-1/4 miles south of Marshall and 7 miles southeast of Walnut, 1000 feet east of main road, at highest point on cleared hill. To reach from courthouse in Marshall, drive west across bridge over French Broad River, 2.6 miles on State Highway 213 to intersection left, turn left on Laurel Branch road, 0.9 miles to intersection of field road left, turn left through gap in fence line 1000 feet to station. A 1-by-1-inch angle iron stamped "AKW 265 1941" and driven flush with ground.

Reference Mark 1: 25.8 feet S 29° E to 6-inch burned white pine stump.

Reference Mark 2: 68.1 feet N 35° W to 18-inch hickory stump.

Reference Mark 3: 71.3 feet N 07° W to 14-inch white pine stump.

GRID POSITION (N. C.): X = 907,581.0; Y = 752,100.6 (T-4)

ELEVATION: 2236 feet (T-5)

**1848 ASH** (USGS, 1896; Madison County, North Carolina)

Located 20 feet north of right bank of Ivy Creek, 0.25 miles from Eller Pond, 200 feet above mouth of Whiteoak Branch. Aluminum bolt stamped "1848 A", in stone.

Note: Searched for but not recovered, June, 1943.

ELEVATION: 1846.12 feet (G-3)

**2084 ASH** (USGS, 1896; Madison County, North Carolina)

Located at Ivy, 70 feet southeast of southeast corner of post office, on south side of road. Iron post stamped "2084 ASH".

Note: Searched for but not recovered, June, 1943. Possibly covered by new road fill.

ELEVATION: 2083.68 feet (G-3)

**2417 ASH** (USGS, 1896; Madison County, North Carolina)

Located about 0.4 miles north along State Highways 213 and 36A from the post office at Mars Hill at the southwest corner of the Jesse Thomas property, 11 feet northwest of the highway, 7.2 feet southwest of a 16-inch red oak tree. A standard tablet stamped "2417 ASH" and set in the top of an iron pipe projecting about 1 foot higher than the ground.

ELEVATION: 2414.372 feet or 735.902 meters (T-2)

**B 124** (USC&GS, 1935; Madison County, Tennessee)

Located about 3.2 miles east along State Highway 36 (1938 route) from Little Creek, thence 0.9 miles south along the old highway through Murray Gap, 250 feet east of the Murray Gap Cemetery, at a hairpin curve, at a fence enclosing the Mrs. Eulah Murray property, 30 feet east of the highway, 15 feet west of a drain, 9.8 feet north of a fence post with the painted letters "FBM", and 7.1 feet west-northwest of a fence post with a painted cross. A standard tablet stamped "B 124 1935" and set in the top of a concrete post.

ELEVATION: 3287.428 feet or 1002.010 meters (T-2)

**B 126** (USC&GS, 1935; Madison County, North Carolina)

Located about 1.1 miles west along the Big Laurel Creek road from Little Creek, on the B. B. Whitt property, 60 feet southwest of the house, 60 feet

northeast of a lumber yard, 18 feet southwest of a branch, 27 feet southwest of the road, 20 feet northeast of Big Laurel Creek, 11 feet northwest of an old road, 7 feet northeast of the northeast corner of a garage, and 7 feet north of a 12-inch poplar tree. A standard tablet stamped "B 126 1935" and set in the top of a concrete post.

ELEVATION: 2785.736 feet or 849.094 meters (T-2)

**B 137** (USC&GS, 1935; Madison County, North Carolina)

Located about 1.5 miles northeast along State Highways 213 and 36 A from the post office at Mars Hill on the Douglas Robinson property, 250 feet east of the house, 38.9 feet north-northeast of the northeast corner of a large barn, 300 feet north of the highway, 14.3 feet southwest of a fence corner, and 2 feet northwest of a wire fence. A standard tablet stamped "B 137 1935" and set in the top of a concrete post.

ELEVATION: 2446.704 feet or 745.757 meters (T-2)

**BARNETT 1** (TVA, 1941; Madison County, North Carolina)

Located about 3.25 miles northwest of Marshall, on the highest point of a top known locally as Barnett Knob. To reach from Marshall Courthouse follow U. S. Highway 25 northwest 4.3 miles and turn left at road fork, follow road 0.7 miles and turn left at next road fork and continue 0.6 miles, leave car and continue on foot in a southerly direction up ridge to station. Drill hole in rock set in ground.

Reference Mark 1: 1.35 feet N 64° W to 24-inch chestnut stump in fence corner.

Reference Mark 2: 4.10 feet N 20° E to first post east of fence intersection.

Reference Mark 3: 8.00 feet South to first post south of intersection.

Note: The original station "BARNETT" by the USGS was searched for but not recovered by a TVA field party in May, 1941. However, one of the original reference marks was found torn out of the ground. It was reset, referenced, and designated "BARNETT 1" and a new position and elevation were established. The new position is approximately 17 feet west of the original station position.

GRID POSITION (N. C.): X = 896,540.3; Y = 776,046.3 (T-4)

ELEVATION: 2596 feet (T-5)

**BOYD** (USGS, 1934; Madison County, North Carolina)

Located about 3 miles south and 2-1/2 miles west of Marshall, on a grassy top known as Big Knob. To reach from Marshall drive west on Highway 70 for 1.3 miles, turn left on Little Pine road and drive 5.5 miles, turn right after crossing Little Pine Creek and drive 0.6 miles, turn left on Roberts Branch and drive 1.3 miles, thence left 0.3 miles to log cabin which is home of R. P. Meadows. Station can be seen from this point 560 feet west. Walk up old road through cleared fields to station about 1 mile. A standard tablet stamped "BOYD 1934" and set in sandstone boulder set in place.

Reference Mark 1: 8.3 feet N 22° E to drill hole in rock set in place.

Reference Mark 2: 11.1 feet S 45° E to drill hole in rock set in place.

Report on Condition (TVA, 1941): Tablet has been removed from set stone and stone battered so that it was impossible to tell where it had been set. The two original references were recovered and a 60d nail was driven into the sandstone at the intersection.

GEODETIC POSITION: Lat. = 35°45'07.065"; Long. = 82°43'46.067" (G-3)

To Station	Geodetic Azimuth	Distance	Log. Meters	Miles
Sandy Mash	59°59'54.1"	239°54'32.3"	4.204404	9.9
Trouble	125 35 15.0	305 31 50.2	4.034058	6.7
White Oak	258 59 35.4	79 03 59.5	4.063478	7.2
Spivey	337 14 08.4	157 16 51.1	4.259425	11.3

GRID POSITION (TENN.): X = 2,970,277.8; Y = 511,249.0 (G-3)

GRID POSITION (N. C.): X = 893,668.8; Y = 749,375.3 (G-3)

ELEVATION: 3056 feet (T-5)

**C 124** (USC&GS, 1935; Madison County, North Carolina)

Located about 3.2 miles east along State Highway 36 (1938 route) from Little Creek, thence 2.0 miles south along the old highway, on the C. L. Hollinfield property, 65 feet north of the house, 350 feet east of the new highway, 36 feet east of the old highway, 175 feet northeast of a tobacco barn, 44.8 feet south of the southwest corner of a chicken house, 9.7 feet north of a fence corner, 6 feet south of a gap in the fence, and 2 feet west of a wooden fence. A standard tablet stamped "C 124 1935" and set in the top of a concrete post.

ELEVATION: 2933.242 feet or 894.054 meters (T-2)

**C 126** (USC&GS, 1935; Madison County, North Carolina)

Located about 2.1 miles west along the Big Laurel Creek road from Little Creek on the Decatur English property, 25.8 feet west of the northwest corner of the house, 57.5 feet south of the southwest corner of an apple house, 55 feet southeast of Big Laurel Creek, 13 feet southeast of Big Laurel Creek road, 9 feet northeast of a gate, and 4 feet southeast of a fence. A standard tablet stamped "C 126 1935" and set in the top of a concrete post.

ELEVATION: 2636.396 feet or 803.575 meters (T-2)

**C 137** (USC&GS, 1935; Madison County, North Carolina)

Located at Petersburg, about 4.1 miles west along State Highway 213 from Mars Hill, 70 feet northeast of the highway bridge over Bull Creek, 18 feet northwest of the highway, 8 feet northeast of the Bull Creek road, on the O. S. Edmons store, 36.5 feet north of the northeast corner of the old store building, 30 feet northeast of an Esso gas pump, 41.7 feet north-northwest of a 16-inch buckeye tree, in the southwest corner of the store building, and about 4 feet above the ground. A standard tablet stamped "C 137 1935" and set vertically.

ELEVATION: 1971.778 feet or 600.999 meters (T-2)

**D 124** (USC&GS, 1935; Madison County, North Carolina)

Located about 3.2 miles east along State Highway 36 (1938 route) from Little Creek, thence 2.9 miles south along the old and new highway, on the John Cody property, 80 feet southwest of the house, 115 feet north of a tobacco barn, 110 feet east of another tobacco barn, 47.8 feet southwest of a 24-inch white oak tree, 55 feet east of the highway, 36.3 feet southeast of the southeast corner of a brick headwall for concrete steps, 20 feet above the highway, and in the top of a rock outcrop. A standard tablet stamped "D 124 1935".

ELEVATION: 2612.951 feet or 796.429 meters (T-2)

**D 126 (USC&GS, 1935; Madison County, North Carolina)**

Located about 3.1 miles west along the Big Laurel Creek road from Little Creek, about 350 feet southwest of the Stanley Shelton house, 85.1 feet west of Huey Slagle's mailbox, 47.7 feet northwest of the north end of a foot bridge over Big Laurel Creek, 35 feet northwest of the creek, 6 feet northwest of the road, and 1 foot southeast of a wire fence. A standard tablet stamped "D 126 1935" and set in the top of a concrete post.

ELEVATION: 2516.435 feet or 767.011 meters (T-2)

**D 137 (USC&GS, 1935; Madison County, North Carolina)**

Located about 4.1 miles west along State Highway 213 from Mars Hill, thence 1.1 miles north along the Bull Creek road from Petersburg, 55 feet northeast of a bridge over Cody Branch, on the George Bruce property, 32.8 feet north of the northwest corner of an old warehouse, 24.4 feet northeast of the northeast corner of the Clarence Cody store, 28 feet northwest of Bull Creek, 8 feet northeast of the Ray Branch road, 6 feet northwest of the Bull Creek road, and 3 feet north of a fence corner. A standard tablet stamped "D 137 1935" and set in the top of a concrete post.

Note: Searched for but not recovered, July, 1943.  
ELEVATION: 2006.791 feet or 611.671 meters (T-2)

**E 124 (USC&GS, 1935; Madison County, North Carolina)**

Located about 3.2 miles east along State Highway 36 (1938 route) from Little Creek, thence about 4.0 miles south along the old and new highway, on the property of the California School, 115 feet south of the schoolhouse, about 250 feet southeast of California Creek, about 105 feet west of a mailbox post, about 102.0 feet northeast of a fence corner, 95.3 feet east of the southeast corner of an outhouse, 24 feet northwest of the highway, an in the schoolyard. A standard tablet stamped "E 124 1935" and set in the top of a concrete post.

ELEVATION: 2381.813 feet or 725.978 meters (T-2)

**E 126 (USC&GS, 1935; Madison County, North Carolina)**

Located about 4.1 miles west along the Big Laurel Creek road from Little Creek, about 0.3 miles northwest of the Cody's store, about 150 feet west of the Jerry Peek house, 64.0 feet southeast of a large boulder, 61.0 feet north-northeast of the northeast corner of a small barn, 35 feet northeast of Big Laurel Creek, and 10 feet northeast of the road. A standard tablet stamped "E 126 1935" and set in the top of a concrete post.

ELEVATION: 2429.911 feet or 739.419 meters (T-2)

**E 134 (USC&GS, 1935; Buncombe County, North Carolina)**

Located at Flat Creek, on State Highway 197, about 4-1/2 miles north of Weaverville, 200 feet east of the junction of U. S. Highways 19 and 23, 145 feet southwest of the J. O. McElroy house, 79.2 feet southwest of the southwest corner of a shed, 17 feet west of the highway junction sign post, 9 feet north of the highway, and 7.0 feet northwest of a power transmission line pole. A standard tablet stamped "E 134 1935" and set in the top of a concrete post.

ELEVATION: 2161.269 feet or 658.756 meters (T-2)

**E 137 (USC&GS, 1935; Madison County, North Carolina)**

Located about 2.1 miles north along the Bull Creek road from Petersburg, 375 feet east of a foot bridge over Bull Creek, 50 feet south of the center of the junction of a drain, about 135 feet southeast of a log barn, on the south side of a hollow, 15 feet north of a trail leading up the hollow, 27.7 feet southeast of a painted wire fence post, and 10 feet southeast of the road. A standard tablet stamped "E 137 1935" and set in the top of a concrete post.

ELEVATION: 2129.760 feet or 649.152 meters (T-2)

**F 124 (USC&GS, 1935; Madison County, North Carolina)**

Located about 3.2 miles east along State Highway 36 (1938 route) from Little Creek, thence 5.0 miles south along the old and new highway, about 3.3 miles northeast along State Highways 36 and 213 from Mars Hill, on the old highway, 0.6 miles north of the junction of the new highway, 0.9 miles north of the junction of State Highway 213, 50 feet northeast of a cut, 30 feet east of the highway, on the B. W. Metcalf property, 125 feet south of the house occupied in 1939 by R. H. Ramsey, 45.5 feet southeast of a mailbox post, 9.8 feet southwest of the southeast corner of a barn, and 7 feet north of a drain. A standard tablet stamped "F 124 1935" and set in the top of a concrete post.

ELEVATION: 2322.056 feet or 707.764 meters (T-2)

**F 126 (USC&GS, 1935; Madison County, North Carolina)**

Located about 5.1 miles west along the Big Laurel Creek road from Little Creek, 100 feet south of the bridge over Foster Creek, 65 feet northeast of Big Laurel Creek, on the Foster Creek Church property, 40.7 feet west of the southwest corner of the cemetery, 12.3 feet south-southwest of the east corner of the church, 5 feet southeast of the church and 22 feet southwest of the road. A standard tablet stamped "F 126 1935" and set in the top of a concrete post.

ELEVATION: 2375.038 feet or 723.913 meters (T-2)

**F 134 (USC&GS, 1935; Buncombe County, North Carolina)**

Located about 1.1 miles northeast along State Highway 197 from the junction of U. S. Highways 19 and 23 at Flat Creek, on the E. D. Gentry property, 65 feet southeast of the house, 35 feet northwest of the highway, 17 feet northeast of a pasture gate, 53.9 feet east of a 24-inch beech tree, 44.5 feet north of a mailbox post at a fence corner, and 10 feet south of a path to the house. A standard tablet stamped "F 134 1935" and set in the top of a concrete post.

ELEVATION: 2220.580 feet or 676.834 meters (T-2)

**F 137 (USC&GS, 1935; Madison County, North Carolina)**

Located about 3.2 miles north along the Bull Creek road from Petersburg, 0.4 miles south from the Grapevine Church, 125 feet east of Bull Creek, 75 feet north of the junction with a road leading to the house of Mrs. Alice Ogle, 70 feet west of Mrs. Milford Gosner's house, 33.6 feet south of the south post of a group of four mailboxes, and 8 feet west of the road. A standard tablet stamped "F 137 1935" and set in the top of a concrete post.

ELEVATION: 2157.660 feet or 657.656 meters (T-2)

**FB 42 (USED, 1925; Madison County, North Carolina)**

Located 2.5 miles upstream from Barnard, at Southern Railway bridge across Walnut Creek, on top of left bank abutment, upstream side. Chiseled cross painted red.

ELEVATION: 1574.58 feet (E-3)

**FB 43 (USED, 1935; Madison County, North Carolina)**

Located at Redman, on highway bridge across French Broad River, top of right bank concrete abutment, downstream side. Chiseled cross painted red.

ELEVATION: 1603.85 feet (T-3)

**FB 44 (USED, 1925; Madison County, North Carolina)**

Located at Marshall, on State Highway bridge across French Broad River, at upper end of island, on top of right bank abutment, upstream side. Chiseled cross painted red.

Note: Searched for but not recovered, July, 1943.

ELEVATION: 1639.46 feet (E-3)

**FB 45 (USED, 1925; Madison County, North Carolina)**

Located 2.4 miles upstream from Marshall, at Southern Railway bridge across French Broad River, on top of first pier from right bank, downstream side. Chiseled cross painted red.

ELEVATION: 1683.26 feet (T-3)

**FB 46 (USED, 1925; Madison County, North Carolina)**

Located 1 mile downstream from Volga, on west end of concrete railway culvert. Chiseled cross painted red.

ELEVATION: 1707.6 feet (E-4)

**FROZEN (USGS, 1934; Madison County, North Carolina)**

Located about Frozen Knob, about 8.5 miles northeast of Marshall (airline). To reach from Petersburg, take road left 1.4 miles to schoolhouse, thence right keeping main road 4 miles to John Burkmaires barn, leave car and continue on foot up old sled road to gap, a distance of about 1 mile, thence left along road 400 feet to cultivated field on right, follow through field a trail to top and station, a distance of about 1000 feet. A standard tablet stamped "FROZEN 1934" and set in a large rock.

Reference Mark 1: 6.5 feet to 1-inch drill hole in rock.

Reference Mark 2: 6.3 feet to 1-inch drill hole in rock.

Reference Mark 3: 9.8 feet to 1-inch drill hole in rock.

Report on Condition (TVA, 1938): Station appears to have been slightly disturbed. Tablet and rock are still in ground, but at angle of 45°.

GEODETIC POSITION: Lat. = 35°53'25.646"; Long. = 82°35'34.985" (G-3)

Geodetic Azimuths

Distance

Log. Meters Miles

White Oak 4°13'55.3" 184°13'32.5" 4.120572 8.2

Big Bald 220 03 58.8 40 07 35.8 4.158034 8.9

Stone Knob 269 41 17.5 89 43 41.1 3.788304 3.8

Nofat 321 14 37.5 141 17 39.9 4.096488 7.8

GRID POSITION (TENN.): X = 3,008,976.8; Y = 563,011.0 (G-3)

GRID POSITION (N. C.): X = 935,941.0; Y = 798,260.5 (G-3)

ELEVATION: 4000 feet (T-5)

**G 124 (USC&GS, 1935; Madison County, North Carolina)**

Located about 2.0 miles northeast along State Highways 36A and 213 from Mars Hill, at the junction of State Highway 36, on the right bank of California Creek, 120 feet south of a large barn, 65 feet west of the Auburn Buckner house and service station, 36 feet east of the intersection of old State Highway 36 and 213 and new State Highway 36, 25.8 feet northeast of a fence corner, at a bridge, 36.8 feet southwest of the northeast corner, and in the southwest abutment. A standard tablet stamped "G 124 1935".

ELEVATION: 2221.013 feet or 676.966 meters (T-2)

**G 126 (USC&GS, 1935; Madison County, North Carolina)**

Located about 6.2 miles west along the Big Laurel Creek road from Little Creek, on the Roy Bracken property, 46 feet northeast of the house, 40 feet west of Big Laurel Creek, 29.4 feet east of the southeast corner of a shed, 28.5 feet north of a mailbox post, 10 feet east of the road, and 8 feet south of a pig shed. A standard tablet stamped "G 126 1935" and set in the top of a concrete post.

ELEVATION: 2296.255 feet or 699.900 meters (T-2)

**G 134 (USC&GS, 1935; Buncombe County, North Carolina)**

Located about 2.1 miles northeast along State Highway 197 from the junction of U. S. Highways 19 and 23 at Flat Creek, about 300 yards west of the junction of the Ivy Hill road, on the T. C. Morgan property, about 200 feet southwest of the house, about 200 feet north of the Harold Morgan house, 50 feet north of a drain, 15 feet south of the highway, 55.3 feet southwest of a power transmission line pole, 48.0 feet west of a pole, and 11 feet south of a wire fence. A standard tablet stamped "G 134 1935" and set in the top of a concrete post.

ELEVATION: 2209.608 feet or 673.490 meters (T-2)

**G 137 (USC&GS, 1935; Madison County, North Carolina)**

Located about 4.1 miles north along the Bull Creek road from Petersburg, 0.1 miles south of Upper Grapevine school, 110 feet south of the junction of Bradley Branch and Bull Creek, on the C. D. Lewis property, 125 feet south of the house, 48.6 feet south of a 12-inch apple tree, 12.0 feet west-southwest of an 8-inch walnut tree, 22 feet east of a wire fence, 20 feet west of Bull Creek, and 6 feet east of the road. A standard tablet stamped "G 137 1935" and set in the top of a concrete post.

ELEVATION: 2235.944 feet or 681.517 meters (T-2)

**G 138 (USC&GS, 1935; Buncombe County, North Carolina)**

Located about 6.0 miles south along State Highway 36 and U. S. Highways 19 and 23 from Mars Hill, about 0.36 miles south of the junction of State Highway 197 at Flat Creek, 68 feet west of the highway, on the W. R. Arrowood property, about 150 feet south of the house, 28.9 feet northeast of the north-east corner of the barn, 8 feet northwest of the old highway, and 3.7 feet west-southwest of the southeast corner of a wagon shed. A standard tablet stamped "G 138 1935" and set in the top of a concrete post.

ELEVATION: 2203.919 feet or 671.756 meters (T-2)

**GAGE BM 1 (USGS, 1934; Madison County, North Carolina)**

Located on right bank of Ivy Creek, about 2 miles upstream from mouth, 300 feet below county bridge, near county highway, 0.2 miles downstream from abandoned power plant and 4 miles southeast of Marshall, set in concrete gage post on intake headwall, 7.68 feet above gage zero. A standard reference tablet.

Note: Searched for but not recovered, June, 1943.

ELEVATION: 1708.09 feet (T-3)

**GAGE EM 2 (USGS, 1934; Madison County, North Carolina)**

Located on right bank of Ivy Creek, about 2 miles upstream from mouth, near county highway, 0.2 miles downstream from abandoned power plant and 4 miles southeast of Marshall, approximately 700 feet west of county bridge, in concrete block supporting shore end of gage shelter platform, 18.53 feet above gage zero. A standard reference tablet.

ELEVATION: 1718.94 feet (T-3)

**H 126 (USCA6S, 1935; Madison County, North Carolina)**

Located about 7.3 miles west along the Big Laurel Creek road from Little Creek, about 300 feet north of the G. N. Carver house, 75.0 feet southwest of the mailbox, about 100 feet southwest of a log bridge over Big Laurel Creek, 50 feet northwest of the creek, 33.8 feet west-northwest of a painted cross on a stump, at a curve, and 8 feet northwest of the road. A standard tablet stamped "H 126 1935" and set in the top of a concrete post.

ELEVATION: 2212.955 feet or 674.510 meters (T-2)

**H 134 (USCA6S, 1935; Buncombe County, North Carolina)**

Located about 3.1 miles west along State Highway 197 from the post office at Barnardville, on the Lee Arrwood property, 125 feet southeast of the E. R. Bensley house, 80 feet northeast of the corner of a woods, 18 feet southeast of the highway, 42.6 feet east-northeast of a pole, 7 feet southeast of a fence, and in a sedge field. A standard tablet stamped "H 134 1935" and set in the top of a concrete post.

ELEVATION: 2277.712 feet or 694.248 meters (T-2)

**H 137 (USCA6S, 1935; Madison County, North Carolina)**

Located about 3.9 miles west along the Big Laurel Creek road from Little Creek, thence 4.6 miles southwest along the Bull Creek road, about 5 miles north of Petersburg, 125 feet southeast of the Harley Coates house, 44.5 feet southwest of the south end of a gate to a cornfield, 40.2 feet south of a mailbox post, 31 feet west of a wire fence, 15 feet east of Bull Creek, and 8 feet west of the road. A standard tablet stamped "H 137 1935" and set in the top of a concrete post.

ELEVATION: 2423.358 feet or 738.641 meters (T-2)

**H 138 (USCA6S, 1935; Buncombe County, North Carolina)**

Located about 5.0 miles south along State Highway 36 and U. S. Highways 19 and 23 from Mars Hill, about 1.9 miles east of the highway bridge at forks of Ivy, 50 feet southeast of a cut, 47 feet east of the highway, on the J. S. Ball property, 26 feet north of the garden, 20.2 feet southwest of the south-west corner of the house, in the south edge of the yard, 4.1 feet north of a 7-inch locust tree, and 12 feet north of an old road. A standard tablet stamped "H 138 1935" and set in the top of a concrete post.

ELEVATION: 2222.765 feet or 677.500 meters (T-2)

**HALEWOOD 1 (USGS, 1934; Buncombe County, North Carolina)**

Located 1.7 miles (airline) east of Flat Creek. To reach from Stockville, drive south of Highway 19 to old Asheville road, turn left and drive 0.3 miles, turn left 0.3 miles, turn left again and follow main road 2 miles to road fork. Park car here and follow extreme left road to house of Claude Rive, thence follow trail to top. A 1-inch drill hole in rock, under 20-inch oak tree.

Report on Condition (TVA, 1941): Drill hole in set stone was not recovered. No evidence was discovered of any having been set. The old signal pole remained in the tree intact and was cut down and a 60d nail placed in the ground referenced as follows:

Reference Mark 1: 4.6 feet N 33° W to 22-inch oak.  
Reference Mark 2: 15.3 feet N 22° E to 24-inch oak.  
Reference Mark 3: 18.5 feet S 63° E to 8-inch hickory on fence line.

GEODETIC POSITION: Lat. = 35°45'17.095"; Long. = 82°30'58.874" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
White Oak	103°29'09.4"	283°26'05.3"	3.910289	5.1
Nofat	189°27'03.0"	9°27'23.5"	3.731491	3.3
Britten	346°31'40.2"	166°32'00.8"	3.581308	2.4

GRID POSITION (TENN.): X = 3,033,439.4; Y = 514,444.1 (G-3)  
GRID POSITION (N. C.): X = 956,895.5; Y = 748,081.6 (G-3)  
ELEVATION: 3284 feet (T-5)

**HALEWOOD 2 (USGS, 1934; Buncombe County, North Carolina)**

Located 1/4 mile north and 1-1/5 mile west of Stockville, on main road to Jupiter. To reach from Stockville drive 1.4 mile on main road to Jupiter to signal, which is on right of road, property of C. J. Wilds. A 1-inch drill hole in rock set in place under signal in 22-inch Spanish oak tree.

Report on Condition (TVA, 1941): Stone marking HALEWOOD 2 has been removed. Old pole remaining in tree was found intact and unstamped angle iron was driven in ground directly under old signal, referenced as below:

Reference Mark 1: 5.4 feet S 71° W to 12-inch white oak.

Reference Mark 2: 4.7 feet N 35° W to 24-inch red oak.

Reference Mark 3: 36.6 feet N 46° E to 12-inch white oak.

GEODETIC POSITION: Lat. = 35°45'31.990"; Long. = 82°33'53.719" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Zillilcoe	46°13'16.7"	226°10'50.7"	3.940132	5.4
White Oak	112°21'48.8"	292°20'27.0"	3.580216	2.4
Nofat	227°16'58.7"	47°19'01.5"	3.856096	4.5

GRID POSITION (TENN.): X = 3,018,966.0; Y = 515,399.5 (G-3)  
GRID POSITION (N. C.): X = 942,546.9; Y = 750,060.0 (G-3)  
ELEVATION: 2202 feet (T-5)

**HALEWOOD 3 (USGS, 1934; Madison County, North Carolina)**

Located 0.3 miles south of Mars Hill. To reach from Mars Hill, drive south on State Highway 213 for 0.5 miles, leave car here and walk about 1/4 mile N 50° W to station. A 1-inch drill hole in rock set in place under a 30-inch white oak tree with triangular blaze.

GEODETIC POSITION: Lat. = 35°49'17.974"; Long. = 82°32'58.813" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
White Oak	41°31'43.5"	221°29'49.5"	3.868403	4.6
Walnut	112°01'48.2"	291°56'54.9"	4.132526	8.4
Nofat	298°24'29.2"	118°26'00.0"	3.646379	2.8

GRID POSITION (TENN.): X = 3,022,701.6; Y = 538,434.2 (G-3)  
GRID POSITION (N. C.): X = 947,887.3; Y = 772,772.3 (G-3)

**HALEWOOD 4 (USGS, 1934; Madison County, North Carolina)**

Located about 5.5 miles northwest of Bald Creek, on a high top of Haw Mountain. To reach from Bald Creek, follow U. S. Highway 19 west for 3.4 miles to road fork, take right hand fork leaving highway through Windy Gap 1.8 miles to road fork, take left hand road 1 mile to forks of main roads, take right hand fork 2.13 miles to T-road north at Ebbe Chapel Schoolhouse, follow T-road north 2.9 miles to residence of E. B. English, continue on foot up ridge to east, following fence line along south side of cleared field to top, a distance of about 1 mile. Nail in top of stake driven in ground on south side of 22-inch buckeye tree (blazed) and 2 feet from its base.

Reference mark is 1-inch drill hole in rock S 32° E and 20.25 feet from mark under tree.

GEODETIC POSITION: Lat. = 35°56'05.483"; Long. = 82°30'58.339" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Stony Knob	9°14'35.3"	189°14'16.7"	3.695427	3.1
Frozen	54°38'24.8"	234°35'42.6"	3.929820	5.3

GRID POSITION (TENN.): X = 3,031,150.3; Y = 579,963.5 (G-3)

GRID POSITION (N. C.): X = 959,261.2; Y = 813,596.8 (G-3)

ELEVATION: 4608 feet (T-5)

**HALEWOOD 5 (USGS, 1934; Madison County, North Carolina)**

Located 2.9 miles north and 1.1 miles west of Mars Hill Post Office. To reach from Mars Hill, drive north on State Highway 31 for 0.25 miles, turn left and drive 2.75 miles up Gabriel Branch road, leave car here at old barn and walk north up same road about 1.0 miles into Mary's Gap, turn left out main ridge about 1/2 mile to station on property of H. Ammons. A 3-by-5-inch oak stake set 2 feet in ground directly under 30-inch ash (triangle blazed).

GEODETIC POSITION: Lat. = 35°52'06.330"; Long. = 82°33'58.220" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Stony Knob	236°18'34.9"	56°20'01.7"	3.649801	2.8
Nofat	323°33'11.2"	143°35'16.9"	3.957578	5.6
Britten	341°42'12.6"	161°44'18.1"	4.232529	10.7

GRID POSITION (TENN.): X = 3,017,215.2; Y = 555,274.4 (G-3)

GRID POSITION (N. C.): X = 943,609.6; Y = 789,958.9 (G-3)

**HALEWOOD 6 (USGS, 1934; Buncombe County, North Carolina)**

Located on southwest top of wooden hill, locally known as Red Oak Knob, about 2.2 miles southeast of junction of French Broad River and Ivy Creek. To reach from Stockville, drive west on gravel road 3.6 miles, turn left and go 1.75 miles, turn right 0.2 miles to summit of road, leave car and walk along woods road northeast about 300 feet to field. Station is about 100 feet to field, about 100 feet east and north of point where road enters field. A chiseled triangle in rock set in place with 1-inch drill hole in it center, directly under 20-inch red oak tree.

GEODETIC POSITION: Lat. = 35°45'11.676"; Long. = 82°36'57.053" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Zillilcoe	17°14'52.1"	197°14'13.1"	3.753671	3.5
High Knob	60°53'00.2"	240°48'14.8"	4.148416	8.7
White Oak	207°49'17.6"	27°49'42.9"	3.367299	1.4

GRID POSITION (TENN.): X = 3,003,594.9; Y = 512,860.9 (G-3)

GRID POSITION (N. C.): X = 927,374.1; Y = 748,594.3 (G-3)

**HALEWOOD 7 (USGS, 1934; Madison County, North Carolina)**

Located on summit of wooded top about 3.8 miles east and north of Marshall and about 1/2 mile northwest of summit of Highway 213, crossing Seven Mile Ridge. To reach from Marshall, drive east on Highway 25, 0.9 miles, turn left on Highway 213 to 5.1 miles to summit of road on Seven Mile Ridge. Leave car here walk northwest along ridge to top and station (about 1/2 mile). A chiseled "A" in top of white flint rock, set in place flush with ground, under 22-inch chestnut oak, 20 feet northeast and about 3 feet lower than top.

GEODETIC POSITION: Lat. = 35°49'13.695"; Long. = 82°57'14.648" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Boyd	52°19'09.1"	232°15'20.4"	4.094325	7.7
Nofat	280°48'28.4"	100°52'28.8"	4.021448	6.5
White Oak	344°11'00.3"	164°11'35.9"	3.749017	3.5

GRID POSITION (TENN.): X = 3,001,660.8; Y = 537,265.8 (G-3)

GRID POSITION (N. C.): X = 926,517.2; Y = 773,099.7 (G-3)

**HALEWOOD 8 (USGS, 1934; Madison County, North Carolina)**

Located 2.9 miles south and 0.9 miles west of Marshall. To reach from Marshall drive south on main road that leads to Cante, 4.15 miles into gap, leave car here and walk east up main ridge about 1/2 mile, 200 feet S 55° W from main grassy top. A 1-inch drill hole in rock set in place under 24-inch white oak tree.

GEODETIC POSITION: Lat. = 35°45'18.204"; Long. = 82°41'55.641" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
High Knob	34°09'26.0"	214°07'34.8"	3.930827	5.3
Trouble	117°14'04.9"	297°09'35.8"	4.114252	8.1
White Oak	257°45'27.3"	77°48'47.0"	3.943843	5.5

GRID POSITION (TENN.): X = 2,979,336.5; Y = 512,680.2 (G-3)

GRID POSITION (N. C.): X = 902,805.8; Y = 750,160.3 (G-3)

**HALEWOOD 10 (USGS, 1934; Madison County, North Carolina)**

Located 1-1/5 miles north and 2-1/5 miles west of Faust Post Office, To reach from Faust drive west on main road 2.5 miles, turn north up Little Creek, 0.75 miles, leave car here and walk west crossing Little Creek and passing through old field, thence in same direction through corn field and on to ridge, turn left out ridge to station, about 3/4 miles. A 1-inch drill hole in rock set in place under 20-inch blazed locust tree.

GEODETIC POSITION: Lat. = 35°55'28.501"; Long. = 82°33'38.525" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Frozen	37°39'02.8"	217°37'54.5"	3.679587	3.0
Sugar	144°26'11.4"	324°24'30.3"	3.870645	4.6
Big Bald	221°17'45.9"	41°20'14.6"	3.982897	6.0

GRID POSITION (TENN.): X = 3,018,117.0; Y = 575,760.6 (G-3)

GRID POSITION (N. C.): X = 945,962.6; Y = 810,329.3 (G-3)

**HALEWOOD 14 (USGS, 1934; Madison County, North Carolina)**

Located on heavily wooded top 1-1/2 miles north of Big Laurel Post

Office. To reach from Big Laurel drive northeast on Spillcorn road, 2.4 miles to home of McKinley Tweed, leave car here and walk west up drain to home of Courtney Shelton, turn right to rail fence about 300 feet, follow rail fence to wire fence, thence up wire fence, total distance about 1 mile. A 1-inch drill hole in rock set in place under 30-inch blazed white oak.

GEODETIC POSITION: Lat. = 35°57'08.86"; Long. = 82°40'35.517" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Rich	76°23'28.4"	256°18'56.6"	4.076995	7.4
Sugar	244 19 08.7	64 21 32.4	3.832548	4.2
Frozen	312 22 27.6	132 25 23.8	4.008725	6.3

GRID POSITION (TENN.): X = 2,963,497.0; Y = 584,718.1 (G-3)  
 GRID POSITION (N. C.): X = 912,065.5; Y = 821,720.2 (G-3)  
 ELEVATION: 3526 feet (T-5)

#### HALEWOOD 16 (USGS, 1934; Madison County, North Carolina)

Located on wooded top about 0.7 miles south and east of junction of Little Laurel Creek and Shelton Laurel Creek and about 3-1/2 miles west of Big Laurel Post Office. To reach from Marshall, drive northwest on Highway 25 for 11 miles, turn right on Highway 208, go 3.6 miles to filling station, leave car and follow old wagon road southerly to Cook farm, on a small top about 1/4 mile south of Cook farm school. A 1-inch drill hole in rock, set in place directly under signal in 16-inch white pine tree.

GEODETIC POSITION: Lat. = 35°55'34.38"; Long. = 82°44'30.23" (T-4)

GRID POSITION (TENN.): X = 2,964,528.8; Y = 574,520.8; (T-4)  
 GRID POSITION (N. C.): X = 892,421.9; Y = 812,894.0 (T-4)  
 ELEVATION: 2160 feet (T-5)

#### HALEWOOD 17 (USGS, 1934; Madison County, North Carolina)

Located on wooded top locally known as Sugarloaf, about 1/4 mile west along ridge from point where North Carolina-Tennessee State Line and Madison-Union County Line crosses. To reach from Marshall, drive west of Highway 25 to junction with Highway 208, turn on Highway 208 and go 3.6 miles, turn right on Highway 212, go 15 miles to home of Harrison Shelton, leave car here and follow wagon road east about 1/4 mile to Appalachian trail, follow trail to gap east of top, thence along wire fence line to top of mountain and station. A standard tablet stamped "SUGAR 1934" and set in large boulder.

Reference Mark 1: 13 feet S 65° E.  
 Reference Mark 2: 10 feet N 30° W.

GEODETIC POSITION: Lat. = 35°59'32.816"; Long. = 82°36'54.840" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Walnut	25°38'30.1"	205°35'54.5"	4.187004	9.6
Big Bald	271 32 11.9	91 36 36.0	4.051779	7.0
Sugar	338 04 45.7	158 04 59.8	3.206282	1.0

GRID POSITION (TENN.): X = 3,001,126.5; Y = 599,886.6 (G-3)  
 GRID POSITION (N. C.): X = 930,726.6; Y = 835,599.8 (G-3)

#### HALEWOOD 18 (USGS, 1934; Madison County, North Carolina)

Located on high wooded top about 3 miles east and north of Big Laurel Post Office and about 0.85 miles southeast of junction of Spillcorn Creek and Calvin Creek. To reach from Big Laurel Post Office, drive up Spillcorn Creek 3.9 miles, turn right, go 1 mile, leave car and walk easterly about 1/2 mile (airline) to highest top and station. A 1-inch drill hole in rock set in place under 16-inch locust tree.

GEODETIC POSITION: Lat. = 35°56'32.879"; Long. = 82°38'13.493" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Sugar	212°22'38.1"	32°23'38.4"	3.681311	3.0
Stony Knob	299 32 26.0	119 36 22.4	4.065540	7.2
Frozen	325 25 56.7	145 27 29.6	3.845513	4.4

GRID POSITION (TENN.): X = 2,995,292.0; Y = 581,480.5 (G-3)  
 GRID POSITION (N. C.): X = 923,601.0; Y = 817,654.0 (G-3)  
 ELEVATION: 3942 feet (T-5)

#### HALEWOOD 19 (USGS, 1934; Madison County, North Carolina)

Located on wooded top locally known as Grapevine Knob, about 5 miles northwest of Mars Hill and about 1 mile east of Grapevine Church. To reach from Marshall Post Office drive east on Highway 250, 0.9 miles, turn left on Highway 213, go 4.7 miles, turn left up Bull Creek, go 1.4 miles to school, turn left and go 2.3 miles to Grapevine Church, go about 500 feet to first road right, leave car and follow sled road easterly to fields, thence along ridge to station. A 1-inch drill hole in rock set in place directly under 14-inch hickory tree.

GEODETIC POSITION: Lat. = 35°52'40.639"; Long. = 82°36'36.627" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Walnut	80°42'54.0"	260°40'07.9"	3.857793	4.5
Frozen	228 05 48.9	48 06 25.0	3.317480	1.3
White Oak	357 12 30.9	177 12 44.1	4.071543	7.3

GRID POSITION (TENN.): X = 3,004,065.5; Y = 598,286.9 (G-3)  
 GRID POSITION (N. C.): X = 930,707.0; Y = 793,896.8 (G-3)

#### HALEWOOD 20 (USGS, 1934; Madison County, North Carolina)

Located on partially wooded top about 6 miles north and west of Mars Hill and about 2.2 miles north and east of Grapevine Church, and about 0.3 miles east and south of summit of road crossing Walnut Mountain. To reach from Marshall, see description of HALEWOOD 19. From Grapevine Church continue to summit of Walnut Mountain, thence by trail easterly to first top and station. A 1-inch drill hole in rock set in place directly under 30-inch white oak tree.

GEODETIC POSITION: Lat. = 35°53'52.966"; Long. = 82°36'47.824" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Walnut	63°35'42.7"	243°33'03.2"	3.882415	4.7
Frozen	294 44 22.2	114 45 04.9	3.303511	1.2
White Oak	356 30 17.1	176 30 37.0	4.147120	8.7

GRID POSITION (TENN.): X = 3,002,891.6; Y = 565,563.8 (G-3)  
 GRID POSITION (N. C.): X = 930,652.3; Y = 801,238.5 (G-3)  
 ELEVATION: 3719 feet (T-5)

#### HALEWOOD 21 (USGS, 1934; Madison County, North Carolina)

Located on high wooded top (Angelic Knob), about 8.7 miles northeast of Hot Springs and about 2.1 miles northwest of junction of Hickory Fork and Shelton Laurel Creek. To reach from Marshall drive west on Highway 25 for 11 miles, turn right on Highway 208 and go 3.6 miles, turn right on Highway 212

and go 6.1 miles, turn left up Duckmill Creek, go 0.95 miles to Y-fork and leave car, follow right fork of wagon road to home of Bill Shelton. Station is on top about 1/2 mile northerly. A class "A" Forest Service marker on extreme top of mountain, stamped "66 1930" under signal in 24-inch hickory tree. Station is 37.6 feet distance, bearing N 52° W from point under signal. Point under signal is chopped blaze in root of signal tree with 40d nail in center.

GEODETIC POSITION: Lat. = 35°59'22.093"; Long. = 82°43'34.497" (G-3)

GRID POSITION (TENN.): X = 2,968,339.6; Y = 597,685.9 (G-3)  
 GRID POSITION (N. C.): X = 897,866.1; Y = 835,730.4 (G-3)  
 ELEVATION: 3429 feet (T-5)

#### J 126 (USC&GS, 1935; Madison County, North Carolina)

Located about 8.4 miles west along the Big Laurel Creek road from Little Creek, about 4.4 miles southeast of Big Laurel, on the J. P. Davis property, about 500 feet northwest of the house, about 100 feet east of the junction of the Pine Branch road, 40 feet northeast of a wooden bridge over Big Laurel Creek, 18 feet southwest of a pasture gate, 6 feet northeast of the road, in a rock outcrop and about 2 feet higher than the road. A standard tablet stamped "J 126 1935".

ELEVATION: 2136.872 feet or 651.320 meters (T-2)

#### J 133 (USC&GS, 1935; Madison County, North Carolina)

Located 6.1 miles southwest of Marshall, 3.0 miles south of Redmon, on Bear Creek road, on property of Ella Rector, 7 feet west of Bear Creek road, 15 feet east of Bear Creek, 125 feet north of intersection of Bear Creek and drain to the west, 3 feet west of wire fence, 31.3 feet north of a painted 18-inch white oak tree, 0.5 miles north of State Highway 213. A standard tablet set in top of concrete post.

Reference Mark 1: 31.3 feet S 05° E to 18-inch white oak tree.

Reference Mark 2: 10.3 feet S 04° W to 6-inch walnut tree.

Report on Condition (TVA, July, 1943): Monument is broken off just below tablet. Tablet is gone.

ELEVATION: 2014.369 feet or 613.981 meters (C & T-2)

#### J 137 (USC&GS, 1935; Madison County, North Carolina)

Located about 3.9 miles west along the Big Laurel Creek road from Little Creek, thence 3.6 miles southwest along the Bull Creek road, 0.2 miles (airline) northeast of the Harley Costes house, on the Walnut Mountain grade, at a sharp hairpin curve, 9 feet southwest of the road, 8 feet southeast of a log bridge over a ditch, and 6 feet northeast of a rail fence. A standard tablet stamped "J 137 1935" and set in the top of a concrete post.

ELEVATION: 2701.268 feet or 823.348 meters (T-2)

#### J 138 (USC&GS, 1935; Buncombe County, North Carolina)

Located about 3.9 miles south along State Highway 36A and U. S. Highways 19 and 23 from Mars Hill, about 0.9 miles south of the highway bridge at Forks of Ivy, 66.0 feet southwest of the southwest corner of a culvert over Gentry Branch, 53.3 feet southeast of the southeast corner of a log cabin, 23 feet west of the highway, 10 feet west of a pine log bridge over a ditch, and in the center of a small sedge patch. A standard tablet stamped "J 138 1935" and set in the top of a concrete post.

ELEVATION: 2051.193 feet or 625.205 meters (T-2)

#### K 126 (USC&GS, 1935; Madison County, North Carolina)

Located about 3.3 miles southeast along the Big Laurel Creek road from Big Laurel, at a bridge over Lewis Branch, 46.9 feet north-northeast of the northeast corner, 42.6 feet northeast of the northwest corner, 35 feet northwest of Big Laurel Creek, at a rock cut, in a rock outcrop, 30 feet southeast of a 36-inch chestnut tree and 6 feet northwest of the road. A standard tablet stamped "K 126 1935".

ELEVATION: 2080.170 feet or 634.037 meters (T-2)

#### K 133 (USC&GS, 1935; Madison County, North Carolina)

Located 4.9 miles southwest of Marshall, 1.8 miles south of Redmon, on Bear Creek road, on property of Bear Creek School, 300 feet southeast of Columbus Ball's house, 45 feet southwest of Bear Creek road, 25 feet northwest of northeast corner of Bear Creek School, just at edge of creek bank. A standard tablet set in rock outcrop.

Note: Marker was set by USC&GS in 1935 and an elevation determined. Line was relevelled by TVA in 1938. This marker was found in poor condition and was reset. The stamping was not changed. The elevation given below is derived from a combination of the leveling by the USC&GS and TVA.

ELEVATION: 1800.790 feet or 548.832 meters (C & T-2)

#### K 137 (USC&GS, 1935; Madison County, North Carolina)

Located about 3.9 miles west along the Big Laurel Creek road from Little Creek, thence 2.6 miles southwest along the Bull Creek road, on the Walnut Mountain grade, 25 feet west of the intersection of the road and a drain, on the west side of a hollow, at a cut, 15 feet northwest of the road, in rock, and about 5 feet higher than the ground. A standard tablet stamped "K 137 1935" and set vertically.

ELEVATION: 3031.244 feet or 923.925 meters (T-2)

#### K 138 (USC&GS, 1935; Buncombe County, North Carolina)

Located about 3.0 miles southeast along State Highway 36A and U. S. Highways 19 and 23 from Mars Hill, about 1.0 miles southwest of the north junction of the highways, at Forks of Ivy, on the north bank of Ivy Creek, 175 feet west of a Baptist Church, 150 feet southwest of the C. A. McClain store, 40 feet west of the junction of the Hobson road, 5 feet northwest of the highway, 3 feet southwest of the Madison-Buncombe County line, at a concrete highway bridge, and in the northwest end of the northeast sbutment. A standard tablet stamped "K 138 1935".

ELEVATION: 1977.644 feet or 602.787 meters (T-2)

#### L 126 (USC&GS, 1935; Madison County, North Carolina)

Located about 2.2 miles southeast along the Big Laurel Creek road from Big Laurel, about 200 feet northeast of the junction of the old Walnut Mountain road, about 250 feet northeast of the Mrs. Mary Bucknew house, 200 feet west of the Henry Rice house, at a rock cut, 35 feet north of Big Laurel Creek, on a high bank, 3 feet north of the road, and 2 feet higher than the road. A standard tablet stamped "L 126 1935" and set vertically.

ELEVATION: 2040.144 feet or 621.837 meters (T-2)

#### L 133 (USC&GS, 1935; Madison County, North Carolina)

Located 3.8 miles southwest of Marshall, 0.7 miles south of Redmon, on Bear Creek road, on property of Bear Creek Church, 15 feet east of Bear Creek

road, 44.2 feet southeast of bridge over Rector Branch, 55 feet east of Bear Creek, 4 feet west of Bear Creek Church, 59 feet southeast of intersection of Bear Creek road and Rector Branch road, 90 feet west of a barn, 3 feet south of church steps. A standard TVA tablet stamped "L 133 1935" and set in the top of a concrete post.

Reference Mark 1: 8.4 feet Due South to southwest corner of church.

Reference Mark 2: 44.2 feet N 42° W to southeast corner of bridge.

Note: Marker was set by USCGS in 1935 and an elevation determined. Line was relevelled by TVA in 1938. This marker was found in poor condition and was reset. The stamping was not changed. The elevation given below is derived from a combination of the leveling by the USCGS and TVA.

ELEVATION: 1659.528 feet or 505.825 meters (C & T-2)

#### L 138 (USCGS, 1935; Madison County, North Carolina)

Located about 2.2 miles southeast along State Highway 36A from Mars Hill, at the north junction of State Highway 36 and U. S. Highways 19 and 23, 300 feet west of the Mrs. Stake Ledford house, 150 feet west of Little Ivy Creek, 85.4 feet north-northwest of the northwest corner of a bridge over Big Branch, 60 feet northwest of the junction of the highways, 47.0 feet west of a highway stop sign, 11 feet north of State Highway 36, and 10 feet southwest of a small shed. A standard tablet stamped "L 138 1935" and set in the top of a concrete post.

Note: Searched for but not recovered, July, 1943. Point may be covered with dirt or torn out by ditch excavation.

ELEVATION: 2012.765 feet or 613.492 meters (T-2)

#### LR 315 (TVA, 1938; Madison County, North Carolina)

Located in northwest corner of Quadrangle 191 NW, on Licklog Knob. To reach from Marshall, drive west on Highway 25, 11 miles, turn right on Highway 208 and go 3.6 miles, turn right on Highway 212 and go 6.1 miles, turn left up Duck Mill Creek and go 1.1 miles to home of Bill Shelton, leave car and follow old road up hill, about 0.5 miles to Y-road intersection, turn left through gate, follow along said road about 800 feet, turn right up comb of ridge along wire fence line and woods, go about 900 feet to extreme northwest corner of woods, at base of corner tree. A 1- by 1-inch angle iron stamped "TVA LR 315 1938".

GEODETIC POSITION: Lat. = 35°59'03.80"; Long. = 82°43'49.06" (T-4)

GRID POSITION (TENN.): X = 2,967,205.1; Y = 595,797.2 (T-4)

GRID POSITION (N. C.): X = 896,600.5; Y = 833,927.0 (T-4)

ELEVATION: 3191 feet (T-5)

#### LR 317 (TVA, 1938; Madison County, North Carolina)

Located in northwest portion of Quadrangle 191 NE. To reach from Mars Hill, drive northeast on Highway 213 for 2.5 miles to new Asheville-Erwin highway, turn left on new highway, go 8.0 miles, turn left at Corns Chapel Church on Laurel Branch, follow said road 5.6 miles to Y-road intersection at Foster Creek Church on Laurel Creek, turn right, follow poor ungraded road up hollow, go 2.9 miles to reverse curve in road, also at branch crossing, leave car and go due west up comb of ridge, follow along top of ridge to small cleared field about 200 feet square, at low gap bear right to main top of ridge about 300 feet from cleared field, turn right, follow dim path about 200 feet to high point, about 800 feet east of highest point on ridge, at base of 24-inch hickory at edge of path, 20 feet east of old fence line, 10 feet west of 36-inch dead chestnut. A 1- by 1-inch angle iron stamped "TVA LR 317 1938".

Reference Mark 1: 2.1 feet N 16° E to 24-inch hickory.

GEODETIC POSITION: Lat. = 35°57'02.30"; Long. = 82°36'33.15" (T-4)

GRID POSITION (TENN.): X = 3,003,434.9; Y = 584,738.0 (T-4)

GRID POSITION (N. C.): X = 931,954.5; Y = 820,325.6 (T-4)

ELEVATION: 3947 feet (T-5)

#### LR 318 (TVA, 1938; Madison County, North Carolina)

Located in south central portion of Quadrangle 191 NW, about 1 mile (airline) from Big Laurel. To reach from post office in Marshall, drive west on U. S. Highways 25 and 70 for 0.9 miles, turn at Walnut Creek road to the right, go 5.1 miles, turn left, go 5.7 miles to Big Laurel Creek, turn left and go 1.3 miles, turn left and go 0.6 miles, leave car and take sled road to east along edge of woods, go about 1500 feet to field on top of ridge, at extreme eastern point of field midway between two drains and near 40-inch dead chestnut. A 1- by 1-inch angle iron.

Reference Mark 1: 7.6 feet N 50° E to 40-inch chestnut.

Reference Mark 2: 12.1 feet S 30° E to 2-inch locust.

GEODETIC POSITION: Lat. = 35°54'49.41"; Long. = 82°40'14.37" (T-4)

GRID POSITION (TENN.): X = 2,985,714.1; Y = 570,684.4 (T-4)

GRID POSITION (N. C.): X = 913,281.5; Y = 807,564.7 (T-4)

ELEVATION: 2612 feet (T-5)

#### LR 319 (TVA, 1938; Madison County, North Carolina)

Located in northeast portion of Quadrangle 191 NW, near Potato Gap. To reach from Marshall, drive west on Highways 25 and 70 for 0.9 miles, turn right on Walnut Creek road, go 5.1 miles, turn left and go 5.7 miles to Big Laurel Creek, turn left and go 2.7 miles to Spillover Creek road, turn right up creek and go 3.0 miles to Licenbee Branch and road, turn left up road and go 0.8 miles to farm house, leave car and follow trail northwest 3000 feet to Potato Gap, when in gap turn right and follow trail to edge of field, when in field go due north 50 feet to lone apple tree. Station is at base of tree in field 48.0 feet N 50° W from intersection of trail and woods line. A 1- by 1-inch angle iron stamped "TVA LR 319 1938".

GEODETIC POSITION: Lat. = 35°58'23.24"; Long. = 82°39'37.17" (T-4)

GRID POSITION (TENN.): X = 2,988,034.8; Y = 592,397.6 (T-4)

GRID POSITION (N. C.): X = 917,136.6; Y = 829,058.4 (T-4)

ELEVATION: 3373 feet (T-5)

#### LR 320 (TVA, 1938; Madison County, North Carolina)

Located about 3 miles (airline) south of Big Laurel. To reach from Marshall, drive west on Highways 25 and 70 for 0.8 miles, turn right on Walnut Creek road and go 6.9 miles to home of Clyde Wallins, leave car at house and go northwest up hollow, following trail by barn about 2000 feet to top of ridge, when on top of ridge turn left and go about 200 feet to narrow strip of woods between two cleared fields on highest point in woods on property of Ell Wallins. A 1- by 1-inch angle iron stamped "TVA LR 320 1938".

Reference Mark 1: 2.65 feet N 20° E to 2-inch blackjack.

Reference Mark 2: 5.55 feet N 70° W to 2-inch dogwood.

Reference Mark 3: 8.20 feet S 20° E to 4-inch poplar.

GEODETIC POSITION: Lat. = 35°53'14.86"; Long. = 82°40'19.13" (T-4)

GRID POSITION (TENN.): X = 2,985,647.6; Y = 561,116.3 (T-4)

GRID POSITION (N. C.): X = 912,536.5; Y = 798,025.5 (T-4)

ELEVATION: 3492 feet (T-5)

#### LR 321 (TVA, 1938; Madison County, North Carolina)

Located in northwest portion of Quadrangle 191 NW from Franklin Mt., about 1500 feet west of Shelton Laurel Creek. To reach from Marshall, drive west on Highways 25 and 70 for 11.5 miles, turn right on Highway 208 and go 3.6 miles, turn right on Highway 212 and go 5.7 miles to Standard filling station on right of road and white house on left, leave car, turn left going by barn and follow sled trail around hill about 1500 feet to gap between two ridges, when in gap turn right and follow high point of hill and fence line about 400 feet to extreme high point of hill, on summit of peak. A 1- by 1-inch angle iron stamped "TVA LR 321 1938".

Reference Mark 1: 15.9 feet S 01° W to nail in 24-inch oak.

Reference Mark 2: 7.7 feet N 40° W to nail in 18-inch chestnut.

Reference Mark 3: 8.7 feet S 55° W to nail in 6-inch sourwood.

GEODETIC POSITION: Lat. = 35°58'14.70"; Long. = 82°42'31.11" (T-4)

GRID POSITION (TENN.): X = 2,973,775.0; Y = 591,050.0 (T-4)

GRID POSITION (N. C.): X = 902,817.1; Y = 828,725.7 (T-4)

ELEVATION: 2398 feet (T-5)

#### LR 322 (TVA, 1938; Madison County, North Carolina)

Located 1.2 miles (airline) southwest of road intersection at White Rock. To reach from White Rock, drive southwest on White Rock road (gravel road) 1.3 miles to Chapel Hill, highest point of hill, turn left on very dim road along edge of pine trees, and go 0.4 miles to farm house, leave car and follow old road about 700 feet to point where road makes left turn, leave road going to right, also up backhills of cleared ridge, continue to top, at wire fence and corner of woods, turn right and go to extreme north corner of narrow strip of woods. Station is due north 58 feet from north edge of woods, on west side of hill and 100 feet north from north edge of another woods, 5.0 feet southwest of 3-inch locust. A 1- by 1-inch angle iron.

Reference Mark 1: 5.5 feet S 15° E to 3-inch locust.

Reference Mark 2: 14.55 feet S 35° W to 2-inch locust.

GEODETIC POSITION: Lat. = 35°56'10.10"; Long. = 82°42'34.72" (T-4)

GRID POSITION (TENN.): X = 2,973,902.0; Y = 578,449.0 (T-4)

GRID POSITION (N. C.): X = 902,050.0; Y = 816,147.5 (T-4)

ELEVATION: 2611 feet (T-5)

#### LR 323 (TVA, 1938; Madison County, North Carolina)

Located in southwest portion of Quadrangle 191 NW on high peak of Walnut Mountain. To reach from Marshall, drive west on Highways 25 and 70 for 7.2 miles, turn right on graded road and go 1.1 miles, turn left up hollow and go 0.4 miles to sled road up hill, leave car and go left, follow old trail about 2500 feet to top of hill, turn right on top and go about 700 feet to center line intersection of 3 fences and hedge row. Station is 8.0 feet N 40° E from fence intersection. A 1- by 1-inch angle iron stamped "TVA LR 323 1938".

Reference Mark 1: 4.1 feet S 60° W to 6-inch walnut.

Reference Mark 2: 3.85 feet Due South to 3-inch elm.

Reference Mark 3: 5.65 feet S 40° E to 4-inch hickory.

GEODETIC POSITION: Lat. = 35°53'06.36"; Long. = 82°43'39.33" (T-4)

GRID POSITION (TENN.): X = 2,969,212.8; Y = 559,702.8 (T-4)

GRID POSITION (N. C.): X = 896,043.1; Y = 797,781.3 (T-4)

ELEVATION: 3418 feet (T-5)

#### LR 324 (TVA, 1938; Madison County, North Carolina)

Located in south central portion of Quadrangle 191 NE. To reach from Mars Hill, drive north from Main Street on Highways 36 and 213, go 2.5 miles to intersection of Highway 213 with new Asheville-Erwin highway via Sams Gap, turn left on new highway and go 7.6 miles to large right turn in road, turn left up Bear Branch road and go 0.8 miles toward Whitaker Gap to barn, leave car and go up hollow to house, from house go N 70° W 700 feet to saddle and cleared field. Station is 100 feet west of saddle, 35 feet south of fence line, 75 feet north of cultivation line, east of 18-inch poplar in clump of second growth trees. A 1- by 1-inch angle iron stamped "TVA LR 324 1938".

Reference Mark 1: 32.7 feet North to 36-inch chestnut.

Reference Mark 2: 27.5 feet N 25° W to 10-inch chestnut stump.

GEODETIC POSITION: Lat. = 35°54'02.57"; Long. = 82°33'30.28" (T-4)

GRID POSITION (TENN.): X = 3,019,100.0; Y = 567,100.7 (T-4)

GRID POSITION (N. C.): X = 946,328.7; Y = 801,621.5 (T-4)

ELEVATION: 3361 feet (T-5)

#### LR 325 (TVA, 1938; Madison County, North Carolina)

Located in northwest corner of Quadrangle 191 SE, about 2-1/2 miles from Petersburg. To reach from Marshall, drive east of Highways 25 and 70 to intersection of Mars Hill road, turn left on Mars Hill road and go 5.6 miles to Petersburg, turn left and go 1.4 miles to Center School, turn left, go 1.5 miles to farm house and trail up hill, leave car and follow trail bearing left just above house, follow extreme comb of ridge, very steep grade, to fence line, cross fence but continue along north side of fence about 2000 feet from road to first round knob 200 feet west of gap in ridge line, 100 feet west of angle point in ridge line, 20 feet north of wire fence line, 20 feet west of 18-inch dead chestnut and 5 feet east of two large stumps, at northwest edge of woods. A 1- by 1-inch angle iron stamped "TVA LR 325 1938".

Reference Mark 1: 7.17 feet N 70° W to 24-inch stump.

Reference Mark 2: 5.80 feet N 45° W to 36-inch stump.

Reference Mark 3: 16.90 feet Due East to 18-inch dead chestnut.

GEODETIC POSITION: Lat. = 35°51'36.04"; Long. = 82°36'47.42" (T-4)

GRID POSITION (TENN.): X = 3,003,403.8; Y = 551,728.7 (T-4)

GRID POSITION (N. C.): X = 929,581.7; Y = 787,402.1 (T-4)

ELEVATION: 2626 feet (T-5)

#### LR 326 (TVA, 1938; Madison County, North Carolina)

Located in southwest portion of Quadrangle 191 NW. To reach from Marshall, drive west on Highways 25 and 70 for 9.3 miles to Walnut Gap, turn right on Lonesome Mountain road, go 3.9 miles on graded and gravelled (new) road, turn right on top of hill, following new gravel road 1.2 miles to point on outside of sharp curve, turn right on dim road up small branch and hollow, go 0.9 miles to log farm house, leave car at house going west, following trail about 1000 feet to top of ridge, turn left along wire fence and hedge row to intersection of four fences about 500 feet, thence turn right (west) and go about 600 feet to angle in fence line and lone tree in angle point, 6.5 feet north of tree in pasture field. A 1- by 1-inch angle iron stamped "TVA LR 326 1938".

Reference Mark 1: 7.0 feet S 20° W to 8-inch persimmon.

Reference Mark 2: 20.2 feet S 60° W to fence post.

GEODETIC POSITION: Lat. = 35°54'08.16"; Long. = 82°43'18.56" (T-4)

GRID POSITION (TENN.): X = 2,970,711.9; Y = 566,004.6 (T-4)

GRID POSITION (N. C.): X = 897,989.3; Y = 803,960.8 (T-4)  
ELEVATION: 2466 feet (T-5)

**LR 327 (TVA, 1938; Madison County, North Carolina)**

Located about 1 mile (airline) from Big Laurel on Mollie Mountain. To reach from Marshall, drive west on Highways 25 and 70 for 0.8 miles, turn right up Walnut Creek road and go 10.8 miles to Big Laurel Creek, turn left down right bank of Big Laurel Creek and go 2.4 miles, turn right up Watha Branch road and go 1.2 miles to end of road at 2 farm houses, leave car going west up hollow, following good trail as it meanders, going 1500 feet to gap in middle ridge, also gap in fence, turn left. When on top follow the extreme top of the ridge about 1000 feet to point where slope of ridge is steep to west. Station is 425 feet from southwest corner of cleared field, on extreme south point of ridge, at wire fence corner. A 1-by-1-inch angle iron stamped "TVA LR 327 1938".

Reference Mark 1: 13.45 feet S 25° W to 40-inch oak.

Reference Mark 2: 4.20 feet N 80° W to 4-inch dead chestnut.

Reference Mark 3: 10.00 feet N 10° E to 20-inch dead chestnut.

GEODETIC POSITION: Lat. = 35°56'18.69"; Long. = 82°40'11.35" (T-4)

GRID POSITION (TENN.): X = 2,985,699.4; Y = 579,715.0 (T-4)

GRID POSITION (N. C.): X = 913,863.6; Y = 816,576.6 (T-4)

ELEVATION: 3047 feet (T-5)

**LR 332 (TVA, 1938; Madison County, North Carolina)**

Located in southwest portion of Quadrangle 191 NW, on Lonesome Mt., near Billy Gap. To reach from Marshall, drive west on Highways 25 and 70 for 9.3 miles to Walnut Gap, turn right on Lonesome Mountain road and go 1.8 miles to another Walnut Gap where road starts going down grade, crossing gap go to first house on left of road, point on horseshoe curve in road, leave car and walk due north along trail on top of ridge to first high point on ridge about 800 feet. Station is on highest point of knoll, 10 feet north of path and 75 feet west of small gap and 30 feet northwest of a 6-inch pine. A 1-by-1-inch angle iron stamped "TVA LR 332 1938".

GEODETIC POSITION: Lat. = 35°54'43.28"; Long. = 82°44'31.95" (T-4)

GRID POSITION (TENN.): X = 2,964,599.4; Y = 569,352.6 (T-4)

GRID POSITION (N. C.): X = 892,085.9; Y = 807,736.7 (T-4)

ELEVATION: 2665 feet (T-5)

**LR 707 (TVA, 1941; Madison County, North Carolina)**

Located about 12.2 miles northwest of Asheville. To reach from Asheville, drive 10.5 miles north on U. S. Highways 70 and 25 to Alexander, continue on Highways 70 and 25 for 3.9 miles, turn right on Kuykendall Creek road for 0.8 miles, turn left 0.6 miles, turn left at sharp "v" bend and go 0.1 miles, turn right and go 0.4 miles to gates at Y-roads. Station is at point of "v". A 1-by-1-inch angle iron stamped "TVA LR 707".

Reference Mark 1: 3.2 feet S 05° E to east post of north gate.

Reference Mark 2: 7.7 feet S 40° E to west point of south gate.

Reference Mark 3: 5.05 feet N 29° E to 1st fence post north of gates.

GRID POSITION (N. C.): X = 912,770.4; Y = 748,059.8 (T-4)

ELEVATION: 2112 feet (T-5)

**LR 708 (TVA, 1941; Buncombe County, North Carolina)**

Located about 11.0 miles north of Asheville, and about 3.0 miles west of Stockville. To reach from Stockville, drive west on Red Oak road for 3.2 miles, turn left and go 1.0 miles to T-road south. Station is in southwest corner of T-roads, about 20 feet from center line of south road and about 30 feet from center of east-west road. A 1-by-1-inch angle iron stamped "TVA LR 708".

Reference Mark 1: 1.5 feet S 43° W to power pole.

GRID POSITION (N. C.): X = 931,279.6; Y = 748,648.2 (T-4)

ELEVATION: 2152 feet (T-5)

**M 125 (USCGS, 1935; Madison County, North Carolina)**

Located 4.4 miles northwest of White Rock schoolhouse, by State Highway 208, 0.4 miles north of junction of Highways 208 and 212, 23.6 feet northeast of edge of highway, 28 yards northeast of telephone post, 2 feet south of corner post of barbed wire fence, 1-1/2 foot above surface of road, 7.4 feet southwest of south post of "Old Mill Wheel" sign. A standard tablet stamped "M 125 1935" and set in concrete monument.

ELEVATION: 1708.205 feet or 520.662 meters (C-2)

**M 126 (USCGS, 1935; Madison County, North Carolina)**

Located about 1.1 miles southeast along the Big Laurel Creek road from Big Laurel, about 300 feet southwest of a bridge across Big Laurel Creek, on the Josh Bishop property, about 100 feet southwest of the house, 60 feet north of Big Laurel Creek, 21.7 feet west of the northwest corner of a barn, 11 feet south of the road, 8.8 feet southeast of the northeast corner of a garden, 2 feet east of a garden fence, and at the northwest corner of a small pen. A standard tablet stamped "M 126 1935" and set in the top of a concrete post.

ELEVATION: 1960.633 feet or 597.602 meters (T-2)

**M 133 (USCGS, 1935; Madison County, North Carolina)**

Located 2.7 miles west of the station at Marshall, by rail, on the Salisbury to Knoxville Division of the Southern Railway, about 2000 feet downstream from power dam across the French Broad River, 150 yards east of the Redmon siding, 35 yards south of the railway, 15 yards south of the junction of the dirt road and road leading to Redmon siding, on the east end of the north abutment of highway bridge across the French Broad River, 1 foot below the floor of bridge. A standard tablet stamped "M 133 1935".

ELEVATION: 1602.953 feet or 488.581 meters (C-1)

**M 133 A (USCGS, 1935; Madison County, North Carolina)**

Located 2.7 miles west of the station in Marshall, by rail, on the Salisbury to Knoxville Division of the Southern Railway, about 500 yards downstream from power dam across French Broad River, 140 yards east of the Redmon siding, 35 yards west of the railway, 15 yards west of the junction of dirt road and road leading to Redmon siding, on the west end of the north abutment of highway bridge over French Broad River, 1 foot below floor of bridge. A 1-by-1-inch outlined square.

ELEVATION: 1602.917 feet or 488.570 meters (C-1)

**M 137 (USCGS, 1935; Madison County, North Carolina)**

Located about 3.9 miles west along the Big Laurel Creek road from Little Creek, thence 1 mile southwest along the Bull Creek road, 550 feet northeast of the W. G. Arrington house, 100 feet southeast of a drain, 200 feet northeast of a horseshoe bend in the road, at a cut, 20 feet northwest of a wire

fence, 7 feet southeast of the road, in a rock ledge, and about 5 feet higher than the road. A standard tablet stamped "M 137 1935" and set vertically.

ELEVATION: 2760.769 feet or 841.484 meters (T-2)

**M 138 (USCGS, 1935; Madison County, North Carolina)**

Located about 2.2 miles southeast along State Highway 36A from Mars Hill, thence 0.9 miles north along U. S. Highways 19 and 23, about 1.8 miles southwest of the Beech Glen school, on U. S. Highways 19 and 23, 0.9 miles northeast from its junction with State Highway 36, 600 feet northwest of Little Ivy Creek, 400 feet northeast of the J. H. Jarvis house, 110 feet southwest of a large tobacco barn, 39.8 feet west-northwest of a pole, 19.7 feet east-southeast of a 6-inch pine tree, 15 feet northwest of the highway, 10 feet southeast of an old road, 8 feet southwest of a garden. A standard tablet stamped "M 138 1935" and set in the top of a concrete post.

ELEVATION: 2059.136 feet or 627.626 meters (T-2)

**MS 650 (TVA, 1941; Madison County, North Carolina)**

Located about 1 mile northeast of Marshall, at Marshall Reservoir. Station was set as near as possible to HALEWOOD 12, which was evidently destroyed during construction of Marshall Reservoir. To reach from Marshall, drive 0.7 miles on U. S. Highways 25 and 70, turn right up Walnut Creek road for 1.5 miles to sharp curve and T-road left to reservoir, take road to reservoir for 0.15 miles to concrete circular reservoir. Here on south side of reservoir in center line of dirt road around reservoir is station. An angle iron stamped "MS 650".

Reference Mark 1: 8.85 feet N 04° E to south corner concrete intake trap.

Reference Mark 2: 22.30 feet S 76° E to dot after painted word "Cap" on tank.

Reference Mark 3: 15.35 feet S 74° W to tack and washer in 3-inch locust.

GRID POSITION (N. C.): X = 910,112.8; Y = 769,498.0 (T-4)

ELEVATION: 2218 feet (T-5)

**MS 651 (TVA, 1941; Madison County, North Carolina)**

Located in Marshall, on right bank of French Broad River, 75 feet southwest from southwest corner of Southern Railway station, 3 feet south of rail. A 1-by-1-inch angle iron stamped "MS 651".

Reference Mark 1: 10.40 feet South to tack and washer in telephone pole.

Reference Mark 2: 35.90 feet Northeast to tack and washer in southwest corner of railroad station.

Reference Mark 3: 40.45 feet Northwest to tack and washer in west post of cattle pen.

Report on Condition (TVA, June, 1943): Station not recovered. Probably covered when railroad bed was raised. Reference marks are in good condition.

GRID POSITION (N. C.): X = 908,799.4; Y = 764,513.7 (T-4)

Grid Azimuth to MS 652 (distance 1147.1 feet): 299°45'.

ELEVATION: 1644.0 feet (T-4)

**MS 652 (TVA, 1941; Madison County, North Carolina)**

Located in east edge of Marshall, on right bank of French Broad River, 1100 feet east of Southern Railway station, 580 feet east of railroad water tank on highway curve, 1/2 foot south of highway guard rail, between highway and railroad track. A 1-by-1-inch angle iron stamped "MS 652".

Reference Mark 1: 2.67 feet S 75° W to tack and washer in guard rail post.

Reference Mark 2: 52.05 feet South to tack and washer in power pole.

Reference Mark 3: 21.32 feet S 70° E to tack and washer in telephone pole.

GRID POSITION (N. C.): X = 909,795.3; Y = 763,944.4 (T-4)

Grid Azimuth to MS 651 (distance 1147.1 feet): 119°45'.

ELEVATION: 1652.9 feet (T-4)

**MS 653 (TVA, 1941; Madison County, North Carolina)**

Located 0.9 miles west of depot in Marshall, on shoulder of Southern Railway, 12 feet north of center line of tracks, just southwest of railroad tool shed. A 1-by-1-inch angle iron stamped "MS 653".

Reference Mark 1: 11.33 feet S 25° W to tack and washer in tie.

Reference Mark 2: 12.41 feet East to tack and washer in crosstie.

Reference Mark 3: 42.77 feet N 40° E to tack and washer in corner of railroad tool house.

GRID POSITION (N. C.): X = 904,699.5; Y = 766,983.7 (T-4)

Grid Azimuth to MS 654 (distance 1619.2 feet): 64°43'.

ELEVATION: 1635.9 feet (T-4)

**MS 654 (TVA, 1941; Madison County, North Carolina)**

Located 1.4 miles west along Southern Railway from depot in Marshall, 10 feet northwest of center line of tracks, 15 feet west of north end of railroad culvert. A 1-by-1-inch angle iron stamped "MS 654".

Reference Mark 1: 48.35 feet S 40° E to tack and washer in power pole.

Reference Mark 2: 14.22 feet N 03° E to tack and washer in crosstie.

Reference Mark 3: 12.55 feet N 20° W to tack and washer in small locust bush growing on rock cut on northwest side of tracks.

GRID POSITION (N. C.): X = 903,235.4; Y = 766,291.8 (T-4)

Grid Azimuth to MS 653 (distance 1619.2 feet): 244°43'.

ELEVATION: 1634.0 feet (T-4)

**MS 655 (TVA, 1941; Madison County, North Carolina)**

Located at Redmon, 10 feet south of center line of Southern Railway, in line with east side of highway bridge across French Broad River, 1760 feet west of N 133. A 1-by-1-inch angle iron stamped "MS 655".

Reference Mark 1: 56.20 feet S 45° W to tack and washer in telephone pole.

Reference Mark 2: 61.42 feet S 20° E to tack and washer in end fence post.

Reference Mark 3: 4.16 feet N 25° E to tack and washer in crosstie.

GRID POSITION (N. C.): X = 897,915.2; Y = 765,056.1 (T-4)

Grid Azimuth to N 133 (distance 1759.9 feet): 284°00'.

ELEVATION: 1612.2 feet (T-4)

**MS 656 (TVA, 1941; Madison County, North Carolina)**

Located 2.2 miles north along Southern Railway (downstream along French Broad River) from station at Redmon, 5 rails northwest of northwest end of

railroad bridge over Walnut Creek, 12 feet southwest of center line of tracks.

A 1- by 1-inch angle iron stamped "MS 656".  
 Reference Mark 1: 29.40 feet S 11° E to tack and washer in phone pole.  
 Reference Mark 2: 18.50 feet N 80° E to tack and washer in crosstie.  
 Reference Mark 3: 40.71 feet N 10° E to tack and washer in crosstie.  
 GRID POSITION (N. C.): X = 892,865.2; Y = 771,613.9 (T-4)  
 Grid Azimuth to MS 657 (distance 605.0 feet): 180°28'.  
 ELEVATION: 1575.4 feet (T-4)

**MS 657 (TVA, 1941; Madison County, North Carolina)**

Located 2.3 miles north along Southern Railway (downstream along French Broad River) from station at Redmon, 12 feet west of center line of tracks, 700 feet south of railroad signal stand No. 168.8 at curve in tracks. A 1- by 1-inch angle iron stamped "MS 657".  
 Reference Mark 1: 28.30 feet N 25° E to tack and washer in crosstie.  
 Reference Mark 2: 8.79 feet S 80° E to tack and washer in crosstie.  
 Reference Mark 3: 65.47 feet S 12° W to tack and washer in phone pole.  
 GRID POSITION (N. C.): X = 892,870.0; Y = 772,218.9 (T-4)  
 Grid Azimuth to MS 656 (distance 605.0 feet): 00°28'.  
 ELEVATION: 1573.0 feet (T-4)

**MS 658 (TVA, 1941; Madison County, North Carolina)**

Located 2.7 miles north along Southern Railway (downstream along French Broad River) from station at Redmon, 9 feet west of center line of railroad tracks, 60 feet southwest of power pole No. 27, 3 rails south of old car stand, at small wooden railroad culvert. A 1- by 1-inch angle iron stamped "MS 658".  
 Reference Mark 1: 27.10 feet S 28° W to tack and washer in power pole.  
 Reference Mark 2: 7.90 feet S 15° E to tack and washer in crosstie.  
 Reference Mark 3: 14.57 feet N 20° E to tack and washer in crosstie.  
 GRID POSITION (N. C.): X = 893,291.4; Y = 774,171.5 (T-4)  
 ELEVATION: 1564.4 feet (T-4)

**MS 702 (TVA, 1941; Madison County, North Carolina)**

Located in west central portion of Quadangle 191 SW, 0.7 miles west of French Broad River and 2.5 miles south of Walnut. To reach from Barnard, drive from railroad station west across river bridge 0.15 miles, turn left at west end of bridge and drive south up left bank of river for 2.65 miles to road intersection with fence line, north down ridge, park car and walk down ridge along fence line north for 100 feet. Here 2 feet east of fence line is station. A 1- by 1-inch angle iron.  
 Reference Mark 1: 7.26 feet S 15° E to tack in fence post.  
 Reference Mark 2: 11.50 feet N 42° W to tack in fence post.  
 Reference Mark 3: 5.01 feet N 67° W to tack in fence post.  
 GRID POSITION (N. C.): X = 888,668.0; Y = 772,757.0 (T-4)  
 ELEVATION: 2043 feet (T-5)

**N 32A (TVA, 1937; Madison County, North Carolina)**

Located on right bank of river, 20 feet north of center line of old U. S. Highways 25 and 70, in yard of bulk station of Gulf Oil Company, about 1 mile east of Marshall. A chiseled square in concrete slab.  
 Note: Searched for but not recovered, July, 1943.  
 ELEVATION: 1653.53 feet (T-3)

**N 126 (USCGS, 1935; Madison County, North Carolina)**

Located at Big Laurel, on the Big Laurel Creek road, about 100 feet southeast of the junction of the Spilloorn road, about 140 feet southeast of Spilloorn Creek, on the Haynes Walden property, about 250 feet southeast of the house, about 125 feet south of a large barn, about 100 feet west of the store, 36.8 feet east of the northeast corner of the Cal Thomas house, 22.2 feet south of the southeast corner of a bridge over Wallin Branch, 15 feet southwest of the branch, 25 feet southwest of the road, and 2 feet northeast of a wire fence. A standard tablet stamped "N 126 1935" and set in the top of a concrete post.  
 ELEVATION: 2033.690 feet or 619.870 meters (T-2)

**N 133 (USCGS, 1935; Madison County, North Carolina)**

Located 2.3 miles west of the station by rail, on the Salisbury to Knoxville Division of the Southern Railway, 120 feet west of the north end of the power dam across French Broad River, in the center of the northwest corner post of concrete railway bridge over dirt road leading to Redmon, 8.3 feet north of the north rail, 6 inches above the top of the rails. A standard tablet stamped "N 133 1935".  
 GRID POSITION (N. C.): X = 899,623.0; Y = 764,630.6 (T-4)  
 Grid Azimuth to MS 655 (distance 1759.9 feet): 104°00'.  
 ELEVATION: 1624.157 feet or 495.044 meters (C-1)

**N 137 (USCGS, 1935; Madison County, North Carolina)**

Located about 3.9 miles west along the Big Laurel Creek road from Little Creek, about 200 feet southwest of the junction of the Bull Creek road, about 100 feet southeast of Big Laurel Creek, 40 feet southeast of the Big Laurel Creek road, at the Cody red-brick store building (operated in 1939 by W. F. Fender), in the north wall, 1 foot east of the northwest corner, 35 feet northeast of a gas pump, 2 feet southeast of a fence corner, and about 3 feet above the ground. A standard tablet stamped "N 137 1935" and set vertically.  
 ELEVATION: 2448.794 feet or 746.394 meters (T-2)

**N 138 (USCGS, 1935; Madison County, North Carolina)**

Located about 2.2 miles southeast along State Highway 36A from Mars Hill, thence 1.9 miles northeast along U. S. Highways 19 and 23, about 0.8 miles southwest of the Beech Glen school at Ivy, 42 feet west of the highway, at the M. D. Phillips service station, in the southeast corner, 65 feet south of a garage, 20 feet west of a Super Shell gas pump, and about 1 foot above the concrete walk. A standard tablet stamped "N 138 1935" and set vertically.  
 ELEVATION: 2072.601 feet or 631.730 meters (T-2)

**NOFAT (USGS, 1934; Madison-Buncombe Counties, North Carolina)**

Located on the highest point of west range of Nofat Mt., about 2 miles northeast of the village of Forks of Ivy. To reach from Burnsville, drive west on Highway 198 for 6 miles to junction of Highway 19W with 198, keep left on Highway 19 for 15.25 miles, turn left on second class road and drive 1.2 miles to Ivy Hill Baptist Church, leave car and walk north up trail on main ridge about 0.75 miles to station. A standard tablet stamped "NOFAT 1934" and set in top of 6- by 8- by 24-inch stone.  
 Reference Mark 1: 9.69 feet from 1-inch drill hole in rock.  
 Reference Mark 2: 9 feet from 1-inch drill hole in rock.  
 Reference Mark 3: 9.46 feet from 1-inch drill hole in rock.  
 Report on Condition (TVA, June, 1941): Tablet out. Only two reference

marks found, but old rock in which station was originally set found with old cement on face of rock. References checked published description. A 40d nail put in crevice of old station rock.

GEODETIC POSITION: Lat. = 35°48'09.567"; Long. = 82°30'23.633" (G-3)

To Station	Geodetic Azimuth	Back Azimuth	Log. Meters	Miles
Coxcomb	262°00'13.0"	82°04'52.7"	4.083512	7.5
Craggy	313 22 49.9	133 27 21.2	4.205779	10.0
Britten	359 58 59.0	179 58 59.1	3.995403	5.6

GRID POSITION (TENN.): X = 3,035,719.9; Y = 531,975.2 (G-3)  
 GRID POSITION (N. C.): X = 960,414.0; Y = 765,406.1 (G-3)

**P 18 (TVA, 1938; Madison County, North Carolina)**

Located about 3.2 miles east along new State Highway 36 and old State Highway 36 from Little Creek, about 1.0 miles east of Faust, about 0.3 miles north of Murray Gap, on the old highway, 50 feet south of the Y-junction of the Upper Laurel road, in a ditch, and on the top of a rock. A chiseled square near the painted letters "TBM P 18".  
 ELEVATION: 3248.845 feet or 990.250 meters (T-2)

**P 27 (TVA, 1938; Madison County, North Carolina)**

Located about 3.2 miles east along State Highway 36 (1938 route) from Little Creek, thence 2.3 miles south along the old highway, 0.4 miles northeast of the junction of Holcombe Branch and California Creek, 50 feet east of the junction of the new highway, at a bridge over the creek, on the left bank, and on the southeast end of the abutment. A chiseled square.  
 ELEVATION: 2819.738 feet or 859.458 meters (T-2)

**P 28 (TVA, 1938; Madison County, North Carolina)**

Located about 3.9 miles northwest along the Big Laurel Creek road from Little Creek, about 1.0 miles south of Foster Creek Church, 200 feet southwest of the junction of the Bull Creek road and on the concrete steps of the Cody red brick store building. A chiseled square.  
 ELEVATION: 2446.140 feet or 745.585 meters (T-2)

**P 30 (TVA, 1938; Madison County, North Carolina)**

Located about 2.9 miles northeast along State Highway 36 and 213 from Mars Hill, 1.4 miles south along the California Creek road, 0.3 miles northwest of the Beech Glen school, at the northwest corner of a large tobacco barn, and in the root of a 20-inch black walnut tree. An iron slug.  
 ELEVATION: 2134.960 feet or 650.737 meters (T-2)

**P 31 (TVA, 1938; Buncombe County, North Carolina)**

Located about 3.8 miles west along State Highway 197 from the post office at Barnardville, about 2.4 miles east of Flat Creek, about 700 feet southeast of Morgan Hill Church, at a culvert, and in the top of the west edge of the headwall. A chiseled square near the painted letters "TBM P 31".  
 ELEVATION: 2227.456 feet or 678.930 meters (T-2)

**P 32 (TVA, 1938; Madison County, North Carolina)**

Located in the city of Mars Hill, on State Highway 213, 0.25 miles west of intersection of State Highways 213 and 36, approximately 500 feet east of Madison Rug Shop, and 45 feet west of fire plug. A chiseled square on sidewalk.  
 Note: Searched for but not recovered, April, 1945. It was reported that sidewalk was weathered and identification of bench mark uncertain.  
 ELEVATION: 2264.398 feet or 690.190 meters (T-2)

**P 33 (TVA, 1938; Madison County, North Carolina)**

Located about 2.6 miles southeast along the Big Laurel Creek road from Big Laurel, about 800 feet east of the intersection of the Walnut Creek road, at the Big Laurel Baptist Church, on the first concrete step, and near the southeast corner. A chiseled square.  
 ELEVATION: 2050.734 feet or 625.065 meters (T-2)

**P 34 (TVA, 1938; Madison County, North Carolina)**

Located at Belva on State Highway 208, at the junction of State Highway 212, about 100 feet east of the bridge over Laurel Creek, 15 feet north of the center line of the highway, at the base of the bluff and on a rock. A painted high point.  
 ELEVATION: 1689.357 feet or 514.918 meters (T-2)

**P 35 (TVA, 1938; Madison County, North Carolina)**

Located about 3.7 miles west along the Big Laurel Creek road from Big Laurel, about 1.8 miles southeast of Belva, about 100 feet south along the Walnut Gap road from its junction with the Big Laurel Creek road, at the bridge over Big Laurel Creek, at the northeast end and on the upstream side of the abutment. A chiseled square.  
 ELEVATION: 1773.792 feet or 540.653 meters (T-2)

**P 36 (TVA, 1938; Madison County, North Carolina)**

Located about 3.9 miles west along the Big Laurel Creek road from Little Creek, 1.8 miles southwest along the Bull Creek road, at a sharp curve in the road, and on a rock. A chiseled square near the painted letters "TBM P 36".  
 ELEVATION: 3056.250 feet or 931.547 meters (T-2)

**P 37 (TVA, 1938; Madison County, North Carolina)**

Located 5.0 miles south of Marshall, approximately 2.0 miles south of Laurel Forks Church, on State Highway 213, at crossroads, 75 feet south of intersection. Nail in root of 10-inch locust.  
 Note: Searched for but not recovered, July, 1943.  
 ELEVATION: 2134.592 feet or 650.625 meters (T-2)

**P 133 (USCGS, 1935; Madison County, North Carolina)**

Located 1.1 miles northwest of the station in Marshall, by rail, on the Salisbury to Knoxville Division of the Southern Railway, 0.4 miles northwest of milepost No. 164, 10 rails northwest of "Station 1 Mile" sign, on the top of large outcropping boulder, 14.6 feet northwest of the northwest rail, 3 feet above the rails. A standard tablet stamped "P 133 1935".  
 Note: Searched for but not recovered, July, 1943. A recent slide in the described location possibly destroyed bench mark.  
 ELEVATION: 1635.404 feet or 498.472 meters (C-1)

**P 138 (USCGS, 1935; Madison County, North Carolina)**

Located about 2.5 miles east along State Highways 36 A and 213 and the California Creek road from Mars Hill, near the junction of the California

Creek road and U. S. Highways 19 and 23, at Beech Glen, 200 feet east of the highway, 225 feet northeast of the Ivy Post Office, about 225 feet southwest of the Methodist Church, about 140 feet northeast of the Missionary Baptist Church, in the foundation of the red brick schoolhouse, 3 feet south of the northeast corner, and 3 feet above the ground. A standard tablet stamped "P 138 1935" and set vertically.

ELEVATION: 2104.602 feet or 641.484 meters (T-2)

**Q 133 (USC&GS, 1935; Madison County, North Carolina)**

Located at Marshall, on the Salisbury to Knoxville Division of the Southern Railway, 460 feet southeast of the station, 25 yards southeast of railway water tank, on the northwest corner of the crossing stop light in the west angle formed by the crossing of the railway and U. S. Highway 25, 11.0 feet southwest of the southwest rail. A standard tablet stamped "Q 133 1935".

Note: Highway has been relocated and no longer crosses railroad. Stop light is gone and bench mark is probably destroyed.

ELEVATION: 1650.121 feet or 502.958 meters (C-1)

**Q 138 (USC&GS, 1935; Madison County, North Carolina)**

Located about 2.0 miles northeast along State Highways 36A and 213 from Mars Hill, thence 0.8 miles south along the California Creek road, about 0.9 miles northwest of the Beech Glen school, on the Harvey George property, 11.6 feet southwest of the southeast corner of the house occupied in 1939 by Columbus Ramsey, 300 feet northeast of a large red barn, 44.4 feet east-northeast of a 12-inch apple tree, 10 feet northeast of the road, 6 feet northeast of a fence corner and 2 feet northwest of a lane leading to the barn and pasture. A standard tablet stamped "Q 138 1935" and set in the top of a concrete post.

ELEVATION: 2156.420 feet or 657.278 meters (T-2)

**R 133 (USC&GS, 1935; Madison County, North Carolina)**

Located about 1.3 miles east along U. S. Highways 25 and 70 and State Highway 213 from Marshall, opposite the junction of a Y-road leading north, at a bridge over Hayes Run, 31.0 feet south-southeast of the southwest corner, 12 feet southwest of the highway, in the top of the concrete retaining wall, and 6 feet north of the angle wall. A standard tablet stamped "R 133 1935".

ELEVATION: 1742.483 feet or 531.110 meters (T-2)

**R 136 (USC&GS, 1935; Madison County, North Carolina)**

Located 4.5 miles south of Marshall by rail, on the Salisbury to Knoxville Division of the Southern Railway, 0.3 miles southwest of milepost No. 159, 0.5 miles north of station "Volga", 2-1/2 rails north of siding switch, 17 yards northeast of concrete bridge over stream, on the northwest corner of concrete foundation of semaphore signal tower No. 158.6, 6.3 feet southeast of the southeast rail, level with the base of the rails. A standard tablet stamped "R 136 1935".

ELEVATION: 1713.215 feet or 522.189 meters (C-1)

**R 138 (USC&GS, 1935; Madison County, North Carolina)**

Located about 2.0 miles northeast along State Highways 36A and 213 from Mars Hill, at the junction of the California Creek road, 70 feet southwest of the junction, on the Mrs. Jeter Edwards property, 18 feet south of State Highway 213, in the northwest end of a red brick barn, and about 3 feet above the ground. A standard tablet stamped "R 138 1935" and set vertically.

ELEVATION: 2213.486 feet or 674.672 meters (T-2)

**RFG 213 (TVA, 1938; Madison County, North Carolina)**

Located 13 miles south-southwest of Erwin, Tennessee. To reach from Flag Pond Post Office, drive south on dirt road for 1.8 miles to Higgins School, turn right at Y-intersection beyond school, 4.8 miles to Bright Hope School, turn left up logging road 0.6 miles to saw mill, cross creek to right and follow woods line on right 1500 feet to corner, then turn right 1000 feet to station on nose of ridge. A 1- by 1-inch angle iron, stamped "RFG 213 1938".

Reference Mark 1: 11.0 feet S 66° W to 6-inch mulberry.

GEODETIC POSITION: Lat. = 35°56'54.28"; Long. = 82°30'56.38" (T-4)

GRID POSITION (TENN.): X = 3,031,135.7; Y = 584,893.8 (T-4)

GRID POSITION (N. C.): X = 599,596.4; Y = 818,515.7 (T-4)

ELEVATION: 4223 feet (T-5)

**RFG 214 (TVA, 1938; Madison County, North Carolina)**

Located 11-1/2 miles west of Burnsville, 0.5 feet above ground. To reach from Swiss Post Office, which is 9 miles by road west of Burnsville on U. S. Highways 19 and 23, drive west on U. S. Highways 19 and 23, 1.8 miles to Windy Gap road right on sharp curve left, 200 feet beyond bridge (west of) over Wolf Branch. Turn right on dirt road 1.5 miles to Windy Gap, then continue 1.5 miles to fork, turn left 0.2 miles to field road left at horseshoe bend to right, turn left on field road 300 feet to gate, pass thru gate along side of field (south side) 500 feet, then turn left and climb to high point of ridge. Station is on high point 10 feet north of fence line in south edge of cleared field. A 1- by 1-inch angle iron stamped "TVA RFG 214 1938".

Reference Mark 1: 11.9 feet S 10° E to 3-inch birch.

Reference Mark 2: 11.8 feet S 25° W to 20-inch dead chestnut on fence line.

Reference Mark 3: 26.5 feet N 80° W to 16-inch dead chestnut on fence line.

GEODETIC POSITION: Lat. = 35°54'25.61"; Long. = 82°30'38.92" (T-4)

GRID POSITION (TENN.): X = 3,033,106.1; Y = 569,928.7 (T-4)

GRID POSITION (N. C.): X = 960,500.0; Y = 803,448.6 (T-4)

ELEVATION: 3650 feet (T-5)

**RFG 218 (TVA, 1938; Madison County, North Carolina)**

Located 15 miles southwest of Erwin. To reach from Flag Pond Post Office, drive south on Sam's Gap Road 5.8 miles to Sam's Gap, leave truck at gap and go west on Appalachian Trail about 2000 feet to top of knob. Station is about 50 feet south of fence line intersection on top of knob at edge of field and woods. A 1- by 1-inch angle iron stamped "TVA RFG 218 1938", 0.5 feet above the ground.

Reference Mark 1: 43.0 feet N 15° W to nail in bottle cap in 10-inch white oak.

Reference Mark 2: 11.4 feet N 75° E to nail in bottle cap in 2-1/2-inch hickory.

Reference Mark 3: 17.8 feet S 80° W to nail in bottle cap in 8-inch dead chestnut.

GEODETIC POSITION: Lat. = 35°57'17.68"; Long. = 82°33'55.54" (T-4)

GRID POSITION (TENN.): X = 3,016,323.0; Y = 586,743.6 (T-4)

GRID POSITION (N. C.): X = 944,952.4; Y = 821,411.8 (T-4)

ELEVATION: 4112 feet (T-5)

**RFG 221 (TVA, 1938; Unicoi County, Tennessee)**

Located 12 miles southwest of Erwin. To reach from Flag Pond Post Office, drive south on dirt road (Higgins Creek road) for 1.8 miles to Higgins School, bear left at fork beyond school for 0.8 miles to farm road right, turn right on farm road for 0.2 miles to fork, then bear left 0.2 miles to fork, then bear right up side of ridge, 0.3 miles to log house on right, continue straight ahead to barn, then turn left up log trail up hollow 1000 feet to top of ridge, then turn left along ridge and fence line 1000 feet to top of knob. Station is on highest point 15 feet northwest of fence line. A 1- by 1-inch angle iron stamped "TVA RFG 221 1938", 0.5 feet above ground.

Reference Mark 1: 10.8 feet N 33° W to 6-inch maple.

Reference Mark 2: 15.2 feet N 56° E to 16-inch maple.

Reference Mark 3: 13.2 feet S 35° E to USDA FS 439 1931 bronze cap in 2-inch concrete post.

GEODETIC POSITION: Lat. = 35°58'52.95"; Long. = 82°30'56.50" (T-4)

GRID POSITION (TENN.): X = 3,030,698.6; Y = 596,891.0 (T-4)

GRID POSITION (N. C.): X = 960,011.8; Y = 830,513.6 (T-4)

ELEVATION: 4424 feet (T-5)

**RFG 223 (TVA, 1938; Unicoi County, Tennessee)**

Located 12 miles southwest of Erwin. To reach from Flag Pond Post Office, drive southwest on road to Mars Hill 2.6 miles to field road right, turn right about 500 feet to house which is about 500 feet north of Shady Grove School, turn right up hollow about 1500 feet to top of ridge. Station is about 75 feet northeast of fence corner on north side of center line of ridge. A 1- by 1-inch angle iron stamped "TVA RFG 223 1938", 0.3 feet above ground.

Reference Mark 1: 15.7 feet N 27° W to nail in bottle cap in 8-inch maple.

Reference Mark 2: 17.9 feet S 35° E to nail in bottle cap in 14-inch burned chestnut.

Reference Mark 3: 9.8 feet West to nail in bottle cap in 8-inch dead stump.

GRID POSITION (TENN.): X = 3,017,330.4; Y = 595,823.5 (T-4)

ELEVATION: 3525 feet (T-5)

**RV 655 (Southern Railway, ? ; Madison County, North Carolina)**

Located 2.5 miles southeast of the station at Marshall, by rail, on the Salisbury to Knoxville Division of the Southern Railway, 0.25 miles southwest of the railway bridge over the French Broad River, 605 (800 in railroad list, map checks this distance) feet southwest of milepost No. 161, in the center of the northwest headwall of railway concrete culvert, 3.5 feet northwest of the northwest rail, 8 inches below the rails. A monel metal rivet.

ELEVATION: 1686.742 feet or 514.120 meters (C-1)

**RV 656 (Southern Railway, ? ; Madison County, North Carolina)**

Located 0.6 miles southeast of the station at Marshall, by rail, on the Salisbury to Knoxville Division of the Southern Railway, about 45 yards east of the junction of U. S. Highways 25 and State Highway 213, on the southwest end of the southeast abutment of railway bridge No. S 162.7 over old State Highway 213 at Hayes Run, 3.4 feet southwest of the southwest rail, 1 foot below the rails. A monel metal rivet.

Note: Searched for but not recovered, July, 1943.

ELEVATION: 1664.626 feet or 507.379 meters (C-1)

**RV 657 (Southern Railway, ? ; Madison County, North Carolina)**

Located 3.9 miles west of the station at Marshall, by rail, on the Salisbury to Knoxville Division of the Southern Railway, at Nocona siding, on the southwest corner of the concrete foundation of semaphore signal tower No. S-167.4, 5.6 feet east of the east rail of the main track, level with the top of the rails. A monel metal rivet.

GRID POSITION (N. C.): X = 893,973.0; Y = 766,441.9 (T-4)

ELEVATION: 1585.427 feet or 483.239 meters (C-1)

**RV 658 (Southern Railway, ? ; Madison County, North Carolina)**

Located 1.5 miles southeast of the station at Barnard, by rail, on the Salisbury to Knoxville Division of the Southern Railway, 400 feet northwest of milepost No. 169, 20 yards northwest of the home of Lloyd Chandler, in the center of the northeast headwall of railway concrete culvert, 12.9 feet northeast of the northeast rail, 4 feet below the rails, 36 inch concrete pipe per Southern Railway list. A monel metal rivet.

ELEVATION: 1560.515 feet or 475.646 meters (C-1)

**S 133 (USC&GS, 1935; Madison County, North Carolina)**

Located about 2.3 miles northeast along U. S. Highways 25 and 70 and State Highway 213 from Marshall, at the junction of a T-road leading west, 63.6 feet east of the northeast corner of a bridge over Hayes Run, on the Jack Ramsey property, 43 feet north of the northwest corner of the barn, 28 feet southwest of a wire fence, and 14 feet east of the highway. A standard tablet stamped "S 133 1935" and set in the top of a concrete post.

Report on Condition (TVA, June, 1943): Monument has been broken off at top of ground and tablet is gone.

ELEVATION: 1922.539 feet or 585.991 meters (T-2)

**S 136 (USC&GS, 1935; Madison County, North Carolina)**

Located 3.3 miles south of Marshall, by rail, on the Salisbury to Knoxville Division of the Southern Railway, 85 yards southwest of milepost No. 160, 25 yards east of power line pole No. 25, on the northeast end of the northwest headwall of railway concrete culvert, 5.5 feet northwest of the northwest rail, 6 inches below the rails. A standard tablet stamped "S 136 1935".

ELEVATION: 1699.249 feet or 517.932 meters (C-1)

**S 138 (USC&GS, 1935; Madison County, North Carolina)**

Located about 1.0 miles west along the Big Laurel Creek road from the post office at Big Laurel, about 125 feet east of the bridge over Barnes Branch, about 175 feet northeast of the Muncy Franklin house, about 150 feet south of the Ed Franklin house, 40 feet northwest of a spring, 15 feet west of the road leading to the Ed Franklin house, 6 feet north of the Big Laurel Creek road, 11.5 feet southwest of a 10-inch pear tree, 4.9 feet southeast of a 5-inch walnut tree, and 3 feet south of a wire fence. A standard tablet stamped "S 138 1935" and set in the top of a concrete post.

ELEVATION: 2070.888 feet or 631.268 meters (T-2)

**ST 6 (TVA, 1941; Madison County, North Carolina)**

Located in extreme southeast corner of Quadrangle 191 NE. To reach from Buckner, drive southwest on U. S. Highway 19 for 1.60 miles to T-road north-

west, turn right on T-road and drive 1.40 miles up poor road going through gate, then a set of bars, park car here and walk up center line of hollow for 3500 feet to center line of ridge, turn right and walk east 500 feet to top of main ridge, known as wooded mountain. A 1- by 1-inch angle iron stamped "ST 6" and set directly under flag in tree 16 feet northeast of top of ridge.

Reference Mark 1: 4.50 feet N 38° W to 18-inch oak.

Reference Mark 2: 3.30 feet N 46° E to 3-inch locust.

Reference Mark 3: 9.53 feet S 41° E to 4-inch locust stump.

GRID POSITION (N. C.): X = 962,341.9; Y = 792,207.7 (T-4)

ELEVATION: 3341 feet (T-5)

#### STONY KNOB (USGS, 1934; Madison County, North Carolina)

Located on the northern part of a small range of mountains known as Stony Knob, lying west of the head of California Creek. To reach from Burnsville drive west on State Highway 19E for 6 miles, thence straight ahead on Highway 19, 12.1 miles to junction of State Highway 31, turn right and drive 1.55 miles, thence right on State Highway 311 passing thru the village of California Creek, 3.6 miles, turn left and drive to home of M. M. Holcombe, leave car and take trail south about 600 feet to large barn, thence west up large drain about 5 miles to top of ridge, take trail to left about 0.25 miles to station. A standard tablet stamped "STONY KNOB 1934".

Reference Mark 1: 2.78 feet N 10° E to 1-inch drill hole in rock.

Reference Mark 2: 10.2 feet N 88° W to 1-inch drill hole in rock.

Reference Mark 3: 6.12 feet S 45° N to 1-inch drill hole in rock.

GEODETIC POSITION: Lat. = 35°53'26.661"; Long. = 82°31'30.101" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Big Bald	195°54'17.3"	15°55'30.6"	4.057411	7.1
Paint Gap	272 38 50.2	92 41 44.9	3.874031	4.6
Nofat	350 18 33.0	170 19 12.0	3.996262	6.2

GRID POSITION (TENN.): X = 3,029,110.1; Y = 563,821.9 (G-3)

GRID POSITION (N. C.): X = 556,080.8; Y = 797,640.8 (G-3)

ELEVATION: 3906 feet (T-5)

#### SUGAR (USGS, 1934; Madison-Union Counties, North Carolina)

Located on wooded top, about 1 mile S 20° E to top locally known as Sugar Leaf Knob, and about 5-1/2 miles northeast of Big Laurel Post Office. To reach from Marshall, drive west on Highway 25, 11 miles, turn right on Highway 212 and go 15 miles to home of Harrison Shelton, leave car and follow wagon road east about 1/4 mile to Appalachian Trail, thence by said trail about 3/4 mile east and south to point about 300 feet northwest of station, thence southeast to top and station. A standard tablet stamped "SUGAR 1934" and cemented in rock set in place under 22-inch water oak.

Reference Mark 1: 7 feet S 40° E.

Reference Mark 2: 11.8 feet S 52° W.

Reference Mark 3: 10.7 feet N 01° E.

GEODETIC POSITION: Lat. = 35°58'44.416"; Long. = 82°36'30.879" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Big Rock	167°03'03.1"	347°02'11.1"	3.994684	6.1
Big Bald	263 38 14.7	83 42 24.7	4.030521	6.7
Frozen	351 52 46.8	171 53 19.5	3.996690	6.2

GRID POSITION (TENN.): X = 3,003,263.8; Y = 595,063.7 (G-3)

GRID POSITION (N. C.): X = 932,516.4; Y = 830,637.5 (G-3)

ELEVATION: 4579 feet (T-5)

#### T 133 (USC&GS, 1935; Madison County, North Carolina)

Located about 2.9 miles west along State Highway 213 from Petersburg, about 3.3 miles northeast of Marshall, 200 feet east of the Kam Morrill house, 70 feet south of the junction of a Y-road leading south, 28.2 feet southwest of a pole, 27.2 feet west of the south end of a rail gate, 12 feet northwest of Hayes Run, 7 feet southeast of the highway, in a concrete retaining wall, and in the northeast corner. A standard tablet stamped "T 133 1935".

ELEVATION: 2024.202 feet or 616.978 meters (T-2)

#### T 136 (USC&GS, 1935; Madison County, North Carolina)

Located 2.6 miles southeast of Marshall, by rail, on the Salisbury to Knoxville Division of the Southern Railway, 0.25 miles southwest of milepost No. 161, 0.4 miles southwest of railway bridge over the French Broad River, on the west corner of the concrete foundation of semaphore signal tower No. S 160.7, 6.8 feet northwest of the northwest rail, 6 inches below the base of the rails. A standard tablet stamped "T 136 1935".

ELEVATION: 1687.785 feet or 514.438 meters (C-1)

#### T 138 (USC&GS, 1935; Madison County, North Carolina)

Located about 1.9 miles west along the Big Laurel Creek road from Big Laurel, at a horseshoe bend in the road, at a rock cut, 40 feet southeast of the junction of a farm road leading north, 200 feet north of Barnes Creek, 30 feet east of the intersection of a drain, 8 feet northeast of the main road, and in a rock and about 4 feet higher than the road. A standard tablet stamped "T 138 1935" and set vertically.

ELEVATION: 1984.976 feet or 605.022 meters (T-2)

#### U 58 (USC&GS, 1934; Madison County, North Carolina)

Located about 3-1/4 miles southwest along State Highway 212 from the school at White Rock, along U. S. Highway 25 and State Highway 212, about 3/4 mile northeast of the junction of State Highway 208, in a hollow at the north end of a curve, about 8 yards west of the center line of State Highway 212, and about 5 yards north of a pole. A standard tablet stamped "U 58 1934" and set in the top of a concrete post.

ELEVATION: 1714.708 feet or 522.644 meters (C-2)

#### U 133 (USC&GS, 1934; Madison County, North Carolina)

Located about 2.0 miles southwest along State Highway 213 from Petersburg, 0.15 miles northwest of Reese Gap, 150 feet northeast of Hayes Run, on the Mrs. Neal Houston property, 125 feet south of the house, 43 feet northeast of a wire fence, 20 feet northeast of the highway, and 3.8 feet west of a power transmission line pole. A standard tablet stamped "U 133 1935" and set in the top of a concrete post.

ELEVATION: 2183.608 feet or 665.565 meters (T-2)

#### U 138 (USC&GS, 1935; Madison County, North Carolina)

Located about 2.7 miles west along the Big Laurel Creek road from Big Laurel on the Tad Franklin property, 18.9 feet north of the northeast corner of the house occupied in 1939 by Winston Ramsey, 90 feet southwest of a large barn, 50 feet south of a corn crib, 42 feet southeast of a garden, 11.9 feet

east-southeast of a mailbox, and 10 feet southeast of the road. A standard tablet stamped "U 138 1935" and set in the top of a concrete post.

ELEVATION: 2089.497 feet or 636.880 meters (T-2)

#### 207 USDA (USDA, 1935; Madison County, North Carolina)

Located 4.0 miles southwest of White Rock schoolhouse by Highway 208, 45 feet south of center line of intersection of Highways 208 and 212, 36 feet south of north end of bridge, 15 feet west of center line of Highway 208. A standard tablet stamped "207 1935" and set in concrete post.

ELEVATION: 1688.960 feet or 514.796 meters (C-2)

#### 212 USDA (USDA, 1935; Madison County, North Carolina)

Located 5.5 miles west of schoolhouse in White Rock, by Highway 208, on horseshoe curve 1-1/2 miles northwest of junction of Highways 208 and 212, 0.1 miles southeast of home of J. B. Thomas, 85 yards east of side road northwest to farm, 7 yards west of center line of highway, 7 feet south of telephone pole, 1 foot below grade at center line. A standard tablet stamped "212 1935" and set in concrete post.

ELEVATION: 1789.252 feet or 544.146 meters (C-2, unchecked spur)

#### V 58 (USC&GS, 1934; Madison County, North Carolina)

Located about 1.2 miles southwest along State Highway 212 from White Rock, about 2.8 miles northeast of the junction with State Highway 208, on a curve, about 150 yards north of a house on the west side of the highway, about 19 yards north of a pole, about 6 yards east of the center line of the highway, and about 1 yard east of a fence. A standard tablet stamped "V 58 1934" and set in the top of a concrete post.

ELEVATION: 1779.531 feet or 542.402 meters (C-2)

#### V 123 (USC&GS, 1935; Madison County, North Carolina)

Located about 1.8 miles north along State Highway 36 from Little Creek on Little Creek road west of the highway, about 200 feet east of the Willard Rice house, on the Hubert Rice property, 45 feet southwest of the Y-junction of a road leading northwest, 40 feet west of the new highway, 21 feet east of the Little Creek road, 8 feet higher than the road, and 3 feet east of a wire fence. A standard tablet stamped "V 123 1935" and set in the top of a concrete post.

ELEVATION: 3305.623 feet or 1007.556 meters (T-2)

#### V 133 (USC&GS, 1935; Madison County, North Carolina)

Located about 0.9 miles southwest along State Highway 213 from Petersburg, on the Mrs. J. C. Tilson property, at the northeast edge of the yard, 60 feet north of the house, 65 feet southeast of the barn, 32.4 feet west-northwest of a 22-inch beech tree, 33 feet east of the northwest corner of a hedge, 18 feet southeast of the highway, and 15.4 feet south-southeast of a mailbox post. A standard tablet stamped "V 133 1935" and set in the top of a concrete post.

ELEVATION: 2118.598 feet or 645.750 meters (T-2)

#### V 136 (USC&GS, 1935; Madison County, North Carolina)

Located 0.6 miles southeast of Marshall, by rail, on the Salisbury to Knoxville Division of the Southern Railway, on the northeast end of the north-west abutment of railway bridge No. S 162.7 over State Highway 213 and Hayes Run, 2.8 feet northeast of the northeast rail, 1 foot below the rails. A standard tablet stamped "V 136 1935".

ELEVATION: 1664.518 feet or 507.346 meters (C-1)

#### W 58 (USC&GS, 1934; Madison County, North Carolina)

Located at White Rock, on State Highway 212, in the schoolyard, midway between the two front entrances to the building, about 5 yards north of the face of the building, and 1 foot north of the north edge of a cinder walk. A standard tablet stamped "W 58 1934" and set in the top of a concrete post.

ELEVATION: 1849.852 feet or 563.836 meters (C-2)

#### W 123 (USC&GS, 1935; Madison County, North Carolina)

Located about 0.9 miles north along State Highway 36 from Little Creek at the intersection of the old and new highway, about 275 feet southwest of the Cornelius Ingle house, about 180 feet east of the Dave Carver house, about 150 feet northeast of two large barns, 90 feet east of Little Creek, 15.5 feet northwest of Dave Carver's mailbox post, 15 feet west of the highway, and 10.9 feet northeast of a 11-inch leaning apple tree. A standard tablet stamped "W 123 1935" and set in the top of a concrete post.

ELEVATION: 3080.762 feet or 939.018 meters (T-2)

#### W 133 (USC&GS, 1935; Madison County, North Carolina)

Located at Petersburg, on State Highway 213, 150 feet west of the Bull Creek road, 48.0 feet west-northwest of a side road sign, 30 feet south of an unpainted house, 15 feet northwest of the highway, 15 feet west of a mill flume, in the top of a rock outcrop, and 2 feet higher than the highway. A standard tablet stamped "W 133 1935".

ELEVATION: 1970.531 feet or 600.619 meters (T-2)

#### W 136 (USC&GS, 1935; Madison County, North Carolina)

Located 0.75 miles northwest of Marshall, by rail, on the Salisbury to Knoxville Division of the Southern Railway, 8-1/2 rails northwest of milepost No. 164, on the southeast end of the northeast headwall of a concrete culvert, 7.5 feet northeast of the northeast rail, 1 foot below the base of the rails. A standard tablet stamped "W 136 1935".

ELEVATION: 1636.604 feet or 498.838 meters (C-1)

#### W 138 (USC&GS, 1938; Madison County, North Carolina)

Located about 0.9 miles southeast along the Big Laurel Creek road from Belva at Graveyard Gap, 450 feet southeast of a large barn, 175 feet northeast of Coon Farm Cemetery, 30 feet southeast of the intersection of a crossroad, 72.1 feet northwest of a 12-inch apple tree, 64.5 feet southwest of a 4-inch apple tree, 8 feet southwest of the main road, and 7 feet west of a trail. A standard tablet stamped "W 138 1935" and set in the top of a concrete post.

ELEVATION: 1967.811 feet or 599.790 meters (T-2)

#### WALNUT (USGS, 1934; Madison County, North Carolina)

Located about 5.9 miles north of Marshall, on a spur ridge of Walnut Mountain, extending to the south. To reach from Marshall Courthouse, follow U. S. Highway 25 north for 0.7 miles to Walnut Creek road, follow said road for 4.1 miles to Walnut Creek Baptist Church, continue 0.6 miles and turn left at road fork for 0.3 miles and turn left again at road fork and follow to gate, leave car and continue on foot about 400 feet and turn right up ridge on sled road and follow to top, a distance of about 1 miles. A standard tablet

stamped "WALNUT 1934" and cemented in rock.

Reference Mark 1: 6.8 feet S 10° E to 1-inch drill hole in rock set along fence line.

Reference Mark 2: 8.45 feet N 60° E to rock set in ground.

GEODETIC POSITION: Lat. = 35°52'02.814"; Long. = 82°41'20.158" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Boyd	15°57'59.7"	195°56'34.3"	4.124728	8.3
Trouble	62 23 40.3	242 18 49.8	4.147971	8.7
Sugar	210 20 36.6	30 23 26.3	4.156725	8.9
Frozen	253 32 37.0	73 35 59.2	3.995540	5.6

GRID POSITION (TENN.): X = 2,980,875.6; Y = 553,665.9 (G-3)  
 GRID POSITION (N. C.): X = 907,248.1; Y = 790,932.5 (G-3)  
 ELEVATION: 3555 feet (T-5)

#### WHITE OAK (USGS, 1934; Madison County, North Carolina)

Located on open top hill locally known as Whiteoak Knob, about 1 mile northwest of Jupiter, and about 2-1/2 miles east of the junction of French Broad River and Ivy River. To reach from Stockville, take Jupiter road 3.3 miles, turn right and go 0.8 miles, turn left at crossroad, go 0.4 miles, leave car and walk northerly about 800 feet to station. Station is in center of northeast end of top 208 feet N 80° W from point where road enters field. A standard tablet stamped "WHITE OAK 1934" and set in rock.

GEODETIC POSITION: Lat. = 35°46'18.526"; Long. = 82°36'13.766" (G-3)

To Station	Geodetic Azimuths		Distance	
	Azimuth	Back Azimuth	Log. Meters	Miles
Spivey	12°55'49.3"	192°54'08.4"	4.289027	12.1
Nofat	248 42 18.4	68 45 43.1	3.974763	5.9
Britten	302 27 02.9	122 30 27.5	4.018357	6.5

GRID POSITION (TENN.): X = 3,007,286.1; Y = 519,739.6 (G-3)  
 GRID POSITION (N. C.): X = 931,184.8; Y = 755,219.1 (G-3)  
 ELEVATION: 2260 feet (T-5)

#### X 58 (USCGS, 1934; Madison County, North Carolina)

Located about 2.3 miles northeast along State Highway 212 from the school at White Rock, about 9 miles south of the North Carolina-Tennessee State line, at the southwest corner of the yard of a small, square frame bungalow at mailbox 8, about 85 feet west of the west line of the bungalow, 27 feet north of the center line of the highway, 12 feet north of a fence corner, and 12 feet west of the center line of the drive to the garage. A standard tablet stamped "X 58 1934" and set in the top of a concrete post.

ELEVATION: 1993.113 feet or 607.502 meters (C-2)

#### X 112 (USCGS, 1935; Unicoi County, Tennessee)

Located about 1.1 miles south along State Highway 81 (Sams Gap road) from Flag Pond, on the Milt Pate property, 200 feet south of a sawmill, 160 feet north of the house, 50 feet southwest of Sams Creek, 31.7 feet east of the southeast corner of a large barn, 15 feet southwest of the highway, 5.9 feet north of the barn lot gate, and 1 foot northeast of a wire fence. A standard tablet stamped "X 112 1935" and set in the top of a concrete post.

ELEVATION: 2464.572 feet or 751.203 meters (T-2)

#### X 133 (USCGS, 1935; Madison County, North Carolina)

Located about 3.1 miles west along State Highway 213 from Mars Hill, at the junction of a Y-road leading to Bull Creek Church, on the left bank of Bone Camp Creek, 70.8 feet southeast of the southeast corner of a building (in a group of three old buildings), at a highway bridge, 27.5 feet southwest of the northeast corner, in the southwest abutment, 10 feet northeast of the road, and 3 feet south of the highway. A standard tablet stamped "X 133 1935".

ELEVATION: 2108.592 feet or 642.700 meters (T-2)

#### X 136 (USCGS, 1935; Madison County, North Carolina)

Located 3.4 miles west of Marshall, by rail, on the Salisbury to Knoxville Division of the Southern Railway, 0.7 miles southwest of Redmon, about 45 yards north of old abandoned log home, 18 yards southeast of siding switch, on the north corner of the concrete foundation of semaphore signal tower No. 8 166.6, 6.1 feet southwest of the southwest rail, about level with the rails. A standard tablet stamped "X 136 1935".

ELEVATION: 1596.893 feet or 486.734 meters (C-1)

#### X 138 (USCGS, 1935; Madison County, North Carolina)

Located at Belva on the Big Laurel Creek road, about 150 feet northeast of the junction of State Highway 208, on the Lilly Hagen Heira property, about 200 feet southeast of the Delmus Cook store, 90.1 feet east of the northeast corner of an old shed, 70.8 feet north of the northeast corner of the Elmer Cook house, and 8 feet north of the road. A standard tablet stamped "X 138 1935" and set in the top of a concrete post.

ELEVATION: 1693.117 feet or 516.063 meters (T-2)

#### Y 58 (USCGS, 1934; Madison County, North Carolina)

Located about 4.2 miles northeast along State Highway 212 from White Rock, about 6.9 miles south of the North Carolina-Tennessee State line, 22 feet south of Mrs. Jane Haynie's two-story frame house, 18 feet north of a stone well building, and about 30 feet east of the center line of the highway. A standard tablet stamped "Y 58 1934" and set in the top of a concrete post.

ELEVATION: 2079.724 feet or 633.901 meters (C-2)

#### Y 112 (USCGS, 1935; Unicoi County, Tennessee)

Located 2.2 miles south along State Highway 81 (Sams Gap road) about 450 feet southeast of a large barn, about 160 feet southwest of the intersection of a drain and the highway, on the J. E. Sams property, about 125 feet southwest of the house (occupied in 1939 by Leonard Treadaway), 61.7 feet southwest of a 12-inch apple tree, 25 feet southeast of the highway, 8 feet southwest of a fence corner, and 3.5 feet northwest of the north post of a pasture gate. A standard tablet stamped "Y 112 1935" and set in the top of a concrete post.

ELEVATION: 2668.446 feet or 813.344 meters (T-2)

#### Y 112X (USCGS, 1935; Unicoi County, Tennessee)

Located about 3.3 miles south along State Highway 81 (Sams Gap road) from Flag Pond, on the C. D. Rice property, 100 feet northeast of the house (occupied in 1939 by Calvin Vance), 32.6 feet southwest of the northwest corner of the store, 20 feet southeast of the highway, and 5 feet north of the northeast corner of a small barn. A standard tablet stamped "Y 112 X 1935" and set in the top of a concrete post.

ELEVATION: 3014.889 feet or 918.940 meters (T-2)

#### Y 123 (USCGS, 1935; Madison County, North Carolina)

Located about 1.0 miles southeast along State Highway 36 from Little Creek, on the old highway, about 300 feet north of a large barn, about 150 feet southwest of a twin concrete culvert, about 125 feet south of the new highway, 14 feet east of the old highway, 12 feet west of a wire fence, 8.8 feet south of a painted cross on a fence post, and 1.7 feet northwest of a fence post with a painted band. A standard tablet stamped "Y 123 1935" and set in the top of a concrete post.

ELEVATION: 2966.910 feet or 904.316 meters (T-2)

#### Y 133 (USCGS, 1935; Madison County, North Carolina)

Located about 2.1 miles west along State Highway 213 from Mars Hill at Bailey Gap, 165 feet south of the Lee McDaris house, 150 feet southwest of a large tobacco barn, 125 feet southeast of the high point of the highway on a ridge, 32 feet east of the junction of a road leading to the barn, 16 feet northeast of the highway, in the southwest corner of a sedge field, 85.6 feet southwest of a 5-inch red oak tree, 16.7 feet east of a fence corner, and 3 feet northwest of a wire fence. A standard tablet stamped "Y 133 1935" and set in the top of a concrete post.

ELEVATION: 2390.061 feet or 728.492 meters (T-2)

#### Y 136 (USCGS, 1935; Madison County, North Carolina)

Located 3 miles south of Barnard, by rail, on the Salisbury to Knoxville Division of the Southern Railway, 19 rails south of milepost No. 168, 0.5 mile north of Nocona siding, 25 yards north of siding switch, on the northeast corner of the concrete foundation of semaphore signal tower No. S 167.8, 7.0 feet west of the west rail, about level with the rails. A standard tablet stamped "Y 136 1935".

ELEVATION: 1576.654 feet or 480.565 meters (C-1)

#### Z 112 (USCGS, 1935; Unicoi County, Tennessee)

Located 4.2 miles south along State Highway 81 (Sams Gap road) from Flag Pond, 2 miles north of Sams Gap, on the Divide Mountain grade, 450 feet north of an abandoned house, 100 feet northwest of Sams Creek, 70 feet southwest of a drain, on the Stokes Shelton property in the southwest corner of a small cultivated field, 65.2 feet south-southeast of a 14-inch buckeye tree on the fence line, 16 feet northwest of the road, and 8.8 feet north of a 12-inch apple tree. A standard tablet stamped "Z 112 1935" and set in the top of a concrete post.

ELEVATION: 3306.335 feet or 1007.773 meters (T-2)

#### Z 112X (USCGS, 1935; Unicoi County, North Carolina)

Located about 5.4 miles south along State Highway 81 (Sams Gap road) from Flag Pond, about 0.6 miles northeast of Sams Gap, on the Divide Mountain grade, about 125 feet south of a sharp hairpin curve in the road, 25 feet south of a 24-inch pipe culvert, 25 feet northwest of a rail fence, 15 feet southeast of the road, 13.9 feet northeast of a 4-inch maple tree, 4.4 feet southwest of a 6-inch maple tree, and on a bank about 3 feet higher than the road. A standard tablet stamped "Z 112 X 1935" and set in the top of a concrete post.

ELEVATION: 3636.157 feet or 1108.303 meters (T-2)

#### Z 123 (USCGS, 1935; Madison County, North Carolina)

Located about 2.2 miles east along new State Highway 36 and old State Highway 36 from Little Creek, on the old highway, about 250 feet northwest of Upper Laurel Church at Faust, 60 feet west of the Y-junction of a road, at a bridge over Big Laurel Creek, 29.9 feet north of the southwest corner of the bridge, in the northwest abutment, 19.0 feet southeast of a 12-inch locust tree, and 5 feet north of the old highway. A standard tablet stamped "Z 123 1935".

ELEVATION: 3107.914 feet or 947.294 meters (T-2)

#### Z 133 (USCGS, 1935; Madison County, North Carolina)

Located about 1.1 miles west along State Highway 213 from the post office at Mars Hill, about 233 yards northwest of the junction of the Gabriels Creek road, 225 feet southwest of the H. C. Brown house, 175 feet southeast of a sharp curve in the highway, at a concrete culvert, in the south headwall, 2 feet northwest of the southeast end, 6 feet southwest of the highway, and 2 feet north of a wire fence. A standard tablet stamped "Z 133 1935".

ELEVATION: 2243.083 feet or 683.693 meters (T-2)

#### Z 136 (USCGS, 1935; Madison County, North Carolina)

Located 2.2 miles southeast of Barnard, by rail, on the Salisbury to Knoxville Division of the Southern Railway, 0.4 miles south of milepost No. 169, on the north corner of the concrete foundation of semaphore signal tower No. S 168.8, 6.8 feet west of the west rail, about level with the rails. A standard tablet stamped "Z 136 1935".

Report on Condition (TVA, July, 1943): Recovered in good condition. Signal tower has been removed but base is O.K.

ELEVATION: 1569.295 feet or 478.322 meters (C-1)

#### Z 136 RESET (TVA, 1942; Madison County, North Carolina)

Located 2.2 miles southeast of Barnard, by rail, on the Salisbury to Knoxville Division of the Southern Railway, 0.4 miles south of milepost No. 169, 25 feet west of west rail, 43.3 feet north of telephone pole, 30.0 feet west of rock outcrop painted white, 42.2 feet southwest of rock. A standard tablet stamped "Z 136 RESET 1942", and set in the top of cast in place concrete post.

Note: Both Z 136 1935 and Z 136 RESET 1942 were recovered in good condition in July, 1943. Reset mark is approximately 65 feet south of original mark set in 1935.

ELEVATION: 1569.570 feet or 478.406 meters (T-1)

#### Z 136 A (USCGS, 1935; Madison County, North Carolina)

Located 0.7 miles southeast of Barnard, by rail, on the Salisbury to Knoxville Division of the Southern Railway, 24-1/2 rails northwest of milepost No. 170, 25 yards west of power line pole No. 5, 13 feet northeast of the north-east rail, level with the top of the rails, 1 foot above the ground. A standard tablet stamped "Z 136 A 1935" and set in concrete post.

ELEVATION: 1539.082 feet or 469.113 meters (C-1)